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Comprehensive investigations revealed consistent pathophysiological alterations after vaccination with COVID-19 vaccines

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Abstract

Large-scale COVID-19 vaccinations are currently underway in many countries in response to the COVID-19 pandemic. Here, we report, besides generation of neutralizing antibodies, consistent alterations in hemoglobin A1c, serum sodium and potassium levels, coagulation profiles, and renal functions in healthy volunteers after vaccination with an inactivated SARS-CoV-2 vaccine. Similar changes had also been reported in COVID-19 patients, suggesting that vaccination mimicked an infection. Single-cell mRNA sequencing (scRNA-seq) of peripheral blood mononuclear cells (PBMCs) before and 28 days after the first inoculation also revealed consistent alterations in gene expression of many different immune cell types. Reduction of CD8⁺ T cells and increase in classic monocyte contents were exemplary. Moreover, scRNA-seq revealed increased NF- κ B signaling and reduced type I interferon responses, which were confirmed by biological assays and also had been reported to occur after SARS-CoV-2 infection with aggravating symptoms. Altogether, our study recommends additional caution when vaccinating people with pre-existing clinical conditions, including diabetes, electrolyte imbalances, renal dysfunction, and coagulation disorders.

Introduction

The COVID-19 pandemic has profoundly affected humanity. The development of COVID-19 vaccines in various forms has been underway in an unprecedented and accelerated manner. Despite some uncertainties regarding potential consequences, large-scale vaccinations are taking place in many countries. There have been different COVID-19 vaccines developed, including inactivated viral

particles, mRNA vaccines, adenoviral-based vaccines, and etc.^{1–5}. Historically, vaccine research has been focused on whether or not vaccination could generate neutralizing antibodies to protect against viral infections, whereas short-term and long-term influences of the various newly developed vaccines to human pathophysiology and other perspectives of the human immune system have not been fully investigated.

With the development of large-scale single-cell mRNA sequencing (scRNA-seq) technology, systematic investigation of people's immune system function with precision became possible, primarily through scRNA-seq of peripheral blood mononuclear cells (PBMCs). During the COVID-19 pandemic, a large body of studies using scRNA-seq of PBMCs had revealed detailed changes in gene expression in different immune cell subtypes including different types of T and B cells, NK cells, monocytes, dendritic cells, etc. during and

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after infection, results from which indicated greatly reduced CD4⁺ and CD8⁺ T-cell numbers and T-cell exhaustion upon SARS-CoV-2 infection. Reduced peripheral mucosal-associated invariable T (MAIT) cell numbers and their migration in and out of the lung had also been observed. Highly activated inflammatory immune responses, including Interferon-gamma (IFN- γ), interleukin-6 (IL-6), and NF- κ B responses, had been reported in COVID-19 patients^{6–12}. Many studies had revealed immune state differences between people with severe versus mild symptoms, in that strong type I interferon (IFN- α/β) responses were beneficial after COVID-19 infection and attenuated IFN- α/β responses were associated with the development of severe symptoms¹³. In contrast, stronger NF- κ B inflammatory responses were associated with more severe symptoms¹⁴. In addition, increased $\gamma\delta$ -T cell and reduced neutrophil contents were reported to be associated with milder symptoms¹⁵.

Upon SARS-CoV-2 infections, many people developed various degrees of respiratory syndromes, and some with gastrointestinal conditions. It had been reported that blood coagulation disorders, vasculature issues, electrolytes imbalances, renal disorders, metabolic disorders, etc. were major clinical complications with COVID-19^{16,17}. The manner in which vaccination would mimic an infection has not been fully evaluated. In this study, we enrolled healthy volunteers who were to be vaccinated with an inactivated SARS-CoV-2 vaccine (Vero Cell)³, to participate in antibody and neutralizing antibody testings, as well as detailed clinical laboratory measurements before and at different times after vaccination (two-dose regimens with slightly different schedules were applied). To our surprise, we observed quite consistent pathophysiological changes regarding electrolyte contents, coagulation profiles, renal function as well as cholesterol and glucose metabolic-related features, as if these people had experienced an infection with SARS-CoV-2. In addition, PBMCs scRNA-seq results also indicated consistent reductions in CD8⁺ T cells and increases in monocyte contents, as well as enhanced NF- κ B inflammatory signaling, which also mimicked responses after infection. Surprisingly, type I interferon responses, which had been linked to reduced damages after SARS-CoV-2 infection and milder symptoms, appeared to be reduced after vaccination, at least by 28 days post the 1st inoculation. This might suggest that in the short-term (1 month) after vaccination, a person's immune system is in a non-privileged state, and may require more protection.

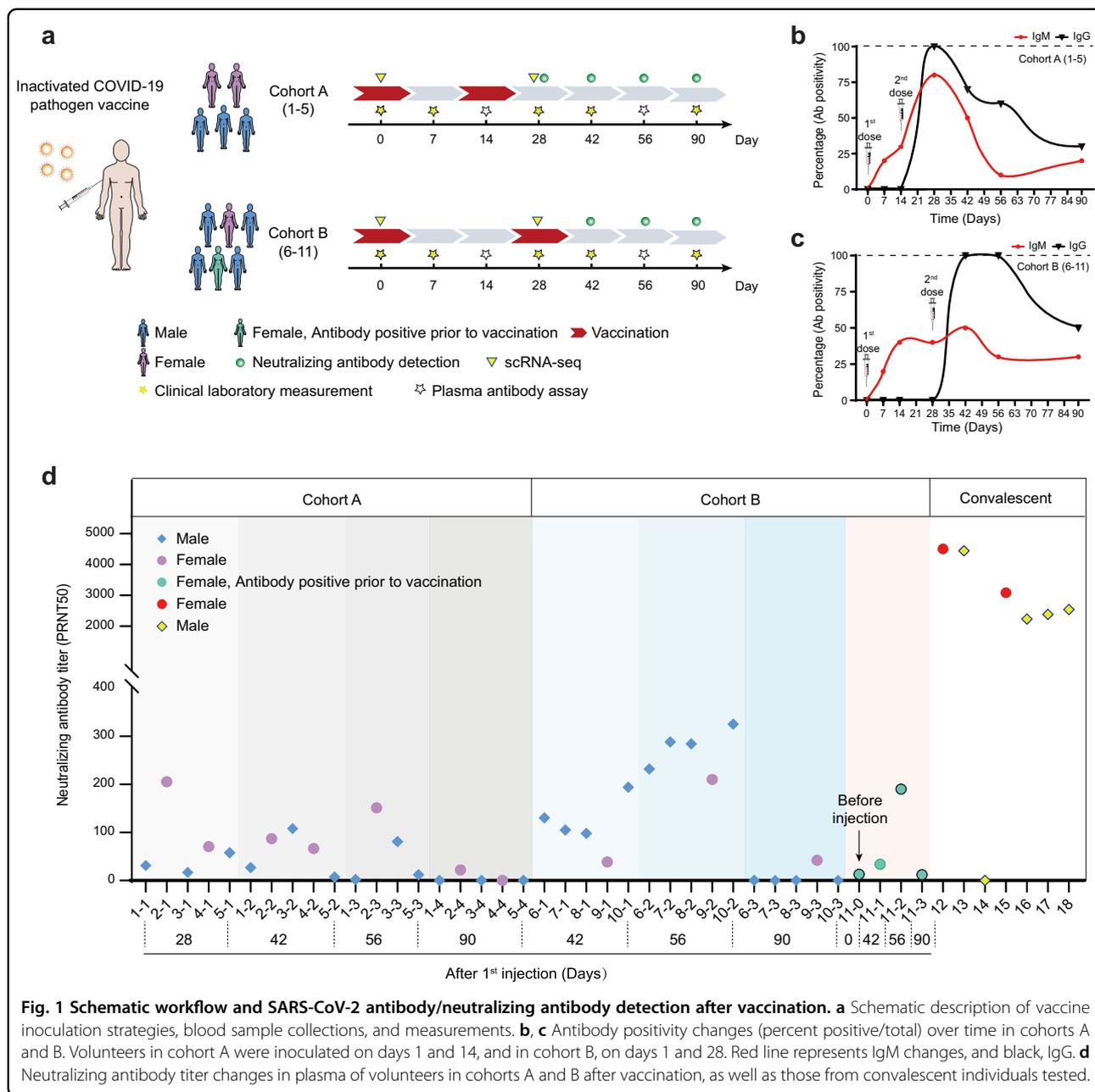
Results

Longitudinal follow-up of anti-SARS-CoV-2 antibody and neutralizing antibody productions after inoculation of inactivated SARS-CoV-2 vaccine

A total of 11 healthy adult volunteers of both sexes, aged 24–47 years, with a BMI of 21.5–30.0 kg/m², were

enrolled in this study (Fig. 1a and Supplementary Tables S1 and S2). SARS-CoV-2 vaccine (Vero Cell), inactivated (Beijing Institute of Biological Products Co. Ltd), was administered intramuscularly into the deltoid. Volunteers were divided into two cohorts; five participants (cohort A) were vaccinated with a full dose (4 μ g) of inactivated SARS-CoV-2 Vaccine (Vero Cell) on days 1 and 14, and six participants (cohort B) received a full dose of the vaccine on days 1 and 28 (Fig. 1a). One of the volunteers in group B was tested positive for anti-SARS-CoV-2 IgM and IgG right before vaccination, suggestive of potential prior infections. However, there was no record of previous positivity by nucleic acid (NA) diagnosis for COVID-19 (marked green in Fig. 1a). For all follow-up examinations, data from this individual was marked green to track any possible influences from potential prior infections.

Adverse events were monitored daily during the first 7 days after each inoculation and then self-recorded by the participants on diary cards in the following weeks. Overall, adverse reactions were mild (grades 1 or 2) and transient (Supplementary Table S3). Blood samples were collected on days 0, 7, 14, 28, 42, 56, and 90, and urine samples were collected on days 0, 14, 28, 42, and 90. Plasma samples were subjected to anti-SARS-CoV-2 IgM/IgG testing using multiple diagnostic kits, results from the most sensitive kit were used for quantification (Fig. 1b, c). Testing results from cohort A demonstrated that prior to the 2nd inoculation 0% of the participants developed anti-SARS-CoV-2 IgG, but by day 28, which was 2 weeks post the 2nd inoculation, 100% of the participants were tested positive (Fig. 1b). Overall, IgM showed up earlier than IgG, which was expected. IgG and IgM positivity decreased by day 42 and remained at relatively low levels by day 90 in cohort A. For cohort B, no one developed IgG until after 2nd inoculation. Yet by day 42, IgG positivity reached 100% (Fig. 1c) and sustained until day 56, suggesting that the vaccination protocol for cohort B was more efficacious. By day 90, IgG positivity also reduced to 50%, indicating antibody production did not sustain for a long time. We further carried out tests for SARS-CoV-2 neutralizing antibodies¹⁸ (Fig. 1d), and results also indicated that two inoculations 28 days apart (cohort B) resulted in higher protective antibody titers as compared to two inoculations with 14 days apart (cohort A). On the other hand, it appeared that anti-SARS-CoV-2 neutralizing antibody titers were overall lower than those in COVID-19 convalescent individuals as reported before³ (Fig. 1d). By 90 days, neutralizing antibody titers dramatically decreased in all volunteers (Fig. 1d). Interestingly, the individual who was antibody positive prior to vaccination was not more prone to generating neutralizing antibodies as compared to the rest of the participants, suggesting that prior potential infection might not have occurred or may not generate long-lasting protection in the perspective of neutralizing antibody production.



Alterations in clinical laboratory measurements after vaccination

Clinical laboratory routine tests including infection-related indices, hematologic parameters, coagulation function, blood glucose, serum lipids, cardiac function-related enzymes, electrolytes, liver, and renal function-related biomarkers, were measured to reveal safety features of the vaccine (Fig. 2a and Supplementary Tables S4 and S5). White blood cell count was significantly, yet only slightly, increased after vaccination on day 7. No differences were detectable at the following time points (Fig.

2b). To our surprise, quite consistent increases in HbA1c levels were observed in healthy volunteers, regardless of whether they belonged to cohort A or B. By day 28 post the 1st inoculation, three out of 11 individuals reached the prediabetic range (Fig. 2c). By days 42 and 90, medium HbA1c levels appeared to revert back, yet were still significantly higher than those before vaccination. Previous work has demonstrated that diabetic patients with uncontrolled blood glucose levels are more prone to develop severe forms of COVID-19¹⁹. High blood glucose levels/glycolysis had been shown to promote SARS-CoV-

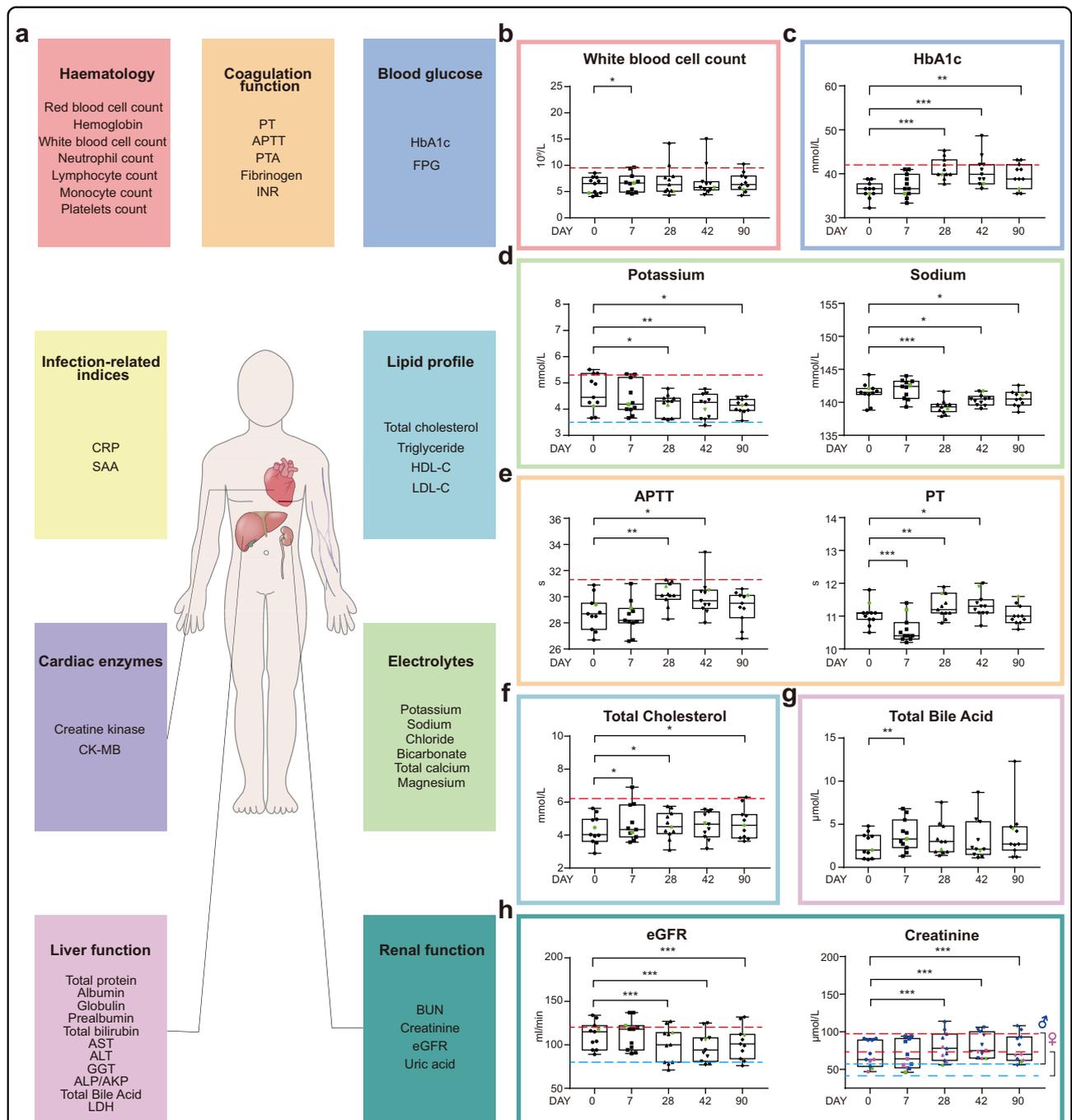


Fig. 2 Temporal changes of clinical laboratory measurements after vaccination. **a** Clinical laboratory routine tests include hematologic and coagulation parameters, blood glucose-related and infection-related indices, lipid profile, cardiac enzymes, electrolytes, liver- and renal function-related biomarkers. More information could be found in Supplementary Tables S4 and S5. Laboratory test values of white blood cell count (**b**), HbA1c (**c**), potassium (**d**, left panel), sodium (**d**, right panel), APTT (**e**, left panel), PT (**e**, right panel), total cholesterol (**f**), total bile acid (**g**), eGFR (**h**, left panel), creatinine (**h**, right panel). Data points represent the values of each individual. Box plots showed the 25th, 50th (median), and 75th percentiles. Horizontal dashed lines showed upper normal limits (red) in **b**, **c**, **d** (left panels), **e** (left panel), **f**, **h** and the lower normal limits (blue) in **d** (left panel) and **h**. The *P* values were calculated by the Wilcoxon sign-rank test by comparing the laboratory measurements at each time with the baseline measurements. **P* ≤ 0.05, ***P* ≤ 0.01, ****P* ≤ 0.001.

2 replication in human monocytes via the production of mitochondrial reactive oxygen species and activation of HIF1A²⁰, therefore presenting a disadvantageous feature.

Serum potassium levels decreased significantly by days 28, 42, and 90 post the 1st inoculation, with one sample below the lower normal limit at day 42 (Fig. 2d, left panel). Similarly, serum sodium levels also decreased following vaccination (Fig. 2d, right panel), indicative of vaccine influences on electrolyte balance. Again, electrolyte imbalance has also been linked to COVID-19²¹. Coagulopathy is another COVID-19-induced clinical condition²². We found that coagulation profiles changed significantly after vaccination, in the short-term (7 days) after the 1st inoculation, coagulation profiles were leaning toward shorter Prothrombin Time (PT), whereas the long-term (28 and 42 days) effect was toward activated partial thromboplastin time (APTT) and PT prolongation (Fig. 2e). By day 90, the profiles returned back to those before vaccination (Fig. 2e). Moreover, we found elevated blood cholesterol levels at days 7, 28 after the 1st inoculation, and elevated total bile acid levels were also detected at day 7 (Fig. 2f, g). Renal dysfunction is another clinical condition linked to COVID-19, and by 28, 42, and 90 days after the first inoculation, serum creatinine levels were significantly higher than those before vaccination, resulting in reduced eGFR (Fig. 2h). Most of these clinical features have been reported to be associated with the development of severe symptoms in COVID-19 patients (Supplementary Table S6). Overall, there were no statistically significant differences between cohorts A and B, except for only a few indices (Supplementary Table S7), therefore data from two cohorts were pooled for clinical data presentation and subsequent analyses.

scRNA-seq revealed dramatic alterations in gene expression of almost all immune cells after vaccination

To explore the immunological features of healthy volunteers following vaccination, we performed droplet-based scRNA-seq (10× Genomics) to study transcriptomic profiles of PBMCs from volunteers belonging to either cohort A or B, before and 28 days after vaccination (Fig. 3a and Supplementary Fig. S1a). After preprocessing and low-quality cell elimination (see “Materials and methods”), we obtained 188,886 cells from all PBMC samples, among which 86,685 cells were from cohort A and 102,201 cells from cohort B. All qualified cells were integrated into the unified dataset and subjected to downstream analyses.

Using graph-based clustering of uniform manifold approximation and projection (UMAP)²³, Single-cell Recognition of cell types (SingleR) algorithm²⁴, and manual annotation based on canonical gene markers, we identified 22 cell types or subtypes and performed differential expression analysis amongst all cell types (Fig. 3b

and Supplementary Table S8). Cells (cell transcriptomes) from samples before (blue) and after (orange) vaccination were distinctly separated in the UMAP representation for both cohorts, which meant immunological features had changed quite drastically in almost all immune cell types detected, and consistently in all volunteers (Fig. 3c). Among the 11 pairs (before and after) of PBMC samples, 10 pairs were sequenced together and one pair was sequenced separately in a different batch. UMAP distributions were drastically similar regardless of the different batches, suggesting minimal sequencing batch effects (Supplementary Fig. S1b). Two independent batches of sequencing revealed similar changes before and after vaccination, suggesting the changes are real, whereas using the batch effect correction method (Harmony²⁵) (Supplementary Fig. S1c–e) would result in over filtration and elimination of the real changes caused by vaccination. Moreover, sample clustering based on the Pearson Correlation coefficient of the transcriptomes indicated that samples from the two cohorts (A and B) intermingled well with each other both before and after vaccination, whereas vaccination-induced changes could clearly be observed (Fig. 3d). Therefore, to increase the statistical power, we combined the two cohorts for subsequent analyses.

To reveal differences in cell-type compositions before and after vaccination, we calculated relative percentages of all cell types in PBMCs of each individual on the basis of scRNA-seq data (Fig. 3e). We observed decreases in contents of CD4⁺ regulatory T cells (CD4.Treg), CD8⁺ T cells (CD8.T), and proliferating CD8⁺ cells (CD8.Tprolif) after vaccination (Fig. 3e). Decreases in $\gamma\delta$ -T cell (gd.T.Vd2) contents were also significant (Fig. 3e). In contrast, vaccination increased CD14⁺ classical monocyte (Mono.C) contents (Fig. 3e), consistent with clinical laboratory measurements (Fig. 3f). The overall lymphocyte contents, which included all CD4⁺ T cells, all CD8⁺ T cells, B cells, and NK cells, did not change significantly before and after vaccination, which was also confirmed by clinical laboratory measurements (Fig. 3g). We collected a published dataset from 196 COVID-19-infected patients and controls⁷, and analyzed our data together with that dataset. The result indicated that vaccination-induced changes in cell contents of all five different immune cell subtypes also changed in the same directions in COVID-19 patients as compared to controls, except for proliferating CD8⁺ T cells (Supplementary Fig. S2).

To study detailed gene expression changes induced by vaccination, we merged individual samples into pseudo-bulk samples and used paired sample test to identify differentially expressed genes (DEGs) (Fig. 3h and Supplementary Table S9). Significantly upregulated genes were involved in “TNF α signaling via NF- κ B”, “inflammatory responses”, and “cytokine-cytokine receptor interaction”,

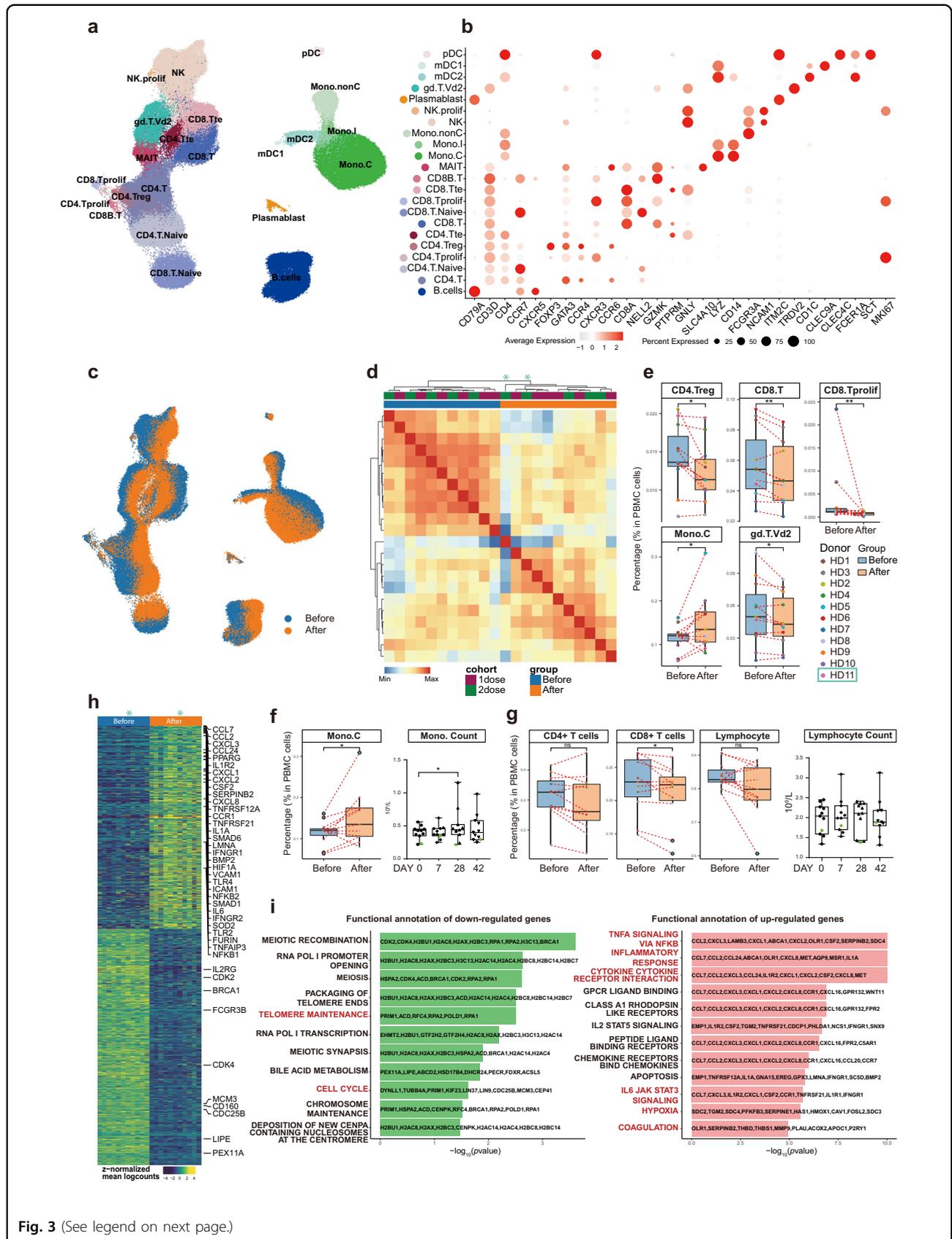


Fig. 3 (See legend on next page.)

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Fig. 3 Changes in peripheral immune cell type and subtype compositions as well as gene expression before and 28 days after the 1st inoculation. **a** Cell-type UMAP representation of all merged samples. In total, 22 cell types were identified by cell-type-specific gene expression signatures. In total, 188,886 cells were depicted. **b** Dot plot for cell-type-specific signature genes. Color scale indicated expression levels and point size represented the percentage of cells per cluster/subtype expressing the corresponding gene. **c** UMAP representation representing cells before (blue) and after (orange) vaccination. **d** Heatmap of correlation amongst pseudo-bulk samples. **e** Percentages of specific immune cell subtypes in total PBMCs from each individual before and after vaccination. Box plot depicted sample distribution. Blue boxes represented samples before, and orange, after vaccination. *P* values were based on the Wilcoxon test for comparisons between groups before and after vaccination. **f** Box plots showed changes before and after vaccination in monocyte content from scRNA-seq data (left panel) and clinical laboratory measures (right panel). **g** Box plots showed changes in CD4⁺, CD8⁺ T-cell contents as well as lymphocyte (T + B + NK) contents before and after vaccination from scRNA-seq data (left 3 panels) and laboratory tests (right panel). **h** DEGs identified by pseudo-bulk samples before and after vaccination. **i** Overrepresentation analysis of HALLMARK gene sets from MSigDB demonstrating different immunological features before and after vaccination.

“IL6-JAK STAT3 signaling”, “coagulation”, “hypoxia”, which had been reported for COVID-19, while cell cycle-related pathways were downregulated (Fig. 3i). These results supported the notion that vaccination mimicked an infection^{6–12}.

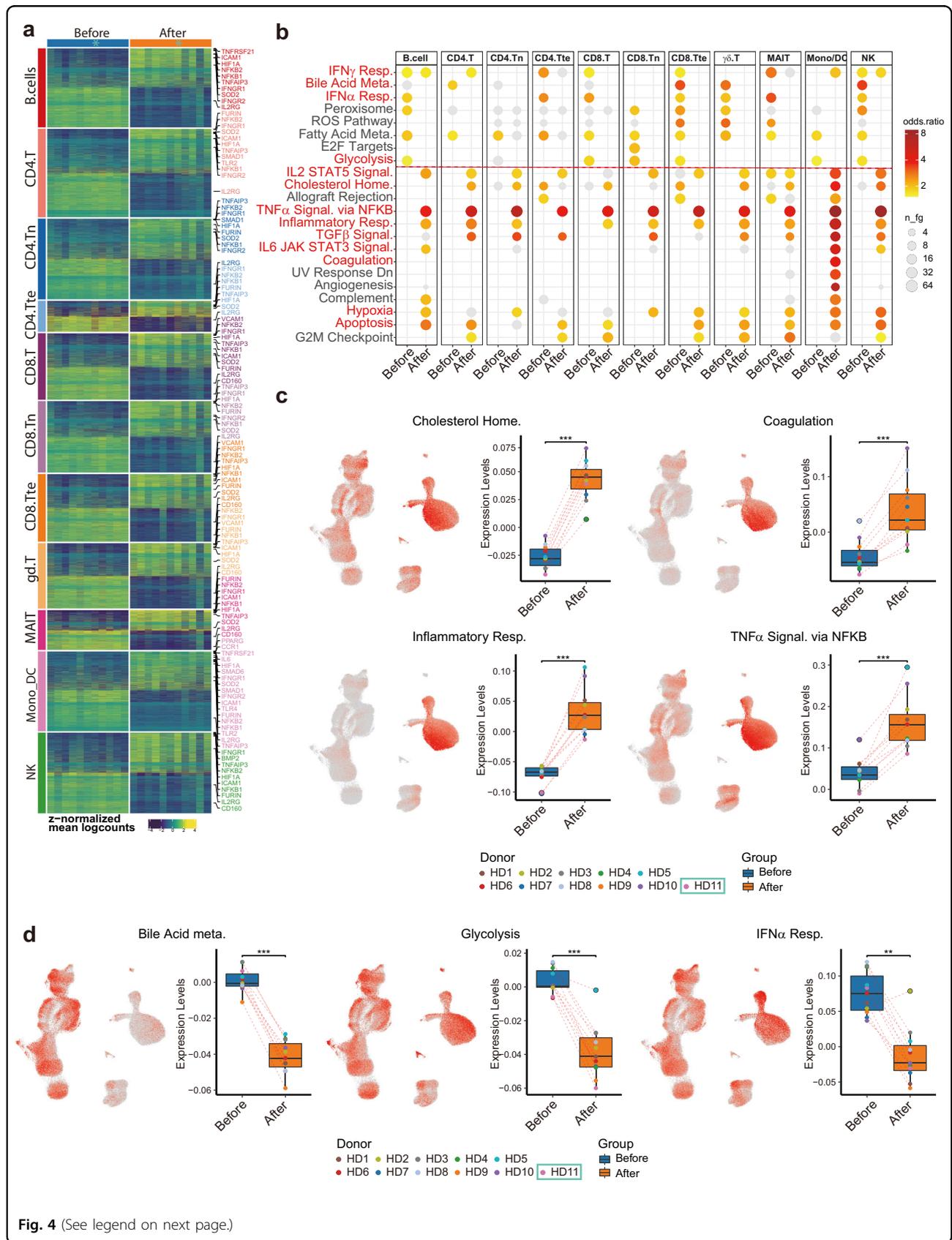
Featured immune cell subtype-specific gene expression changes mirrored clinical laboratory alterations

Prior to the elucidation of the functional heterogeneity and cell-type-specific gene expression changes between samples before and after vaccination, we grouped cells into 11 major types: (1) naive-state CD4⁺ T cells, (2) naive-state CD8⁺ T cells, (3) CD4⁺ helper T cells (including CD4.T, CD4.Treg, and CD4.Tprolif), (4) CD8⁺ cytotoxic T cells (including CD8.T, CD8B.T, and CD8.Tprolif), (5) MAIT, (6) $\gamma\delta$ -T cells, (7) NK cells (including NK, NK proliferative), (8) B/plasmablast cells (including B cells and plasmablasts), (9) monocytes/dendritic cells (including classical mono, intermediate mono, non-classical mono, myeloid DC1, myeloid DC2, and plasmacytoid DC), (10) CD4⁺ terminal effector T cells, and (11) CD8⁺ terminal effector T cells. Following eleven major cell-type categorizations, we performed sample-level comparisons by aggregating gene expression across major cell types within each donor and then performed differential expression analysis using muscat²⁶. We identified differentially expressed genes (DEGs) among all major cell types (Fig. 4a and Supplementary Table S10) and conducted gene functional analysis (Fig. 4b). Echoing the clinical measurement results, genes related to “cholesterol homeostasis”, “coagulation”, and “inflammatory response” (CXCL8, CD14, IL6, and TNFRSF1B), “TNF α signaling via NF- κ B” (NFKB1, NFKB2, NFKBIE, TNFAIP3, and TNFSF9) and “hypoxia” (HIF1A) were upregulated. In addition, “TGF β signaling”, “IL2-STAT5 signaling” (IFNGR1, MAPKAPK2, and CASP3), and “IL6-JAK-STAT3 signaling”-related genes were also upregulated (Fig. 4c). To visualize which cell types were enriched for those signatures, we performed gene module scoring and displayed the scores on UMAP coordinates as

well as grouped box plots (Fig. 4c and Supplementary Table S11). Interestingly, “inflammatory response” genes were highly expressed in monocytes and after vaccination further increased (Fig. 4c), suggesting monocytes were one of the major cell types participating in inflammatory responses after vaccination. In contrast, genes related to “glycolysis”, “bile acid metabolism”, and “type I interferon (IFN- α/β) response” were downregulated, consistent with our clinical data and the pathophysiology of COVID-19¹³ (Fig. 4d).

Most common changes in multiple immune cell subtypes revealed increases in NF- κ B signaling and decreases in IFN- α/β responses

Given that clusters of genes changed their expression dramatically among all major cell types, we hypothesized that there might be some transcription factors serving as master regulators leading to immunological alterations. To solve the computational challenges associated with such a big dataset, we used the MetaCell algorithm²⁷ to aggregate homogeneous groups of cells into metacells, and finally produced 1857 metacells (893 before and 964 after vaccination) to represent the whole structure of the scRNA-seq data (Fig. 5a). Those metacells were then applied to “single-cell regulatory network inference and clustering (SCENIC)”^{28,29} to construct the gene regulatory networks. The workflow produced a list of 157 “regulons”, which included transcription factors and their direct targets. Regulon activities were scored using AUCell to access averaged enrichment of all genes belonging to each regulon in each metacell, as well as averaged regulon gene enrichment in all 893 metacells before vaccination, and 964 metacells after vaccination. Top-ranked (most active) eight regulons upregulated and eight regulons downregulated after vaccination were identified (Fig. 5b). We selected 3 + 3 typical regulons to construct a regulatory network as presented in Fig. 5c (Supplementary Table S12). The network showed two distinct groups, one is consisted of IRF2, STAT1 and STAT2, which were downregulated after vaccination, and the other, contained



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Fig. 4 Subtype-specific differential gene expression and gene set overrepresentation analyses depicting common gene expression changes amongst different types of immune cells after vaccination. **a** 11 major immune cell-type-specific DEGs identified by pseudo-bulk data produced by combinations of samples before and after vaccination. Genes with $\log_{2}FC > 0.5$ and adjusted $P < 0.05$ were included. **b** Overrepresentation analysis of HALLMARK gene sets from MSigDB amongst 11 major cell types demonstrated common changes in gene sets representing altered immunological states before and after vaccination. **c, d** UMAP visualization colored by average expression scores (levels) based on differential enrichment pathway. Box plot depicting the expression score distribution before and after vaccination.

RELB, NFKB2, and HIF1A, which were upregulated after inoculation. The GO terms of the upregulated network are predominantly related to lymphocyte differentiation, activation, and “Germinal Center Formation”, which suggested that T cells and B cells were activated after vaccination. In addition, NF- κ B signaling was also elevated after vaccination. The downregulated network was enriched for many interferons-related pathways and Cytokine Secretion (Fig. 5d and Supplementary Table S13). This suggested that vaccination might inhibit interferon responses in the peripheral immune system, by reducing the activities of regulons STAT1, STAT2, and IRF2, which were thought to be master transcription factors driving type I and III interferon signaling^{30,31}.

To confirm vaccination-induced inhibition of interferon responses revealed by scRNA-seq, we stimulated PBMCs from vaccinated individuals before and 28 days after vaccination with IFN- α/β . After 16 h of culturing and 12 h of stimulation, we used RT-qPCR to measure the relative expression of master regulators IRF2, IRF7, and STAT2. STAT2 and IRF7 were significantly downregulated after vaccination, yet IRF2 showed a trend of downregulation (Fig. 5e, f). The regulon analyses indicated that the states of the peripheral immune system after vaccination had reduced type I interferon responses, indicative of attenuated general antiviral abilities at least 28 days after the first inoculation.

Vaccination-induced inflammatory responses in monocytes

Recent reports have described conserved host immune response signatures to respiratory viral infections, namely the Meta-Virus Signature (MVS), which is also conserved in SARS-CoV-2 infection^{32,33}. Higher MVS scores are associated with infection^{32,33}. In all, 380 (158 positively- and 222 negatively contributed to MVS scores) out of 396 (161 positively- and 235 negatively contributed) genes selected for MVS measurement were detected in our dataset. To investigate host immune responses after vaccination with inactivated SARS-CoV-2, we separated the positive and negative gene sets and calculated MVS scores (Fig. 6a). The MVS scores were substantially higher after vaccination (Fig. 6b, c), suggesting that vaccination mimicked an infection. Interestingly, the positive MVS gene set was predominantly expressed in monocytes,

while the negative set in lymphocytes, indicating different cell-type-specific immune responses would take place after vaccination (Supplementary Fig. S3a, b).

To investigate which pathways were associated with MVS-positive gene set and MVS-negative gene set, we calculated Spearman correlation among MVS gene sets scores and previously identified differentially enriched pathways using our scRNA-seq data (Fig. 6d). The most highly correlated pathway with MVS score and MVS-positive set was “Inflammatory response signaling”, which was strikingly upregulated in monocyte after vaccination, together with CD14, FPR1, C5AR1, NAMPT, NLRP3, CDKN1A, and IFNGR2. Whereas, MVS-negative set correlated well with “Cytotoxicity signature”, represented by NKG7, CCL4, CST7, PRF1, GZMA, GZMB, IFNG, and CCL3 expression, significantly decreased in many T-cell subtypes but not NK cells after vaccination (Supplementary Fig. S3c).

Discussion

This is a comprehensive investigation of the pathophysiological changes, including detailed immunological alterations in people after COVID-19 vaccination. Results indicated that vaccination, in addition to stimulating the generation of neutralizing antibodies, also influenced various health indicators including those related to diabetes, renal dysfunction, cholesterol metabolism, coagulation problems, electrolyte imbalance, in a way as if the volunteers experienced an infection. scRNA-seq of PBMCs from volunteers before and after vaccination revealed dramatic changes in immune cell gene expression, not only echoing some of the clinical laboratory measures but also suggestive of increased NF- κ B-related inflammatory responses, which turned out to be mainly taking place in classical monocytes. Vaccination also increased classical monocyte contents. Moreover, the gene set positively contributing to MVS scores, also known to be associated with severe symptom development, was highly expressed in monocytes. Type I interferon (IFN- α/β) responses, supposedly beneficial against COVID-19, were downregulated after vaccination. In addition, the negative MVS genes were highly expressed in lymphocytes (T, B, and NK cells), yet showed reduced expression after vaccination. Together, these data suggested that after vaccination, at least by day 28, other than

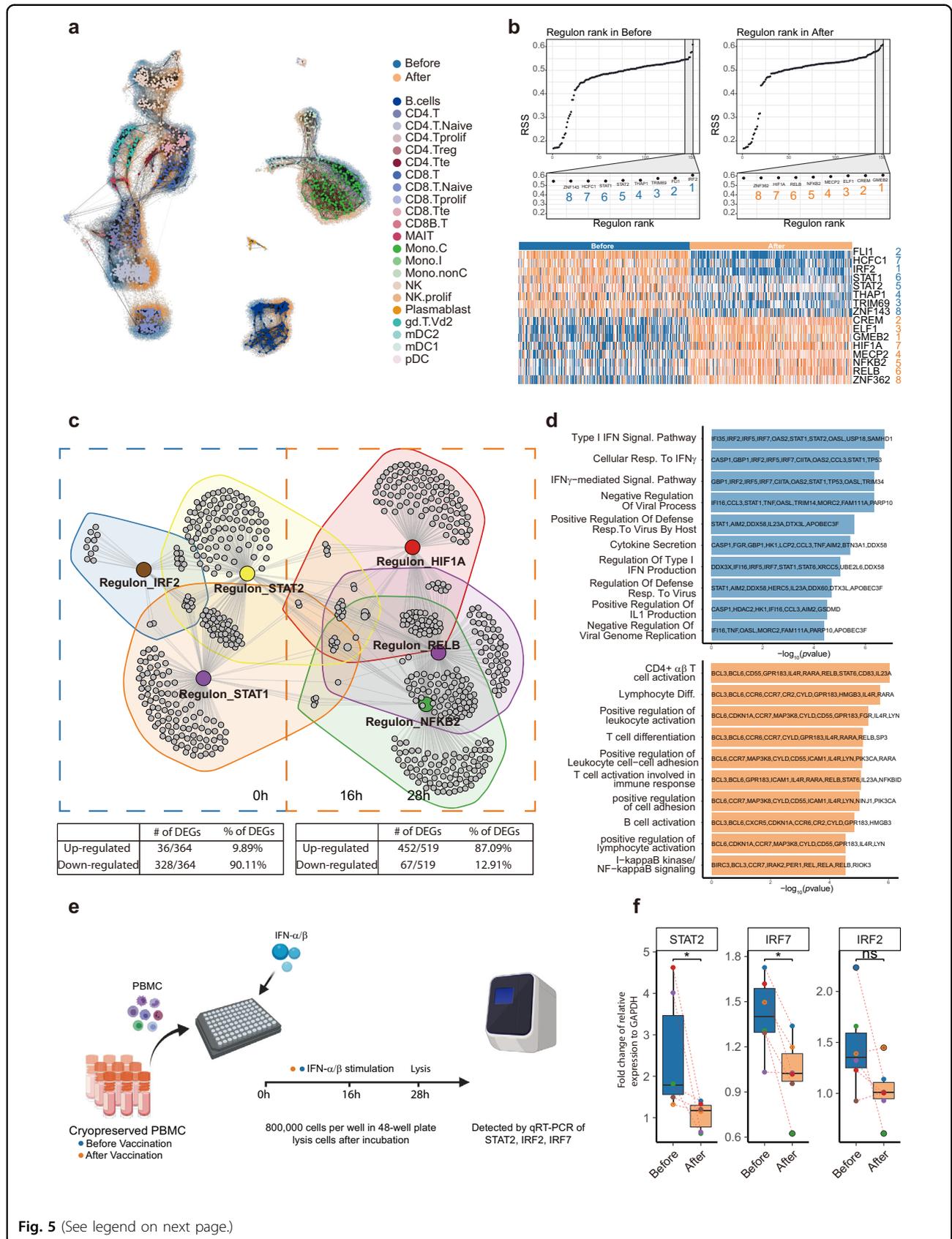


Fig. 5 (See legend on next page.)

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Fig. 5 Identification of master regulons and their regulatory networks before and after vaccination. **a** Visualization for the “similarity-structure-associating” metacells on the original scRNA-seq data. Metacells were color-coded according to their cell-type annotations. The original scRNA-seq data were color-coded “blue” and “orange” to represent samples “before” and “after” vaccination, respectively. **b** Top panels: rank of regulons in samples before (left) and after (right) vaccination, based on Regulon Specificity Score (RSS). Bottom panels: heatmap of top-ranked regulon activities before (blue) and after (orange) vaccination based on AUCell scores. Names of the regulons are color (blue/orange) and number coded (1–8). **c** Network of regulons and their target genes. The table below indicated the proportion of genes within the regulons which were up- or downregulated after vaccination. **d** Gene functional annotation and related genes before (blue) and after (orange) vaccination. **e** Schematic overview of the experiment. **f** After treatment with IFN- α/β , PBMCs from volunteers after vaccination had reduced expression of genes associated with type I interferon responses as compared to those before vaccination. Paired Wilcoxon test was used. $*P \leq 0.05$, $n = 6$.

generation of neutralizing antibodies, people’s immune systems, including those of lymphocytes and monocytes, were perhaps in a more vulnerable state.

Interestingly, our preliminary data demonstrated that if we pre-incubated RBD of SARS-CoV-2 with the PBMCs (from volunteers before and after vaccination) and then treated the cells with IFN- α/β , type I interferon responses were actually enhanced in PBMCs after vaccination, suggesting that perhaps vaccination, while reduced a person’s general antiviral ability, enhanced adaptive immune function specifically towards SARS-CoV-2 (Supplementary Fig. S4a). On the other hand, comparing PBMCs before vaccination, pre-treatment of SARS-CoV-2 S-RBD appeared to reduce type I interferon responses ($P < 0.05$, IRF2, IRF7, STAT2) (Supplementary Fig. S4b), suggesting 1st time exposure of the viral peptide would actually cause a reduction in type I interferon responses in PBMC. These in vitro data nicely supported the scRNA-seq results.

It is worth mentioning that one individual in cohort A who was on antibiotics, happened to not having reduced gene expression linked to type I interferon responses, and this individual also had the highest neutralizing antibody titer within the cohort. We further calculated Pearson’s Correlation Coefficient between neutralizing antibody titers and inflammatory responses measured by averaged gene expression of genes associated with TNF α Signaling via NF- κ B and interferon- α (type I interferon) responses. The results were 0.32 and 0.39 with $P > 0.05$ (Supplementary Fig. S4c), respectively, suggesting immune response changes and adaptive immune protection of the vaccine do not appear to be highly correlated. Whether antibiotics may influence vaccine efficacy remains to be determined. It is also rather interesting that while cohorts A and B had different anti-SARS-CoV-2 antibody production profiles, their PBMCs scRNA-seq results were drastically similar, including their B-cell scRNA-seq data (Supplementary Fig. S5a–c). It should be noted that after vaccination, the majority of responsive B cells, particularly those producing mature anti-COVID-19 antibodies (IgG) including memory B cells, should be primarily located in

peripheral lymphatic tissues such as lymph nodes and the spleen, while only a few mature B cells would exist in the circulation. Therefore, the B-cell population in PBMCs preparations may not reflect the whole spectrum of humoral immunity.

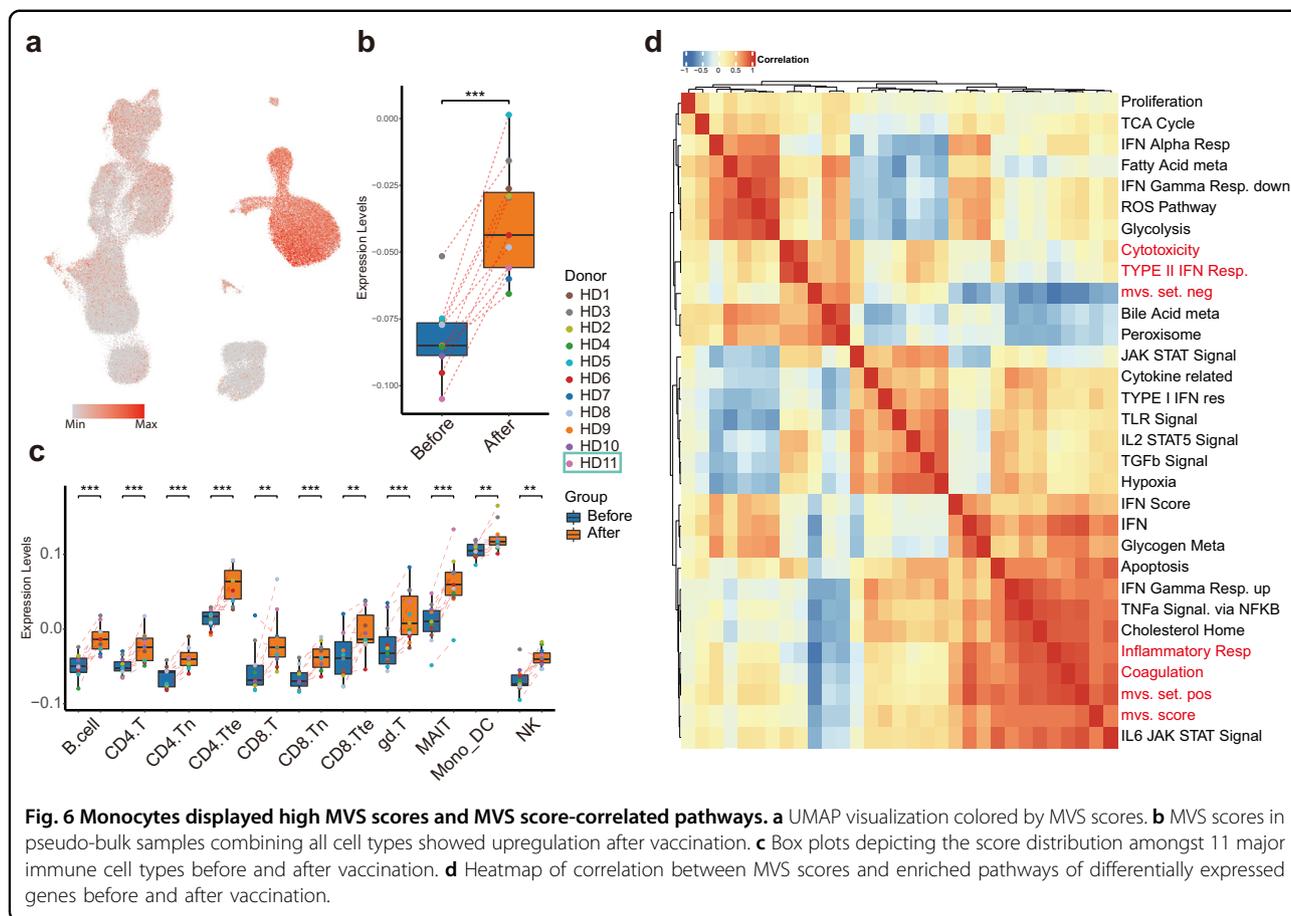
The analyses presented in this study, particularly, scRNA-seq of PBMCs had not been performed for previous vaccine evaluations, whether the changes in immune system function-related genes were COVID-19-specific or could be generally applied to other vaccines or other types of COVID-19 vaccines remained to be determined. However, these types of detailed analyses should be overall beneficial to vaccine development and applications. Our study postulates that it is imperative to consider the potential long-term impact of vaccination to certain medical conditions³⁴ or to general human health.

Materials and methods

Participants, clinical data collection, and procedures

Healthy adult volunteers were recruited to the program. All subjects underwent a physical examination and completed a questionnaire by trained doctors. Healthy adult aged 18–60 years, with axillary temperature ≤ 37.0 °C, negative for SARS-CoV-2 nucleic acid test, and willing to complete all scheduled study processes were enrolled in the study. People with epilepsy, brain or mental diseases, history of allergies, uncontrolled major chronic illnesses, and clinically significant abnormal findings on biochemistry, hematology tests were excluded. Pregnant or breastfeeding women were also excluded. This study was approved by the Ethics Committee of Shanghai East Hospital in accordance with the principles of the Helsinki Declaration (No.2020 (096)). Written informed consents were obtained from all participants before enrollment.

A total of 11 participants were enrolled and vaccinated to evaluate the clinical safety and dynamic changes in the immune system. Among these, five participants (cohort A) were vaccinated with 4 μ g dose of inactivated SARS-CoV-2 Vaccine (Vero Cell) on days 1 and 14, and six participants (cohort B) received a 4 μ g dose of the vaccine on days 1 and 28. Inactivated SARS-CoV-2 Vaccine (Vero



Cell) (China Biotechnology Group Corporation) was administered intramuscularly into the deltoid. All vaccines were approved by the National Institutes for Food and Drug Control of China.

Laboratory safety tests including infection-related indices (C-reactive protein, serum amyloid A protein), hematologic parameters (white blood cell counts, neutrophil counts, lymphocyte counts, monocyte counts, red blood cell counts, hemoglobin, platelet counts), coagulation function-related indices (prothrombin time, activated partial thromboplastin time/APTT, fibrinogen, prothrombin activity/PT, international normalized ratio/INR), blood glucose-related parameters (fasting plasma glucose, HbA1c), serum lipid (total cholesterol, triglyceride, HDL-C, LDL-C), cardiac function-related enzymes (creatinine kinase, CK-MB), electrolytes (potassium, sodium, chloride, bicarbonate, total calcium, magnesium), liver function-related biomarkers (e.g., albumin, alanine aminotransferase/ALT, aspartate aminotransferase/AST, total bilirubin, and etc.), renal function-related markers (creatinine, uric acid, blood urine nitrogen/BUN, estimated glomerular filtration rate/eGFR) were measured.

COVID-19 antibody (IgG/IgM) testing

A number of commercially available COVID-19 antibody (IgG/IgM) rapid testing kits including “Innovita (S protein specific)”, “GenBody (N protein specific)”, “Livzon (S + N proteins)”, and “AbKhan (S + N proteins)” were used to test anti-COVID-19 (IgM/IgG) positivities of plasma from volunteers before and at different times after vaccination. The “AbKhan” kit was most sensitive and data were used in this study.

Neutralizing antibody test by PRNT

Serum samples were each tested using a plaque reduction neutralization test (PRNT) assay for SARS-CoV-2 (2019-nCoV-WIV04) in the BSL-3 laboratory. Briefly, sera were heat-inactivated at 56 °C for 30 min and diluted to 1:50, followed by threefold serial dilutions (1:50, 1:150, 1:450, 1:1350, 1:4050, and 1:12,150). Sera were then mixed with 100 PFU of virus and incubated at 37 °C for 1 h. The virus–serum dilution mixtures and virus control were then inoculated into Vero E6 cell monolayers in 24-well plates for 1 h before adding an overlay medium including 1.5% methylcellulose at 37 °C for 4–5 days to allow plaque

development. Then the plates were fixed and stained with 2% crystal violet in 30% methanol for 30 min at room temperature, and the plaques were manually counted and measured. The PRNT titer was calculated based on a 50% reduction in plaque count (PRNT50).

Preparation of single-cell suspensions, single-cell RNA library preparation, and sequencing

The PBMCs were isolated from heparinized venous blood from healthy volunteers using a Ficoll-Paque™ PLUS Media (GE Healthcare Inc.) according to the standard density-gradient centrifugation method provided by the manufacturer. PBMCs were frozen in freezing media (70% RPMI-1640, 20% FBS, and 10% DMSO), and stored in liquid nitrogen until use. Single-cell capture and library construction were performed using the Chromium Single Cell 5' Library & Gel Bead kit (10× Genomics) according to the manufacturer's instructions. Libraries were sequenced using the Novaseq 6000 platform (Illumina).

scRNA-seq data analysis and statistics

Single-cell sequencing data were aligned and quantified using kallisto/bustools (KB, v0.25.0)³⁵ against the GRCh38 human reference genome downloaded from the 10× Genomics official website. Preliminary counts were then used for downstream analyses. We made a pipeline to process data. Briefly, cells with less than 200 genes were filtered out, the logarithmic normalized counts and top 3000 highly variable genes (HVGs) selection were performed by Scanpy³⁶.

We excluded specific genes from HVGs including mitochondrial genes, immunoglobulin genes, and genes linked to poorly supported transcriptional models (annotated with the prefix "Rp-"). Then principal component analysis (PCA) was performed utilizing the HVGs and Harmony algorithm was used to remove batch effects²⁵. We used the PARC approach to identify clusters³⁷ and selected features by "FeatureSelectionByEnrichment" function from cytoph2 algorithm³⁸, followed by another round of PCA, Harmony, and PARC. Subsequently, we calculated K nearest neighbors in a KNN graph, performed uniform manifold approximation and projection (UMAP) by Pegasus³⁹, and identified clusters by PARC. In addition, we applied Scrublet⁴⁰ to identify potential doublets.

Quality control was applied to clusters based on output of the first round of the pipeline:

1. Clusters with more than 20% cells of which doublet score > 0.4 were defined as doublets clusters.
2. Clusters with more than 20% cells that had > 20% of their transcripts mapped to mitochondrial genes were defined as low-quality clusters.
3. Clusters with more than 20% cells that had < 0.05% of their transcripts mapped to mitochondrial genes

were defined as nuclei.

4. Median expression of PPBP, PF4, HBB, HBA2 > 0, indicating erythrocytes and platelets.
5. Less than 50 cells.
6. Detected gene numbers < 1000.
7. Ratio of mean of total UMIs and mean of detected genes < 2.
8. Scrublet identified doublets.
9. Using DBSCAN⁴¹ to remove outliers.

After removing low-quality cells, we annotated cells by single-cell recognition of cell types (SingleR) algorithm, referring to Monaco immune datasets⁴².

Qualified cells were subjected to downstream analysis. Similarly, we rerun the pipeline to identify main cell types including T cells (CD3D, CD3E, CD3G, CD40LG, CD8A, CD8B), B cells (MS4A1, CD79A, CD79B), NK cells (GNLY, NKG7, TYROBP, NCAM1), and monocytes (CST3, LYZ). In addition, we run the pipeline on each type of cells, respectively, and further identified subtypes based on the SingleR-identified cell types and well-characterized markers (Fig. 3b).

Comparing immune cell proportion

For samples from PBMCs, we calculated immune cell proportions for each major cell type and underlying subtypes. For each sample, the cell-type proportion was calculated by the number of cells in a certain cell type divided by the total number of cells. To identify changes in cell proportions between samples in different groups, we performed a Wilcoxon test on the proportions of each major cell types as well as cell subtypes across different groups (Supplementary Fig. S2). Only those cell types with statistically significant differences ($P < 0.05$) in proportions are shown in Fig. 3e.

Differential expression analysis, gene sets overrepresentation analysis, and score signature modules

To investigate immunological feature alterations, we identified DEGs by muscat algorithm²⁶ with default parameters. Briefly, we first sum-collapsed the data, summing UMIs across cells for each healthy donor, to produce a bulk RNA-seq style UMIs profile for each sample. Afterward, the aggregated counts were loaded onto pbDS function to identify DEGs, and heatmaps were plotted by pbHeatmap function. Gene set overrepresentation analysis of DEGs ($\log_{2}FC > 0.5$ and adjusted $P < 0.05$) were performed using one-sided Fisher's exact test (as implemented in the "gsfisher" R package) with "HALLMARK", "KEGG", and "REACTOME" gene sets derived from MSigDB. Gene sets with $P < 0.05$ were considered to be significant. Signature module scores were calculated via "AddModuleScore" function, with default settings in Seurat. Briefly, for each cell, the score was defined as the average expression of the signature

gene list subtracting the average expression of the corresponding control gene list⁴³. Gene lists used for analysis are provided in Supplementary Table S11.

Metacell analysis

We used the R package “MetaCell”²⁷ to analyze the data. We removed specific mitochondrial genes, immunoglobulin genes, and genes linked to poorly supported transcriptional models (annotated with the prefix “Rp-”). We then filtered cells with less than 500 UMIs. Gene features were selected using the parameter $T_{vm} = 0.08$ and a minimum total UMI count > 100 . We subsequently performed hierarchical clustering of the correlation matrix between those genes (filtering genes with low coverage and computing correlation using a down-sampled UMI matrix) and selected gene clusters containing anchor genes. We used $K = 100$, and 500 bootstrap iterations and otherwise standard parameters. Metacells were annotated by the most abundant cell types composing each metacell.

Gene regulatory network analysis

For identification and scoring of regulon activity, we employed pySCENIC^{28,29} workflow on log-normalized metacells data to determine sets of co-expressed genes. We linked direct targets to their corresponding transcription factors using RcisTarget databases (v1.2.1), and retained putative downstream genes with enriched DNA motifs at 10 kb or 500 bp from the transcription start site (normalized enrichment score > 3). Finally, we used AUCell function to score activity of each regulon across cells in the dataset, which was computed as the sum of genes expressed per regulon and produced binary activity matrices based on cutoffs manually adjusted after inspecting the distributions of AUC scores. Regulon specificity scores (RSS) were calculated by the “regulon_specificity_scores” function from pySCENIC algorithm with default parameters.

Analysis of IFN- α/β response of PBMCs

PBMCs were isolated from heparinized blood by Ficoll-Hypaque at $400\times g$ for 30 min. The PBMCs ($1 \times 10^6 \text{ ml}^{-1}$) of donors before and after vaccination were then seeded in 48-well culture plates with RPMI-1640 containing 5% knockout serum replacement and 0.032% heparin. The next day, medium was exchanged and cells were treated with 100 ng/ml IFN- α and 10 ng/ml IFN- β for 12 h. Some cells were pre-treated with 250 ng/ml RBD for 16 h, followed by IFN- α/β treatment for 12 h. Following washing and extraction of total RNA, real-time quantitative PCR was performed to detect the expression of type I interferon response-associated genes. Fold changes relative to GAPDH were calculated by $2^{-\Delta\Delta C_t}$ and expressed as means \pm SEM. Differences between groups were evaluated using paired Student's *t*-test and considered significant when $P < 0.05$.

Statistical analysis

Clinical data were summarized using mean (standard deviation), median (Q1, Q3), or number (percentage), when appropriate. The Wilcoxon signed-rank test was used to compare paired medians over time for laboratory characteristics. In addition, Wilcoxon sum-rank test was used to compare the median changes from baseline between cohorts A and B. We graded adverse events according to the scale issued by the China National Medical Products Administration (<https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20191231111901460.html>) and the judgment of laboratory test results was based on the reference value range of the local population. All statistical tests were two-sided. Statistical significance was defined as $P \leq 0.05$. Statistical analyses were performed using SAS v9.4 (SAS Institute Inc., Cary, NC, USA).

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Author contributions

Z.L., Y.E.S., C.W., and J.L. conceived and designed the study, had full access to all of the data in the study. H.X., C.Z., W.C., H.Z., Q.L., W.G., L.W., Z.S., W.Z., and Y.E.S. generated COVID-19 neutralizing antibody and performed antibody (IgM/IgG) tests. Y.W., C.W., R.Z., Y.S., and W.Z. supplied either patient samples or testing kits. J.W., Q.L., Z.S., Z.X., L.Z., J.S., X.Y., Y.D., and C.Z. were involved in sample preparations and scRNA-seq. J.X. analyzed clinical data and performed statistical analyses, J.L., L.Z., and J.S. were involved in sequencing data bioinformatics analyses. The manuscript was drafted by Y.E.S., J.L., C.W., W.C., H. Z., L.Z., H.X., and Z.L.; and critically revised by all authors.

Data availability

The accession numbers for the sequencing raw data and processed data in this paper are Genome Sequence Archive in BIG Data Center (GSA, Beijing Institute of Genomics, Chinese Academy of Sciences): HRA001150.

Conflict of interest

The authors declare no competing interests.

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From: Melissa Fisher
Sent: 11/2/2022 3:58:24 PM
To: DOH WSBOH
Cc:
Subject: No covid-19 vaccine mandate

External Email

Dear board members

I am asking that you do not mandate the covid-19 vaccine for school kids. It does not stop transmission. It is still under an EUA. We have more data about the possible side effects. This is something that each parent should be able to choose based on their family needs. The V-Safe Data is now available. I hope that you have also looked at that when making your decision. Also the VEARS. The children are at very little risk from covid-19. I hope you make the right decision so that my kids may stay in school as they love it.

Thank you

Melissa Fisher

From: Chelsey Longenecker
Sent: 11/1/2022 1:49:29 PM
To: DOH WSBOH
Cc:
Subject: Vaccine mandates for students

External Email

Hello,
My name is Chelsey Huston. I am aware that the WA BOH is meeting next week in regards to including the covid-19 vaccination in the required vaccines for students. I am reaching out as a mother, former healthcare worker, and WA state citizen who does not support mandating this vaccination, for multiple reasons. I am respectfully asking you to not push this unnecessary vaccine on our children.

Sincerely,
Chelsey Huston

From: beach4me
Sent: 10/31/2022 9:03:13 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Subject: No liability-free medical treatments mandated for kids!

External Email

Vaccine Advisory Committee,

Do not recommend the Board of Health adopt the covid-19 vaccine as a requirement for school attendance. This is not a true vaccine, it doesn't prevent covid infection or spreading covid, in fact for minors, the chances for injury are much higher than if they acquired covid naturally. The manufacturers are exempt from liability for harm done, parents of injured children are having difficulty getting any compensation for claims, and have not proven it's safety or efficacy.

The CDC has been wrong on everything and flip flopped positions. Save the children from this dangerous and terrible advice.

Sincerely,

Annette Kessler
Brier, WA

From: Gen Mossman
Sent: 10/20/2022 12:18:15 PM
To: DOH WSBOH
Cc:
Subject: Child Immunization Schedule inquiry

External Email

Good afternoon,

I am writing to inquire about the recent news of CDC adding this shot to children immunization schedules.

Are children in the State of Washington required to have the covid-19 shot in order to attend school?

If you can, please respond and clarify.

Thank you for your attention in these regards.

Genevieve Mossman

From: Wynn Grcich
Sent: 11/2/2022 11:00:56 PM
To: DOH WSBOH
Cc:
Subject: opposed to any vaccine mandates, especially for children school schedules

External Email

To the WA Department of Health (DOH) Vaccine Advisory Committee (VAC),

I am opposed to all vaccine mandates! Where there are risks, there should always be choice! The decision should be made by the recipient if it's for an adult, or parent or legal guardian for a child. I am more opposed to the COVID vaccines being added to the schedule.

www.brighteon.com

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.brighteon.com%2F&data=05>>
"Cancer Explodes After Vax!- Experts Are Speaking Out!- Where Is The Justice?"

Watch this and you will never take another jab.

No informed consent. Not transparent of ingredients.

These are death jabs.

Needs to be stopped immediately.

Wynn Grcich

1955wcg@gmail.com <<mailto:1955wcg@gmail.com>>

From: Denise Lozada
Sent: 10/22/2022 7:17:41 AM
To: DOH WSBOH
Cc:
Subject: School Vaccination COVID 19

External Email

Dear BOH Members:

Thank you for listening to the concerns of us as citizens of Washington State and for voting to adopt the TAG's recommendation to not add the COVID-19 vaccine to Washington's list of required immunizations for child care and school entry at your April 13 virtual public meeting. We are confident that the emerging scientific data will continue to affirm your decision. Thank you for your thoughtful consideration in your role to protect the health of the children in our State.

Respectfully,
Denise Lozada

From: John Harding
Sent: 10/31/2022 2:30:32 PM
To: DOH WSBOH
Cc:
Subject: Vaccine Mandates for Children

External Email

To Whom It May Concern:

The "safe and effective" COVID vaccine has proven to be neither safe nor effective. The most recent research has proven that the vaccine doesn't stop the vaccinated from getting the virus, nor does it stop the transmission of the virus. Rather, it has proven to cause a whole host of side effects and even death in some individuals.

Given the facts presented above, what is the rationale for mandating the "jab" to children who will most likely never get COVID and, if they do, have the highest possible chance of surviving it. On the contrary, kids who get the vaccine have a much higher risk of vaccine-related injury and death, not from the virus but from the spike proteins that are injected into their bodies. Mandating this vaccine is nothing short of child abuse. Please have some common sense and let parents decide whether their kids should get the vaccine or not.

Sincerely,

John Harding
702 87th Ave SE
Lake Stevens, WA 98258
425-348-1829

From: Sheryl Pedigo
Sent: 10/22/2022 12:57:34 PM
To: DOH WSBOH
Cc:
Subject: Mandatory Covid Vaccines

External Email

Hello-

I would like to comment that I DO NOT support requiring the so called Covid vaccine for school children. I beg you to not do this. Please see the over 30,000 deaths attributed to this "vaccine" as well as huge numbers of myocarditis issues on the Vaccine Adverse Event Reporting System (VAERS). Giving this shots to children who essentially have a ZERO chance of death or serious complications from Covid would be outrageous. Their risk of death or serious side effect from the Covid "vaccine" far out way any proposed benefit.

Thank you for your attention in this serious matter!

Sincerely,
Sheryl Pedigo

Sent from my iPhone

From: Penny West
Sent: 10/21/2022 5:26:50 PM
To: DOH WSBOH
Cc:
Subject: Covid Vac for kids

External Email

Dear BOH,

Please do not require Covid shots for kids to attend school. There have been many adverse events from these shots. I have seen the v-safe data. No healthy children have died from Covid. Very many children have already had it? Are you going to count natural immunity? All studies have proven it is more protective than the vaccine that does NOT stop transmission. The only current claim for the vaccine is that it provides a milder case. Children already have mild cases so what good is it? No good and with the amount of myocarditis it causes plus exacerbating any autoimmune disorders the children may have it obviously has more risk than Covid to them. I am a grandmother. My adult children will not allow their children to get this vaccine. We know the spike protein accumulates in the ovaries. Can this possibly effect fertility? We simply don't know yet. I am urging you to wait on this. The emergency is over and I believe very soon the eua will cease. If not, I am talking to everyone with young children. This is just too potentially harmful. It makes no sense. Please think about this rationally. I think you'll agree that the above arguments make sense. Parents don't want this. Don't make them pull their kids out of school over this because they will. What does that do to your tax base?

Sincerely,
Penny West

Sent from my iPhone

From: Barbara Elder
Sent: 11/1/2022 6:56:16 AM
To: DOH WSBOH
Cc:
Subject: Voting

External Email

The public does not want any liability-free COVID-19 products to be mandated for our kids.

Barbara Elder

From: Brad Loosveldt
Sent: 11/1/2022 7:38:12 PM
To: DOH WSBOH
Cc:
Subject: No Covid shot for kids on the immunization schedule

External Email

I am completely against the Covid-19 vax for our children. They do NOT need it because the data shows that for the vast majority of children their symptoms will be mild and then they'll have natural immunity, thus becoming part of the solution. The risk of injury to our kids is far greater than the benefits of this mRNA vax. We also don't have many studies on kids and the vax so it makes little sense to have them become Guinea pigs for this experimental treatment. We now know that this vax is NOT safe (+30,000 adverse reactions and counting)

OR effective (it appears the more boosters you have the more likely you are to get Covid) and public health officials have known since December of 2020 that it doesn't stop transmission of the virus.

Please don't approve this vax. Our kids have suffered enough In lost academics and social, psychological and emotional damage they may never recover from. Protect our children!

Sylvia Loosveldt

Sent from my iPhone Sent from my iPhone

Sent from my iPhone

From: Tara Redfern
Sent: 10/21/2022 5:07:49 PM
To: DOH WSBOH
Cc:
Subject: Covid shots for school children

External Email

To whom it may concern:

If the state requires covid 19 shots for children to attend public school I will pull my children from public school. I have 3 children in public school and I know many more that will do the same!

Parents should have a choice and a voice. Nobody should be forced to put something into their body if they don't feel right doing so.

Sincerely,

The Redfern family

From: j
Sent: 10/20/2022 10:45:40 PM
To: j
Cc:
Subject: Many professionals are ' seeing' deaths from the JAB! Epoch Times Article
PLEASE SAVE YOURSELVES!!!

External Email

Dear Ones,

STATISTICS do not LIE!!! Please read this new article from Epoch Times. Thank you,
Mary

95 Percent of Corpses Had Received COVID Vaccination Within 2 Weeks of Death:
Funeral Director (theepochtimes.com)
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.theepochtimes.com%2Fhealth-percent-of-corpses-had-received-covid-vaccination-within-2-weeks-of-death-funeral-director_4798942.html&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Ca1a068301de647c07b7408dab327>

From: Diane King
Sent: 11/1/2022 8:15:51 AM
To: DOH Secretary's Office
Cc:
Subject: NO VACCINES for KIDS

External Email
Please do not subject these innocents to this risky shot!

J Diane King
Port Townsend, WA

From: Barbara Elder
Sent: 11/2/2022 6:56:01 AM
To: DOH Secretary's Office
Cc:
Subject: Voting

External Email

☐The public does not want any liability-free COVID-19 products to be mandated for our kids.

Barbara Elder

From: Joanne Edinberg
Sent: 11/3/2022 10:22:12 AM
To: DOH Secretary's Office
Cc:
Subject: Please no COVID shots for children

External Email

Please do not add the COVID-19 shots to the childhood immunization schedule. There is simply no evidence that they are necessary. Parents can choose to immunize their children if they want.

Thank you for your thoughtful consideration of this decision.

Joanne

"A moment of self-compassion can change your entire day. A string of such moments can change the course of your life."
-Christopher Germer

From: bobhunt768
Sent: 10/31/2022 10:59:22 AM
To: DOH WSBOH
Cc:
Subject: Covid mandates

External Email

Dear sirs: Please discontinue now and forgo any future covid mandates. The science clearly shows that robust human Immunity trumps anything else that we have thrown at it to society's detriment.
Thank you. Bob Rennie, Cosmopolis, WA.

Sent from my Galaxy

From: Dolores Bruner
Sent: 11/2/2022 2:01:06 PM
To: DOH Secretary's Office
Cc:
Subject: Mandate for Schools

External Email

I am writing today to ask you not to recommend the COVID-19 shot as a requirement for attending daycare and preschool through 12th grade. Healthy children have never been at risk from this virus and are actually more at risk from the mRNA shot. It is well documented that boys, teenaged boys, and young men are at risk for myocarditis as a result of these shots. Girls are at risk for menstrual abnormalities. The long term effect of producing the spike protein for a lifetime are also unknown. I object to enriching the pharmaceutical companies at the expense of our children. Parents have the right to make medical decisions for their children, and that right should not be taken away from them.

Dolores Bruner

Aberdeen, WA

From: Lakeesha Ester
Sent: 10/22/2022 8:17:49 AM
To: DOH WSBOH
Cc:
Subject: 4E30B67D-2C50-4141-BC1D-D6E8748DC69A

External Email

Hi my name is LaKeesha Ester I'm a mother of 3 children here in Shreveport Louisiana. I
been trying to get help since Nov of 2018
I been having a problem with Parasites I have recorded Documents alone with pictures
my children has witness my experiences.
I've been to the emergency room 47 times and been locked down 23 times
I also reached out to new stations trying to get help
Channel 3,6,;and 12
I been sending emails to CDC
The Board of Health
Even call the Health Units
I've been to every Hospital here in Shreveport Louisiana still no help.
Recently I was bitten by a Rat and some how
I regenectlly reproduce that same Rat.
I been feeling movement and bites for a long period of years/ times and now my
ammune system is starting to break down
I was recently Hospitalized in Bastrop Louisiana
I had to have 3 paints of blood due to the Doctor running test and I was told that I had
lost a lot of Blood but when they examine me there was no results of where I had lost my
Blood.
Please if someone gets my messages please help me
I need help
Not the Gov. Coming for me and would rather experiment on me than help me and my
life would be taking for the numerous of test that they would wanna run....
Thank you,
LaKeesha Ester

From: Emily Calkins

Sent: 11/1/2022 9:44:08 PM

To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH), DOH WSBOH

Cc:

Subject: Regarding COVID vaccine as an addition to pediatric immunization schedule

External Email

Dear Committee:

Although the ACIP (the Advisory Committee on Immunization Practices) recently recommended adding Covid shots to the CDC pediatric schedule, I am asking that you do NOT recommend COVID shot mandates for the children in Washington. The public is not served by liability-free COVID-19 products being mandated for our kids. Not only are a majority of our kids not at risk of developing COVID, COVID shots have also not been adequately tested and show some concerning health risks. Please recommend to the Board of Health that such shots NOT be added to our state's pediatric schedule.

Truly,

Emily Calkins

From: Darcy Poland
Sent: 11/2/2022 8:46:51 AM
To: DOH Secretary's Office
Cc:
Subject: Covid-19 vaccine

External Email
To whom it may concern,

Please DO NOT add the Covid-19 vaccine to the daycare and school children's vaccine schedule. As we know, children are not susceptible to hospitalization due to Covid. This vaccine is unwarranted and will definitely cause a drastic reduction in our ALREADY declining public schools.

Sincerely,
Darcy Poland

From: Barbara Eneberg
Sent: 11/1/2022 6:29:45 PM
To: DOH WSBOH
Cc:
Subject: Re: Meeting for Covid19 Vaccine for school children...

External Email

Hello WA State Vaccine Advisory Committee and Board of Health Members -

I'm sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school. Here's why...

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits!!! The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science!!! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school!!!

Sincerely,
grandparents of 7,
Gary and Barbara Eneberg

From: Darin Padur
Sent: 10/31/2022 3:45:37 PM
To: DOH WSBOH
Cc:
Subject: No vaccine mandates for Covid 19

External Email

This makes so sense as there is little risk to children or anyone else.

Darin Padur
dpadur@comcast.net
(253) 335-7917

From: Beth Martin
Sent: 11/3/2022 10:33:40 AM
To: DOH WSBOH
Cc:
Subject: COVID Vaccine for Children

External Email

Dear Board of Health Members,

As a parent of elementary children in Seattle, I am writing today to ask that you do not add the COVID-19 vaccine to the schedule of immunizations required for day care and K-12 learning in Washington State. As the TAG concluded this spring, this mandate is not in the best interest of children given known and unknown side effects, the majority of Washingtonians are not in line with requiring this for children, and this would put an undue burden on school administration when their focus needs to be on the academic and emotional toll the last two years has taken on students. We've seen the test numbers, the last thing schools should be dealing with is vaccine mandates, they need to be focused on educating our youth.

Parents deserve authority over medical decisions for their children when it comes to the COVID-19 vaccine, without the threat of school admissions weighing over them. We do not have a health emergency for children with COVID-19 and there is no reason for the state to step between parents and physicians when making this decision for anyone, most especially children.

Thank you,

Beth Martin
Seattle, WA

From: Karen Hamblet
Sent: 10/31/2022 2:58:27 PM
To: DOH WSBOH
Cc:
Subject: Forced Covid Shots for WA state schoolchildren



attachments\E363D7446B004627_cleardot.gif

External Email

We are writing to oppose mandatory COVID "immunizations" for children in WA state schools. These RNA vaccines are unproven and have had very limited testing in children. Many published statistics show more chance of adverse reactions in children than the possibility of them contacting or becoming severely ill from COVID. The manufacturers of these shots are also not accepting any liability for adverse events.

Children have a lot of natural immunity to respiratory viruses, and many if tested may have already developed additional immunity. There is no current pandemic, and the chance that innoculated children could develop myocarditis or other adverse reactions remains.

Parents should be making these decisions along with their health care providers. We very much object to forced COVID immunizations in children (or anyone for that matter). No family should have to be forced to get their child injected with RNA medications or not be able to attend school.

We do not believe in the long term that courts will decide in favor of this requirement.

Karen & Dennis Hamblet
1815 33RD AVE NE
Olympia, WA 98506
360-918-8192

From: Teresa Cover

Sent: 10/31/2022 12:50:20 PM

To: DOH WSBOH,DOH Secretary's Office,Kwan-Gett, Tao (DOH),Sherls-Jones, Jamilia J (DOH),Drummond, Heather M (DOH),Thai, Nathaniel J (SBOH)

Subject: COVID shot recommendations

External Email

Dear WA BOH and DOH VAC,

With great urgency, I ask you to stick with the decision you came to already -- not to put the Covid shots on the mandatory vaccine schedule for our children.

First, remember that these are not really vaccines -- they do not stop transmission, nor were they ever tested for this. If they do not stop transmission and our youth are not at risk -- what is the point? A needless injection full of both short and long-term risk.

Secondly, we are well aware of complications and deaths these shots cause (VAERS, family, friends, etc) -- and now these EUA shots are liability free thanks to the CDC.

The reckless and unrelenting actions of the pharmaceutical companies, combined with FDA and CDC approval and promotion have opened our eyes to their profit-before-honesty approach. These institutions have destroyed their credibility with the American people.

Please show us that the Washington State DOH and BOH still has credibility -- do not try to force these shots on our children.

Other nations are destroying these shots altogether and scrapping any injection programs; that's what we should do too.

Thank you,
Teresa Cover

From: Kelsey Anderson
Sent: 11/2/2022 8:37:44 PM
To: DOH WSBOH
Cc:
Subject: Covid-19 Mandates for Children

External Email

All -

As a Washington state mom of three kids under five, please hear me when I say - we are absolutely opposed to Covid vaccine mandates for children. The choice to vaccinate my children against Covid 19 (which they have all had multiple times) should be the choice of my husband and I, and our choice alone. Just as it is with the seasonal flu vaccine, this should be at the discretion of the parents who have birthed and raised and cared for their babies. NOT a decision made by the state.

Thank you,
Kelsey Anderson, Kennewick WA

From: Beth O'Neal
Sent: 11/2/2022 8:28:28 AM
To: DOH WSBOH
Cc:
Subject: Do not add Covid mRNA shots

External Email

Hello,

I am writing to ask you to please not add the Covid mRNA shots to the schedule for children. It is clear the risks outweigh any benefits. Children have statistically a .000% chance of death from Covid and are not carriers of SARS Cov2. There are risks associated with this new technology and 10's of thousands of reported injuries due to the shots. Please stand up for children's health and say no. I have included some local articles for you to read which link and more information. They are in relation to our local health officer's choices but she followed suit to the higher ups and the money.

<https://www.porttownsendfreepress.com/2022/10/29/disinformation-trick-or-treats-be-afraid-be-berry-afraid-part-one/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.porttownsendfreepress.com%2Ftrick-or-treats-be-afraid-be-berry-afraid-part-one%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ce66a29f041964687c6af08dabce6e316%7C11d0>>

<https://www.porttownsendfreepress.com/2022/10/30/vax-trial-fraud-disinfo-another-berry-trick-or-treat-part-two/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.porttownsendfreepress.com%2Ftrial-fraud-disinfo-another-berry-trick-or-treat-part-two%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ce66a29f041964687c6af08dabce6e316%7C11d0>>

<https://www.porttownsendfreepress.com/2022/10/31/vax-efficacy-disinfo-bats-in-the-berry-belfry-part-three/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.porttownsendfreepress.com%2Fefficacy-disinfo-bats-in-the-berry-belfry-part-three%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ce66a29f041964687c6af08dabce6e316%7C11d0>>

You also may not be aware, there is a nonprofit action group called the Informed Consent Action Network who together working with lawyer Aaron Siri have committed to filing legal action against any state mandating these shots for children.

Please be brave and do the right thing.

Warmly,
Beth O'Neal
Port Townsend, WA

Sent from my iPad

From: Audra Byrd
Sent: 10/21/2022 7:04:59 PM
To: DOH WSBOH
Cc:
Subject: No to covid vax

External Email

To whom it may concern,

I am a Richland School District School Board Director and I am asking you to please not add the covid vaccine to our students vaccine requirement list. We have many families that do not want to get this vaccine and it will cause severe turmoil in our community.

Sincerely,
Audra Byrd
Richland School Board

Get Outlook for iOS

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Faka.ms%2Fo0ukef&data=05%7C>>

----- NOTICE OF PUBLIC DISCLOSURE:
This Richland School District e-mail account is public domain. Any correspondence from or to this e-mail account may be a public record. Accordingly, this e-mail, in whole or in part, may be subject to disclosure pursuant to RCW 42.56, regardless of any claim of confidentiality or privilege asserted by an external party.

From: CenturyLink Customer
Sent: 10/31/2022 8:10:49 PM
To: DOH WSBOH
Cc:
Subject: VAXX

External Email

The vaxx murders. You know it. There will be a day when you will answer for your EVIL!!!!!!

From: Jim Rosemary
Sent: 10/21/2022 5:39:33 PM
To: DOH WSBOH
Cc:
Subject: Vote NO on COVID-19 Vaccination Requirement for Children

External Email

Despite the recent CDC decision to recommend COVID-19 vaccinations be added to the childhood schedule, I strongly urge the WA BOH vote AGAINST recommending any/all COVID-19 vaccines from the immunization schedule for children/adolescents.

Pay attention to the recommendation from the Technical Advisory Group which voted not to recommend the addition. There is a reason why 40,000 oppositional comments were submitted by the public.

At this point, there has been insufficient testing to determine the efficacy and long-term safety of such vaccines in children. Additionally, there have been thousands of reports (through VAERS) of short-term adverse reactions in children. We still have no idea what the long term impact could be. The vaccines themselves represent a potentially greater threat to children's health than the disease itself.

Overall, COVID at every stage posed virtually no health threat to children as proven by numerous studies, and numerous studies proved that children do not comprise any significant transmission vector. That, plus at this point, the COVID pandemic has now been reduced to an endemic of a relatively mild strain, equating to cold-like symptoms for most people.

There is no health threat, no public emergency, no long-term safety study -- VOTE NO on recommending the COVID-19 vaccines for the immunization schedule for children.

– Jim Rosemary

253-639-3165

jim@newtechweb.com

From: 5crownz@gmail.com
Sent: 10/22/2022 1:43:15 PM
To: DOH WSBOH
Cc:
Subject: Covid 19 Vaccine requirement for schools

External Email

To all the members considering this addition to the vaccine schedule requirements,

Please stop the pharmaceutical companies from further endangering our children with their experimental drugs. The serious adverse events have now been well documented. There is NO circumstance imaginable where this toxic vaccine could be of use. Please help stop this madness! We are literally begging you to intervene to protect our precious children.

Thank you for your time and consideration.

Sincerely,

Kelle Hauser

Sent from my iPhone

From: Darcy Poland
Sent: 11/2/2022 8:45:21 AM
To: DOH WSBOH
Cc:
Subject: Covid vaccine

External Email

Dear Board of Health,

Please DO NOT add the Covid-19 vaccine to the daycare and school children's vaccine schedule. As we know, children are not susceptible to hospitalization due to Covid. This vaccine is unwarranted and will definitely cause a drastic reduction in our ALREADY declining public schools.

Sincerely,
Darcy Poland

From: Glen Rasmussen
Sent: 10/31/2022 11:31:51 AM
To: DOH WSBOH,DOH Secretary's Office,Kwan-Gett, Tao (DOH),Sherls-Jones, Jamilia J (DOH),Drummond, Heather M (DOH)
Cc:
Subject: NO Mandatory Covid Shots

External Email

Sirs:

I am writing to ask you to NOT make any vaccine, shot or medication for Covid or any other disease mandatory for anyone, child or adult. Such injections MUST be entirely voluntary with prior full disclosure of expected benefits, and illnesses including deaths, resulting from past use, that is the history from a large and random sampling of other recipients. This information should include the facts that

- a) children rarely experience any serious problems from a Covid infection,
- b) many people, including young people, have experienced serious health problems soon after receiving a Covid shot, that is, they generally have a greater chance of serious illness caused by the vaccination than from the disease, and
- c) the Covid shots do not protect others from infection.

Such disclosure must be made to the parent or legal guardian of a minor, and that adult must approve and authorize any and all injections or other medications for a minor.

Anyone who does not receive such a Covid injection or any other medication must not be penalized or restricted from any legal activity such as attending school, entering a business or being employed. In fact, we need a law prohibiting all discrimination based on anyone's vaccination status or medical history, which information should be private and restricted to the patient (or parent) and only those whom he/she permits to have such information.

Thank you.
Glen Rasmussen
Anacortes, WA

From: Naomi Aldort
Sent: 11/2/2022 6:43:52 PM
To: DOH WSBOH
Cc:
Subject: immunization requirements

External Email

Hello,

My comment for the Wednesday meeting on immunization requirements

Obviously we can not mandate an experimental injection for children as we have NO IDEA what it can cause years from now. We should be very careful to care for the children, and not for the finances of big pharma who is behind these attempts to mandate their product.

Fear of the injections today is greater than fear of the disease. Covid is harmless to children!!! It is often less than a common cold or even unnoticed. No reason for a risky injection with unknown long term consequences and a horrid track record of ineffectiveness and harm.

Add to it the the above the fact that these injections have proven unsafe (thousands of injuries and deaths) and ineffective, it would be very risky to impose these to anyone, let alone children. I personally know people who were required to take it for work and died. These facts are available on VAERS.

My scientific knowledge indicates that such unproven risky injection should not be allowed to be mandated by any state, school, business, county, or any organization. It should be specifically illegal to mandate.

Naomi Aldort

Author, Raising Our Children, Raising Ourselves

<https://naomialdort.com>

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnaomialdort.com%2F&data=05%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnaomialdort.com%2F&data=05%7)

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naomi@aldort.com

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To discuss your parenting and other concerns with Naomi:

<https://www.naomialdort.com/about-naomi-aldort/parenting-guiding-sessions.html>

From: Allyson Miller
Sent: 11/1/2022 8:43:21 AM
To: DOH WSBOH
Cc:
Subject: Covid shots to pediatric schedule

External Email

To all this may concern,

I am writing to urge you to vote to NOT add Covid shots to the pediatric schedule in Washington State.

By now it is undeniably clear that these shots do not do what they were promised to do: prevent the spread of Covid, nor prevent one from becoming infected with it. The risks of receiving these shots, especially for children, FAR outweigh any possible benefits.

Please show that your commitment is truly to maintain and improve the health of Washington's youngest residents, and not to follow a politicized agenda, by voting NO on adding the Covid shots to the pediatric schedule.

Thank you for your time,

Allyson Miller

From: Penny Vandebosch
Sent: 11/3/2022 6:31:03 PM
To: DOH WSBOH
Cc:
Subject: Covid Shots

External Email

The science for children in catching Covid is at 99.98% of recovery and if they catch Covid their recovery is quick and they should not be put at risk with these shots.

Thank You!
Penny

Sent from my iPhone

From: janet large
Sent: 10/30/2022 10:40:10 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH)
Cc:
Subject: Liability free vaccine mandates

External Email

I am asking you as a decision-maker to stop, now, in putting more kids at risk. This is an issue that the parent has the right to decide for their children. If you force them to get vaccines then you each personally and as a department need to be sued for every harm that comes to every child. You do not have the right to terminate the rights of parents nor decide what people do to their bodies.

We have lost trust in you as individuals and as leaders. We do not trust you have our best interests in minds like the people who decided on childhood vaccines.

When trust is restored, I might think differently.

janet Large

From: Peter & Anne Selby
Sent: 11/1/2022 8:25:35 AM
To: DOH WSBOH
Cc:
Subject: Re: No to Covid vaccine mandates in childrens immunization schedule

External Email

Dear Board of Health voting members:

I am writing to express my complete opposition to Covid vaccine mandates. These injections have proven harmful in so many cases and there is no scientifically validated benefit to giving them. They don't stop transmission and they don't prevent infection and so why would you get these dangerous shots to our children. Please vote No to this proposal.

Thank you in advance for your conscientious investigation of these matters.

Sincerely,

Peter and Anne Selby
360 837 1592h
916 719 6948c

--

Peter & Anne Selby

1916 NE 380th Avenue
Washougal, WA 98671
Home/Office: 541 549-1927
Cell: 916 719-6948

<http://www.youangelyou.com>

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.youangelyou.com%2F&data=>

From: Richard Erickson
Sent: 11/2/2022 12:04:10 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: Immunization Requirements for Washington's Daycare and K-12 Children

External Email

RE: Immunization Requirements for Washington's Daycare and K-12 Children

Please do not add Covid shot immunizations to the pediatric schedule for the State of Washington. These mRNA vaccines have a greater risk of adverse effects than the disease it is being used to mitigate. The mRNA vaccines did not go through the usual approval process that normally takes 10-15 years. Additionally, earlier last month Janine Small, Pfizer's president of international developed markets, admitted that Cominarty, the approved version of the Pfizer Biontech (BNT162b2) Covid vaccine offers only a modest impact on transmission to prevent Covid infection. As of October 21, there are 90 countries that don't require covid vaccination or test for travel.

Germany, France, Finland, Sweden and Denmark restricted use of Moderna's vaccine for those under 30. CDC data shows there is almost a zero risk to those under 18 of having severe life-threatening effects after having contracted Covid. Recovery is virtually 100% for those individuals that do not have comorbidities. Most of the US population has already received the vaccine or contracted a mild case of one of Covid genotypes that have largely mutated to one of the less deadly omicron variants. Therefore the vast majority of the US population has a degree of immunity either from earlier vaccination or natural immunity.

I'm sure you are familiar with the underreporting of adverse reactions immediately following Covid vaccination in the VAERS reporting system. The reported adverse reactions are numerous, but only represent a small fraction due to underreporting. But are you aware of the parallel reporting system instituted in our Military families? Data from last year shows the following:

Based on data from the Defense Medical Epidemiology Database (DMED), Renz reported that these whistleblowers found a significant increase in registered diagnoses on DMED for miscarriages, cancer, and many other medical conditions in 2021 compared to a five-year average from 2016-2020. For example, at the roundtable Renz stated that registered diagnoses for neurological issues increased 10 times from a five-year average of 82,000 to 863,000 in 2021. There were also increases in registered diagnoses in 2021 for the following medical conditions:

- Hypertension – 2,181% increase
- Diseases of the nervous system – 1,048% increase
- Malignant neoplasms of esophagus – 894% increase

- Multiple sclerosis – 680% increase
- Malignant neoplasms of digestive organs – 624% increase
- Guillain-Barre syndrome – 551% increase
- Breast cancer – 487% increase
- Demyelinating – 487% increase
- Malignant neoplasms of thyroid and other endocrine glands – 474% increase
- Female infertility – 472% increase

The above medical conditions were diagnosed in adults. What does this data suggest is the potential risk to children? There is no good reason to approve use of these vaccines in our school age population when immunity has already been demonstrated and attained. The risk of as yet unexhibited detrimental effects in future years is sufficient reason to refrain from requiring their use in the immediate future. It is dangerous to recommend adding pediatric Covid immunization requirements to the existing schedule of required immunizations.

Sincerely,

Richard Erickson

From: sonyaupson
Sent: 10/31/2022 11:38:33 AM
To: DOH WSBOH
Cc:
Subject: Vaccine mandates

External Email

I am wanting to express my concerns for your proposed vaccine mandates for children, I am a grandmother and after seeing my granddaughter be so sick after she had the covid vaccine disturbs me. I have been around children all my life and am fully aware of their immune systems and as a medical professional understand the common cold virus etc etc. This vaccine should of never been mandated for adults either! You have no idea what the long term effects can be or what damage it is already doing to peoples immune systems and yes causing Fatalities. Trust the Science is the most ridiculous thing I have ever heard! Science is forever changing! Leave our children alone with your mandates and let the adults make their own decisions and not be forced to take this Covid 19 injection or be isolated from education, jobs or Society!

CONCERNED WASHINGTONIAN,

Sonya Upson

Sent from my Verizon, Samsung Galaxy smartphone

From: Nathan Webb
Sent: 11/2/2022 10:33:25 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: DOH, VAC personal comment

External Email
Hello,

I am writing to submit a personal comment on the subject of vaccine mandates for children.

I ask that you please consider ALL the objective evidence about the risks vs. benefits of covid vaccinations for children. The covid vaccines are in no way necessary for children's health and safety. Covid poses very little risk, if any, to children, and the vaccines are completely ineffective at preventing the spread of coronavirus anyways.

There is no logical basis for mandating a vaccine for children that doesn't prevent the transmission of the infectious agent.

From a moral perspective, human beings absolutely have the right to choose what medical interventions they wish to engage in for their health. Vaccines are no exception.

Finally, please keep in the mind the staggering number of "adverse reactions" (injuries, deaths) that have resulted from people taking these shots. The side effects of these shots can be extremely severe and damaging. Why risk injecting children with them when it provides no real benefit anyways?

Thank you for reading my comment.

-Nathan Webb

"The time is always right to do the right thing." -Martin Luther King Jr.

From: Rick Allen
Sent: 11/2/2022 8:58:34 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Subject: Follow the Science: COVID Shots Do NOT Belong on the Childhood Schedule

External Email
Washington Board of Health and their ACIP:

In short, there is no need for these COVID-19 shots for kids. They are neither safe nor effective. Why should you even be considering giving an experimental injection called a "vaccine" that has killed or injured more people than all other vaccines? The answer is protection - protection for the pharmaceutical manufacturers from lawsuits under the 1986 childhood vaccination act. Already 28 state governors have rejected the CDC ACIP's recommendation of approving these shots for kids.

I implore you to look at the whole picture, to consider the science, the politics and the money behind this whole effort. Please take time to do 3 things to come up to speed on this important issue:

1. Listen to the respected doctors and scientists testifying before US Senator Johnson's panel. Highlights - <https://www.youtube.com/watch?v=IkVN3KwDfVI>

2. Watch Robert F Kennedy Jr's just released documentary, The Real Anthony Fauci - <https://www.therealanthonyfaucimovie.com/viewing/>

3. Watch 1000 athletes of all ages collapsing from the COVID injections - kids up to professionals suffering heart attacks, myocarditis and more from the shots: <https://tv.gab.com/channel/dionichi/view/watch-1000-athletes-collapsing-62bf8417335b191f7d38e12f>.

You may need to stop well before reaching 1000.

I strongly urge you to keep COVID-19 shots off of the required list of immunizations to attend school. Our children deserve better. Join me in stopping this assault on our health, parental responsibilities and rights, and constitutionally guaranteed freedoms and, instead, promoting naturally robust health. Otherwise, I have been told that efforts will be made to revoke your surety bond and sue you for failure to protect our children's health if you add these shots to the childhood schedule.

Don't tangle with Momma Bears protecting their kids!

Dr Rick Allen, MS, LMT, DC
NEW EMAIL: drrickallen@icloud.com
NEW WEBSITE: <https://cascadechiropracticclinic.troutlake.org/>
Cascade Wellness Clinic
663 Sunnyside Rd
Trout Lake WA 98650

home/work: 509-395-0024
cell: 503-803-2766

ADDITIONAL SUPPORTING INFORMATION:

Proceeding with COVID-19 vaccine mandates is a blatant disregard for our children's long term health. As you consider adding COVID-19 injections to the required list of childhood vaccines to attend school, please take a look at the science:

There is no COVID-19 emergency for children.

Children under 18 with no comorbidities have virtually no risk of death or serious illness. They have a 99.95% recovery rate and the vast majority of children have minimal symptoms. A study published in Nature describes how children mount effective, robust and sustained immune responses to COVID-19. And the CDC's own data show that at least 85% of children already have this superior natural immunity.

mRNA shots offer little in the way of protection.

There is no clinically significant health benefit from the shots. Preliminary data showed the shots were only about 44% effective at preventing symptomatic infection in children 6 months to 2 years old, and 37% effective in children ages 2 to 5 — both below the 50% level that regulators had generally called the minimum level for EUA approval in 2020. In New York, officials observed that Pfizer's efficacy against Omicron plummeted from 68% to 12% after 7 weeks in children ages 5 to 11.

Injuries from COVID-19 shots in children are catastrophic.

Vaccinated children face a substantial risk of myocarditis. Moderna's EUA application, originally filed in June 2021, was delayed due to a clear safety signal for myocarditis, which has already prompted a number of European countries to prohibit its use in young people. Additionally, the Vaccine Adverse Events Reporting System (VAERS) already has over 58,500 reports of adverse events in children, including 163 deaths (as of Oct. 7, 2022) and a growing number of reports of encephalopathies, clotting issues, diabetes and neurological issues in children following COVID-19 shots.

Several other countries are limiting or suspending the use of mRNA shots in children and adolescents.

Germany, France, Sweden, Finland, Norway, Denmark, UK and Australia have changed policies and many are no longer recommending the COVID-19 injection to younger age groups without comorbidities.

Pharmaceutical products that cannot meet standard efficacy thresholds and have been linked to serious harm in thousands of children, including death, are unnecessary for an illness from which healthy children can easily recover.

From: K'Lyn Smith
Sent: 11/1/2022 3:28:51 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccinations

External Email

Covid vaccinations DO NOT belong on mandatory or even recommended vaccination lists.

It is absolutely outrageous that they would even be considered as mandatory or recommended. They do not prevent the virus or stop it there's no reason to subject humans to something that has not been thoroughly researched. The success rate of the vaccine is non-existent. In fact it has been shown to do more harm than good.

My opinion is freedom to choose. Not mandatory!

Thank you -K'Lyn

Sent from my iPhone

From: Susan Prosser
Sent: 10/31/2022 3:34:21 PM
To: DOH WSBOH
Cc:
Subject: I oppose adding the Covid experimental jab to the pediatric required shots.
10.31.22

External Email

Hello.

I want to be loud and clear: I oppose adding the COVID experimental job to the pediatric requirements shots. I also oppose this for adults or anyone.

Thank you.
Blessings.
Susan Prosser

From: Sarah Carossino

Sent: 11/2/2022 3:38:28 PM

To: DOH WSBOH

Cc:

Subject: Adding Covid-19 vaccine to required vaccine schedule for public schools.

External Email

Dear Ladies and Gentlemen,

I am writing to let you know that I oppose liability-free Covid-19 vaccines to be required / mandated for our children to attend school. It has been shown that children are the population with the least amount of risk of adverse side effects from contracting the Covid-19 virus. There has also been a steady climb in myocarditis and blood clots in our pediatric population since the introduction of Covid-19 vaccines. This is not coincidence.

I strongly support parental choice in medical decisions for OUR OWN children, not government mandates. The government is not the parent. There needs to be a separation. Parents should consult with their child's own pediatrician to make the choice that best meets their needs; again, WITHOUT government interference.

Please say no to adding the Covid-19 vaccine to the required vaccines for public schools. Rest assured, no children of mine will be enrolled in the public school system should this take place.

Sincerely,
Sarah Carossino

From: tttranch
Sent: 11/3/2022 10:48:44 AM
To: DOH WSBOH
Cc:
Subject: Vax the kids

External Email

NO!
Let the immune system function as designed.
Live vaccines - carry on.
mRNA shot - NO!

Sent from my Verizon, Samsung Galaxy smartphone

From: John Black
Sent: 11/1/2022 9:00:23 AM
To: DOH WSBOH
Cc:
Subject: Child vaccines

External Email

Please vote to NOT add covid vaccines to required vaccines for school children. These are not proven safe and multiple injuries are proven. Marilyn Black

Sent from my iPhone

From: Lou Whitemarsh
Sent: 11/1/2022 7:56:43 AM
To: DOH Secretary's Office
Cc:
Subject: NO TO VAXX FOR KIDS

External Email

Please do not require Covid vaxx for children! These are only EUA. and there has been no appropriate testing to see the outcome. I know of many adults having complications and even death from these so called vaccinations. PLEASE, PLEASE, PLEASE do not allow this to kill our innocent children.

Thank you,
Lou Whitemarsh

Sent from my iPad

From: Chandler Bailey
Sent: 10/24/2022 3:23:33 PM
To: DOH WSBOH
Cc:
Subject: CDC Recommends Covid Shots

External Email

The CDC will be including Covid shots in their schedule of recommended shots for school children. We should not follow their example.

Since your TAG team recommended against requiring Covid shots for school children the science and facts have become clearer. The shots do not prevent transmission of Covid. School age children are at near zero risk of serious illness/death from Covid. The shots provide less protection for any age than originally believed. The efficacy of the shots lasts only a short time.

There is growing evidence of heart damage caused by the shots in children and young adults. More and more experts are recommending against these shots for school age children.

There is no need to revisit this issue here in Washington State. The TAG team made the correct decision and the growing body of scientific evidence confirms it.

Please don't waste taxpayer resources in yet another irresponsible, unreasonable, and ill-fated attempt to require the Covid shots for school attendance.

Chan Bailey
PO Box 307
Colbert, WA 99005

From: Regan Peek
Sent: 10/31/2022 4:37:28 PM
To: DOH WSBOH
Cc:
Subject: No COVID shots for children

External Email

Hello,

I am writing to you today to insist that you all ensure that there will be no form of mandate for children to take an experimental, dangerous COVID shot.

I urge you to carefully consider this information

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finformedchoicewa.org%2Fnews%2Freview-of-covid-19-shots%2F&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C8274eb55f1f84acac84e08dabb98de04%7C>>
.

Based on these facts that the shots are statistically extremely risky and harmful to children, I would consider it to be a criminal act to implement any form of mandate.

I know of no-one that wants to do this to their kids.

Please take this information seriously. There are lots of parents watching!

Thanks - Concerned Parent.

From: Aurora Worldwide
Sent: 11/4/2022 9:09:30 AM
To:
Cc:
Subject: NO to covid shot mandates

External Email

To WA Department of Health (DOH), Vaccine Advisory Committee (VAC), and Washington State Legislators, agencies and officials;

I am writing to voice, we do NOT want COVID shot mandates in our state and certainly NOT for the pediatric immunization requirements" of Washington's children, daycares, and K-12 school requirements.

There has been more and more evidence becoming available regarding the lack of safety, harm, and ineffectiveness of the COVID-19 products. This is a grave concern and is a threat to our state's children and families of Washington.

Please do NOT vote to recommend adding vaccines to daycare and school requirements, just as you did not vote to last winter 2021, when BOH convened a Technical Advisory Group (TAG), to consider whether to require Covid shots for Washington's school kids. Thank you for listening to all of the 40,000+ constituents who voiced their opposition to having covid shots for children.

We stand for health, freedom & informed choice for Washington state.

Sincerely,

Elizabeth Johnson

From: Carrie Sullivan
Sent: 11/1/2022 11:16:06 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: Covid vaccines for pediatrics

External Email
Good morning,

I am aware there has been a recommendation to add the Covid vaccine to the mandatory list of pediatric vaccines. Please do not vote for this. This vaccine in children has not been proven effective or necessary. Taking this vaccine should be left up to each individual and their specific situation, not mandated for everyone.

PLEASE DO NOT MAKE THE COVID VACCINE MANDATORY FOR CHILDREN.

Thank you for your important work in this area.

Carrie Sullivan

From: Janice Moerschel
Sent: 11/1/2022 10:58:31 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), DOH
WSBOH
Cc:
Subject: Say NO to mandating "vaccines"

External Email

I urge you not to put these Covid "vaccines" on the schedule for children. Effectively, this would mandate that all children in the state take shots that have proven to be 1) ineffective and 2) dangerous. I keep hearing cases of people getting sick from them, suffering myocarditis, blood clots, dropping dead on soccer fields, and suffering many long-term ill effects - including the possibility of death. Children are at so little risk from the actual virus and yet some (you?) are willing to risk those lives - when children would not have been at risk of losing their lives from the virus. Try following the real science. Look at the real data. Look at the lists of side effects from these shots. Then just say NO.

I am very concerned for all Washington state citizens but, particularly, the children who may suffer the rest of their lives if you go forward with this. If you consider yourselves "pro-choice" in any way, let parents and children make the decisions about themselves and their children. You need to listen to people and their concerns.

Sincerely,
Janice Moerschel
Spokane, WA

From: 369
Sent: 11/2/2022 9:28:34 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: STOP THE VACCINE MANDATE

External Email

We as mankind got to stop ACIP (the Advisory Committee on Immunization Practices) recently recommended adding Covid shots to the CDC pediatric schedule. Mandate of any kind is the invasion and colonization of mankind body and enslaving mankind of earth. This is going too far and it must stop!

Tri

From: Virginia Thomas
Sent: 11/3/2022 9:46:30 AM
To: DOH WSBOH
Cc:
Subject: Oppose Covid-19 Products

External Email

I oppose any liability-free Covid-19 products to be mandated for our Children.

Concerned Citizen,

Virginia Thomas

From: Marneye Driesen
Sent: 11/4/2022 9:16:28 AM
To: DOH WSBOH
Cc:
Subject: My Public Comments

External Email

Board members,

Here we are again, discussing adding the Covid vaccine to the childhood schedule, for entry into school/daycare.

From the last time this was discussed, the medical journal publications on the harms of vaccine-induced myocarditis and statistics on covid's minuscule detriment to children has only made this argument increasingly null and void. I have encountered more parents who have decided to home school their children in the wake of poor public health policies than I have ever seen. Please do not continue to invalidate the trust we as parents had instilled in this public entity.

Omicron has diminutive consequences for children, on the other hand, myocarditis along with any long term health effects from these vaccines are most concerning. If these vaccines stopped infection or transmission there would be an argument for adding it to this schedule, but they don't! Even the director of the CDC had her Omicron booster 9/22/22 and contracted omicron covid 10/21/22.

You cannot responsibly and in good conscience put this on the schedule for our children, mandated or not. You will continue to lose children in your public schools and in your daycare facilities. This vaccine is touted as preventing severe illness and hospitalization. Children are at little to no risk of severe illness or hospitalization in the first place!!

<https://www.mdpi.com/2414-6366/7/8/196>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F2414-6366%2F7%2F8%2F196&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cc72da44599c14413ecbd08dabe>>

<https://www.medrxiv.org/content/10.1101/2022.10.13.22281036v1.full.pdf>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.medrxiv.org%2Fcontent%2F>

There are plenty of other peer reviewed and pre-print articles that tout the same principle. The risk of myocarditis from vaccination is real and cannot be unseen. The data cannot be skewed to exaggerate any risk of severe illness from covid to our children.

<https://www.reuters.com/business/healthcare-pharmaceuticals/cdc-reports-fewer-covid-19-pediatric-deaths-after-data-correction-2022-03-18/>
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.reuters.com%2Fbusiness%2Fpharmaceuticals%2Fcdc-reports-fewer-covid-19-pediatric-deaths-after-data-correction-2022-03-18%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cc72da44599c14413ecbd08dabe7fe425%7C11d0e>

Your actions on this matter have a lasting impact on our babies. It would be an abhorrent mistake to add this as a recommended or mandated vaccine to the childhood vaccine schedule.

From: Kathleen Borden
Sent: 11/1/2022 9:16:09 PM
To: DOH WSBOH
Cc:
Subject: Mandatory COVID shots - NO!

External Email

To Whom it May Concern:

Medical freedom is truly at the very base of our human rights! More and more proof of the ineffectiveness and danger to one's health is coming forth pertaining to these dangerous vaccines. We have yet to see how horrific the end results will be with this social/scientific experiment. Do the right thing!: Vote AGAINST mandatory COVID vaccines!

Kathleen Borden

This is love: not that we loved God, but that he loved us and sent his Son as an atoning sacrifice for our sins. 1 John 4:10

From: 1Saorsa
Sent: 10/31/2022 11:54:29 AM
To: DOH WSBOH
Cc:
Subject: No MRNA injection mandates

External Email

WA BOH: It is my understanding that the WA Board of Health (BOH) meets Wednesday, November 9. I am sure you are aware by now that the ACIP (the Advisory Committee on Immunization Practices) recently recommended adding Covid shots to the CDC pediatric schedule. Currently, I do not see an agenda item discussing this fact, but it is my understanding you reserve the right to alter this meeting agenda at will. I must remind the BOH members that last winter your Technical Advisory Group (TAG) considered whether to require Covid shots for Washington's school kids and the TAG voted for the "citizens" of WA state with a resounding "NO". Not only did the TAG vote "NO" but the BOH also received over 40,000 public comments in opposition to adding the Covid MRNA injections to the school schedule. Since the BOH has been hand selected by Governor Inslee, no doubt there is insurmountable pressure by his office/pharmaceutical companies to add these injections to our kid's vaccine schedule at any cost. Any attempt to take that action is against the will of the citizens and outright tyranny.

Sincerely,
Jeffery P Eiffert

From: Duck Duck Goose
Sent: 10/21/2022 2:50:45 PM
To: DOH WSBOH
Cc:
Subject: Public Comment

External Email

Hello SBOH,

I urge you to NOT add the COVID vaccine to WAC 246-105-030. I would like to point out that the TAG voted AGAINST adding the COVID vaccine. My wife and I are the parents of a young child. Our child is has all of the required vaccines. We support this. My wife and I are fully vaxxed. My wife and I are liberal, affluent, and highly educated. My entire family has already had Omicron. It is well known that the COVID vaccine does not prevent COVID transmission. It is also well known that COVID presents a low risk to (otherwise) healthy children. The COVID vaccine uses a novel method of action: it is an mRNA vaccine. The long term risks of the COVID vaccine for children are not yet known. I believe that the benefits of the COVID vaccine do NOT outweigh the risks for children. I will not allow my young child to be vaccinated with the COVID vaccine. If that means that we must home school, so be it. If that means that we must move to another state, so be it. Leave this decision up to parents in consultation with their child's pediatrician. COVID presents the greatest risks to adults with co-morbidities and the elderly. Please focus the state's limited resources there, as that will save the most lives. Thank you.

William Swearingen
21605 E Lost Lake Rd
Snohomish WA 98296

From: Andrew McNabb
Sent: 11/3/2022 10:01:18 AM
To: DOH Secretary's Office
Cc:
Subject: CDC Pediatric Schedule

External Email
Hello,

As a citizen of Washington State, I insist that the Department of Health NOT recommend adding the COVID-19 MRNA gene therapy shot to the pediatric schedule.

I refuse to accept the mandates forced upon the people of this great state and have been consistent throughout the past THREE YEARS of this nonsense. If we, as a society, have learned anything during this time, it is that this is NOT about public health and safety, but about power and control. The public health authorities have continued to perpetuate lies, obfuscate the truth, and sow distrust amongst the people. There is no open dialogue, but censorship of the truth. Where is the transparency?

This latest attack on our children and their health is yet another example of our government overstepping its authority. We THE PARENTS demand choice regarding our children's health. This is no longer a public emergency and there is reason to believe that it never was, so why do our leaders and lawmakers still act as such? REGARDLESS, our children's safety was never at risk. As we have learned, they are unaffected by COVID and there is absolutely no reason why they should be subject to experimental and unauthorized medical treatment. We do NOT know the long-term effects. We know that the shot does not prevent transmission, which has been admitted by PFIZER and the CDC. This is and always was a personal decision. Our local authorities have no authority on this matter. It is solely the responsibility of the parents to decide what is best for our children.

DO NOT ADD THE COVID SHOT TO THE PEDIATRIC SCHEDULE!

Respectfully,

Andrew McNabb

From: Jody Hafner
Sent: 10/31/2022 10:50:59 AM
To: DOH WSBOH
Cc:
Subject: no

External Email

no to the COVID-19 fucking vaccine since you have to have five now this is getting ridiculous! fuck you to Insley, and he can suck a bag of dicks! No vaccines for kids!

From: pigswithwings@frontier.com
Sent: 10/21/2022 4:56:50 PM
To: DOH WSBOH
Cc:
Subject: Covid-19 shots for children

External Email

Dear Board of Health,
I am writing today to encourage you to not add the covid-19 shot to the school age shot requirements. The covid-19 shot has been proven to not only not stop a person from contracting the virus but also does not prevent the spread of the virus. Recently in an EU committee hearing, Pfizer admitted that there have been no studies as to the shots stopping the spread and that it does not actually stop the spread. This alone is reason enough not to add the shots to the child immunization schedule. Add to the dismal failure of these injections to protect and stop the spread of the virus, they are not without significant risk. The shots have been proven to increase the risk of heart inflammation in young people and increase blood clots. There is no good reason to mandate this shot for children.
Marisa Corless
King County resident

From: DOH Information
Sent: 10/26/2022 12:04:26 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccine schedule inquiry



attachments\61BF4312B8604CBD_image001.png

Hello,

I believe this is intended for the Board, regarding whether the COVID vaccine will be added to the vaccine schedule in WA?

Thank you

Alexandra Moore

Customer Service Specialist

Executive Office of Public Affairs & Equity (formerly C4PA)

Washington State Department of Health

DOH.Information@doh.wa.gov

800-525-0127 | www.doh.wa.gov

[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.doh.wa.gov%2FNewsroom%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.doh.wa.gov%2FNewsroom%2F)

From: DOH Feedback <doh.information@doh.wa.gov>
Sent: Friday, October 21, 2022 1:41 PM
To: DOH Information <DOH.Information@DOH.WA.GOV>
Subject: Question/Comment from the public

The following survey response is submitted:

1.

Please select one:

Other

2.

Please enter your comments or questions in the space provided below:

Hi there, I noted the CDC's recent vote to add the COVID vaccine to the ACIP immunization schedule. Will Washington State require the COVID vaccine for children to attend school? Thank you. William Swearingen

3.

If you are sending feedback on one of our Web pages, please paste the URL here:
(no answer)

4.

Would you like a response?

Tell us how to get in touch with you.

Name:
William Swearingen

Email:
duck@zerolisted.com <mailto:duck@zerolisted.com>
Telephone:
(no answer)

5.

To receive a confirmation of your submission, please enter your email address again in the space provided below.

duck@zerolisted.com <mailto:duck@zerolisted.com>

From: Rosita Wischmeyer
Sent: 10/31/2022 11:17:13 AM
To: DOH WSBOH
Cc:
Subject: Re: COVID vaccines to pediatric schedule

External Email

Hello I would like to share with you that I oppose adding the COVID shots to children's required immunization schedule. I have many friends , family and acquaintances that have had from minor to severe (including death) reactions to this vaccine and I believe that some if not all children are NOT ready to be tested with this vaccine. There are way too many red flags. Please do not add this vaccine to the pediatric schedule for immunizations.

Thank you,

a concerned Washington resident with children and grandchildren.

Rosita Wischmeyer

From: Cindy Galante

Sent: 11/2/2022 9:31:03 AM

To: DOH Secretary's Office, sheng.kwan-gett@doh.wa.gov, Drummond, Heather M (DOH), DOH WSBOH, Sherls-Jones, Jamilya J (DOH)

Subject: School Vaccine Schedule

External Email

Hello,

We know that the CDC unanimously voted to recommend the Covid vaccine for kids on the school schedule. However, this would cause more families to leave our great State and or pull their kids out of public schools. Also, this was done without FDA approval.

The precautionary principle argues that, in cases where harm may occur, the proponent of a treatment has the burden of proving harmlessness.

Easily available evidence suggests that pediatric covid vaccination MAY BE linked to increased cases of pediatric myocarditis. And, based on its own research, the State of Florida has recommended against pediatric vaccination absent compelling need.

Those promoting the covid vaccines for children MUST prove the ABSENCE of causation before the drugs can be approved for the childhood vaccine schedules.

Although the precautionary principle may be overly-limiting in some cases, when dealing with our own children, who are the future and security of the human race itself, the principle must be paramount. Reject scheduling the vaccines until and unless proponents can prove safety and efficacy beyond a reasonable doubt.

Thank you.

Cynthia Galante

Sent from my iPad

From: Kathyanne Christine
Sent: 11/3/2022 11:49:31 AM
To: heather.drummond@doa.wa.gov,jamila.sherls-jones@doh.wa.gov,DOH Secretary's Office,toasheng.kwan-gett@doh.wa.gov
Cc:
Subject: No Covid vax for kids!!

External Email

Do not add the unproven Vax.

You will be held liable by the people you hurt by giving this. Big pharma is off the hook, but not the rest of you.

You know These kids are innocent lambs and the least affected by this virus. There's no evidence that the shot helps the transmission of it. All you're doing is destroying the health of young children. That will be on you.

Gig harbor

--

Kathyanne

From: Robert James
Sent: 10/31/2022 7:02:42 PM
To: DOH WSBOH
Cc:
Subject: 'vaccines'

External Email

No 'vaccine' mandates of any kind... for any one... including children.

Look outside your 'known' perspective.

There is a serious, potentially deadly serious problem with the whole 'vaccine' agenda.

These proposed protocols are NOT supporting health in our population.

You might want to look up the definition/meaning of propaganda and whether you have been propagandized.

You might want to teach nutrition and healthy activities instead of pushing pharmacological 'solutions'.

You might want to encourage natural immunity protocols.

You might want to wake up from your slumber and see what is really going on.

Truth is being revealed and you will be known for your relationship to truth.

Sincerely, Robert James, Sequim, WA

From: Lisa Minnihan
Sent: 11/1/2022 12:03:04 PM
To: DOH WSBOH
Cc:
Subject: NO VaX Mandates Please

External Email

Hello;

As a lifelong citizen of this Beautiful State of Washington, I send this message to you with my own passionate truth regarding the COVID-19 Vaccine Recommendations and Mandates—that these should not be present in healthy human affairs. I tell you this from the heart, from a battle with Cancer last year, which I WON because I changed my food, I changed my attitude and I became a fierce believer in the power of the body to heal itself. Any mandate by which persons and children would be required to render ANY harmful material at the hand of Big Pharma and Big Medicine and Big Food and Big Government into their bodies just to participate in our normal societal business is completely preposterous. I say this with experience of having fought off COVID naturally, along with my family members, during Chemo and Radiation treatments, and I only had a headache. My family fought Covid the natural way, and we remain unvaccinated to this day, because NO person has the power to tell us we must put this vaccine in our body. It simply is not the natural right of any other human to displace that much power over another. We will not follow mandates, and if Washington imposes any mandates for vaccines we will remove our children from their schools and move out of this beautiful State, leaving it to wallow in its own waywardness. Every voice has a right to be heard, and ours will no longer be silent.

Thank you for keeping the Covid Vaccine a matter of CHOICE, not a matter of CONTROL.

Sincerely,

Lisa

LISA M. MINNIHAN, MBA-HRM
(360) 774-1649
lisa.minnihan@yahoo.com <mailto:lisa.minnihan@yahoo.com>

From: Sarah Geiger
Sent: 10/22/2022 8:33:53 AM
To: DOH WSBOH
Subject: COVID-19 Vaccine Mandate for children is wrong

External Email

Washington State Board of Health Members,

I've included my legislators from the 39th district in Snohomish County as well to be clear we do not support vaccine mandates, period. Since ACIP recently recommended the addition of the COVID-19 to the childhood immunization schedule, we know it will be a topic to discuss at your next meeting November 9th. As a resident, we urge you to not add the COVID-19 vaccine to the school schedule here in Washington. It is plain and simple that these vaccines are still in the research and clinical trials until next year. Why would we add an experimental vaccine to the school schedule? Additionally, Pfizer recently admitted

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.king5.com%2Farticle%2Fnews%2Fpfizer-didnt-know-if-covid-vaccine-prevented-transmission-missing-context-fact-check%2F536-aaf563f5-2286-44d4-ae0b-2c71812b84e4&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cabcec0c4cf5c403e38ce08dab442d11e%7C>>

the clinical trials so far have only evaluated how effective the vaccine is at preventing infection, not transmission. If the vaccine can't prevent transmission, why is it necessary for any public setting?

You will see a massive wave of parents removing their children from school if this vaccine is required for school entrance moving forward. There is no basis and parents already do not trust bureaucracies like the CDC and ACIP that put profit over true health. We did not elect any of those representatives, nor any of the Governor appointed positions on the Washington State Board of Health. Follow the money, it is clear lobbyists and corporations own the messaging around vaccine safety and efficiency. I implore you all to look at recent VAERS data to see how many have reported vaccine injury and side effects from the COVID-19 vaccine. Mandating this vaccine is putting children directly in harm's way! Where there is risk, there must be choice!

We do not support vaccine mandates period, we must hold vaccine manufacturers and pharmaceutical companies accountable. Until that happens, we will not allow unelected officials to make decisions about our family's health!

Sarah Geiger

From: Damon Tompkins
Sent: 10/31/2022 12:46:20 PM
To: DOH WSBOH
Cc:
Subject: Covid-19 School Vaccine Mandates

External Email

To Whom It May Concern,

Candidly I am astounded that I am even having to write this email at this point. After several years of non-stop coercion and outright deceit on behalf of our public health officials and the medical community my family and I remain (and will remain) completely opposed to taking the failed Covid-19 vaccine. This product is an outright failure and the fact that this even needs to be discussed is flabbergasting to me. As a resident of Washington State who pays a tremendous amount of property taxes and contributes significantly to the local economy and tech industry, I found myself in a very peculiar position over the past few years. I was faced with staying in the state I love and being subjected to medical tyranny or move. I chose to stay but I was so compelled by the hideous behavior of the state government and their hysteria to act on behalf of the pharmaceutical empire that I decided to buy a second home in South Florida. As a father of two teenage daughters in the Redmond School District, I can assure that I will NEVER, EVER allow my children to be injected with the failed experimental poison known as the Covid-19 vaccine. So much so that should the state choose to pursue this insane and outrageous policy, we will pack our things, sell our beloved home in Woodinville and move to our home in Florida without pause and never set foot in this state again. This is not a threat, and I am more than happy to take my time, talent and treasures to a state that respects our personal rights and our decisions over our children's health. Washington State has a choice to make, if it stands with liberty and personal freedom or if it stands with the pharmaceutical mafia, it's just that simple. These drugs have ZERO efficacy on transmission and so your intentions are bare naked... It's time to do the right thing and stop this despicable behavior and do away with any suggestion of Covid-19 vaccine mandates for school children. When you look back on your life, you can decide if you sold out or not and I hope you do the just thing in this matter.

Sincerely,

Damon Tompkins
13946 224th Ct NE
Woodinville, Washington 98077

Or

430 Casey Key Rd
Nokomis, Florida 34275

From: Dolores Bruner
Sent: 11/2/2022 2:04:04 PM
To: DOH WSBOH
Cc:
Subject: Mandate for Schools

External Email

I am writing today to ask you not to recommend the COVID-19 shot as a requirement for attending daycare and preschool through 12th grade. Healthy children have never been at risk from this virus and are actually more at risk from the mRNA shot. It is well documented that boys, teenaged boys, and young men are at risk for myocarditis as a result of these shots. Girls are at risk for menstrual abnormalities. The long term effect of producing the spike protein for a lifetime are also unknown. I object to enriching the pharmaceutical companies at the expense of our children. Parents have the right to make medical decisions for their children, and that right should not be taken away from them.

Dolores Bruner

Aberdeen, WA

From: Christina Patton
Sent: 11/2/2022 10:19:37 PM
To: DOH Secretary's Office
Cc:
Subject: Opposing the COVID 19 vaccine requirement for children

External Email

It should be the parents decision on whether a child should take the vaccine. Please keep our children out of the politics and greed. This vaccine isn't proven and you will see thousands of kids being removed from the public school system, which will affect funding for schools. So if you don't care about the health of the children, maybe the lack of money/funding will grab your attention.

*Tina Patton

From: Lisa Eastman
Sent: 11/1/2022 9:56:51 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: NO to mandated COVID vaccines for WA schools

External Email

To WA State Health Officials,

I am writing to convey my strong stand against any COVID vaccine mandates in our state, including our schools. Evidence continues to mount that these vaccines are ineffective, while long-term effects continue to present, sometimes fatally. With even the CDC acknowledging the shots do not prevent infection or transmission, and that any protection fades rapidly, the cost does not justify making our children test subjects for drug companies.

Furthermore, it has been proven that the existing COVID vaccines fail to meet your own Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030. This will undoubtedly result in law suits at the cost of taxpayer's money, a fiscally irresponsible move during a recession when we need to be utilizing state funds as wisely as ever.

I implore you to vote NO to this mandate.

Thank you,
Lisa Eastman

From: Tatyana T.
Sent: 11/1/2022 10:15:22 AM
To: DOH WSBOH
Cc:
Subject: No Covid-19 Vaccines for K-12

External Email

Dear WA Board of Health,
please DO NOT add the Covid-19 vaccine to the childhood schedule for K-12. This has been thoroughly discussed already that these vaccines are neither safe nor effective, the science has made it very very clear. No one needs to be jabbed with this product, especially children. We DO NOT want any liability-free Covid-19 products to be mandated for our children.

Thank you very much!

Tatyana Trishchuk

From: Donna Young
Sent: 10/31/2022 12:28:45 PM
To: DOH WSBOH
Cc:
Subject: Covid

External Email

It is wrong to mandate liability-free covid shots (or any product, medicine, etc) to anyone, especially to our children.

Thank you in advance for doing the right thing for the people.

Donna Young
5117 183rd Avenue SW, Longbranch, WA 98351

From: Julie Matthews
Sent: 11/1/2022 2:42:34 PM
To: DOH WSBOH
Cc:
Subject: No COVID shot mandate, please

External Email

To whom it may concern,

Since the last decision to not mandate the COVID shot, even more evidence has become available regarding lack of safety and effectiveness.

I am in great opposition of this board mandating the COVID-19 products for children.

Thank you for receiving my unwavering request!

Blessings, Julie Matthews (mother of 5 public school age Children)

From: Tim Dever
Sent: 11/2/2022 1:54:27 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Nov. 3rd Meeting Considerations

External Email
Hi All,

A couple items for consideration regarding the potential adding of the Covid vaccine to the childhood schedule.

1. The vaccine was designed for a strain that is out of circulation for 18+ months now.
 - a. No one goes to the doc and asks for a flu vaccine that was designed for the strain from two years ago. Those have been thrown out for good reason, let's remember that reason going forward.
 2. The IFR rate for children, during the original strain before the vaccine, was so minute, it's not even a blip on the radar, statistically irrelevant. We now know that the vaccine does not, nor tested in the case of Pfizer, prevent transmission. Here is the IFR before vaccines, to put into perspective, it is around 0.0023%. Here is the article - <https://pubmed.ncbi.nlm.nih.gov/35219376/> here is the video of the Pfizer exec admitting that transmission was not a part of the testing. <https://www.youtube.com/watch?v=mnxlzxoZx0>
 - a. If this committee is considering adding the Covid vaccine for children at this extremely low risk, what won't be added? To add this will be malfeasance on the part of the state of WA.

Thank you for your consideration,

Tim Dever

From: Brittany Wilson
Sent: 10/31/2022 10:50:49 AM
To: DOH WSBOH
Cc:
Subject: Vaccines

External Email

Do not mandate covid vaccination for school. It is against so many values and beliefs.
Covid vaccinations does NOT belong In school.

Brittany Wilson RN,BSN
Bwilson0009@yahoo.com

From: Mike Heath
Sent: 10/22/2022 5:38:00 AM
To: DOH WSBOH
Cc:
Subject: Vaccine mandates

External Email

We are extremely upset that children are being subjected to these dangerous "vaccines" when these "vaccines" have already proven to be deadly in many cases and children have virtually no statistical exposure to the supposed COVID-19 issue that has never been proven to exist by a lab isolation study from a so called "infected patient"! ALL individuals who play a material role in this highly questionable COVID-19 panic will be subjected to intense scrutiny and prosecuted for crimes against humanity regardless of excuse! "Just doing my job" is not a defense to a crime against humanity charge and the government across the board has now violated ALL of the Nuremberg Code categories of criminal behavior, and everyone involved is now subject to criminal trials and/or tribunals~! Those found guilty of crimes against humanity this time can expect to be executed~! M

<<<P>>>

From: Tamara Nelson
Sent: 11/2/2022 12:23:47 PM
To: DOH Secretary's Office
Cc:
Subject: Vaccine recommendations

External Email

Please note that I do not want any liability-free COVID-19 products to be mandated for our kids. These shots are still under emergency use authorization. More and more evidence has become available regarding lack of safety and effectiveness. More children have been harmed by these shots than by the virus. Children are not at risk of the virus unless they have myriad co-morbidities, in which case, they probably aren't in school. It has been shown that the shots are not stopping transmission or infection of the virus. Adding them to the list of childhood vaccines is a clear demonstration to the public that pharmaceutical companies, medical institutions, and government entities are in collusion for financial gain, as it is clearly not for the good of the children. We see through this. We have your names. You will be accountable for your actions. If you are not yet informed about the problems with the creation and push of these shots, please take the time to watch

<https://www.therealanthonyfaucimovie.com/trailer/>

Thank you.

Tamara Nelson

From: Katrina Mason
Sent: 11/2/2022 11:19:59 PM
To: DOH WSBOH
Cc:
Subject: Please vote no to adding covid shots to children's immunization schedule

External Email

To whom it may concern,

Please vote no to adding COVID shots to the children's immunization schedule. VAERS data signals the covid shots have a staggering number of reports of serious adverse reactions and deaths and that is likely a very small representation of the real numbers of adverse reactions and deaths. Young athletes who were mandated to get the covid shots are suddenly dropping dead in large numbers. Adolescents boys who receive the covid shots have a higher risk of developing heart problems. Numerous doctors around the world have now looked under microscopes at the substances from the vials of covid shots, and blood of people who have been injected with the covid shots and have reported and taken pictures of foreign metallic particles, parasites, and self assembling circuitry. Blood cells of those who have been injected appear coagulated and deformed. Please do not subject our children any longer to this inhumane experimentation. The public has been lied to about the safety and efficacy of the covid shots. Please protect our children by stopping this attempt to add the covid shots to the immunization schedule.

Thank you,

Sincerely,

An extremely concerned parent of teen boys.

Sent from Yahoo Mail on Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.onelink.me%2F107872968%3F>>

From: kathy brody
Sent: 11/3/2022 9:41:55 AM
To: DOH Secretary's Office
Cc:
Subject: School children are not at risk

External Email

Dear secretary of the department of health,

>

>

> If you vote for the children to be vaccinated you will be making a huge mistake. I watched the zoom meeting Feb. 17. These expert presenters were too connected to government and organizations who are and who continue to profit from the wreckage this planned pandemic is inflicting. Widen your circle of information gathering, say to Senator Ron Johnson's experts, or to the countries who are gathering data and reporting more honestly than the USA. Changing our immune systems with jabs or RNA is destroying those immune systems. We are heading for further disasters. Here is what Scotland is finding. The unvaccinated will survive.

> My post graduate work was in Epidemiology, I was a public health nurse, and my career was in Health Care Research.

> Please let the parents decide for their own children, without discrimination for the unvaccinated.

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdailyexpose.uk%2F2022%2F02%2Frefuse-publish-covid-data-shows-fully-vaccinated-have-aids%2F&data=05%7C01%7CDOH.Secretary%40DOH.WA.GOV%7C6bd40ecd8a9b4950612508dabdb>

From: Beda
Sent: 11/2/2022 5:47:09 AM
To: DOH WSBOH
Cc:
Subject: Standing for Medical Freedom

External Email

Anyone who votes yes for mandated covid shots for children should be held accountable for the harm it may cause.

These shots have been proven to kill and harm people.

Vote No to inlee's mandates to inject an experimental vaccine into our children.

Stand for Medical Freedom!

From: Jillian Malmberg
Sent: 11/1/2022 1:02:33 PM
To: DOH WSBOH
Cc:
Subject: Committee Meeting

External Email

As a mother of five children who are all vaccinated with traditional vaccines, I do not agree with a mandatory Covid vaccine as for the same reason we do not require a mandatory flu vaccine. A Covid or flu vaccine does not prevent disease but rather lessens the impact of the virus for the person who would acquire either virus, the choice should be the individuals as to whether they wish to reduce potential sickness. To approved a mandatory vaccine for Covid would be only to show a corrupt relationship with the pharmaceutical companies and drive their profits.

Jillian Malmberg

From: Lidia Sukhaya
Sent: 10/25/2022 3:38:18 PM
To: DOH WSBOH
Cc:
Subject: F3F6981A-602D-4AD5-8EDA-1EE977B5CD16

External Email

My name is Lidia. I am a mother and grandmother. I oppose Covid vaccination "requirements" for our children. Covid vaccination could be harmful to our children in many ways. We read many cases of side effects. We do not have enough study to prove that this vaccination will stop the spreading of Covid and we do not know the extend of side effects on children bodies. It should be a family choice. To make it as a requirement for them to attend school - is terrible thing. Let's children enjoy going to school and learn.

I pray for you that the Lord will give you wisdom, consideration and peace.

Respectfully yours Lidia S.

From: Jo-Ann Brant
Sent: 11/1/2022 2:43:51 PM
To: DOH WSBOH
Cc:
Subject: Objection to increased mandated vaccines

External Email

Dear Washington Board of Health,

I am writing to register my alarm at the government's intrusion into medical freedom and choices among the people of Washington.

The Supreme Court of New York has already clearly ruled against the egregious overreach of the Federal government in the case of the untested, warp-speed produced COVID-19 injections. Do we all simply need to tie up our state governments into litigation to stoop government overreach?

Sincerely,
Jo-Ann Brant

Contact Info: Phone 425-326-2461 or 425 529 3261
Joann.Brant@gmail.com <<mailto:Joann.Brant@gmail.com>>
Personal Mail: 1633 Lincoln CT. SE Renton WA 98055

From: Lisa Easton
Sent: 11/1/2022 12:56:50 PM
To: DOH WSBOH
Cc:
Subject: Vaccines

External Email

Hello there,

I am A mom of 2 school aged boys and registered nurse.

I do not feel that it is safe to implement the addition of a covid-19 vaccine to childhood vaccination schedules.

This vaccine has not been tested well enough to begin making this a mandatory vaccination.

That, combined with the absurd amount of serious reactions and vaccine deaths for the adult population, makes giving this vaccine to children reckless.

Thank you,

Lisa

Sent from my iPhone

From: Jodi Dotson
Sent: 11/3/2022 10:14:54 AM
To: DOH WSBOH
Cc:
Subject: Fw: Child immunizations for Covid 19

External Email

Sent from Yahoo Mail for iPhone
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Foverview.mail.yahoo.com%2F%3F>>

Begin forwarded message:

On Thursday, November 3, 2022, 10:13 AM, Jodi Dotson <jdotson_99@yahoo.com> wrote:

I urge you all to not force children to take such a deadly toxin. Children are not at high risk for this and you all know this. It is unfathomable to think you are even considering this in the first place. The question I have for all of you is How much are you getting paid to push this deadly toxin and is it worth your conscious? This whole Covid disaster is so disheartening and to think you as a public health department would even consider this is mind blowing. I am sure you all are parents, grand parents, mothers, fathers and would you purposely give your kids strict nine because the Governor told you to? I mean think about this, the person who made the mRNA had the shots got sick from it and now recommends to stop ALL inoculation on all humans. How hard is it for you people to understand that maybe it is not safe and for god sake why would you demand it for kids. I am praying you do the right thing for humanity.

Sincerely,
Jodi Dotson

Sent from Yahoo Mail for iPhone
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Foverview.mail.yahoo.com%2F%3F>>

From: carl royer
Sent: 10/31/2022 7:41:59 PM
To: DOH WSBOH
Cc:
Subject: Vaccines

External Email

Children seldom get Covid-19. When they do it is almost always mild and/or often symptomless. In addition, the covid shots do not prevent covid, do not prevent covid from being more serious, and do not prevent shedding of covid. They are worthless for anyone. In more addition, covid shots often have side effects such as death, incapacitation, heart damage in younger persons, and other problems. See [VAERS.gov](https://www.vaers.gov), which enumerates the vaccine adverse reactions, and historically is only one percent reported, so multiply what you see there by a realistic factor. Please don't require our children to be harmed for profit.

Carl Royer
503.969.5924

From: Curtis Nelson
Sent: 11/1/2022 1:48:08 PM
To: DOH WSBOH
Cc:
Subject: COVID 19 Vaccine Mandates for Children



attachments\7702DDF98BE343D2_image001.jpg

External Email

Hello,

It is my understanding that you are making a decision soon regarding mandatory vaccination for K-12 children. I am opposed to mandatory COVID 19 vaccination for K-12 children. The risk of severe illness or death to children from COVID 19 is miniscule therefore the potential benefit of vaccination is also miniscule. The risk of injury from the vaccine in this age group has not been established but is very likely non-zero. Further, the vaccination does very little to slow the spread of COVID 19 according to the CDC and other research available. Therefore, this vaccination should not be mandated for children.

Curtis Nelson, DC

16701 NE 80th St, Suite 103

Redmond, WA 98052

www.nelsonchiro.com

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From: Pam Erickson
Sent: 11/2/2022 4:23:05 PM
To: DOH WSBOH
Cc:
Subject: Childhood Vaccine schedule

External Email

-
-

Whereas the CDC Director Director admitted that the COVID-19 vaccine does not prevent the spread of the virus; <https://www.cdc.gov/media/releases/2021/s0730-mmwr-covid-19.html>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fmedia%2Freleases%2Fs0730-mmwr-covid-19.html&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C334c70569e4d4014ecd908dabd28f1f7%7C11d0e>>

Whereas, Pfizer executive admits no testing was done on the COVID-19 vaccine Re: transmission;

<https://www.news.com.au/technology/science/human-body/pfizer-did-not-know-whether-covid-vaccine-stopped-transmission-before-rollout-executive-admits/news-story/f307f28f794e173ac017a62784fec414>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.news.com.au%2Ftechnology%2Fhuman-body%2Fpfizer-did-not-know-whether-covid-vaccine-stopped-transmission-before-rollout-executive-admits%2Fnews-story%2Ff307f28f794e173ac017a62784fec414&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C334c70569e4d4014ecd908dabd28f1f7%7C11d0e>>

<https://medika.life/pfizer-confirms-mrna-vaccine-never-tested-for-preventing-covid-transmission/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmedika.life%2Fpfizer-confirms-mrna-vaccine-never-tested-for-preventing-covid-transmission%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C334c70569e4d4014ecd908dabd28f1f7%7C11d0e>>

<https://lynnwoodtimes.com/2022/10/11/covid-transmission-221011/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Flynnwoodtimes.com%2F2022%2F10%2F11%2Fcovid-transmission-221011%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C334c70569e4d4014ecd908dabd28f1f7%7C11d0e>>

Whereas, the COVID-19 vaccine has not undergone the rigorous testing that is demanded for a vaccines to be added to the childhood safety schedule; (see references above for corroboration)

Whereas, the Pharmaceutical companies making these vaccines would be relieved from liability for any adverse reactions if it is added to a childhood vaccine schedule; (this is and will be of insurmountable concern to all parents/grandparents, everywhere.)

Whereas, the risk of severe illness in children is so low as to NEGATE any need for a vaccine;

<https://www.bbc.com/news/health-57766717>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bbc.com%2Fnews%2Fhealth-57766717&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C334c70569e4d4014ecd908dabd28f1f7%7C11d>

With the evidences stated above, it is the sensible decision to remove even the idea of mandating these "vaccines" for children.

Pam Erickson

From: Dan Renfrow
Sent: 11/2/2022 8:02:50 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Vaccine Advisory Committee public comment

External Email
Hi WA Dept of Health VAC,

As a parent and lifelong resident of Washington I urge you to consider the recent facts and studies as well as comments regarding the efficacy and effectiveness of the Covid vaccines. The risks of vaccine injury are simply too high for our youth to continue C-19 vaccination and boosters for a product that does not protect against retransmission. I am concerned with continuing gene-therapy with forced injection of our children where we don't know long term effects. Myocarditis is increasing globally and this is becoming the next health crisis for our children. There is little reason to mandate injections. I have lost trust in the CDC and FDA. That they will make good and sound decisions for our health does not appear to be their concern. Please be health leaders for our state and keep the trust of my family and Washington citizens by not voting to make C-19 vaccines mandatory for K-12.

Thank you,
Dan Renfrow
Bothell, WA

From: Diana Mendez
Sent: 11/2/2022 10:11:01 AM
To: DOH Secretary's Office
Cc:
Subject: Covid vaccine child immunization

External Email
Hello,

I am writing to state that as a parent in WA state I am against adding the covid vaccinations to the childhood immunization schedule requirement for schools/daycare. There is no need for children to receive this vaccination as they are at least risk from covid 19. Many adults are not comfortable with this vaccine much less giving it to our children. Please listen to us parents.

Thank you,
Diana Mendez

From: Mara Williams
Sent: 10/31/2022 10:53:20 AM
To: DOH WSBOH
Cc:
Subject: Adding the Covid shot to the schedule

External Email

Please do NOT do it! These shots are not needed by children and cause myocarditis and other serious problems. They change DNA. Please don't consider this addition.

Mara Williams

Sent from my iPhone

From: Michaella Minnick
Sent: 10/31/2022 9:33:35 AM
To: DOH WSBOH
Cc:
Subject: Covid Vaccine

External Email

I am writing to voice my concern about the BOH adding the Covid vaccine to the list of childhood required vaccinations to attend school in WA state. I oppose this action, and strongly disagree that this is beneficial to the healthy immune systems of our children. There is simply not enough data to prove this is safe or effective, especially for children.

Thank you,
Michaella Minnick

From: Julie
Sent: 11/2/2022 10:20:00 PM
To: DOH Secretary's Office, Sherls-Jones, Jamilya J (DOH)
Subject: Stop Covid 19 Vaccinations for school Children.

External Email

Much has been said about anti-vaxers. The real problem is these vaccines were rushed to market and improperly tested and screened without any trials. No one knows what the long range issues will be. We can't inflict these problems on our Innocents. Covid has nearly run its course, why mandate vaccines. All the pharmaceutical companies are padding their golden parachutes without any fear of repercussions should these vaccines have adverse side effects like weaken their hearts or lungs or even their ability to conceive. That is not protecting the people. Children are the most immune age group. Despite what they say Vaccinated people do get covid and they can spread covid. Save our Children. Let them make the call when their 18.

Julie Byler
Washington State

From: Thomas Martin
Sent: 10/31/2022 12:34:00 PM
To: DOH WSBOH
Cc:
Subject: Fwd: COVID-19 Vaccines for kids-comment



attachments\536F3EBDC57545EF_Childhood vaccine schedule comment.docx

attachments\AF069F71E40B40C0_Maddie's story.docx

External Email

I sent this to the advisory committee on vaccines for children and am forwarding it to you. Please consider it in your decision Tom Martin

----- Forwarded message -----

From: Thomas Martin <newmartintc@gmail.com <mailto:newmartintc@gmail.com> >
Date: Mon, Oct 31, 2022 at 12:24 PM
Subject: COVID-19 Vaccines for kids-comment
To: <secretary@doh.wa.gov <mailto:secretary@doh.wa.gov> >, <TaoSheng.Kwan-Gett@doh.wa.gov <mailto:TaoSheng.Kwan-Gett@doh.wa.gov> >, <Jamilia.Sherls-Jones@doh.wa.gov <mailto:Jamilia.Sherls-Jones@doh.wa.gov> >, <Heather.Drummond@doh.wa.gov <mailto:Heather.Drummond@doh.wa.gov> >

I sent a comment to the CDC stating 7 reasons I know of that make any mandate or childhood vaccination schedule as very suspect if adopted for (especially) children. I will attach that comment as a word document to this email. I don't believe that the Washington State decision makers are as compromised as the National officials so I have hopes that you will listen to reason and make the only logical, compassionate, and beneficial decision remembering that this is about every child born and or raised in Washington State. Please consider reason and the clearly known history vs narrative of the progression of COVID virus from very deadly and unknown to mild and known (ways of treating it). Please do not allow a so called "vaccine" to be on the childhood schedule, that has very near zero benefits due to children having no real risk of harm from the virus, but significant known risks from the vaccines (see my attached word doc). Thank you for your consideration. Tom Martin

PS I would ask you to consider why fo you consider adding it. Just because the CDC recommends it? Why do they recommend it? Do you know the answer to that question clearly and safely for our children? Hopefully it is not just because pharma tells us it is a good idea. Have you thought about conflict of interest in this whole process? If you have time, it would be good if you watched the video "Maddie's Story"---link attached. Scroll down a little in the text of the article for the video. Maddie is a child.

From: ELIZABETH RICHMOND
Sent: 10/31/2022 10:30:44 PM
To: DOH WSBOH
Cc:
Subject: Please Prohibit Mandatory Covid Vaccine Mandates

External Email

Dear Washington BOH,

The public does not want their children to have liability-free Covid Vaccines. You have the power to keep parents and families in charge of their children's health by prohibiting covid vaccine mandates in our state. Americans are concerned about the rushed development, shifting statistics, and lack of long-term safety and efficacy data on the covid jabs.

I am concerned about our religious and bodily freedom, our right to travel and associate, our right to share information and more.
Mandates create discrimination, and there is no place for that in the United States of America.

Consent requires choice. There is no true choice when our options are between a job or our job, school, community, travel and social services.

I urge you to make sure that public policy paves the way for our residents to make responsible informed choices about the best way to care for our own health. Personal choice, not public pressure or coercion, must be the only factor in getting this vaccine for our children.

Thank you,

Liz Richmond
Seattle WA

From: Jonathan Anderson
Sent: 10/22/2022 8:18:53 AM
To: DOH WSBOH
Cc:
Subject: Oppose COVID vaccine mandates for school age children

External Email

To whom it may concern:

The CDC was wrong to add the COVID-19 vaccine to the childhood recommended immunization schedule. The Washington State Board of Health should not make a similar mistake by following the lead of the CDC. I oppose any attempts to mandate COVID vaccinations for school age children. Parents are the decision making authority for their children when it comes to vaccinations. It is immoral to deny schooling to children over ridiculous attempts to force everyone to comply. It's time to move on!

Jonathan Anderson
Tacoma, WA

From: Lisa Templeton
Sent: 10/18/2022 6:52:10 PM
To: DOH WSBOH
Cc:
Subject: for the BOH: here's the link I promised

External Email

Hello, will you kindly share this message with the BOH members as my follow up to last week's meeting and confirm that you have done so? Thank you.

Good evening, BOH members,

Now that October 18 is here, The Real Anthony Fauci Movie I wrote to you about has launched; please see below for access. As I mentioned, RFK, Jr's., book, the movie's progenitor, contains hundreds of citations that back its claims.

I ask that you spend the time to watch the movie, which is free through the end of the month. I welcome your feedback.

Thank you.

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Our mission is to end childhood health epidemics by working aggressively to eliminate harmful exposures, hold those responsible accountable, and establish safeguards to prevent future harm.

Children's Health Defense
852 Franklin Ave., Suite 511
Franklin Lakes, New Jersey 07417
Contact us

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdefault.salsalabs.org%2FT984f015363b-4478-a690-43afbe82c588%2F2a6ee245-af6e-4507-9f58-7d384107f7b8&data=05%7C01%7CWsboh%40sboh.wa.gov%7C7ee689243e96425edb1408dab17437d1%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdefault.salsalabs.org%2FT984f015363b-4478-a690-43afbe82c588%2F2a6ee245-af6e-4507-9f58-7d384107f7b8&data=05%7C01%7CWsboh%40sboh.wa.gov%7C7ee689243e96425edb1408dab17437d1%2F)

From: Tera Tagliabue
Sent: 11/1/2022 3:20:14 PM
To: DOH WSBOH
Cc:
Subject: Oppose adding COVID vaccines to school immunization requirements

External Email

Please oppose adding COVID vaccine requirements for attending school. The public does not want these liability-free products to be mandated for our kids.

They do not prevent infection or transmission. There is no long term safety data. There are many adverse reactions to the vaccines and children do not usually suffer severe symptoms if infected with COVID 19.

Parents have the right to choose.

Do not mandate these vaccines.

From: Dr. Lisa DVM

Sent: 11/1/2022 9:49:06 PM

To: DOH WSBOH

Cc:

Subject: I respectfully urge you to recommend AGAINST the COVID-19 injection for the childhood vaccine schedule



attachments\F6DE8D984A4B4AB8_Pathophysiologic alterations post vaccine.pdf



attachments\E08337E15B7D41C4_Vaccine related Prion Disease.pdf



attachments\58D9FDD3B9164C95_cimb-44-00073 (1).pdf

External Email

Dear Board of Health,

I know I already sent these articles to the board on a previous request, but they are still relevant as to why the Covid-19 injection makes no sense for children. Once again, I respectfully urge you to recommend against including the COVID-19 injection for the state's daycare and K-12 requirements. First many of these children have already been exposed and achieved immunity, the risk of serious disease in these individuals is extremely low, next this injection does not stimulate neutralizing antibodies against the variants and has been demonstrated in some individuals to allow the variants to create a more severe disease through antibody dependent enhancement, plus the mRNA therapy is typically a therapy that requires 10-15 years of observation for aberrant effects and we are just a bit over 2 years and we are seeing a number of structural injuries to various important reproductive and circulatory organs, neurologic injuries, autoimmune disease and physiologic injuries. New studies indicate that the mRNA stays in the body for several months. During the initial CDC vaccine roll out lectures I participated in showed slides of the mRNA quickly being broken down and being removed by the immune system (this was Oct or Nov 2020). We now know they remain in the body many months and the 3rd attachment discusses this research and "Furthermore, a recent study showed that SARS-CoV-2 RNA can be reverse-transcribed and integrated into the genome of human cells." The second study discusses many different ailments besides neurologic injury and has some interesting adverse event comparison tables.

It is one thing for an adult with free will to voluntarily receive this injection, it is completely different matter to mandate unknown life long effects on a child who is trusting us to make decisions for their highest good.

Sincerely,

Dr. Lisa Brien

ARTICLE

Open Access

Comprehensive investigations revealed consistent pathophysiological alterations after vaccination with COVID-19 vaccines

Jiping Liu¹, Junbang Wang², Jinfang Xu³, Han Xia^{1,4,5}, Yue Wang¹, Chunxue Zhang¹, Wei Chen¹, Huina Zhang¹, Qi Liu¹, Rong Zhu¹, Yiqi Shi¹, Zihao Shen¹, Zhonggang Xing¹, Wenxia Gao¹, Liqiang Zhou¹, Jinliang Shao¹, Jiayu Shi¹, Xuejiao Yang¹, Yaxuan Deng¹, Li Wu¹, Quan Lin¹, Changhong Zheng¹, Wenmin Zhu¹, Congrong Wang^{1,6}, Yi E. Sun¹ and Zhongmin Liu¹

Abstract

Large-scale COVID-19 vaccinations are currently underway in many countries in response to the COVID-19 pandemic. Here, we report, besides generation of neutralizing antibodies, consistent alterations in hemoglobin A1c, serum sodium and potassium levels, coagulation profiles, and renal functions in healthy volunteers after vaccination with an inactivated SARS-CoV-2 vaccine. Similar changes had also been reported in COVID-19 patients, suggesting that vaccination mimicked an infection. Single-cell mRNA sequencing (scRNA-seq) of peripheral blood mononuclear cells (PBMCs) before and 28 days after the first inoculation also revealed consistent alterations in gene expression of many different immune cell types. Reduction of CD8⁺ T cells and increase in classic monocyte contents were exemplary. Moreover, scRNA-seq revealed increased NF-κB signaling and reduced type I interferon responses, which were confirmed by biological assays and also had been reported to occur after SARS-CoV-2 infection with aggravating symptoms. Altogether, our study recommends additional caution when vaccinating people with pre-existing clinical conditions, including diabetes, electrolyte imbalances, renal dysfunction, and coagulation disorders.

Introduction

The COVID-19 pandemic has profoundly affected humanity. The development of COVID-19 vaccines in various forms has been underway in an unprecedented and accelerated manner. Despite some uncertainties regarding potential consequences, large-scale vaccinations are taking place in many countries. There have been different COVID-19 vaccines developed, including inactivated viral

particles, mRNA vaccines, adenoviral-based vaccines, and etc.^{1–5}. Historically, vaccine research has been focused on whether or not vaccination could generate neutralizing antibodies to protect against viral infections, whereas short-term and long-term influences of the various newly developed vaccines to human pathophysiology and other perspectives of the human immune system have not been fully investigated.

With the development of large-scale single-cell mRNA sequencing (scRNA-seq) technology, systematic investigation of people's immune system function with precision became possible, primarily through scRNA-seq of peripheral blood mononuclear cells (PBMCs). During the COVID-19 pandemic, a large body of studies using scRNA-seq of PBMCs had revealed detailed changes in gene expression in different immune cell subtypes including different types of T and B cells, NK cells, monocytes, dendritic cells, etc. during and

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²Key Laboratory of Spine and Spinal Cord Injury Repair and Regeneration of Ministry of Education, Orthopedic Department of Tongji Hospital, School of Medicine, Tongji University, Shanghai, China

Full list of author information is available at the end of the article

These authors contributed equally: Jiping Liu, Junbang Wang, Jinfang Xu, Han Xia, Yue Wang.

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after infection, results from which indicated greatly reduced CD4⁺ and CD8⁺ T-cell numbers and T-cell exhaustion upon SARS-CoV-2 infection. Reduced peripheral mucosal-associated invariable T (MAIT) cell numbers and their migration in and out of the lung had also been observed. Highly activated inflammatory immune responses, including Interferon-gamma (IFN- γ), interleukin-6 (IL-6), and NF- κ B responses, had been reported in COVID-19 patients^{6–12}. Many studies had revealed immune state differences between people with severe versus mild symptoms, in that strong type I interferon (IFN- α/β) responses were beneficial after COVID-19 infection and attenuated IFN- α/β responses were associated with the development of severe symptoms¹³. In contrast, stronger NF- κ B inflammatory responses were associated with more severe symptoms¹⁴. In addition, increased $\gamma\delta$ -T cell and reduced neutrophil contents were reported to be associated with milder symptoms¹⁵.

Upon SARS-CoV-2 infections, many people developed various degrees of respiratory syndromes, and some with gastrointestinal conditions. It had been reported that blood coagulation disorders, vasculature issues, electrolytes imbalances, renal disorders, metabolic disorders, etc. were major clinical complications with COVID-19^{16,17}. The manner in which vaccination would mimic an infection has not been fully evaluated. In this study, we enrolled healthy volunteers who were to be vaccinated with an inactivated SARS-CoV-2 vaccine (Vero Cell)³, to participate in antibody and neutralizing antibody testings, as well as detailed clinical laboratory measurements before and at different times after vaccination (two-dose regimens with slightly different schedules were applied). To our surprise, we observed quite consistent pathophysiological changes regarding electrolyte contents, coagulation profiles, renal function as well as cholesterol and glucose metabolic-related features, as if these people had experienced an infection with SARS-CoV-2. In addition, PBMCs scRNA-seq results also indicated consistent reductions in CD8⁺ T cells and increases in monocyte contents, as well as enhanced NF- κ B inflammatory signaling, which also mimicked responses after infection. Surprisingly, type I interferon responses, which had been linked to reduced damages after SARS-CoV-2 infection and milder symptoms, appeared to be reduced after vaccination, at least by 28 days post the 1st inoculation. This might suggest that in the short-term (1 month) after vaccination, a person's immune system is in a non-privileged state, and may require more protection.

Results

Longitudinal follow-up of anti-SARS-CoV-2 antibody and neutralizing antibody productions after inoculation of inactivated SARS-CoV-2 vaccine

A total of 11 healthy adult volunteers of both sexes, aged 24–47 years, with a BMI of 21.5–30.0 kg/m², were

enrolled in this study (Fig. 1a and Supplementary Tables S1 and S2). SARS-CoV-2 vaccine (Vero Cell), inactivated (Beijing Institute of Biological Products Co. Ltd), was administered intramuscularly into the deltoid. Volunteers were divided into two cohorts; five participants (cohort A) were vaccinated with a full dose (4 μ g) of inactivated SARS-CoV-2 Vaccine (Vero Cell) on days 1 and 14, and six participants (cohort B) received a full dose of the vaccine on days 1 and 28 (Fig. 1a). One of the volunteers in group B was tested positive for anti-SARS-CoV-2 IgM and IgG right before vaccination, suggestive of potential prior infections. However, there was no record of previous positivity by nucleic acid (NA) diagnosis for COVID-19 (marked green in Fig. 1a). For all follow-up examinations, data from this individual was marked green to track any possible influences from potential prior infections.

Adverse events were monitored daily during the first 7 days after each inoculation and then self-recorded by the participants on diary cards in the following weeks. Overall, adverse reactions were mild (grades 1 or 2) and transient (Supplementary Table S3). Blood samples were collected on days 0, 7, 14, 28, 42, 56, and 90, and urine samples were collected on days 0, 14, 28, 42, and 90. Plasma samples were subjected to anti-SARS-CoV-2 IgM/IgG testing using multiple diagnostic kits, results from the most sensitive kit were used for quantification (Fig. 1b, c). Testing results from cohort A demonstrated that prior to the 2nd inoculation 0% of the participants developed anti-SARS-CoV-2 IgG, but by day 28, which was 2 weeks post the 2nd inoculation, 100% of the participants were tested positive (Fig. 1b). Overall, IgM showed up earlier than IgG, which was expected. IgG and IgM positivity decreased by day 42 and remained at relatively low levels by day 90 in cohort A. For cohort B, no one developed IgG until after 2nd inoculation. Yet by day 42, IgG positivity reached 100% (Fig. 1c) and sustained until day 56, suggesting that the vaccination protocol for cohort B was more efficacious. By day 90, IgG positivity also reduced to 50%, indicating antibody production did not sustain for a long time. We further carried out tests for SARS-CoV-2 neutralizing antibodies¹⁸ (Fig. 1d), and results also indicated that two inoculations 28 days apart (cohort B) resulted in higher protective antibody titers as compared to two inoculations with 14 days apart (cohort A). On the other hand, it appeared that anti-SARS-CoV-2 neutralizing antibody titers were overall lower than those in COVID-19 convalescent individuals as reported before³ (Fig. 1d). By 90 days, neutralizing antibody titers dramatically decreased in all volunteers (Fig. 1d). Interestingly, the individual who was antibody positive prior to vaccination was not more prone to generating neutralizing antibodies as compared to the rest of the participants, suggesting that prior potential infection might not have occurred or may not generate long-lasting protection in the perspective of neutralizing antibody production.

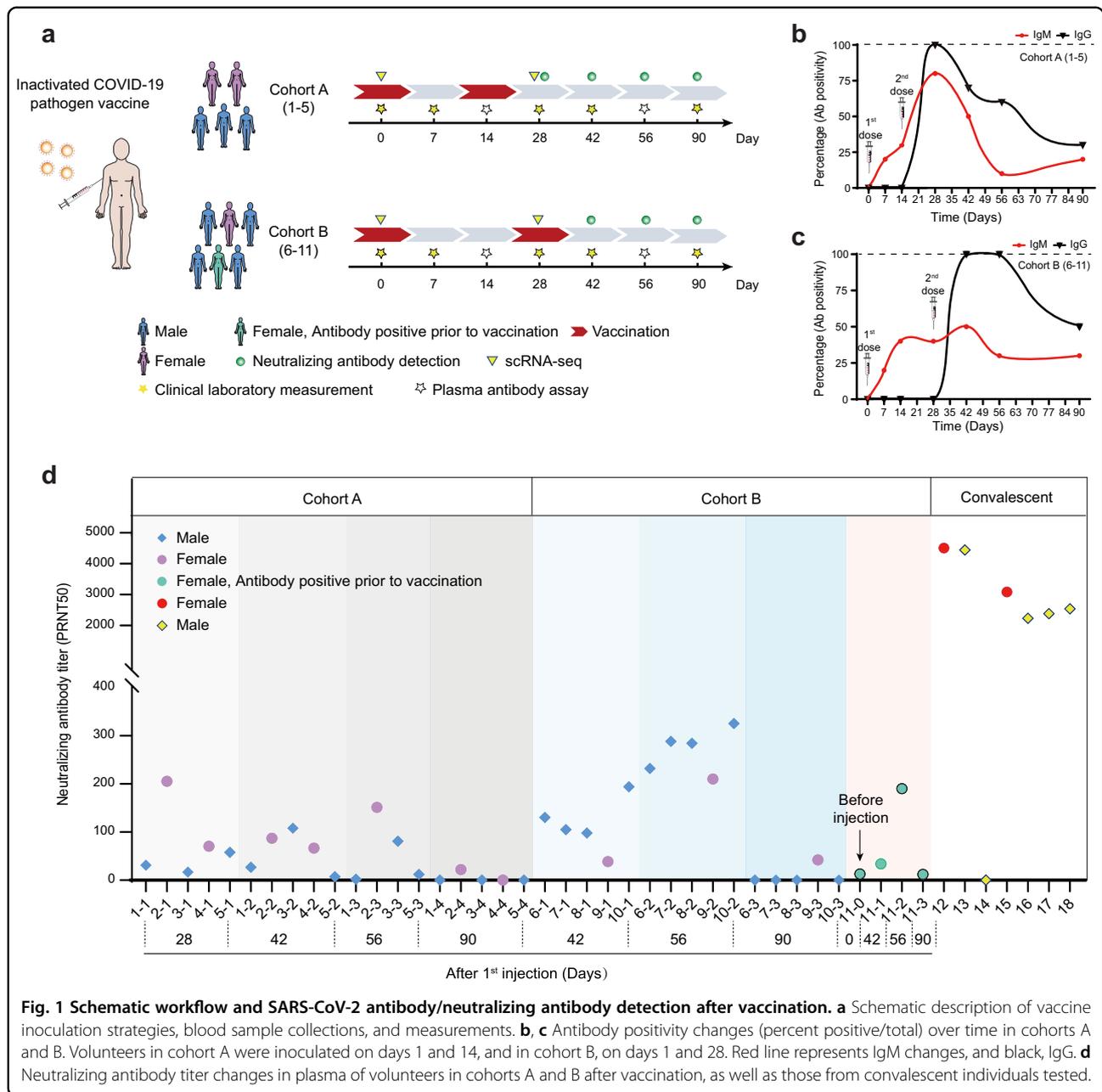


Fig. 1 Schematic workflow and SARS-CoV-2 antibody/neutralizing antibody detection after vaccination. **a** Schematic description of vaccine inoculation strategies, blood sample collections, and measurements. **b, c** Antibody positivity changes (percent positive/total) over time in cohorts A and B. Volunteers in cohort A were inoculated on days 1 and 14, and in cohort B, on days 1 and 28. Red line represents IgM changes, and black, IgG. **d** Neutralizing antibody titer changes in plasma of volunteers in cohorts A and B after vaccination, as well as those from convalescent individuals tested.

Alterations in clinical laboratory measurements after vaccination

Clinical laboratory routine tests including infection-related indices, hematologic parameters, coagulation function, blood glucose, serum lipids, cardiac function-related enzymes, electrolytes, liver, and renal function-related biomarkers, were measured to reveal safety features of the vaccine (Fig. 2a and Supplementary Tables S4 and S5). White blood cell count was significantly, yet only slightly, increased after vaccination on day 7. No differences were detectable at the following time points (Fig.

2b). To our surprise, quite consistent increases in HbA1c levels were observed in healthy volunteers, regardless of whether they belonged to cohort A or B. By day 28 post the 1st inoculation, three out of 11 individuals reached the prediabetic range (Fig. 2c). By days 42 and 90, medium HbA1c levels appeared to revert back, yet were still significantly higher than those before vaccination. Previous work has demonstrated that diabetic patients with uncontrolled blood glucose levels are more prone to develop severe forms of COVID-19¹⁹. High blood glucose levels/glycolysis had been shown to promote SARS-CoV-

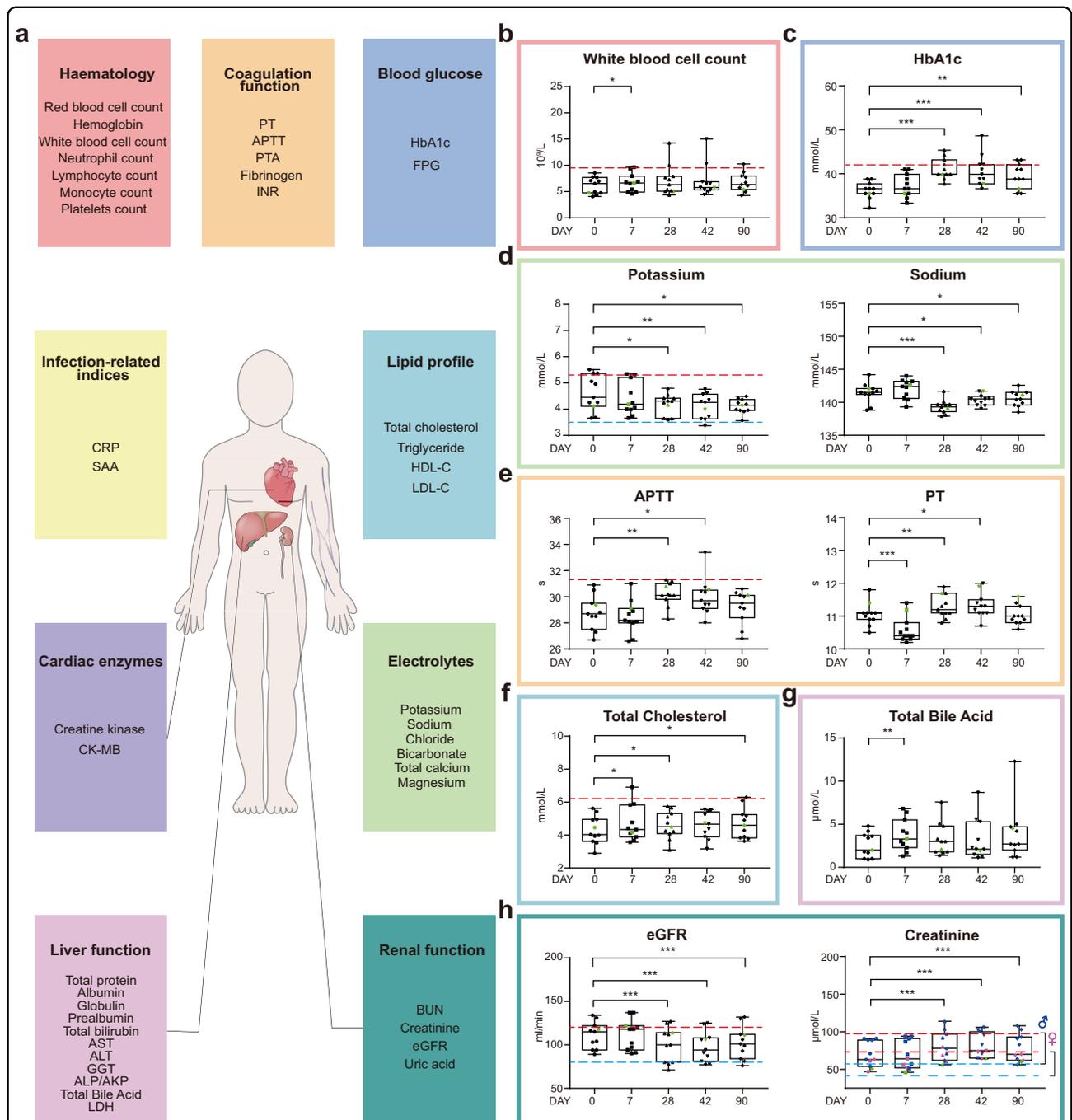


Fig. 2 Temporal changes of clinical laboratory measurements after vaccination. **a** Clinical laboratory routine tests include hematologic and coagulation parameters, blood glucose-related and infection-related indices, lipid profile, cardiac enzymes, electrolytes, liver- and renal function-related biomarkers. More information could be found in Supplementary Tables S4 and S5. Laboratory test values of white blood cell count (**b**), HbA1c (**c**), potassium (**d**, left panel), sodium (**d**, right panel), APTT (**e**, left panel), PT (**e**, right panel), total cholesterol (**f**), total bile acid (**g**), eGFR (**h**, left panel), creatinine (**h**, right panel). Data points represent the values of each individual. Box plots showed the 25th, 50th (median), and 75th percentiles. Horizontal dashed lines showed upper normal limits (red) in **b**, **c**, **d** (left panels), **e** (left panel), **f**, **h** and the lower normal limits (blue) in **d** (left panel) and **h**. The *P* values were calculated by the Wilcoxon sign-rank test by comparing the laboratory measurements at each time with the baseline measurements. **P* ≤ 0.05, ***P* ≤ 0.01, ****P* ≤ 0.001.

2 replication in human monocytes via the production of mitochondrial reactive oxygen species and activation of HIF1A²⁰, therefore presenting a disadvantageous feature.

Serum potassium levels decreased significantly by days 28, 42, and 90 post the 1st inoculation, with one sample below the lower normal limit at day 42 (Fig. 2d, left panel). Similarly, serum sodium levels also decreased following vaccination (Fig. 2d, right panel), indicative of vaccine influences on electrolyte balance. Again, electrolyte imbalance has also been linked to COVID-19²¹. Coagulopathy is another COVID-19-induced clinical condition²². We found that coagulation profiles changed significantly after vaccination, in the short-term (7 days) after the 1st inoculation, coagulation profiles were leaning toward shorter Prothrombin Time (PT), whereas the long-term (28 and 42 days) effect was toward activated partial thromboplastin time (APTT) and PT prolongation (Fig. 2e). By day 90, the profiles returned back to those before vaccination (Fig. 2e). Moreover, we found elevated blood cholesterol levels at days 7, 28 after the 1st inoculation, and elevated total bile acid levels were also detected at day 7 (Fig. 2f, g). Renal dysfunction is another clinical condition linked to COVID-19, and by 28, 42, and 90 days after the first inoculation, serum creatinine levels were significantly higher than those before vaccination, resulting in reduced eGFR (Fig. 2h). Most of these clinical features have been reported to be associated with the development of severe symptoms in COVID-19 patients (Supplementary Table S6). Overall, there were no statistically significant differences between cohorts A and B, except for only a few indices (Supplementary Table S7), therefore data from two cohorts were pooled for clinical data presentation and subsequent analyses.

scRNA-seq revealed dramatic alterations in gene expression of almost all immune cells after vaccination

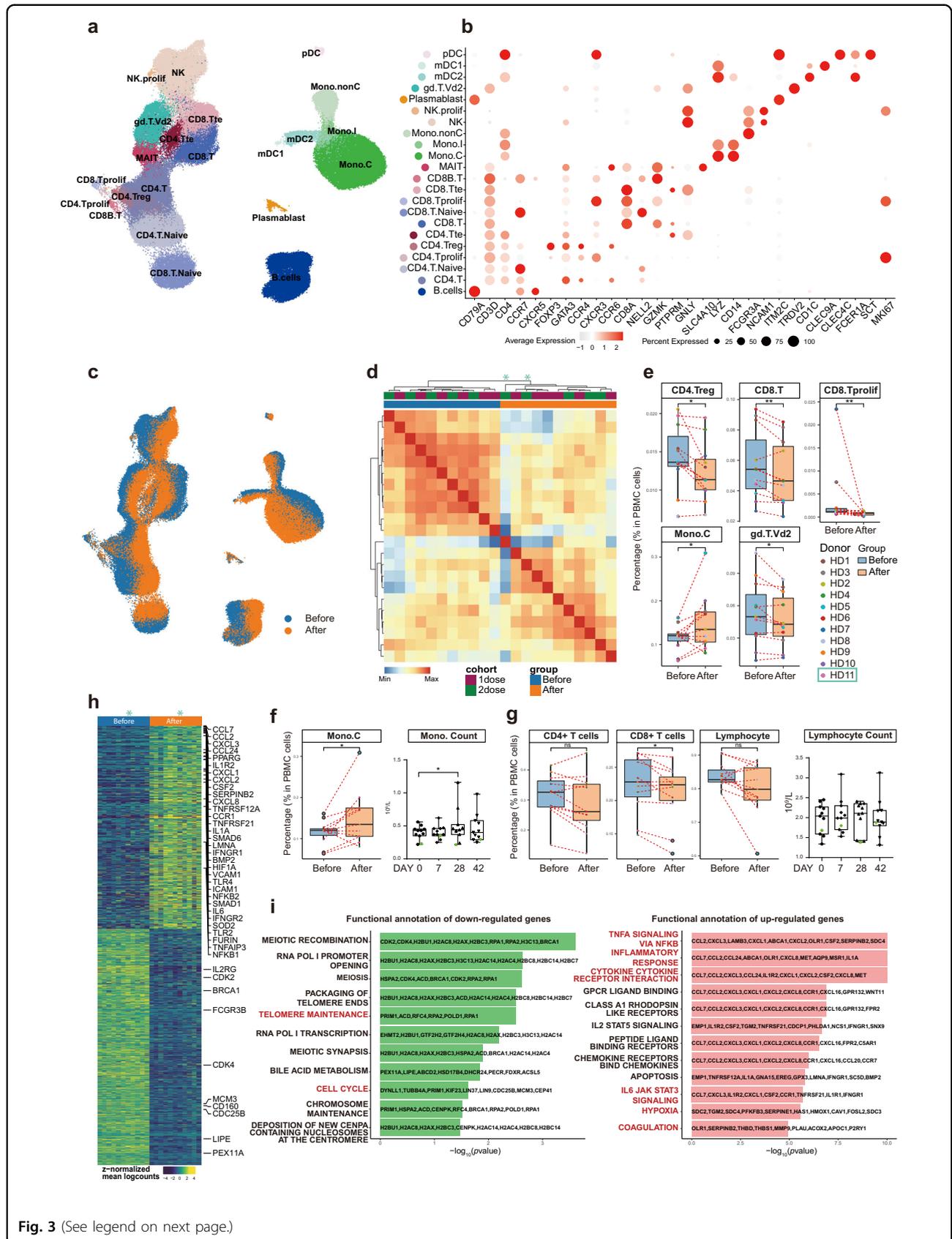
To explore the immunological features of healthy volunteers following vaccination, we performed droplet-based scRNA-seq (10× Genomics) to study transcriptomic profiles of PBMCs from volunteers belonging to either cohort A or B, before and 28 days after vaccination (Fig. 3a and Supplementary Fig. S1a). After preprocessing and low-quality cell elimination (see “Materials and methods”), we obtained 188,886 cells from all PBMC samples, among which 86,685 cells were from cohort A and 102,201 cells from cohort B. All qualified cells were integrated into the unified dataset and subjected to downstream analyses.

Using graph-based clustering of uniform manifold approximation and projection (UMAP)²³, Single-cell Recognition of cell types (SingleR) algorithm²⁴, and manual annotation based on canonical gene markers, we identified 22 cell types or subtypes and performed differential expression analysis amongst all cell types (Fig. 3b

and Supplementary Table S8). Cells (cell transcriptomes) from samples before (blue) and after (orange) vaccination were distinctly separated in the UMAP representation for both cohorts, which meant immunological features had changed quite drastically in almost all immune cell types detected, and consistently in all volunteers (Fig. 3c). Among the 11 pairs (before and after) of PBMC samples, 10 pairs were sequenced together and one pair was sequenced separately in a different batch. UMAP distributions were drastically similar regardless of the different batches, suggesting minimal sequencing batch effects (Supplementary Fig. S1b). Two independent batches of sequencing revealed similar changes before and after vaccination, suggesting the changes are real, whereas using the batch effect correction method (Harmony²⁵) (Supplementary Fig. S1c–e) would result in over filtration and elimination of the real changes caused by vaccination. Moreover, sample clustering based on the Pearson Correlation coefficient of the transcriptomes indicated that samples from the two cohorts (A and B) intermingled well with each other both before and after vaccination, whereas vaccination-induced changes could clearly be observed (Fig. 3d). Therefore, to increase the statistical power, we combined the two cohorts for subsequent analyses.

To reveal differences in cell-type compositions before and after vaccination, we calculated relative percentages of all cell types in PBMCs of each individual on the basis of scRNA-seq data (Fig. 3e). We observed decreases in contents of CD4⁺ regulatory T cells (CD4.Treg), CD8⁺ T cells (CD8.T), and proliferating CD8⁺ cells (CD8.Tprolif) after vaccination (Fig. 3e). Decreases in $\gamma\delta$ -T cell (gd.T.Vd2) contents were also significant (Fig. 3e). In contrast, vaccination increased CD14⁺ classical monocyte (Mono.C) contents (Fig. 3e), consistent with clinical laboratory measurements (Fig. 3f). The overall lymphocyte contents, which included all CD4⁺ T cells, all CD8⁺ T cells, B cells, and NK cells, did not change significantly before and after vaccination, which was also confirmed by clinical laboratory measurements (Fig. 3g). We collected a published dataset from 196 COVID-19-infected patients and controls⁷, and analyzed our data together with that dataset. The result indicated that vaccination-induced changes in cell contents of all five different immune cell subtypes also changed in the same directions in COVID-19 patients as compared to controls, except for proliferating CD8⁺ T cells (Supplementary Fig. S2).

To study detailed gene expression changes induced by vaccination, we merged individual samples into pseudo-bulk samples and used paired sample test to identify differentially expressed genes (DEGs) (Fig. 3h and Supplementary Table S9). Significantly upregulated genes were involved in “TNF α signaling via NF- κ B”, “inflammatory responses”, and “cytokine-cytokine receptor interaction”,



(see figure on previous page)

Fig. 3 Changes in peripheral immune cell type and subtype compositions as well as gene expression before and 28 days after the 1st inoculation. **a** Cell-type UMAP representation of all merged samples. In total, 22 cell types were identified by cell-type-specific gene expression signatures. In total, 188,886 cells were depicted. **b** Dot plot for cell-type-specific signature genes. Color scale indicated expression levels and point size represented the percentage of cells per cluster/subtype expressing the corresponding gene. **c** UMAP representation representing cells before (blue) and after (orange) vaccination. **d** Heatmap of correlation amongst pseudo-bulk samples. **e** Percentages of specific immune cell subtypes in total PBMCs from each individual before and after vaccination. Box plot depicted sample distribution. Blue boxes represented samples before, and orange, after vaccination. *P* values were based on the Wilcoxon test for comparisons between groups before and after vaccination. **f** Box plots showed changes before and after vaccination in monocyte content from scRNA-seq data (left panel) and clinical laboratory measures (right panel). **g** Box plots showed changes in CD4⁺, CD8⁺ T-cell contents as well as lymphocyte (T + B + NK) contents before and after vaccination from scRNA-seq data (left 3 panels) and laboratory tests (right panel). **h** DEGs identified by pseudo-bulk samples before and after vaccination. **i** Overrepresentation analysis of HALLMARK gene sets from MSigDB demonstrating different immunological features before and after vaccination.

“IL6-JAK STAT3 signaling”, “coagulation”, “hypoxia”, which had been reported for COVID-19, while cell cycle-related pathways were downregulated (Fig. 3i). These results supported the notion that vaccination mimicked an infection^{6–12}.

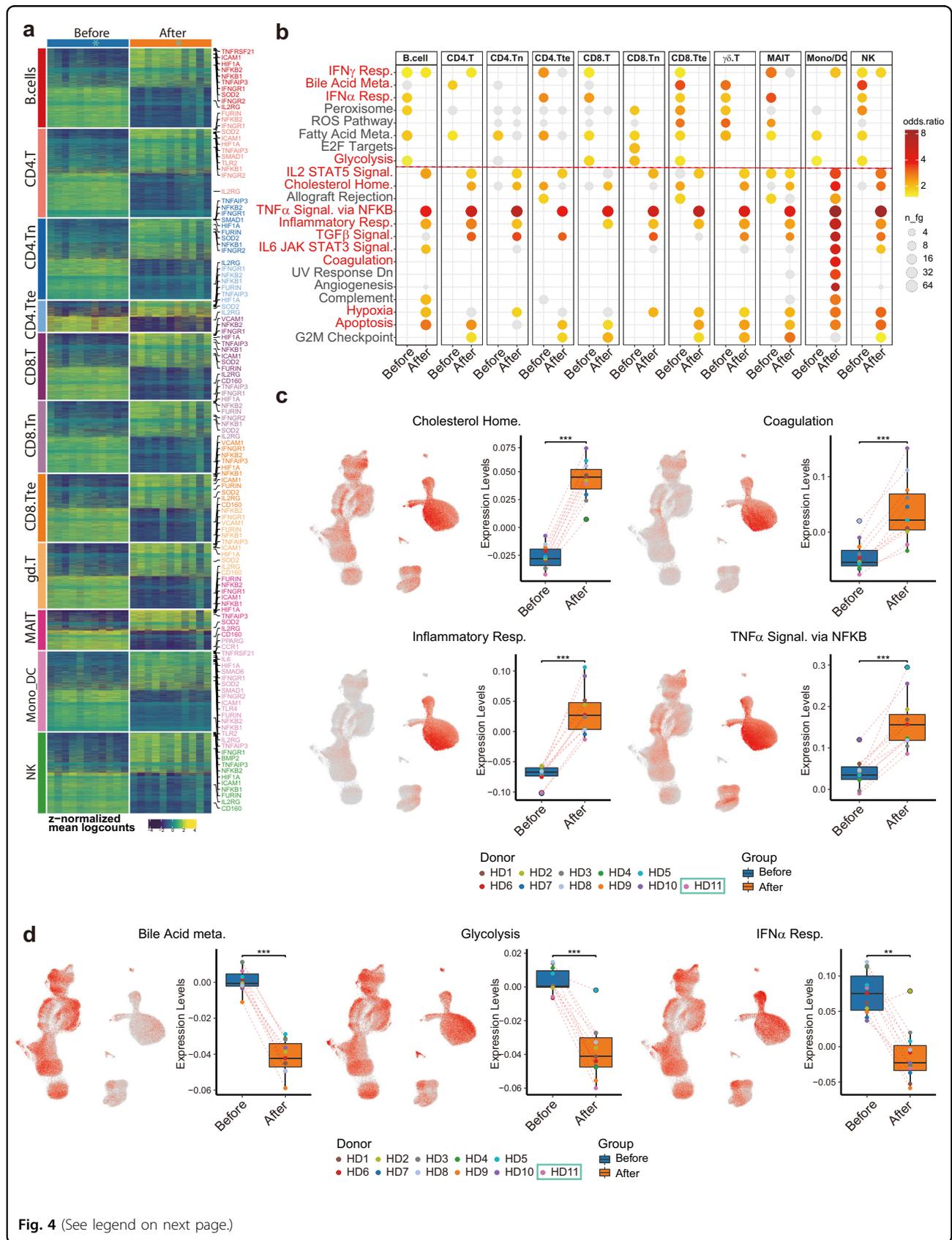
Featured immune cell subtype-specific gene expression changes mirrored clinical laboratory alterations

Prior to the elucidation of the functional heterogeneity and cell-type-specific gene expression changes between samples before and after vaccination, we grouped cells into 11 major types: (1) naive-state CD4⁺ T cells, (2) naive-state CD8⁺ T cells, (3) CD4⁺ helper T cells (including CD4.T, CD4.Treg, and CD4.Tprolif), (4) CD8⁺ cytotoxic T cells (including CD8.T, CD8B.T, and CD8.Tprolif), (5) MAIT, (6) $\gamma\delta$ -T cells, (7) NK cells (including NK, NK proliferative), (8) B/plasmablast cells (including B cells and plasmablasts), (9) monocytes/dendritic cells (including classical mono, intermediate mono, non-classical mono, myeloid DC1, myeloid DC2, and plasmacytoid DC), (10) CD4⁺ terminal effector T cells, and (11) CD8⁺ terminal effector T cells. Following eleven major cell-type categorizations, we performed sample-level comparisons by aggregating gene expression across major cell types within each donor and then performed differential expression analysis using muscat²⁶. We identified differentially expressed genes (DEGs) among all major cell types (Fig. 4a and Supplementary Table S10) and conducted gene functional analysis (Fig. 4b). Echoing the clinical measurement results, genes related to “cholesterol homeostasis”, “coagulation”, and “inflammatory response” (CXCL8, CD14, IL6, and TNFRSF1B), “TNF α signaling via NF- κ B” (NFKB1, NFKB2, NFKBIE, TNFAIP3, and TNFSF9) and “hypoxia” (HIF1A) were upregulated. In addition, “TGF β signaling”, “IL2-STAT5 signaling” (IFNGR1, MAPKAPK2, and CASP3), and “IL6-JAK-STAT3 signaling”-related genes were also upregulated (Fig. 4c). To visualize which cell types were enriched for those signatures, we performed gene module scoring and displayed the scores on UMAP coordinates as

well as grouped box plots (Fig. 4c and Supplementary Table S11). Interestingly, “inflammatory response” genes were highly expressed in monocytes and after vaccination further increased (Fig. 4c), suggesting monocytes were one of the major cell types participating in inflammatory responses after vaccination. In contrast, genes related to “glycolysis”, “bile acid metabolism”, and “type I interferon (IFN- α/β) response” were downregulated, consistent with our clinical data and the pathophysiology of COVID-19¹³ (Fig. 4d).

Most common changes in multiple immune cell subtypes revealed increases in NF- κ B signaling and decreases in IFN- α/β responses

Given that clusters of genes changed their expression dramatically among all major cell types, we hypothesized that there might be some transcription factors serving as master regulators leading to immunological alterations. To solve the computational challenges associated with such a big dataset, we used the MetaCell algorithm²⁷ to aggregate homogeneous groups of cells into metacells, and finally produced 1857 metacells (893 before and 964 after vaccination) to represent the whole structure of the scRNA-seq data (Fig. 5a). Those metacells were then applied to “single-cell regulatory network inference and clustering (SCENIC)”^{28,29} to construct the gene regulatory networks. The workflow produced a list of 157 “regulons”, which included transcription factors and their direct targets. Regulon activities were scored using AUCell to access averaged enrichment of all genes belonging to each regulon in each metacell, as well as averaged regulon gene enrichment in all 893 metacells before vaccination, and 964 metacells after vaccination. Top-ranked (most active) eight regulons upregulated and eight regulons downregulated after vaccination were identified (Fig. 5b). We selected 3 + 3 typical regulons to construct a regulatory network as presented in Fig. 5c (Supplementary Table S12). The network showed two distinct groups, one is consisted of IRF2, STAT1 and STAT2, which were downregulated after vaccination, and the other, contained



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Fig. 4 Subtype-specific differential gene expression and gene set overrepresentation analyses depicting common gene expression changes amongst different types of immune cells after vaccination. **a** 11 major immune cell-type-specific DEGs identified by pseudo-bulk data produced by combinations of samples before and after vaccination. Genes with $\log_{2}FC > 0.5$ and adjusted $P < 0.05$ were included. **b** Overrepresentation analysis of HALLMARK gene sets from MSigDB amongst 11 major cell types demonstrated common changes in gene sets representing altered immunological states before and after vaccination. **c, d** UMAP visualization colored by average expression scores (levels) based on differential enrichment pathway. Box plot depicting the expression score distribution before and after vaccination.

RELB, NFKB2, and HIF1A, which were upregulated after inoculation. The GO terms of the upregulated network are predominantly related to lymphocyte differentiation, activation, and “Germinal Center Formation”, which suggested that T cells and B cells were activated after vaccination. In addition, NF- κ B signaling was also elevated after vaccination. The downregulated network was enriched for many interferons-related pathways and Cytokine Secretion (Fig. 5d and Supplementary Table S13). This suggested that vaccination might inhibit interferon responses in the peripheral immune system, by reducing the activities of regulons STAT1, STAT2, and IRF2, which were thought to be master transcription factors driving type I and III interferon signaling^{30,31}.

To confirm vaccination-induced inhibition of interferon responses revealed by scRNA-seq, we stimulated PBMCs from vaccinated individuals before and 28 days after vaccination with IFN- α/β . After 16 h of culturing and 12 h of stimulation, we used RT-qPCR to measure the relative expression of master regulators IRF2, IRF7, and STAT2. STAT2 and IRF7 were significantly downregulated after vaccination, yet IRF2 showed a trend of downregulation (Fig. 5e, f). The regulon analyses indicated that the states of the peripheral immune system after vaccination had reduced type I interferon responses, indicative of attenuated general antiviral abilities at least 28 days after the first inoculation.

Vaccination-induced inflammatory responses in monocytes

Recent reports have described conserved host immune response signatures to respiratory viral infections, namely the Meta-Virus Signature (MVS), which is also conserved in SARS-CoV-2 infection^{32,33}. Higher MVS scores are associated with infection^{32,33}. In all, 380 (158 positively- and 222 negatively contributed to MVS scores) out of 396 (161 positively- and 235 negatively contributed) genes selected for MVS measurement were detected in our dataset. To investigate host immune responses after vaccination with inactivated SARS-CoV-2, we separated the positive and negative gene sets and calculated MVS scores (Fig. 6a). The MVS scores were substantially higher after vaccination (Fig. 6b, c), suggesting that vaccination mimicked an infection. Interestingly, the positive MVS gene set was predominantly expressed in monocytes,

while the negative set in lymphocytes, indicating different cell-type-specific immune responses would take place after vaccination (Supplementary Fig. S3a, b).

To investigate which pathways were associated with MVS-positive gene set and MVS-negative gene set, we calculated Spearman correlation among MVS gene sets scores and previously identified differentially enriched pathways using our scRNA-seq data (Fig. 6d). The most highly correlated pathway with MVS score and MVS-positive set was “Inflammatory response signaling”, which was strikingly upregulated in monocyte after vaccination, together with CD14, FPR1, C5AR1, NAMPT, NLRP3, CDKN1A, and IFNGR2. Whereas, MVS-negative set correlated well with “Cytotoxicity signature”, represented by NKG7, CCL4, CST7, PRF1, GZMA, GZMB, IFNG, and CCL3 expression, significantly decreased in many T-cell subtypes but not NK cells after vaccination (Supplementary Fig. S3c).

Discussion

This is a comprehensive investigation of the pathophysiological changes, including detailed immunological alterations in people after COVID-19 vaccination. Results indicated that vaccination, in addition to stimulating the generation of neutralizing antibodies, also influenced various health indicators including those related to diabetes, renal dysfunction, cholesterol metabolism, coagulation problems, electrolyte imbalance, in a way as if the volunteers experienced an infection. scRNA-seq of PBMCs from volunteers before and after vaccination revealed dramatic changes in immune cell gene expression, not only echoing some of the clinical laboratory measures but also suggestive of increased NF- κ B-related inflammatory responses, which turned out to be mainly taking place in classical monocytes. Vaccination also increased classical monocyte contents. Moreover, the gene set positively contributing to MVS scores, also known to be associated with severe symptom development, was highly expressed in monocytes. Type I interferon (IFN- α/β) responses, supposedly beneficial against COVID-19, were downregulated after vaccination. In addition, the negative MVS genes were highly expressed in lymphocytes (T, B, and NK cells), yet showed reduced expression after vaccination. Together, these data suggested that after vaccination, at least by day 28, other than

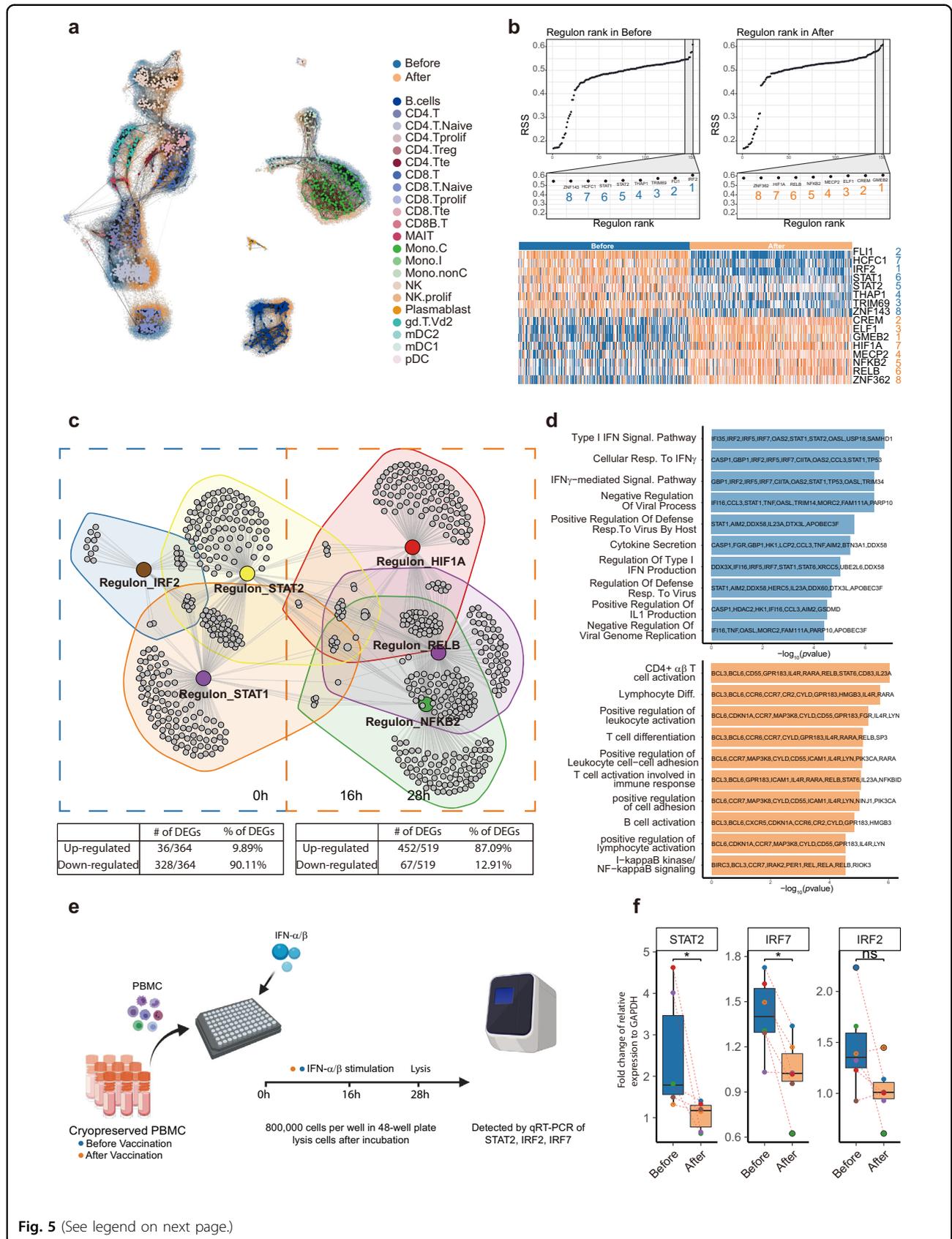


Fig. 5 (See legend on next page.)

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Fig. 5 Identification of master regulons and their regulatory networks before and after vaccination. **a** Visualization for the “similarity-structure-associating” metacells on the original scRNA-seq data. Metacells were color-coded according to their cell-type annotations. The original scRNA-seq data were color-coded “blue” and “orange” to represent samples “before” and “after” vaccination, respectively. **b** Top panels: rank of regulons in samples before (left) and after (right) vaccination, based on Regulon Specificity Score (RSS). Bottom panels: heatmap of top-ranked regulon activities before (blue) and after (orange) vaccination based on AUCell scores. Names of the regulons are color (blue/orange) and number coded (1–8). **c** Network of regulons and their target genes. The table below indicated the proportion of genes within the regulons which were up- or downregulated after vaccination. **d** Gene functional annotation and related genes before (blue) and after (orange) vaccination. **e** Schematic overview of the experiment. **f** After treatment with IFN- α/β , PBMCs from volunteers after vaccination had reduced expression of genes associated with type I interferon responses as compared to those before vaccination. Paired Wilcoxon test was used. $*P \leq 0.05$, $n = 6$.

generation of neutralizing antibodies, people’s immune systems, including those of lymphocytes and monocytes, were perhaps in a more vulnerable state.

Interestingly, our preliminary data demonstrated that if we pre-incubated RBD of SARS-CoV-2 with the PBMCs (from volunteers before and after vaccination) and then treated the cells with IFN- α/β , type I interferon responses were actually enhanced in PBMCs after vaccination, suggesting that perhaps vaccination, while reduced a person’s general antiviral ability, enhanced adaptive immune function specifically towards SARS-CoV-2 (Supplementary Fig. S4a). On the other hand, comparing PBMCs before vaccination, pre-treatment of SARS-CoV-2 S-RBD appeared to reduce type I interferon responses ($P < 0.05$, IRF2, IRF7, STAT2) (Supplementary Fig. S4b), suggesting 1st time exposure of the viral peptide would actually cause a reduction in type I interferon responses in PBMC. These in vitro data nicely supported the scRNA-seq results.

It is worth mentioning that one individual in cohort A who was on antibiotics, happened to not having reduced gene expression linked to type I interferon responses, and this individual also had the highest neutralizing antibody titer within the cohort. We further calculated Pearson’s Correlation Coefficient between neutralizing antibody titers and inflammatory responses measured by averaged gene expression of genes associated with TNF α Signaling via NF- κ B and interferon- α (type I interferon) responses. The results were 0.32 and 0.39 with $P > 0.05$ (Supplementary Fig. S4c), respectively, suggesting immune response changes and adaptive immune protection of the vaccine do not appear to be highly correlated. Whether antibiotics may influence vaccine efficacy remains to be determined. It is also rather interesting that while cohorts A and B had different anti-SARS-CoV-2 antibody production profiles, their PBMCs scRNA-seq results were drastically similar, including their B-cell scRNA-seq data (Supplementary Fig. S5a–c). It should be noted that after vaccination, the majority of responsive B cells, particularly those producing mature anti-COVID-19 antibodies (IgG) including memory B cells, should be primarily located in

peripheral lymphatic tissues such as lymph nodes and the spleen, while only a few mature B cells would exist in the circulation. Therefore, the B-cell population in PBMCs preparations may not reflect the whole spectrum of humoral immunity.

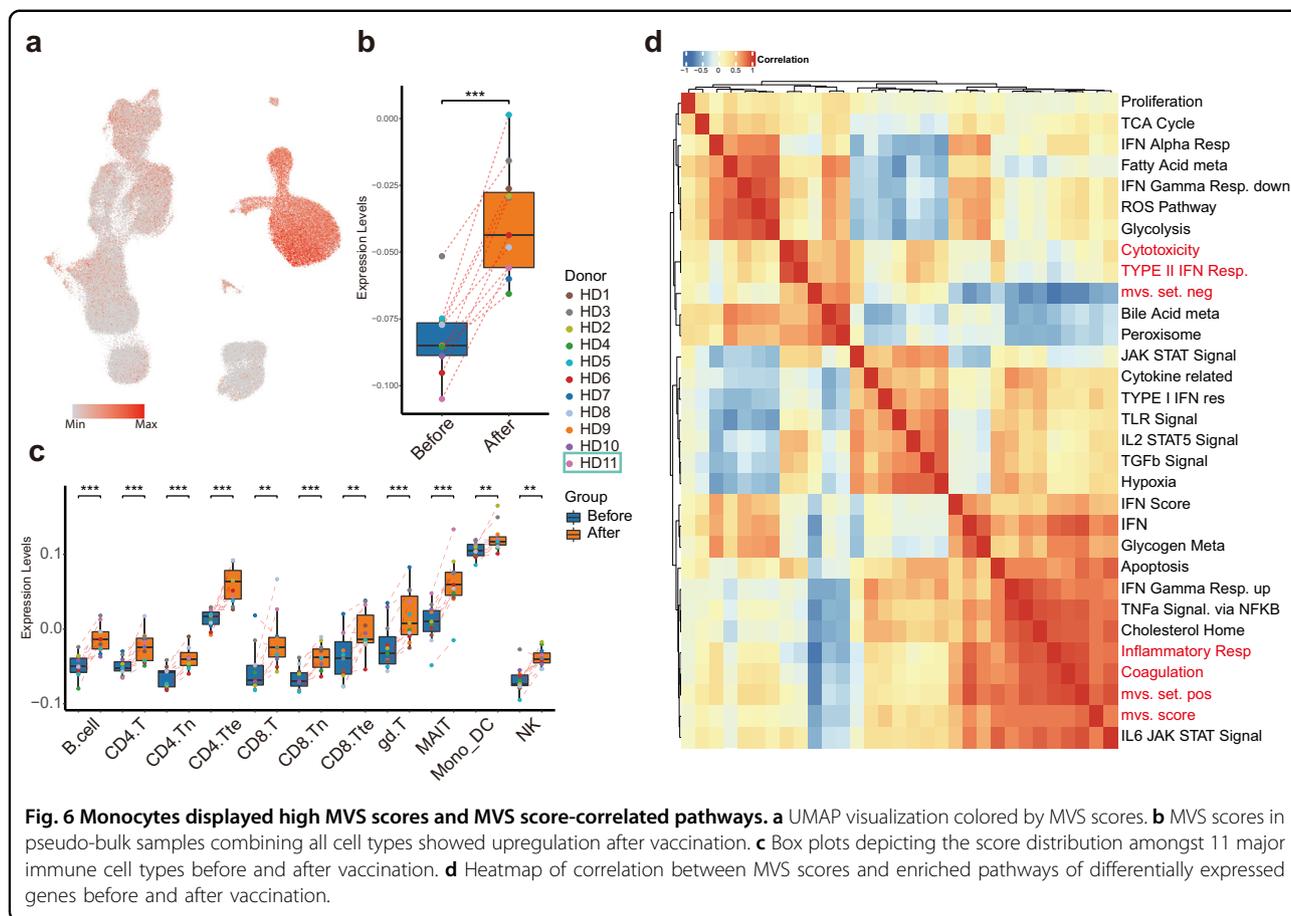
The analyses presented in this study, particularly, scRNA-seq of PBMCs had not been performed for previous vaccine evaluations, whether the changes in immune system function-related genes were COVID-19-specific or could be generally applied to other vaccines or other types of COVID-19 vaccines remained to be determined. However, these types of detailed analyses should be overall beneficial to vaccine development and applications. Our study postulates that it is imperative to consider the potential long-term impact of vaccination to certain medical conditions³⁴ or to general human health.

Materials and methods

Participants, clinical data collection, and procedures

Healthy adult volunteers were recruited to the program. All subjects underwent a physical examination and completed a questionnaire by trained doctors. Healthy adult aged 18–60 years, with axillary temperature ≤ 37.0 °C, negative for SARS-CoV-2 nucleic acid test, and willing to complete all scheduled study processes were enrolled in the study. People with epilepsy, brain or mental diseases, history of allergies, uncontrolled major chronic illnesses, and clinically significant abnormal findings on biochemistry, hematology tests were excluded. Pregnant or breastfeeding women were also excluded. This study was approved by the Ethics Committee of Shanghai East Hospital in accordance with the principles of the Helsinki Declaration (No.2020 (096)). Written informed consents were obtained from all participants before enrollment.

A total of 11 participants were enrolled and vaccinated to evaluate the clinical safety and dynamic changes in the immune system. Among these, five participants (cohort A) were vaccinated with 4 μ g dose of inactivated SARS-CoV-2 Vaccine (Vero Cell) on days 1 and 14, and six participants (cohort B) received a 4 μ g dose of the vaccine on days 1 and 28. Inactivated SARS-CoV-2 Vaccine (Vero



Cell) (China Biotechnology Group Corporation) was administered intramuscularly into the deltoid. All vaccines were approved by the National Institutes for Food and Drug Control of China.

Laboratory safety tests including infection-related indices (C-reactive protein, serum amyloid A protein), hematologic parameters (white blood cell counts, neutrophil counts, lymphocyte counts, monocyte counts, red blood cell counts, hemoglobin, platelet counts), coagulation function-related indices (prothrombin time, activated partial thromboplastin time/APTT, fibrinogen, prothrombin activity/PT, international normalized ratio/INR), blood glucose-related parameters (fasting plasma glucose, HbA1c), serum lipid (total cholesterol, triglyceride, HDL-C, LDL-C), cardiac function-related enzymes (creatinine kinase, CK-MB), electrolytes (potassium, sodium, chloride, bicarbonate, total calcium, magnesium), liver function-related biomarkers (e.g., albumin, alanine aminotransferase/ALT, aspartate aminotransferase/AST, total bilirubin, and etc.), renal function-related markers (creatinine, uric acid, blood urine nitrogen/BUN, estimated glomerular filtration rate/eGFR) were measured.

COVID-19 antibody (IgG/IgM) testing

A number of commercially available COVID-19 antibody (IgG/IgM) rapid testing kits including “Innovita (S protein specific)”, “GenBody (N protein specific)”, “Livzon (S + N proteins)”, and “AbKhan (S + N proteins)” were used to test anti-COVID-19 (IgM/IgG) positivities of plasma from volunteers before and at different times after vaccination. The “AbKhan” kit was most sensitive and data were used in this study.

Neutralizing antibody test by PRNT

Serum samples were each tested using a plaque reduction neutralization test (PRNT) assay for SARS-CoV-2 (2019-nCoV-WIV04) in the BSL-3 laboratory. Briefly, sera were heat-inactivated at 56 °C for 30 min and diluted to 1:50, followed by threefold serial dilutions (1:50, 1:150, 1:450, 1:1350, 1:4050, and 1:12,150). Sera were then mixed with 100 PFU of virus and incubated at 37 °C for 1 h. The virus–serum dilution mixtures and virus control were then inoculated into Vero E6 cell monolayers in 24-well plates for 1 h before adding an overlay medium including 1.5% methylcellulose at 37 °C for 4–5 days to allow plaque

development. Then the plates were fixed and stained with 2% crystal violet in 30% methanol for 30 min at room temperature, and the plaques were manually counted and measured. The PRNT titer was calculated based on a 50% reduction in plaque count (PRNT50).

Preparation of single-cell suspensions, single-cell RNA library preparation, and sequencing

The PBMCs were isolated from heparinized venous blood from healthy volunteers using a Ficoll-Paque™ PLUS Media (GE Healthcare Inc.) according to the standard density-gradient centrifugation method provided by the manufacturer. PBMCs were frozen in freezing media (70% RPMI-1640, 20% FBS, and 10% DMSO), and stored in liquid nitrogen until use. Single-cell capture and library construction were performed using the Chromium Single Cell 5' Library & Gel Bead kit (10× Genomics) according to the manufacturer's instructions. Libraries were sequenced using the Novaseq 6000 platform (Illumina).

scRNA-seq data analysis and statistics

Single-cell sequencing data were aligned and quantified using kallisto/bustools (KB, v0.25.0)³⁵ against the GRCh38 human reference genome downloaded from the 10× Genomics official website. Preliminary counts were then used for downstream analyses. We made a pipeline to process data. Briefly, cells with less than 200 genes were filtered out, the logarithmic normalized counts and top 3000 highly variable genes (HVGs) selection were performed by Scanpy³⁶.

We excluded specific genes from HVGs including mitochondrial genes, immunoglobulin genes, and genes linked to poorly supported transcriptional models (annotated with the prefix "Rp-"). Then principal component analysis (PCA) was performed utilizing the HVGs and Harmony algorithm was used to remove batch effects²⁵. We used the PARC approach to identify clusters³⁷ and selected features by "FeatureSelectionByEnrichment" function from cytoph2 algorithm³⁸, followed by another round of PCA, Harmony, and PARC. Subsequently, we calculated K nearest neighbors in a KNN graph, performed uniform manifold approximation and projection (UMAP) by Pegasus³⁹, and identified clusters by PARC. In addition, we applied Scrublet⁴⁰ to identify potential doublets.

Quality control was applied to clusters based on output of the first round of the pipeline:

1. Clusters with more than 20% cells of which doublet score > 0.4 were defined as doublets clusters.
2. Clusters with more than 20% cells that had > 20% of their transcripts mapped to mitochondrial genes were defined as low-quality clusters.
3. Clusters with more than 20% cells that had < 0.05% of their transcripts mapped to mitochondrial genes

were defined as nuclei.

4. Median expression of PPBP, PF4, HBB, HBA2 > 0, indicating erythrocytes and platelets.
5. Less than 50 cells.
6. Detected gene numbers < 1000.
7. Ratio of mean of total UMIs and mean of detected genes < 2.
8. Scrublet identified doublets.
9. Using DBSCAN⁴¹ to remove outliers.

After removing low-quality cells, we annotated cells by single-cell recognition of cell types (SingleR) algorithm, referring to Monaco immune datasets⁴².

Qualified cells were subjected to downstream analysis. Similarly, we rerun the pipeline to identify main cell types including T cells (CD3D, CD3E, CD3G, CD40LG, CD8A, CD8B), B cells (MS4A1, CD79A, CD79B), NK cells (GNLY, NKG7, TYROBP, NCAM1), and monocytes (CST3, LYZ). In addition, we run the pipeline on each type of cells, respectively, and further identified subtypes based on the SingleR-identified cell types and well-characterized markers (Fig. 3b).

Comparing immune cell proportion

For samples from PBMCs, we calculated immune cell proportions for each major cell type and underlying subtypes. For each sample, the cell-type proportion was calculated by the number of cells in a certain cell type divided by the total number of cells. To identify changes in cell proportions between samples in different groups, we performed a Wilcoxon test on the proportions of each major cell types as well as cell subtypes across different groups (Supplementary Fig. S2). Only those cell types with statistically significant differences ($P < 0.05$) in proportions are shown in Fig. 3e.

Differential expression analysis, gene sets overrepresentation analysis, and score signature modules

To investigate immunological feature alterations, we identified DEGs by muscat algorithm²⁶ with default parameters. Briefly, we first sum-collapsed the data, summing UMIs across cells for each healthy donor, to produce a bulk RNA-seq style UMIs profile for each sample. Afterward, the aggregated counts were loaded onto pbDS function to identify DEGs, and heatmaps were plotted by pbHeatmap function. Gene set overrepresentation analysis of DEGs ($\log_{FC} > 0.5$ and adjusted $P < 0.05$) were performed using one-sided Fisher's exact test (as implemented in the "gsfisher" R package) with "HALLMARK", "KEGG", and "REACTOME" gene sets derived from MSigDB. Gene sets with $P < 0.05$ were considered to be significant. Signature module scores were calculated via "AddModuleScore" function, with default settings in Seurat. Briefly, for each cell, the score was defined as the average expression of the signature

gene list subtracting the average expression of the corresponding control gene list⁴³. Gene lists used for analysis are provided in Supplementary Table S11.

Metacell analysis

We used the R package “MetaCell”²⁷ to analyze the data. We removed specific mitochondrial genes, immunoglobulin genes, and genes linked to poorly supported transcriptional models (annotated with the prefix “Rp-”). We then filtered cells with less than 500 UMIs. Gene features were selected using the parameter $T_{vm} = 0.08$ and a minimum total UMI count > 100 . We subsequently performed hierarchical clustering of the correlation matrix between those genes (filtering genes with low coverage and computing correlation using a down-sampled UMI matrix) and selected gene clusters containing anchor genes. We used $K = 100$, and 500 bootstrap iterations and otherwise standard parameters. Metacells were annotated by the most abundant cell types composing each metacell.

Gene regulatory network analysis

For identification and scoring of regulon activity, we employed pySCENIC^{28,29} workflow on log-normalized metacells data to determine sets of co-expressed genes. We linked direct targets to their corresponding transcription factors using RcisTarget databases (v1.2.1), and retained putative downstream genes with enriched DNA motifs at 10 kb or 500 bp from the transcription start site (normalized enrichment score > 3). Finally, we used AUCell function to score activity of each regulon across cells in the dataset, which was computed as the sum of genes expressed per regulon and produced binary activity matrices based on cutoffs manually adjusted after inspecting the distributions of AUC scores. Regulon specificity scores (RSS) were calculated by the “regulon_specificity_scores” function from pySCENIC algorithm with default parameters.

Analysis of IFN- α/β response of PBMCs

PBMCs were isolated from heparinized blood by Ficoll-Hypaque at $400\times g$ for 30 min. The PBMCs ($1 \times 10^6 \text{ ml}^{-1}$) of donors before and after vaccination were then seeded in 48-well culture plates with RPMI-1640 containing 5% knockout serum replacement and 0.032% heparin. The next day, medium was exchanged and cells were treated with 100 ng/ml IFN- α and 10 ng/ml IFN- β for 12 h. Some cells were pre-treated with 250 ng/ml RBD for 16 h, followed by IFN- α/β treatment for 12 h. Following washing and extraction of total RNA, real-time quantitative PCR was performed to detect the expression of type I interferon response-associated genes. Fold changes relative to GAPDH were calculated by $2^{-\Delta\Delta C_t}$ and expressed as means \pm SEM. Differences between groups were evaluated using paired Student's *t*-test and considered significant when $P < 0.05$.

Statistical analysis

Clinical data were summarized using mean (standard deviation), median (Q1, Q3), or number (percentage), when appropriate. The Wilcoxon signed-rank test was used to compare paired medians over time for laboratory characteristics. In addition, Wilcoxon sum-rank test was used to compare the median changes from baseline between cohorts A and B. We graded adverse events according to the scale issued by the China National Medical Products Administration (<https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20191231111901460.html>) and the judgment of laboratory test results was based on the reference value range of the local population. All statistical tests were two-sided. Statistical significance was defined as $P \leq 0.05$. Statistical analyses were performed using SAS v9.4 (SAS Institute Inc., Cary, NC, USA).

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Author contributions

Z.L., Y.E.S., C.W., and J.L. conceived and designed the study, had full access to all of the data in the study. H.X., C.Z., W.C., H.Z., Q.L., W.G., L.W., Z.S., W.Z., and Y.E.S. generated COVID-19 neutralizing antibody and performed antibody (IgM/IgG) tests. Y.W., C.W., R.Z., Y.S., and W.Z. supplied either patient samples or testing kits. J.W., Q.L., Z.S., Z.X., L.Z., J.S., X.Y., Y.D., and C.Z. were involved in sample preparations and scRNA-seq. J.X. analyzed clinical data and performed statistical analyses, J.L., L.Z., and J.S. were involved in sequencing data bioinformatics analyses. The manuscript was drafted by Y.E.S., J.L., C.W., W.C., H. Z., L.Z., H.X., and Z.L.; and critically revised by all authors.

Data availability

The accession numbers for the sequencing raw data and processed data in this paper are Genome Sequence Archive in BIG Data Center (GSA, Beijing Institute of Genomics, Chinese Academy of Sciences): HRA001150.

Conflict of interest

The authors declare no competing interests.

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COVID-19 Vaccine Associated Parkinson's Disease, A Prion Disease Signal in the UK Yellow Card Adverse Event Database

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ABSTRACT

Many have argued that SARS-CoV-2 spike protein and its mRNA sequence, found in all COVID-19 vaccines, are prionogenic. The UK's Yellow Card database of COVID-19 vaccine adverse event reports was evaluated for signals consistent with a pending epidemic of COVID vaccine induced prion disease. Adverse event reaction rates from AstraZeneca's vaccine were compared to adverse event rates for Pfizer's COVID vaccines. The vaccines employ different technologies allowing for potential differences in adverse event rates but allowing each to serve as a control group for the other. The analysis showed a highly statistically significant and clinically relevant (2.6-fold) increase in Parkinson's disease, a prion disease, in the AstraZeneca adverse reaction reports compared to the Pfizer vaccine adverse reaction reports ($p = 0.000024$). These results are consistent with monkey toxicity studies showing infection with SARS-CoV-2 results in Lewy Body formation. The findings suggest that regulatory approval, even under an emergency use authorization, for COVID vaccines was premature and that widespread use should be halted until full long term safety studies evaluating prion toxicity has been complete. Alternative vaccines like the Measles Mumps Rubella (MMR) vaccine should be explored for those desiring immunization against COVID-19.

Keywords

COVID-19, Immunization, Vaccines, Parkinson's disease.

Introduction

Many have raised the alarm about the wisdom of wide spread immunization campaigns using COVID-19 vaccines without first performing long term human safety studies and well-planned animal toxicity studies. Concern has been raised regarding evidence that the SARS-CoV-2 virus, which causes COVID-19, is actually a lab derived bioweapon [1-4]. Several peer reviewed papers [3,5,6] have indicated that the spike protein of the SARS-CoV-2 virus and its nucleic acid sequence are actually prion forming toxins. A toxicity study in monkeys infected with SARS-CoV-2 showed the formation of Lewy Bodies [8] and supports these findings. All the COVID-19 vaccines on the market contain spike protein or its nucleic acid sequence creating a possible catastrophic epidemic of prion disease in the future.

The COVID vaccines from AstraZeneca and Pfizer are quite different in their composition. The AstraZeneca COVID vaccine

utilizes live adenoviruses that are genetically engineered to make the spike protein. Pfizer's COVID vaccine utilizes mRNA encapsulated in lipids to cause formation of spike protein in the recipient. Both vaccines technologies have the potential to induce prion disease [4]. Because the technologies are unique it was hypothesized their rates of prion induction may be contrasting enough to be detected as a difference in a spontaneous adverse event reporting database. The UK's Yellow Card adverse event reporting system was chosen to evaluate whether a difference in prion related vaccine's reaction reports could be detected. As discussed below there were theoretical benefits for studying this effect in a database from a single small country as opposed to larger EU or US databases.

Method

Yellow Card adverse reporting data from the United Kingdom government website (<https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting>) was

downloaded. Data was in the form of 4 PDF documents, one each for vaccines from AstraZeneca, Pfizer, Moderna, and one for reports where the vaccine was not identified. Each document categorized adverse event reports into specific groups primarily sorted by organ system as summarized in Table 1. Adverse events in each major category are further classified more or less by specific disease or symptom. While the documents do not specifically say outright, the website indicates the reports may come from both lay persons and healthcare professionals and may include both spontaneous reports and reports derived from clinical trials.

Table 1.

General Categories	Pfizer	AstraZeneca	Risk
Blood Disorders	7164	6645	0.93
Cardiac Disorders	2776	7879	2.84
Congenital Disorders	32	65	2.03
Ear Disorders	2855	8250	2.89
Endocrine Disorders	85	263	3.09
Eye Disorders	3558	12181	3.42
Gastrointestinal	21225	73305	3.45
General Disorders	57080	233977	4.10
Hepatic Disorders	84	363	4.32
Immune System Disorders	1188	2594	2.18
Infections	5202	16093	3.09
Injuries	2343	7065	3.02
Investigations	2552	9499	3.72
Metabolic Disorders	1268	8090	6.38
Muscle and Tissue Disorders	27007	90733	3.36
Neoplasm	140	317	2.26
Nervous Disorders	38876	160834	4.14
Pregnancy	186	191	1.03
null	62	117	1.89
Psychiatric Disorders	3900	15206	3.90
Renal and Urinary Disorders	581	2234	3.85
Reproductive and Breast Disorders	3839	7839	2.04
Respiratory Disorders	9087	24655	2.71
Skin Disorders	15642	45995	2.94
Social Circumstances	85	266	3.13
Surgical and Medical Procedures	186	584	3.14
Vascular Disorders	3165	10725	3.39
Total Reactions	210168	745965	3.55
Total Reports	73944	205221	2.78
Fatal Reports	425	904	2.13
Reactions per Report	2.84	3.63	1.28
Fatalities per Report	0.006	0.004	0.77

The frequency of adverse event reports pertaining to possible prion induced neurological symptoms were compared between AstraZeneca and Pfizer vaccines. No analysis was made for other potential adverse events except that the rates of total psychological reactions (“Psychiatric Disorders”) was also compared. The analysis was specifically intended for detecting prion disease in the “Nervous Disorders” reaction reports. An analysis was not performed on the “Psychiatric Disorders” reactions or any other category of diseases listed in Table 1. A Chi square analysis using a 2x2 table was used to calculate statistical p values for just 3 clearly specific signals. An online statistical chi square calculator (<https://www.socscistatistics.com/tests/chisquare>) was used. Chi square

analysis was also performed, one each, for “Nervous Disorders” and “Psychiatric Disorders” in Table 1. In addition, a separate chi square analysis was performed for 3 specific neurological reactions that could relate to prion disease. A single “negative” control chi square analysis was performed to verify that the calculator software was functioning properly.

Results

Four documents were downloaded from the UK government database. The documents state the data lock date was June 16th, 2021 and the Report Run Date was June 17, 2021. The documents indicated that the following number of adverse event reactions were reported for each vaccine, Pfizer: 210,168; AstraZeneca: 745,965; Moderna: 14,781; brand unspecified: 2,521. Because of insufficient data only the Pfizer and AstraZeneca adverse event reports were analyzed. According to the documents the Pfizer adverse events were reported between December 9, 2020 and June 16, 2021 while the AstraZeneca adverse events were reported between January 4, 2021 and June 16, 2021. There were thus only a few days difference in the dates the adverse events were reported. Additional publicly available data from the UK indicates by June 16th, 72,891,861 vaccine doses had been administered (<https://coronavirus.data.gov.uk/details/vaccinations>). The proportion of these doses attributed to Pfizer or AstraZeneca vaccines was not readily available.

Adverse reactions to the Pfizer and AstraZeneca vaccines were categorized by Yellow Card into major categories based on organ system and are summarized in Table 1. Table 1 shows that in general there are 3.55 times more adverse reactions reported and 2.78 more reports filed for the AstraZeneca vaccine than for the Pfizer vaccine. In general, there were 3.63 adverse reaction disclosed for each report pertaining to the AstraZeneca vaccine compared 2.84 reactions for each report pertaining to the Pfizer vaccine.

Data in Table 1 was specifically analyzed looking for a signal of a potential difference in prion disease between the vaccine groups. There were 4.14 times ($p=0.00001$) as many “Nervous Disorders” reactions and 3.9 times ($p=0.00001$) as many “Psychiatric Disorders” reactions reported for the AstraZeneca Vaccine compared to the Pfizer vaccine. These differences were elevated compared to a 3.55 times difference for all adverse event reactions reported between the two groups respectively.

Analysis of the “Nervous Disorders” data, Table 2, showed a highly significant and specific increase in Parkinson’s disease reactions in the AstraZeneca reports compared to the Pfizer vaccine reports. There were 185 reactions listing Parkinson’s disease reactions in the AstraZeneca reports compared to only 20 in the Pfizer vaccine reports ($p=0.000024$). Table 3 shows how the Parkinson’s disease patients were classified in the reactions. These Parkinson’s disease cases were primarily identified using a highly specific, pathognomonic, symptom “Freezing Phenomenon”. Table 3 shows that “tremor”, a less specific but more sensitive

symptom found in Parkinson's disease patients was present in 9,288 reactions reported for the AstraZeneca vaccine but found in only 937 reactions reported for the Pfizer vaccine (p=0.00001).

Table 2: Nervous Disorders

	Pfizer	Ratio	AstraZeneca
Abnormal reflexes	11	4.73	52
Abnormal sleep-related events	11	2.09	23
Absence seizures	16	2.06	33
Acute polyneuropathies	39	8.44	329
Autonomic nervous system disorders	7	2.71	19
Central nervous system aneurysms and dissections	2	2.00	4
Central nervous system haemorrhages and cerebrovascular accidents	404	4.13	1668
Central nervous system inflammatory disorders NEC	1	17.00	17
Central nervous system vascular disorders NEC	5	5.40	27
Cerebrovascular venous and sinus thrombosis	36	7.17	258
Cervical spinal cord and nerve root disorders	3	3.00	9
Choreiform movements	2	2.50	5
Chronic polyneuropathies	1	14.00	14
Coma states	6	3.67	22
Coordination and balance disturbances	283	3.58	1013
Cortical dysfunction NEC	43	3.37	145
Cranial nerve disorders NEC	2	3.00	6
Dementia (excl Alzheimer's type)	11	2.55	28
Demyelinating disorders NEC	12	2.08	25
Disturbances in consciousness NEC	3236	2.96	9592
Disturbances in sleep phase rhythm	1	10.00	10
Dyskinesias and movement disorders NEC	143	3.08	440
Dystonias	14	1.86	26
Encephalitis NEC	3	2.00	6
Encephalopathies NEC	3	4.00	12
Encephalopathies toxic and metabolic	0		2
Eye movement disorders	14	1.21	17
Facial cranial nerve disorders	587	1.45	854
Generalised tonic-clonic seizures	22	3.55	78
Headaches NEC	16896	4.68	79069
Hydrocephalic conditions	1	11.00	11
Hypoglossal nerve disorders	1	5.00	5
Increased intracranial pressure disorders	6	9.00	54
Intellectual disabilities	1	9.00	9
Lumbar spinal cord and nerve root disorders	44	3.75	165
Memory loss (excl dementia)	163	3.38	551
Mental impairment (excl dementia and memory loss)	242	3.56	861
Migraine headaches	1689	4.29	7248
Mixed cranial nerve disorders	1	1.00	1
Mononeuropathies	35	2.91	102
Motor neurone diseases	0		1
Multiple sclerosis acute and progressive	40	2.58	103
Muscle tone abnormal	14	3.14	44

Myelitis (incl infective)	20	3.20	64
Narcolepsy and hypersomnia	57	3.46	197
Nervous system cysts and polyps	0		1
Nervous system disorders NEC	8	6.50	52
Neurologic visual problems NEC	13	1.92	25
Neurological signs and symptoms NEC	6599	3.63	23971
Neuromuscular disorders NEC	22	3.05	67
Neuromuscular junction dysfunction	8	1.75	14
Olfactory nerve disorders	274	2.33	639
Optic nerve disorders NEC	19	2.16	41
Paraesthesias and dysaesthesias	3987	3.58	14281
Paralysis and paresis (excl cranial nerve)	205	3.04	623
Parkinson's disease and parkinsonism	20	9.25	185
Partial complex seizures	8	3.88	31
Partial simple seizures NEC	0		8
Peripheral neuropathies NEC	73	3.00	219
Seizures and seizure disorders NEC	509	3.40	1732
Sensory abnormalities NEC	1765	3.02	5330
Sleep disturbances NEC	3	16.00	48
Speech and language abnormalities	140	3.37	472
Spinal cord and nerve root disorders NEC	11	2.82	31
Structural brain disorders NEC	4	8.75	35
Transient cerebrovascular events	99	3.91	387
Tremor (excl congenital)	937	9.91	9288
Trigeminal disorders	43	2.98	128
Vertigos NEC	1	2.00	2

Table 3: Parkinson's Disease

	Pfizer	Ratio	AstraZeneca
Parkinson's disease and parkinsonism	20	9.25	185
Freezing phenomenon	7		152
Parkinson's disease	3		15
Parkinsonian gait	1		0
Parkinsonism	4		10
Reduced facial expression	5		7
Vascular parkinsonism	0		1
Tremor (excl congenital)	937	9.91	9288
Action tremor	1		2
Asterixis	0		1
Essential tremor	3		5
Head titubation	5		15
Intention tremor	0		1
Postural tremor	0		1
Resting tremor	2		5
Tremor	926		9258

Another striking imbalance found in the analysis of “Nervous Disorders” of Table 2 was sleep disturbance. This is of interest because sleep disorders are a hallmark symptom of a genetically transmitted prion disease called Fatal Familial Insomnia. A detailed analysis of neurologically characterized sleep disturbance reactions is disclosed in Table 4. The data indicate there were 4 sleep disturbance or sleep phase rhythm reactions in the reports pertaining to the Pfizer vaccine versus 58 reactions in reports pertaining to the AstraZeneca vaccine (p=0.003).

Table 4: Sleep Disorders

	Pfizer	Ratio	AstraZeneca
Disturbances in sleep phase rhythm	1	10.00	10
Advanced sleep phase	0		1
Circadian rhythm sleep disorder	0		5
Delayed sleep phase	0		1
Irregular sleep phase	0		1
Irregular sleep wake rhythm disorder	1		1
Non-24-hour sleep-wake disorder	0		1
Sleep disturbances NEC	3	16.00	48
Microsleep	0		2
Periodic limb movement disorder	0		1
Sleep deficit	2		45
Sudden onset of sleep	1		0

Discussion

The current analysis was performed on COVID vaccine adverse reactions reported through the UK's Yellow Card system. While analysis is challenging a clear signal of a specific prion disease, Parkinson's disease, was found as discussed below. The findings are consistent with knowledge of the spike protein and its nucleic acid sequence [3-7], well accepted pathophysiology of prion disease, and animal toxicity data in monkeys [8]. The findings in this paper represent an urgent warning to halt mass immunization with COVID vaccines until proper safety studies are complete. Alternative vaccines like the Measles Mumps Rubella (MMR) vaccine should be explored for those desiring immunization against COVID-19 outside of clinical trials [4].

Analysis of spontaneous reporting data, as found in the Yellow Card system is limited for several reasons including the historical finding that spontaneous reporting under reports adverse events 95% of the time. Only 5% of drug adverse events are typically reported [9]. These figures on reporting of adverse events pertain to acute adverse events, essentially none of the adverse events occurring years or decades after administration of a pharmaceutical are ever reported. Analysis of the adverse events that are reported may be difficult to interpret, outside a controlled clinical trial, since it is often difficult to know the expected rate of a specific event in the recipient population.

The current study attempted to avoid previous problems associated with analysis of spontaneous adverse event reports by comparing reports between groups receiving different COVID vaccines. In this case those receiving the Pfizer COVID vaccine acted as the controls for those receiving the AstraZeneca COVID vaccine and visa versus. The fact that mass administration of both vaccines was started within days of each other worked in favor of the analysis as did the fact that there was an acute shortage of vaccines. People wanting a COVID vaccine would likely be forced to take what was available and not allowed much choice. These factors as well as government policies on what populations would be offered the vaccine first may have helped minimize demographics differences relating to which vaccine was received, at least in regards to age and sex. However, this is only theoretical since demographic data pertaining to use of specific vaccines was not readily available on the internet at the time this paper was written.

The data shows that that there are more adverse reactions reported for the AstraZeneca vaccine than for the Pfizer vaccine. On a whole there are 3.55 time more adverse reactions and 2.78 times more reports for the AstraZeneca vaccine than for the Pfizer vaccine. This may be explained in part by the number of vaccine doses administered but this information was not readily available. However, it is also possibly that there may be more acute reactions to the AstraZeneca vaccine. On average there were 3.63 adverse reactions per report for the AstraZeneca vaccine compared to 2.84 adverse reactions per report for the Pfizer vaccine. Demographics of the recipients and also the reporters (academic versus community clinicians) may also account for some of the differences.

The goal of this research was to determine if there was an early signal of prion disease. Because of the differences in vaccine composition [4] it was hoped that differences between vaccine groups may manifest early enough to create a signal. The analysis was specifically geared to look for evidence of a few prion diseases. No analysis was performed for non prion diseases such as autoimmune diseases or clotting diseases for example. The prion diseases of interest included: ALS, frontotemporal lobar degeneration, Alzheimer's disease, CJD, Parkinson's disease, and Fatal Familial Insomnia. Unfortunately, many of these prion diseases are characterized by non specific neurological and psychological symptoms [10]. There is overlap of symptoms between prion diseases making a definitive diagnosis slow at times.

Prion disease may take years or decades to manifest from onset however there were several reasons to hope that a signal may be detected within months of the immunization. First it was believed that there was a pool of people with either subclinical prion disease or mild prion disease that had not been correctly diagnosed. One theory is that COVID vaccines may accelerate disease progression causing these undiagnosed patients to have frank disease that is rapidly diagnosed after immunization.

A second reason to believe that a signal could be detected soon after immunization relates to knowledge of the spike protein. It is believed that the spike protein and its nucleic acid sequence may be a complex bioweapon capable of inducing prion disease by several different mechanisms. The mRNA nucleic acid may cause certain intrinsic proteins like TDP-43 and FUS to fold into prions which eventually leads to disease [3,4]. The spike protein also has a prion like region [5] which may catalyze a chain reaction and eventually lead to prion disease. However, a third group published data [6] that the spike protein may cause proteins including prions already in cells to aggregate, forming Lewy Bodies for example, and causing relatively rapid cell death. It is this third method that could allow fairly rapid detection of prion disease after immunization.

The current analysis showed a specific signal for an increased risk of Parkinson's disease. There were 20 Parkinson's disease reactions reported with the Pfizer vaccine and while 71 reactions (3.55 x 20) were expected in the AstraZeneca reports, there were 185 reactions actually reported (p=0.000024). The analysis was able to detect this signal because adverse event reports were filed

disclosing a very disease specific, pathognomonic, symptom “Freezing Phenomenon” which made up the bulk of the Parkinson’s disease reports. It is not clear if the reports were primarily related to new onset Parkinson’s disease or worsening of a previously diagnosed patient. The signal is supported by a proportionally similar imbalance in reports of a more sensitive, but less specific symptom of Parkinson’s disease, tremor (Table 3). A total of 937 tremor reactions were reported for the Pfizer vaccine and while 3,326 reactions (9.37 x 3.55) were expected to be reported for the AstraZeneca vaccine, a total of 9,288 reactions were reported (p=0.00001). The net effect is that the clinical relevance could be logs in magnitudes higher than the reports of Parkinson’s disease even after adjusting approximately 20-fold for under reporting [9].

Many but not all cases of Parkinson’s disease are believed to be caused by prion disease [11]. It is believed that α -synuclein aggregates in the substantia nigra of the brain in Parkinson’s disease patients causing the formation of Lewy Bodies. The relation of Lewy Bodies to Parkinson disease provides strong bio plausible support for a causal effect with this signal because infections of monkeys [8] with the SARS-CoV-2 virus lead to development of Lewy Bodies. The relative rapid onset of Parkinson’s disease symptom after immunization may be explained by the vaccine derived spike protein’s heparin binding site. One group [6] showed that the spike protein heparin binding site binds “to a number of aggregation-prone, heparin binding proteins including $A\beta$, α -synuclein, tau, prion, and TDP 43 RRM. These interactions suggests that the heparin-binding site on the S1 protein might assist the binding of amyloid proteins to the viral surface and thus could initiate aggregation of these proteins and finally leads to neurodegeneration in brain.”

Another prion disease with some more unique features is Fatal Familial Insomnia. It is a rare genetic prion disorder characterized by an inability to sleep [12]. It was noted in the analysis of Nervous Disorder data of Table 2 and Table 4 that there was an imbalance of sleep reports between vaccine groups. There were 4 sleep reactions reported for Pfizer’s vaccine and while 14 reactions (4 x 3.55) were expected in the AstraZeneca reports, a total of 58 reactions were reported (p=0.003). A rapid onset of difference between the two groups could be explained by the spike protein aggregating prion molecules already in the cells as discussed with Parkinson’s disease symptoms above.

The Yellow Card database does not provide good insight on possible risk of developing many different prion diseases as can be expected. There is however an highly statistical increase in Nervous Disorders and Psychiatric Disorders reactions reported for the AstraZeneca vaccine compared to Pfizer vaccine, Table 1. This imbalance suggests that there may be underlying differences in prion disorders other than Parkinson’s disease. Unfortunately most prion diseases have symptoms not specific to prion disorders and symptoms of different prion diseases overlap [10]. This fact delays diagnosis and, in some cases, the definitive diagnosis is delayed until post mortem autopsy.

The current analysis is not intended to indicate that one COVID vaccine is safer than another in regards to prion disease. One limitation of the analysis is that both vaccines may equally increase the rates of one or more prion diseases and no difference will be detected in the Yellow Card database. Imbalances in rates of reactions detected in this analysis can be explained by the striking differences in composition of the two vaccines allowing one vaccine to induce some prion diseases quicker. The AstraZeneca adenoviral virus based COVID vaccine may concentrate in the gastrointestinal system [4] to a greater extent leading to faster transport of the spike protein via the vagus nerve to the brain [13]. By contrast over the long run the Pfizer mRNA vaccine may induce more TDP-43 and FUS to form prions [3] and lead to more prion disease.

This analysis should serve as an urgent warning to those mindlessly following advice of politicians and public health officials regarding COVID immunization. Both groups have had a dismal record of protecting the health of the public. US public health officials ran the infamous Tuskegee syphilis study allowing people of color to die from syphilis because the public health officials refused to inform the patients, they had syphilis and that a treatment existed. There have been numerous less well-known experiments on prisoners and other vulnerable populations in North America. The infamous Nazi physician Josef Mengele was a public health doctor. Founding father politicians in the US championed civil liberties while owning slaves and running extermination campaigns against Native Americans. The current policy to immunize the masses with COVID vaccines before proper safety studies are complete is likely to follow in the steps of the previously mentioned historical acts.

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Article

Intracellular Reverse Transcription of Pfizer BioNTech COVID-19 mRNA Vaccine BNT162b2 In Vitro in Human Liver Cell Line

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Abstract: Preclinical studies of COVID-19 mRNA vaccine BNT162b2, developed by Pfizer and BioNTech, showed reversible hepatic effects in animals that received the BNT162b2 injection. Furthermore, a recent study showed that SARS-CoV-2 RNA can be reverse-transcribed and integrated into the genome of human cells. In this study, we investigated the effect of BNT162b2 on the human liver cell line Huh7 in vitro. Huh7 cells were exposed to BNT162b2, and quantitative PCR was performed on RNA extracted from the cells. We detected high levels of BNT162b2 in Huh7 cells and changes in gene expression of long interspersed nuclear element-1 (LINE-1), which is an endogenous reverse transcriptase. Immunohistochemistry using antibody binding to LINE-1 open reading frame-1 RNA-binding protein (ORFp1) on Huh7 cells treated with BNT162b2 indicated increased nucleus distribution of LINE-1. PCR on genomic DNA of Huh7 cells exposed to BNT162b2 amplified the DNA sequence unique to BNT162b2. Our results indicate a fast up-take of BNT162b2 into human liver cell line Huh7, leading to changes in LINE-1 expression and distribution. We also show that BNT162b2 mRNA is reverse transcribed intracellularly into DNA in as fast as 6 h upon BNT162b2 exposure.

Keywords: COVID-19 mRNA vaccine; BNT162b2; liver; reverse transcription; LINE-1; Huh7



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1. Introduction

Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was announced by the World Health Organization (WHO) as a global pandemic on 11 March 2020, and it emerged as a devastating health crisis. As of February 2022, COVID-19 has led to over 430 million reported infection cases and 5.9 million deaths worldwide [1]. Effective and safe vaccines are urgently needed to reduce the morbidity and mortality rates associated with COVID-19.

Several vaccines for COVID-19 have been developed, with particular focus on mRNA vaccines (by Pfizer-BioNTech and Moderna), replication-defective recombinant adenoviral vector vaccines (by Janssen-Johnson and Johnson, Astra-Zeneca, Sputnik-V, and CanSino), and inactivated vaccines (by Sinopharm, Bharat Biotech and Sinovac). The mRNA vaccine has the advantages of being flexible and efficient in immunogen design and manufacturing, and currently, numerous vaccine candidates are in various stages of development and application. Specifically, COVID-19 mRNA vaccine BNT162b2 developed by Pfizer and BioNTech has been evaluated in successful clinical trials [2–4] and administered in national COVID-19 vaccination campaigns in different regions around the world [5–8].

BNT162b2 is a lipid nanoparticle (LNP)-encapsulated, nucleoside-modified RNA vaccine (modRNA) and encodes the full-length of SARS-CoV-2 spike (S) protein, modified

by two proline mutations to ensure antigenically optimal pre-fusion conformation, which mimics the intact virus to elicit virus-neutralizing antibodies [3]. Consistent with randomized clinical trials, BNT162b2 showed high efficiency in a wide range of COVID-19-related outcomes in a real-world setting [5]. Nevertheless, many challenges remain, including monitoring for long-term safety and efficacy of the vaccine. This warrants further evaluation and investigations. The safety profile of BNT162b2 is currently only available from short-term clinical studies. Less common adverse effects of BNT162b2 have been reported, including pericarditis, arrhythmia, deep-vein thrombosis, pulmonary embolism, myocardial infarction, intracranial hemorrhage, and thrombocytopenia [4,9–20]. There are also studies that report adverse effects observed in other types of vaccines [21–24]. To better understand mechanisms underlying vaccine-related adverse effects, clinical investigations as well as cellular and molecular analyses are needed.

A recent study showed that SARS-CoV-2 RNAs can be reverse-transcribed and integrated into the genome of human cells [25]. This gives rise to the question of if this may also occur with BNT162b2, which encodes partial SARS-CoV-2 RNA. In pharmacokinetics data provided by Pfizer to European Medicines Agency (EMA), BNT162b2 biodistribution was studied in mice and rats by intra-muscular injection with radiolabeled LNP and luciferase modRNA. Radioactivity was detected in most tissues from the first time point (0.25 h), and results showed that the injection site and the liver were the major sites of distribution, with maximum concentrations observed at 8–48 h post-dose [26]. Furthermore, in animals that received the BNT162b2 injection, reversible hepatic effects were observed, including enlarged liver, vacuolation, increased gamma glutamyl transferase (γ GT) levels, and increased levels of aspartate transaminase (AST) and alkaline phosphatase (ALP) [26]. Transient hepatic effects induced by LNP delivery systems have been reported previously [27–30], nevertheless, it has also been shown that the empty LNP without modRNA alone does not introduce any significant liver injury [27]. Therefore, in this study, we aim to examine the effect of BNT162b2 on a human liver cell line in vitro and investigate if BNT162b2 can be reverse transcribed into DNA through endogenous mechanisms.

2. Materials and Methods

2.1. Cell Culture

Huh7 cells (JCRB Cell Bank, Osaka, Japan) were cultured in 37 °C at 5% CO₂ with DMEM medium (HyClone, HYCLSH30243.01) supplemented with 10% (*v/v*) fetal bovine serum (Sigma-Aldrich, F7524-500ML, Burlington, MA, USA) and 1% (*v/v*) Penicillin-Streptomycin (HyClone, SV30010, Logan, UT, USA). For BNT162b2 treatment, Huh7 cells were seeded with a density of 200,000 cells/well in 24-well plates. BNT162b2 mRNA vaccine (Pfizer BioNTech, New York, NY, USA) was diluted with sterile 0.9% sodium chloride injection, USP into a final concentration of 100 µg/mL as described in the manufacturer's guideline [31]. BNT162b2 suspension was then added in cell culture media to reach final concentrations of 0.5, 1.0, or 2.0 µg/mL. Huh7 cells were incubated with or without BNT162b2 for 6, 24, and 48 h. Cells were washed thoroughly with PBS and harvested by trypsinization and stored in –80 °C until further use.

2.2. REAL-TIME RT-QPCR

RNA from the cells was extracted with RNeasy Plus Mini Kit (Qiagen, 74134, Hilden, Germany) following the manufacturer's protocol. RT-PCR was performed using RevertAid First Strand cDNA Synthesis kit (Thermo Fisher Scientific, K1622, Waltham, MA, USA) following the manufacturer's protocol. Real-time qPCR was performed using Maxima SYBR Green/ROX qPCR Master Mix (Thermo Fisher Scientific, K0222, Waltham, MA, USA) with primers for BNT162b2, *LINE-1* and housekeeping genes *ACTB* and *GAPDH* (Table 1).

Table 1. Primer sequences of RT-qPCR and PCR.

Target	Sequence
<i>ACTB</i> forward	CCTCGCCTTTGCCGATCC
<i>ACTB</i> reverse	GGATCTTCATGAGGTAGTCAGTC
<i>GAPDH</i> forward	CTCTGCTCCTCCTGTTCGAC
<i>GAPDH</i> reverse	TTAAAAGCAGCCCTGGTGAC
<i>LINE-1</i> forward	TAACCAATACAGAGAAGTGC
<i>LINE-1</i> reverse	GATAATATCCTGCAGAGTGT
BNT162b2 forward	CGAGGTGGCCAAGAATCTGA
BNT162b2 reverse	TAGGCTAAGCGTTTTGAGCTG

2.3. Immunofluorescence Staining and Confocal Imaging

Huh7 cells were cultured in eight-chamber slides (LAB-TEK, 154534, Santa Cruz, CA, USA) with a density of 40,000 cells/well, with or without BNT162b2 (0.5, 1 or 2 µg/mL) for 6 h. Immunohistochemistry was performed using primary antibody anti-LINE-1 ORF1p mouse monoclonal antibody (Merck, 3574308, Kenilworth, NJ, USA), secondary antibody Cy3 Donkey anti-mouse (Jackson ImmunoResearch, West Grove, PA, USA), and Hoechst (Life technologies, 34850, Carlsbad, CA, USA), following the protocol from Thermo Fisher (Waltham, MA, USA). Two images per condition were taken using a Zeiss LSM 800 and a 63X oil immersion objective, and the staining intensity was quantified on the individual whole cell area and the nucleus area on 15 cells per image by ImageJ 1.53c. LINE-1 staining intensity for the cytosol was calculated by subtracting the intensity of the nucleus from that of the whole cell. All images of the cells were assigned a random number to prevent bias. To mark the nuclei (determined by the Hoechst staining) and the whole cells (determined by the borders of the LINE-1 fluorescence), the Freehand selection tool was used. These areas were then measured, and the mean intensity was used to compare the groups.

2.4. Genomic DNA Purification, PCR Amplification, Agarose Gel Purification, and Sanger Sequencing

Genomic DNA was extracted from cell pellets with PBNB buffer (10 mM Tris-HCl pH 8.3, 50 mM KCl, 2.5 mM MgCl₂, 0.45% NP-40, 0.45% Tween-20) according to protocol described previously [32]. To remove residual RNA from the DNA preparation, RNase (100 µg/mL, Qiagen, Hilden, Germany) was added to the DNA preparation and incubated at 37 °C for 3 h, followed by 5 min at 95 °C. PCR was then performed using primers targeting BNT162b2 (sequences are shown in Table 1), with the following program: 5 min at 95 °C, 35 cycles of 95 °C for 30 s, 58 °C for 30 s, and 72 °C for 1 min; finally, 72 °C for 5 min and 12 °C for 5 min. PCR products were run on 1.4% (*w/v*) agarose gel. Bands corresponding to the amplicons of the expected size (444 bps) were cut out and DNA was extracted using QIAquick PCR Purification Kit (Qiagen, 28104, Hilden, Germany), following the manufacturer's instructions. The sequence of the DNA amplicon was verified by Sanger sequencing (Eurofins Genomics, Ebersberg, Germany).

Statistics

Statistical comparisons were performed using two-tailed Student's *t*-test and ANOVA. Data are expressed as the mean ± SEM or ± SD. Differences with *p* < 0.05 are considered significant.

2.5. Ethical Statements

The Huh7 cell line was obtained from Japanese Collection of Research Bioresources (JCRB) Cell Bank.

3. Results

3.1. BNT162b2 Enters Human Liver Cell Line Huh7 Cells at High Efficiency

To determine if BNT162b2 enters human liver cells, we exposed human liver cell line Huh7 to BNT162b2. In a previous study on the uptake kinetics of LNP delivery in Huh7 cells, the maximum biological efficacy of LNP was observed between 4–7 h [33]. Therefore, in our study, Huh7 cells were cultured with or without increasing concentrations of BNT162b2 (0.5, 1.0 and 2.0 $\mu\text{g}/\text{mL}$) for 6, 24, and 48 h. RNA was extracted from cells and a real-time quantitative reverse transcription polymerase chain reaction (RT-qPCR) was performed using primers targeting the BNT162b2 sequence, as illustrated in Figure 1. The full sequence of BNT162b2 is publicly available [34] and contains a two-nucleotides cap; 5'-untranslated region (UTR) that incorporates the 5'-UTR of a human α -globin gene; the full-length of SARS-CoV-2 S protein with two proline mutations; 3'-UTR that incorporates the human mitochondrial 12S rRNA (mtRNR1) segment and human AES/TLE5 gene segment with two C→U mutations; poly(A) tail. Detailed analysis of the S protein sequence in BNT162b2 revealed 124 sequences that are 100% identical to human genomic sequences and three sequences with only one nucleotide (nt) mismatch in 19–26 nts (Table S1, see Supplementary Materials). To detect BNT162b2 RNA level, we designed primers with forward primer located in SARS-CoV-2 S protein regions and reverse primer in 3'-UTR, which allows detection of PCR amplicon unique to BNT162b2 without unspecific binding of the primers to human genomic regions.

BNT162b2 sequence (4284 bases)

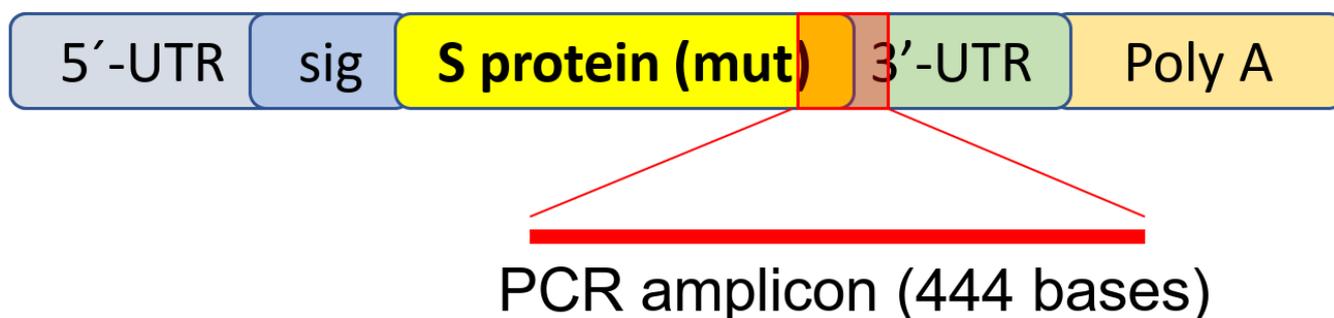


Figure 1. PCR primer set used to detect mRNA level and reverse-transcription of BNT162b2. Illustration of BNT162b2 was adapted from previously described literature [34].

RT-qPCR results showed that Huh7 cells treated with BNT162b2 had high levels of BNT162b2 mRNA relative to housekeeping genes at 6, 24, and 48 h (Figure 2, presented in logged $2^{-\Delta\Delta\text{CT}}$ due to exceptionally high levels). The three BNT162b2 concentrations led to similar intracellular BNT162b2 mRNA levels at the different time points, except that the significant difference between 1.0 and 2.0 $\mu\text{g}/\text{mL}$ was observed at 48 h. BNT162b2 mRNA levels were significantly decreased at 24 h compared to 6 h, but increased again at 48 h.

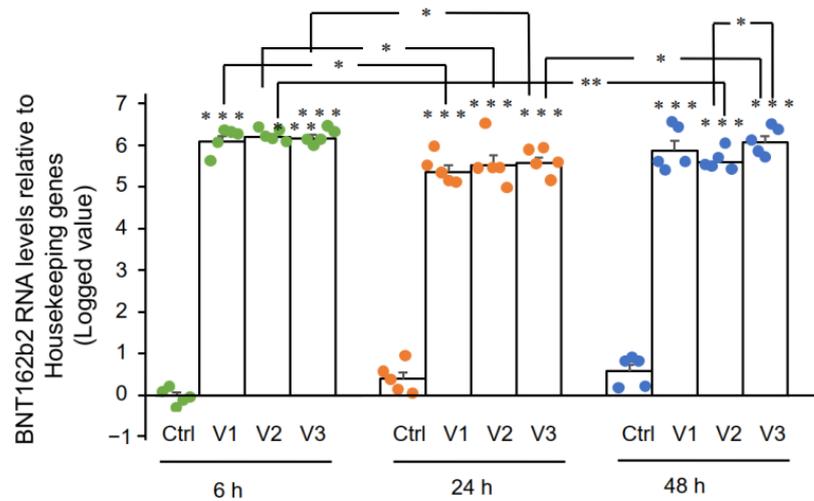


Figure 2. BNT162b2 mRNA levels in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 (V1), 1 (V2), and 2 $\mu\text{g}/\text{mL}$ (V3) of BNT162b2 for 6 (green dots), 24 (orange dots), and 48 h (blue dots). RNA was purified and qPCR was performed using primers targeting BNT162b2. RNA levels of BNT162b2 are presented as logged $2^{-\Delta\Delta\text{CT}}$ values relative to house-keeping genes *GAPDH* and *ACTB*. Results are from five independent experiments ($n = 5$). Differences between respective groups were analyzed using two-tailed Student’s *t*-test. Data are expressed as the mean \pm SEM. (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ vs. respective control at each time point, or as indicated).

3.2. Effect of BNT162b2 on Human Endogenous Reverse Transcriptase Long Interspersed Nuclear Element-1 (*LINE-1*)

Here we examined the effect of BNT162b2 on *LINE-1* gene expression. RT-qPCR was performed on RNA purified from Huh7 cells treated with BNT162b2 (0, 0.5, 1.0, and 2.0 $\mu\text{g}/\text{mL}$) for 6, 24, and 48 h, using primers targeting *LINE-1*. Significantly increased *LINE-1* expression compared to control was observed at 6 h by 2.0 $\mu\text{g}/\text{mL}$ BNT162b2, while lower BNT162b2 concentrations decreased *LINE-1* expression at all time points (Figure 3).

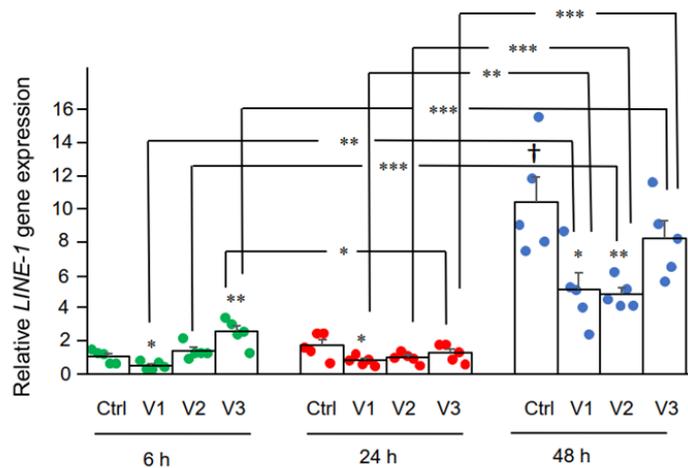


Figure 3. *LINE-1* mRNA levels in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 (V1), 1 (V2), and 2 $\mu\text{g}/\text{mL}$ (V3) of BNT162b2 for 6 (green dots), 24 (red dots), and 48 h (blue dots). RNA was purified and qPCR was performed using primers targeting *LINE-1*. RNA levels of *LINE-1* are presented as $2^{-\Delta\Delta\text{CT}}$ values relative to house-keeping genes *GAPDH* and *ACTB*. Results are from five independent experiments ($n = 5$). Differences between respective groups were analyzed using two-tailed Student’s *t*-test. Data are expressed as the mean \pm SEM. (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ vs. respective control at each time point, or as indicated; † $p < 0.05$ vs. 6 h-Ctrl).

Next, we studied the effect of BNT162b2 on LINE-1 protein level. The full-length LINE-1 consists of a 5' untranslated region (UTR), two open reading frames (ORFs), ORF1 and ORF2, and a 3'UTR, of which ORF1 is an RNA binding protein with chaperone activity. The retrotransposition activity of LINE-1 has been demonstrated to involve ORF1 translocation to the nucleus [35]. Huh7 cells treated with or without BNT162b2 (0.5, 1.0 and 2.0 $\mu\text{g}/\text{mL}$) for 6 h were fixed and stained with antibodies binding to LINE-1 ORF1p, and DNA-specific probe Hoechst for visualization of cell nucleus (Figure 4a). Quantification of immunofluorescence staining intensity showed that BNT162b2 increased LINE-1 ORF1p protein levels in both the whole cell area and nucleus at all concentrations tested (Figure 4b–d).

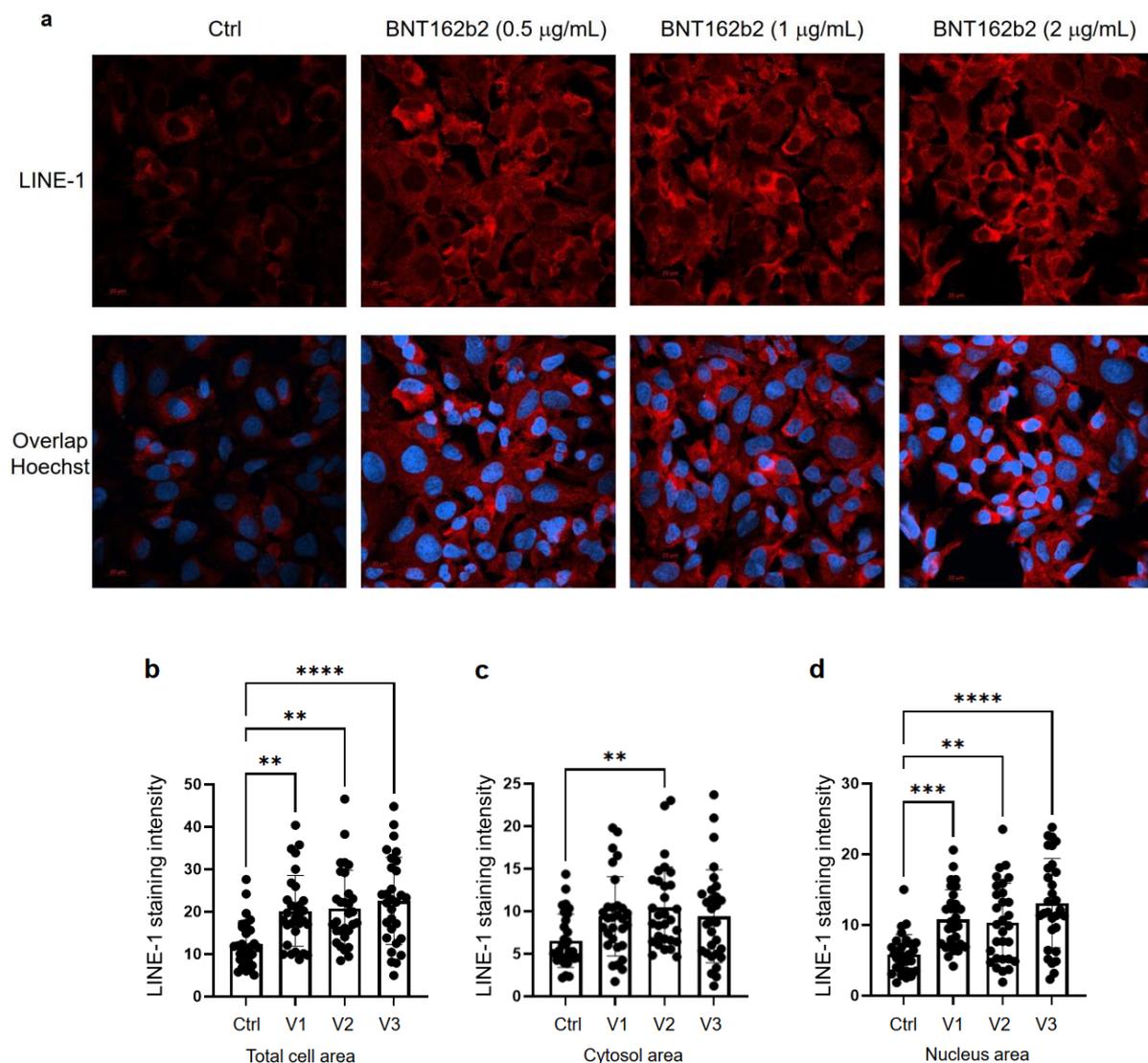


Figure 4. Immunohistochemistry of Huh7 cells treated with BNT162b2 on LINE-1 protein distribution. Huh7 cells were treated without (Ctrl) or with 0.5, 1, and 2 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h. Cells were fixed and stained with antibodies binding to LINE-1 ORF1p (red) and DNA-specific probe Hoechst for visualization of cell nucleus (blue). (a) Representative images of LINE-1 expression in Huh7 cells treated with or without BNT162b2. (b–d) Quantification of LINE-1 protein in whole cell area (b), cytosol (c), and nucleus (d). All data were analyzed using One-Way ANOVA, and graphs were created using GraphPad Prism V 9.2. All data is presented as mean \pm SD (** $p < 0.01$; *** $p < 0.001$; **** $p < 0.0001$ as indicated).

3.3. Detection of Reverse Transcribed BNT162b2 DNA in Huh7 Cells

A previous study has shown that entry of LINE-1 protein into the nucleus is associated with retrotransposition [35]. In the immunofluorescence staining experiment described above, increased levels of LINE-1 in the nucleus were observed already at the lowest concentration of BNT162b2 (0.5 µg/mL). To examine if BNT162b2 is reversely transcribed into DNA when LINE-1 is elevated, we purified genomic DNA from Huh7 cells treated with 0.5 µg/mL of BNT162b2 for 6, 24, and 48 h. Purified DNA was treated with RNase to remove RNA and subjected to PCR using primers targeting BNT162b2, as illustrated in Figure 1. Amplified DNA fragments were then visualized by electrophoresis and gel-purified (Figure 5). BNT162b2 DNA amplicons were detected in all three time points (6, 24, and 48 h). Sanger sequencing confirmed that the DNA amplicons were identical to the BNT162b2 sequence flanked by the primers (Table 2). To ensure that the DNA amplicons were derived from DNA but not BNT162b2 RNA, we also performed PCR on RNA purified from Huh7 cells treated with 0.5 µg/mL BNT162b2 for 6 h, with or without RNase treatment (Ctrl 5 and 6 in Figure 5), and no amplicon was detected in the RNA samples subjected to PCR.

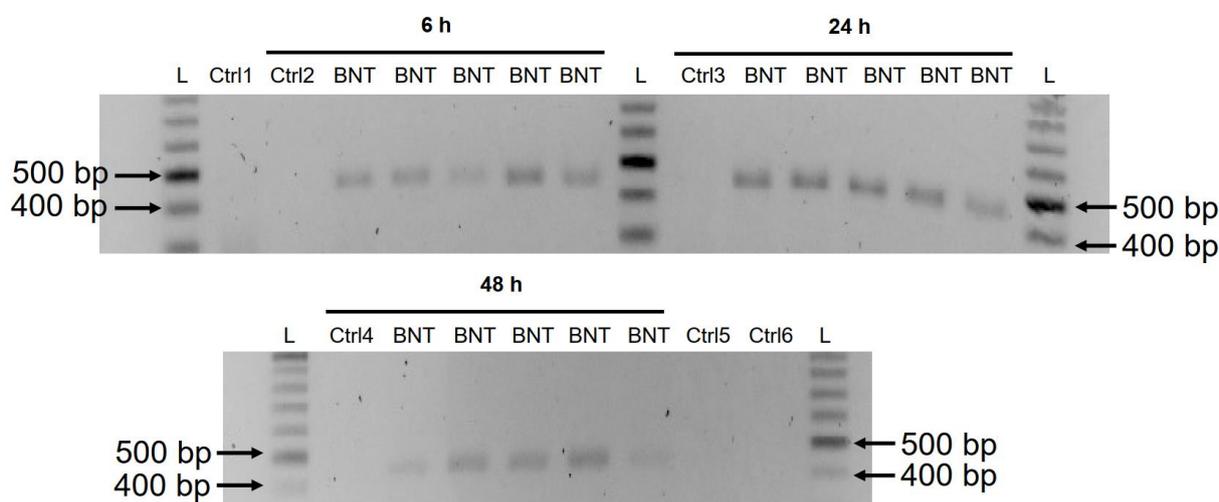


Figure 5. Detection of DNA amplicons of BNT162b2 in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 µg/mL of BNT162b2 for 6, 24, and 48 h. Genomic DNA was purified and digested with 100 µg/mL RNase. PCR was run on all samples with primers targeting BNT162b2, as shown in Figure 1 and Table 1. DNA amplicons (444 bps) were visualized on agarose gel. BNT: BNT162b2; L: DNA ladder; Ctrl1: cultured Huh7 cells; Ctrl2: Huh7 cells without BNT162b2 treatment collected at 6 h; Ctrl3: Huh7 cells without BNT162b2 treatment collected at 24 h; Ctrl4: Huh7 cells without BNT162b2 treatment collected at 48 h; Ctrl5: RNA from Huh7 cells treated with 0.5 µg/mL of BNT162b2 for 6 h; Ctrl6: RNA from Huh7 cells treated with 0.5 µg/mL of BNT162b2 for 6 h, digested with RNase.

Table 2. Sanger sequencing result of the BNT162b2 amplicon.

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CGAGTGGCCAAGAATCTGAACGAGAGCCTGATCGACCTGCAAGAACTGGGGAAGT
ACGAGCAGTACATCAAGTGGCCCTGGTACATCTGGCTGGGCTTTATCGCCGGACTGATTG
CCATCGTGATGGTCACAATCATGCTGTGTTCATGACCAGCTGCTGTAGCTGCCTGAAGG
GCTGTTGTAGCTGTGGCAGCTGCTGCAAGTTCGACGAGGACGATTCTGAGCCCGTGCTGA
AGGGCGTGAAGACTGCACTACACATGATGACTCGAGCTGGTACTGCATGCACGCAATGCTA
GCTGCCCCTTTCCCGTCCTGGGTACCCCGAGTCTCCCCCGACCTCGGGTCCCAGGTATGC
TCCCACCTCCACCTGCCCCACTCACACCTCTGCTAGTTCAGACACCTCCCAAGCACGC
AGCAATGCAGCTCAAAAACGCTTAGCCTA
```

4. Discussion

In this study we present evidence that COVID-19 mRNA vaccine BNT162b2 is able to enter the human liver cell line Huh7 in vitro. BNT162b2 mRNA is reverse transcribed intracellularly into DNA as fast as 6 h after BNT162b2 exposure. A possible mechanism for reverse transcription is through endogenous reverse transcriptase LINE-1, and the nucleus protein distribution of LINE-1 is elevated by BNT162b2.

Intracellular accumulation of LNP in hepatocytes has been demonstrated in vivo [36]. A preclinical study on BNT162b2 showed that BNT162b2 enters the human cell line HEK293T cells and leads to robust expression of BNT162b2 antigen [37]. Therefore, in this study, we first investigated the entry of BNT162b2 in the human liver cell line Huh7 cells. The choice of BNT162b2 concentrations used in this study warrants explanation. BNT162b2 is administered as a series of two doses three weeks apart, and each dose contains 30 µg of BNT162b2 in a volume of 0.3 mL, which makes the local concentration at the injection site at the highest 100 µg/mL [31]. A previous study on mRNA vaccines against H10N8 and H7N9 influenza viruses using a similar LNP delivery system showed that the mRNA vaccine can distribute rather nonspecifically to several organs such as liver, spleen, heart, kidney, lung, and brain, and the concentration in the liver is roughly 100 times lower than that of the intra-muscular injection site [38]. In the assessment report on BNT162b2 provided to EMA by Pfizer, the pharmacokinetic distribution studies in rats demonstrated that a relatively large proportion (up to 18%) of the total dose distributes to the liver [26]. We therefore chose to use 0.5, 1, and 2 µg/mL of vaccine in our experiments on the liver cells. However, the effect of a broader range of lower and higher concentrations of BNT162b2 should also be verified in future studies.

In the current study, we employed a human liver cell line for in vitro investigation. It is worth investigating if the liver cells also present the vaccine-derived SARS-CoV-2 spike protein, which could potentially make the liver cells targets for previously primed spike protein reactive cytotoxic T cells. There has been case reports on individuals who developed autoimmune hepatitis [39] after BNT162b2 vaccination. To obtain better understanding of the potential effects of BNT162b2 on liver function, in vivo models are desired for future studies.

In the BNT162b2 toxicity report, no genotoxicity nor carcinogenicity studies have been provided [26]. Our study shows that BNT162b2 can be reverse transcribed to DNA in liver cell line Huh7, and this may give rise to the concern if BNT162b2-derived DNA may be integrated into the host genome and affect the integrity of genomic DNA, which may potentially mediate genotoxic side effects. At this stage, we do not know if DNA reverse transcribed from BNT162b2 is integrated into the cell genome. Further studies are needed to demonstrate the effect of BNT162b2 on genomic integrity, including whole genome sequencing of cells exposed to BNT162b2, as well as tissues from human subjects who received BNT162b2 vaccination.

Human autonomous retrotransposon LINE-1 is a cellular endogenous reverse transcriptase and the only remaining active transposon in humans, able to retrotranspose itself and other nonautonomous elements [40,41], and ~17% of the human genome are comprised of LINE-1 sequences [42]. The nonautonomous *Alu* elements, short, interspersed nucleotide elements (SINEs), variable-number-of-tandem-repeats (VNTR), as well as cellular mRNA-processed pseudogenes, are retrotransposed by the LINE-1 retrotransposition proteins working in *trans* [43,44]. A recent study showed that endogenous LINE-1 mediates reverse transcription and integration of SARS-CoV-2 sequences in the genomes of infected human cells [25]. Furthermore, expression of endogenous LINE-1 is often increased upon viral infection, including SARS-CoV-2 infection [45–47]. Previous studies showed that LINE-1 retrotransposition activity is regulated by RNA metabolism [48,49], DNA damage response [50], and autophagy [51]. Efficient retrotransposition of LINE-1 is often associated with cell cycle and nuclear envelope breakdown during mitosis [52,53], as well as exogenous retroviruses [54,55], which promotes entrance of LINE-1 into the nucleus. In our study, we observed increased LINE-1 ORF1p distribution as determined by immunohisto-

chemistry in the nucleus by BNT162b2 at all concentrations tested (0.5, 1, and 2 µg/mL), while elevated *LINE-1* gene expression was detected at the highest BNT162b2 concentration (2 µg/mL). It is worth noting that gene transcription is regulated by chromatin modifications, transcription factor regulation, and the rate of RNA degradation, while translational regulation of protein involves ribosome recruitment on the initiation codon, modulation of peptide elongation, termination of protein synthesis, or ribosome biogenesis. These two processes are controlled by different mechanisms, and therefore they may not always show the same change patterns in response to external challenges. The exact regulation of *LINE-1* activity in response to BNT162b2 merits further study.

The cell model that we used in this study is a carcinoma cell line, with active DNA replication which differs from non-dividing somatic cells. It has also been shown that Huh7 cells display significant different gene and protein expression including upregulated proteins involved in RNA metabolism [56]. However, cell proliferation is also active in several human tissues such as the bone marrow or basal layers of epithelia as well as during embryogenesis, and it is therefore necessary to examine the effect of BNT162b2 on genomic integrity under such conditions. Furthermore, effective retrotransposition of *LINE-1* has also been reported in non-dividing and terminally differentiated cells, such as human neurons [57,58].

The Pfizer EMA assessment report also showed that BNT162b2 distributes in the spleen (<1.1%), adrenal glands (<0.1%), as well as low and measurable radioactivity in the ovaries and testes (<0.1%) [26]. Furthermore, no data on placental transfer of BNT162b2 is available from Pfizer EMA assessment report. Our results showed that BNT162b2 mRNA readily enters Huh7 cells at a concentration (0.5 µg/mL) corresponding to 0.5% of the local injection site concentration, induce changes in *LINE-1* gene and protein expression, and within 6 h, reverse transcription of BNT162b2 can be detected. It is therefore important to investigate further the effect of BNT162b2 on other cell types and tissues both in vitro and in vivo.

5. Conclusions

Our study is the first in vitro study on the effect of COVID-19 mRNA vaccine BNT162b2 on human liver cell line. We present evidence on fast entry of BNT162b2 into the cells and subsequent intracellular reverse transcription of BNT162b2 mRNA into DNA.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/cimb44030073/s1>.

Author Contributions: M.A., F.O.F., D.Y., M.B. and C.L. performed in vitro experiments. M.A. and F.O.F. performed data analysis. M.R. and Y.D.M. contributed to the implementation of the research, designed, and supervised the study. Y.D.M. wrote the paper with input from all authors. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: All data supporting the findings of this study are available within the article and supporting information.

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Conflicts of Interest: The authors declare no conflict of interest.

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From: Karine Raetzloff
Sent: 11/3/2022 1:22:30 AM
To: DOH WSBOH,DOH Secretary's Office
Cc:
Subject: Re. Potential inclusion of Covid-19 vaccine in WAC 246-105

External Email

Hello,

I write today to once again ask that you do not mandate COVID-19 vaccines for children and that you leave that decision to parents and their pediatricians.

The CDC has made it clear that their recommendations are not indicative of support of a mandate on all children, and that decision is left to the states; however, existing law in Washington State cites the ACIP recommendations from 2019, and if that date was updated to 2022, families across the state may be forced to choose between sending their children to public school or making the best decision for their health.

Furthermore, there is no consensus in the medical community that the COVID-19 vaccines should be given to healthy children, especially under the age of 11. Sweden decided against recommending COVID vaccines for healthy children aged 5 to 11, with their lead health agency stating, "we don't see any clear benefit to vaccinating them."

Additionally, the flu shot is not mandated for children and yet the flu is more deadly for them. This is presumably because, similarly to the Covid shot, it is not a guarantee against illness as vaccines like the Polio and Measles vaccines are. Please do not mandate vaccines that do not offer guaranteed protection from the contagion they are supposed to protect against.

Lastly, we simply do not want any liability-free COVID-19 products to be mandated for our kids. Please do not mandate vaccines that are still only available under an EUA.

Thank you for your time,

Karine Raetzloff
Registered voter and parent of two school age kids
Everett, WA 98201
Snohomish County

On Feb 28, 2022, at 11:55 PM, Karine R <karine_raetz@yahoo.com> wrote:

Hello,

In follow-up to my January 6, 2022 email below, I'm reaching out to ensure that you saw the recent news that Pfizer's COVID shot is not effective in preventing infection in kids ages 5-11.

As reported in the Seattle Times, in a reprint of the New York Times, "[t]he Pfizer vaccine is the only COVID shot authorized for that age group in the United States. It still

prevents severe illness in the children, but offers virtually no protection against infection, even within a month after full immunization, the data, which were collected during the omicron surge, suggest.”

<https://www.seattletimes.com/nation-world/pfizers-covid-shot-far-less-effective-in-ages-5-11-than-in-older-kids/>
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.seattletimes.com%2Fnation-world%2Fpfizers-covid-shot-far-less-effective-in-ages-5-11-than-in-older-kids%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C100a349e09744a676c4308dabd7488d9%7C11d>>

Given this, and given that children have an extremely low risk of severe illness in the first place, it is not logical to coerce parents to vaccinate their children with something that is not guaranteed to prevent illness or infection, even within a month of receiving it, for something that poses such a low risk to them.

Therefore, I reaffirm my position below and I ask that you vote against including the Covid-19 vaccine in WAC 246-105.

Thank you for your time,

Karine Raetzloff
Registered voter and parent of two school age kids
Everett, WA 98201
Snohomish County

Sent from my iPhone

On Jan 6, 2022, at 11:49 PM, Karine R <karine_raetz@yahoo.com> wrote:

□

Hello,

I'm reaching out to you with a public comment related to the potential inclusion of the Covid-19 vaccine in WAC 246-105, which is being considered at your January 12, 2022 meeting.

I have taken the vaccine myself and believe it has its place in our community, especially in our adult and senior population; however, a Covid-19 vaccine mandate does not pass the nine required Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030 and I am against including it in WAC 246-105 at this time.

Specifically, the Covid-19 vaccine fails to meet the criteria set in:

II. Disease Burden Criteria

5. The vaccine containing this antigen prevents disease(s) that has

significant morbidity and/or mortality in at least some sub-set of the population.

6. Vaccinating against this disease reduces the risk of person-to-person transmission, with transmission in a school or child care setting or activity being given the highest priority.

III. Implementation of the Criteria

7. The vaccine containing this antigen is acceptable to the medical community and the public.

8. The administrative burdens of delivery and tracking of vaccine containing this antigen are reasonable.

9. The burden of compliance for the vaccine containing this antigen is reasonable for the parent/caregiver.

To point five, the vaccine is widely available to every vulnerable subset of the population. In general, children are not a vulnerable population. According to the CDC

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdata.cdc.gov%2FNCHS%2FProvisi>

COVID-19-Deaths-Focus-on-Ages-0-18-Yea%2Fnr4s-

juj3%2Fdata&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C100a349e09744a676c4308dabd7488d9%7C

, as of 1/6/22, there were 823 provisional Covid-19 deaths in the 0-18 population for the period of 1/4/20-1/4/22, for the entire country. Many of these are deaths "with" Covid rather than "from" Covid. Even so, on an annual basis, this is less than the annual number of estimated deaths in a typical year from the flu

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fflu%2Fabout%2>

2020.html&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C100a349e09744a676c4308dabd7488d9%7C11

. The flu vaccine is not mandated. I assume that this is because, similarly to the Covid-19 vaccine, the flu vaccine is not a guarantee against infection as the polio vaccine is, and we do not know, year-to-year, whether the respective vaccine will be the correct one for the flu variant.

Along these lines, and to point six, it is widely proven that vaccinated individuals still catch and transmit Covid-19. We know this because this was the science used to justify mask mandates; masks are currently still mandated indoors everywhere in the state of Washington, including in schools and regardless of vaccination status, because of this reason.

To point seven, it is hard to tell if the vaccine is currently acceptable to the medical community, as it pertains to children. Unlike the adult vaccines, none of the Covid-19 vaccines are fully approved for children ages 5-15, they have only received Emergency Use Authorization (EUA). Also, the FDA has chosen to not consult with their expert advisory board on their most recent EUAs related to Covid-19 vaccinations and boosters for children, seemingly because their expert advisory board does not concur with their current decisions.

Additionally, it is hard to tell if the vaccine is currently acceptable to the general public. According to usafacts.org

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fusafacts.org%2Fvisualizations%2>

vaccine-tracker-
states%2Fstate%2Fwashington&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C100a349e09744a676c430
, despite being widely available, only 68.14% of Washington state's population has been fully vaccinated. This statistic belies the fact that our top three demographic groups in the state are vaccinated at rates of 53% or less (White: 53%, Hispanic: 46%, Black: 53%). Vaccination rates are considerably lower for those 19 years of age and under; only 1.55% of this population has been fully vaccinated.

These vaccination rates do not show a strong level of public acceptance. They also show that parents are choosing to not vaccinate their children, likely because they know that they are, fortunately, not generally susceptible to Covid-19.

To point eight, hospital administrators and nurses have already given feedback that a vaccine mandate would create an unreasonable and insurmountable administrative burden involving tracking.

Lastly, to point nine, coercing parents to vaccinate their children with a vaccine that is currently only authorized with an Emergency Use Authorization, for an illness that they are largely not susceptible to, does not fall within a reasonable burden of compliance. It is not logical to coerce parents to vaccinate their children for something that poses such a low risk to them. At this point, our children are already doing what they can to protect their elders. They did remote schooling for a year until their elders could be vaccinated. They are not generally susceptible to Covid-19 and when they do catch it they shed much less of the virus than adults do. They spend their full school day masked. And, over 90% of our Washington state senior citizens, those 65 years and over, are now fully vaccinated. Many of them are also boosted, and they too continue to mask up. Therefore, arguing that vaccinating our children to protect our elders is an argument without substance.

Parents who want to vaccinate their children should absolutely be able to do so. And, if and when our medical community develops a vaccine that prevents infection from Covid-19 rather than just the more dire effects of the illness, this matter should be reconsidered. Unfortunately, that day is not today. Therefore, I ask that you vote not to include the Covid-19 vaccine in WAC 246-105.

Thank you for your time,

Karine Raetzloff
Registered voter and parent of two school age kids

Everett, WA 98201
Snohomish County

From: Margit Scholz
Sent: 10/20/2022 5:57:29 PM
To: DOH WSBOH
Cc:
Subject: Commit to no COVID vaccine mandates on children

External Email

Dear Washington State Board of Health,

I urge you to accept the TAGs recommendation and choose to NOT mandate covid vaccines on our children. Our state government should NOT be mandating Covid vaccines on our children. They are at extremely low risk for Covid and these medical decisions should be left in the hands of parents and their family doctors.

Sincerely,

The Citizens of Washington State

From: Jotform
Sent: 11/3/2022 5:50:24 AM
To: DOH WSBOH
Cc:
Subject: Re: Stop The Child Vaccine Mandate Petition - Gary Medearis

External Email

<<https://cdn.jotform.ms/assets/img/logo2021/jotform-logo.png>>

Stop The Child Vaccine Mandate Petition

Name

Gary Medearis

Email

gmedearis@yahoo.com

Zip

98248

Cell Phone Number

(3603930094)

You can edit this submission

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Fedit%2F543>

and view all your submissions

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Ftables%2F2>
easily.

From: Barbara Elder
Sent: 11/1/2022 6:54:24 AM
To: DOH Secretary's Office
Cc:
Subject: Voting

External Email

the public does not want any liability-free COVID-19 products to be mandated for our kids.

Barbara

From: Shauna Sams
Sent: 10/31/2022 2:15:52 PM
To: DOH WSBOH
Cc:
Subject: Child vaccines

External Email

I am writing to let the Washington SBOH know that I as well as many many other people in Washington state are strongly opposed of you recommending the covid "vaccine" to the required vaccine schedule for our children. Covid is NOT killing children, it is the flu! This so called vaccine is killing and maming more people than covid is, and it is NOT stopping it. Please look at the VAERS data and other data that as you consider your decision.

DO NOT ADD THIS TO OUR CHILDRENS SCHEDULE!

From: Allyson Miller

Sent: 11/1/2022 8:42:01 AM

To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)

Cc:

Subject: Covid shots to pediatric schedule

External Email

To all this may concern,

I am writing to urge you to vote to NOT adding Covid shots to the pediatric schedule in Washington State.

By now it is undeniably clear that these shots do not do what they were promised to do: prevent the spread of Covid, nor prevent one from becoming infected with it. The risks of receiving these shots, especially for children, FAR outweigh any possible benefits.

Please show that your commitment is truly to maintain and improve the health of Washington's youngest residents, and not to follow a politicized agenda, by voting NO on adding the Covid shots to the pediatric schedule.

Thank you for your time,

Allyson Miller

From: Shannon Zander
Sent: 11/2/2022 1:40:33 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Subject: No to child covid vax

External Email
Hello,

Please save the children! Vote no on adding covid-19 vaccination to childhood immunization schedule.

These are very dangerous products. I personally know two people that have died in their sleep, one with a pulmonary embolism currently in the hospital and a mother who is permanently disabled from these shots!

Covid-19 is not dangerous to children. Most children have already had covid. These shots are not necessary and could do them harm. Why take the risk? We need the children to have natural immunity.

Sincerely,
Shannon Zander

From: Aaron Allen
Sent: 11/3/2022 6:31:35 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: NO COVID-19 products for our kids

External Email

I do NOT want any liability-free COVID-19 products to be mandated for our kids.

Thank you,
Aaron Allen
9015 Cascadia Ave
Everett, WA 98208

From: Brett Spore
Sent: 10/21/2022 9:03:22 PM
To: DOH WSBOH
Cc:
Subject: Please do not add COVID vaccines to required vaccines for education

External Email

Should the topic come up again, I request that you do NOT add any COVID vaccines to the list of required vaccines for education in WA. Our state has seen enough people leave because of vaccine mandates already. Our schools have seen enough mass exiting of students because of mandates already. Adding the COVID vaccine to requirements for education will only continue to divide our state, send more people out of the state and reduce the number of students in school.

Thank you for your consideration,

Brett Elizabeth Spore

From: Gregory Lawson
Sent: 11/2/2022 7:59:46 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccines for children

External Email

If they are made mandatory, I know all of my grandchildren and many of my friends will be moving out of WA. This includes several small businesses. Their reasons are that they see that these decisions are not based on science or logic. They are political and financial.

Greg Lawson
Camano Island

From: npadur@nventure.com
Sent: 11/1/2022 7:52:53 PM
To: DOH WSBOH
Cc:
Subject: No Covid Shots For Kids To Attend School

External Email

Do Not Mandate Covid shots for kids to attend school. These shots are on emergency approval only.

Studies are not complete on the danger or harm they are to children. The efficacy of the shots is questionable.

Sincerely,

Neal Padur

Tacoma, WA

253-927-1168

From: Aaron Allen
Sent: 11/3/2022 6:32:13 AM
To: DOH WSBOH
Cc:
Subject: NO COVID-19 products for our kids

External Email

I do NOT want any liability-free COVID-19 products to be mandated for our kids.

Thank you,
Aaron Allen
9015 Cascadia Ave
Everett, WA 98208

From: Liz Mason
Sent: 10/31/2022 11:19:53 AM
To: DOH WSBOH
Cc:
Subject: Adding Covid shots to the CDC pediatric schedule

External Email

I am VERY opposed to adding Covid shots to the CDC pediatric schedule. Children are not the ones at risk. They are already being bombarded with countless vaccinations.

Please vote against.

Thank you,

Liz Mason

From: Gail Fleming
Sent: 10/24/2022 1:52:29 PM
To: DOH WSBOH
Cc:
Subject: Vax mandates

External Email

Strongly against mandates for public school children. Very divisive issue in our state! It has already cost family relationships, jobs, education and much more! We give people a choice over their body as far as abortion. Let's be fair and give us a voice over vaccinating children. Children don't die from Covid. A very small % with pre existing condition. Let's save that for a real pandemic. Enough already!
Susan Fleming

Sent from my iPhone

From: Nikia Demmings
Sent: 10/31/2022 11:43:04 AM
To: DOH WSBOH
Cc:
Subject: COVID-19

External Email

To Whom it May Concern:

I am speaking as a concerned parent and a law abiding citizen in my community, I do not want any liability free COVID-19 products to be mandated for my child or anyone else's kids.

The CDC acknowledges the shots do not prevent infection or transmission and that any protection afforded fades rapidly, yet they refuse to abandon their push for increased uptake and boosters, and they refuse to promote existing early treatment protocols or acknowledge the mountain of evidence of the superior safety and effectiveness of naturally-acquired immunity. I beg you to please reconsider for the well being of the children. Again I do not want any liability free COVID-19 products to be mandated for my child or anyone else's kids.

Sincerely,
Nikia Demmings

From: Testify Online Survey
Sent: 11/2/2022 1:08:45 PM
To: DOH WSBOH
Cc:
Subject: Survey Response: Testify Online *

The following survey response is submitted:

1.

State Board of Health Meeting Date:

Nov 3rd 2022

2.

Agenda Item or Issue:

Vaccine requiremts for schools

3.

Your Name:

Zoae Spackman

4.

Do you have a professional title?

2. No

5.

Are you representing an organization?

2. No

6.

Address:

Bellingham, WA

7.

Email:

Crashnsmoke@gmail.com

8.

Phone Number (Include Area Code):

509-947-5091

9.

Do you have any special expertise relevant to this topic?

1. Yes

Mother of school aged children

10.

Are you testifying on a specific proposal under consideration by the board?

1. Yes

School immunization report

11.

Are you Pro or Con on the proposal?

2. Con

The covid vaccine should NOT be required for attending ANY public school.

From: Cheryl Thompson
Sent: 11/2/2022 2:24:43 PM
To: DOH WSBOH
Cc:
Subject: NO Covid Shots for Washington State school-age kids or younger - NO mandates whatsoever!

External Email

Hello! We are Cheryl and Rodney Thompson, Washington State residents since 1989, and grandparents of school-age children attending Washington public schools. We do NOT want any liability-free COVID-19 products to be mandated for our children, that includes NO Covid shots for Washington's school-age kids or younger. Many people have died or have been injured from the vaccine itself. We personally know some of these people and their families. It has been awful! Someone needs to be held accountable for these deaths/injuries. The COVID-19 vaccines are NOT safe! If the vaccine is mandated, our grandchildren will be leaving public schools. Please do NOT mandate the Covid shots. Please leave this very personal decision for the child, parent(s), and their doctors.

Sincerely,

Rodney and Cheryl Thompson
12750 444 Avenue SE
PO Box 644
North Bend, WA 98045
(425) 442-0242

From: Lori
Sent: 11/2/2022 5:13:29 PM
To: DOH Secretary's Office
Cc:
Subject: Vaccine

External Email

Why would anyone mandate a vaccine that is proven not to work? It doesn't keep one from getting covid or spreading covid. Long term affects are unknown.

Sent from my iPhone

From: Only Better

Sent: 11/3/2022 3:37:54 PM

To: DOH WSBOH

Cc:

Subject: Communicating With Board Members: UNSPEAKABLE, CRIMINAL, HIGH-TECH MEDICAL EXPERIMENTS USING INVISIBILITY TECHNOLOGY & N.KOREAN SLAVES IN CHILDREN'S DAYCARE CENTER (7720 GREENWOOD AVE, SEATTLE 98103)

External Email

Dear Sir or Madam:

I could have contributed more, except that I currently do not have an access to a secure computer. As I have clearly stated in my earlier email, my home has been ruthlessly invaded for 50 months now, and my life has been totally wrecked by a mysterious group of self-claimed Democrats and Korean high-tech team in Seattle.

They initially started this atrocious program by saying, "You're too conservative. We're starting a war now. Pack your things and leave," and then changed their tone to "Your condo (650 sq) is large enough for a minimum of 6 persons to live together, and you're eating too much (1 meal a day then). The program will run indefinitely because you're an environmental hazard, and everything will be liquidated. We'll throw you out to the street with brain damage and a serious lung disease, or commit you to a mental hospital. Call the police, and talk about us right now (12:30 am)."

Owing to their heavy reliance on the alien Invisibility Technology (presumably detected by thermal cameras), I have been forced to live with their torture and harassment for 50 months so far. Having been blocked from all productive activities, my life is totally annihilated by these unscrupulous elements posing as the Korean scientists in Seattle.

They're headquartered in the Illumination Learning Studio of 7720 Greenwood Ave, Seattle. Today alone, they (led by a 45-year-old Korean woman of N.Korean origin, working for Hyundai U&I as a bodyguard/fixer/assassin) followed me to the bank, copied SSN #, Birthdate, Account #, and the name & the country of the origin of my personal banker, for robbery purpose. Would you seriously investigate the Invisibility Technology that these Hyundai U&I contractors employ for nefarious schemes?

Just in case you haven't got my earlier email, I'll attach it below:

Dear Sir or Madam:

Please read through what I'm experiencing in Seattle. I've tried to write it down as faithfully as possible. Often, we cannot see the truth until it's too late, because we're mostly fixated by our own experiences, limiting ourselves to what we want to see or hear. Throughout the past four years of my life experiences, I've had a glimpse of how Hitler and the Nazi Party had managed to contaminate a whole society, wearing sheeps' skins and presenting themselves as those who they're not. Once they took over the whole country of Germany, belated regrets that some Germans might have felt got mixed with fear, ultimately leading to renewed but forced enthusiasm (by then) toward all powerful Hitler. Too late, you had no other option. It's not a rather rambunctious Trump figure that we have to watch for. It's those who act and think like praying mantis hiding behind a popular, legitimate establishment, who we have to be mindful of. In sum, what has previously been unthinkable is happening in Seattle. A surprising number of Americans are involved in this unspeakable atrocity.

I've been under an illegal brain/medical experiment by a group of self-claimed Democrats

in Seattle, who extensively use an alien technology of invisible mobility in collaboration with a N.KOREA-friendly S.Korean conglomerate. During the past four years, they've made numerous murder attempts in disguise of medical experiment (e.g. contamination of food with rat poisoning, employment of toxins and electromagnetic waves to generate preliminary symptoms of heart attack or brain aneurysm, & many more). According to their conversations, they will continue this experiment until I expire so that they can liquidate my possession, calling it Financial Legacy. As the person holding a leadership position in the country, I would suggest, you should seriously investigate the components of the current Democratic Party in order to insure that the Party has not been infiltrated by unscrupulous elements such as Nazi or Communists. Presently, I'd rather stay silent than vote for the party that I'm no longer familiar with. Truly Monstrous Americans, I've never imagined of in the U.S. soil.

A S.Korean conglomerate is conducting DNA/MEMORY EDITS, BRAIN DAMAGES, □ATTACK/STROKE/TOXINS/SUICIDALIDEATION 4 ASSASSINS, HUMANS OCCUPIED & ALTERED BY PARASITE, HIGH-TECH INVISIBLE MOBILITY, DOPPELGANGER BY CLONING, OFF-HR BANK INTRUSION, using N.Koreans & childcare workers in Seattle. IN COMPLETE DISGUISE.

From China's ally North Korea, the said South Korean conglomerate, which dominates business there, recruited "mysterious" female slaves to train them as superhuman soldiers wielding INVISIBILITY TECHNOLOGY, TOXINS, GERMS & RAYS AS WEAPON. Totally Alien Technology. New Age of Crime!

Illegal BRAIN EXPERIMENTS have been conducted by S.Korean co., in collaboration with a group of Americans of Nazi mentality, in a complete disguise, using the facility and childcare workers of Illumination Learning Studio of Seattle, located right below my residence.

I'm A WOMAN, A MINORITY, A NATURALIZED CITIZEN, AN ELDERLY. Being mistaken as a Republican/Evangelist, I've been put in a Holocaust Program in N.Korean Labor Camp Style "brain experiments" by Seattle Dems. A torturous series of experiment, ultimately leading to death and confiscation of your property. INVISIBILITY TECHNOLOGY HEAVILY USED. When a group of self-claimed Democrats forcibly intruded my Seattle home to conduct brain experiments using Invisibility Technology, they called me mockingly, "Subhuman Category," "Immigrant," "Why don't you die?" NAZI?

The brains of N.Koreans & childcare workers are connected to my brain, read my thoughts, see what I see, view dream images of mine nightly, and insert made-up dreams to alter my memory while I'm sleeping. Those previously illiterate now read what I read, steal my memory directly from Hippocampus, perform autopsy in my brain for the purpose of making my replica, teleport themselves directly into the inside of local banks off-hr without setting off alarms (Home Street Bank Greenwood Branch, Dec/2020-Jan/2021), plot robbery and identity theft by use of cloning technology (DOPPELGANGER), make a list of inventory of all my belongings for the purpose of liquidation and property "confiscation" (initially for their own profit sharing, but later for the new order from their "Chairperson" to "SELL EVERYTHING AND BRING IT TO ME."

I've been captivated by N.Koreans (born in 1940's, abducted & returned w/tech) for secret experiment of a S.Korean conglomerate. They worship their Chairperson, just as average N.Koreans may die for their leader, calling her "Our Savior who saved our lives." If I step outside my residence, I get attacked by heartattack gun. All female slaves wear and toss back my underwears and outfits without washing them, hog yogurt & peanut butter directly from container, bottle up beverages & syrups and pour unfiltered water to disguise their consumption, leave urines unflushed, casually urinate and defecate in carpet, monetize bathroom-videos (recently profiting \$4,000 from underground internet market by selling multiple closeup photo images of my morning routines taken from my toilet). It's been a nightmare to watch my little nest that I used to call home turning

decrepit.

For 4 yrs. N.Koreans (in their 30s-50s), who were born in 1940's, abducted and returned with INVISIBILITY TECHNOLOGY. I've been tortured and threatened with life in my own Seattle home, having been mistaken as a Republican and Evangelist: 24/7 surveillance; Intrusion via open window or through fireplace from children's center downstairs. They've attempted murder in disguise of medical technology experiments, under the protection of bribed policemen who often visit the site at midnight or on weekends.

It's not a Republican or Southern thing. A S.Korean Chaebol put me in a Holocaust program in Seattle by lying to the power-that-be that I was a Republican. About ten N.Koreans were sent inside my 650 sq condo, saying it's too large for only two adults to live in. A Dem mistaken as Rep. So what? How can this scale of atrocity committed against an individual be justified, with or without God?

It's not just the Republicans who embrace dark anything. When a Korean conglomerate put me in a secret program resembling WWII Jewish Concentration Camp combined with N.Korean Labor Camp four years ago, they lied to the authority in charge of the Program that I was a Republican. The concerned S.Korean conglomerate is related to me by blood. When I refused to sign an unknown document sent to me without an explanation, its IT CONTRACTORS put me in this Holocaust program.

In the said children's daycare center of Seattle, a variety of high-tech equipments are tested by them. When its employees provided music in Ballard Seafood Festival, a sudden eruption of violence occurred, according to local attendants. I witnessed the same phenomenon myself when a flock of crows suddenly became violent in its doorstep.

If you'd be interested in understanding "INVISIBLY MOVING N.KOREAN SLAVE WORKERS" (provided with 1 meal/day, and told to take care of the rest of food, clothing and other necessities from my home), and their "perfect crimes carried out by inducing illnesses in bodies and disruptions in life", which have been monitored by a S.Korean conglomerate in Seattle (7720 Greenwood Ave), please read Peter Hamilton's SALVATION LOST. Totally ignorant of high-tech myself (I'd been quite satisfied with my flip phone until my phone company dropped the service this year), I find it helpful and relevant. This' our future.

Sincerely,
S. H.

P.S. A 45-year-old Korean woman of N.Korean origin, using INVISIBILITY TECHNOLOGY, followed me on my way to the bank, played with my login info to my bank account, thus blocking my access to my brokerage account, right in front of bank personnel, in May, 2022. That evening, I overheard her talking to other Koreans in her team that she was attempting a fast withdrawal of cash from my brokerage account right in front of my banker. Whether she's visible or not, she certainly showed a lack of commonsense, totally relying on her INVISIBILITY TECHNOLOGY. In this manner, she and her team will continually and recklessly attempt another financial crimes against anyone living alone.

P.P.S. Due to invisibility technology heavily involved in this case, and corresponding ignorance of the said technology among the General public, I couldn't request any help from the authorities in U.S. THESE CRIMINALS ARE VERY RELAXED ABOUT MY EMAILS TO ANY LAW ENFORCEMENT AGENCIES OR AUTHORITIES BUT TO SAMSUNG ELECTRONICS (SOUTH-KOREAN CONGLOMERATE). BY LISTENING TO THEIR CONVERSATIONS, I ASSUME THAT ONLY SAMSUNG PEOPLE COULD FIGURE OUT THE NATURE OF THEIR CRIMINAL ACTIVITIES. THEY'RE VERY CONCERNED ABOUT MY EMAIL TO SAMSUNG REPORTING THE INCIDENT.

From: Garry Blankenship

Sent: 10/18/2022 7:08:13 AM

To: Van De Wege, Kevin,Chapman, Mike,hcinfo.infosc@canada.ca,DOH

WSBOH,OADS@cdc.gov,ombuds@oc.fda.gov,sheriff@co.clallam.wa.us,mozias@co.clallam.wa.us,rjohnson@

Cc:

Subject: The Suppressed Harms Caused by the Experimental mRNA Drugs



attachments\9410EB441C344B8B_V-Safe Conf. of Jab Hazzards.docx

External Email

Good Day,

I request that any and all public health representatives review the attached article and refute any of the content. If you can please do so. If you cannot find mistruths, I ask why you have not disclosed these experimental drug dangers to your constituents. This is not a quest to be right, but it is a quest to understand why these toxins were forced and coerced upon us. I am at a loss to understand how my public health representatives would not only allow this to happen, but to be subsequently silent when the harms are irrefutably known. Please explain - - - please !

Sincerely,

Garry Blankenship

From: Mitzi Niblack
Sent: 11/1/2022 3:24:05 PM
To: DOH WSBOH
Cc:
Subject: covid vaccination mandate for children

External Email

Do not allow a mandate to require covid vaccines for school aged children. Many doctors and agencies are now against this. Evidence of dangerous adverse reactions are beginning to emerge. Protect our children! Stop this dangerous requirement now.

Harrietta L. Niblack,
Vancouver WA

From: Anik
Sent: 11/1/2022 12:24:52 PM
To: DOH Secretary's Office
Cc:
Subject: Nov 3rd meeting re: vaccination

External Email

To whom it may concern,

I am a parents, community member, business owner and health care provider in the state of Washington.

The CDC recently added the mRNA Covid 19 vaccine to the mandated childhood vaccine schedule. My assumption is that the Nov. 3rd will have an agenda to discuss implementing this in Washington state.

This vaccine continues to be specific to Emergency use only which negates any logic that it should implemented to the routine schedule for all children (permanently).

This vaccine does not claim to prevent spread or infection. What then, is the purpose of vaccinating our children?

Kids are not at risk of complication from Covid 19.

A high percentage of our children have already been exposed to and have successfully gone through the immune response to Covid 19. We now know that natural immunity is far superior to vaccination. Why would we then, mandate this to every child in Washington state.

We also know that there is a legitimate vaccine related cardiovascular risk for children (particularly boys). Are we willing to risk cardiovascular damage for a vaccine which doesn't claim to be effective for prevention of spread?

I trust that if you have the upmost safety of our children in mind that you will fight to protect them and the right of their parents to advocate and make the necessary health care decisions for their own children based on their own assessment of risk and need.

Anik St-Martin, DC, DACCP

From: Bruce Hulett
Sent: 11/4/2022 11:08:10 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: VOTE NO TO PEDIATRIC COVID SHOTS !!! WA Department of Health (DOH) Vaccine Advisory Committee (VAC)

External Email

PLEASE VOTE NO for Covid Shots for Children.

This is an Unproven Shot with Unknown Long Term Side Effects or Issues.

It is Risk vrs Rewards. As said above, the Risk for Kids is very low and the Reward of known and unknown health effects is bad.

Bruce Hulett

360-713-3580 – Cell

From: Pamela Thompson
Sent: 11/3/2022 1:33:20 AM
To: Kwan-Gett, Tao (DOH),DOH Secretary's Office,Sherls-Jones, Jamilia J (DOH),Drummond, Heather M (DOH)
Cc:
Subject: No liability-free vaccines for children

External Email

To the WA Department of Health (DOH) Vaccine Advisory Committee (VAC)

The public does not want mandatory liability COVID-19 vaccine products for its children. Please take into account all of the injuries that have been reported to the <https://openvaers.com/> website and the fact that children are less likely to become severely ill from Covid. <https://www.washington.edu/news/2022/11/02/infants-less-likely-to-contract-covid-develop-severe-symptoms-than-other-household-caregivers/>

Thank you for doing the right thing, and NOT subjecting our to mandatory covid vaccines.

Respectfully,

Pamela Thompson

From: Laura Kett
Sent: 10/24/2022 3:11:19 PM
To: DOH WSBOH
Cc:
Subject: adding vaccines to the childhood schedule

External Email

I have read for 100s of hours on the subject of vaccines: the history of, the science of and the politics. There have been bad vaccines and ones which seem to be good and those where the jury is out. I have read about how little MD's are trained in using and recommending them, the political/financial nature of the approval process and the heavy hand of the pharmaceutical industry in all of this...along with the NIH and NIAID.

I gave all the childhood vaccines to my daughters (who are now adults). One of them definitely suffered from eczema and asthma - which is now (after all these years) a known side-effect of some vaccines for some people. I did not like signing those permission forms but I had little choice and no direction at the time.

Drug companies have no incentive to reveal any safety flaws in their medicines. For vaccines on a schedule they have total indemnity. Have you seen what it takes to even fight clearly fatal flaws in medicines in court? The pharmacy companies have such deep pockets. They are not a benevolent power.

The science behind these covid vaccines is not clear, there are no long term results and there is no clear benefit for children to be taking these. I implore you based on solid science and compassion NOT to add these to the childhood schedule.

We need to have medical freedom in this area. We cannot vaccinate our way into health! Instead why not provide more nutrition, more health building initiatives (vitamin D was shown clearly to benefit - why not put that on the billboards?).

You have a big responsibility. Please do not make this political. Do not shame people who have chosen another way to health. Do not make this choice for the citizens.

Unvaccinated are not disease spreaders. Sick people are.

There are 10s of thousands of medical professionals who have either had to hide their concerns on this or have spoken up and had their license taken away for speaking against the mandates. And this is worldwide!

Thank you for reading to the end.

Laura Kett

Living in the beautiful PNW on the ancestral lands of the Duwamish people.

From: Class Ack Photography
Sent: 11/2/2022 5:56:48 PM
To: Sherls-Jones, Jamilia J (DOH),DOH Secretary's Office,Drummond, Heather M (DOH)
Cc:
Subject: Covid vaccines for kids

External Email

It is to my understanding that the WA Department of Health Vaccine Advisory Committee is meeting Thursday, November 3rd, to make vaccine recommendations to the BOH. Please understand the public (many of us PARENTS) does not want any (liability-free) COVID-19 products to be mandated for our kids. These shots should be taken BY CHOICE, same as a flu shot, not by mandate. Please give us the courtesy of respecting our wishes to do what WE feel is best for our children. Thank you for your time.

Stefanie Ackerknecht

From: Irene Hill
Sent: 10/31/2022 10:23:37 PM
To: DOH Secretary's Office
Cc:
Subject: Covid-19

External Email

To those whom should be concerned:

I am a WA state voter, residing in Appleton, Klickitat county.

I am strongly opposed to any mandates of Covid-19 products particularly to children. Of special concern is the fact that companies can not be held liable for negative and/or life threatening side effects.

I believe it is imperative that individuals have freedom to choose their own health interventions.

Please preserve that freedom at the VAC, this Thursday, Nov. 3.

Sincerely,
Irene Hill

From: Janice Haney
Sent: 11/3/2022 1:52:39 PM
To: DOH WSBOH,jhaney@outlook.com
Cc:
Subject: FW: Washington Department of Health Vaccine Recommendations

External Email

I strongly and vehemently oppose adding the COVID-19 shot to the immunization schedule for children. There is no long term data proving the vaccine is safe! Healthy children are not high risk to becoming seriously ill from COVID. Additionally, I oppose the vaccine at a time when: (1) the CDC has long declared the shot's ineffectiveness; (2) the President of the United States of America has declared "The Pandemic's Over;"(3) there is no scientific basis to include this shot to the schedule, especially for children.

My children have vowed to pull my grandchildren out of public school if this shot is mandated. Many other parents we know have vowed to do the same.

I NO LONGER TRUST OR HAVE ANY FAITH IN THE CDC, THE FDA OR THE WDOH. WHY ARE WE DISCUSSING THIS SHOT AGAIN AFTER THE TECHNICAL ADVISORY GROUP RECOMMENDED AGAINST IT EARLIER IN THE YEAR? THERE IS MORE EVIDENCE THAN EVER AS WHY THIS SHOT SHOULDN'T BE GIVEN TO CHILDREN. WHY, WHY, WHY IS THIS SHOT BEING PUSHED SO HARD BY THE GOVERNMENT? DID THEY BUY TOO MUCH VACCINE? ARE THEY IN BED WITH BIG PHARMA? IT MAKES NO SENSE. YOU USE TO BE SUCH TRUSTED AGENCIES, BUT I NO LONGER TRUST YOU. I DON'T KNOW ANYONE WHO DOES. COULD WE PLEASE BRING BACK SOME INTEGRITY TO OUR GOVERNMENT. PLEASE STOP THE INSANITY! RECOMMENDING THIS SHOT IS A CRIME AGAINST CHILDREN. DON'T FAIL TO PROTECT CHILDREN AS THE CDC AND FDA DID. YOU ARE MEDICAL PROFESSIONALS, ACT LIKE IT.

Sincerely,

Janice Haney

Facts:

* The COVID shots are not traditional vaccines. Rather, they are experimental genetic products with novel mechanisms of action and many unknown short- and especially long-term risks. The CDC and FDA did not determine the long-term safety of the current COVID shots in children before instituting current child vaccine policies. At least five years of testing/research are necessary before we can really understand the risks.

* After just one year of use in children, there is abundant evidence in official U.S. vaccine safety tracking databases that injuries from the COVID shots in children are catastrophic. The U.S. Vaccine Adverse Events Reporting System (VAERS) as of September 30, 2022 contains almost 28,000 adverse event reports in American children

6 months to 17 years, with 60 deaths and 433 near-deaths, 301 permanently disabled, and 985 reports of myocarditis.

* Other serious injuries in children include severe allergic reactions, blood clots and strokes, encephalitis/encephalopathy, and other autoimmune and neurologic disorders. In older persons there is evidence of loss of fertility and cancer. The CDC and FDA have failed to acknowledge, disclose or explain to the U.S. people the overwhelming evidence of injuries and deaths reported to official U.S. vaccine safety tracking databases and in the pharmaceutical companies' own clinical trial data.

* The 1,953 VAERS reports of myocarditis worldwide prompted a number of European countries to prohibit the COVID shot in children and teens. How can the CDC justify instead a vote to mandate it for school-age children?

* Healthy children under 18 have virtually no risk of death from COVID, a 99.995% recovery rate and the vast majority have minimal symptoms. CDC data show that most children (more than three out of four) already have developed natural immunity to the virus and thus have no demonstrated need for vaccination. There is no benefit to vaccinating children given the known serious health risks of the shot that parents and children may have to live with for the rest of their lives.

* The CDC and the FDA have promoted the false and misleading claims that, "COVID vaccines are safe and effective" and, "Benefits of vaccination outweigh the risks" but failed to provide objective quantitative evidence that supports their scientific basis. They have failed to acknowledge, disclose or explain to the U.S. people the overwhelming evidence of injuries and deaths reported to official U.S. vaccine safety tracking databases and in the pharmaceutical companies' own clinical trial data.

* During FDA's October 26, 2021 Vaccine Advisory Committee meeting, multiple advisors voiced concerns over COVID-19 vaccination among healthy children. FDA Advisor Dr. Mark Sawyer said, "We're all concerned about the myocarditis issue, and I do think the model has overestimated the hospitalizations prevented. I do think we need it as a tool for high-risk children." FDA adviser Dr. James Hildreth stated, "I do believe children at high risk should be vaccinated but vaccinating all the children to achieve that just seems a bit much for me."

* Parents' personal health decisions to accept or reject the vaccine for their minor children were made without their true voluntary informed consent due to intentional failure to provide complete and accurate information about risks, benefits or alternative options and, in numerous instances, coercion, retaliation or social restrictions. This violates the Nuremberg Code, parental rights and the fundamental human right of bodily autonomy.

From: Kristy Welles
Sent: 11/2/2022 3:59:04 PM
To: DOH WSBOH
Cc:
Subject: Requiring EUA Shots For Children

External Email

To Whom It May Concern:

My opinion of these shots is even more reinforced since I wrote to you last winter, when you were contemplating them to be required for children. They should be recalled immediately. Per the CDC's own statistics that have been made public, these shots neither prevent infection, nor stop transmission.

They have never been scrutinized under the normal length of time for drug trials, and people are not receiving informed consent.

Please do your research and see the CDC's own website VAERS, for the number of hospitalizations, injuries and deaths that have occurred as a result. Experts in the field say that VAERS accounts for only 1% of vaccine-related injuries and is under-reported.

See <https://www.openvaers.com>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.openvaers.com%2F&data=0>>

Sincerely,
Kristy Welles

From: Diana Franklin
Sent: 10/31/2022 12:28:04 PM
To: DOH WSBOH
Cc:
Subject: NO Covid Vaccine Mandate, PLEASE

External Email

I urge the members of the Washington Board of Health to vote not to add Covid vaccines to the immunization requirements for children in daycare and grades 1 - 12.

These vaccines are still experimental and were originally authorized only for emergency use. No one has any idea of their long-term health effects, and they are not without the potential for dangerous side effects. The CDC has come out saying the vaccines do not prevent transmission nor do they protect the persons immunized from contracting Covid.

Establishing a mandatory requirement for Covid vaccines is overstepping the rights of parents and children to make an informed choice they can live with.

Concerned,

Diana Franklin

From: Jeanne Dilger
Sent: 11/1/2022 7:41:40 AM
To: DOH WSBOH
Cc:
Subject: 776AC41C-CF2A-4CE4-BC13-789C6AA44915

External Email

Dear Sirs:

With all due respect, I am against forcing children or anyone else to receive the Covid Vaccines. It was authorized as an experimental vaccine only and it wasn't tested thoroughly. Please don't put into law any mandate that goes against the constitution in allowing us freedom of choice.

Thank you,

Jeanne Dilger

From: Lindsay Cox
Sent: 10/27/2022 4:17:49 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccine requirement in schools

External Email

I would like to ask you to take into consideration that the COVID vaccine is still in its early stages of testing and use, and not much is known about its long term affect on children at this time. Please don't use our youth as test subjects for the COVID vaccine. I consider the ultimate low is to prey on children, and giving them a controversial shot, not knowing the long term implications is no different. There is no actual scientific evidence that the COVID vaccine prevents people from contracting COVID, or keeps it from being transmitted to others. Please say no to mandatory vaccination for covid for children to be able to attend our schools.

Thank you,

Lindsay Cox

Sent from my iPhone

Pam Erickson

From: Janice Haney
Sent: 11/3/2022 1:41:10 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Drummond, Heather M (DOH), Sherls-Jones, Jamilia J (DOH), Janice Haney
Cc:
Subject: Washington Department of Health Vaccine Recommendations

External Email

I strongly and vehemently oppose adding the COVID-19 shot to the immunization schedule for children. There is no long term data proving the vaccine is safe! Healthy children are not high risk to becoming seriously ill from COVID. Additionally, I oppose the vaccine at a time when: (1) the CDC has long declared the shot's ineffectiveness; (2) the President of the United States of America has declared "The Pandemic's Over"; (3) there is no scientific basis to include this shot to the schedule, especially for children.

My children have vowed to pull my grandchildren out of public school if this shot is mandated. Many other parents we know have vowed to do the same.

I NO LONGER TRUST OR HAVE ANY FAITH IN THE CDC, THE FDA OR THE WDOH. WHY ARE WE DISCUSSING THIS SHOT AGAIN AFTER THE TECHNICAL ADVISORY GROUP RECOMMENDED AGAINST IT EARLIER IN THE YEAR? THERE IS MORE EVIDENCE THAN EVER AS WHY THIS SHOT SHOULDN'T BE GIVEN TO CHILDREN. WHY, WHY, WHY IS THIS SHOT BEING PUSHED SO HARD BY THE GOVERNMENT? DID THEY BUY TOO MUCH VACCINE? ARE THEY IN BED WITH BIG PHARMA? IT MAKES NO SENSE. YOU USE TO BE SUCH TRUSTED AGENCIES, BUT I NO LONGER TRUST YOU. I DON'T KNOW ANYONE WHO DOES. COULD WE PLEASE BRING BACK SOME INTEGRITY TO OUR GOVERNMENT. PLEASE STOP THE INSANITY! RECOMMENDING THIS SHOT IS A CRIME AGAINST CHILDREN. DON'T FAIL TO PROTECT CHILDREN AS THE CDC AND FDA DID. YOU ARE MEDICAL PROFESSIONALS, ACT LIKE IT.

Sincerely,

Janice Haney

Facts:

- * The COVID shots are not traditional vaccines. Rather, they are experimental genetic products with novel mechanisms of action and many unknown short- and especially long-term risks. The CDC and FDA did not determine the long-term safety of the current COVID shots in children before instituting current child vaccine policies. At least five years of testing/research are necessary before we can really understand the risks.
- * After just one year of use in children, there is abundant evidence in official U.S. vaccine safety tracking databases that injuries from the COVID shots in children are catastrophic. The U.S. Vaccine Adverse Events Reporting System (VAERS) as of September 30, 2022 contains almost 28,000 adverse event reports in American children 6 months to 17 years, with 60 deaths and 433 near-deaths, 301 permanently disabled, and 985 reports of myocarditis.
- * Other serious injuries in children include severe allergic reactions, blood clots and strokes, encephalitis/encephalopathy, and other autoimmune and neurologic disorders. In older persons there is evidence of loss of fertility and cancer. The CDC and FDA have failed to acknowledge, disclose or explain to the U.S. people the overwhelming evidence of injuries and deaths reported to official U.S. vaccine safety tracking databases and in

the pharmaceutical companies' own clinical trial data.

* The 1,953 VAERS reports of myocarditis worldwide prompted a number of European countries to prohibit the COVID shot in children and teens. How can the CDC justify instead a vote to mandate it for school-age children?

* Healthy children under 18 have virtually no risk of death from COVID, a 99.995% recovery rate and the vast majority have minimal symptoms. CDC data show that most children (more than three out of four) already have developed natural immunity to the virus and thus have no demonstrated need for vaccination. There is no benefit to vaccinating children given the known serious health risks of the shot that parents and children may have to live with for the rest of their lives.

* The CDC and the FDA have promoted the false and misleading claims that, "COVID vaccines are safe and effective" and, "Benefits of vaccination outweigh the risks" but failed to provide objective quantitative evidence that supports their scientific basis. They have failed to acknowledge, disclose or explain to the U.S. people the overwhelming evidence of injuries and deaths reported to official U.S. vaccine safety tracking databases and in the pharmaceutical companies' own clinical trial data.

* During FDA's October 26, 2021 Vaccine Advisory Committee meeting, multiple advisors voiced concerns over COVID-19 vaccination among healthy children. FDA Advisor Dr. Mark Sawyer said, "We're all concerned about the myocarditis issue, and I do think the model has overestimated the hospitalizations prevented. I do think we need it as a tool for high-risk children." FDA adviser Dr. James Hildreth stated, "I do believe children at high risk should be vaccinated but vaccinating all the children to achieve that just seems a bit much for me."

* Parents' personal health decisions to accept or reject the vaccine for their minor children were made without their true voluntary informed consent due to intentional failure to provide complete and accurate information about risks, benefits or alternative options and, in numerous instances, coercion, retaliation or social restrictions. This violates the Nuremberg Code, parental rights and the fundamental human right of bodily autonomy.

From: Aline Bright
Sent: 11/2/2022 5:42:54 PM
To: DOH Secretary's Office
Cc:
Subject: Covid-19 products mandates

External Email

Public comment: As a former homeschool teacher/mother and medical technician I want to express to you that I am completely against the Covid-19 product mandates for children. The children are also at low risk for acquiring, being harmed by Covid-19, nor do the products prevent the transmission. There has not been enough time to safely test these products and there is growing concern that they are harmful. Thank you for your time and consideration for our children and our future.

Aline Bright

From: happydog023@centurylink.net
Sent: 10/23/2022 10:39:38 AM
To: DOH WSBOH
Cc:
Subject: Covid biologic added to school vaccination schedule

External Email

Hello,

First of all this Covid MRNA shot is NOT a vaccine. It does not prevent transmission, infection, or death. This alone disqualifies it from being put on the VACCINE schedule. It is an experimental BIOLOGIC gene therapy which alters RNA and DNA.

According to the Nuremburg Code and numerous other US Codes such as Title 18, sec. 241 & 242, 21 Code Fed reg. sec. 50.23 & 24, it is illegal to make anyone participate in an experimental program, or accept any medical treatment using coercion. Placing any medication, injection, gene therapy, or vaccine on the school schedule, requiring it in order for a child to receive a public education, paid for by OUR taxpayer dollars, it a crime and is coercion. Perhaps we should withhold our taxpayer dollars from the schools? Perhaps a class action lawsuit against those forcing this onto our children? Perhaps filing numerous complaints against surety bonds?

What right do you imagine you have to force any parent to risk/cause potential harm to their child as a condition to receive an education, funded by the collection and redistribution of our tax dollars? YOU work for the taxpayers and their children. Without our funding your jobs will be eliminated.

These biological treatments are proven to have no benefit for children, and are proven and documented to cause harm and even death. The VAERS reporting system has substantial documentation of adverse effects, and it is estimated only about 1% of adverse effects are reported to VAERS. Myocarditis is not an injury to be taken lightly in anyone, much less a child.

That you would even consider putting this Covid biologic on the schedule, or that ANY child should be forced to accept a biologic, medical treatment, or vaccine by a school board member, board of health member, the CDC, the FDA, or any agency is a criminal action. These agencies are factually compromised and are revolving doors for politicians, corporate heads, and pharmaceutical employees for profit, power and political gain.

I recently heard an interesting comment made by a WEF member. Science is not about facts, or truth, it is about power. It is a power structure used to advance unpopular agendas that would never be approved of, except by declaring an emergency.

DO NOT do this. The people will be watching.

Donna Moore

From: Allie Hawks
Sent: 10/21/2022 5:24:06 PM
To: DOH WSBOH
Cc:
Subject: re: WAC 246-105-030

External Email

I am reaching out to tell you that I am opposed to your adding the Covid 19 Vaccine or any of the Covid vaccines to the schedule for children to enter school. This vaccine is NOT proven effective and has dismal side effects. Our children are not guinea pigs. Please do not treat them as such.

Sincerely Allisa Hawks, Tacoma, WA

From: Yael Kantor
Sent: 10/31/2022 10:18:08 PM
To: DOH WSBOH
Cc:
Subject: Adding vaccines to the childhood schedule

External Email

It is a known fact that the Covid vaccine does not prevent transmission.
It is a known fact that the Covid vaccine has caused myocarditis in young children.
It is a known fact that Pfizer is a corrupt organization that has paid out billions in fines for malfeasance.

Your support of adding this vaccine to the childhood schedule is not based on science or safety (as those studies have not been done). It is based on back door agreements, bribes? and pay outs.

Watching the acip agree to add this vaccine based on no valid scientific justification is abhorrent.

I suggest you research what other countries have found and all vote no on adding this to the schedule.

We the people have very little faith in our public health departments after their behavior during Covid and this will drive the lack of confidence down even further and add a large faction of the population that did not previously even question the vaccine schedule.

Vote no on the addition of this or any other vaccines to an already overloaded unreasonable damaging schedule

Thank you
Yael

Sent from my iPhone

From: DOH Information
Sent: 11/1/2022 3:58:54 PM
To: DOH Secretary's Office,DOH WSBOH,DOH PCH Immunization Child Profile
Cc:
Subject: FW: Question/Comment from the public



attachments\7CD237DCB8CD4608_image001.png

Hello,

Below is feedback on the childhood immunization schedule for school children and the covid vaccine.

Thank you,

Customer Service Specialist 2

Center for Public Affairs (C4PA)

Washington State Department of Health

DOH.Information@DOH.WA.GOV <mailto:DOH.Information@DOH.WA.GOV>

1-800-525-0127 | www.doh.wa.gov

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.doh.wa.gov%2F&data=05%7>>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.doh.wa.gov%2FNewsroom%7>>

From: DOH Feedback <doh.information@doh.wa.gov>
Sent: Monday, October 31, 2022 7:22 PM
To: DOH Information <DOH.Information@DOH.WA.GOV>
Subject: Question/Comment from the public

The following survey response is submitted:

1.

Please select one:

Other

2.

Please enter your comments or questions in the space provided below:

I would like to express my deep concern about the plans to mandate the COVID vaccine in schools as part of the regularly required vaccines to attend school. It is NOT a well tested vaccine and there is a reasonable amount of data that suggests it can actually be HARMFUL. Many thousands upon thousands of people got the COVID shot plus the booster and STILL got COVID. We don't require flu shots for the kids...why the COVID shot? Let the parents decide what is right for their own child. I know many parents who will pull their kids out of school if the vaccine is required.

3.

If you are sending feedback on one of our Web pages, please paste the URL here:
(no answer)

4.

Would you like a response?

Tell us how to get in touch with you.

Name:
(no answer)

Email:
(no answer)
Telephone:
(no answer)

5.

To receive a confirmation of your submission, please enter your email address again in the space provided below.

kcushman6@yahoo.com <mailto:kcushman6@yahoo.com>

From: DOH Information
Sent: 11/4/2022 11:37:57 AM
To: DOH Secretary's Office,DOH PCH Immunization Child Profile,DOH WSBOH
Cc:
Subject: FW: No mandatory covid vaccine for children



attachments\91EBBF2B05474CE3_image001.png

Hello,

Below is feedback regarding the childhood immunizations for covid.

Thank you,

Customer Service Specialist 2

Center for Public Affairs (C4PA)

Washington State Department of Health

DOH.Information@DOH.WA.GOV <mailto:DOH.Information@DOH.WA.GOV>

1-800-525-0127 | www.doh.wa.gov

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.doh.wa.gov%2F&data=05%7>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.doh.wa.gov%2FNewsroom%7>

From: DOH OS Civil Rights <Civil.Rights@doh.wa.gov>
Sent: Thursday, November 3, 2022 3:07 PM
To: DOH Information <DOH.Information@DOH.WA.GOV>
Subject: FW: No mandatory covid vaccine for children

From: annmarie.adams97 <annmarie.adams97@yahoo.com
<mailto:annmarie.adams97@yahoo.com> >
Sent: Wednesday, November 2, 2022 11:34 AM
To: DOH OS Civil Rights <Civil.Rights@doh.wa.gov <mailto:Civil.Rights@doh.wa.gov> >
Cc: Ann Adams/Mobile <annmarie.adams97@yahoo.com
<mailto:annmarie.adams97@yahoo.com> >
Subject: No mandatory covid vaccine for children

External Email

I cannot believe that after 32 months we're still having this conversation.

Everyone on this board knows that these vaccines were not vetted appropriately, that every single one of the pharmacy companies have fudged the data to push this out.

We are seeing permanent medical injuries to children and adults from the side effects of the vaccines. With the CDC's horrible decision they have voided any individual's ability to sue these companies for their malpractice.

Absolutely shameful.

We are a Constitutional Federal Republic - that means you work for the people. The people have made it very clear - medical decisions are personal and not to be regulated or strong-armed by any government.

I'll leave you with a quote from Abraham Lincoln

'We the people are the rightful masters of both Congress and the courts, not to overthrow the Constitution but to overthrow the men who pervert the Constitution'

Your decision will impact every child in this state and put the nail in the coffin for public education.

AnnMarie Adams

360-510-7139

Sent from my T-Mobile 5G Device

From: Carolyn Long
Sent: 11/2/2022 8:20:50 PM
To: DOH WSBOH
Cc:
Subject: Covid Immunization

External Email

The Covid Shot should not be on the immunization schedule for children in Washington State.

Studies have shown that the shot may be more dangerous than Covid itself. My five grandchildren have all had Covid and all had mild cases lasting less than a week. They were not vaccinated.

We should not give an experimental shot to our children.

Thank you
Carolyn Long
Port Angeles

Sent from my iPhone

From: j
Sent: 10/25/2022 10:18:19 PM
To: j
Cc:
Subject: Part 2 is LIVE! The REAL ANTHONY FAUCI, THE MOVIE

External Email

Get Part 1 here: The Real Anthony Fauci (therealanthonyfaucimovie.com)
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.therealanthonyfaucimovie.com>>

This method has been banned by Pharma for being "too cheap".

<<https://link.therealanthonyfaucimovie.com/a/229/open/9842317/126797573/13eab5907094678aed86bd>>

<https://cdn-m4m.chd01.com/pro/uploads/account_229/651483/TRAF_Email_Header.png>

If you missed the announcement, The Real Anthony Fauci Movie Part 2 is LIVE NOW.
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Flink.therealanthonyfaucimovie.com>>

Studies in Israel, the U.K., and Scotland show that if you're triple or quadruple vaccinated it actually increases your risk of getting COVID.

Vaccine injuries are becoming more and more common...

But there's an astonishing method against all this that you should be aware of.

Dr. Paul Marik explains what it is and why it's been banned by Big Pharma for being "too cheap" here.
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Flink.therealanthonyfaucimovie.com>>

If you've been dealing with brain fog lately, you could've been severely damaged by vaccines without even noticing...

But this doctor's strong insight on the subject will give you alternative solutions...

So make sure to check it out now.

With appreciation,
The Real Anthony Fauci Team.

P.S. Having access to critical health information could be the difference between life and death...

And with this information being at risk of censorship, you'll want to make sure you have the information you need, if/when you need it.

The best way to ensure that is to get lifetime access to this series at 50% OFF here.

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Flink.therealanthonyfaucimovie.com>

If you happen to purchase anything Jeff Hays Films recommends, in this or any of our communications, it's likely we will receive some kind of affiliate compensation. Still, we only recommend stuff that we truly believe in and share with our friends and family. If you ever have an issue with anything we recommend please let us know. We want to make sure we are always serving you at the highest level. FTC DISCLOSURE: Any health claims shared by viewers, students, friends, subscribers, or clients are understood to be true and accurate, but are not verified in any way. Any products, programs, or personal recommendations made in this or any email communication from Jeff Hays Films for 3rd parties will likely result in some form of compensation from said 3rd party. Always do your own due diligence and use your own judgment when making buying decisions and investments. Always consult a physician before making any health-related decisions. For more information click here

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Flink.therealanthonyfaucimovie.com> for our terms of service. *Results may not be typical and may vary from person to person.

The Privacy Policy

pertains to the online information collection practices for Revealed Films. Specifically, it outlines the types of information that we gather about you while you are using any Revealed Films ("RF") website (the "Site") and any or all of its subdomains; and the ways in which we use this information.

By visiting and using the Site, you agree that any dispute over privacy is governed by this Privacy Policy. Because the internet is ever-evolving, we may change our Privacy Policy at some point in the future and post the changes to this Privacy Policy on this website and update the Effective Date of the policy to reflect the date of the changes. By continuing to use the Site, you accept the Privacy Policy as modified.

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This email was sent to carolyn8chew@gmail.com
<mailto:carolyn8chew@gmail.com> by hello@therealanthonyfaucimovie.com
<mailto:hello@therealanthonyfaucimovie.com>

870 E North Union Ave, Midvale, UT 84047

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From: Kahler, Kelie (SBOH)
Sent: 10/25/2022 7:56:32 AM
To: DOH WSBOH
Cc:
Subject: FW: Covid vaccine school schedule

-----Original Message-----

From: Laurie Sherwin <Ldsherwin@comcast.net>
Sent: Saturday, October 22, 2022 1:17 PM
To: Kahler, Kelie (SBOH) <Kelie.Kahler@sboh.wa.gov>
Subject: Covid vaccine school schedule

External Email

Hello,

I'm wondering if the Covid vaccine is going to be added to the children's vaccine schedule for school in Wa.? I know they took a vote to wait for more information on this, after forming a special committee, etc. I'm curious if another vote is forthcoming?

I'm really hoping the Wa. DOH leads the nation in deciding this by using data & facts, and not simply going by the CDC committee recommendation. Something has hijacked current CDC decision makers, and facts, data, & science concerning children's side effects from these vaccines, have been ignored. This is completely unacceptable, as their decision isn't just reckless, it would result in one of the largest tragedies against our children ever. This is not an exaggeration by any means.

Please pass my email to whomever you see fit in addressing this issue. I appreciate your time reading this. We may only have one chance to make a difference that will effect our future forever. This might be the chance.

Sincerely,
Laurie Sherwin
Des Moines, Wa.

From: Eldon Clark
Sent: 10/31/2022 4:32:39 PM
To: DOH WSBOH
Cc:
Subject: Mandatory Covid Vac

External Email

Please do not make Covid Vac mandatory for our school children. Parents need to be the people in control of what vaccinations their children receive, not school districts, not states, not national governments. What ever happened to our freedoms? Do not make this covid vac mandatory. Sincerely, Judy M. Clark, voting citizen of WA state and the United States of America.

Sent from my iPad

From: Carrie Lippold
Sent: 11/3/2022 9:47:16 AM
To: DOH WSBOH
Cc:
Subject: FW: Committee Meeting: November 3 2022

External Email

Sent from my Sprint Samsung Galaxy Phone.

----- Original message -----

From: Carrie Lippold <carrie.lippold@hotmail.com>
Date: 11/3/22 9:41 AM (GMT-08:00)
To: secretary@doh.wa.gov
Subject: Committee Meeting: November 3 2022

Dear Secretary of Dept. Of Health, Washington

This email is to share my request: please advise all committee members that myself, my family, my siblings and their children and all agree that there should be No Vaccine Mandates in our state. Ever.

Why use force when the law requires informed consent?

Why risk health problems from side effects previously unknown due to rushed time constraints?

Why put the government, the state and the citizens of Washington at risk for possible potential legal claims, against said government, for compensation for damages?

It's clear more time is needed to research these concerns, to gather and review all the current information coming forth, and share this with the public.

People deserve a government that allows for informed consent.

With new information coming forth daily, including updates on efficacy and side effects, statements on the C.D.C.'s official website, as well as countless other recent scientific medical control studies, indicating that the current vaccines do not prevent transmission of Covid, and this apparently following the statements made by Pfizer executives last week stating this, it is becoming increasingly clear that after two years of efforts to stop the spread of covid, the manufacturers of the experimental vaccines are now disclosing through FOIA requests information that says the vaccines don't prevent infection or transmission.

Which brings me to my point:

There seems to be plenty of information available, because enough time has passed, that any mandate would and could possibly lead to legal claims against governmental bodies who forced mandates and vaccinations.

Let's please not put our state in that precarious position. For all the many obvious reasons.

Thank you for your time and consideration in these matters.

Sincerely,
Carrie Lippold
carrie.lippold@gmail.com
Washington

Sent from my Sprint Samsung Galaxy Phone.

From: Eldon Clark
Sent: 10/31/2022 4:39:25 PM
To: DOH WSBOH
Cc:
Subject: Mandatory Covid Vac

External Email

I do not want this foisted upon my children, grandchildren, or great grand children. It is not proven to work and may be detrimental to their health. There should be no mandatory Covid or any other vaccine for anyone in a free United States of America. I am not against vaccines but there are so many now and given in such quantity that it is becoming dangerous. Let parents choose what is best for their children. We are not a state run or under communist control where others make our decisions for us. Do not allow mandatory covid vac. Thank you, Eldon Clark

Sent from my iPad

From: Linda Thomason
Sent: 11/1/2022 10:05:40 AM
To: DOH WSBOH
Cc:
Subject: Vaccines

External Email

Do NOT make Covid vaccines mandatory for our children!!

Sent from my iPhone

From: Sarah Kenady
Sent: 11/1/2022 9:36:20 PM
To: DOH WSBOH
Cc:
Subject: Vaccine mandate public comment

External Email

To WA State Health Officials,

I am writing to convey my strong stand against any COVID vaccine mandates in our state, including our schools. Evidence continues to mount that these vaccines are ineffective, while long-term effects continue to present, sometimes fatally. With even the CDC acknowledging the shots do not prevent infection or transmission, and that any protection fades rapidly, the cost does not justify making our children test subjects for drug companies.

Furthermore, it has been proven that the existing COVID vaccines fail to meet your own Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030. This will undoubtedly result in lawsuits at the cost of taxpayer's money, a fiscally irresponsible move during a recession when we need to be utilizing state funds as wisely as ever.

I implore you to vote NO to this mandate.

Thank you,

Sarah Kenady
Kent, WA
206-579-5783

From: Christine Monson
Sent: 10/31/2022 7:38:28 PM
To: DOH WSBOH
Cc:
Subject: Vaccine mandate

External Email

I do not agree with vaccine

From: Linda Sickles
Sent: 11/1/2022 8:00:14 AM
To: DOH Secretary's Office
Cc:
Subject: Covid-19

External Email

There should be NO Covid-19 products mandated for our kids!

From: haroleefairley@aol.com
Sent: 10/31/2022 5:31:31 PM
To: haroleefairley@aol.com
Cc:
Subject: Vaccine Mandates for Children

External Email

Covid shots should absolutely NOT be a requirement for our children to attend school or childcare.

Children are at extremely low risk for Covid.
The vaccines are still only EUA (emergency use authorized).
There are no long-term studies to document any history of safety.
Studies do now document that vaccinated and unvaccinated can both transmit Covid, therefore the vaccine apparently does not stop the spread of the disease.

For these reasons I would appreciate your consideration to SAY NO to state mandated Covid-19 shots for children in Washington State.

Sincerely,

Harolee Fairley
Graham, WA 98338

From: Scott Newell

Sent: 11/2/2022 9:11:20 PM

To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)

Cc:

Subject: VAC meeting - opposed to adding Covid-19 Transfection to children's Vaccine Schedule

External Email

Hello,

I am requesting that you do not add the Covid-19 Vaccination to the children's vaccine schedule.

- * Children are at very low risk of harm from Covid-19 infection.
- * There is a greater risk of harm from the mRNA injection than from infection for children.
- * The original Wuhan strain is no longer present.
- * The Bivalent Vaccinations have not been adequately tested.

Thank-you for your consideration,

Scott Newell
Bellingham, WA

From: Colleen Gudge
Sent: 10/24/2022 9:05:46 AM
To: DOH WSBOH
Cc:
Subject: No longer a need to mandate

External Email

To Whom this Concerns;

With all due respect, with increasing recovery rates from the virus, natural immunity into effect, a vaccine and a pill from Pfizer, there is no valid reason to continue the mandates.

It is very clear that this virus is no longer a danger.

I sincerely hope you will consider my comment and take it to heart when you make your decision that can either adversely effect us or bring peace and prosperity.

Thank you for your consideration,

Colleen Gudge

From: John Pavlick
Sent: 10/24/2022 11:38:28 AM
To: DOH WSBOH
Cc:
Subject: Mandatory covid vaccines for school children

External Email

To the Washington state Board of Health,

The recent decision by the CDC to recommend covid vaccinations for children ages 6 months needs to be disregarded by the BoH.

The Washington state BoH made the wise decision last year to leave the shots off the schedule. I highly recommend that the BoH stick with that decision.

If it has not become more obvious, the covid vaccine and multiple boosters are neither safe nor effective. It is merely poisoning people and providing a steady revenue stream for big pharma. Having had or not had the covid vaccine has had little to no impact on our school kids. Not to mention, children are the one demographic affected least by covid 19 and its various mutations.

The TAG mentioned that they needed to rebuild trust with the citizens of Washington. If you take this issue up again, you will NEVER regain it.

The solution to all this is very simple: let parents make their own decision in regards to vaccinating their children. Make the covid vaccine voluntary, not mandatory.

All of us parents are watching you and encouraging you to disregard the CDC's decision and leave the covid vaccine/boosters off the schedule for Washington state school children.

Sincerely,
John Pavlick
Concerned parent.

Sent via the Samsung Galaxy A13 5G,an AT&T 5G smartphone

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From: C. Alphenia
Sent: 10/19/2022 1:10:44 PM
To: DOH WSBOH,DOH Secretary's Office
Cc:
Subject: Thank You for Listening to the Citizens of WA State

External Email

Dear BOH Members:

Thank you for listening to the concerns of us as citizens of Washington State and for voting to adopt the TAG's recommendation to not add the COVID-19 vaccine to Washington's list of required immunizations for child care and school entry at your April 13 virtual public meeting. We are confident that the emerging scientific data will continue to affirm your decision. Thank you for your thoughtful consideration in your role to protect the health of the children in our State.

Respectfully,
Corrine

From: Stacey Porter
Sent: 10/31/2022 11:04:22 AM
To: DOH WSBOH
Cc:
Subject: Vaccine Requirements

External Email

Good morning!

Just a quick email to say, our family does not want any liability-free COVID-19 products to be mandated for our kids. Please consider keeping the vaccine requirements as they are.

Thank you for your time!
Stacey

From: Geri Rubano
Sent: 10/21/2022 10:41:29 PM
To: DOH WSBOH
Cc:
Subject: COVID Shots Do NOT Belong on the Childhood Schedule

External Email

Dear BOH members,

Despite immense blowback, Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP) voted unanimously to add COVID-19 injections to its recommended vaccine schedule for infants, children and adolescents. This is a declaration of war on our children and it's your job as elected and public health officials to protect the health and well-being of our children.

The risks demonstrably outweigh the benefits of COVID-19 vaccination in children. We need your support to ensure the COVID-19 injection doesn't become a mandated vaccine for children to attend school in our state.

If you don't act now our state will universally adopt the CDC's recommended vaccination schedule. It would be irresponsible to recommend these injections when it is known they don't prevent transmission or infection of COVID-19, provide no significant benefit and pose serious risks, such as myocarditis. Another concern to consider is these vaccines haven't had long-term studies and are currently in clinical trials.

Proceeding with COVID-19 vaccine mandates is a blatant disregard for our children's long term health. As you consider adding COVID-19 injections to the required list of childhood vaccines to attend school, please take a look at the science:

There is no COVID-19 emergency for children.

Children under 18 with no co-morbidities have virtually no risk of death or serious illness. They have a 99.95% recovery rate and the vast majority of children have minimal symptoms. A study published in Nature describes how children mount effective, robust and sustained immune responses to COVID-19. And the CDC's own data show that at least 85% of children already have this superior natural immunity.

mRNA shots offer little in the way of protection.

There is no clinically significant health benefit from the shots. Preliminary data showed the shots were only about 44% effective at preventing symptomatic infection in children 6 months to 2 years old, and 37% effective in children ages 2 to 5 — both below the 50% level that regulators had generally called the minimum level for EUA approval in 2020. In New York, officials observed that Pfizer's efficacy against Omicron plummeted from 68% to 12% after 7 weeks in children ages 5 to 11.

Injuries from COVID-19 shots in children are catastrophic.

Vaccinated children face a substantial risk of myocarditis. Moderna's EUA application, originally filed in June 2021, was delayed due to a clear safety signal for myocarditis, which has already prompted a number of European countries to prohibit its use in young people. Additionally, the Vaccine Adverse Events Reporting System (VAERS) already has over 58,500 reports of adverse events in children, including 163 deaths (as of Oct. 7, 2022) and a growing number of reports of encephalopathies, clotting issues, diabetes and neurological issues in children following COVID-19 shots.

Several other countries are limiting or suspending the use of mRNA shots in children

and adolescents.

Germany, France, Sweden, Finland, Norway, Denmark, UK and Australia have changed policies and many are no longer recommending the COVID-19 injection to younger age groups without co-morbidities.

Pharmaceutical products that cannot meet standard efficacy thresholds and have been linked to serious harm in thousands of children, including death, are unnecessary for an illness that healthy children can easily recover from.

I strongly urge you to keep COVID-19 shots off of the required list of immunizations to attend school. Our children deserve better.

Thank you!

Gerri Rubano

From: audrey55@comcast.net
Sent: 11/4/2022 11:32:46 AM
To: DOH WSBOH
Cc:
Subject: Please OPPOSE any mandate for COVID-19 vaccination for school now and in the future

External Email

To WA State Board of Health:

I sent the following comment to the WA DOH Vaccine Advisory Committee on Wed, Nov 2, 2022 and would like it to be submitted for comment in the Board of Health's public comment for the upcoming meeting on Nov 9, 2022.

The COVID-19 vaccination should not be a requirement for anyone, but especially for children or teens who have nearly zero mortality risk for COVID. The vaccine is a new experimental shot that has not been subjected to normal drug trials for safety. COVID-19 is not an "emergency" for children and no "emergency use authorization" vaccine should be mandated for a population that is NOT experiencing emergent health threats from the virus.

The COVID-19 vaccinations do not work---they do not protect against infection and they do not protect against transmission. My sister's nursing facility is a perfect example where they are currently in the middle of the second major COVID outbreak even though 100% are vaccinated.

Perhaps most important, the long-term health risks to children have NEVER been investigated. Reproduction health has been a significant side effect of the COVID-19 shot in adults and could have an even worse future effect for children. Vaccine manufacturers have no liability, and therefore, no incentive to produce safe vaccines.

In 1986 my son's vaccine reaction was a major contributor to a lifetime of disability, which is now costing the Washington State Developmental Disability Administration more than \$40K annually, while the vaccine manufacturer contributes not a dime to his support.

Requiring school children to be vaccinated with an experimental vaccine that has not gone through rigorous testing for safety is unconscionable and could potentially have devastating effects in many unexpected directions.

We don't know ANYTHING about the long-term health and socioeconomic effects of this vaccine. Please do not recommend or mandate it for children.

Audrey Adams

14411 150th Ave SE

Renton, WA 98059

From: Marisa De Lisle
Sent: 11/1/2022 8:14:13 AM
To: DOH WSBOH
Cc:
Subject: COVID 19 shot for K-12

External Email

This comment is intended for the members of the VAC and the BOH regarding adding the COVID 19 shot to the K-12 school schedule.

I would like to oppose the addition of this shot to the school schedule. Immunizations that have been required to attend school and/or day care have historically been based on the ability to reduce/eliminate transmission of a virus.

The COVID 19 shot does not reduce transmission of the virus, therefore it is an unreasonable recommendation for families and children in WA state.

Obtaining a COVID 19 shot to attend K-12 and/or daycare should be left up to the individual families since this modality has proven to act more like a treatment than an immunization and cannot reduce transmission.

Improving the quality of air circulation within our facilities shows to be more effective in reducing transmission of COVID 19 compared to the shot. There are alternatives to mandating this shot.

I also oppose this shot because it is still in emergency use and has not been approved by the FDA. If the VAC and BOH recommend this shot they are telling families in WA state that they are OK experimenting on our children. The industry is still collecting long term information about effects of this modality. It would be irresponsible to mandate this for a child to obtain an education and would drive more families out of the public school system.

Sincerely,
Dr. Marisa De Lisle

From: DOH Information
Sent: 11/3/2022 8:39:41 AM
To: DOH WSBOH
Cc:
Subject: Vaccine schedule comment



attachments\86C699D12D654EC7_image001.png

Hello,

I believe this is intended for the Board regarding the vaccine schedule for school immunizations.

Thank you

Alexandra Moore

Customer Service Specialist

Executive Office of Public Affairs & Equity (formerly C4PA)

Washington State Department of Health

DOH.Information@doh.wa.gov

800-525-0127 | www.doh.wa.gov

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From: DOH Feedback <doh.information@doh.wa.gov>
Sent: Wednesday, November 2, 2022 8:21 PM
To: DOH Information <DOH.Information@DOH.WA.GOV>
Subject: Question/Comment from the public

The following survey response is submitted:

1.

Please select one:

mandating these "vaccines" for children.

3.

If you are sending feedback on one of our Web pages, please paste the URL here:
(no answer)

4.

Would you like a response?

Tell us how to get in touch with you.

Name:

Pam

Email:

Pc.erickson@yahoo.com <mailto:Pc.erickson@yahoo.com>

Telephone:

9564339217

5.

To receive a confirmation of your submission, please enter your email address again in the space provided below.

Pc.erickson@yahoo.com <mailto:Pc.erickson@yahoo.com>

From: Charles Miller
Sent: 11/3/2022 5:04:33 AM
To: DOH WSBOH
Subject: DO NOT MANDATE THE COVID VACCINE AS AN IMMUNIZATION REQUIREMENT FOR WA ST SCHOOLS

External Email

To whom (all) it may concern,

I am writing to you in regards to your intent/desire to mandate the "covid" vaccination as part of the immunization requirements for attending school in Washington state.

I fully disagree with even the thought of considering this mandate. The CDC does not have the power to force these shots on people. They are not an elected body and have no power to force or control anything, including these "vaccines".

I cannot believe that this would even be a consideration in light of the factual evidence proving that all versions of these vaccinations have literally caused injury and fatalities to a vast majority of people who have received them.

It's been proven that children are least likely to contract the "covid" virus and even if they do, they suffer no more than they would if they had contracted influenza. So why even consider a mandate? Do you hate children that much?

It has also been proven that these shots also cause myocarditis, pericarditis, significant clotting of arteries and vessels within the vascular system, not to mention the effects it has on the neurological and nervous system.

To even consider mandating these shots as a requirement to attend school is sheer lunacy and extremely irresponsible.

We are already experiencing some of the most upsetting times this country has ever faced at the hands of a federal government who has shown itself to be the most anti-American government in the history of our nation.

Our children are our future but, if you mandate this "vaccination" that would change, for the worse. Mandating this vaccine could even be considered genocidal.

It is up to you to stop the assault on our children. You need to protect them, not endanger them with decisions like the one you are promoting with this mandate.

If you do one good thing in life, let it be not mandating our children to a life of injury or potential death.

To mandate this "vaccine" makes you nothing less than monsters. It would prove you to be evil and unworthy of the public's trust and respect.

Do the right thing.

And you can rest assured that I am not alone in this battle for the health and safety of our children and that includes not mandating this lethal cocktail as a requirement for attending school in Washington state on ANY level.

PROTECT OUR CHILDREN! DO NOT MANDATE THIS POISON!

Sincerely,

Charles M Miller Jr

Sent via the Samsung Galaxy S8 Active, an AT&T 5G Evolution capable smartphone

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From: Gregory Lawson
Sent: 11/2/2022 7:47:56 PM
To: DOH Secretary's Office
Cc:
Subject: covid vaccines

External Email

Please do not make these mandatory or highly recommended. There is no substantial science to show that these are beneficial in children and they may even have a higher risk vs benefit ratio. And children are already at such a low risk of dying from covid. Vaccines for children do not make sense.

Greg Lawson
Camano Island

From: j
Sent: 10/22/2022 12:52:18 PM
To: superintendent@ousd.org,Reykdal, Chris
(DOHi),superintendent@lausd.net,jastman@oakwoodschoo.org,office@chabotelementary.org

Cc:
Subject: CDC just did the UNTHINKABLE!! Millions of Children will Die!!

External Email

Dear Ones,
No one can stand aside and not ACT now that the horrendous TRUTH is emerging about the CDC and the eugenics agenda to sterilize and kill our children!! No vaccine since 1986 has been safety tested....let that FACT sink it!! Love to all, Mary

<https://www.stopworldcontrol.com/cd>
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ffloj291.keap-link017.com%2Fv2%2Fclick%2Ff3fd08da7091ef49678715115edc5d5a%2FeJyNkMsKwjAQRf9I1sXa1orJroiUWibVKWHbe38mb9UJJkTkkymzS4rtjCOP9Wikbi5e3sLFN1NPGtx6avh0SnPnxFtS8Ow67pZi8Z2xinOfGFn1IyZJADLYWYj&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cce5f6a6c6e1148a12f0108dab466e9e2%7C11d0>>

<https://mail.aol.com/webmail-std/en-us/suite> from Robt. Kennedy Jr.

From: Rita Hayes
Sent: 11/2/2022 9:42:51 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: No Covid Shots on CDC Pediatric Schedule

External Email

I strongly object to the addition of Covid shots to the CDC Pediatric Schedule since they have not been proven to be safe and or effective.

Rita Hayes
Snoqualmie, WA

From: JC Warren
Sent: 10/31/2022 3:05:04 PM
To: DOH WSBOH
Cc:
Subject: Board of Health COVID-19 injection requirements

External Email

Dear Board of Health members,

Regarding the addition of COVID-19 mRNA injections to the vaccination list required for children to attend public schools. Considering the well-established fact that children have almost zero risk of COVID-19 infection and an essentially zero risk of serious illness if infected, it would most likely be extremely detrimental to the long-term health of Washington state school children to require mRNA injections which not only have not been tested for long-term safety but the rapidly mounting evidence of harm from the injections is impossible to ignore.

Please protect school-aged children in Washington state by rejecting harm inducing, liability free COVID-19 injections.

Sincerely,

JC Warren

Sammamish, WA

From: Aftan Danielle Long
Sent: 10/22/2022 10:31:45 AM
To: DOH WSBOH
Cc:
Subject: Vaccine mandates

External Email

To whom it may concern,

I am writing to you as a mother of two children in the public school system, with another on the way. I have spent much time sifting through data and information as to how to approach vaccines and whether or not they are good for my children or not. Both my older two have had all the childhood vaccinations, and I was debating on whether or not I would do the same with my child due to be born in December. I have chosen to follow through with all the basic childhood vaccinations because I want all my children to have safeguards against the awful sicknesses that can come. However, none of us have had the COVID vaccination, and I do not intend on ever having any of my family receive them. We have all had COVID and recovered just fine from it. Our natural immunity is what we choose and I am formally requesting you add my vote for not forcing students to have the COVID vaccination. I know several people who have had the COVID vaccination and they have gotten COVID more than we have. I truly hope it doesn't ever come to a decision where I feel cornered into making a decision to have to withdraw my children from school because I refuse to accept the COVID vaccination as a mandatory shot.

If you have any further questions please don't hesitate to contact me.

Thank you in advance,

Aftan Long

From: Wendy Wilhelm
Sent: 11/1/2022 8:46:57 AM
To: DOH WSBOH
Subject: NO to adding Covid Vaccine to pediatric schedule

External Email

I am writing you to express strong opposition to adding experimental covid vaccines to the Pediatric Schedule.

From: Rebecca Porter
Sent: 11/1/2022 6:16:24 PM
To: DOH WSBOH
Cc:
Subject: Please stop the insanity

External Email

I am a school teacher in the Olympia School District, and I am strongly opposed to requiring these shots for anyone, let alone our children. I know countless people who have been sickened by this shot, and all of them have since been infected by Covid. Children are not at risk from being seriously injured by Covid, but they ARE at risk if they get injected with this vaccine once, let alone on an annual basis. Please stop the loss of freedom and common sense. We need your help in standing up to big Pharma.

Sincerely
Rebecca Porter

From: bobbi samples
Sent: 11/1/2022 7:39:26 AM
To: DOH WSBOH
Cc:
Subject: Vaccine Mandate

External Email

I am a parent , grandparent and public school employee. I am also an art teacher of homeschool and private school children. There is a huge concern by parents about the COVID vaccines. With school attendance dropping, I believe it is unadvised to mandate this vaccine for children to attend school. I have never heard 1 person say they believe COVID VACCINES should be a mandate for school attendance.
THANKYOU, BARBARA SAMPLES, WA STATE 4255082931. Please feel free to contact me if you have any questions.

From: Wendy Wilhelm
Sent: 11/1/2022 8:53:59 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Subject: NO to adding covid vax to pediatric schedule

External Email

I am writing to you to express my strong opposition to adding experimental covid vaccines to the Pediatric Schedule. Other States are reinstating employees who were fired for not getting the Covid vaccine. Plus the incidence of Covid in school children is very low while the incidence of vaccine injuries in children is high. It is accepted knowledge that this experimental vaccine is NOT "safe and effective."

Thank you.
Wendy Wilhelm
Professor (Emerita)
WWU

From: Tamara Nelson
Sent: 11/2/2022 12:25:49 PM
To: DOH WSBOH
Cc:
Subject: Vaccine recommendations

External Email

Please note that I do not want any liability-free COVID-19 products to be mandated for our kids. These shots are still under emergency use authorization. More and more evidence has become available regarding lack of safety and effectiveness. More children have been harmed by these shots than by the virus. Children are not at risk of the virus unless they have myriad co-morbidities, in which case, they probably aren't in school. It has been shown that the shots are not stopping transmission or infection of the virus. Adding them to the list of childhood vaccines is a clear demonstration to the public that pharmaceutical companies, medical institutions, and government entities are in collusion for financial gain, as it is clearly not for the good of the children. We see through this. We have your names. You will be accountable for your actions. If you are not yet informed about the problems with the creation and push of these shots, please take the time to watch

<https://www.therealanthonyfaucimovie.com/trailer/>
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.therealanthonyfaucimovie.com>

Thank you.

Tamara Nelson

From: Donna Rowland
Sent: 10/31/2022 8:03:51 PM
To: DOH WSBOH
Cc:
Subject: COVID-19 Shots and the Vaccine Schedule

External Email

I strongly oppose adding COVID-19 gene therapy shots to any vaccine scedule.

These injections are not fully tested under regular vaccine protocols and have not been proven to stop transmission. Phase 3 clinical trials and actual full testing should be completed before ever placing any "vaccine" on a schedule that can be required for school attendance, etc.

There are too many unanswered questions about safety of COVID-19 gene therapy injections, especially for children.

Please do not allow the COVID-19 injections to be placed on a vaccine schedule in Washington state.

Thank you for your time and consideration.

Donna Rowland

Sent from my Galaxy

From: melleady
Sent: 11/2/2022 12:46:39 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: VAC Covid

External Email
Dear Sir / Ma'am,

I am writing to discourage you from advising that the covid vaccines be added to the Washington school vaccine schedule. I am concerned that you will find the ACIP decision in October sufficient reason to add covid vaccines to the schedule, as the decision fulfills criterion #1.

However, please be advised that other criteria are not met.
#2 The vaccine is not effective based on population based prevention data. Immunogenicity data only shows effectiveness for a few months.
#4 The vaccine safety signal from VAERS is beyond troubling and demands scrutiny. So far, Florida is the only state to do a proper risk-benefit analysis for covid vaccines in youths. Florida found the risks outweigh the benefits. I don't believe Washington nor the CDC has done a similar investigation.
#5 The vaccine does not prevent disease, and recent studies are showing that over time it increases the likelihood for covid illness.
#7 The public is opposed. This is evident from waning vaccine uptake in Washington. 85% first shot, 70% second shot, 35% third shot (50% of 70%), no data on fourth shot, 7% bivalent fifth shot (10% of 70%).

For all these reasons, please advise against requiring the covid vaccines for school children. John Stuart Mills, whom you quote in your IAC criteria for justifying mandates, would be turning over in his grave!

Sincerely,
Melissa Leady
Washington resident

Sent with Proton Mail secure email.

From: Frank O'Neill
Sent: 11/3/2022 2:47:20 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Vaccine Safety

External Email
Dear Advisory Committee

I'm writing as a WA resident that you look into the high risk indicated in the VAERS data and the many reports of myocarditis and death for children getting the EUA Covid vaccine. Please also consider that the 5-17 age group is at near-zero risk of death from Covid compared to >70yr population (0.00003% Infection Fatality Rate for healthy kids) - compare this to 0.1% for common flu for all age groups combined. There is no transmission benefit to the Covid vaccines, and recent booster data on adults in Israel show any benefit in reducing serious illness wanes after 4 weeks. Parents should have the power to choose. No mandates. Transparency. Choice.

Thank you,
Frank O'Neill
Bellingham WA

From: Jerry Logan
Sent: 10/31/2022 1:55:21 PM
To: DOH WSBOH
Cc:
Subject: Mandate against covid shots on vaccine schedule

External Email

I am surprised that you would even consider to mandate any covid vaccine for anyone, Especially young children. The shots are in effective and harmful. The vaccines have had Limited If any test trials. We have been lied to buy our government both state and federal, Especially the CDC. We've had enough, You will be responsible for any harm That anyone occurs as results of these vaccines.... Open your eyes and see what's happened to many of the people around you by taking them. What in the world are you thinking ? Do you have any common sense ?

Sent from Yahoo Mail on Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.onelink.me%2F107872968%3F>>

From: Stephen Eneberg
Sent: 10/31/2022 6:14:47 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Subject: DO NOT MANDATE COVID VACCINES FOR SCHOOL KIDS IN WA!!!!

External Email

Hello WA State Vaccine Advisory Committee and Board of Health Members -

I'm sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school. Here's why...

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits!!! The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science!!! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school!!!

Sincerely,
Stephen Eneberg,
Everett, WA Resident

From: Kirby, Kristin @ Bellevue
Sent: 11/1/2022 8:18:10 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Covid 19 Shots Not Necessary For Children

External Email

Hi,

Covid 19 Shots Not Necessary For Children. Further, there are extensive studies and reports showing these shots are causing irreparable harm.

- * Shots are still experimental
- * Proven increasing ineffectiveness. Over stimulation of immune system if people/children get these shots over and over. It's too much.
- * These shots do not prevent getting, nor transmitting Covid – there's no point in children getting these shots because they are at an almost 100% chance of survival – this was confirmed, under Oath, by Pfizer (they never tested for transmission prevention). The public is being deceived.
- * Bivalent "boosters" have never been tested in humans at all, neither adults nor children – IT'S AN EXPERIMENT
- * Losing trust in the vaccine schedule itself
- * Zero liability for manufacturers, even though they have admitted there are serious side effects and these are noted too many times to count, including death
- * Toxic elements in the shots
- * Zero long term studies for safety – and the Pfizer court documents being released show how shoddy their safety data is. They didn't follow the participants for very long at all – you can read it all in those documents being released
- * These shots will not "fix" anything and are not a solution to Covid – there are treatments out there that don't involve any of these shots
- * Emergency use and yet there is NO emergency for this age group
- * Major backlash against those who won't get these shots – issues with inclusion, bullying and privacy
- * High levels of removals of children from schools, which equals less money to the State for education
- * VAERS data, which is grossly underreported, shows these shots are the MOST dangerous to humans in ALL of history
- * These shot requirements are already in many courts and are continually being struck down as not Constitutional – these corporations and politicians will stop at nothing until they injure and harm our children. It's disgusting.
- * The FDA and CDC have shown over and over their ineptitude and blatant disregard for data and doctors and a gross cooperation with corporate interests

Which side are you on? Pharmaceuticals and politics or families and children? Do not be pressured by these groups who do not want to "protect" children. The children need protecting from THEM. Do the right thing and never make these shots part of any requirements for school attendance. To do so is simply gross negligence and child abuse on a massive scale.

Kristin Kirby

From: Luke Short
Sent: 11/3/2022 8:33:24 AM
To: Kwan-Gett, Tao (DOH),DOH Secretary's Office,Sherls-Jones, Jamilya J (DOH),Drummond, Heather M (DOH)
Cc:
Subject: COVID 19 VACCINE - SCHOOLS

External Email

Hello,

I am writing to you all to ask that you would please take into consideration the risk of mandating that kids receive a vaccine for COVID-19 when they have little to no chance of becoming deathly ill from the sickness. Logically speaking it makes no sense to force a group of people to take something they do not need. Yet if they get vaccinated for it they have an unknown amount of exposed risk to various other complications.

The vaccine has no long term data showing what the risk is of getting it. If you force parents to get their kids vaccinated against COVID-19 it will drive an even bigger wedge between parents trust in our state government. That is on top of the fact that in spite of getting vaccinated, people STILL get COVID-19. There is no reason to mandate the vaccine for children, please do not use kids as a political purpose. Parents will pull their kids out of the public school system.

Please consider the possible ramifications of your decision. Thank you for your consideration

--

Luke Short

From: Catiya Gainor
Sent: 11/3/2022 7:23:49 PM
To: DOH WSBOH
Cc:
Subject: immunization requirements" for Washington's daycare and K-12

External Email

I would like to register my opinion AGAINST COVID vaccinations for children as the vaccine has NOT proven to be effective against transmission of the virus and also has shown to have negative side effects for some people.

While it was a stop-gap, emergency measure taken during a pandemic, it does not seem to be as comprehensively tested as other vaccines and does not meet the standards for a true, safe and effective vaccination.

Thank you,
Catiya

From: Jenelle Arkills
Sent: 10/31/2022 1:30:03 PM
To: DOH WSBOH
Cc:
Subject: no for vaccine mandate

External Email

Please do not require children to have the Covid vaccine to attend school. The vaccine doesn't prevent Covid and Covid is mild in children. There have also been new safety concerns with the vaccine.

Thank you

Jenelle Arkills

From: Alicia Gardner
Sent: 11/1/2022 9:28:01 AM
To: DOH WSBOH
Cc:
Subject: meeting regarding covid vaccine for children

External Email

Dear Board,
Please vote no on recommending the covid vaccine for children as part of the required schedule. It has been proven that it was not that effective and is not safe.

Sincerely,
Alicia Gardner

From: M D
Sent: 10/22/2022 8:45:41 AM
To: DOH WSBOH
Cc:
Subject: COVID vax

External Email

As a taxpayer and voter. I'm writing to tell you that I am vehemently opposed to the COVID mRNA vax being added to vaccine requirements for this state.
Sincerely, Melissa Dodd

From: teaboy1
Sent: 10/22/2022 8:53:33 AM
To: DOH WSBOH
Cc:
Subject: Vivid shots for children

External Email

I am a grand father and oppose a requirement for children to receive the vivid shots for school attendance. We are the only Western industrialized countries looking to require this mandate.

Many European countries have forbidden these shots for children period. They have many studies showing the harm and forbid them hole cloth.

The shots don't prevent contraction nor transmission of covid. Many people have received this treatment and still contract. Additionally the two main producers of the mRNA vaccine have said in European courts that they have not tested it for prevention of transmission. This shot does not have the years of testing and review as many other child hood vaccination. Those currently recommend and require protects the health of the individual and community. However the covid shot works no better than the annual flu shot.

There are many other finding world wide and we are not relying on science if you aloud this to be mandatory.

Thank you for your time and consideration.

Mr. Mark Doerr (TSgt, Ret. USAF)

Sent from my Kyocera DuraForce, an AT&T 4G LTE smartphone

From: Scott & Georgene Faries
Sent: 11/3/2022 7:14:19 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), Eslick, Carolyn, Sutherland, Robert, DOR Keith Wagoner, Gilday, Greg, Muzzall, Ron
Subject: No on Covid Shots for Kids

External Email
Greetings,

I am writing to request that you DO NOT add Covid shots to the CDC pediatric schedule. Covid shots are liability free products, many people are not comfortable with them at this time.

The biggest concerns are about potential unknown long-term effects and serious side effects of the vaccine.

With any unknown, parents are very concerned about doing something to their child that might have long-term ramifications
the COVID-19 vaccination is too new; it's experimental.

Some concerns are long-term and have serious adverse effects:

Future fertility issues

Adolescents have an elevated risk of myocarditis—inflammation of the heart muscle—from BNT162b2

(Pfizer and Moderna vaccines were followed by higher-than-expected incidents of myocarditis, an inflammation of the heart, in males between 16 and 29)

Covid is less severe in children and they recover quickly—without bio chemicals injected inside of them

The COVID-19 vaccine was rushed, it's still under Emergency Use Authorization. Is it fully licensed under the FDA?

53% think the vaccine poses more risk than the disease

COVID-19 vaccines are political, and that has not been true in the past

You're asking parents to inject their child with a biological agent, and I think that it's understandable for parents to recoil from that.

Please hear these words, we DO NOT want Covid shots mandated for our kids.
Please vote AGAINST this.

Georgene Faries
425-232-3092

Let us be sure that those who come after will say of us in our time, that in our time we did everything that could be done. We finished the race; we kept them free; we kept the faith. Ronald Reagan

From: Pat Jerrells
Sent: 11/2/2022 5:49:38 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Jamilla.Sheris-Jones@doh.wa.gov, Drummond, Heather M (DOH)
Subject: No Covid shot mandates for Washington children

External Email

Dear Washington Department Of Health VAC,

Dr. David McCune, a hematology and oncology doctor here in Washington State told Epic Times that

"saying the vaccines protect young children against severe disease "is a leap of faith" and that it is

"not supported by the research". There are many excellent, well respected, and ethical doctors, scientists and researchers that have raised legitimate questions about the whole pandemic issue.

Covid "vaccines" fall into that category. Cover-ups and refusing to talk about the issues or even to

look into the questions raises all kinds of red flags. The old saying "Follow the money" certainly

is an issue as vaccines are a huge cash cow for many in government as well as those in the health and vaccine industry.

Why would parents ever play vaccine roulette with their children's health if they realized children are not

in danger from Covid? Kids would get immunity if they did get it. Most often they would not realize they

had anything. Maybe show up as a mild cold. This is known. Why the push for the shots for kids? Money?

If this does get on the register for Washington children, I expect to see a lot of kids being home schooled.

Or, if the parents can get work elsewhere, moving to another state that does not have the mandate.

Myocarditis is a real issue with young men 15-22 or so for the most part. It does get other ages, too.

Also, the blood clotting problem seems to be more prevalent than first thought. As more children get

the shot I expect we will see more injuries and deaths. If you want to mandate something, maybe

informed consent should be considered. How many people got that when getting the shot? No one I know.

If someone wants their child to have the shot, there is nothing preventing them from getting it. They are

available almost everywhere. I don't see the need to force this shot on the kids when they are fine

without it and probably safer without it. Doesn't our Washington State Constitution say

something about
guaranteeing education for all children? Isn't saying "no shot, no schooling"
like blackmail?

I sincerely hope you all study the information, and there is a lot of it, around this issue
very carefully.

Please consider information from scientists, researchers and doctors that have saved
thousands of sick

people without the shot and practiced medicine that helped people without
hospitalization. It is out there.

Your recommendations to the BOH impact the people of Washington State deeply. Please
know we

really don't want or need any mandates for Covid-19 and its variants, shots or other
products. The fact

that the industry that produces these products is liability-free is another huge red flag
and a slap in the

face to the parents, and others, that believed in the government, FDA, WHO, CDC, Fauci,
etc. and are

now injured or have loved ones who have needlessly died. If this industry is making
products that are

"safe and effective" why don't they stand behind their product? That is just a
PR slogan. Again, it is

all about money. I have never been aware of so many whistle-blowers around an issue
before this one.

Sincerely,
Patricia Jerrells

From: Rachel Wernet
Sent: 11/2/2022 9:00:20 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherlis-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: For Covid-19 Vaccine DOH Advisory Committee meeting

External Email

Hello WA State Vaccine Advisory Committee and Board of Health Members -

I'm sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school. Here's why:

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits. The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science!!! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school.

We already pulled one of our children out of WA public school and might have to do the same for our other one.

Thanks,
Rachel Wernet
Seattle, WA

From: Sandy Higgins
Sent: 11/2/2022 11:56:07 AM
To: DOH WSBOH
Cc:
Subject: Vaccinations

External Email

Please do NOT add the covid vaccine to mandatory vaccinations for children. This vaccine has had some unfavorable results and children are at low risk from being seriously ill from covid-19. This is unnecessary and could prove unhealthy.

Sandra Higgins

Edmonds, Wa

Sent from Mail

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Fwlink%2F%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Fwlink%2F%2F)
for Windows

From: Duncan Farris
Sent: 11/1/2022 4:17:27 AM
To: DOH Secretary's Office
Cc:
Subject: NO COVID SHOTS

External Email
NO COVID SHOTS!

Duncan Farris
Kennewick, Washington
(208) 861-7562

From: Darleen Christopher
Sent: 10/31/2022 8:48:03 PM
To: DOH WSBOH
Cc:
Subject: comment

External Email

Please do not insist on the vaccines. They are deadly, killing athletes, causing myocarditis, blood clots. Do the research! This is about money, big pharma, depopulation and keeping politicians in the game of controlling our bodies. No way.

From: donny payne
Sent: 10/21/2022 8:41:41 PM
To: DOH WSBOH
Cc:
Subject: Opposed to mandatory vaccinations

External Email

Greetings,

Please put our family down in opposition to mandatory Covid vaccinations for children in public schools. This is a horrible idea and totally unnecessary for children.

V/R

Mr. and Mrs. Payne
Des Moines, WA

From: Sheryl Martin
Sent: 11/2/2022 1:28:56 PM
To: DOH WSBOH
Cc:
Subject: Do not mandate COVID19 shots for our School children

External Email

From: Morgante, James
Sent: 11/4/2022 11:27:15 AM
To: DOH WSBOH
Cc:
Subject: Immunization requirements for WA Daycare and K-12 Children

External Email

I oppose Covid vaccination requirements for children. Their risk for vaccine injury is greater than the risk from Covid. The latest physician to call for suspending Covid vaccinations due to a lack of informed risk consent is Dr. Aseem Malhotra in the Journal of Insulin Resistance, 9/26/2022 (Curing the pandemic of misinformation on COVID-19 mRNA vaccines through real evidence-based medicine, <https://insulinresistance.org/index.php/jir/> <<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finsulinresistance.org%2Findex.php>>).

Do the right thing -- do not subject children to Covid vaccine risk.

Sincerely,
James Morgante

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finsulinresistance.org%2Findex.php>>

Journal of Insulin Resistance

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finsulinresistance.org%2Findex.php>>

The Journal of Insulin Resistance is a peer-reviewed, clinically oriented journal covering advances in disorders of insulin resistance. Articles focus on clinical care and advancing therapy for patients with insulin resistance-related disorders. Insulin resistance includes pathophysiology, management, patient education, and treatment considerations for different patient populations.
insulinresistance.org

From: Yvette Montgomery
Sent: 11/1/2022 12:04:23 PM
To: DOH WSBOH
Cc:
Subject: COVID 19 VACCINE MANDATE

External Email

Dear Sirs,

This is grounds for a revived Nuremburg to force experimental mrna gene therapy on children. NO to add the experimental mrna gene therapy on the children vaccine schedules.

<https://7mwa02.a2cdn1.secureserver.net/wp-content/uploads/2021/11/TemplateLegisSue.pdf>
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2F7mwa02.a2cdn1.secureserver.net/content%2Fuploads%2F2021%2F11%2FTemplateLegisSue.pdf&data=05%7C01%7Cwsboh%40sboh.wa.go>>

From: Lisa Templeton
Sent: 11/4/2022 11:59:00 AM
To: DOH WSBOH
Cc:
Subject: public comment for BOH's meeting on Wednesday, November 9

External Email

Will you kindly include this in the materials for the Board? Thank you.

Dear Board members,

I watched all of the TAG meetings that occurred last December through February, as well as the BOH's ratification in April of the TAG's recommendation not to add Covid shots to the daycare and school requirements. I am most grateful for this outcome.

However, I noted that one factor in the decision was that part of Criterion 1 in the Board's Immunization Advisory Committee: Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030 had not yet been met—the inclusion of the product on the CDC schedule. Now that ACIP has recommended adding Covid injections to the pediatric schedule, and that CDC is likely to adopt this recommendation, I am writing to ask you not to require these experimental shots to the DOH for Washington's daycare and K-12 children.

Pediatric Covid symptoms are typically very mild. Safe and effective treatments are available (please see [HealthyImmunityNow.org](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhealthyimmunitynow.org%2F&data=05%7C01%7CWsboh%40sboh.wa.gov%7C6a140f3162d543a56be008dabe96a0dd%7C11d0e21) <<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhealthyimmunitynow.org%2F&data=05%7C01%7CWsboh%40sboh.wa.gov%7C6a140f3162d543a56be008dabe96a0dd%7C11d0e21>>). Most children are already naturally immune to Covid, having already experienced the infection.

In contrast, the shots are fraught with risk, having already been associated with tens of thousands of deaths and over a million injuries, and those figures reflect less than two years of reports. See [OpenVAERS.com](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.openvaers.com%2F&data=05%7C01%7CWsboh%40sboh.wa.gov%7C6a140f3162d543a56be008dabe96a0dd%7C11d0e21) <<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.openvaers.com%2F&data=05%7C01%7CWsboh%40sboh.wa.gov%7C6a140f3162d543a56be008dabe96a0dd%7C11d0e21>>. No one knows what the long-term effects of these products will be. In addition, the shots don't work as advertised to prevent infection or transmission. It's hard to believe they are even still being discussed, especially in light of President Biden's recent statement that the pandemic is over.

I implore you to exercise the precautionary principle. Before you again consider adding these liability-free products to Washington's school schedule, please first require that they be PROVEN safe and that the deaths and injuries recorded in V-Safe and VAERS are NOT caused by the shots. Do you agree that would be our best way forward—for the health of our children? We have nothing to lose and everything to gain with such an approach.

Thank you,

Lisa Templeton

Concerned citizen, wife, and mother

From: Joe Baile
Sent: 10/31/2022 12:07:47 PM
To: DOH WSBOH
Cc:
Subject: NO COVID VACCINES for kids or anyone else

External Email

The Covid shots are NOT safe and I am against them. My sister in law developed myocarditis from her shot which is a common side effect. These experimental vaccines are NOT safe They do not need to go into any childrens' arms at all. Please vote against this in the upcoming meeting(s). ALSO wearing a mask does not help prevent the transmission of ANY microscopic disease particles and the last people that should be wearing them are children. NO MORE MANDATES.

Thank you

Joe Baile

From: Beda
Sent: 11/2/2022 5:06:55 AM
To: DOH Secretary's Office
Cc:
Subject: Stand for Medical Freedom

External Email

It has come to my attention washington state is considering a mandate to add covid vaccine to the immunization schedule with no liability if a child is harmed by these injections.

Does this really make sense to you?

Do you not stand up for parents rights to choose their medical freedom for their child's individual health needs?

Please educate yourself on how many people have been harmed by these vaccines.

Please follow logic and common sense and do not vote yes to this insanity.

Beda Marlin

From: Dr. Rachel Giordano
Sent: 11/2/2022 12:08:32 PM
To: DOH Secretary's Office
Cc:
Subject: VAC regarding adding the COVID 19 shot to the K-12 school schedule.

External Email
Dear DOH,

I would like to oppose the addition of this shot to the school schedule. Immunizations that have been required to attend school and/or day care have historically been based on the ability to reduce/eliminate transmission of a virus.

The COVID 19 shot does not reduce transmission of the virus, therefore it is an unreasonable recommendation for families and children in WA state.

Obtaining a COVID 19 shot to attend K-12 and/or daycare should be left up to the individual families since this modality has proven to act more like a treatment than an immunization and cannot reduce transmission.

Improving the quality of air circulation within our facilities shows to be more effective in reducing transmission of COVID 19 compared to the shot. There are alternatives to mandating this shot.

I also oppose this shot because it is still in emergency use and has not been approved by the FDA. If the VAC recommends this shot they are telling families in WA state that they are OK experimenting on our children. The industry is still collecting long term information about effects of this modality. It would be irresponsible to mandate this for a child to obtain an education and would drive more families out of the public school system.

In Health,

Dr Rachel Giordano

Sent from Mail for Windows

From: Joelle Balcom
Sent: 10/31/2022 6:44:23 PM
To: DOH WSBOH,DOH Secretary's Office,Kwan-Gett, Tao (DOH),Sherls-Jones, Jamilia J (DOH),Drummond, Heather M (DOH),Gett@doh.wa.gov
Cc:
Subject: NO to C-19 Vax for K-12

External Email

Dear DOH and BOH members:

You are about to take on the most important decision of your life as a part of the WSBOH and WADOH in regard to OUR children.

We have ALREADY stated clearly before with over 40,000 of us in opposition to these shots. Even though the ACIP is now recommending them??? We are STILL against requiring these horrendous injury and death causing vaccines. We know more now and know of the thousands of doctors and specialists who are against them as well. There is more evidence that is readily available regarding lack of safety and effectiveness.

The CDC even admits the vax doesn't help in preventing infection or transmission. Children are better off without it and fight it off readily with their own strong immune systems. PLEASE do more research.

NO, NO, NO, NO, NO! Please do NOT require these for our children K-12.

Kind regards,

Joelle Balcom
balcomjoem@yahoo.com <mailto:balcomjoem@yahoo.com>
904.403.6447

From: Testify Online Survey
Sent: 11/2/2022 10:31:27 AM
To: DOH WSBOH
Cc:
Subject: Survey Response: Testify Online *

The following survey response is submitted:

1.

State Board of Health Meeting Date:

11/09/2022

2.

Agenda Item or Issue:

Adding newborn screening for MPS II

3.

Your Name:

Mary Cavanagh

4.

Do you have a professional title?

2. No

5.

Are you representing an organization?

1. Yes

National MPS Society

6.

Address:

2417 223rd PL NE Sammamish, WA 98074

7.

Email:

cavanagh@gmail.com

8.

Phone Number (Include Area Code):

4253015363

9.

Do you have any special expertise relevant to this topic?

1. Yes

My 21 year old son has MPS.

10.

Are you testifying on a specific proposal under consideration by the board?

2. No

11.

Are you Pro or Con on the proposal?

1. Pro

n/a

From: Foss, Angel

Sent: 10/20/2022 11:38:59 AM

To: dbaker@kenmorewa.gov, bdaniell, lisa.herbold@seattle.gov, Zahilay, Girmay, susan.honda@cityoffederalway.com, Kohl-Welles, Jeanne, CouncilMember Koellen, McDermott, Joe (DOHi), teresa.mosqueda, butchdec@uw.edu, Sara.nelson@seattle.gov, Morales, Tammy, Zahn, Janice, Dembowski, Rod, Narruhn, Robin A, Levy, Susan (Susie), Carpine-Cazzanti, Joy, Khan, Faisal (DOHi), Einer, Tim

Subject: GREEN FOLDER - October 20, 2022 Board of Health



attachments\51B3653273044F42_20221020-BOH-additional.pdf



attachments\664EEF9478734D91_image002.jpg



attachments\B206D5696AD543B6_image001.jpg

External Email

Angel Foss, CMC

Deputy Clerk | Clerk of the Council's Office

516 Third Ave, Room 1200 | Seattle, WA 98104

206.477.1021 | angel.allende@kingcounty.gov <mailto:angel.allende@kingcounty.gov>

From: Karla Phillips
Sent: 11/1/2022 2:48:06 PM
To: DOH Secretary's Office
Cc:
Subject: Requiring Covid vaccines for children

External Email

I am not anti-vaccinations for most childhood diseases but I would like to respectfully ask that the Covid vaccine NOT be included in the required vaccination list for children. The safety and effectiveness of this vaccine has not been clearly shown for children.

From: Randy and Linda Bach
Sent: 11/2/2022 8:18:10 AM
To: DOH Secretary's Office
Subject: Vaccines for School Children – A Second Opinion

External Email

To Our State Leaders:

I am concerned that the State of Washington is considering mandatory Covid vaccines for children as a requirement to attend schools and daycare facilities.

I believe that the decision regarding whether or not to administer these unproven drugs to children should be left up to their parents / guardians and not mandated by any State Agency.

My research shows there is significant evidence these vaccines do not meet the requirements to be included in WAC 246-105-030. Therefore, there should not be a requirement under Washington law for children to be vaccinated for Covid to attend school or daycare.

Accordingly, I urge you in every way that you have any influence over such decisions, to please use your position to insist that such decisions be left up to the parents of children in consultation with their medical advisors.

Thank you.

Sent from my iPhone

From: sandra gildroy
Sent: 10/31/2022 12:28:55 PM
To: DOH WSBOH
Cc:
Subject: Immunization Requirements

External Email

To All:

Covid "vaccine" is not an immunization. The most toxic spike of the virus was used in the shot to travel to the brain, heart, and all other organs of the body.

It does Not stop spread of the virus;
It does Not stop you from contracting the virus.

History now proves, Most hospitalizations from covid are the Vaccinated...they reproduce the toxic spike protein, give it to themselves and others, reduce their previous immunity to other diseases and become much sicker.

History now shows the vaccine causes detrimental harm to both children and adults: Myocarditis, Auto-immune disorders, Brain dysfunction, long, thick rubbery clots with calamari consistency, blood clots, etc, and DEATH.

Read real research. You can find the list of harms from the vaccine on the CDC VAERS list.

Documentation based on Real Science can be found on childrenshealthdefense.org
<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fchildrenshealthdefense.org%2F&da>
. among other sites. They show all sources of their well-researched information.

Please do not be an Inslee puppet, doing what you are told without any solid proof. Do not do something because of anyone's "say-so".

Be smart. Do your own research by looking at uncensored sites.

Please save our children and grand-children by saying NO to this medical atrocity.

Thank you for your time,

Sandra Gildroy
Blaine, WA

From: Theresa Wolf Silva
Sent: 11/2/2022 1:10:54 PM
To: DOH WSBOH
Cc:
Subject: Re Covid

External Email

Dear Committee Members,

I request that you do not include the covid immunization amongst school requirements. It is sti in experimental stage. The number of ill affects of this immunization will greatly deteriorate the health of Washington's children.

I propose a moratorium on adding any immunization to the existing overloaded list.

Thank you,
Theresa Wolf-Silva

From: Jeff Hall
Sent: 11/3/2022 11:36:46 AM
To: DOH WSBOH
Cc:
Subject: Fwd: Latest research on the Death Jab

External Email

----- Forwarded message -----

From: Jeff Hall <echotopia44@gmail.com <mailto:echotopia44@gmail.com> >
Date: Thu, Nov 3, 2022, 11:34 AM
Subject: Latest research on the Death Jab
To: <secretary@doh.wa.gov <mailto:secretary@doh.wa.gov> >
Cc: Jeff Hall <echotopia44@gmail.com <mailto:echotopia44@gmail.com> >

<https://rumble.com/v1r7unm-dr.-jane-and-dr.-bryan-ardis-and-mike-adams-shocking-news-110322.html>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Frumble.com%2Fv1r7unm-dr.-jane-and-dr.-bryan-ardis-and-mike-adams-shocking-news-110322.html&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C49c24f1007534a5c84f808dabdca47bf%7C>>

From: Erika Reagor
Sent: 11/1/2022 8:19:26 AM
To: DOH WSBOH
Cc:
Subject: No to Covid shot

External Email

To the members of this board, do not add this to the schedule. As it is, there are way too many immunizations being pushed on our kids and general public. The Covid shot is not effective against the spread of this flu/cold. 99.99% of Children survive the Covid virus within days of catching it. This shot cause serious health issues and has killed thousands of people. Vaccine injuries from this shot are real and you people know it. It is a hoax.

Thank you

Sent from my iPhone

From: Elaine Casperson
Sent: 10/31/2022 12:05:24 AM
To: DOH Secretary's Office
Cc:
Subject: Mandated vaccine for school children

External Email

I am adamantly opposed to requiring Covid vaccines for our school age children. If you look at any sources such as America's Frontline Doctors, there is no necessity for it! The percentage of children that get Covid is extremely small and there is not enough information as to how it will affect children as they grow up. In fact there is quite a lot of information as to adverse side effects of giving the vaccine to children. As a parent, grandparent and voter, I oppose this mandated experimental drug requirement.

Thank you!

Elaine Casperson

From: Connie Davis
Sent: 11/2/2022 8:50:36 AM
To: DOH Secretary's Office
Cc:
Subject: Concerns About COVID 19 Vaccines for Nov. 3 Meeting

External Email

Dear Secretary of the Department of Health of Washington State,

I am against putting the COVID-19 vaccinations onto the child vaccine schedule or requirements for anything because of several reasons. Two of which are: that children, even without being vaccinated, are of low risk of serious complications from COVID-19 and because of the masses of VEARs reports having to do with the COVID-19 vaccines. I am not convinced that the COVID-19 vaccinations are safe and effective. I would challenge you to do research on this matter and to check out research that is independent of possible conflicts of interest.

For a start check out this paper:

<http://www.kathydopp.info/COVIDinfo/Vaccines/RisksCovidVsRisksCovVaccines>
COVID-19 and All-Cause Mortality Data by Age Group Reveals Risk of COVID Vaccine-Induced Fatality is Equal to or Greater than the Risk of a COVID death or all Age Groups Under 80 Years Old as of 6 February 2022.

Kathy Dopp, MS Mathematics and Stephanie Seneff, PhD
13 February 2022.

Thank you for your time.

Sincerely,
Connie

From: Diana Simon
Sent: 11/2/2022 8:49:05 PM
To: DOH WSBOH
Cc:
Subject: Childhood Vaccines

External Email

To Whom it may concern. I am a concerned grandparent about making the COVID vaccine part of the mandatory school vaccines. The risk is low in children in having COVID to experience debilitating side effects, but there is a high risk for children taking the vaccine to encounter death or severe side effects. To place the COVID vaccine on the school required vaccines would release pharmaceutical companies from any liabilities. This would be unjust for the companies should be held accountable for deaths & severe side effects. There is no justification for vaccinating school children. Sincerely,
Diana Simon BSRN
Sent from my iPhone

From: Catherine Temple
Sent: 10/31/2022 11:17:15 AM
To: DOH WSBOH
Cc:
Subject: Covid Vaccines for Children

External Email

Dear Committe Members,

I'm writing in regards to the upcoming vote on Covid vaccine recommendations for school age children in our state. I would like to encourage you to NOT adopt the CDC's recommendations for these dangerous vaccines for our children.

Please consider the evidence that children are at the least risk of danger from the Covid virus and it amounts to nothing more than cold or flu-like symptoms in them which we currently do not vaccinate for. Also, consider the number of cases of vaccine injury reported to the VAERS database. For any of our previous vaccines if the number of injuries or deaths was over 50 the drug or vaccine was pulled from the market, yet the Covid vaccine injuries are in the thousands and still we are being coerced into taking them. There's plenty of evidence now that they are causing heart problems in children and young adults. They have not been properly tested for long term side effects. Why would we give experimental drugs or vaccines to our children not knowing what damage these will cause?

Please consider this recent article, just one of many that have come out against these vaccines.

https://www.americanthinker.com/articles/2022/10/disaster_cdc_calls_for_covid19_vaccines_on_the_child

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.americanthinker.com%2Fda>

Again, as a very concerned guardian, I urge you please, please don't expose our children to this unsafe, unproven vaccine.

Sincerely,

Catherine Temple

--

Catherine Temple

Pet Portrait and Wildlife Artist

Clarkston, WA.
(208) 791-7052
ctemple99@gmail.com <<mailto:ctemple99@gmail.com>>

www.catherinetemple.com
<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.catherinetemple.com%2Fda>

www.flickr.com/photos/ctemple/

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.flickr.com%2Fphotos%2Fctemple/>

From: Sarah Dexter
Sent: 11/2/2022 9:53:49 AM
To: DOH WSBOH
Cc:
Subject: Recommended school vaccines

External Email

To whom it may concern,

I am writing to voice my opinion about adding Covid vaccinations to the list of required vaccines for children in daycares/preschools and K-12 settings. I would recommend against adding this vaccine, for the following reasons: it is no different in action (reducing spread, reducing symptoms) than a flu vaccine, and those have never been recommended. The only vaccines ever "required" for school attendance (with opt outs easily acquired, as it should be) have been true vaccines that inoculate the child for years if not for life, against devastating diseases. Even still, parents should always have the right to decline any and all vaccines for any reason. There should never be a full mandate on vaccines, of any sort, for any group, ever. It is a violation of a person's autonomy and free will.

Thank you,
Sarah Dexter

From: Becky Hernandez
Sent: 10/31/2022 5:13:34 AM
To: DOH Secretary's Office
Cc:
Subject: No for covid vaccine

External Email

I implore you to not recommend the covid shot to go on the childhood vaccine schedule for Washington state. Our children do not need this shot as they are very low risk from having adverse affects from getting covid. There is plenty of evidence now showing that these shots are not safe and effective and are actually harming people. It is shameful that these are even being considered to be permanently mandated for our precious children. I strongly encourage you to vote to not recommend this shot to be added to the childhood vaccine schedule for public schools . Thank you!

Sent from my iPhone

From: Barbara Gallier-Bange
Sent: 11/2/2022 9:22:13 PM
To: DOH WSBOH
Cc:
Subject: Covid shot

External Email



Hello,

I write to to you today to IMPLOREyou to NOT add the Covid experimental mRNA shot to the list of school required immunizations. More and more data has become available and numerous studies have been conducted that now show this experimental mRNA shot is not providing the protection it was originally touted to. It DOES NOT prevent the transmission of Covid and it DOES NOT prevent a person from contracting it!

Our children are MORE AT RISK to contract myocarditis or some other ill-fated side effect from this shot than any false "protection" it was claimed to provide. We have lost all trust in the 3 letter agencies that were claiming to be for public health. THIS SHOT IS NOT FOR PUBLIC HEALTH AND SHOULD NOT BE ADDED TO THE IMMUNIZATION REQUIREMENTS FOR OUR CHILDREN.

PLEASE, PLEASE, PLEASE LET THE PARENTS DECIDE WHAT'S BEST FOR THEIR CHILDREN!!!

Sincerely,
A Very Angry and Exhausted Washingtonian Resident

Sent from my iPhone

From: Kirby, Kristin @ Bellevue
Sent: 11/1/2022 8:18:11 AM
To: DOH WSBOH
Cc:
Subject: Covid 19 Shots Not Necessary For Children

External Email

Hi,

Covid 19 Shots Not Necessary For Children. Further, there are extensive studies and reports showing these shots are causing irreparable harm.

- * Shots are still experimental
- * Proven increasing ineffectiveness. Over stimulation of immune system if people/children get these shots over and over. It's too much.
- * These shots do not prevent getting, nor transmitting Covid – there's no point in children getting these shots because they are at an almost 100% chance of survival – this was confirmed, under Oath, by Pfizer (they never tested for transmission prevention). The public is being deceived.
- * Bivalent "boosters" have never been tested in humans at all, neither adults nor children – IT'S AN EXPERIMENT
- * Losing trust in the vaccine schedule itself
- * Zero liability for manufacturers, even though they have admitted there are serious side effects and these are noted too many times to count, including death
- * Toxic elements in the shots
- * Zero long term studies for safety – and the Pfizer court documents being released show how shoddy their safety data is. They didn't follow the participants for very long at all – you can read it all in those documents being released
- * These shots will not "fix" anything and are not a solution to Covid – there are treatments out there that don't involve any of these shots
- * Emergency use and yet there is NO emergency for this age group
- * Major backlash against those who won't get these shots – issues with inclusion, bullying and privacy
- * High levels of removals of children from schools, which equals less money to the State for education
- * VAERS data, which is grossly underreported, shows these shots are the MOST dangerous to humans in ALL of history
- * These shot requirements are already in many courts and are continually being struck down as not Constitutional – these corporations and politicians will stop at nothing until they injure and harm our children. It's disgusting.
- * The FDA and CDC have shown over and over their ineptitude and blatant disregard for data and doctors and a gross cooperation with corporate interests

Which side are you on? Pharmaceuticals and politics or families and children? Do not be pressured by these groups who do not want to "protect" children. The children need protecting from THEM. Do the right thing and never make these shots part of any requirements for school attendance. To do so is simply gross negligence and child abuse on a massive scale.

Kristin Kirby
Assistant Real Estate Manager
CBRE | Property Management
6645 185th Ave NE, Suite 250 | Redmond, WA 98052
T +1 425 365 0790
kristin.kirby@cbre.com

Redmond East, Canyon Park East, Willows Commerce Park – 425 365 0790 – After Hours
Emergency Line

One Esterra/Esterra Park – 1 800 374 6932 – After Hours Emergency Line

Plaza 305 – 1 800 328 1153 – After Hours Emergency Line

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| Instagram

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finstagram.com%2Fcbre%2F&data=05%7C01%7C>
| Facebook

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.facebook.com%2Fcbre&data=05%7C01%7C>

From: Clayton Boehrig
Sent: 10/21/2022 5:56:05 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccine requirements for our children

External Email

The science says children are not at risk for covid death, there for, it should, and always should be the choice of the parents and the child's doctor to decide whats best for each child. PERIOD!

I say absolutely NO! to mandatory covid vaccines for anyone, especially our children.

Clayton Boehrig
Greenacres wa
509-844-3498

Sent from my iPhone

From: Dee Dietz
Sent: 10/31/2022 8:24:16 PM
To: DOH WSBOH
Cc:
Subject: vaccine

External Email

Given the undocumented efficacy, lack of studies, documented side effects, and the survival rate of unvaccinated, the covid vaccine should not be added to the required list.

Deanne Carter

1102 A St, Unit 971
Tacoma, WA 98402

From: Becca Dallain
Sent: 10/31/2022 1:53:48 PM
To: DOH WSBOH
Cc:
Subject: Please do NOT add this vaccine to WA recommended schedule.

External Email

Hello,

I am writing in hopes that the board will hear that I and many other parents across Washington State do NOT approve or agree with adding the Covid Vaccine to any mandated schedule for children. There is increased myocarditis in teenage boys and that's just the start. Earlier this month a Pfizer executive admitted to the EU committee that the vaccine was not studied to prevent transmission.

Why would we mandate something that has not been thoroughly studied for our children, and especially when it doesn't even stop transmission? As we've seen vaccinated and unvaccinated get and spread covid this last year. Adding this shot to the schedule here in Washington state, will be harmful without much-if any benefit for public health. So far, thankfully, children's immune systems have been handling this virus well. I've seen child after child who did get the vaccine fall ill multiple times after receiving this vaccine. So trading one virus for many others? It's playing with fire and at our children's risk.

I hope you vote no to adding the Covid vaccine to any childhood schedule in Washington state.

Thank you,
Becca

Becca Dallain
A Drop Of Lavender Moon|Earths Energies Massage
Instagram: @adropoflavendermoon
425-443-5918

From: jmreagor@centurylink.net
Sent: 11/2/2022 12:02:45 PM
To: DOH WSBOH
Cc:
Subject: Dr. Sucharit Bhakdi - CV19 Vax Destroys Hearts & Brains of Billions of People!!!

External Email

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2F7>

Another video document from reliable source
Sent from my iPhone

From: Lauren Welch
Sent: 10/22/2022 10:37:31 PM
To: DOH WSBOH
Cc:
Subject: Adding covid shot to children's required vaccine schedule

External Email

To Whom it May Concern at Board of Health,

I want to thank you for drawing my attention to how horrific the required vaccines are for children in the state of Washington, and how we, the residents, have subtly accepted this type of medical duress as "reasonable" or "normal." It is becoming apparent that it should be illegal to force any people take any vaccines. We need to reevaluate this entire system. Too many facts about vaccine injury are leaking out, and it's getting harder and harder for our government to suppress this information. I have relatives who are injured and have died as a direct result of the covid shot.

Not only do I say no to you forcing the covid shot on the children's vaccine schedule, but I also say no to you forcing any shots, and I say no more vaccine schedules altogether. I also say no to you granting 100% immunity to pharmaceutical companies from any legal recourse for anyone who has been harmed by these harmful products.

I understand that approving the covid shot for the children's schedule is primarily about granting a legal pass to the pharmaceutical companies from lawsuits.

Nothing about this is legal or humane, and you, the BOH, are not officially elected representatives. If you move ahead with this and put covid shots on the vaccine schedule and also grant legal immunity to big pharma, as we the people, I do not consent to this and I do not surrender to this illegal madness. I'm aligning with many folks across our beautiful state who are saying no.

Sincerely,

Lauren Welch

From: Lynn
Sent: 11/3/2022 9:20:31 AM
To: DOH WSBOH
Cc:
Subject: Adding Cov-19 shots to childhood schedule

External Email

Dear Washington State Board of Health;

Members;

Please vote "no" on adding the COV-19 shot to the childhood schedule of shots required for children to attend school.

1. There is no proof that anyone, receiving the so-called "vaccine" cannot spread COVID-19
2. There is no proof that any child is at risk from COVID-19
3. There is no proof that any child needs the COVID-19 shots
4. There is no proof that the COVID-19 shots are effective in preventing contracting or spreading COVID-19
5. There is proof of the increase of myocarditis in young males receiving the COVID-19 series of shots
6. There is proof of the increase of COVID-19 cases among all age groups receiving the COVID-19 series of shots
7. There is proof of adverse health effects from the COVID-19 series of shots

No so-called "vaccine" should be given until proven safe and effective. In the case of the COVID-19 shots, that has not happened.

The American people have been lied to consistently about both COVID-19 and the shots. Anyone, putting forth evidence of the same has been censored and targeted by entities bent on curbing free speech and free will.

It's time this madness was halted.

Sincerely,

Lynn M Finney

From: meredith prystas
Sent: 11/3/2022 12:05:47 PM
To: DOH WSBOH
Cc:
Subject: BOH

External Email

To the Board,

It is well known that the mRNA injection causes Myocarditis and Pericarditis in young people, particularly young males. The data collected on VAERS makes it clear that the risks do not stop there.

This cannot be ignored! Whenever there is risk, there must be choice.

In addition, just two weeks ago, Janine Small admitted to the European Union Parliament that the Pfizer vaccine was never tested for transmission. This declaration alone should stop you from forcing a medical procedure on young people on the grounds of 'keeping the community safe'. That is a fictitious statement with no scientific backing.

We are counting on you to do the right thing.

Signed,
A Concerned Citizen

From: Jenni Ricker
Sent: 10/25/2022 3:19:49 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccine pediatric schedule

External Email

Hello,

I have concerns regarding adding the Covid vaccine to the pediatric schedule. Thus far research has shown pediatric concern responses as myocarditis (largely in males teens to early twenties) and effects on menstruation. We will not know the full impact of these effects for females until they are childbearing. Other concerns that appear to affect smaller numbers are neurologic and auto-immune effects. Every individual will be affected differently by the Covid vaccine and the risk benefit should be allowed to be weighed by each individual in the family unit. With the risk of serious Covid side effects being incredibly small, the risks associated with the Covid vaccine are typically greater than Covid itself. Can you truly justify the addition of the vaccine?

As a mother and health care provider I hear from families who have healthy children that they have accepted Covid as a cyclical illness that is not a threat to their households. The addition of Covid to the pediatric vaccine schedule will be viewed as another government overreach, another Covid overreach.

My family urges you to not add the Covid vaccine to the pediatric schedule.

Sincerely,

Jenni Ricker

From: Destiney Tompkins
Sent: 11/2/2022 10:48:41 PM
To: DOH Secretary's Office
Cc:
Subject: No COVID vax for school entry

External Email

Good evening,

In light of the ACIP recently recommending the addition of COVID shots to the CDC pediatric schedule, I am keenly aware that WA state might attempt to go back down this path of requiring for k-12 school entry.

Please stick with your vote earlier this year to NOT REQUIRE for school entry. So much new information has come to light regarding safety and efficacy and parents in this state are more resolved than ever that the risks do not outweigh the benefits. Those who have not vaccinated their children for COVID at this point have zero intention of doing so, even if it means homeschooling.

As you aware from the previous vote, there are many concerned citizens across the state who are watching closely. Please continue to allow this health decision to be left up to families.

Respectfully,
Destiney Tompkins
□

From: PAUL BLAUERT
Sent: 11/1/2022 7:05:44 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: COVID vaccine requirement for children

External Email

Hello WA State Vaccine Advisory Committee and Board of Health Members -

I'm sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school. Here's why...

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits!!! The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science!!! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school!!!

Sincerely, parents of four children, eleven grandchildren and four great grandchildren

Paul & Sandy Blauert

From: julie necco
Sent: 10/31/2022 10:02:14 PM
To: DOH WSBOH,DOH Secretary's Office,Kwan-Gett, Tao (DOH),jamilia.sherls.jones@doh.wa.gov,Drummond, Heather M (DOH)
Cc:
Subject: Immunization Requirements

External Email

Hello,

I am writing to you today to urge you not include the covid-19 shot as a mandated shot for Washington's daycare and K-12 children. This shot is still experimental. It is now known to have serious side effects. It does not prevent infection nor transmission of Sars CoV2. Furthermore this age group is the least likely to contract the virus as well as the least likely to suffer severe symptoms. Do not approve this shot to be added to the immunization requirements!

Respectfully,
Julie
Anacortes

From: Diana Franklin
Sent: 11/1/2022 8:18:43 AM
To: DOH Secretary's Office
Cc:
Subject: NO Covid Vaccine Mandate, PLEASE

External Email
Dr. Shah:

As Secretary of Health, I urge you to NOT recommend the addition of Covid vaccines to the immunization requirements for children in daycare and grades 1 – 12.

These vaccines are still experimental and were originally authorized only for emergency use. No one has any idea of their long-term health effects, and they are not without the potential for dangerous side effects. The CDC has come out saying the vaccines do not prevent transmission nor do they protect the persons immunized from contracting Covid.

Establishing a mandatory requirement for Covid vaccines is overstepping the rights of parents and children to make an informed choice they can live with.

Concerned,
Diana Franklin

From: Nancy Majors
Sent: 11/4/2022 7:17:38 AM
To: DOH WSBOH
Cc:
Subject: Immunization Requirements for Children

External Email

WA BOH Members:

I am totally opposed to your mandating immunization requirements for Daycare Facilities & Kindergarten children and grades 1-12 (especially when it pertains to COVID-19 shots which have no liability to the manufacturers for harm caused from these shots).

Nancy Majors

From: Laurie Pascual
Sent: 11/2/2022 8:13:00 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: adding covid shots to schedule



attachments\7DDA8125E37E484D_To the WA Department of Health (D_PRDTOOL_NAMETOOLONG.docx

External Email

to the WA Department of Health Advisory Committee,

I am totally opposed to having these Covid vaccines added to the schedule. Please read my attached letter explaining why. Please put my letter on Public record. In addition, I would like a response in writing about the questions I asked within 10 working days.

Thank you
Laurel Pascual

From: Karen Waugh
Sent: 11/2/2022 4:51:17 PM
To: DOH Secretary's Office
Cc:
Subject: COVID shots

External Email
Dear Mr. Secretary,

I am writing to strongly encourage the Vaccine Advisory Committee to NOT mandate any COVID 19 products for children in the state of Washington. These shots are liability free for the manufacturers and under emergency use authorization. The COVID shots do not prevent infection or transmission. Children are not at risk for severe outcomes from the disease. Strong safety signals in the VAERS and V-safe reports are being dismissed by the CDC, FDA and many others in positions of power. Other countries are not recommending these shots for children.

Sincerely,
Karen Waugh

From: Hundven Family
Sent: 10/31/2022 12:19:31 PM
To: DOH WSBOH
Cc:
Subject: Covid Vaccinations

External Email

Please do not add Covid vaccinations to the pediatric schedule. Not only do they NOT stop one from spreading Covid but they don't prevent one from getting Covid as even the CDC has acknowledged. They are also dangerous to children as we see with the number of children having heart issues increases. Adding them to the list is pointless except for lining the pockets of the manufacturers who supply them and those who promote them. We do not need or want our children to have them.

Laurie Hundven

From: Malisa DeOchoa
Sent: 10/31/2022 11:24:44 PM
To: DOH WSBOH
Cc:
Subject: Re: Injection Choice

External Email

I want to implore you to vote AGAINST adding this "vaccine" which really isn't a vaccine to the childhood schedule of required vaccines. At this point it is clearly evident that it is dangerous and children don't die from this illness anyway. The survival rate is 99.99996%. Getting or not getting this injection is a decision that should be made by parents.

From: K N
Sent: 11/2/2022 1:18:50 AM
To: DOH Secretary's Office
Cc:
Subject: Regarding COVID shot mandates for children

External Email

Dear Secretary of the Dept. of Health VAC Member,

I am contacting you to state that I am opposed to any liability-free COVID-19 products mandated for our children.

The information of documented risks and injuries of the COVID-19 products to our children increases daily.

I urge you to read ICWA Review of COVID-19 Shots by ICWA April 27, 2022.

<https://informedchoicewa.org/news/icwa-review-of-covid-19-shots/>

I have included two references from the review:

Colette Martin, an RN of 17 years, testified in front of the Louisiana House about the harms of vaccine reactions that she has witnessed. She also stated that more children have died from the vaccine than from covid itself. Louisiana House of Representatives Health and Welfare Committee Hearing, December 6, 2021,

https://www.house.louisiana.gov/H_Video/VideoArchivePlayer?v=house/2021/dec/1206_21_HW
(begin at 6:54:00)

Vaccines and Related Biological Products Advisory Committee member Dr. Cody Meissner stated "[F]our per million [pediatric hospitalizations] certainly does not constitute an emergency, and there are significant questions about the safety of this product." June 10, 2021, VRBPAC meeting transcript, p. 62.

<https://www.fda.gov/media/150815/download>

Respectfully,
Kathleen Nelson

From: Betty Jo Cloninger
Sent: 10/31/2022 1:35:19 PM
To: DOH WSBOH
Cc:
Subject: 15D9CBFE-9401-4828-B3B5-1B5C3CF6CF10

External Email

No to adding the Covid balcony, as mandatory. It's not even been effectively tested yet
Stop, Stop.

We are tired of this tyranny in this state. So MANY have left because the people aren't
getting a say in what they want. It's time to stop this.

From: Scott Holbrook

Sent: 10/26/2022 11:29:23 AM

To: DOH WSBOH, Davis, Michelle (SBOH), Hisaw, Melanie (SBOH), Hoff, Christy Curwick (DOH), Glasoe, Stuart D (SBOH), Pskowski, Samantha L (SBOH), Donahoe, Kaitlyn N (SBOH), Lang, Caitlin M (SBOH), Herendeen, Lindsay (SBOH), Schreiber, Tracy N (SBOH), Haag, Hannah R (SBOH), Kahler, Kelie (SBOH), Thai, Nathaniel J (SBOH)

Cc:

Subject: 3C2B6ECD-59DE-4006-964A-1CC4A80A336D

External Email

I oppose the proposed WAC's 246-100-070, WAC 246-100-045, WAC 246-100-040, WAC 246-100, WAC 246-105

I am completely against giving local health officers use of law enforcement and the use of an emergency order to involuntarily detain a person or family into a quarantine facility if they refuse the requests of medical examination, testing, treatment, counseling, or vaccination.

I am completely against covid-19 injections as part of the school immunization requirements using WAC 246-105. I am completely against covid-19 injections as part of normal school admissions or admissions into any clinic or hospital. I am completely against covid-19 injections as part of participation in city council meetings or visiting city hall for whatever reason.

From: Angie Eifling
Sent: 10/31/2022 6:53:24 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSOH
Cc:
Subject: Adding Covid-19 products to the CDC pediatric schedule

External Email

Please let it be known that I do not want any liability-free COVID-19 products to be mandated upon my child or added to the pediatric schedule.

Thank you,
Angie Eifling

From: vivzoellin@hotmail.com
Sent: 10/31/2022 12:48:55 PM
To: DOH WSBOH
Cc:
Subject: Vaccine

External Email

Please please do Not allow this Covid vaccine to be required for our beautiful healthy children. Thank you Vivien zoellin

Sent from my iPhone

From: jmreagor@centurylink.net

Sent: 11/2/2022 12:00:01 PM

To: DOH WSBOH

Cc:

Subject: Parents - Stop killing your children with these vaccines. Please pray for Uno

External Email

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2FKu>

Past time to wake up. These jabs do not prevent the spread of COVID. This virus has over a 99 percent plus recovery for most people. Children are not threatened by this virus. Over 1400 athletes worldwide have died from these jabs. 80 Canadian young doctors are dead from these jabs. Millions have died worldwide from these jabs. Billions have suffered adverse side affects.

Sent from my iPhone

From: Susan Horst
Sent: 11/2/2022 6:32:59 PM
To: DOH WSBOH
Cc:
Subject: no vaccine mandates for Washington kids!

External Email

Dear Washington State Board of Health members,

Please vote against COVID shot mandates in our state.

* The risk of COVID-19 for children is low

Data from the U.S. and five other countries show "minimal" risk of COVID-19 disease to children, on the order of 0.17 deaths per 100,000 cases, according to an article in BMJ Journal of Medical Ethics.

* The risks of the shot are greater than the benefit

CDC VAERS data show 1,277,980 reports of adverse events from all age groups following COVID-19 vaccines, including 28,312 deaths and 232,694 serious injuries between Dec. 14, 2020, and May 20, 2022.

More than 1,000 reports of adverse events have been lodged with U.S. authorities following COVID-19 vaccination in children aged 5 and younger.

A statistically significant safety signal for myocarditis in males ages 8 to 21 appears in the CDC's VAERS

* COVID vaccines do not prevent transmission

This is abundantly clear from everyone's personal experience, even before a Pfizer executive admitted the COVID vaccine was not tested for preventing transmission

Thank you for your service on the Washington State Board of Health.

Susan Horst
Bellingham, Washington

From: Jessica Engel
Sent: 10/31/2022 1:31:56 PM
To: DOH WSBOH
Cc:
Subject: BOH meeting Wednesday, Nov 9 - comment

External Email

Hello,

I am submitting a public comment to you ahead of the November 9th BOH meeting. I want to make it clear that I absolutely do not want any liability-free COVID-19 products to be mandated for our kids. There are already thousands of adverse events and deaths reported to the CDC from the COVID-19 vaccines. I personally know over 25 people who were killed or seriously injured from these shots. Making them mandatory for kids, who are at almost zero risk of dying from COVID-19, is insanity. Do not allow this to happen and do not allow pharmaceutical companies to have no liability for products that are causing harm.

Thank you,

Jessica Engel

From: P C
Sent: 11/3/2022 6:12:55 AM
To: DOH WSBOH
Cc:
Subject: Say no to C-19 shots for children!

External Email

Children are being maimed and killed by this shot. This is a fact and if you do anything to push this then you are responsible and will be held accountable for your actions. There's no other way to say it. It is appalling that you're not doing your research and you are blindly pushing this poison. There is such a major conflict of interest with these shots because the people making the trillions of dollars on it are the ones pushing it and are the ones that have the most control over the regulators. This message barely skims the surface of what is really happening with these shots. When you go home from work tonight start researching what is in these shots, and do not just go to the entities that are pushing it, go outside of their information and start looking into this intelligently.

From: Karen Majkut
Sent: 10/31/2022 1:16:04 PM
To: WABOH@SBOH.WA.GOV,DOH WSBOH
Cc:
Subject: Fwd: Mandated Covid vaccine for pediatric/ newborn-18 years

External Email



Sent from my iPhone

Begin forwarded message:

From: Karen Majkut <KARENMAJKUT1@gmail.com>
Date: October 31, 2022 at 1:07:52 PM PDT
To: Jamilia.Sherls-Jones@doh.wa.gov
Subject: Mandated Covid vaccine for pediatric/ newborn-18 years

Parental consent is law and foremost right.

We all know children ARE NOT AT RISK FOR COVID and CDC, FAUCI, ALL MEDIA RECOGNIZED AND SPOKE TO THE WORLD AT LARGE OF THIS. This is science and it hasn't changed. Freedom to choose!!!

WHAT EVER HAPPENED TO MY BODY MY CHOICE? WHAT GIVES YOU THE RIGHT TO IMPOSE ANYTHING ON SOCIETY THAT, IF, NOT DONE BY ITS CITIZENS LOCK-STEP, YOU OSTRACIZE, PUNISH THE CITIZENS OF THE STATE OF WASHINGTON IN MATTERS OF HEALTH CHOICES? HIPPA WAS THROWN OUT THE WINDOW BY YOU. SHAME ON YOU FOR NOT RESPECTING THE HEALTH CHOICES OF WASHINGTON CITIZENS AND FOR DESTROYING LIVES, FAMILIES IF THEY DON'T VACCINATE THEIR NEWBORNS, CHILDREN FROM BIRTH TO 18 YEARS OF AGE!

Sent from my iPhone

**5.3.6 CUMULATIVE ANALYSIS OF POST-AUTHORIZATION ADVERSE EVENT
REPORTS OF PF-07302048 (BNT162B2) RECEIVED THROUGH 28-FEB-2021**

Report Prepared by:

Worldwide Safety

Pfizer

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LIST OF ABBREVIATIONS

Acronym	Term
AE	adverse event
AESI	adverse event of special interest
BC	Brighton Collaboration
CDC	Centers for Disease Control and Prevention
COVID-19	coronavirus disease 2019
DLP	data lock point
EUA	emergency use authorisation
HLGT	(MedDRA) High Group Level Term
HLT	(MedDRA) High Level Term
MAH	marketing authorisation holder
MedDRA	medical dictionary for regulatory activities
MHRA	Medicines and Healthcare products Regulatory Agency
PCR	Polymerase Chain Reaction
PT	(MedDRA) Preferred Term
PVP	pharmacovigilance plan
RT-PCR	Reverse Transcription-Polymerase Chain Reaction
RSI	reference safety information
TME	targeted medically event
SARS-CoV-2	severe acute respiratory syndrome coronavirus 2
SMQ	standardised MedDRA query
SOC	(MedDRA) System Organ Class
UK	United Kingdom
US	United States
VAED	vaccine-associated enhanced disease
VAERD	vaccine-associated enhanced respiratory disease
VAERS	vaccine adverse event reporting system

1. INTRODUCTION

Reference is made to the Request for Comments and Advice submitted 04 February 2021 regarding Pfizer/BioNTech's proposal for the clinical and post-authorization safety data package for the Biologics License Application (BLA) for our investigational COVID-19 Vaccine (BNT162b2). Further reference is made to the Agency's 09 March 2021 response to this request, and specifically, the following request from the Agency.

“Monthly safety reports primarily focus on events that occurred during the reporting interval and include information not relevant to a BLA submission such as line lists of adverse events by country. We are most interested in a cumulative analysis of post-authorization safety data to support your future BLA submission. Please submit an integrated analysis of your cumulative post-authorization safety data, including U.S. and foreign post-authorization experience, in your upcoming BLA submission. Please include a cumulative analysis of the Important Identified Risks, Important Potential Risks, and areas of Important Missing Information identified in your Pharmacovigilance Plan, as well as adverse events of special interest and vaccine administration errors (whether or not associated with an adverse event). Please also include distribution data and an analysis of the most common adverse events. In addition, please submit your updated Pharmacovigilance Plan with your BLA submission.”

This document provides an integrated analysis of the cumulative post-authorization safety data, including U.S. and foreign post-authorization adverse event reports received through 28 February 2021.

2. METHODOLOGY

Pfizer is responsible for the management post-authorization safety data on behalf of the MAH BioNTech according to the Pharmacovigilance Agreement in place. Data from BioNTech are included in the report when applicable.

Pfizer's safety database contains cases of AEs reported spontaneously to Pfizer, cases reported by the health authorities, cases published in the medical literature, cases from Pfizer-sponsored marketing programs, non-interventional studies, and cases of serious AEs reported from clinical studies regardless of causality assessment.

The limitations of post-marketing adverse drug event reporting should be considered when interpreting these data:

- Reports are submitted voluntarily, and the magnitude of underreporting is unknown. Some of the factors that may influence whether an event is reported include: length of time since marketing, market share of the drug, publicity about a drug or an AE, seriousness of the reaction, regulatory actions, awareness by health professionals and consumers of adverse drug event reporting, and litigation.
- Because many external factors influence whether or not an AE is reported, the spontaneous reporting system yields reporting proportions not incidence rates. As a result, it is generally not appropriate to make between-drug comparisons using these

proportions; the spontaneous reporting system should be used for signal detection rather than hypothesis testing.

- In some reports, clinical information (such as medical history, validation of diagnosis, time from drug use to onset of illness, dose, and use of concomitant drugs) is missing or incomplete, and follow-up information may not be available.
- An accumulation of adverse event reports (AERs) does not necessarily indicate that a particular AE was caused by the drug; rather, the event may be due to an underlying disease or some other factor(s) such as past medical history or concomitant medication.
- Among adverse event reports received into the Pfizer safety database during the cumulative period, only those having a complete workflow cycle in the safety database (meaning they progressed to Distribution or Closed workflow status) are included in the monthly SMSR. This approach prevents the inclusion of cases that are not fully processed hence not accurately reflecting final information. Due to the large numbers of spontaneous adverse event reports received for the product, the MAH has prioritised the processing of serious cases, in order to meet expedited regulatory reporting timelines and ensure these reports are available for signal detection and evaluation activity. The increased volume of reports has not impacted case processing for serious reports, and compliance metrics continue to be monitored weekly with prompt action taken as needed to maintain compliance with expedited reporting obligations. Non-serious cases are entered into the safety database no later than 4 calendar days from receipt. Entrance into the database includes the coding of all adverse events; this allow for a manual review of events being received but may not include immediate case processing to completion. Non-serious cases are processed as soon as possible and no later than 90 days from receipt. Pfizer has also taken a multiple actions to help alleviate the large increase of adverse event reports. This includes significant technology enhancements, and process and workflow solutions, as well as increasing the number of data entry and case processing colleagues. To date, Pfizer has onboarded approximately (b) (4) additional full-time employees (FTEs). More are joining each month with an expected total of more than (b) (4) additional resources by the end of June 2021.

3. RESULTS

3.1. Safety Database

3.1.1. General Overview

It is estimated that approximately (b) (4) doses of BNT162b2 were shipped worldwide from the receipt of the first temporary authorisation for emergency supply on 01 December 2020 through 28 February 2021.

Cumulatively, through 28 February 2021, there was a total of 42,086 case reports (25,379 medically confirmed and 16,707 non-medically confirmed) containing 158,893 events. Most cases (34,762) were received from United States (13,739), United Kingdom (13,404) Italy (2,578), Germany (1913), France (1506), Portugal (866) and Spain (756); the remaining 7,324 were distributed among 56 other countries.

Table 1 below presents the main characteristics of the overall cases.

Table 1. General Overview: Selected Characteristics of All Cases Received During the Reporting Interval

	Characteristics	Relevant cases (N=42086)
Gender:	Female	29914
	Male	9182
	No Data	2990
Age range (years): 0.01 -107 years Mean = 50.9 years n = 34952	≤ 17	175 ^a
	18-30	4953
	31-50	13886
	51-64	7884
	65-74	3098
	≥ 75	5214
	Unknown	6876
Case outcome:	Recovered/Recovering	19582
	Recovered with sequelae	520
	Not recovered at the time of report	11361
	Fatal	1223
	Unknown	9400

a. in 46 cases reported age was <16-year-old and in 34 cases <12-year-old.

As shown in [Figure 1](#), the System Organ Classes (SOCs) that contained the greatest number ($\geq 2\%$) of events, in the overall dataset, were General disorders and administration site conditions (51,335 AEs), Nervous system disorders (25,957), Musculoskeletal and connective tissue disorders (17,283), Gastrointestinal disorders (14,096), Skin and subcutaneous tissue disorders (8,476), Respiratory, thoracic and mediastinal disorders (8,848), Infections and infestations (4,610), Injury, poisoning and procedural complications (5,590), and Investigations (3,693).

Figure 1. Total Number of BNT162b2 AEs by System Organ Classes and Event Seriousness

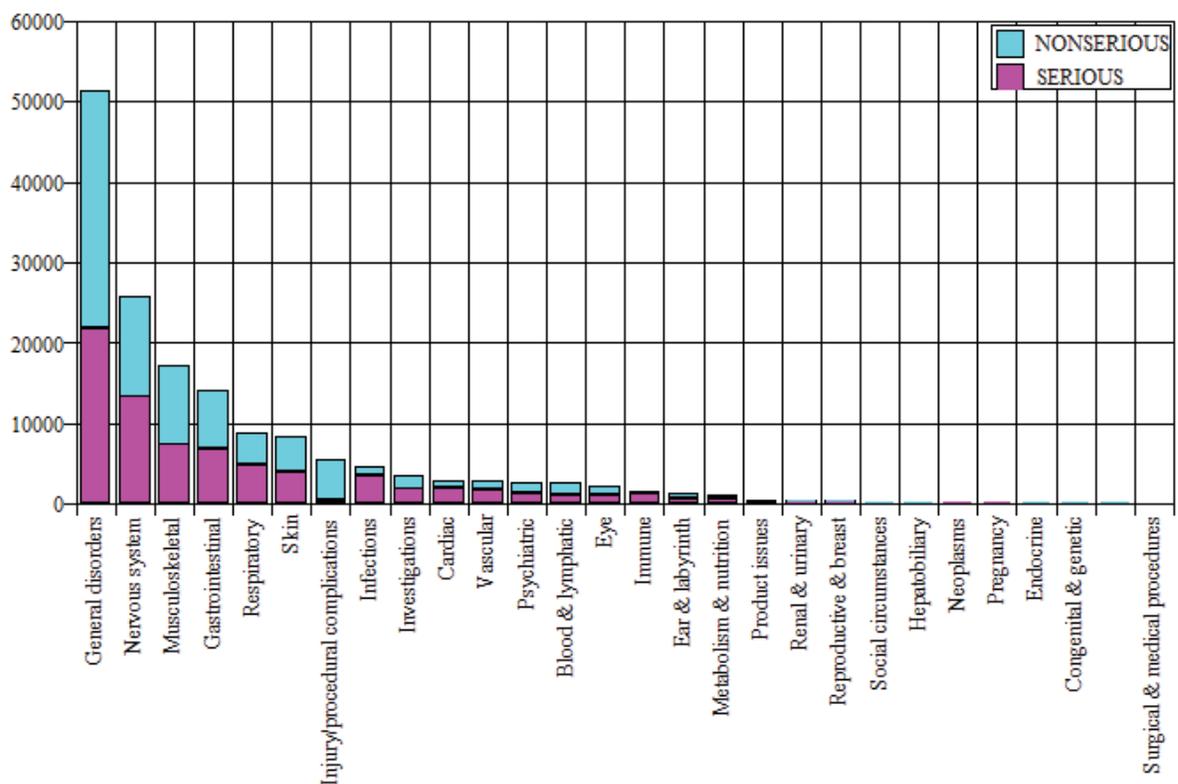


Table 2 shows the most commonly ($\geq 2\%$) reported MedDRA (v. 23.1) PTs in the overall dataset (through 28 February 2021),

Table 2. Events Reported in $\geq 2\%$ Cases

MedDRA SOC	MedDRA PT	Cumulatively Through 28 February 2021 AEs (AERP%) N = 42086
Blood and lymphatic system disorders	Lymphadenopathy	1972 (4.7%)
	Tachycardia	1098 (2.6%)
Gastrointestinal disorders	Nausea	5182 (12.3%)
	Diarrhoea	1880 (4.5%)
	Vomiting	1698 (4.0%)
General disorders and administration site conditions	Pyrexia	7666 (18.2%)
	Fatigue	7338 (17.4%)
	Chills	5514 (13.1%)
	Vaccination site pain	5181 (12.3%)

Table 2. Events Reported in $\geq 2\%$ Cases

		Cumulatively Through 28 February 2021
MedDRA SOC	MedDRA PT	AEs (AERP%) N = 42086
	Pain	3691 (8.8%)
	Malaise	2897 (6.9%)
	Asthenia	2285 (5.4%)
	Drug ineffective	2201 (5.2%)
	Vaccination site erythema	930 (2.2%)
	Vaccination site swelling	913 (2.2%)
	Influenza like illness	835 (2%)
Infections and infestations		
	COVID-19	1927 (4.6%)
Injury, poisoning and procedural complications		
	Off label use	880 (2.1%)
	Product use issue	828 (2.0%)
Musculoskeletal and connective tissue disorders		
	Myalgia	4915 (11.7%)
	Pain in extremity	3959 (9.4%)
	Arthralgia	3525 (8.4%)
Nervous system disorders		
	Headache	10131 (24.1%)
	Dizziness	3720 (8.8%)
	Paraesthesia	1500 (3.6%)
	Hypoaesthesia	999 (2.4%)
Respiratory, thoracic and mediastinal disorders		
	Dyspnoea	2057 (4.9%)
	Cough	1146 (2.7%)
	Oropharyngeal pain	948 (2.3%)
Skin and subcutaneous tissue disorders		
	Pruritus	1447 (3.4%)
	Rash	1404 (3.3%)
	Erythema	1044 (2.5%)
	Hyperhidrosis	900 (2.1%)
	Urticaria	862 (2.1%)
Total number of events		93473

3.1.2. Summary of Safety Concerns in the US Pharmacovigilance Plan**Table 3. Safety concerns**

Important identified risks	Anaphylaxis
Important potential risks	Vaccine-Associated Enhanced Disease (VAED), Including Vaccine-associated Enhanced Respiratory Disease (VAERD)
Missing information	Use in Pregnancy and lactation Use in Paediatric Individuals <12 Years of Age Vaccine Effectiveness

Table 4. Important Identified Risk

Topic	Description														
Important Identified Risk	Post Authorization Cases Evaluation (cumulative to 28 Feb 2021) Total Number of Cases in the Reporting Period (N=42086)														
Anaphylaxis	<p>Since the first temporary authorization for emergency supply under Regulation 174 in the UK (01 December 2020) and through 28 February 2021, 1833 potentially relevant cases were retrieved from the Anaphylactic reaction SMQ (Narrow and Broad) search strategy, applying the MedDRA algorithm. These cases were individually reviewed and assessed according to Brighton Collaboration (BC) definition and level of diagnostic certainty as shown in the Table below:</p> <table border="1" data-bbox="423 562 1276 768"> <thead> <tr> <th>Brighton Collaboration Level</th> <th>Number of cases</th> </tr> </thead> <tbody> <tr> <td>BC 1</td> <td>290</td> </tr> <tr> <td>BC 2</td> <td>311</td> </tr> <tr> <td>BC 3</td> <td>10</td> </tr> <tr> <td>BC 4</td> <td>391</td> </tr> <tr> <td>BC 5</td> <td>831</td> </tr> <tr> <td><i>Total</i></td> <td>1833</td> </tr> </tbody> </table> <p>Level 1 indicates a case with the highest level of diagnostic certainty of anaphylaxis, whereas the diagnostic certainty is lowest for Level 3. Level 4 is defined as “reported event of anaphylaxis with insufficient evidence to meet the case definition” and Level 5 as not a case of anaphylaxis.</p> <p>There were 1002 cases (54.0% of the potentially relevant cases retrieved), 2958 potentially relevant events, from the Anaphylactic reaction SMQ (Broad and Narrow) search strategy, meeting BC Level 1 to 4:</p> <p>Country of incidence: UK (261), US (184), Mexico (99), Italy (82), Germany (67), Spain (38), France (36), Portugal (22), Denmark (20), Finland, Greece (19 each), Sweden (17), Czech Republic , Netherlands (16 each), Belgium, Ireland (13 each), Poland (12), Austria (11); the remaining 57 cases originated from 15 different countries.</p> <p>Relevant event seriousness: Serious (2341), Non-Serious (617);</p> <p>Gender: Females (876), Males (106), Unknown (20);</p> <p>Age (n=961) ranged from 16 to 98 years (mean = 54.8 years, median = 42.5 years);</p> <p>Relevant even outcome^a: fatal (9)^b, resolved/resolving (1922), not resolved (229), resolved with sequelae (48), unknown (754);</p> <p>Most frequently reported relevant PTs (≥2%), from the Anaphylactic reaction SMQ (Broad and Narrow) search strategy: Anaphylactic reaction (435), Dyspnoea (356), Rash (190), Pruritus (175), Erythema (159), Urticaria (133), Cough (115), Respiratory distress, Throat tightness (97 each), Swollen tongue (93), Anaphylactic shock (80), Hypotension (72), Chest discomfort (71), Swelling face (70), Pharyngeal swelling (68), and Lip swelling (64).</p> <p>Conclusion: Evaluation of BC cases Level 1 - 4 did not reveal any significant new safety information. Anaphylaxis is appropriately described in the product labeling as are non-anaphylactic hypersensitivity events. Surveillance will continue.</p>	Brighton Collaboration Level	Number of cases	BC 1	290	BC 2	311	BC 3	10	BC 4	391	BC 5	831	<i>Total</i>	1833
Brighton Collaboration Level	Number of cases														
BC 1	290														
BC 2	311														
BC 3	10														
BC 4	391														
BC 5	831														
<i>Total</i>	1833														

^a Different clinical outcome may be reported for an event that occurred more than once to the same individual.

^b There were 4 individuals in the anaphylaxis evaluation who died on the same day they were vaccinated. Although these patients experienced adverse events (9) that are potential symptoms of anaphylaxis, they all had serious underlying medical conditions, and one individual appeared to also have COVID-19 pneumonia, that likely contributed to their deaths

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Table 5. Important Potential Risk

Topic	Description
Important Potential Risk	Post Authorization Cases Evaluation (cumulative to 28 Feb 2021) Total Number of Cases in the Reporting Period (N=42086)
Vaccine-Associated Enhanced Disease (VAED), including Vaccine-Associated Enhanced Respiratory Disease (VAERD)	<p>No post-authorized AE reports have been identified as cases of VAED/VAERD, therefore, there is no observed data at this time. An expected rate of VAED is difficult to establish so a meaningful observed/expected analysis cannot be conducted at this point based on available data. The feasibility of conducting such an analysis will be re-evaluated on an ongoing basis as data on the virus grows and the vaccine safety data continues to accrue.</p> <p>The search criteria utilised to identify potential cases of VAED for this report includes PTs indicating a lack of effect of the vaccine and PTs potentially indicative of severe or atypical COVID-19^a.</p> <p>Since the first temporary authorization for emergency supply under Regulation 174 in the UK (01 December 2020) and through 28 February 2021, 138 cases [0.33% of the total PM dataset], reporting 317 potentially relevant events were retrieved:</p> <p>Country of incidence: UK (71), US (25), Germany (14), France, Italy, Mexico, Spain, (4 each), Denmark (3); the remaining 9 cases originated from 9 different countries; Cases Seriousness: 138; Seriousness criteria for the total 138 cases: Medically significant (71, of which 8 also serious for disability), Hospitalization required (non-fatal/non-life threatening) (16, of which 1 also serious for disability), Life threatening (13, of which 7 were also serious for hospitalization), Death (38). Gender: Females (73), Males (57), Unknown (8); Age (n=132) ranged from 21 to 100 years (mean = 57.2 years, median = 59.5); Case outcome: fatal (38), resolved/resolving (26), not resolved (65), resolved with sequelae (1), unknown (8); Of the 317 relevant events, the most frequently reported PTs (≥2%) were: Drug ineffective (135), Dyspnoea (53), Diarrhoea (30), COVID-19 pneumonia (23), Vomiting (20), Respiratory failure (8), and Seizure (7).</p> <p>Conclusion: VAED may present as severe or unusual clinical manifestations of COVID-19. Overall, there were 37 subjects with suspected COVID-19 and 101 subjects with confirmed COVID-19 following one or both doses of the vaccine; 75 of the 101 cases were severe, resulting in hospitalisation, disability, life-threatening consequences or death. None of the 75 cases could be definitively considered as VAED/VAERD.</p> <p>In this review of subjects with COVID-19 following vaccination, based on the current evidence, VAED/VAERD remains a theoretical risk for the vaccine. Surveillance will continue.</p>

a. Search criteria: Standard Decreased Therapeutic Response Search AND PTs Dyspnoea; Tachypnoea; Hypoxia; COVID 19 pneumonia; Respiratory Failure; Acute Respiratory Distress Syndrome; Cardiac Failure; Cardiogenic shock; Acute myocardial infarction; Arrhythmia; Myocarditis; Vomiting; Diarrhoea; Abdominal pain; Jaundice; Acute hepatic failure; Deep vein thrombosis; Pulmonary embolism; Peripheral Ischaemia; Vasculitis; Shock; Acute kidney injury; Renal failure; Altered state of consciousness; Seizure; Encephalopathy; Meningitis; Cerebrovascular accident; Thrombocytopenia; Disseminated intravascular coagulation; Chillblains; Erythema multiforme; Multiple organ dysfunction syndrome; Multisystem inflammatory syndrome in children.

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Table 6. Description of Missing Information

Topic	Description
Missing Information	Post Authorization Cases Evaluation (cumulative to 28 Feb 2021) Total Number of Cases in the Reporting Period (N=42086)
Use in Pregnancy and lactation	<ul style="list-style-type: none"> • Number of cases: 413^a (0.98% of the total PM dataset); 84 serious and 329 non-serious; • Country of incidence: US (205), UK (64), Canada (31), Germany (30), Poland (13), Israel (11); Italy (9), Portugal (8), Mexico (6), Estonia, Hungary and Ireland, (5 each), Romania (4), Spain (3), Czech Republic and France (2 each), the remaining 10 cases were distributed among 10 other countries. <p>Pregnancy cases: 274 cases including:</p> <ul style="list-style-type: none"> • 270 mother cases and 4 foetus/baby cases representing 270 unique pregnancies (the 4 foetus/baby cases were linked to 3 mother cases; 1 mother case involved twins). • Pregnancy outcomes for the 270 pregnancies were reported as spontaneous abortion (23), outcome pending (5), premature birth with neonatal death, spontaneous abortion with intrauterine death (2 each), spontaneous abortion with neonatal death, and normal outcome (1 each). No outcome was provided for 238 pregnancies (note that 2 different outcomes were reported for each twin, and both were counted). • 146 non-serious mother cases reported exposure to vaccine in utero without the occurrence of any clinical adverse event. The exposure PTs coded to the PTs Maternal exposure during pregnancy (111), Exposure during pregnancy (29) and Maternal exposure timing unspecified (6). Trimester of exposure was reported in 21 of these cases: 1st trimester (15 cases), 2nd trimester (7), and 3rd trimester (2). • 124 mother cases, 49 non-serious and 75 serious, reported clinical events, which occurred in the vaccinated mothers. Pregnancy related events reported in these cases coded to the PTs Abortion spontaneous (25), Uterine contraction during pregnancy, Premature rupture of membranes, Abortion, Abortion missed, and Foetal death (1 each). Other clinical events which occurred in more than 5 cases coded to the PTs Headache (33), Vaccination site pain (24), Pain in extremity and Fatigue (22 each), Myalgia and Pyrexia (16 each), Chills (13) Nausea (12), Pain (11), Arthralgia (9), Lymphadenopathy and Drug ineffective (7 each), Chest pain, Dizziness and Asthenia (6 each), Malaise and COVID-19 (5 each). Trimester of exposure was reported in 22 of these cases: 1st trimester (19 cases), 2nd trimester (1 case), 3rd trimester (2 cases). • 4 serious foetus/baby cases reported the PTs Exposure during pregnancy, Foetal growth restriction, Maternal exposure during pregnancy, Premature baby (2 each), and Death neonatal (1). Trimester of exposure was reported for 2 cases (twins) as occurring during the 1st trimester. <p>Breast feeding baby cases: 133, of which:</p> <ul style="list-style-type: none"> • 116 cases reported exposure to vaccine during breastfeeding (PT Exposure via breast milk) without the occurrence of any clinical adverse events; • 17 cases, 3 serious and 14 non-serious, reported the following clinical events that occurred in the infant/child exposed to vaccine via breastfeeding: Pyrexia (5), Rash (4), Infant irritability (3), Infantile vomiting, Diarrhoea, Insomnia, and Illness (2 each), Poor feeding infant, Lethargy, Abdominal discomfort, Vomiting, Allergy to vaccine, Increased appetite, Anxiety, Crying, Poor quality sleep, Eructation, Agitation, Pain and Urticaria (1 each). <p>Breast feeding mother cases (6):</p> <ul style="list-style-type: none"> • 1 serious case reported 3 clinical events that occurred in a mother during breast feeding (PT Maternal exposure during breast feeding); these events coded to the PTs Chills, Malaise, and Pyrexia • 1 non-serious case reported with very limited information and without associated AEs.

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Table 6. Description of Missing Information

Topic	Description
Missing Information	<p align="center">Post Authorization Cases Evaluation (cumulative to 28 Feb 2021) Total Number of Cases in the Reporting Period (N=42086)</p>
	<ul style="list-style-type: none"> In 4 cases (3 non-serious; 1 serious) Suppressed lactation occurred in a breast feeding women with the following co-reported events: Pyrexia (2), Paresis, Headache, Chills, Vomiting, Pain in extremity, Arthralgia, Breast pain, Scar pain, Nausea, Migraine, Myalgia, Fatigue and Breast milk discolouration (1 each). <p>Conclusion: There were no safety signals that emerged from the review of these cases of use in pregnancy and while breast feeding.</p>
Use in Paediatric Individuals <12 Years of Age	<p><u>Paediatric individuals <12 years of age</u></p> <ul style="list-style-type: none"> Number of cases: 34^d (0.1% of the total PM dataset), indicative of administration in paediatric subjects <12 years of age; Country of incidence: UK (29), US (3), Germany and Andorra (1 each); Cases Seriousness: Serious (24), Non-Serious (10); Gender: Females (25), Males (7), Unknown (2); Age (n=34) ranged from 2 months to 9 years, mean = 3.7 years, median = 4.0; Case outcome: resolved/resolving (16), not resolved (13), and unknown (5). Of the 132 reported events, those reported more than once were as follows: Product administered to patient of inappropriate age (27, see Medication Error), Off label use (11), Pyrexia (6), Product use issue (5), Fatigue, Headache and Nausea (4 each), Vaccination site pain (3), Abdominal pain upper, COVID-19, Facial paralysis, Lymphadenopathy, Malaise, Pruritus and Swelling (2 each). <p>Conclusion: No new significant safety information was identified based on a review of these cases compared with the non-paediatric population.</p>
Vaccine Effectiveness	<p>Company conventions for coding cases indicative of lack of efficacy:</p> <p>The coding conventions for lack of efficacy in the context of administration of the COVID-19 vaccine were revised on 15 February 2021, as shown below:</p> <ul style="list-style-type: none"> PT “Vaccination failure” is coded when ALL of the following criteria are met: <ul style="list-style-type: none"> The subject has received the series of two doses per the dosing regimen in local labeling. At least 7 days have elapsed since the second dose of vaccine has been administered. The subject experiences SARS-CoV-2 infection (confirmed laboratory tests). PT “Drug ineffective” is coded when either of the following applies: <ul style="list-style-type: none"> The infection is not confirmed as SARS-CoV-2 through laboratory tests (irrespective of the vaccination schedule). This includes scenarios where LOE is stated or implied, e.g., “the vaccine did not work”, “I got COVID-19”. <ul style="list-style-type: none"> It is unknown: <ul style="list-style-type: none"> Whether the subject has received the series of two doses per the dosing regimen in local labeling; How many days have passed since the first dose (including unspecified number of days like” a few days”, “some days”, etc.); If 7 days have passed since the second dose; The subject experiences a vaccine preventable illness 14 days after receiving the first dose up to and through 6 days after receipt of the second dose. <p>Note: after the immune system as had sufficient time (14 days) to respond to the vaccine, a report of COVID-19 is considered a potential lack of efficacy even if the vaccination course is not complete.</p> <p>Summary of the coding conventions for onset of vaccine preventable disease versus the vaccination date:</p>

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Table 6. Description of Missing Information

Topic	Description		
Missing Information	Post Authorization Cases Evaluation (cumulative to 28 Feb 2021) Total Number of Cases in the Reporting Period (N=42086)		
	1st dose (day 1-13)	From day 14 post 1st dose to day 6 post 2nd dose	Day 7 post 2nd dose
	Code only the events describing the SARS-CoV-2 infection	Code “Drug ineffective”	Code “Vaccination failure”
	Scenario Not considered LOE	Scenario considered LOE as “Drug ineffective”	Scenario considered LOE as “Vaccination failure”
	<p>Lack of efficacy cases</p> <ul style="list-style-type: none"> • Number of cases: 1665^b (3.9 % of the total PM dataset) of which 1100 were medically confirmed and 565 non medically confirmed; • Number of lack of efficacy events: 1665 [PT: Drug ineffective (1646) and Vaccination failure (19)^f]. • Country of incidence: US (665), UK (405), Germany (181), France (85), Italy (58), Romania (47), Belgium (33), Israel (30), Poland (28), Spain (21), Austria (18), Portugal (17), Greece (15), Mexico (13), Denmark (8), Canada (7), Hungary, Sweden and United Arab Emirates (5 each), Czech Republic (4), Switzerland (3); the remaining 12 cases originated from 9 different countries. • COVID-19 infection was suspected in 155 cases, confirmed in 228 cases, in 1 case it was reported that the first dose was not effective (no other information). • COVID-19 infection (suspected or confirmed) outcome was reported as resolved/resolving (165), not resolved (205) or unknown (1230) at the time of the reporting; there were 65 cases where a fatal outcome was reported. <p>Drug ineffective cases (1649)</p> <ul style="list-style-type: none"> • Drug ineffective event seriousness: serious (1625), non-serious (21)^e; • Lack of efficacy term was reported: <ul style="list-style-type: none"> ○ after the 1st dose in 788 cases ○ after the 2nd dose in 139 cases ○ in 722 cases it was unknown after which dose the lack of efficacy occurred. • Latency of lack of efficacy term reported after the first dose was known for 176 cases: <ul style="list-style-type: none"> ○ Within 9 days: 2 subjects; ○ Within 14 and 21 days: 154 subjects; ○ Within 22 and 50 days: 20 subjects; • Latency of lack of efficacy term reported after the second dose was known for 69 cases: <ul style="list-style-type: none"> ○ Within 0 and 7 days: 42 subjects; ○ Within 8 and 21 days: 22 subjects; ○ Within 23 and 36 days: 5 subjects. • Latency of lack of efficacy term reported in cases where the number of doses administered was not provided, was known in 409 cases: <ul style="list-style-type: none"> ○ Within 0 and 7 days after vaccination: 281 subjects. ○ Within 8 and 14 days after vaccination: 89 subjects. ○ Within 15 and 44 days after vaccination: 39 subjects. <p>According to the RSI, individuals may not be fully protected until 7 days after their second dose of vaccine, therefore for the above 1649 cases where lack of efficacy was reported after the 1st dose or the</p>		

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Table 6. Description of Missing Information

Topic	Description
Missing Information	Post Authorization Cases Evaluation (cumulative to 28 Feb 2021) Total Number of Cases in the Reporting Period (N=42086)
	<p>2nd dose, the reported events may represent signs and symptoms of intercurrent or undiagnosed COVID-19 infection or infection in an individual who was not fully vaccinated, rather than vaccine ineffectiveness.</p> <p style="text-align: center;"><i>Vaccination failure cases (16)</i></p> <ul style="list-style-type: none"> • Vaccination failure seriousness: all serious; • Lack of efficacy term was reported in all cases after the 2nd dose; • Latency of lack of efficacy was known for 14 cases: <ul style="list-style-type: none"> ○ Within 7 and 13 days: 8 subjects; ○ Within 15 and 29 days: 6 subjects. <p>COVID-19 (10) and Asymptomatic COVID-19 (6) were the reported vaccine preventable infections that occurred in these 16 cases.</p> <p>Conclusion: No new safety signals of vaccine lack of efficacy have emerged based on a review of these cases.</p>

- a. From a total of 417 cases, 4 cases were excluded from the analysis. In 3 cases, the MAH was informed that a 33-year-old and two unspecified age pregnant female patients were scheduled to receive bnt162b2 (PT reported Off label use and Product use issue in 2 cases; Circumstance or information capable of leading to medication error in one case). One case reported the PT Morning sickness; however, pregnancy was not confirmed in this case.
- b. 558 additional cases retrieved in this dataset were excluded from the analysis; upon review, 546 cases cannot be considered true lack of efficacy cases because the PT Drug ineffective was coded but the subjects developed SARS-CoV-2 infection during the early days from the first dose (days 1 – 13); the vaccine has not had sufficient time to stimulate the immune system and, consequently, the development of a vaccine preventable disease during this time is not considered a potential lack of effect of the vaccine; in 5 cases the PT Drug ineffective was removed after data lock point (DLP) because the subjects did not develop COVID-19 infection; in 1 case, reporting Treatment failure and Transient ischaemic attack, the Lack of efficacy PT did not refer to BNT162b2 vaccine; 5 cases have been invalidated in the safety database after DLP; 1 case has been deleted from the discussion because the PTs reported Pathogen resistance and Product preparation issue were not indicative of a lack of efficacy. to be eliminated.
- c. Upon review, 31 additional cases were excluded from the analysis as the data reported (e.g. clinical details, height, weight, etc.) were not consistent with paediatric subjects
- d. Upon review, 28 additional cases were excluded from the analysis as the data reported (e.g. clinical details, height, weight, etc.) were not consistent with paediatric subjects.
- e. Different clinical outcomes may be reported for an event that occurred more than once to the same individual
- f. In 2 cases the PT Vaccination failure was replaced with Drug ineffective after DLP. Another case was not included in the discussion of the Vaccination failure cases because correct scheduling (21 days apart between the first and second dose) cannot be confirmed.

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3.1.3. Review of Adverse Events of Special Interest (AESIs)

Please refer to [Appendix 1](#) for the list of the company’s AESIs for BNT162b2.

The company’s AESI list takes into consideration the lists of AESIs from the following expert groups and regulatory authorities: Brighton Collaboration (SPEAC), ACCESS protocol, US CDC (preliminary list of AESI for VAERS surveillance), MHRA (unpublished guideline).

The AESI terms are incorporated into a TME list and include events of interest due to their association with severe COVID-19 and events of interest for vaccines in general.

The AESI list is comprised of MedDRA PTs, HLTs, HLTs or MedDRA SMQs and can be changed as appropriate based on the evolving safety profile of the vaccine.

Table 7 provides a summary review of cumulative cases within AESI categories in the Pfizer safety database. This is distinct from safety signal evaluations which are conducted and included, as appropriate, in the Summary Monthly Safety Reports submitted regularly to the FDA and other Health Authorities.

Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
Anaphylactic Reactions <i>Search criteria: Anaphylactic reaction SMQ (Narrow and Broad, with the algorithm applied), selecting relevant cases according to BC criteria</i>	Please refer to the Risk ‘Anaphylaxis’ included above in Table 4 .
Cardiovascular AESIs <i>Search criteria: PTs Acute myocardial infarction; Arrhythmia; Cardiac failure; Cardiac failure acute; Cardiogenic shock; Coronary artery disease; Myocardial infarction; Postural orthostatic tachycardia syndrome; Stress cardiomyopathy; Tachycardia</i>	<ul style="list-style-type: none"> • Number of cases: 1403 (3.3% of the total PM dataset), of which 241 are medically confirmed and 1162 are non-medically confirmed; • Country of incidence: UK (268), US (233), Mexico (196), Italy (141), France (128), Germany (102), Spain (46), Greece (45), Portugal (37), Sweden (20), Ireland (17), Poland (16), Israel (13), Austria, Romania and Finland (12 each), Netherlands (11), Belgium and Norway (10 each), Czech Republic (9), Hungary and Canada (8 each), Croatia and Denmark (7 each), Iceland (5); the remaining 30 cases were distributed among 13 other countries; • Subjects’ gender: female (1076), male (291) and unknown (36); • Subjects’ age group (n = 1346): Adult^c (1078), Elderly^d (266) Child^e and Adolescent^f (1 each); • Number of relevant events: 1441, of which 946 serious, 495 non-serious; in the cases reporting relevant serious events; • Reported relevant PTs: Tachycardia (1098), Arrhythmia (102), Myocardial infarction (89), Cardiac failure (80), Acute myocardial infarction (41), Cardiac failure acute (11), Cardiogenic shock and Postural orthostatic tachycardia syndrome (7 each) and Coronary artery disease (6); • Relevant event onset latency (n = 1209): Range from <24 hours to 21 days, median <24 hours;

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Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
	<ul style="list-style-type: none"> • Relevant event outcome^g: fatal (136), resolved/resolving (767), resolved with sequelae (21), not resolved (140) and unknown (380); <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
<p>COVID-19 AESIs <i>Search criteria: Covid-19 SMQ (Narrow and Broad) OR PTs Ageusia; Anosmia</i></p>	<ul style="list-style-type: none"> • Number of cases: 3067 (7.3% of the total PM dataset), of which 1013 are medically confirmed and 2054 are non-medically confirmed; • Country of incidence: US (1272), UK (609), Germany (360), France (161), Italy (94), Spain (69), Romania (62), Portugal (51), Poland (50), Mexico (43), Belgium (42), Israel (41), Sweden (30), Austria (27), Greece (24), Denmark (18), Czech Republic and Hungary (17 each), Canada (12), Ireland (11), Slovakia (9), Latvia and United Arab Emirates (6 each); the remaining 36 cases were distributed among 16 other different countries; • Subjects' gender: female (1650), male (844) and unknown (573); • Subjects' age group (n= 1880): Adult (1315), Elderly (560), Infant^h and Adolescent (2 each), Child (1); • Number of relevant events: 3359, of which 2585 serious, 774 non-serious; • Most frequently reported relevant PTs (>1 occurrence): COVID-19 (1927), SARS-CoV-2 test positive (415), Suspected COVID-19 (270), Ageusia (228), Anosmia (194), SARS-CoV-2 antibody test negative (83), Exposure to SARS-CoV-2 (62), SARS-CoV-2 antibody test positive (53), COVID-19 pneumonia (51), Asymptomatic COVID-19 (31), Coronavirus infection (13), Occupational exposure to SARS-CoV-2 (11), SARS-CoV-2 test false positive (7), Coronavirus test positive (6), SARS-CoV-2 test negative (3) SARS-CoV-2 antibody test (2); • Relevant event onset latency (n = 2070): Range from <24 hours to 374 days, median 5 days; • Relevant event outcome: fatal (136), not resolved (547), resolved/resolving (558), resolved with sequelae (9) and unknown (2110). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
<p>Dermatological AESIs <i>Search criteria: PT Chillblains; Erythema multiforme</i></p>	<ul style="list-style-type: none"> • Number of cases: 20 cases (0.05% of the total PM dataset), of which 15 are medically confirmed and 5 are non-medically confirmed; • Country of incidence: UK (8), France and Poland (2 each), and the remaining 8 cases were distributed among 8 other different countries; • Subjects' gender: female (17) male and unknown (1 each); • Subjects' age group (n=19): Adult (18), Elderly (1); • Number of relevant events: 20 events, 16 serious, 4 non-serious

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Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
	<ul style="list-style-type: none"> • Reported relevant PTs: Erythema multiforme (13) and Chillblains (7) • Relevant event onset latency (n = 18): Range from <24 hours to 17 days, median 3 days; • Relevant event outcome: resolved/resolving (7), not resolved (8) and unknown (6). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue.</p>
<p>Haematological AESIs <i>Search criteria: Leukopenias NEC (HLT) (Primary Path) OR Neutropenias (HLT) (Primary Path) OR PTs Immune thrombocytopenia, Thrombocytopenia OR SMQ Haemorrhage terms (excl laboratory terms</i></p>	<ul style="list-style-type: none"> • Number of cases: 932 (2.2 % of the total PM dataset), of which 524 medically confirmed and 408 non-medically confirmed; • Country of incidence: UK (343), US (308), France (50), Germany (43), Italy (37), Spain (27), Mexico and Poland (13 each), Sweden (10), Israel (9), Netherlands (8), Denmark, Finland, Portugal and Ireland (7 each), Austria and Norway (6 each), Croatia (4), Greece, Belgium, Hungary and Switzerland (3 each), Cyprus, Latvia and Serbia (2 each); the remaining 9 cases originated from 9 different countries; • Subjects' gender (n=898): female (676) and male (222); • Subjects' age group (n=837): Adult (543), Elderly (293), Infant (1); • Number of relevant events: 1080, of which 681 serious, 399 non-serious; • Most frequently reported relevant PTs (≥15 occurrences) include: Epistaxis (127), Contusion (112), Vaccination site bruising (96), Vaccination site haemorrhage (51), Petechiae (50), Haemorrhage (42), Haematochezia (34), Thrombocytopenia (33), Vaccination site haematoma (32), Conjunctival haemorrhage and Vaginal haemorrhage (29 each), Haematoma, Haemoptysis and Menorrhagia (27 each), Haematemesis (25), Eye haemorrhage (23), Rectal haemorrhage (22), Immune thrombocytopenia (20), Blood urine present (19), Haematuria, Neutropenia and Purpura (16 each) Diarrhoea haemorrhagic (15); • Relevant event onset latency (n = 787): Range from <24 hours to 33 days, median = 1 day; • Relevant event outcome: fatal (34), resolved/resolving (393), resolved with sequelae (17), not resolved (267) and unknown (371). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
<p>Hepatic AESIs <i>Search criteria: Liver related investigations, signs and symptoms (SMQ) (Narrow and Broad) OR PT Liver injury</i></p>	<ul style="list-style-type: none"> • Number of cases: 70 cases (0.2% of the total PM dataset), of which 54 medically confirmed and 16 non-medically confirmed; • Country of incidence: UK (19), US (14), France (7), Italy (5), Germany (4), Belgium, Mexico and Spain (3 each), Austria, and Iceland (2 each); the remaining 8 cases originated from 8 different countries; • Subjects' gender: female (43), male (26) and unknown (1); • Subjects' age group (n=64): Adult (37), Elderly (27);

Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
	<ul style="list-style-type: none"> • Number of relevant events: 94, of which 53 serious, 41 non-serious; • Most frequently reported relevant PTs (≥ 3 occurrences) include: Alanine aminotransferase increased (16), Transaminases increased and Hepatic pain (9 each), Liver function test increased (8), Aspartate aminotransferase increased and Liver function test abnormal (7 each), Gamma-glutamyltransferase increased and Hepatic enzyme increased (6 each), Blood alkaline phosphatase increased and Liver injury (5 each), Ascites, Blood bilirubin increased and Hypertransaminasaemia (3 each); • Relevant event onset latency (n = 57): Range from <24 hours to 20 days, median 3 days; • Relevant event outcome: fatal (5), resolved/resolving (27), resolved with sequelae (1), not resolved (14) and unknown (47). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
<p>Facial Paralysis <i>Search criteria: PTs Facial paralysis, Facial paresis</i></p>	<ul style="list-style-type: none"> • Number of cases: 449ⁱ (1.07% of the total PM dataset), 314 medically confirmed and 135 non-medically confirmed; • Country of incidence: US (124), UK (119), Italy (40), France (27), Israel (20), Spain (18), Germany (13), Sweden (11), Ireland (9), Cyprus (8), Austria (7), Finland and Portugal (6 each), Hungary and Romania (5 each), Croatia and Mexico (4 each), Canada (3),Czech Republic, Malta, Netherlands, Norway, Poland and Puerto Rico (2 each); the remaining 8 cases originated from 8 different countries; • Subjects' gender: female (295), male (133), unknown (21); • Subjects' age group (n=411): Adult (313), Elderly (96), Infant^j and Child (1 each); • Number of relevant events^k: 453, of which 399 serious, 54 non-serious; • Reported relevant PTs: Facial paralysis (401), Facial paresis (64); • Relevant event onset latency (n = 404): Range from <24 hours to 46 days, median 2 days; • Relevant event outcome: resolved/resolving (184), resolved with sequelae (3), not resolved (183) and unknown (97); <p>Overall Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue. Causality assessment will be further evaluated following availability of additional unblinded data from the clinical study C4591001, which will be unblinded for final analysis approximately mid-April 2021. Additionally, non-interventional post-authorisation safety studies, C4591011 and C4591012 are expected to capture data on a sufficiently large vaccinated population to detect an increased risk of Bell's palsy in vaccinated individuals. The timeline for conducting these analyses will be established based on the size of the vaccinated population captured in the study data sources by the first interim reports (due 30 June</p>

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Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
Immune-Mediated/Autoimmune AESIs <i>Search criteria: Immune-mediated/autoimmune disorders (SMQ) (Broad and Narrow) OR Autoimmune disorders HLGT (Primary Path) OR PTs Cytokine release syndrome; Cytokine storm; Hypersensitivity</i>	<p>2021). Study C4591021, pending protocol endorsement by EMA, is also intended to inform this risk.</p> <ul style="list-style-type: none"> • Number of cases: 1050 (2.5 % of the total PM dataset), of which 760 medically confirmed and 290 non-medically confirmed; • Country of incidence (>10 cases): UK (267), US (257), Italy (70), France and Germany (69 each), Mexico (36), Sweden (35), Spain (32), Greece (31), Israel (21), Denmark (18), Portugal (17), Austria and Czech Republic (16 each), Canada (12), Finland (10). The remaining 74 cases were from 24 different countries. • Subjects' gender (n=682): female (526), male (156). • Subjects' age group (n=944): Adult (746), Elderly (196), Adolescent (2). • Number of relevant events: 1077, of which 780 serious, 297 non-serious. • Most frequently reported relevant PTs (>10 occurrences): Hypersensitivity (596), Neuropathy peripheral (49), Pericarditis (32), Myocarditis (25), Dermatitis (24), Diabetes mellitus and Encephalitis (16 each), Psoriasis (14), Dermatitis Bullous (13), Autoimmune disorder and Raynaud's phenomenon (11 each); • Relevant event onset latency (n = 807): Range from <24 hours to 30 days, median <24 hours. • Relevant event outcome¹: resolved/resolving (517), not resolved (215), fatal (12), resolved with sequelae (22) and unknown (312). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
Musculoskeletal AESIs <i>Search criteria: PTs Arthralgia; Arthritis; Arthritis bacterial¹; Chronic fatigue syndrome; Polyarthritits; Polyneuropathy; Post viral fatigue syndrome; Rheumatoid arthritis</i>	<ul style="list-style-type: none"> • Number of cases: 3600 (8.5% of the total PM dataset), of which 2045 medically confirmed and 1555 non-medically confirmed; • Country of incidence: UK (1406), US (1004), Italy (285), Mexico (236), Germany (72), Portugal (70), France (48), Greece and Poland (46), Latvia (33), Czech Republic (32), Israel and Spain (26), Sweden (25), Romania (24), Denmark (23), Finland and Ireland (19 each), Austria and Belgium (18 each), Canada (16), Netherlands (14), Bulgaria (12), Croatia and Serbia (9 each), Cyprus and Hungary (8 each), Norway (7), Estonia and Puerto Rico (6 each), Iceland and Lithuania (4 each); the remaining 21 cases originated from 11 different countries; • Subjects' gender (n=3471): female (2760), male (711); • Subjects' age group (n=3372): Adult (2850), Elderly (515), Child (4), Adolescent (2), Infant (1); • Number of relevant events: 3640, of which 1614 serious, 2026 non-serious; • Reported relevant PTs: Arthralgia (3525), Arthritis (70), Rheumatoid arthritis (26), Polyarthritits (5), Polyneuropathy, Post viral fatigue syndrome, Chronic fatigue syndrome (4 each), Arthritis bacterial (1); • Relevant event onset latency (n = 2968): Range from <24 hours to 32 days, median 1 day;

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Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
	<ul style="list-style-type: none"> Relevant event outcome: resolved/resolving (1801), not resolved (959), resolved with sequelae (49), and unknown (853). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue.</p>
<p>Neurological AESIs (including demyelination)</p> <p><i>Search criteria: Convulsions (SMQ) (Broad and Narrow) OR Demyelination (SMQ) (Broad and Narrow) OR PTs Ataxia; Cataplexy; Encephalopathy; Fibromyalgia; Intracranial pressure increased; Meningitis; Meningitis aseptic; Narcolepsy</i></p>	<ul style="list-style-type: none"> Number of cases: 501 (1.2% of the total PM dataset), of which 365 medically confirmed and 136 non-medically confirmed. Country of incidence (≥9 cases): UK (157), US (68), Germany (49), Mexico (35), Italy (31), France (25), Spain (18), Poland (17), Netherlands and Israel (15 each), Sweden (9). The remaining 71 cases were from 22 different countries. Subjects' gender (n=478): female (328), male (150). Subjects' age group (n=478): Adult (329), Elderly (149); Number of relevant events: 542, of which 515 serious, 27 non-serious. Most frequently reported relevant PTs (>2 occurrences) included: Seizure (204), Epilepsy (83), Generalised tonic-clonic seizure (33), Guillain-Barre syndrome (24), Fibromyalgia and Trigeminal neuralgia (17 each), Febrile convulsion, (15), Status epilepticus (12), Aura and Myelitis transverse (11 each), Multiple sclerosis relapse and Optic neuritis (10 each), Petit mal epilepsy and Tonic convulsion (9 each), Ataxia (8), Encephalopathy and Tonic clonic movements (7 each), Foaming at mouth (5), Multiple sclerosis, Narcolepsy and Partial seizures (4 each), Bad sensation, Demyelination, Meningitis, Postictal state, Seizure like phenomena and Tongue biting (3 each); Relevant event onset latency (n = 423): Range from <24 hours to 48 days, median 1 day; Relevant events outcome: fatal (16), resolved/resolving (265), resolved with sequelae (13), not resolved (89) and unknown (161); <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
<p>Other AESIs</p> <p><i>Search criteria: Herpes viral infections (HLT) (Primary Path) OR PTs Adverse event following immunisation; Inflammation; Manufacturing laboratory analytical testing issue; Manufacturing materials issue; Manufacturing production issue; MERS-CoV test; MERS-CoV test negative; MERS-CoV test positive; Middle East respiratory syndrome; Multiple organ dysfunction syndrome; Occupational exposure to communicable disease; Patient</i></p>	<ul style="list-style-type: none"> Number of cases: 8152 (19.4% of the total PM dataset), of which 4977 were medically confirmed and 3175 non-medically confirmed; Country of incidence (> 20 occurrences): UK (2715), US (2421), Italy (710), Mexico (223), Portugal (210), Germany (207), France (186), Spain (183), Sweden (133), Denmark (127), Poland (120), Greece (95), Israel (79), Czech Republic (76), Romania (57), Hungary (53), Finland (52), Norway (51), Latvia (49), Austria (47), Croatia (42), Belgium (41), Canada (39), Ireland (34), Serbia (28), Iceland (25), Netherlands (22). The remaining 127 cases were from 21 different countries; Subjects' gender (n=7829): female (5969), male (1860); Subjects' age group (n=7479): Adult (6330), Elderly (1125), Adolescent, Child (9 each), Infant (6);

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Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
<i>isolation; Product availability issue; Product distribution issue; Product supply issue; Pyrexia; Quarantine; SARS-CoV-1 test; SARS-CoV-1 test negative; SARS-CoV-1 test positive</i>	<ul style="list-style-type: none"> • Number of relevant events: 8241, of which 3674 serious, 4568 non-serious; • Most frequently reported relevant PTs (≥6 occurrences) included: Pyrexia (7666), Herpes zoster (259), Inflammation (132), Oral herpes (80), Multiple organ dysfunction syndrome (18), Herpes virus infection (17), Herpes simplex (13), Ophthalmic herpes zoster (10), Herpes ophthalmic and Herpes zoster reactivation (6 each); • Relevant event onset latency (n =6836): Range from <24 hours to 61 days, median 1 day; • Relevant events outcome: fatal (96), resolved/resolving (5008), resolved with sequelae (84), not resolved (1429) and unknown (1685). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>
Pregnancy Related AESIs <i>Search criteria: PTs Amniotic cavity infection; Caesarean section; Congenital anomaly; Death neonatal; Eclampsia; Foetal distress syndrome; Low birth weight baby; Maternal exposure during pregnancy; Placenta praevia; Pre-eclampsia; Premature labour; Stillbirth; Uterine rupture; Vasa praevia</i>	<p>For relevant cases, please refer to Table 6, Description of Missing Information, Use in Pregnancy and While Breast Feeding</p>
Renal AESIs <i>Search criteria: PTs Acute kidney injury; Renal failure.</i>	<ul style="list-style-type: none"> • Number of cases: 69 cases (0.17% of the total PM dataset), of which 57 medically confirmed, 12 non-medically confirmed; • Country of incidence: Germany (17), France and UK (13 each), US (6), Belgium, Italy and Spain (4 each), Sweden (2), Austria, Canada, Denmark, Finland, Luxembourg and Norway (1 each); • Subjects' gender: female (46), male (23); • Subjects' age group (n=68): Adult (7), Elderly (60), Infant (1); • Number of relevant events: 70, all serious; • Reported relevant PTs: Acute kidney injury (40) and Renal failure (30); • Relevant event onset latency (n = 42): Range from <24 hours to 15 days, median 4 days; • Relevant event outcome: fatal (23), resolved/resolving (10), not resolved (15) and unknown (22). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue.</p>
Respiratory AESIs <i>Search criteria: Lower respiratory tract infections NEC (HLT)</i>	<ul style="list-style-type: none"> • Number of cases: 130 cases (0.3% of the total PM dataset), of which 107 medically confirmed;

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Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
<p><i>(Primary Path) OR Respiratory failures (excl neonatal) (HLT)</i> <i>(Primary Path) OR Viral lower respiratory tract infections (HLT)</i> <i>(Primary Path) OR PTs: Acute respiratory distress syndrome; Endotracheal intubation; Hypoxia; Pulmonary haemorrhage; Respiratory disorder; Severe acute respiratory syndrome</i></p>	<ul style="list-style-type: none"> • Countries of incidence: United Kingdom (20), France (18), United States (16), Germany (14), Spain (13), Belgium and Italy (9), Denmark (8), Norway (5), Czech Republic, Iceland (3 each); the remaining 12 cases originated from 8 different countries. • Subjects' gender (n=130): female (72), male (58). • Subjects's age group (n=126): Elderly (78), Adult (47), Adolescent (1). • Number of relevant events: 137, of which 126 serious, 11 non-serious; • Reported relevant PTs: Respiratory failure (44), Hypoxia (42), Respiratory disorder (36), Acute respiratory distress syndrome (10), Chronic respiratory syndrome (3), Severe acute respiratory syndrome (2). • Relevant event onset latency (n=102): range from < 24 hours to 18 days, median 1 day; • Relevant events outcome: fatal (41), Resolved/resolving (47), not recovered (18) and unknown (31). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue.</p>
<p>Thromboembolic Events <i>Search criteria: Embolism and thrombosis (HLGT) (Primary Path), excluding PTs reviewed as Stroke AESIs, OR PTs Deep vein thrombosis; Disseminated intravascular coagulation; Embolism; Embolism venous; Pulmonary embolism</i></p>	<ul style="list-style-type: none"> • Number of cases: 151 (0.3% of the total PM dataset), of which 111 medically confirmed and 40 non-medically confirmed; • Country of incidence: UK (34), US (31), France (20), Germany (15), Italy and Spain (6 each), Denmark and Sweden (5 each), Austria, Belgium and Israel (3 each), Canada, Cyprus, Netherlands and Portugal (2 each); the remaining 12 cases originated from 12 different countries; • Subjects' gender (n= 144): female (89), male (55); • Subjects' age group (n=136): Adult (66), Elderly (70); • Number of relevant events: 168, of which 165 serious, 3 non-serious; • Most frequently reported relevant PTs (>1 occurrence) included: Pulmonary embolism (60), Thrombosis (39), Deep vein thrombosis (35), Thrombophlebitis superficial (6), Venous thrombosis limb (4), Embolism, Microembolism, Thrombophlebitis and Venous thrombosis (3 each) Blue toe syndrome (2); • Relevant event onset latency (n = 124): Range from <24 hours to 28 days, median 4 days; • Relevant event outcome: fatal (18), resolved/resolving (54), resolved with sequelae (6), not resolved (49) and unknown (42). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue.</p>
<p>Stroke <i>Search criteria: HLT Central nervous system haemorrhages and cerebrovascular accidents</i></p>	<ul style="list-style-type: none"> • Number of cases: 275 (0.6% of the total PM dataset), of which 180 medically confirmed and 95 non-medically confirmed; • Country of incidence: UK (81), US (66), France (32), Germany (21), Norway (14), Netherlands and Spain (11 each), Sweden (9),

Table 7. AESIs Evaluation for BNT162b2

AESIs^a Category	Post-Marketing Cases Evaluation^b Total Number of Cases (N=42086)
<p><i>(Primary Path) OR HLT Cerebrovascular venous and sinus thrombosis (Primary Path)</i></p>	<p>Israel (6), Italy (5), Belgium (3), Denmark, Finland, Poland and Switzerland (2 each); the remaining 8 cases originated from 8 different countries;</p> <ul style="list-style-type: none"> • Subjects' gender (n= 273): female (182), male (91); • Subjects' age group (n=265): Adult (59), Elderly (205), Child^m (1); • Number of relevant events: 300, all serious; • Most frequently reported relevant PTs (>1 occurrence) included: <ul style="list-style-type: none"> ○ PTs indicative of Ischaemic stroke: Cerebrovascular accident (160), Ischaemic stroke (41), Cerebral infarction (15), Cerebral ischaemia, Cerebral thrombosis, Cerebral venous sinus thrombosis, Ischaemic cerebral infarction and Lacunal infarction (3 each) Basal ganglia stroke, Cerebellar infarction and Thrombotic stroke (2 each); ○ PTs indicative of Haemorrhagic stroke: Cerebral haemorrhage (26), Haemorrhagic stroke (11), Haemorrhage intracranial and Subarachnoid haemorrhage (5 each), Cerebral haematoma (4), Basal ganglia haemorrhage and Cerebellar haemorrhage (2 each); • Relevant event onset latency (n = 241): Range from <24 hours to 41 days, median 2 days; • Relevant event outcome: fatal and resolved/resolving (61 each), resolved with sequelae (10), not resolved (85) and unknown (83). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue.</p>
<p>Vasculitic Events <i>Search criteria: Vasculitides HLT</i></p>	<ul style="list-style-type: none"> • Number of cases: 32 cases (0.08% of the total PM dataset), of which 26 medically confirmed and 6 non-medically confirmed; • Country of incidence: UK (13), France (4), Portugal, US and Spain (3 each), Cyprus, Germany, Hungary, Italy and Slovakia and Costa rica (1 each); • Subjects' gender: female (26), male (6); • Subjects' age group (n=31): Adult (15), Elderly (16); • Number of relevant events: 34, of which 25 serious, 9 non-serious; • Reported relevant PTs: Vasculitis (14), Cutaneous vasculitis and Vasculitic rash (4 each), (3), Giant cell arteritis and Peripheral ischaemia (3 each), Behcet's syndrome and Hypersensitivity vasculitis (2 each) Palpable purpura, and Takayasu's arteritis (1 each); • Relevant event onset latency (n = 25): Range from <24 hours to 19 days, median 3 days; • Relevant event outcome: fatal (1), resolved/resolving (13), not resolved (12) and unknown (8). <p>Conclusion: This cumulative case review does not raise new safety issues. Surveillance will continue</p>

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Table 7. AESIs Evaluation for BNT162b2

AESIs ^a Category	Post-Marketing Cases Evaluation ^b Total Number of Cases (N=42086)
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- a. For the complete list of the AESIs, please refer to Appendix 5;
- b. Please note that this corresponds to evidence from post-EUA/conditional marketing authorisation approval data sources;
- c. Subjects with age ranged between 18 and 64 years;
- d. Subjects with age equal to or above 65 years;
- e. Subjects with age ranged between 2 and 11 years;
- f. Subjects with age ranged between 12 and less than 18 years;
- g. Multiple episodes of the same PT event were reported with a different clinical outcome within some cases hence the sum of the events outcome exceeds the total number of PT events;
- h. Subjects with age ranged between 1 (28 days) and 23 months;
- i. Twenty-four additional cases were excluded from the analysis as they were not cases of peripheral facial nerve palsy because they described other disorders (stroke, cerebral haemorrhage or transient ischaemic attack); 1 case was excluded from the analysis because it was invalid due to an unidentifiable reporter;
- j. This UK case report received from the UK MHRA described a 1-year-old subject who received the vaccine, and had left postauricular ear pain that progressed to left-sided Bell’s palsy 1 day following vaccination that had not resolved at the time of the report;
- k. If a case included both PT Facial paresis and PT Facial paralysis, only the PT Facial paralysis was considered in the descriptions of the events as it is most clinically important;
- l. Multiple episodes of the same PT event were reported with a different clinical outcome within some cases hence the sum of the events outcome exceeds the total number of PT events
- m. This UK case report received from the UK MHRA described a 7-year-old female subject who received the vaccine and had stroke (unknown outcome); no follow-up is possible for clarification.
- n. This PT not included in the AESIs/TME list was included in the review as relevant for ACCESS protocol criteria;

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3.1.4. Medication error

Cases potentially indicative of medication errors¹ that cumulatively occurred are summarized below.

- Number of relevant medication error cases: 2056² (4.9%) of which 1569 (3.7%) are medically confirmed.
- Number of relevant events: 2792
- Top 10 countries of incidence:
 - US (1201), France (171), UK (138), Germany (88), Czech Republic (87), Sweden (49), Israel (45), Italy (42), Canada (35), Romania (33), Finland (21), Portugal (20), Norway (14), Puerto Rico (13), Poland (12), Austria and Spain (10 each).

Medication error case outcomes:

- Fatal (7)³,
- Recovered/recovering (354, of which 4 are serious),
- Recovered with sequelae (8, of which 3 serious)

¹ MedDRA (version 23.1) Higher Level Terms: Accidental exposures to product; Product administration errors and issues; Product confusion errors and issues; Product dispensing errors and issues; Product label issues; Product monitoring errors and issues; Product preparation errors and issues; Product selection errors and issues; Product storage errors and issues in the product use system; Product transcribing errors and communication issues, OR Preferred Terms: Accidental poisoning; Circumstance or information capable of leading to device use error; Circumstance or information capable of leading to medication error; Contraindicated device used; Deprescribing error; Device use error; Dose calculation error; Drug titration error; Expired device used; Exposure via direct contact; Exposure via eye contact; Exposure via mucosa; Exposure via skin contact; Failure of child resistant product closure; Inadequate aseptic technique in use of product; Incorrect disposal of product; Intercepted medication error; Intercepted product prescribing error; Medication error; Multiple use of single-use product; Product advertising issue; Product distribution issue; Product prescribing error; Product prescribing issue; Product substitution error; Product temperature excursion issue; Product use in unapproved therapeutic environment; Radiation underdose; Underdose; Unintentional medical device removal; Unintentional use for unapproved indication; Vaccination error; Wrong device used; Wrong dosage form; Wrong dosage formulation; Wrong dose; Wrong drug; Wrong patient; Wrong product procured; Wrong product stored; Wrong rate; Wrong route; Wrong schedule; Wrong strength; Wrong technique in device usage process; Wrong technique in product usage process.

² Thirty-five (35) cases were excluded from the analysis because describing medication errors occurring in an unspecified number of individuals or describing medication errors occurring with co suspects were determined to be non-contributory.

³ All the medication errors reported in these cases were assessed as non-serious occurrences with an unknown outcome; based on the available information including the causes of death, the relationship between the medication error and the death is weak. .

- Not recovered (189, of which 84 are serious),
- Unknown (1498, of which 33 are serious).

1371 cases reported only MEs without any associated clinical adverse event. The PTs most frequently reported (≥ 12 occurrences) were: Poor quality product administered (539), Product temperature excursion issue (253), Inappropriate schedule of product administration (225), Product preparation error (206), Underdose (202), Circumstance or information capable of leading to medication error (120), Product preparation issue (119), Wrong technique in product usage process (76), Incorrect route of product administration (66), Accidental overdose (33), Product administered at inappropriate site (27), Incorrect dose administered and Accidental exposure to the product (25 each), Exposure via skin contact (22), Wrong product administered (17), Incomplete course of vaccination, and Product administration error (14 each) Product administered to patient of inappropriate age (12).

In 685 cases, there were co-reported AEs. The most frequently co-associated AEs (> 40 occurrences) were: Headache (187), Pyrexia (161), Fatigue (135), Chills (127), Pain (107), Vaccination site pain (100), Nausea (89), Myalgia (88), Pain in extremity (85) Arthralgia (68), Off label use (57), Dizziness (52), Lymphadenopathy (47), Asthenia (46) and Malaise (41). These cases are summarized in Table 8.

Table 8. ME PTs by seriousness with or without harm co-association (Through 28 February 2021)

ME PTs	Serious		Non-Serious	
	With Harm	Without Harm	With Harm	Without Harm
Accidental exposure to product	0	0	0	5
Accidental overdose	4	1	9	6
Booster dose missed	0	0	0	1
Circumstance or information capable of leading to medication error	0	0	5	11
Contraindicated product administered	1	0	0	2
Expired product administered	0	0	0	2
Exposure via skin contact	0	0	0	5
Inappropriate schedule of product administration	0	2	8	264
Incorrect dose administered	1	1	0	0

Table 8. ME PTs by seriousness with or without harm co-association (Through 28 February 2021)

ME PTs	Serious		Non-Serious	
	With Harm	Without Harm	With Harm	Without Harm
Incorrect route of product administration	2	6	16	127
Lack of vaccination site rotation	1	0	0	0
Medication error	0	0	0	1
Poor quality product administered	1	0	0	34
Product administered at inappropriate site	2	1	13	29
Product administered to patient of inappropriate age	0	4	0	40
Product administration error	1	0	0	3
Product dose omission issue	0	1	0	3
Product preparation error	1	0	4	11
Product preparation issue	1	1	0	14

Overall, there were 68 cases with co-reported AEs reporting Harm and 599 cases with co-reported AEs without harm. Additionally, Intercepted medication errors was reported in 1 case (PTs Malaise, clinical outcome unknow) and Potential medication errors were reported in 17 cases.

4. DISCUSSION

Pfizer performs frequent and rigorous signal detection on BNT162b2 cases. The findings of these signal detection analyses are consistent with the known safety profile of the vaccine. This cumulative analysis to support the Biologics License Application for BNT162b2, is an integrated analysis of post-authorization safety data, from U.S. and foreign experience, focused on Important Identified Risks, Important Potential Risks, and areas of Important Missing Information identified in the Pharmacovigilance Plan, as well as adverse events of special interest and vaccine administration errors (whether or not associated with an adverse event). The data do not reveal any novel safety concerns or risks requiring label changes and support a favorable benefit risk profile of to the BNT162b2 vaccine.

5. SUMMARY AND CONCLUSION

Review of the available data for this cumulative PM experience, confirms a favorable benefit: risk balance for BNT162b2.

Pfizer will continue routine pharmacovigilance activities on behalf of BioNTech according to the Pharmacovigilance Agreement in place, in order to assure patient safety and will inform the Agency if an evaluation of the safety data yields significant new information for BNT162b2.

APPENDIX 1. LIST OF ADVERSE EVENTS OF SPECIAL INTEREST

1p36 deletion syndrome;2-Hydroxyglutaric aciduria;5'nucleotidase increased;Acoustic neuritis;Acquired C1 inhibitor deficiency;Acquired epidermolysis bullosa;Acquired epileptic aphasia;Acute cutaneous lupus erythematosus;Acute disseminated encephalomyelitis;Acute encephalitis with refractory, repetitive partial seizures;Acute febrile neutrophilic dermatosis;Acute flaccid myelitis;Acute haemorrhagic leukoencephalitis;Acute haemorrhagic oedema of infancy;Acute kidney injury;Acute macular outer retinopathy;Acute motor axonal neuropathy;Acute motor-sensory axonal neuropathy;Acute myocardial infarction;Acute respiratory distress syndrome;Acute respiratory failure;Addison's disease;Administration site thrombosis;Administration site vasculitis;Adrenal thrombosis;Adverse event following immunisation;Ageusia;Agranulocytosis;Air embolism;Alanine aminotransferase abnormal;Alanine aminotransferase increased;Alcoholic seizure;Allergic bronchopulmonary mycosis;Allergic oedema;Alloimmune hepatitis;Alopecia areata;Alpers disease;Alveolar proteinosis;Ammonia abnormal;Ammonia increased;Amniotic cavity infection;Amygdalohippocampectomy;Amyloid arthropathy;Amyloidosis;Amyloidosis senile;Anaphylactic reaction;Anaphylactic shock;Anaphylactic transfusion reaction;Anaphylactoid reaction;Anaphylactoid shock;Anaphylactoid syndrome of pregnancy;Angioedema;Angiopathic neuropathy;Ankylosing spondylitis;Anosmia;Anti-acetylcholine receptor antibody positive;Anti-actin antibody positive;Anti-aquaporin-4 antibody positive;Anti-basal ganglia antibody positive;Anti-cyclic citrullinated peptide antibody positive;Anti-epithelial antibody positive;Anti-erythrocyte antibody positive;Anti-exosome complex antibody positive;Anti-GAD antibody negative;Anti-GAD antibody positive;Anti-ganglioside antibody positive;Antigliadin antibody positive;Anti-glomerular basement membrane antibody positive;Anti-glomerular basement membrane disease;Anti-glycyl-tRNA synthetase antibody positive;Anti-HLA antibody test positive;Anti-IA2 antibody positive;Anti-insulin antibody increased;Anti-insulin antibody positive;Anti-insulin receptor antibody increased;Anti-insulin receptor antibody positive;Anti-interferon antibody negative;Anti-interferon antibody positive;Anti-islet cell antibody positive;Antimitochondrial antibody positive;Anti-muscle specific kinase antibody positive;Anti-myelin-associated glycoprotein antibodies positive;Anti-myelin-associated glycoprotein associated polyneuropathy;Antimyocardial antibody positive;Anti-neuronal antibody positive;Antineutrophil cytoplasmic antibody increased;Antineutrophil cytoplasmic antibody positive;Anti-neutrophil cytoplasmic antibody positive vasculitis;Anti-NMDA antibody positive;Antinuclear antibody increased;Antinuclear antibody positive;Antiphospholipid antibodies positive;Antiphospholipid syndrome;Anti-platelet antibody positive;Anti-prothrombin antibody positive;Antiribosomal P antibody positive;Anti-RNA polymerase III antibody positive;Anti-saccharomyces cerevisiae antibody test positive;Anti-sperm antibody positive;Anti-SRP antibody positive;Antisynthetase syndrome;Anti-thyroid antibody positive;Anti-transglutaminase antibody increased;Anti-VGCC antibody positive;Anti-VGKC antibody positive;Anti-vimentin antibody positive;Antiviral prophylaxis;Antiviral treatment;Anti-zinc transporter 8 antibody positive;Aortic embolus;Aortic thrombosis;Aortitis;Aplasia pure red cell;Aplastic anaemia;Application site thrombosis;Application site vasculitis;Arrhythmia;Arterial bypass occlusion;Arterial bypass thrombosis;Arterial thrombosis;Arteriovenous fistula thrombosis;Arteriovenous graft site stenosis;Arteriovenous graft thrombosis;Arteritis;Arteritis

coronary;Arthralgia;Arthritis;Arthritis enteropathic;Ascites;Aseptic cavernous sinus thrombosis;Aspartate aminotransferase abnormal;Aspartate aminotransferase increased;Aspartate-glutamate-transporter deficiency;AST to platelet ratio index increased;AST/ALT ratio abnormal;Asthma;Asymptomatic COVID-19;Ataxia;Atheroembolism;Atonic seizures;Atrial thrombosis;Atrophic thyroiditis;Atypical benign partial epilepsy;Atypical pneumonia;Aura;Autoantibody positive;Autoimmune anaemia;Autoimmune aplastic anaemia;Autoimmune arthritis;Autoimmune blistering disease;Autoimmune cholangitis;Autoimmune colitis;Autoimmune demyelinating disease;Autoimmune dermatitis;Autoimmune disorder;Autoimmune encephalopathy;Autoimmune endocrine disorder;Autoimmune enteropathy;Autoimmune eye disorder;Autoimmune haemolytic anaemia;Autoimmune heparin-induced thrombocytopenia;Autoimmune hepatitis;Autoimmune hyperlipidaemia;Autoimmune hypothyroidism;Autoimmune inner ear disease;Autoimmune lung disease;Autoimmune lymphoproliferative syndrome;Autoimmune myocarditis;Autoimmune myositis;Autoimmune nephritis;Autoimmune neuropathy;Autoimmune neutropenia;Autoimmune pancreatitis;Autoimmune pancytopenia;Autoimmune pericarditis;Autoimmune retinopathy;Autoimmune thyroid disorder;Autoimmune thyroiditis;Autoimmune uveitis;Autoinflammation with infantile enterocolitis;Autoinflammatory disease;Automatism epileptic;Autonomic nervous system imbalance;Autonomic seizure;Axial spondyloarthritis;Axillary vein thrombosis;Axonal and demyelinating polyneuropathy;Axonal neuropathy;Bacterascites;Baltic myoclonic epilepsy;Band sensation;Basedow's disease;Basilar artery thrombosis;Basophilopenia;B-cell aplasia;Behcet's syndrome;Benign ethnic neutropenia;Benign familial neonatal convulsions;Benign familial pemphigus;Benign rolandic epilepsy;Beta-2 glycoprotein antibody positive;Bickerstaff's encephalitis;Bile output abnormal;Bile output decreased;Biliary ascites;Bilirubin conjugated abnormal;Bilirubin conjugated increased;Bilirubin urine present;Biopsy liver abnormal;Biotinidase deficiency;Birdshot chorioretinopathy;Blood alkaline phosphatase abnormal;Blood alkaline phosphatase increased;Blood bilirubin abnormal;Blood bilirubin increased;Blood bilirubin unconjugated increased;Blood cholinesterase abnormal;Blood cholinesterase decreased;Blood pressure decreased;Blood pressure diastolic decreased;Blood pressure systolic decreased;Blue toe syndrome;Brachiocephalic vein thrombosis;Brain stem embolism;Brain stem thrombosis;Bromosulphthalein test abnormal;Bronchial oedema;Bronchitis;Bronchitis mycoplasmal;Bronchitis viral;Bronchopulmonary aspergillosis allergic;Bronchospasm;Budd-Chiari syndrome;Bulbar palsy;Butterfly rash;C1q nephropathy;Caesarean section;Calcium embolism;Capillaritis;Caplan's syndrome;Cardiac amyloidosis;Cardiac arrest;Cardiac failure;Cardiac failure acute;Cardiac sarcoidosis;Cardiac ventricular thrombosis;Cardiogenic shock;Cardiolipin antibody positive;Cardiopulmonary failure;Cardio-respiratory arrest;Cardio-respiratory distress;Cardiovascular insufficiency;Carotid arterial embolus;Carotid artery thrombosis;Cataplexy;Catheter site thrombosis;Catheter site vasculitis;Cavernous sinus thrombosis;CDKL5 deficiency disorder;CEC syndrome;Cement embolism;Central nervous system lupus;Central nervous system vasculitis;Cerebellar artery thrombosis;Cerebellar embolism;Cerebral amyloid angiopathy;Cerebral arteritis;Cerebral artery embolism;Cerebral artery thrombosis;Cerebral gas embolism;Cerebral microembolism;Cerebral septic infarct;Cerebral thrombosis;Cerebral venous sinus thrombosis;Cerebral venous thrombosis;Cerebrospinal thrombotic

tamponade;Cerebrovascular accident;Change in seizure presentation;Chest discomfort;Child-Pugh-Turcotte score abnormal;Child-Pugh-Turcotte score increased;Chillblains;Choking;Choking sensation;Cholangitis sclerosing;Chronic autoimmune glomerulonephritis;Chronic cutaneous lupus erythematosus;Chronic fatigue syndrome;Chronic gastritis;Chronic inflammatory demyelinating polyradiculoneuropathy;Chronic lymphocytic inflammation with pontine perivascular enhancement responsive to steroids;Chronic recurrent multifocal osteomyelitis;Chronic respiratory failure;Chronic spontaneous urticaria;Circulatory collapse;Circumoral oedema;Circumoral swelling;Clinically isolated syndrome;Clonic convulsion;Coeliac disease;Cogan's syndrome;Cold agglutinins positive;Cold type haemolytic anaemia;Colitis;Colitis erosive;Colitis herpes;Colitis microscopic;Colitis ulcerative;Collagen disorder;Collagen-vascular disease;Complement factor abnormal;Complement factor C1 decreased;Complement factor C2 decreased;Complement factor C3 decreased;Complement factor C4 decreased;Complement factor decreased;Computerised tomogram liver abnormal;Concentric sclerosis;Congenital anomaly;Congenital bilateral perisylvian syndrome;Congenital herpes simplex infection;Congenital myasthenic syndrome;Congenital varicella infection;Congestive hepatopathy;Convulsion in childhood;Convulsions local;Convulsive threshold lowered;Coombs positive haemolytic anaemia;Coronary artery disease;Coronary artery embolism;Coronary artery thrombosis;Coronary bypass thrombosis;Coronavirus infection;Coronavirus test;Coronavirus test negative;Coronavirus test positive;Corpus callosotomy;Cough;Cough variant asthma;COVID-19;COVID-19 immunisation;COVID-19 pneumonia;COVID-19 prophylaxis;COVID-19 treatment;Cranial nerve disorder;Cranial nerve palsies multiple;Cranial nerve paralysis;CREST syndrome;Crohn's disease;Cryofibrinogenaemia;Cryoglobulinaemia;CSF oligoclonal band present;CSWS syndrome;Cutaneous amyloidosis;Cutaneous lupus erythematosus;Cutaneous sarcoidosis;Cutaneous vasculitis;Cyanosis;Cyclic neutropenia;Cystitis interstitial;Cytokine release syndrome;Cytokine storm;De novo purine synthesis inhibitors associated acute inflammatory syndrome;Death neonatal;Deep vein thrombosis;Deep vein thrombosis postoperative;Deficiency of bile secretion;Deja vu;Demyelinating polyneuropathy;Demyelination;Dermatitis;Dermatitis bullous;Dermatitis herpetiformis;Dermatomyositis;Device embolisation;Device related thrombosis;Diabetes mellitus;Diabetic ketoacidosis;Diabetic mastopathy;Dialysis amyloidosis;Dialysis membrane reaction;Diastolic hypotension;Diffuse vasculitis;Digital pitting scar;Disseminated intravascular coagulation;Disseminated intravascular coagulation in newborn;Disseminated neonatal herpes simplex;Disseminated varicella;Disseminated varicella zoster vaccine virus infection;Disseminated varicella zoster virus infection;DNA antibody positive;Double cortex syndrome;Double stranded DNA antibody positive;Dreamy state;Dressler's syndrome;Drop attacks;Drug withdrawal convulsions;Dyspnoea;Early infantile epileptic encephalopathy with burst-suppression;Eclampsia;Eczema herpeticum;Embolia cutis medicamentosa;Embolic cerebellar infarction;Embolic cerebral infarction;Embolic pneumonia;Embolic stroke;Embolism;Embolism arterial;Embolism venous;Encephalitis;Encephalitis allergic;Encephalitis autoimmune;Encephalitis brain stem;Encephalitis haemorrhagic;Encephalitis periaxialis diffusa;Encephalitis post immunisation;Encephalomyelitis;Encephalopathy;Endocrine disorder;Endocrine ophthalmopathy;Endotracheal intubation;Enteritis;Enteritis leukopenic;Enterobacter pneumonia;Enterocolitis;Enteropathic spondylitis;Eosinopenia;Eosinophilic

fasciitis;Eosinophilic granulomatosis with polyangiitis;Eosinophilic oesophagitis;Epidermolysis;Epilepsy;Epilepsy surgery;Epilepsy with myoclonic-atonic seizures;Epileptic aura;Epileptic psychosis;Erythema;Erythema induratum;Erythema multiforme;Erythema nodosum;Evans syndrome;Exanthema subitum;Expanded disability status scale score decreased;Expanded disability status scale score increased;Exposure to communicable disease;Exposure to SARS-CoV-2;Eye oedema;Eye pruritus;Eye swelling;Eyelid oedema;Face oedema;Facial paralysis;Facial paresis;Faciobrachial dystonic seizure;Fat embolism;Febrile convulsion;Febrile infection-related epilepsy syndrome;Febrile neutropenia;Felty's syndrome;Femoral artery embolism;Fibrillary glomerulonephritis;Fibromyalgia;Flushing;Foaming at mouth;Focal cortical resection;Focal dyscognitive seizures;Foetal distress syndrome;Foetal placental thrombosis;Foetor hepaticus;Foreign body embolism;Frontal lobe epilepsy;Fulminant type 1 diabetes mellitus;Galactose elimination capacity test abnormal;Galactose elimination capacity test decreased;Gamma-glutamyltransferase abnormal;Gamma-glutamyltransferase increased;Gastritis herpes;Gastrointestinal amyloidosis;Gelastic seizure;Generalised onset non-motor seizure;Generalised tonic-clonic seizure;Genital herpes;Genital herpes simplex;Genital herpes zoster;Giant cell arteritis;Glomerulonephritis;Glomerulonephritis membranoproliferative;Glomerulonephritis membranous;Glomerulonephritis rapidly progressive;Glossopharyngeal nerve paralysis;Glucose transporter type 1 deficiency syndrome;Glutamate dehydrogenase increased;Glycocholic acid increased;GM2 gangliosidosis;Goodpasture's syndrome;Graft thrombosis;Granulocytopenia;Granulocytopenia neonatal;Granulomatosis with polyangiitis;Granulomatous dermatitis;Grey matter heterotopia;Guanase increased;Guillain-Barre syndrome;Haemolytic anaemia;Haemophagocytic lymphohistiocytosis;Haemorrhage;Haemorrhagic ascites;Haemorrhagic disorder;Haemorrhagic pneumonia;Haemorrhagic varicella syndrome;Haemorrhagic vasculitis;Hantavirus pulmonary infection;Hashimoto's encephalopathy;Hashitoxicosis;Hemimegalencephaly;Henoch-Schonlein purpura;Henoch-Schonlein purpura nephritis;Hepaplastin abnormal;Hepaplastin decreased;Heparin-induced thrombocytopenia;Hepatic amyloidosis;Hepatic artery embolism;Hepatic artery flow decreased;Hepatic artery thrombosis;Hepatic enzyme abnormal;Hepatic enzyme decreased;Hepatic enzyme increased;Hepatic fibrosis marker abnormal;Hepatic fibrosis marker increased;Hepatic function abnormal;Hepatic hydrothorax;Hepatic hypertrophy;Hepatic hypoperfusion;Hepatic lymphocytic infiltration;Hepatic mass;Hepatic pain;Hepatic sequestration;Hepatic vascular resistance increased;Hepatic vascular thrombosis;Hepatic vein embolism;Hepatic vein thrombosis;Hepatic venous pressure gradient abnormal;Hepatic venous pressure gradient increased;Hepatitis;Hepatobiliary scan abnormal;Hepatomegaly;Hepatosplenomegaly;Hereditary angioedema with C1 esterase inhibitor deficiency;Herpes dermatitis;Herpes gestationis;Herpes oesophagitis;Herpes ophthalmic;Herpes pharyngitis;Herpes sepsis;Herpes simplex;Herpes simplex cervicitis;Herpes simplex colitis;Herpes simplex encephalitis;Herpes simplex gastritis;Herpes simplex hepatitis;Herpes simplex meningitis;Herpes simplex meningoencephalitis;Herpes simplex meningomyelitis;Herpes simplex necrotising retinopathy;Herpes simplex oesophagitis;Herpes simplex otitis externa;Herpes simplex pharyngitis;Herpes simplex pneumonia;Herpes simplex reactivation;Herpes simplex sepsis;Herpes simplex viraemia;Herpes simplex virus conjunctivitis neonatal;Herpes simplex visceral;Herpes virus

infection;Herpes zoster;Herpes zoster cutaneous disseminated;Herpes zoster infection neurological;Herpes zoster meningitis;Herpes zoster meningoencephalitis;Herpes zoster meningomyelitis;Herpes zoster meningoradiculitis;Herpes zoster necrotising retinopathy;Herpes zoster oticus;Herpes zoster pharyngitis;Herpes zoster reactivation;Herpetic radiculopathy;Histone antibody positive;Hoigne's syndrome;Human herpesvirus 6 encephalitis;Human herpesvirus 6 infection;Human herpesvirus 6 infection reactivation;Human herpesvirus 7 infection;Human herpesvirus 8 infection;Hyperammonaemia;Hyperbilirubinaemia;Hypercholia;Hypergammaglobulinaemia benign monoclonal;Hyperglycaemic seizure;Hypersensitivity;Hypersensitivity vasculitis;Hyperthyroidism;Hypertransaminaemia;Hyperventilation;Hypoalbuminaemia;Hypocalcaemic seizure;Hypogammaglobulinaemia;Hypoglossal nerve paralysis;Hypoglossal nerve paresis;Hypoglycaemic seizure;Hyponatraemic seizure;Hypotension;Hypotensive crisis;Hypothenar hammer syndrome;Hypothyroidism;Hypoxia;Idiopathic CD4 lymphocytopenia;Idiopathic generalised epilepsy;Idiopathic interstitial pneumonia;Idiopathic neutropenia;Idiopathic pulmonary fibrosis;IgA nephropathy;IgM nephropathy;IIIrd nerve paralysis;IIIrd nerve paresis;Iliac artery embolism;Immune thrombocytopenia;Immune-mediated adverse reaction;Immune-mediated cholangitis;Immune-mediated cholestasis;Immune-mediated cytopenia;Immune-mediated encephalitis;Immune-mediated encephalopathy;Immune-mediated endocrinopathy;Immune-mediated enterocolitis;Immune-mediated gastritis;Immune-mediated hepatic disorder;Immune-mediated hepatitis;Immune-mediated hyperthyroidism;Immune-mediated hypothyroidism;Immune-mediated myocarditis;Immune-mediated myositis;Immune-mediated nephritis;Immune-mediated neuropathy;Immune-mediated pancreatitis;Immune-mediated pneumonitis;Immune-mediated renal disorder;Immune-mediated thyroiditis;Immune-mediated uveitis;Immunoglobulin G4 related disease;Immunoglobulins abnormal;Implant site thrombosis;Inclusion body myositis;Infantile genetic agranulocytosis;Infantile spasms;Infected vasculitis;Infective thrombosis;Inflammation;Inflammatory bowel disease;Infusion site thrombosis;Infusion site vasculitis;Injection site thrombosis;Injection site urticaria;Injection site vasculitis;Instillation site thrombosis;Insulin autoimmune syndrome;Interstitial granulomatous dermatitis;Interstitial lung disease;Intracardiac mass;Intracardiac thrombus;Intracranial pressure increased;Intrapericardial thrombosis;Intrinsic factor antibody abnormal;Intrinsic factor antibody positive;IPEX syndrome;Irregular breathing;IRVAN syndrome;IVth nerve paralysis;IVth nerve paresis;JC polyomavirus test positive;JC virus CSF test positive;Jeavons syndrome;Jugular vein embolism;Jugular vein thrombosis;Juvenile idiopathic arthritis;Juvenile myoclonic epilepsy;Juvenile polymyositis;Juvenile psoriatic arthritis;Juvenile spondyloarthritis;Kaposi sarcoma inflammatory cytokine syndrome;Kawasaki's disease;Kayser-Fleischer ring;Keratoderma blenorrhagica;Ketosis-prone diabetes mellitus;Kounis syndrome;Lafora's myoclonic epilepsy;Lamb's excrescences;Laryngeal dyspnoea;Laryngeal oedema;Laryngeal rheumatoid arthritis;Laryngospasm;Laryngotracheal oedema;Latent autoimmune diabetes in adults;LE cells present;Lemierre syndrome;Lennox-Gastaut syndrome;Leucine aminopeptidase increased;Leukoencephalomyelitis;Leukoencephalopathy;Leukopenia;Leukopenia neonatal;Lewis-Sumner syndrome;Lhermitte's sign;Lichen planopilaris;Lichen planus;Lichen sclerosus;Limbic encephalitis;Linear IgA disease;Lip oedema;Lip swelling;Liver function test abnormal;Liver function test decreased;Liver function test increased;Liver induration;Liver injury;Liver iron concentration abnormal;Liver iron concentration

increased;Liver opacity;Liver palpable;Liver sarcoidosis;Liver scan abnormal;Liver tenderness;Low birth weight baby;Lower respiratory tract herpes infection;Lower respiratory tract infection;Lower respiratory tract infection viral;Lung abscess;Lupoid hepatic cirrhosis;Lupus cystitis;Lupus encephalitis;Lupus endocarditis;Lupus enteritis;Lupus hepatitis;Lupus myocarditis;Lupus myositis;Lupus nephritis;Lupus pancreatitis;Lupus pleurisy;Lupus pneumonitis;Lupus vasculitis;Lupus-like syndrome;Lymphocytic hypophysitis;Lymphocytopenia neonatal;Lymphopenia;MAGIC syndrome;Magnetic resonance imaging liver abnormal;Magnetic resonance proton density fat fraction measurement;Mahler sign;Manufacturing laboratory analytical testing issue;Manufacturing materials issue;Manufacturing production issue;Marburg's variant multiple sclerosis;Marchiafava-Bignami disease;Marine Lenhart syndrome;Mastocytic enterocolitis;Maternal exposure during pregnancy;Medical device site thrombosis;Medical device site vasculitis;MELAS syndrome;Meningitis;Meningitis aseptic;Meningitis herpes;Meningoencephalitis herpes simplex neonatal;Meningoencephalitis herpetic;Meningomyelitis herpes;MERS-CoV test;MERS-CoV test negative;MERS-CoV test positive;Mesangioproliferative glomerulonephritis;Mesenteric artery embolism;Mesenteric artery thrombosis;Mesenteric vein thrombosis;Metapneumovirus infection;Metastatic cutaneous Crohn's disease;Metastatic pulmonary embolism;Microangiopathy;Microembolism;Microscopic polyangiitis;Middle East respiratory syndrome;Migraine-triggered seizure;Miliary pneumonia;Miller Fisher syndrome;Mitochondrial aspartate aminotransferase increased;Mixed connective tissue disease;Model for end stage liver disease score abnormal;Model for end stage liver disease score increased;Molar ratio of total branched-chain amino acid to tyrosine;Molybdenum cofactor deficiency;Monocytopenia;Mononeuritis;Mononeuropathy multiplex;Morphoea;Morvan syndrome;Mouth swelling;Moyamoya disease;Multifocal motor neuropathy;Multiple organ dysfunction syndrome;Multiple sclerosis;Multiple sclerosis relapse;Multiple sclerosis relapse prophylaxis;Multiple subpial transection;Multisystem inflammatory syndrome in children;Muscular sarcoidosis;Myasthenia gravis;Myasthenia gravis crisis;Myasthenia gravis neonatal;Myasthenic syndrome;Myelitis;Myelitis transverse;Myocardial infarction;Myocarditis;Myocarditis post infection;Myoclonic epilepsy;Myoclonic epilepsy and ragged-red fibres;Myokymia;Myositis;Narcolepsy;Nasal herpes;Nasal obstruction;Necrotising herpetic retinopathy;Neonatal Crohn's disease;Neonatal epileptic seizure;Neonatal lupus erythematosus;Neonatal mucocutaneous herpes simplex;Neonatal pneumonia;Neonatal seizure;Nephritis;Nephrogenic systemic fibrosis;Neuralgic amyotrophy;Neuritis;Neuritis cranial;Neuromyelitis optica pseudo relapse;Neuromyelitis optica spectrum disorder;Neuromyotonia;Neuronal neuropathy;Neuropathy peripheral;Neuropathy, ataxia, retinitis pigmentosa syndrome;Neuropsychiatric lupus;Neurosarcoidosis;Neutropenia;Neutropenia neonatal;Neutropenic colitis;Neutropenic infection;Neutropenic sepsis;Nodular rash;Nodular vasculitis;Noninfectious myelitis;Noninfective encephalitis;Noninfective encephalomyelitis;Noninfective oophoritis;Obstetrical pulmonary embolism;Occupational exposure to communicable disease;Occupational exposure to SARS-CoV-2;Ocular hyperaemia;Ocular myasthenia;Ocular pemphigoid;Ocular sarcoidosis;Ocular vasculitis;Oculofacial paralysis;Oedema;Oedema blister;Oedema due to hepatic disease;Oedema mouth;Oesophageal achalasia;Ophthalmic artery thrombosis;Ophthalmic herpes simplex;Ophthalmic herpes zoster;Ophthalmic vein thrombosis;Optic neuritis;Optic

neuropathy;Optic perineuritis;Oral herpes;Oral lichen planus;Oropharyngeal oedema;Oropharyngeal spasm;Oropharyngeal swelling;Osmotic demyelination syndrome;Ovarian vein thrombosis;Overlap syndrome;Paediatric autoimmune neuropsychiatric disorders associated with streptococcal infection;Paget-Schroetter syndrome;Palindromic rheumatism;Palisaded neutrophilic granulomatous dermatitis;Palmoplantar keratoderma;Palpable purpura;Pancreatitis;Panencephalitis;Papillophlebitis;Paracancerous pneumonia;Paradoxical embolism;Parainfluenzae viral laryngotracheobronchitis;Paraneoplastic dermatomyositis;Paraneoplastic pemphigus;Paraneoplastic thrombosis;Paresis cranial nerve;Parietal cell antibody positive;Paroxysmal nocturnal haemoglobinuria;Partial seizures;Partial seizures with secondary generalisation;Patient isolation;Pelvic venous thrombosis;Pemphigoid;Pemphigus;Penile vein thrombosis;Pericarditis;Pericarditis lupus;Perihepatic discomfort;Periorbital oedema;Periorbital swelling;Peripheral artery thrombosis;Peripheral embolism;Peripheral ischaemia;Peripheral vein thrombus extension;Periportal oedema;Peritoneal fluid protein abnormal;Peritoneal fluid protein decreased;Peritoneal fluid protein increased;Peritonitis lupus;Pernicious anaemia;Petit mal epilepsy;Pharyngeal oedema;Pharyngeal swelling;Pityriasis lichenoides et varioliformis acuta;Placenta praevia;Pleuroparenchymal fibroelastosis;Pneumobilia;Pneumonia;Pneumonia adenoviral;Pneumonia cytomegaloviral;Pneumonia herpes viral;Pneumonia influenzal;Pneumonia measles;Pneumonia mycoplasmal;Pneumonia necrotising;Pneumonia parainfluenzae viral;Pneumonia respiratory syncytial viral;Pneumonia viral;POEMS syndrome;Polyarteritis nodosa;Polyarthritis;Polychondritis;Polyglandular autoimmune syndrome type I;Polyglandular autoimmune syndrome type II;Polyglandular autoimmune syndrome type III;Polyglandular disorder;Polymicrogyria;Polymyalgia rheumatica;Polymyositis;Polyneuropathy;Polyneuropathy idiopathic progressive;Portal pyaemia;Portal vein embolism;Portal vein flow decreased;Portal vein pressure increased;Portal vein thrombosis;Portosplenomesenteric venous thrombosis;Post procedural hypotension;Post procedural pneumonia;Post procedural pulmonary embolism;Post stroke epilepsy;Post stroke seizure;Post thrombotic retinopathy;Post thrombotic syndrome;Post viral fatigue syndrome;Postictal headache;Postictal paralysis;Postictal psychosis;Postictal state;Postoperative respiratory distress;Postoperative respiratory failure;Postoperative thrombosis;Postpartum thrombosis;Postpartum venous thrombosis;Postpericardiotomy syndrome;Post-traumatic epilepsy;Postural orthostatic tachycardia syndrome;Precerebral artery thrombosis;Pre-eclampsia;Preictal state;Premature labour;Premature menopause;Primary amyloidosis;Primary biliary cholangitis;Primary progressive multiple sclerosis;Procedural shock;Proctitis herpes;Proctitis ulcerative;Product availability issue;Product distribution issue;Product supply issue;Progressive facial hemiatrophy;Progressive multifocal leukoencephalopathy;Progressive multiple sclerosis;Progressive relapsing multiple sclerosis;Prosthetic cardiac valve thrombosis;Pruritus;Pruritus allergic;Pseudovasculitis;Psoriasis;Psoriatic arthropathy;Pulmonary amyloidosis;Pulmonary artery thrombosis;Pulmonary embolism;Pulmonary fibrosis;Pulmonary haemorrhage;Pulmonary microemboli;Pulmonary oil microembolism;Pulmonary renal syndrome;Pulmonary sarcoidosis;Pulmonary sepsis;Pulmonary thrombosis;Pulmonary tumour thrombotic microangiopathy;Pulmonary vasculitis;Pulmonary veno-occlusive disease;Pulmonary venous thrombosis;Pyoderma gangrenosum;Pyostomatitis vegetans;Pyrexia;Quarantine;Radiation leukopenia;Radiculitis

brachial;Radiologically isolated syndrome;Rash;Rash erythematous;Rash pruritic;Rasmussen encephalitis;Raynaud's phenomenon;Reactive capillary endothelial proliferation;Relapsing multiple sclerosis;Relapsing-remitting multiple sclerosis;Renal amyloidosis;Renal arteritis;Renal artery thrombosis;Renal embolism;Renal failure;Renal vascular thrombosis;Renal vasculitis;Renal vein embolism;Renal vein thrombosis;Respiratory arrest;Respiratory disorder;Respiratory distress;Respiratory failure;Respiratory paralysis;Respiratory syncytial virus bronchiolitis;Respiratory syncytial virus bronchitis;Retinal artery embolism;Retinal artery occlusion;Retinal artery thrombosis;Retinal vascular thrombosis;Retinal vasculitis;Retinal vein occlusion;Retinal vein thrombosis;Retinol binding protein decreased;Retinopathy;Retrograde portal vein flow;Retroperitoneal fibrosis;Reversible airways obstruction;Reynold's syndrome;Rheumatic brain disease;Rheumatic disorder;Rheumatoid arthritis;Rheumatoid factor increased;Rheumatoid factor positive;Rheumatoid factor quantitative increased;Rheumatoid lung;Rheumatoid neutrophilic dermatosis;Rheumatoid nodule;Rheumatoid nodule removal;Rheumatoid scleritis;Rheumatoid vasculitis;Saccadic eye movement;SAPHO syndrome;Sarcoidosis;SARS-CoV-1 test;SARS-CoV-1 test negative;SARS-CoV-1 test positive;SARS-CoV-2 antibody test;SARS-CoV-2 antibody test negative;SARS-CoV-2 antibody test positive;SARS-CoV-2 carrier;SARS-CoV-2 sepsis;SARS-CoV-2 test;SARS-CoV-2 test false negative;SARS-CoV-2 test false positive;SARS-CoV-2 test negative;SARS-CoV-2 test positive;SARS-CoV-2 viraemia;Satoyoshi syndrome;Schizencephaly;Scleritis;Sclerodactylia;Scleroderma;Scleroderma associated digital ulcer;Scleroderma renal crisis;Scleroderma-like reaction;Secondary amyloidosis;Secondary cerebellar degeneration;Secondary progressive multiple sclerosis;Segmented hyalinising vasculitis;Seizure;Seizure anoxic;Seizure cluster;Seizure like phenomena;Seizure prophylaxis;Sensation of foreign body;Septic embolus;Septic pulmonary embolism;Severe acute respiratory syndrome;Severe myoclonic epilepsy of infancy;Shock;Shock symptom;Shrinking lung syndrome;Shunt thrombosis;Silent thyroiditis;Simple partial seizures;Sjogren's syndrome;Skin swelling;SLE arthritis;Smooth muscle antibody positive;Sneezing;Spinal artery embolism;Spinal artery thrombosis;Splenic artery thrombosis;Splenic embolism;Splenic thrombosis;Splenic vein thrombosis;Spondylitis;Spondyloarthropathy;Spontaneous heparin-induced thrombocytopenia syndrome;Status epilepticus;Stevens-Johnson syndrome;Stiff leg syndrome;Stiff person syndrome;Stillbirth;Still's disease;Stoma site thrombosis;Stoma site vasculitis;Stress cardiomyopathy;Stridor;Subacute cutaneous lupus erythematosus;Subacute endocarditis;Subacute inflammatory demyelinating polyneuropathy;Subclavian artery embolism;Subclavian artery thrombosis;Subclavian vein thrombosis;Sudden unexplained death in epilepsy;Superior sagittal sinus thrombosis;Susac's syndrome;Suspected COVID-19;Swelling;Swelling face;Swelling of eyelid;Swollen tongue;Sympathetic ophthalmia;Systemic lupus erythematosus;Systemic lupus erythematosus disease activity index abnormal;Systemic lupus erythematosus disease activity index decreased;Systemic lupus erythematosus disease activity index increased;Systemic lupus erythematosus rash;Systemic scleroderma;Systemic sclerosis pulmonary;Tachycardia;Tachypnoea;Takayasu's arteritis;Temporal lobe epilepsy;Terminal ileitis;Testicular autoimmunity;Throat tightness;Thromboangiitis obliterans;Thrombocytopenia;Thrombocytopenic purpura;Thrombophlebitis;Thrombophlebitis migrans;Thrombophlebitis

neonatal;Thrombophlebitis septic;Thrombophlebitis superficial;Thromboplastin antibody positive;Thrombosis;Thrombosis corpora cavernosa;Thrombosis in device;Thrombosis mesenteric vessel;Thrombotic cerebral infarction;Thrombotic microangiopathy;Thrombotic stroke;Thrombotic thrombocytopenic purpura;Thyroid disorder;Thyroid stimulating immunoglobulin increased;Thyroiditis;Tongue amyloidosis;Tongue biting;Tongue oedema;Tonic clonic movements;Tonic convulsion;Tonic posturing;Topectomy;Total bile acids increased;Toxic epidermal necrolysis;Toxic leukoencephalopathy;Toxic oil syndrome;Tracheal obstruction;Tracheal oedema;Tracheobronchitis;Tracheobronchitis mycoplasmal;Tracheobronchitis viral;Transaminases abnormal;Transaminases increased;Transfusion-related alloimmune neutropenia;Transient epileptic amnesia;Transverse sinus thrombosis;Trigeminal nerve paresis;Trigeminal neuralgia;Trigeminal palsy;Truncus coeliacus thrombosis;Tuberous sclerosis complex;Tubulointerstitial nephritis and uveitis syndrome;Tumefactive multiple sclerosis;Tumour embolism;Tumour thrombosis;Type 1 diabetes mellitus;Type I hypersensitivity;Type III immune complex mediated reaction;Uhthoff's phenomenon;Ulcerative keratitis;Ultrasound liver abnormal;Umbilical cord thrombosis;Uncinate fits;Undifferentiated connective tissue disease;Upper airway obstruction;Urine bilirubin increased;Urobilinogen urine decreased;Urobilinogen urine increased;Urticaria;Urticaria papular;Urticular vasculitis;Uterine rupture;Uveitis;Vaccination site thrombosis;Vaccination site vasculitis;Vagus nerve paralysis;Varicella;Varicella keratitis;Varicella post vaccine;Varicella zoster gastritis;Varicella zoster oesophagitis;Varicella zoster pneumonia;Varicella zoster sepsis;Varicella zoster virus infection;Vasa praevia;Vascular graft thrombosis;Vascular pseudoaneurysm thrombosis;Vascular purpura;Vascular stent thrombosis;Vasculitic rash;Vasculitic ulcer;Vasculitis;Vasculitis gastrointestinal;Vasculitis necrotising;Vena cava embolism;Vena cava thrombosis;Venous intravasation;Venous recanalisation;Venous thrombosis;Venous thrombosis in pregnancy;Venous thrombosis limb;Venous thrombosis neonatal;Vertebral artery thrombosis;Vessel puncture site thrombosis;Visceral venous thrombosis;VIth nerve paralysis;VIth nerve paresis;Vitiligo;Vocal cord paralysis;Vocal cord paresis;Vogt-Koyanagi-Harada disease;Warm type haemolytic anaemia;Wheezing;White nipple sign;XIth nerve paralysis;X-ray hepatobiliary abnormal;Young's syndrome;Zika virus associated Guillain Barre syndrome.

BOARD OF HEALTH
GREEN FOLDER

October 19, 2022

1

Replace Attachment A

[S. Porter]

Sponsor: _____

Proposed No.: 22-04

1 **AMENDMENT TO PROPOSED RESOLUTION 22-04, VERSION 1**

2 Strike Attachment A, King County Board of Health Nonelected Member Candidate

3 Selections, dated October 5, 2022, and insert Attachment A, King County Board of

4 Health Nonelected Member Candidate Selections, dated October 20, 2022

5

6 **EFFECT prepared by S. Porter: *Replacing the Attachment A to reflect updated***

7 ***member assignments with Katherine Gudgel now serving in a regular member role***

8 ***with a two-year term and Patricia Egwuatu serving as an alternate with a three-year***

9 ***term. Both members would continue to represent public health, facilities, and***

10 ***providers.***

KING COUNTY BOARD OF HEALTH NONELECTED MEMBER CANDIDATE SELECTIONS

Pos. No.	Name	Background / Representing	Term Years	Term Expiring End of
1	Butch de Castro	Public health, facilities, and providers	1	2023
2	Lisa Chew	Public health, facilities, and providers	1	2023
3	Katherine Gudgel	Public health, facilities, and providers	2	2024
4	Quiana Daniels	Consumers of public health	3	2025
5	Robin Narruhn	Consumers of public health	2	2024
6	Julie Osgood	Community stakeholders	3	2025
7	Victor Loo	Community stakeholders	3	2025
8 AIHC	Esther Lucero	American Indian Health Commission	2	2024
9 AIHC Alternate	Abigail Echo-Hawk	American Indian Health Commission	2	2024
10 Alternate	Patricia Egwuatu	Public health, facilities, and providers	3	2025
11 Alternate	Mustafa Mohammed	Consumers of public health	2	2024
12 Alternate	Jeff Sconyers	Community stakeholders	1	2023

Autopsy Histopathologic Cardiac Findings in 2 Adolescents Following the Second COVID-19 Vaccine Dose

James R. Gill, MD; Randy Tashjian, MD; Emily Duncanson, MD

• **Context.**—Myocarditis in adolescents has been diagnosed clinically following the administration of the second dose of an mRNA vaccine for coronavirus disease 2019 (COVID-19).

Objective.—To examine the autopsy microscopic cardiac findings in adolescent deaths that occurred shortly following administration of the second Pfizer-BioNTech COVID-19 dose to determine if the myocarditis described in these instances has the typical histopathology of myocarditis.

Design.—Clinical and autopsy investigation of 2 teenage boys who died shortly following administration of the second Pfizer-BioNTech COVID-19 dose.

Myocarditis in adolescents (particularly teenage boys) has been reported following the second dose of the Pfizer-BioNTech COVID-19 vaccine.^{1–7} Since cardiac biopsies are rarely performed in these instances with clinically stable patients, the myocardial pathology has not been clearly elucidated.⁸ Myocarditis is rarely diagnosed at autopsy in deaths due to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.^{9,10} The incidence of myocarditis, although low, has been shown to increase after the receipt of the BNT162b2 vaccine, particularly after the second dose among young male recipients.¹¹ In addition, the first week after the second vaccine dose was found to be the main risk window.¹¹ The clinical presentation of myocarditis after vaccination was usually mild.¹¹

We report the autopsy results, including microscopic myocardial findings, of 2 teenage boys who died within the first week after receiving the second Pfizer-BioNTech

Results.—The microscopic examination revealed features resembling a catecholamine-induced injury, not typical myocarditis pathology.

Conclusions.—The myocardial injury seen in these postvaccine hearts is different from typical myocarditis and has an appearance most closely resembling a catecholamine-mediated stress (toxic) cardiomyopathy. Understanding that these instances are different from typical myocarditis and that cytokine storm has a known feedback loop with catecholamines may help guide screening and therapy.

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COVID-19 dose. The microscopic findings are not the alterations seen with typical myocarditis. This suggests a role for cytokine storm, which may occur with an excessive inflammatory response, as there also is a feedback loop between catecholamines and cytokines.¹²

Also see p. 921 and p. 924.

MATERIALS AND METHODS

The Connecticut Office of the Chief Medical Examiner and the Michigan Institute of Forensic Science and Medicine investigate all unexpected and unnatural deaths in their respective jurisdictions: Connecticut and the Michigan counties of Alcona, Gladwin, Huron, Lapeer, Ogemaw, and Saginaw.

Standard medicolegal autopsies were performed including gross, microscopic, and toxicologic testing. SARS-CoV-2 nasal swab testing was performed by reverse transcriptase–polymerase chain reaction assay. Tissues were sent to the National Center for Emerging and Zoonotic Infectious Diseases branch of the Centers for Disease Control and Prevention for molecular studies.

Cardiac molecular testing with sequence analysis and deletion/duplication testing of the 100 genes listed in Invitae's arrhythmia and cardiomyopathy comprehensive panel was performed.

RESULTS

The results of autopsies for 2 teenage boys who were found dead in bed 3 and 4 days after receiving the second dose of the Pfizer-BioNTech COVID-19 vaccine are presented (Table). Both boys were pronounced dead at home without attempted resuscitation.

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The authors have no relevant financial interest in the products or companies described in this article.

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Summary of Clinical and Autopsy Findings		
Patient	Heart Gross	Microscopic and Molecular
<p>Teenage boy A, BMI = 21. History of attention deficit hyperactivity syndrome</p>	<p>280 g, normal</p>	<p>There was global myocardial injury with areas of coagulative myocytolysis and contraction bands, with a perivascular pattern of inflammation consisting of predominantly neutrophils with histiocytes, scant lymphocytes, and occasional eosinophils (Figures 1 through 4; Supplemental Figures 1 and 2). In some sections, the myocardial injury was predominantly subepicardial, and in other sections it was patchy and transmural. In the posterior wall, there was subepicardial/transmural fibrous scar, without fatty replacement. There were no acute or organizing thrombi. The overall pattern of injury was consistent with stress cardiomyopathy with contraction bands and a neutrophilic/histiocytic infiltrate</p> <p>PCR tissue testing performed by the CDC on heart and lung found no molecular evidence of SARS-CoV-2 infection</p> <p>Molecular testing on postmortem blood detected 2 variants of uncertain significance: <i>DOLK</i> (c.1257C.G [p.Ile419Met] heterozygous) and <i>MAP2K2</i> (c.581-3C>T [intronic] heterozygous)</p>
<p>Teenage boy B, BMI = 30 with obesity</p>	<p>520 g with biventricular dilatation and marked pulmonary edema (combined lung weight = 1481 g)</p>	<p>There was global myocardial injury similar to that seen above, but with more widespread transmural ischemic changes and more interstitial inflammation, again with a predominant neutrophil component with histiocytes and scant lymphocytes (Figures 5 through 7; Supplemental Figures 3 and 4). Several sections had transmural, confluent areas of hypereosinophilic myocytes; confluent areas of contraction bands apart from any inflammation; and florid neutrophilic inflammation with some histiocytes. In this case, a subepicardial distribution of injury was not seen. There were no acute or organizing thrombi. PCR tissue testing performed by the CDC on heart and lung found no molecular evidence of SARS-CoV-2 infection</p>

Abbreviations: BMI, body mass index; CDC, Centers for Disease Control and Prevention; PCR, polymerase chain reaction.

Boy A complained of a headache and gastric upset but felt better by postvaccine day 3. There was no history of prior medical problems (he took prescribed amphetamine/dextroamphetamine during the school year for attention deficit hyperactivity disorder but was not currently receiving it) or prior SARS-CoV-2 infection. Boy B had no complaints, prior health issues, or prior SARS-CoV-2 infection. Neither boy complained of fever, chest pain, palpitations, or dyspnea. The autopsies were unremarkable except for obesity in one boy and the cardiac findings (Figures 1 through 7; Supplemental Figures 1 through 4 [see supplemental digital content at <https://meridian.allenpress.com/aplm> in the August 2022 table of contents]). Unique cardiac findings in boy A included myocardial fibrosis and in boy B cardiac hypertrophy. There were no rashes or lymphadenopathy.

Expanded forensic toxicologic testing was negative for medications and drugs of abuse. SARS-CoV-2 was not detected by postmortem swab (reverse transcriptase–polymerase chain reaction assay) in either boy. Cardiac sections were submitted from the right and left ventricles (12 sections in boy A and 29 sections in boy B). The cardiac conduction systems were not examined.

DISCUSSION

Myocarditis is an inflammatory disease of the myocardium, which may occur in isolation or as part of multiorgan/systemic immune-mediated disorders or reactions to exogenous/endogenous substances.¹³ The etiologies are varied and include infectious and noninfectious causes. Noninfectious causes include immune/autoimmune conditions (autoantigens, association with immune-mediated diseases, alloantigens, and allergens), drugs/toxic substances (eg, hypersensitivity or direct toxic effects), and other causes (eg, radiation, insect stings, snake bites).¹³ Lymphocytic myocarditis is the commonest histologic subtype, charac-

terized by an inflammatory myocardial infiltrate typically comprising mononuclear cells. In the acute/active phases, it is usually accompanied by myocyte damage/necrosis.¹³ Although criteria are evolving, the Dallas criteria require “inflammatory infiltrates of the myocardium with necrosis and/or degeneration of *adjacent* myocytes, not typical of ischemic damage associated with coronary artery disease.”^{14–16}

Toxic myocarditis is an etiologic classification involving direct myocardial injury by various drugs or substances.^{13,17,18} Although variable, the histologic features consist of 2 main patterns: an early stage with foci of solely necrotic/damaged myocytes and the later phase of “myocarditis.” Toxic myocarditis usually indicates inflammatory stages of catecholamine-induced myocardial injury. Catecholamine toxicity on the heart was first described in patients with pheochromocytoma.^{19–21} These lesions have been described in patients with subarachnoid hemorrhages and, more recently, in donor hearts rejected for transplantation in persons declared dead by neurologic criteria, secondary to catecholamine release during the “sympathetic storm” following brain death or administered as pharmacologic support (see supplemental material).^{22,23} The wide spectrum of these lesions has been studied in detail in routine pathology examination of donor hearts unsuitable for transplantation.²²

Both teenage boys had similar clinical presentations with no obvious cardiac symptoms. Their histopathology did not demonstrate a typical myocarditis. In those instances, one sees lymphocytic (or giant cell) infiltrates with adjacent myocyte necrosis; changes such as hypereosinophilic myocytes and contraction bands are absent. In these 2 postvaccination instances, there are areas of contraction bands and hypereosinophilic myocytes distinct from the inflammation. This injury pattern is instead similar to what

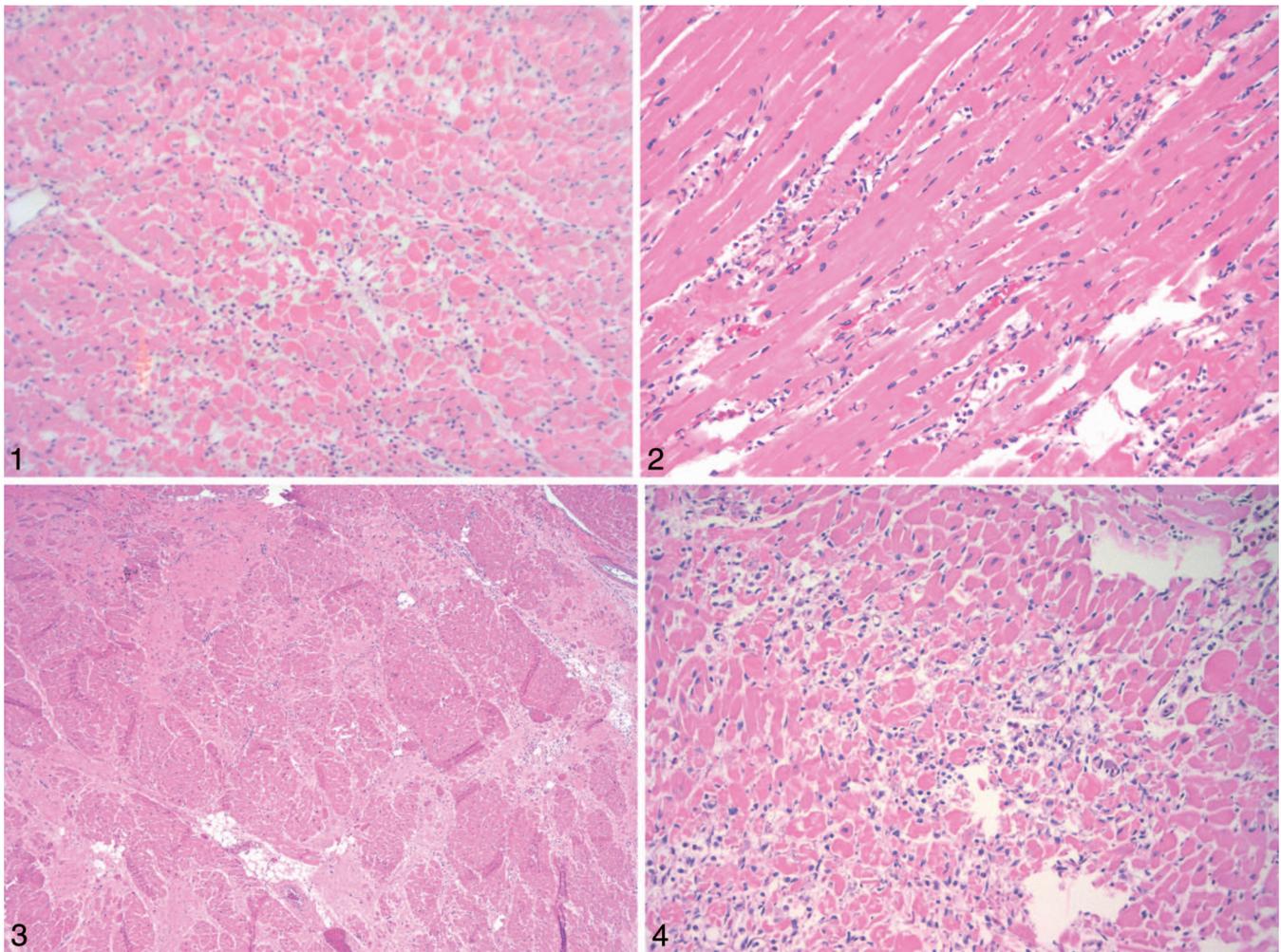


Figure 1. Case A, heart: confluent areas of ischemia (hematoxylin-eosin, original magnification $\times 100$).

Figure 2. Case A, heart: coagulative and contraction band necrosis (hematoxylin-eosin, original magnification $\times 200$).

Figure 3. Case A, heart: subepicardial fibrosis. This appears older than the timing of the first vaccine dose. This is a possible arrhythmogenic cardiomyopathy, but its appearance is more consistent with healed ischemia or inflammation (hematoxylin-eosin, original magnification $\times 40$).

Figure 4. Case A, heart: confluent areas of ischemia with contraction bands and coagulative myocytolysis (hematoxylin-eosin, original magnification $\times 200$).

is seen in the myocardium of patients who are clinically diagnosed with Takotsubo, toxic, or stress cardiomyopathy, which is a temporary myocardial injury that can develop in patients with extreme physical, chemical, or sometimes emotional stressors.^{24–31}

Stress cardiomyopathy is a catecholamine-mediated ischemic process seen in high catecholamine states in the absence of coronary artery disease or spasm.^{17,31} It has also been called “neurogenic myocardial injury” and “broken heart syndrome.”^{18,24–36} Surges in catecholamines may have several triggers (fight/flight response, adrenal pathology, etc). Proposed mechanisms for catecholamine-mediated stunning in stress cardiomyopathy include epicardial spasm, microvascular dysfunction, hyperdynamic contractility with midventricular or outflow tract obstruction, and direct effects of catecholamines on cardiomyocytes.³³

Catecholamine-mediated myocardial stunning may be due to direct myocyte injury, as elevated catecholamines decrease the viability of myocytes through cyclic adenosine

monophosphate-mediated calcium overload. Catecholamines also are a potential source of oxygen-derived free radicals, which can interfere with sodium and calcium transporters, possibly resulting in myocyte dysfunction through increased transsarcolemmal calcium influx and cellular calcium overload.³⁷

Histologically, catecholamine effects have been associated with contraction band necrosis, characterized by hypercontracted sarcomeres, dense eosinophilic transverse bands, and an interstitial mononuclear inflammatory response that is distinct from the polymorphonuclear inflammation seen with infarction. In addition, the mononuclear cells are not causing the myocyte necrosis; there is a distinct, separate distribution.³⁷

We suspect that the acute cardiac changes seen in these 2 boys are the result of epinephrine-mediated effects on cardiomyocytes. These occurrences generally have a favorable prognosis; however, some patients may die from the underlying (noncardiac) cause of the myocardial findings

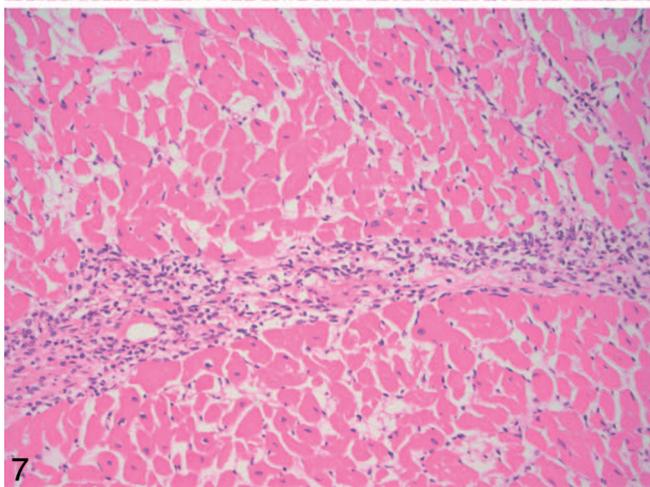
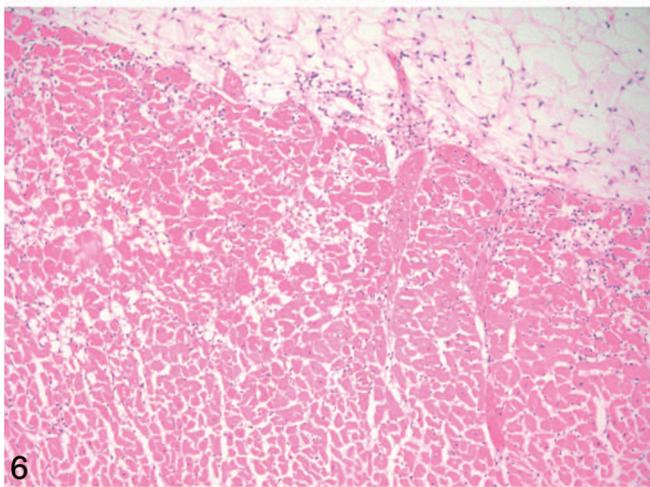
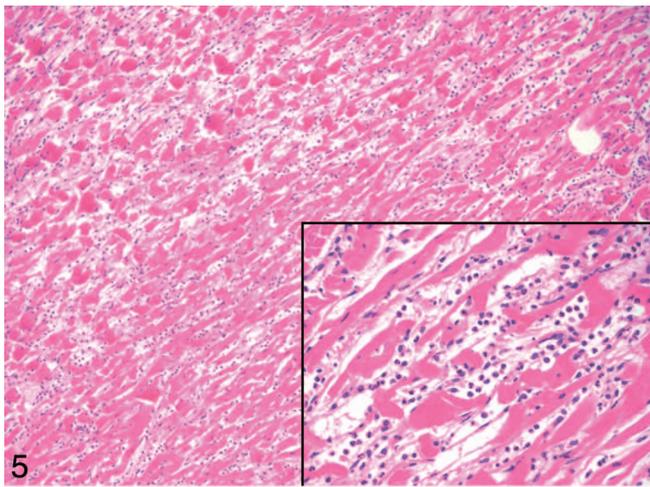


Figure 5. Case B, heart: hyper eosinophilic myocytes, contraction band necrosis, and coagulative myocytolysis. Inset: the infiltrate is predominantly neutrophilic (hematoxylin-eosin, original magnifications $\times 100$ and $\times 400$ [inset]).

Figure 6. Case B, heart: subepicardial coagulative myocytolysis/contraction band necrosis (hematoxylin-eosin, original magnification $\times 100$).

Figure 7. Case B, heart: perivascular inflammation (hematoxylin-eosin, original magnification $\times 200$).

(eg, as with subarachnoid hemorrhage). Histologically, diffuse hyper eosinophilic myocytes, contraction bands, and coagulative myocytolysis are seen, with a patchy and random pattern and a neutrophilic/mononuclear cell infiltrate. With longer survival, global myocardial ischemia may develop.³⁷

This postvaccine reaction may represent an overly exuberant immune response, with the myocardial injury mediated by similar immune mechanisms to those described with SARS-CoV-2 and multisystem inflammatory syndrome cytokine storms.³⁸ Multisystem inflammatory syndrome is a rare systemic illness presenting with persistent fever and extreme inflammation following exposure to SARS-CoV-2. Affected children have persistent fever and may have acute abdominal pain with diarrhea or vomiting, muscle pain/malaise, and hypotension. Other reported symptoms include rashes, enlarged lymph nodes, and swelling.

A hypersensitivity reaction is in the differential diagnosis; however, infrequency or lack of eosinophils would be unusual. The common denominator of a hypersensitivity reaction is the eosinophilic infiltrate, which may be the major inflammatory component or part of a complex picture of mixed inflammation with lymphocytes, macrophages, plasma cells, poorly formed microgranulomas, and giant cells.³⁹ An autopsy study of 69 cases of hypersensitivity myocarditis examined the spectrum of histologic findings, including the distribution of infiltrates and the extent and composition of the infiltrates.⁴⁰ The authors reported that hypersensitivity myocarditis was “defined by the presence of eosinophils, a mixed lymphohistiocytic infiltrate along natural planes of separation, and an absence of fibrosis or granulation tissue in areas of infiltrate.”⁴⁰

Despite a molecular investigation, the etiology of the fibrosis in case A is unclear. It is conceivable that this process first started with the first vaccination dose and the initial myocardial effects resolved and healed over time. The second dose may have restarted the process. One might expect some scarring/repair after a few weeks, although the scarring in case A appears more organized than the 3-week interval between the vaccine doses. Also, it is only in one of the cases. It remains possible that the fibrosis represents arrhythmogenic cardiomyopathy. Unfortunately, cardiac molecular testing was equivocal.

Regardless of the etiology of the fibrosis, the extent of scarring by itself is potentially arrhythmogenic and may be a contributing factor with the acute postvaccine myocardial injury. Similarly, the cardiac hypertrophy in case B may have made the heart more susceptible to an arrhythmia. The key point is that since these boys died suddenly and unexpectedly in their sleep without resuscitation, if the arrhythmia had been due to the myocardial scar (boy A) or cardiomegaly (boy B), then the fulminant, global myocardial injury would not be an expected finding. These 2 clinical histories support the etiology of the acute myocardial injury as a primary factor, not a secondary agonal or postresuscitative artifact.

Two adults (ages 42 and 45 years) with myocarditis diagnosed histologically (one at autopsy and one by biopsy) following SARS-CoV-2 mRNA vaccinations were recently reported.⁴¹ One occurred 10 days after receiving the first Pfizer-BioNTech COVID-19 vaccine dose and the other occurred 14 days after receiving the second mRNA-1273 (Moderna) dose. Histologically, both were described as “fulminant” myocarditis with “multifocal cardiomyocyte

damage associated with mixed inflammatory infiltration." In addition to areas of myocyte necrosis associated with the inflammatory infiltrate, the photomicrographs demonstrate ischemic changes distinct from the inflammation, similar to our findings.

Cytokine storm has been described with an excessive and uncontrolled inflammatory response, and there is a feedback loop between catecholamines and cytokines.¹² Clinical complications may include cardiac compromise, respiratory distress, and hypercoagulation.⁴² The myocardial injury seen in these postvaccine hearts has a similar histologic appearance to catecholamine-mediated stress cardiomyopathy and severe SARS-CoV-2 infection, including myocarditis, which is associated with cytokine release syndrome.³⁸ Recognition that these instances are different from typical myocarditis and that cytokine storm has a known feedback loop with catecholamines may help guide screening, diagnosis, and therapy.

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BOMBHELL: Pfizer Doc Admits Numerous Severe Adverse Reactions Following Jab

<https://newspunch.com/bombshell-pfizer-doc-admits-numerous-severe-adverse-reactions-following-jab/>

A newly released document reveals a massive number of serious adverse reactions people are likely to suffer from as a result of getting the Pfizer jab.

It appears that Pfizer was desperate for the information to remain hidden from the public, with a blurb on the first page warning that “dissemination of this information outside of Pfizer, its Affiliates, its Licensees, or Regulatory Agencies is strictly prohibited.”

The information contained in this document is proprietary and confidential. Any disclosure, reproduction, distribution, or other dissemination of this information outside of Pfizer, its Affiliates, its Licensees, or Regulatory Agencies is strictly prohibited. Except as may be otherwise agreed to in writing, by accepting or reviewing these materials, you agree to hold such information in confidence and not to disclose it to others (except where required by applicable law), nor to use it for unauthorized purposes.

Bigleaguepolitics.com reports:

The number of adverse events listed remained numerous. One notable condition found in Pfizer’s data is 1p36 deletion syndrome, which the National Library of Medicine **describes** as “a disorder that typically causes severe intellectual disability.” They also point out the severity of the disease, noting that “most affected individuals do not

“speak, or speak only a few words” and “may have temper tantrums, bite themselves, or exhibit other behavior problems.”

The “Adverse Events of Special Interest” identified from pages 30-38 can be found below:

APPENDIX 1. LIST OF ADVERSE EVENTS OF SPECIAL INTEREST

1. *1p36 deletion syndrome*
2. *2-Hydroxyglutaric aciduria*
3. *5'nucleotidase increased*
4. *Acoustic neuritis*
5. *Acquired C1 inhibitor deficiency*
6. *Acquired epidermolysis bullosa*
7. *Acquired epileptic aphasia*
8. *Acute cutaneous lupus erythematosus*
9. *Acute disseminated encephalomyelitis*
10. *Acute encephalitis with refractory, repetitive partial seizures*
11. *Acute febrile neutrophilic dermatosis*
12. *Acute flaccid myelitis*
13. *Acute haemorrhagic leukoencephalitis*
14. *Acute haemorrhagic oedema of infancy*
15. *Acute kidney injury*
16. *Acute macular outer retinopathy*
17. *Acute motor axonal neuropathy*
18. *Acute motor-sensory axonal neuropathy*
19. *Acute myocardial infarction*
20. *Acute respiratory distress syndrome*
21. *Acute respiratory failure*

22. *Addison's disease*
23. *Administration site thrombosis*
24. *Administration site vasculitis*
25. *Adrenal thrombosis*
26. *Adverse event following immunization*
27. *Ageusia*
28. *Agranulocytosis*
29. *Air embolism*
30. *Alanine aminotransferase abnormal*
31. *Alanine aminotransferase increased*
32. *Alcoholic seizure*
33. *Allergic bronchopulmonary mycosis*
34. *Allergic oedema*
35. *Alloimmune hepatitis*
36. *Alopecia areata*
37. *Alpers disease*
38. *Alveolar proteinosis*
39. *Ammonia abnormal*
40. *Ammonia increased*
41. *Amniotic cavity infection*
42. *Amygdalohippocampectomy*
43. *Amyloid arthropathy*
44. *Amyloidosis*
45. *Amyloidosis senile*
46. *Anaphylactic reaction*
47. *Anaphylactic shock*
48. *Anaphylactic transfusion reaction*
49. *Anaphylactoid reaction*
50. *Anaphylactoid shock*
51. *Anaphylactoid syndrome of pregnancy*

52. *Angioedema*
53. *Angiopathic neuropathy*
54. *Ankylosing spondylitis*
55. *Anosmia*
56. *Anti-acetylcholine receptor antibody positive*
57. *Anti-actin antibody positive*
58. *Anti-aquaporin-4 antibody positive*
59. *Anti-basal ganglia antibody positive*
60. *Anti-cyclic citrullinated peptide antibody positive*
61. *Anti-epithelial antibody positive*
62. *Anti-erythrocyte antibody positive*
63. *Anti-exosome complex antibody positive*
64. *AntiGAD antibody negative*
65. *Anti-GAD antibody positive*
66. *Anti-ganglioside antibody positive*
67. *Antigliadin antibody positive*
68. *Anti-glomerular basement membrane antibody positive*
69. *Anti-glomerular basement membrane disease*
70. *Anti-glycyl-tRNA synthetase antibody positive*
71. *Anti-HLA antibody test positive*
72. *Anti-IA2 antibody positive*
73. *Anti-insulin antibody increased*
74. *Anti-insulin antibody positive*
75. *Anti-insulin receptor antibody increased*
76. *Antiinsulin receptor antibody positive*
77. *Anti-interferon antibody negative*
78. *Anti-interferon antibody positive*
79. *Anti-islet cell antibody positive*
80. *Antimitochondrial antibody positive*

81. *Anti-muscle specific kinase antibody positive*
82. *Anti-myelin-associated glycoprotein antibodies positive*
83. *Anti-myelin-associated glycoprotein associated polyneuropathy*
84. *Antimyocardial antibody positive*
85. *Anti-neuronal antibody positive*
86. *Antineutrophil cytoplasmic antibody increased*
87. *Antineutrophil cytoplasmic antibody positive*
88. *Anti-neutrophil cytoplasmic antibody positive vasculitis*
89. *Anti-NMDA antibody positive*
90. *Antinuclear antibody increased*
91. *Antinuclear antibody positive*
92. *Antiphospholipid antibodies positive*
93. *Antiphospholipid syndrome*
94. *Anti-platelet antibody positive*
95. *Anti-prothrombin antibody positive*
96. *Antiribosomal P antibody positive*
97. *Anti-RNA polymerase III antibody positive*
98. *Anti-saccharomyces cerevisiae antibody test positive*
99. *Anti-sperm antibody positive*
100. *Anti-SRP antibody positive*
101. *Antisynthetase syndrome*
102. *Anti-thyroid antibody positive*
103. *Anti-transglutaminase antibody increased*
104. *Anti-VGCC antibody positive*
105. *AntiVGKC antibody positive*
106. *Anti-vimentin antibody positive*
107. *Antiviral prophylaxis*

108. *Antiviral treatment*
109. *Anti-zinc transporter 8 antibody positive*
110. *Aortic embolus*
111. *Aortic thrombosis*
112. *Aortitis*
113. *Aplasia pure red cell*
114. *Aplastic anaemia*
115. *Application site thrombosis*
116. *Application site vasculitis*
117. *Arrhythmia*
118. *Arterial bypass occlusion*
119. *Arterial bypass thrombosis*
120. *Arterial thrombosis*
121. *Arteriovenous fistula thrombosis*
122. *Arteriovenous graft site stenosis*
123. *Arteriovenous graft thrombosis*
124. *Arteritis*
125. *Arteritis coronary*
126. *Arthralgia*
127. *Arthritis*
128. *Arthritis enteropathic*
129. *Ascites*
130. *Aseptic cavernous sinus thrombosis*
131. *Aspartate aminotransferase abnormal*
132. *Aspartate aminotransferase increased*
133. *Aspartate-glutamate-transporter deficiency*
134. *AST to platelet ratio index increased*
135. *AST/ALT ratio abnormal*
136. *Asthma*
137. *Asymptomatic COVID19*

138. *Ataxia*
139. *Atheroembolism*
140. *Atonic seizures*
141. *Atrial thrombosis*
142. *Atrophic thyroiditis*
143. *Atypical benign partial epilepsy*
144. *Atypical pneumonia*
145. *Aura*
146. *Autoantibody positive*
147. *Autoimmune anaemia*
148. *Autoimmune aplastic anaemia*
149. *Autoimmune arthritis*
150. *Autoimmune blistering disease*
151. *Autoimmune cholangitis*
152. *Autoimmune colitis*
153. *Autoimmune demyelinating disease*
154. *Autoimmune dermatitis*
155. *Autoimmune disorder*
156. *Autoimmune encephalopathy*
157. *Autoimmune endocrine disorder*
158. *Autoimmune enteropathy*
159. *Autoimmune eye disorder*
160. *Autoimmune haemolytic anaemia*
161. *Autoimmune heparin-induced thrombocytopenia*
162. *Autoimmune hepatitis*
163. *Autoimmune hyperlipidaemia*
164. *Autoimmune hypothyroidism*
165. *Autoimmune inner ear disease*
166. *Autoimmune lung disease*
167. *Autoimmune lymphoproliferative syndrome*

168. *Autoimmune myocarditis*
169. *Autoimmune myositis*
170. *Autoimmune nephritis*
171. *Autoimmune neuropathy*
172. *Autoimmune neutropenia*
173. *Autoimmune pancreatitis*
174. *Autoimmune pancytopenia*
175. *Autoimmune pericarditis*
176. *Autoimmune retinopathy*
177. *Autoimmune thyroid disorder*
178. *Autoimmune thyroiditis*
179. *Autoimmune uveitis*
180. *Autoinflammation with infantile enterocolitis*
181. *Autoinflammatory disease*
182. *Automatism epileptic*
183. *Autonomic nervous system imbalance*
184. *Autonomic seizure*
185. *Axial spondyloarthritis*
186. *Axillary vein thrombosis*
187. *Axonal and demyelinating polyneuropathy*
188. *Axonal neuropathy*
189. *Bacterascites*
190. *Baltic myoclonic epilepsy*
191. *Band sensation*
192. *Basedow's disease*
193. *Basilar artery thrombosis*
194. *Basophilopenia*
195. *B-cell aplasia*
196. *Behcet's syndrome*
197. *Benign ethnic neutropenia*

198. *Benign familial neonatal convulsions*
199. *Benign familial pemphigus*
200. *Benign rolandic epilepsy*
201. *Beta-2 glycoprotein antibody positive*
202. *Bickerstaff's encephalitis*
203. *Bile output abnormal*
204. *Bile output decreased*
205. *Biliary ascites*
206. *Bilirubin conjugated abnormal*
207. *Bilirubin conjugated increased*
208. *Bilirubin urine present*
209. *Biopsy liver abnormal*
210. *Biotinidase deficiency*
211. *Birdshot chorioretinopathy*
212. *Blood alkaline phosphatase abnormal*
213. *Blood alkaline phosphatase increased*
214. *Blood bilirubin abnormal*
215. *Blood bilirubin increased*
216. *Blood bilirubin unconjugated increased*
217. *Blood cholinesterase abnormal*
218. *Blood cholinesterase decreased*
219. *Blood pressure decreased*
220. *Blood pressure diastolic decreased*
221. *Blood pressure systolic decreased*
222. *Blue toe syndrome*
223. *Brachiocephalic vein thrombosis*
224. *Brain stem embolism*
225. *Brain stem thrombosis*
226. *Bromosulphthalein test abnormal*
227. *Bronchial oedema*

228. *Bronchitis*
229. *Bronchitis mycoplasmal*
230. *Bronchitis viral*
231. *Bronchopulmonary aspergillosis allergic*
232. *Bronchospasm*
233. *BuddChiari syndrome*
234. *Bulbar palsy*
235. *Butterfly rash*
236. *C1q nephropathy*
237. *Caesarean section*
238. *Calcium embolism*
239. *Capillaritis*
240. *Caplan's syndrome*
241. *Cardiac amyloidosis*
242. *Cardiac arrest*
243. *Cardiac failure*
244. *Cardiac failure acute*
245. *Cardiac sarcoidosis*
246. *Cardiac ventricular thrombosis*
247. *Cardiogenic shock*
248. *Cardiolipin antibody positive*
249. *Cardiopulmonary failure*
250. *Cardio-respiratory arrest*
251. *Cardio-respiratory distress*
252. *Cardiovascular insufficiency*
253. *Carotid arterial embolus*
254. *Carotid artery thrombosis*
255. *Cataplexy*
256. *Catheter site thrombosis*
257. *Catheter site vasculitis*

258. *Cavernous sinus thrombosis*
259. *CDKL5 deficiency disorder*
260. *CEC syndrome*
261. *Cement embolism*
262. *Central nervous system lupus*
263. *Central nervous system vasculitis*
264. *Cerebellar artery thrombosis*
265. *Cerebellar embolism*
266. *Cerebral amyloid angiopathy*
267. *Cerebral arteritis*
268. *Cerebral artery embolism*
269. *Cerebral artery thrombosis*
270. *Cerebral gas embolism*
271. *Cerebral microembolism*
272. *Cerebral septic infarct*
273. *Cerebral thrombosis*
274. *Cerebral venous sinus thrombosis*
275. *Cerebral venous thrombosis*
276. *Cerebrospinal thrombotic tamponade*
277. *Cerebrovascular accident*
278. *Change in seizure presentation*
279. *Chest discomfort*
280. *ChildPugh-Turcotte score abnormal*
281. *Child-Pugh-Turcotte score increased*
282. *Chillblains*
283. *Choking*
284. *Choking sensation*
285. *Cholangitis sclerosing*
286. *Chronic autoimmune glomerulonephritis*
287. *Chronic cutaneous lupus erythematosus*

288. *Chronic fatigue syndrome*
289. *Chronic gastritis*
290. *Chronic inflammatory demyelinating polyradiculoneuropathy*
291. *Chronic lymphocytic inflammation with pontine perivascular enhancement responsive to steroids*
292. *Chronic recurrent multifocal osteomyelitis*
293. *Chronic respiratory failure*
294. *Chronic spontaneous urticaria*
295. *Circulatory collapse*
296. *Circumoral oedema*
297. *Circumoral swelling*
298. *Clinically isolated syndrome*
299. *Clonic convulsion*
300. *Coeliac disease*
301. *Cogan's syndrome*
302. *Cold agglutinins positive*
303. *Cold type haemolytic anaemia*
304. *Colitis*
305. *Colitis erosive*
306. *Colitis herpes*
307. *Colitis microscopic*
308. *Colitis ulcerative*
309. *Collagen disorder*
310. *Collagen-vascular disease*
311. *Complement factor abnormal*
312. *Complement factor C1 decreased*
313. *Complement factor C2 decreased*
314. *Complement factor C3 decreased*
315. *Complement factor C4 decreased*

316. *Complement factor decreased*
317. *Computerised tomogram liver abnormal*
318. *Concentric sclerosis*
319. *Congenital anomaly*
320. *Congenital bilateral perisylvian syndrome*
321. *Congenital herpes simplex infection*
322. *Congenital myasthenic syndrome*
323. *Congenital varicella infection*
324. *Congestive hepatopathy*
325. *Convulsion in childhood*
326. *Convulsions local*
327. *Convulsive threshold lowered*
328. *Coombs positive haemolytic anaemia*
329. *Coronary artery disease*
330. *Coronary artery embolism*
331. *Coronary artery thrombosis*
332. *Coronary bypass thrombosis*
333. *Coronavirus infection*
334. *Coronavirus test*
335. *Coronavirus test negative*
336. *Coronavirus test positive*
337. *Corpus callosotomy*
338. *Cough*
339. *Cough variant asthma*
340. *COVID-19*
341. *COVID-19 immunisation*
342. *COVID-19 pneumonia*
343. *COVID-19 prophylaxis*
344. *COVID-19 treatment*
345. *Cranial nerve disorder*

346. *Cranial nerve palsies multiple*
347. *Cranial nerve paralysis*
348. *CREST syndrome*
349. *Crohn's disease*
350. *Cryofibrinogenaemia*
351. *Cryoglobulinaemia*
352. *CSF oligoclonal band present*
353. *CSWS syndrome*
354. *Cutaneous amyloidosis*
355. *Cutaneous lupus erythematosus*
356. *Cutaneous sarcoidosis*
357. *Cutaneous vasculitis*
358. *Cyanosis*
359. *Cyclic neutropenia*
360. *Cystitis interstitial*
361. *Cytokine release syndrome*
362. *Cytokine storm*
363. *De novo purine synthesis inhibitors associated acute inflammatory syndrome*
364. *Death neonatal*
365. *Deep vein thrombosis*
366. *Deep vein thrombosis postoperative*
367. *Deficiency of bile secretion*
368. *Deja vu*
369. *Demyelinating polyneuropathy*
370. *Demyelination*
371. *Dermatitis*
372. *Dermatitis bullous*
373. *Dermatitis herpetiformis*
374. *Dermatomyositis*

375. *Device embolisation*
376. *Device related thrombosis*
377. *Diabetes mellitus*
378. *Diabetic ketoacidosis*
379. *Diabetic mastopathy*
380. *Dialysis amyloidosis*
381. *Dialysis membrane reaction*
382. *Diastolic hypotension*
383. *Diffuse vasculitis*
384. *Digital pitting scar*
385. *Disseminated intravascular coagulation*
386. *Disseminated intravascular coagulation in newborn*
387. *Disseminated neonatal herpes simplex*
388. *Disseminated varicella*
389. *Disseminated varicella zoster vaccine virus infection*
390. *Disseminated varicella zoster virus infection*
391. *DNA antibody positive*
392. *Double cortex syndrome*
393. *Double stranded DNA antibody positive*
394. *Dreamy state*
395. *Dressler's syndrome*
396. *Drop attacks*
397. *Drug withdrawal convulsions*
398. *Dyspnoea*
399. *Early infantile epileptic encephalopathy with burst-suppression*
400. *Eclampsia*
401. *Eczema herpeticum*
402. *Embolia cutis medicamentosa*
403. *Embolic cerebellar infarction*

404. *Embolic cerebral infarction*
405. *Embolic pneumonia*
406. *Embolic stroke*
407. *Embolism*
408. *Embolism arterial*
409. *Embolism venous*
410. *Encephalitis*
411. *Encephalitis allergic*
412. *Encephalitis autoimmune*
413. *Encephalitis brain stem*
414. *Encephalitis haemorrhagic*
415. *Encephalitis periaxialis diffusa*
416. *Encephalitis post immunisation*
417. *Encephalomyelitis*
418. *Encephalopathy*
419. *Endocrine disorder*
420. *Endocrine ophthalmopathy*
421. *Endotracheal intubation*
422. *Enteritis*
423. *Enteritis leukopenic*
424. *Enterobacter pneumonia*
425. *Enterocolitis*
426. *Enteropathic spondylitis*
427. *Eosinopenia*
428. *Eosinophilic fasciitis*
429. *Eosinophilic granulomatosis with polyangiitis*
430. *Eosinophilic oesophagitis*
431. *Epidermolysis*
432. *Epilepsy*
433. *Epilepsy surgery*

434. *Epilepsy with myoclonic-atonic seizures*
435. *Epileptic aura*
436. *Epileptic psychosis*
437. *Erythema*
438. *Erythema induratum*
439. *Erythema multiforme*
440. *Erythema nodosum*
441. *Evans syndrome*
442. *Exanthema subitum*
443. *Expanded disability status scale score decreased*
444. *Expanded disability status scale score increased*
445. *Exposure to communicable disease*
446. *Exposure to SARS-CoV-2*
447. *Eye oedema*
448. *Eye pruritus*
449. *Eye swelling*
450. *Eyelid oedema*
451. *Face oedema*
452. *Facial paralysis*
453. *Facial paresis*
454. *Faciobrachial dystonic seizure*
455. *Fat embolism*
456. *Febrile convulsion*
457. *Febrile infection-related epilepsy syndrome*
458. *Febrile neutropenia*
459. *Felty's syndrome*
460. *Femoral artery embolism*
461. *Fibrillary glomerulonephritis*
462. *Fibromyalgia*
463. *Flushing*

464. *Foaming at mouth*
465. *Focal cortical resection*
466. *Focal dyscognitive seizures*
467. *Foetal distress syndrome*
468. *Foetal placental thrombosis*
469. *Foetor hepaticus*
470. *Foreign body embolism*
471. *Frontal lobe epilepsy*
472. *Fulminant type 1 diabetes mellitus*
473. *Galactose elimination capacity test abnormal*
474. *Galactose elimination capacity test decreased*
475. *Gamma-glutamyltransferase abnormal*
476. *Gamma-glutamyltransferase increased*
477. *Gastritis herpes*
478. *Gastrointestinal amyloidosis*
479. *Gelastic seizure*
480. *Generalised onset non-motor seizure*
481. *Generalised tonic-clonic seizure*
482. *Genital herpes*
483. *Genital herpes simplex*
484. *Genital herpes zoster*
485. *Giant cell arteritis*
486. *Glomerulonephritis*
487. *Glomerulonephritis membranoproliferative*
488. *Glomerulonephritis membranous*
489. *Glomerulonephritis rapidly progressive*
490. *Glossopharyngeal nerve paralysis*
491. *Glucose transporter type 1 deficiency syndrome*
492. *Glutamate dehydrogenase increased*
493. *Glycocholic acid increased*

494. *GM2 gangliosidosis*
495. *Goodpasture's syndrome*
496. *Graft thrombosis*
497. *Granulocytopenia*
498. *Granulocytopenia neonatal*
499. *Granulomatosis with polyangiitis*
500. *Granulomatous dermatitis*
501. *Grey matter heterotopia*
502. *Guanase increased*
503. *GuillainBarre syndrome*
504. *Haemolytic anaemia*
505. *Haemophagocytic lymphohistiocytosis*
506. *Haemorrhage*
507. *Haemorrhagic ascites*
508. *Haemorrhagic disorder*
509. *Haemorrhagic pneumonia*
510. *Haemorrhagic varicella syndrome*
511. *Haemorrhagic vasculitis*
512. *Hantavirus pulmonary infection*
513. *Hashimoto's encephalopathy*
514. *Hashitoxicosis*
515. *Hemimegalencephaly*
516. *Henoch-Schonlein purpura*
517. *HenochSchonlein purpura nephritis*
518. *Hepaplastin abnormal*
519. *Hepaplastin decreased*
520. *Heparin-induced thrombocytopenia*
521. *Hepatic amyloidosis*
522. *Hepatic artery embolism*
523. *Hepatic artery flow decreased*

524. *Hepatic artery thrombosis*
525. *Hepatic enzyme abnormal*
526. *Hepatic enzyme decreased*
527. *Hepatic enzyme increased*
528. *Hepatic fibrosis marker abnormal*
529. *Hepatic fibrosis marker increased*
530. *Hepatic function abnormal*
531. *Hepatic hydrothorax*
532. *Hepatic hypertrophy*
533. *Hepatic hypoperfusion*
534. *Hepatic lymphocytic infiltration*
535. *Hepatic mass*
536. *Hepatic pain*
537. *Hepatic sequestration*
538. *Hepatic vascular resistance increased*
539. *Hepatic vascular thrombosis*
540. *Hepatic vein embolism*
541. *Hepatic vein thrombosis*
542. *Hepatic venous pressure gradient abnormal*
543. *Hepatic venous pressure gradient increased*
544. *Hepatitis*
545. *Hepatobiliary scan abnormal*
546. *Hepatomegaly*
547. *Hepatosplenomegaly*
548. *Hereditary angioedema with C1 esterase inhibitor deficiency*
549. *Herpes dermatitis*
550. *Herpes gestationis*
551. *Herpes oesophagitis*
552. *Herpes ophthalmic*

553. *Herpes pharyngitis*
554. *Herpes sepsis*
555. *Herpes simplex*
556. *Herpes simplex cervicitis*
557. *Herpes simplex colitis*
558. *Herpes simplex encephalitis*
559. *Herpes simplex gastritis*
560. *Herpes simplex hepatitis*
561. *Herpes simplex meningitis*
562. *Herpes simplex meningoencephalitis*
563. *Herpes simplex meningomyelitis*
564. *Herpes simplex necrotising retinopathy*
565. *Herpes simplex oesophagitis*
566. *Herpes simplex otitis externa*
567. *Herpes simplex pharyngitis*
568. *Herpes simplex pneumonia*
569. *Herpes simplex reactivation*
570. *Herpes simplex sepsis*
571. *Herpes simplex viraemia*
572. *Herpes simplex virus conjunctivitis neonatal*
573. *Herpes simplex visceral*
574. *Herpes virus infection*
575. *Herpes zoster*
576. *Herpes zoster cutaneous disseminated*
577. *Herpes zoster infection neurological*
578. *Herpes zoster meningitis*
579. *Herpes zoster meningoencephalitis*
580. *Herpes zoster meningomyelitis*
581. *Herpes zoster meningoradiculitis*
582. *Herpes zoster necrotising retinopathy*

583. *Herpes zoster oticus*
584. *Herpes zoster pharyngitis*
585. *Herpes zoster reactivation*
586. *Herpetic radiculopathy*
587. *Histone antibody positive*
588. *Hoigne's syndrome*
589. *Human herpesvirus 6 encephalitis*
590. *Human herpesvirus 6 infection*
591. *Human herpesvirus 6 infection reactivation*
592. *Human herpesvirus 7 infection*
593. *Human herpesvirus 8 infection*
594. *Hyperammonaemia*
595. *Hyperbilirubinaemia*
596. *Hypercholia*
597. *Hypergammaglobulinaemia benign monoclonal*
598. *Hyperglycaemic seizure*
599. *Hypersensitivity*
600. *Hypersensitivity vasculitis*
601. *Hyperthyroidism*
602. *Hypertransaminasaemia*
603. *Hyperventilation*
604. *Hypoalbuminaemia*
605. *Hypocalcaemic seizure*
606. *Hypogammaglobulinaemia*
607. *Hypoglossal nerve paralysis*
608. *Hypoglossal nerve paresis*
609. *Hypoglycaemic seizure*
610. *Hyponatraemic seizure*
611. *Hypotension*
612. *Hypotensive crisis*

613. *Hypothenar hammer syndrome*
614. *Hypothyroidism*
615. *Hypoxia*
616. *Idiopathic CD4 lymphocytopenia*
617. *Idiopathic generalised epilepsy*
618. *Idiopathic interstitial pneumonia*
619. *Idiopathic neutropenia*
620. *Idiopathic pulmonary fibrosis*
621. *IgA nephropathy*
622. *IgM nephropathy*
623. *IIIrd nerve paralysis*
624. *IIIrd nerve paresis*
625. *Iliac artery embolism*
626. *Immune thrombocytopenia*
627. *Immunemediated adverse reaction*
628. *Immune-mediated cholangitis*
629. *Immune-mediated cholestasis*
630. *Immune-mediated cytopenia*
631. *Immune-mediated encephalitis*
632. *Immune-mediated encephalopathy*
633. *Immune-mediated endocrinopathy*
634. *Immune-mediated enterocolitis*
635. *Immunemediated gastritis*
636. *Immune-mediated hepatic disorder*
637. *Immune-mediated hepatitis*
638. *Immunemediated hyperthyroidism*
639. *Immune-mediated hypothyroidism*
640. *Immune-mediated myocarditis*
641. *Immune-mediated myositis*
642. *Immune-mediated nephritis*

643. *Immune-mediated neuropathy*
644. *Immune-mediated pancreatitis*
645. *Immune-mediated pneumonitis*
646. *Immune-mediated renal disorder*
647. *Immune-mediated thyroiditis*
648. *Immune-mediated uveitis*
649. *Immunoglobulin G4 related disease*
650. *Immunoglobulins abnormal*
651. *Implant site thrombosis*
652. *Inclusion body myositis*
653. *Infantile genetic agranulocytosis*
654. *Infantile spasms*
655. *Infected vasculitis*
656. *Infective thrombosis*
657. *Inflammation*
658. *Inflammatory bowel disease*
659. *Infusion site thrombosis*
660. *Infusion site vasculitis*
661. *Injection site thrombosis*
662. *Injection site urticaria*
663. *Injection site vasculitis*
664. *Instillation site thrombosis*
665. *Insulin autoimmune syndrome*
666. *Interstitial granulomatous dermatitis*
667. *Interstitial lung disease*
668. *Intracardiac mass*
669. *Intracardiac thrombus*
670. *Intracranial pressure increased*
671. *Intrapericardial thrombosis*
672. *Intrinsic factor antibody abnormal*

673. *Intrinsic factor antibody positive*
674. *IPEX syndrome*
675. *Irregular breathing*
676. *IRVAN syndrome*
677. *IVth nerve paralysis*
678. *IVth nerve paresis*
679. *JC polyomavirus test positive*
680. *JC virus CSF test positive*
681. *Jeavons syndrome*
682. *Jugular vein embolism*
683. *Jugular vein thrombosis*
684. *Juvenile idiopathic arthritis*
685. *Juvenile myoclonic epilepsy*
686. *Juvenile polymyositis*
687. *Juvenile psoriatic arthritis*
688. *Juvenile spondyloarthritis*
689. *Kaposi sarcoma inflammatory cytokine syndrome*
690. *Kawasaki's disease*
691. *Kayser-Fleischer ring*
692. *Keratoderma blenorrhagica*
693. *Ketosisprone diabetes mellitus*
694. *Kounis syndrome*
695. *Lafora's myoclonic epilepsy*
696. *Lambl's excrescences*
697. *Laryngeal dyspnoea*
698. *Laryngeal oedema*
699. *Laryngeal rheumatoid arthritis*
700. *Laryngospasm*
701. *Laryngotracheal oedema*
702. *Latent autoimmune diabetes in adults*

- 703. *LE cells present*
- 704. *Lemierre syndrome*
- 705. *Lennox-Gastaut syndrome*
- 706. *Leucine aminopeptidase increased*
- 707. *Leukoencephalomyelitis*
- 708. *Leukoencephalopathy*
- 709. *Leukopenia*
- 710. *Leukopenia neonatal*
- 711. *Lewis-Sumner syndrome*
- 712. *Lhermitte's sign*
- 713. *Lichen planopilaris*
- 714. *Lichen planus*
- 715. *Lichen sclerosus*
- 716. *Limbic encephalitis*
- 717. *Linear IgA disease*
- 718. *Lip oedema*
- 719. *Lip swelling*
- 720. *Liver function test abnormal*
- 721. *Liver function test decreased*
- 722. *Liver function test increased*
- 723. *Liver induration*
- 724. *Liver injury*
- 725. *Liver iron concentration abnormal*
- 726. *Liver iron concentration increased*
- 727. *Liver opacity*
- 728. *Liver palpable*
- 729. *Liver sarcoidosis*
- 730. *Liver scan abnormal*
- 731. *Liver tenderness*
- 732. *Low birth weight baby*

- 733. *Lower respiratory tract herpes infection*
- 734. *Lower respiratory tract infection*
- 735. *Lower respiratory tract infection viral*
- 736. *Lung abscess*
- 737. *Lupoid hepatic cirrhosis*
- 738. *Lupus cystitis*
- 739. *Lupus encephalitis*
- 740. *Lupus endocarditis*
- 741. *Lupus enteritis*
- 742. *Lupus hepatitis*
- 743. *Lupus myocarditis*
- 744. *Lupus myositis*
- 745. *Lupus nephritis*
- 746. *Lupus pancreatitis*
- 747. *Lupus pleurisy*
- 748. *Lupus pneumonitis*
- 749. *Lupus vasculitis*
- 750. *Lupus-like syndrome*
- 751. *Lymphocytic hypophysitis*
- 752. *Lymphocytopenia neonatal*
- 753. *Lymphopenia*
- 754. *MAGIC syndrome*
- 755. *Magnetic resonance imaging liver abnormal*
- 756. *Magnetic resonance proton density fat fraction measurement*
- 757. *Mahler sign*
- 758. *Manufacturing laboratory analytical testing issue*
- 759. *Manufacturing materials issue*
- 760. *Manufacturing production issue*
- 761. *Marburg's variant multiple sclerosis*

762. *Marchiafava-Bignami disease*
763. *Marine Lenhart syndrome*
764. *Mastocytic enterocolitis*
765. *Maternal exposure during pregnancy*
766. *Medical device site thrombosis*
767. *Medical device site vasculitis*
768. *MELAS syndrome*
769. *Meningitis*
770. *Meningitis aseptic*
771. *Meningitis herpes*
772. *Meningoencephalitis herpes simplex neonatal*
773. *Meningoencephalitis herpetic*
774. *Meningomyelitis herpes*
775. *MERS-CoV test*
776. *MERS-CoV test negative*
777. *MERS-CoV test positive*
778. *Mesangioproliferative glomerulonephritis*
779. *Mesenteric artery embolism*
780. *Mesenteric artery thrombosis*
781. *Mesenteric vein thrombosis*
782. *Metapneumovirus infection*
783. *Metastatic cutaneous Crohn's disease*
784. *Metastatic pulmonary embolism*
785. *Microangiopathy*
786. *Microembolism*
787. *Microscopic polyangiitis*
788. *Middle East respiratory syndrome*
789. *Migraine-triggered seizure*
790. *Miliary pneumonia*
791. *Miller Fisher syndrome*

792. *Mitochondrial aspartate aminotransferase increased*
793. *Mixed connective tissue disease*
794. *Model for end stage liver disease score abnormal*
795. *Model for end stage liver disease score increased*
796. *Molar ratio of total branched-chain amino acid to tyrosine*
797. *Molybdenum cofactor deficiency*
798. *Monocytopenia*
799. *Mononeuritis*
800. *Mononeuropathy multiplex*
801. *Morphoea*
802. *Morvan syndrome*
803. *Mouth swelling*
804. *Moyamoya disease*
805. *Multifocal motor neuropathy*
806. *Multiple organ dysfunction syndrome*
807. *Multiple sclerosis*
808. *Multiple sclerosis relapse*
809. *Multiple sclerosis relapse prophylaxis*
810. *Multiple subpial transection*
811. *Multisystem inflammatory syndrome in children*
812. *Muscular sarcoidosis*
813. *Myasthenia gravis*
814. *Myasthenia gravis crisis*
815. *Myasthenia gravis neonatal*
816. *Myasthenic syndrome*
817. *Myelitis*
818. *Myelitis transverse*
819. *Myocardial infarction*
820. *Myocarditis*

821. *Myocarditis post infection*
822. *Myoclonic epilepsy*
823. *Myoclonic epilepsy and ragged-red fibers*
824. *Myokymia*
825. *Myositis*
826. *Narcolepsy*
827. *Nasal herpes*
828. *Nasal obstruction*
829. *Necrotising herpetic retinopathy*
830. *Neonatal Crohn's disease*
831. *Neonatal epileptic seizure*
832. *Neonatal lupus erythematosus*
833. *Neonatal mucocutaneous herpes simplex*
834. *Neonatal pneumonia*
835. *Neonatal seizure*
836. *Nephritis*
837. *Nephrogenic systemic fibrosis*
838. *Neuralgic amyotrophy*
839. *Neuritis*
840. *Neuritis cranial*
841. *Neuromyelitis optica pseudo relapse*
842. *Neuromyelitis optica spectrum disorder*
843. *Neuromyotonia*
844. *Neuronal neuropathy*
845. *Neuropathy peripheral*
846. *Neuropathy, ataxia, retinitis pigmentosa syndrome*
847. *Neuropsychiatric lupus*
848. *Neurosarcoidosis*
849. *Neutropenia*
850. *Neutropenia neonatal*

851. *Neutropenic colitis*
852. *Neutropenic infection*
853. *Neutropenic sepsis*
854. *Nodular rash*
855. *Nodular vasculitis*
856. *Noninfectious myelitis*
857. *Noninfective encephalitis*
858. *Noninfective encephalomyelitis*
859. *Noninfective oophoritis*
860. *Obstetrical pulmonary embolism*
861. *Occupational exposure to communicable disease*
862. *Occupational exposure to SARS-CoV-2*
863. *Ocular hyperaemia*
864. *Ocular myasthenia*
865. *Ocular pemphigoid*
866. *Ocular sarcoidosis*
867. *Ocular vasculitis*
868. *Oculofacial paralysis*
869. *Oedema*
870. *Oedema blister*
871. *Oedema due to hepatic disease*
872. *Oedema mouth*
873. *Oesophageal achalasia*
874. *Ophthalmic artery thrombosis*
875. *Ophthalmic herpes simplex*
876. *Ophthalmic herpes zoster*
877. *Ophthalmic vein thrombosis*
878. *Optic neuritis*
879. *Optic neuropathy*
880. *Optic perineuritis*

881. *Oral herpes*
882. *Oral lichen planus*
883. *Oropharyngeal oedema*
884. *Oropharyngeal spasm*
885. *Oropharyngeal swelling*
886. *Osmotic demyelination syndrome*
887. *Ovarian vein thrombosis*
888. *Overlap syndrome*
889. *Paediatric autoimmune neuropsychiatric disorders associated with streptococcal infection*
890. *Paget-Schroetter syndrome*
891. *Palindromic rheumatism*
892. *Palisaded neutrophilic granulomatous dermatitis*
893. *Palmoplantar keratoderma*
894. *Palpable purpura*
895. *Pancreatitis*
896. *Panencephalitis*
897. *Papillophlebitis*
898. *Paracancerous pneumonia*
899. *Paradoxical embolism*
900. *Parainfluenzae viral laryngotracheobronchitis*
901. *Paraneoplastic dermatomyositis*
902. *Paraneoplastic pemphigus*
903. *Paraneoplastic thrombosis*
904. *Paresis cranial nerve*
905. *Parietal cell antibody positive*
906. *Paroxysmal nocturnal haemoglobinuria*
907. *Partial seizures*
908. *Partial seizures with secondary generalisation*
909. *Patient isolation*

910. *Pelvic venous thrombosis*
911. *Pemphigoid*
912. *Pemphigus*
913. *Penile vein thrombosis*
914. *Pericarditis*
915. *Pericarditis lupus*
916. *Perihepatic discomfort*
917. *Periorbital oedema*
918. *Periorbital swelling*
919. *Peripheral artery thrombosis*
920. *Peripheral embolism*
921. *Peripheral ischaemia*
922. *Peripheral vein thrombus extension*
923. *Periportal oedema*
924. *Peritoneal fluid protein abnormal*
925. *Peritoneal fluid protein decreased*
926. *Peritoneal fluid protein increased*
927. *Peritonitis lupus*
928. *Pernicious anaemia*
929. *Petit mal epilepsy*
930. *Pharyngeal oedema*
931. *Pharyngeal swelling*
932. *Pityriasis lichenoides et varioliformis acuta*
933. *Placenta praevia*
934. *Pleuroparenchymal fibroelastosis*
935. *Pneumobilia*
936. *Pneumonia*
937. *Pneumonia adenoviral*
938. *Pneumonia cytomegaloviral*
939. *Pneumonia herpes viral*

940. *Pneumonia influenzal*
941. *Pneumonia measles*
942. *Pneumonia mycoplasmal*
943. *Pneumonia necrotising*
944. *Pneumonia parainfluenzae viral*
945. *Pneumonia respiratory syncytial viral*
946. *Pneumonia viral*
947. *POEMS syndrome*
948. *Polyarteritis nodosa*
949. *Polyarthrititis*
950. *Polychondritis*
951. *Polyglandular autoimmune syndrome type I*
952. *Polyglandular autoimmune syndrome type II*
953. *Polyglandular autoimmune syndrome type III*
954. *Polyglandular disorder*
955. *Polymicrogyria*
956. *Polymyalgia rheumatica*
957. *Polymyositis*
958. *Polyneuropathy*
959. *Polyneuropathy idiopathic progressive*
960. *Portal pyaemia*
961. *Portal vein embolism*
962. *Portal vein flow decreased*
963. *Portal vein pressure increased*
964. *Portal vein thrombosis*
965. *Portosplenomesenteric venous thrombosis*
966. *Post procedural hypotension*
967. *Post procedural pneumonia*
968. *Post procedural pulmonary embolism*
969. *Post stroke epilepsy*

970. *Post stroke seizure*
971. *Post thrombotic retinopathy*
972. *Post thrombotic syndrome*
973. *Post viral fatigue syndrome*
974. *Postictal headache*
975. *Postictal paralysis*
976. *Postictal psychosis*
977. *Postictal state*
978. *Postoperative respiratory distress*
979. *Postoperative respiratory failure*
980. *Postoperative thrombosis*
981. *Postpartum thrombosis*
982. *Postpartum venous thrombosis*
983. *Postpericardiotomy syndrome*
984. *Post-traumatic epilepsy*
985. *Postural orthostatic tachycardia syndrome*
986. *Precerebral artery thrombosis*
987. *Pre-eclampsia*
988. *Preictal state*
989. *Premature labour*
990. *Premature menopause*
991. *Primary amyloidosis*
992. *Primary biliary cholangitis*
993. *Primary progressive multiple sclerosis*
994. *Procedural shock*
995. *Proctitis herpes*
996. *Proctitis ulcerative*
997. *Product availability issue*
998. *Product distribution issue*
999. *Product supply issue*

1000. *Progressive facial hemiatrophy*
1001. *Progressive multifocal leukoencephalopathy*
1002. *Progressive multiple sclerosis*
1003. *Progressive relapsing multiple sclerosis*
1004. *Prosthetic cardiac valve thrombosis*
1005. *Pruritus*
1006. *Pruritus allergic*
1007. *Pseudovasculitis*
1008. *Psoriasis*
1009. *Psoriatic arthropathy*
1010. *Pulmonary amyloidosis*
1011. *Pulmonary artery thrombosis*
1012. *Pulmonary embolism*
1013. *Pulmonary fibrosis*
1014. *Pulmonary haemorrhage*
1015. *Pulmonary microemboli*
1016. *Pulmonary oil microembolism*
1017. *Pulmonary renal syndrome*
1018. *Pulmonary sarcoidosis*
1019. *Pulmonary sepsis*
1020. *Pulmonary thrombosis*
1021. *Pulmonary tumour thrombotic microangiopathy*
1022. *Pulmonary vasculitis*
1023. *Pulmonary veno-occlusive disease*
1024. *Pulmonary venous thrombosis*
1025. *Pyoderma gangrenosum*
1026. *Pyostomatitis vegetans*
1027. *Pyrexia*
1028. *Quarantine*
1029. *Radiation leukopenia*

- 1030. *Radiculitis brachial*
- 1031. *Radiologically isolated syndrome*
- 1032. *Rash*
- 1033. *Rash erythematous*
- 1034. *Rash pruritic*
- 1035. *Rasmussen encephalitis*
- 1036. *Raynaud's phenomenon*
- 1037. *Reactive capillary endothelial proliferation*
- 1038. *Relapsing multiple sclerosis*
- 1039. *Relapsing-remitting multiple sclerosis*
- 1040. *Renal amyloidosis*
- 1041. *Renal arteritis*
- 1042. *Renal artery thrombosis*
- 1043. *Renal embolism*
- 1044. *Renal failure*
- 1045. *Renal vascular thrombosis*
- 1046. *Renal vasculitis*
- 1047. *Renal vein embolism*
- 1048. *Renal vein thrombosis*
- 1049. *Respiratory arrest*
- 1050. *Respiratory disorder*
- 1051. *Respiratory distress*
- 1052. *Respiratory failure*
- 1053. *Respiratory paralysis*
- 1054. *Respiratory syncytial virus bronchiolitis*
- 1055. *Respiratory syncytial virus bronchitis*
- 1056. *Retinal artery embolism*
- 1057. *Retinal artery occlusion*
- 1058. *Retinal artery thrombosis*
- 1059. *Retinal vascular thrombosis*

1060. *Retinal vasculitis*
1061. *Retinal vein occlusion*
1062. *Retinal vein thrombosis*
1063. *Retinol binding protein decreased*
1064. *Retinopathy*
1065. *Retrograde portal vein flow*
1066. *Retroperitoneal fibrosis*
1067. *Reversible airways obstruction*
1068. *Reynold's syndrome*
1069. *Rheumatic brain disease*
1070. *Rheumatic disorder*
1071. *Rheumatoid arthritis*
1072. *Rheumatoid factor increased*
1073. *Rheumatoid factor positive*
1074. *Rheumatoid factor quantitative increased*
1075. *Rheumatoid lung*
1076. *Rheumatoid neutrophilic dermatosis*
1077. *Rheumatoid nodule*
1078. *Rheumatoid nodule removal*
1079. *Rheumatoid scleritis*
1080. *Rheumatoid vasculitis*
1081. *Saccadic eye movement*
1082. *SAPHO syndrome*
1083. *Sarcoidosis*
1084. *SARS-CoV-1 test*
1085. *SARS-CoV-1 test negative*
1086. *SARS-CoV-1 test positive*
1087. *SARS-CoV-2 antibody test*
1088. *SARS-CoV-2 antibody test negative*
1089. *SARS-CoV-2 antibody test positive*

1090. *SARS-CoV-2 carrier*
1091. *SARS-CoV-2 sepsis*
1092. *SARS-CoV-2 test*
1093. *SARSCoV-2 test false negative*
1094. *SARS-CoV-2 test false positive*
1095. *SARS-CoV-2 test negative*
1096. *SARSCoV-2 test positive*
1097. *SARS-CoV-2 viraemia*
1098. *Satoyoshi syndrome*
1099. *Schizencephaly*
1100. *Scleritis*
1101. *Sclerodactylia*
1102. *Scleroderma*
1103. *Scleroderma associated digital ulcer*
1104. *Scleroderma renal crisis*
1105. *Scleroderma-like reaction*
1106. *Secondary amyloidosis*
1107. *Secondary cerebellar degeneration*
1108. *Secondary progressive multiple sclerosis*
1109. *Segmented hyalinising vasculitis*
1110. *Seizure*
1111. *Seizure anoxic*
1112. *Seizure cluster*
1113. *Seizure like phenomena*
1114. *Seizure prophylaxis*
1115. *Sensation of foreign body*
1116. *Septic embolus*
1117. *Septic pulmonary embolism*
1118. *Severe acute respiratory syndrome*
1119. *Severe myoclonic epilepsy of infancy*

- 1120. *Shock*
- 1121. *Shock symptom*
- 1122. *Shrinking lung syndrome*
- 1123. *Shunt thrombosis*
- 1124. *Silent thyroiditis*
- 1125. *Simple partial seizures*
- 1126. *Sjogren's syndrome*
- 1127. *Skin swelling*
- 1128. *SLE arthritis*
- 1129. *Smooth muscle antibody positive*
- 1130. *Sneezing*
- 1131. *Spinal artery embolism*
- 1132. *Spinal artery thrombosis*
- 1133. *Splenic artery thrombosis*
- 1134. *Splenic embolism*
- 1135. *Splenic thrombosis*
- 1136. *Splenic vein thrombosis*
- 1137. *Spondylitis*
- 1138. *Spondyloarthropathy*
- 1139. *Spontaneous heparin-induced thrombocytopenia syndrome*
- 1140. *Status epilepticus*
- 1141. *Stevens-Johnson syndrome*
- 1142. *Stiff leg syndrome*
- 1143. *Stiff person syndrome*
- 1144. *Stillbirth*
- 1145. *Still's disease*
- 1146. *Stoma site thrombosis*
- 1147. *Stoma site vasculitis*
- 1148. *Stress cardiomyopathy*

- 1149. *Stridor*
- 1150. *Subacute cutaneous lupus erythematosus*
- 1151. *Subacute endocarditis*
- 1152. *Subacute inflammatory demyelinating polyneuropathy*
- 1153. *Subclavian artery embolism*
- 1154. *Subclavian artery thrombosis*
- 1155. *Subclavian vein thrombosis*
- 1156. *Sudden unexplained death in epilepsy*
- 1157. *Superior sagittal sinus thrombosis*
- 1158. *Susac's syndrome*
- 1159. *Suspected COVID19*
- 1160. *Swelling*
- 1161. *Swelling face*
- 1162. *Swelling of eyelid*
- 1163. *Swollen tongue*
- 1164. *Sympathetic ophthalmia*
- 1165. *Systemic lupus erythematosus*
- 1166. *Systemic lupus erythematosus disease activity index abnormal*
- 1167. *Systemic lupus erythematosus disease activity index decreased*
- 1168. *Systemic lupus erythematosus disease activity index increased*
- 1169. *Systemic lupus erythematosus rash*
- 1170. *Systemic scleroderma*
- 1171. *Systemic sclerosis pulmonary*
- 1172. *Tachycardia*
- 1173. *Tachypnoea*
- 1174. *Takayasu's arteritis*

- 1175. *Temporal lobe epilepsy*
- 1176. *Terminal ileitis*
- 1177. *Testicular autoimmunity*
- 1178. *Throat tightness*
- 1179. *Thromboangiitis obliterans*
- 1180. *Thrombocytopenia*
- 1181. *Thrombocytopenic purpura*
- 1182. *Thrombophlebitis*
- 1183. *Thrombophlebitis migrans*
- 1184. *Thrombophlebitis neonatal*
- 1185. *Thrombophlebitis septic*
- 1186. *Thrombophlebitis superficial*
- 1187. *Thromboplastin antibody positive*
- 1188. *Thrombosis*
- 1189. *Thrombosis corpora cavernosa*
- 1190. *Thrombosis in device*
- 1191. *Thrombosis mesenteric vessel*
- 1192. *Thrombotic cerebral infarction*
- 1193. *Thrombotic microangiopathy*
- 1194. *Thrombotic stroke*
- 1195. *Thrombotic thrombocytopenic purpura*
- 1196. *Thyroid disorder*
- 1197. *Thyroid stimulating immunoglobulin increased*
- 1198. *Thyroiditis*
- 1199. *Tongue amyloidosis*
- 1200. *Tongue biting*
- 1201. *Tongue oedema*
- 1202. *Tonic clonic movements*
- 1203. *Tonic convulsion*
- 1204. *Tonic posturing*

1205. *Topectomy*
1206. *Total bile acids increased*
1207. *Toxic epidermal necrolysis*
1208. *Toxic leukoencephalopathy*
1209. *Toxic oil syndrome*
1210. *Tracheal obstruction*
1211. *Tracheal oedema*
1212. *Tracheobronchitis*
1213. *Tracheobronchitis mycoplasmal*
1214. *Tracheobronchitis viral*
1215. *Transaminases abnormal*
1216. *Transaminases increased*
1217. *Transfusion-related alloimmune neutropenia*
1218. *Transient epileptic amnesia*
1219. *Transverse sinus thrombosis*
1220. *Trigeminal nerve paresis*
1221. *Trigeminal neuralgia*
1222. *Trigeminal palsy*
1223. *Truncus coeliacus thrombosis*
1224. *Tuberous sclerosis complex*
1225. *Tubulointerstitial nephritis and uveitis syndrome*
1226. *Tumefactive multiple sclerosis*
1227. *Tumor embolism*
1228. *Tumor thrombosis*
1229. *Type 1 diabetes mellitus*
1230. *Type I hypersensitivity*
1231. *Type III immune complex mediated reaction*
1232. *Uhthoff's phenomenon*
1233. *Ulcerative keratitis*
1234. *Ultrasound liver abnormal*

1235. *Umbilical cord thrombosis*
1236. *Uncinate fits*
1237. *Undifferentiated connective tissue disease*
1238. *Upper airway obstruction*
1239. *Urine bilirubin increased*
1240. *Urobilinogen urine decreased*
1241. *Urobilinogen urine increased*
1242. *Urticaria*
1243. *Urticaria papular*
1244. *Urticarial vasculitis*
1245. *Uterine rupture*
1246. *Uveitis*
1247. *Vaccination site thrombosis*
1248. *Vaccination site vasculitis*
1249. *Vagus nerve paralysis*
1250. *Varicella*
1251. *Varicella keratitis*
1252. *Varicella post vaccine*
1253. *Varicella zoster gastritis*
1254. *Varicella zoster oesophagitis*
1255. *Varicella zoster pneumonia*
1256. *Varicella zoster sepsis*
1257. *Varicella zoster virus infection*
1258. *Vasa praevia*
1259. *Vascular graft thrombosis*
1260. *Vascular pseudoaneurysm thrombosis*
1261. *Vascular purpura*
1262. *Vascular stent thrombosis*
1263. *Vasculitic rash*
1264. *Vasculitic ulcer*

1265. *Vasculitis*
1266. *Vasculitis gastrointestinal*
1267. *Vasculitis necrotising*
1268. *Vena cava embolism*
1269. *Vena cava thrombosis*
1270. *Venous intravasation*
1271. *Venous recanalisation*
1272. *Venous thrombosis*
1273. *Venous thrombosis in pregnancy*
1274. *Venous thrombosis limb*
1275. *Venous thrombosis neonatal*
1276. *Vertebral artery thrombosis*
1277. *Vessel puncture site thrombosis*
1278. *Visceral venous thrombosis*
1279. *VIth nerve paralysis*
1280. *VIth nerve paresis*
1281. *Vitiligo*
1282. *Vocal cord paralysis*
1283. *Vocal cord paresis*
1284. *Vogt-Koyanagi-Harada disease*
1285. *Warm type haemolytic anaemia*
1286. *Wheezing*
1287. *White nipple sign*
1288. *XIth nerve paralysis*
1289. *X-ray hepatobiliary abnormal*
1290. *Young's syndrome*
1291. *Zika virus associated Guillain Barre syndrome.*

I want to plead with you to NOT make any current CoVid "vaccine" a part of the childhood vaccine schedule for the following reasons.

1. The definition of a vaccine was changed by you because what the vaccines accomplished did not accomplish any immunity from getting or transmitting this virus. Your own records show this
2. All but the Corminaty vaccines are to this day still under Emergency Use. I might ask you why there is still an emergency? If they are still only available under emergency use this implies that the vaccines are not fully vetted so knowing long term effects are not fully known. How can you even consider suggesting giving these "vaccines" to children without knowing all of the long term effects? And to suggest that they be put onto the childhood vaccination schedule is so egregious that I can barely fathom it. That is mind boggling to me and most people who are aware of all of the data and studies available in the USA and abroad.
3. I personally searched your VARS reporting system approximately a year ago and at that time there were thousands of deaths and over a million adverse reactions to vaccinated individuals. You can argue how many are minor and how many are serious and that these events are rare (my wife is one of them and it was not minor) On the warning label for one of your vaccine providers is a warning that heart conditions of many varieties are a potential side effect). The point being that there is not just one or two potential side effects but a wide variety and span of differing types of side effects from neurological to cardiac, to reproductive.

With such an obvious potential for HARM in the short term and zero long term known side effects, there should be a great danger to babies and young people from contracting CoVid which is exactly the opposite of reality. You know from your own records that the likelihood of harm from CoVid to babies and young people (unless they have multiple comorbidities) rounds to zero. What possible justification can you provide for even giving this "vaccine" to young people and especially the most vulnerable to harm---babies.

4. It is common sense that when it became part of the protocol to give boosters for this virus, that the purported benefit waned over time (Dr. Fauchi's words) then why in the world would you want to give this to children at a time when there is no dire need when in 6 months there will be no or very little benefit in their system left. Adding to this, do you expect this virus to stop mutating? No more variations?
5. Congress gives immunity to the Pharmaceutical companies from being held responsible for any harm done by vaccines on the childhood vaccination schedule. You wouldn't buckle under pressure from pharmaceutical companies need to be free from worry about harm would you by putting babies, young children, and all young people at risk. Big pharma can just relax and rush through trials and data collection and be totally free to make any amount of money they want. What a deal.
5. Last but not least, there are many simple ways help people get past this virus which are exponentially better than these "vaccines" and they have been censored, ignored, and demonized since the beginning of the "plandemic". I am 75 years old and when our family got CoVid together (Dec 2021), I did not know I had the virus until we all tested positive, while my wife and daughter both were sick in bed a day or so then mildly sick for a few more days and they had both been vaccinated. I used the easiest other options to treat CoVid and my family did not. The problem was that the other options did not provide a

way for pharma to get super rich. If I hear one more person say "I'm so glad I got my booster so I didn't get really sick from Covid" I'm going to puke. Pharma does not deserve this wide open door to huge profits and no one standing up for the common man. Please have some intellectual honesty and do not commit this greatest travesty on our society.

7. There is one more reason to not add this to the 20 or so vaccines already put on babies and children. Can you show me the studies on how all of these vaccines impact a child when all of them are considered together. With immunity from being sued, there will be many, many more. Do they interact in any way with each other for good or bad? If you have not looked into that, it is time you did. There is a lady in the UK who has done just that and sometimes they actually help each other and sometimes they cause damage. If I had more time, I could look her up but I have a feeling you likely don't really care how many shots you give children as long as pharma claims from **their own** studies that all is well. How many vaccines are too many for a young body to safely take. 100? 200? No limit?



Article

Intracellular Reverse Transcription of Pfizer BioNTech COVID-19 mRNA Vaccine BNT162b2 In Vitro in Human Liver Cell Line

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Abstract: Preclinical studies of COVID-19 mRNA vaccine BNT162b2, developed by Pfizer and BioNTech, showed reversible hepatic effects in animals that received the BNT162b2 injection. Furthermore, a recent study showed that SARS-CoV-2 RNA can be reverse-transcribed and integrated into the genome of human cells. In this study, we investigated the effect of BNT162b2 on the human liver cell line Huh7 in vitro. Huh7 cells were exposed to BNT162b2, and quantitative PCR was performed on RNA extracted from the cells. We detected high levels of BNT162b2 in Huh7 cells and changes in gene expression of long interspersed nuclear element-1 (LINE-1), which is an endogenous reverse transcriptase. Immunohistochemistry using antibody binding to LINE-1 open reading frame-1 RNA-binding protein (ORFp1) on Huh7 cells treated with BNT162b2 indicated increased nucleus distribution of LINE-1. PCR on genomic DNA of Huh7 cells exposed to BNT162b2 amplified the DNA sequence unique to BNT162b2. Our results indicate a fast up-take of BNT162b2 into human liver cell line Huh7, leading to changes in LINE-1 expression and distribution. We also show that BNT162b2 mRNA is reverse transcribed intracellularly into DNA in as fast as 6 h upon BNT162b2 exposure.

Keywords: COVID-19 mRNA vaccine; BNT162b2; liver; reverse transcription; LINE-1; Huh7



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1. Introduction

Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was announced by the World Health Organization (WHO) as a global pandemic on 11 March 2020, and it emerged as a devastating health crisis. As of February 2022, COVID-19 has led to over 430 million reported infection cases and 5.9 million deaths worldwide [1]. Effective and safe vaccines are urgently needed to reduce the morbidity and mortality rates associated with COVID-19.

Several vaccines for COVID-19 have been developed, with particular focus on mRNA vaccines (by Pfizer-BioNTech and Moderna), replication-defective recombinant adenoviral vector vaccines (by Janssen-Johnson and Johnson, Astra-Zeneca, Sputnik-V, and CanSino), and inactivated vaccines (by Sinopharm, Bharat Biotech and Sinovac). The mRNA vaccine has the advantages of being flexible and efficient in immunogen design and manufacturing, and currently, numerous vaccine candidates are in various stages of development and application. Specifically, COVID-19 mRNA vaccine BNT162b2 developed by Pfizer and BioNTech has been evaluated in successful clinical trials [2–4] and administered in national COVID-19 vaccination campaigns in different regions around the world [5–8].

BNT162b2 is a lipid nanoparticle (LNP)-encapsulated, nucleoside-modified RNA vaccine (modRNA) and encodes the full-length of SARS-CoV-2 spike (S) protein, modified

by two proline mutations to ensure antigenically optimal pre-fusion conformation, which mimics the intact virus to elicit virus-neutralizing antibodies [3]. Consistent with randomized clinical trials, BNT162b2 showed high efficiency in a wide range of COVID-19-related outcomes in a real-world setting [5]. Nevertheless, many challenges remain, including monitoring for long-term safety and efficacy of the vaccine. This warrants further evaluation and investigations. The safety profile of BNT162b2 is currently only available from short-term clinical studies. Less common adverse effects of BNT162b2 have been reported, including pericarditis, arrhythmia, deep-vein thrombosis, pulmonary embolism, myocardial infarction, intracranial hemorrhage, and thrombocytopenia [4,9–20]. There are also studies that report adverse effects observed in other types of vaccines [21–24]. To better understand mechanisms underlying vaccine-related adverse effects, clinical investigations as well as cellular and molecular analyses are needed.

A recent study showed that SARS-CoV-2 RNAs can be reverse-transcribed and integrated into the genome of human cells [25]. This gives rise to the question of if this may also occur with BNT162b2, which encodes partial SARS-CoV-2 RNA. In pharmacokinetics data provided by Pfizer to European Medicines Agency (EMA), BNT162b2 biodistribution was studied in mice and rats by intra-muscular injection with radiolabeled LNP and luciferase modRNA. Radioactivity was detected in most tissues from the first time point (0.25 h), and results showed that the injection site and the liver were the major sites of distribution, with maximum concentrations observed at 8–48 h post-dose [26]. Furthermore, in animals that received the BNT162b2 injection, reversible hepatic effects were observed, including enlarged liver, vacuolation, increased gamma glutamyl transferase (γ GT) levels, and increased levels of aspartate transaminase (AST) and alkaline phosphatase (ALP) [26]. Transient hepatic effects induced by LNP delivery systems have been reported previously [27–30], nevertheless, it has also been shown that the empty LNP without modRNA alone does not introduce any significant liver injury [27]. Therefore, in this study, we aim to examine the effect of BNT162b2 on a human liver cell line in vitro and investigate if BNT162b2 can be reverse transcribed into DNA through endogenous mechanisms.

2. Materials and Methods

2.1. Cell Culture

Huh7 cells (JCRB Cell Bank, Osaka, Japan) were cultured in 37 °C at 5% CO₂ with DMEM medium (HyClone, HYCLSH30243.01) supplemented with 10% (*v/v*) fetal bovine serum (Sigma-Aldrich, F7524-500ML, Burlington, MA, USA) and 1% (*v/v*) Penicillin-Streptomycin (HyClone, SV30010, Logan, UT, USA). For BNT162b2 treatment, Huh7 cells were seeded with a density of 200,000 cells/well in 24-well plates. BNT162b2 mRNA vaccine (Pfizer BioNTech, New York, NY, USA) was diluted with sterile 0.9% sodium chloride injection, USP into a final concentration of 100 μ g/mL as described in the manufacturer's guideline [31]. BNT162b2 suspension was then added in cell culture media to reach final concentrations of 0.5, 1.0, or 2.0 μ g/mL. Huh7 cells were incubated with or without BNT162b2 for 6, 24, and 48 h. Cells were washed thoroughly with PBS and harvested by trypsinization and stored in –80 °C until further use.

2.2. REAL-TIME RT-QPCR

RNA from the cells was extracted with RNeasy Plus Mini Kit (Qiagen, 74134, Hilden, Germany) following the manufacturer's protocol. RT-PCR was performed using RevertAid First Strand cDNA Synthesis kit (Thermo Fisher Scientific, K1622, Waltham, MA, USA) following the manufacturers protocol. Real-time qPCR was performed using Maxima SYBR Green/ROX qPCR Master Mix (Thermo Fisher Scientific, K0222, Waltham, MA, USA) with primers for BNT162b2, *LINE-1* and housekeeping genes *ACTB* and *GAPDH* (Table 1).

Table 1. Primer sequences of RT-qPCR and PCR.

Target	Sequence
<i>ACTB</i> forward	CCTCGCCTTTGCCGATCC
<i>ACTB</i> reverse	GGATCTTCATGAGGTAGTCAGTC
<i>GAPDH</i> forward	CTCTGCTCCTCCTGTTCGAC
<i>GAPDH</i> reverse	TTAAAAGCAGCCCTGGTGAC
<i>LINE-1</i> forward	TAACCAATACAGAGAAGTGC
<i>LINE-1</i> reverse	GATAATATCCTGCAGAGTGT
BNT162b2 forward	CGAGGTGGCCAAGAATCTGA
BNT162b2 reverse	TAGGCTAAGCGTTTTGAGCTG

2.3. Immunofluorescence Staining and Confocal Imaging

Huh7 cells were cultured in eight-chamber slides (LAB-TEK, 154534, Santa Cruz, CA, USA) with a density of 40,000 cells/well, with or without BNT162b2 (0.5, 1 or 2 µg/mL) for 6 h. Immunohistochemistry was performed using primary antibody anti-LINE-1 ORF1p mouse monoclonal antibody (Merck, 3574308, Kenilworth, NJ, USA), secondary antibody Cy3 Donkey anti-mouse (Jackson ImmunoResearch, West Grove, PA, USA), and Hoechst (Life technologies, 34850, Carlsbad, CA, USA), following the protocol from Thermo Fisher (Waltham, MA, USA). Two images per condition were taken using a Zeiss LSM 800 and a 63X oil immersion objective, and the staining intensity was quantified on the individual whole cell area and the nucleus area on 15 cells per image by ImageJ 1.53c. LINE-1 staining intensity for the cytosol was calculated by subtracting the intensity of the nucleus from that of the whole cell. All images of the cells were assigned a random number to prevent bias. To mark the nuclei (determined by the Hoechst staining) and the whole cells (determined by the borders of the LINE-1 fluorescence), the Freehand selection tool was used. These areas were then measured, and the mean intensity was used to compare the groups.

2.4. Genomic DNA Purification, PCR Amplification, Agarose Gel Purification, and Sanger Sequencing

Genomic DNA was extracted from cell pellets with PBDN buffer (10 mM Tris-HCl pH 8.3, 50 mM KCl, 2.5 mM MgCl₂, 0.45% NP-40, 0.45% Tween-20) according to protocol described previously [32]. To remove residual RNA from the DNA preparation, RNase (100 µg/mL, Qiagen, Hilden, Germany) was added to the DNA preparation and incubated at 37 °C for 3 h, followed by 5 min at 95 °C. PCR was then performed using primers targeting BNT162b2 (sequences are shown in Table 1), with the following program: 5 min at 95 °C, 35 cycles of 95 °C for 30 s, 58 °C for 30 s, and 72 °C for 1 min; finally, 72 °C for 5 min and 12 °C for 5 min. PCR products were run on 1.4% (*w/v*) agarose gel. Bands corresponding to the amplicons of the expected size (444 bps) were cut out and DNA was extracted using QIAquick PCR Purification Kit (Qiagen, 28104, Hilden, Germany), following the manufacturer's instructions. The sequence of the DNA amplicon was verified by Sanger sequencing (Eurofins Genomics, Ebersberg, Germany).

Statistics

Statistical comparisons were performed using two-tailed Student's *t*-test and ANOVA. Data are expressed as the mean ± SEM or ± SD. Differences with *p* < 0.05 are considered significant.

2.5. Ethical Statements

The Huh7 cell line was obtained from Japanese Collection of Research Bioresources (JCRB) Cell Bank.

3. Results

3.1. BNT162b2 Enters Human Liver Cell Line Huh7 Cells at High Efficiency

To determine if BNT162b2 enters human liver cells, we exposed human liver cell line Huh7 to BNT162b2. In a previous study on the uptake kinetics of LNP delivery in Huh7 cells, the maximum biological efficacy of LNP was observed between 4–7 h [33]. Therefore, in our study, Huh7 cells were cultured with or without increasing concentrations of BNT162b2 (0.5, 1.0 and 2.0 $\mu\text{g}/\text{mL}$) for 6, 24, and 48 h. RNA was extracted from cells and a real-time quantitative reverse transcription polymerase chain reaction (RT-qPCR) was performed using primers targeting the BNT162b2 sequence, as illustrated in Figure 1. The full sequence of BNT162b2 is publicly available [34] and contains a two-nucleotides cap; 5'-untranslated region (UTR) that incorporates the 5'-UTR of a human α -globin gene; the full-length of SARS-CoV-2 S protein with two proline mutations; 3'-UTR that incorporates the human mitochondrial 12S rRNA (mtRNR1) segment and human AES/TLE5 gene segment with two C→U mutations; poly(A) tail. Detailed analysis of the S protein sequence in BNT162b2 revealed 124 sequences that are 100% identical to human genomic sequences and three sequences with only one nucleotide (nt) mismatch in 19–26 nts (Table S1, see Supplementary Materials). To detect BNT162b2 RNA level, we designed primers with forward primer located in SARS-CoV-2 S protein regions and reverse primer in 3'-UTR, which allows detection of PCR amplicon unique to BNT162b2 without unspecific binding of the primers to human genomic regions.

BNT162b2 sequence (4284 bases)

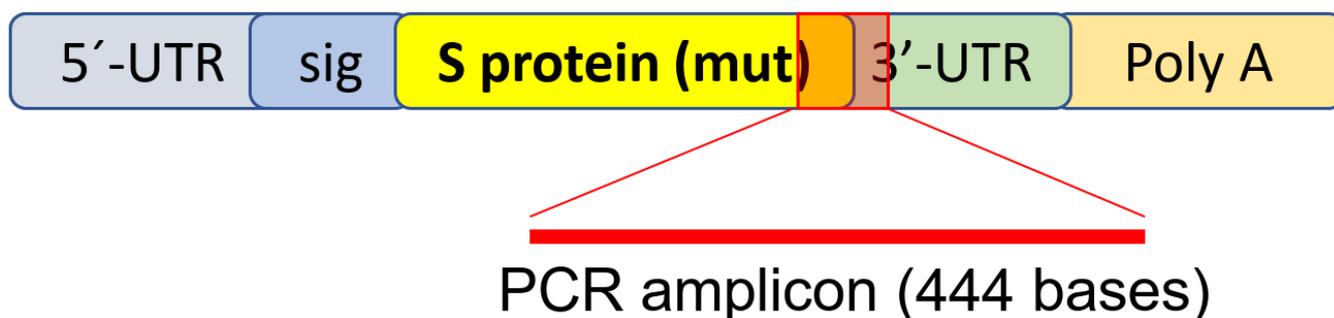


Figure 1. PCR primer set used to detect mRNA level and reverse-transcription of BNT162b2. Illustration of BNT162b2 was adapted from previously described literature [34].

RT-qPCR results showed that Huh7 cells treated with BNT162b2 had high levels of BNT162b2 mRNA relative to housekeeping genes at 6, 24, and 48 h (Figure 2, presented in logged $2^{-\Delta\Delta\text{CT}}$ due to exceptionally high levels). The three BNT162b2 concentrations led to similar intracellular BNT162b2 mRNA levels at the different time points, except that the significant difference between 1.0 and 2.0 $\mu\text{g}/\text{mL}$ was observed at 48 h. BNT162b2 mRNA levels were significantly decreased at 24 h compared to 6 h, but increased again at 48 h.

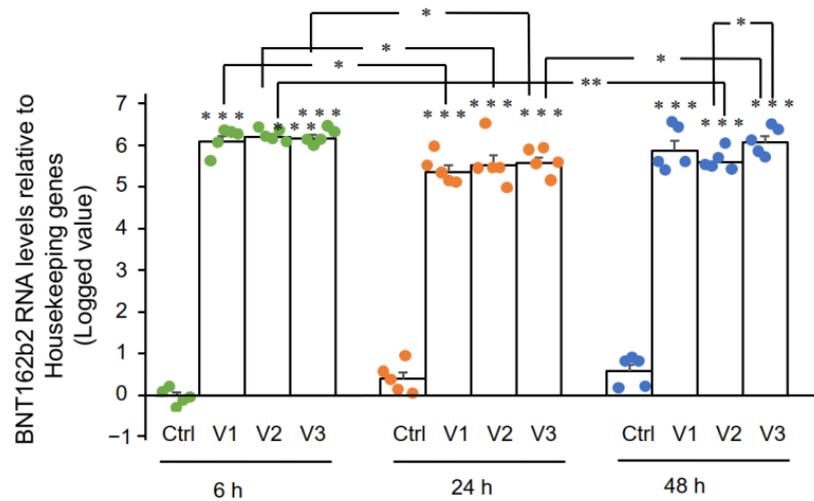


Figure 2. BNT162b2 mRNA levels in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 (V1), 1 (V2), and 2 $\mu\text{g}/\text{mL}$ (V3) of BNT162b2 for 6 (green dots), 24 (orange dots), and 48 h (blue dots). RNA was purified and qPCR was performed using primers targeting BNT162b2. RNA levels of BNT162b2 are presented as logged $2^{-\Delta\Delta\text{CT}}$ values relative to house-keeping genes *GAPDH* and *ACTB*. Results are from five independent experiments ($n = 5$). Differences between respective groups were analyzed using two-tailed Student’s *t*-test. Data are expressed as the mean \pm SEM. (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ vs. respective control at each time point, or as indicated).

3.2. Effect of BNT162b2 on Human Endogenous Reverse Transcriptase Long Interspersed Nuclear Element-1 (*LINE-1*)

Here we examined the effect of BNT162b2 on *LINE-1* gene expression. RT-qPCR was performed on RNA purified from Huh7 cells treated with BNT162b2 (0, 0.5, 1.0, and 2.0 $\mu\text{g}/\text{mL}$) for 6, 24, and 48 h, using primers targeting *LINE-1*. Significantly increased *LINE-1* expression compared to control was observed at 6 h by 2.0 $\mu\text{g}/\text{mL}$ BNT162b2, while lower BNT162b2 concentrations decreased *LINE-1* expression at all time points (Figure 3).

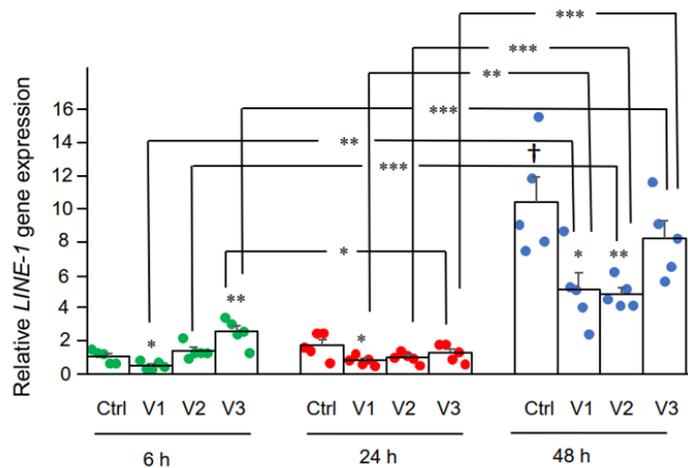


Figure 3. *LINE-1* mRNA levels in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 (V1), 1 (V2), and 2 $\mu\text{g}/\text{mL}$ (V3) of BNT162b2 for 6 (green dots), 24 (red dots), and 48 h (blue dots). RNA was purified and qPCR was performed using primers targeting *LINE-1*. RNA levels of *LINE-1* are presented as $2^{-\Delta\Delta\text{CT}}$ values relative to house-keeping genes *GAPDH* and *ACTB*. Results are from five independent experiments ($n = 5$). Differences between respective groups were analyzed using two-tailed Student’s *t*-test. Data are expressed as the mean \pm SEM. (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ vs. respective control at each time point, or as indicated; † $p < 0.05$ vs. 6 h-Ctrl).

Next, we studied the effect of BNT162b2 on LINE-1 protein level. The full-length LINE-1 consists of a 5' untranslated region (UTR), two open reading frames (ORFs), ORF1 and ORF2, and a 3'UTR, of which ORF1 is an RNA binding protein with chaperone activity. The retrotransposition activity of LINE-1 has been demonstrated to involve ORF1 translocation to the nucleus [35]. Huh7 cells treated with or without BNT162b2 (0.5, 1.0 and 2.0 $\mu\text{g}/\text{mL}$) for 6 h were fixed and stained with antibodies binding to LINE-1 ORF1p, and DNA-specific probe Hoechst for visualization of cell nucleus (Figure 4a). Quantification of immunofluorescence staining intensity showed that BNT162b2 increased LINE-1 ORF1p protein levels in both the whole cell area and nucleus at all concentrations tested (Figure 4b–d).

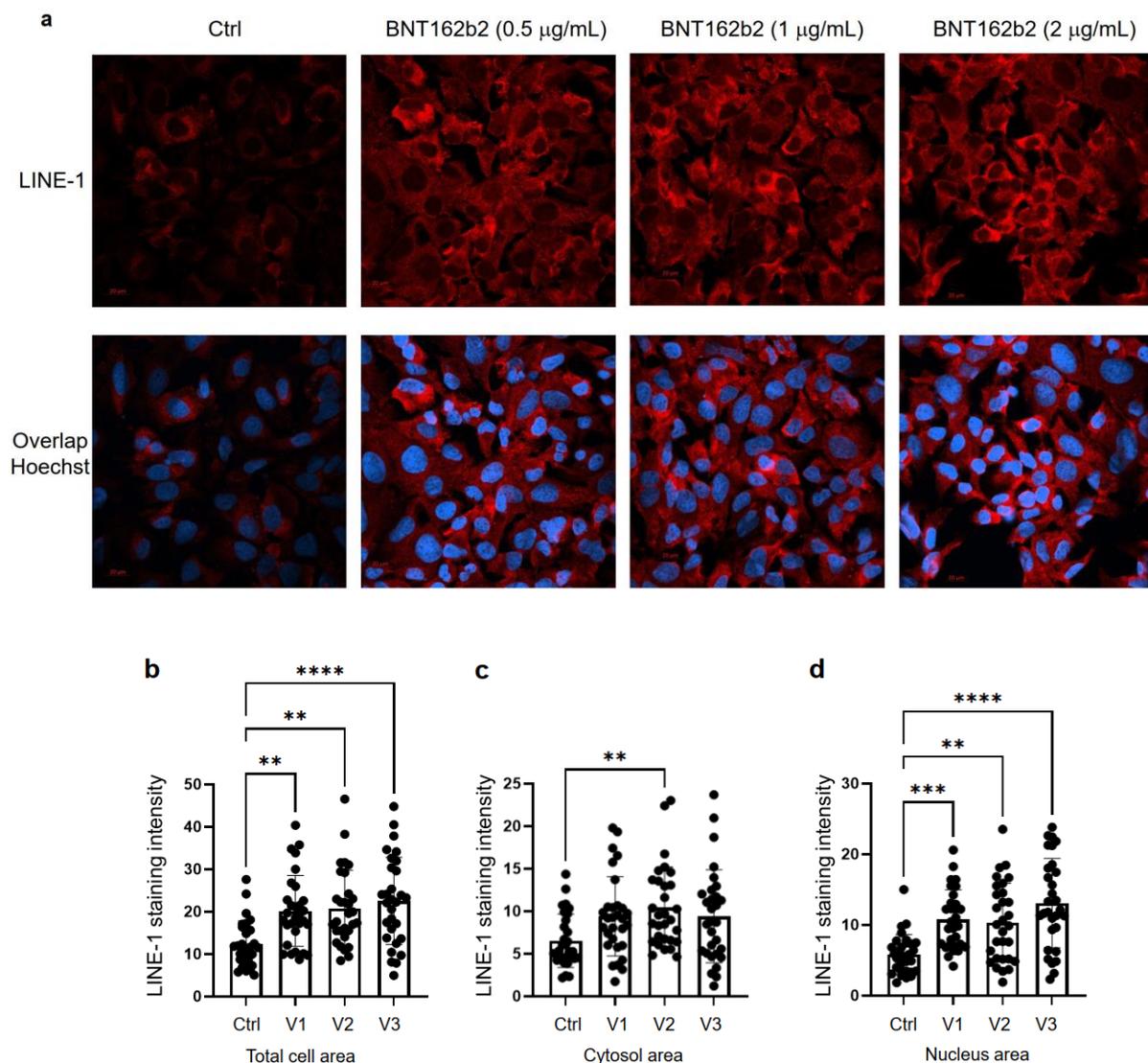


Figure 4. Immunohistochemistry of Huh7 cells treated with BNT162b2 on LINE-1 protein distribution. Huh7 cells were treated without (Ctrl) or with 0.5, 1, and 2 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h. Cells were fixed and stained with antibodies binding to LINE-1 ORF1p (red) and DNA-specific probe Hoechst for visualization of cell nucleus (blue). (a) Representative images of LINE-1 expression in Huh7 cells treated with or without BNT162b2. (b–d) Quantification of LINE-1 protein in whole cell area (b), cytosol (c), and nucleus (d). All data were analyzed using One-Way ANOVA, and graphs were created using GraphPad Prism V 9.2. All data is presented as mean \pm SD (** $p < 0.01$; *** $p < 0.001$; **** $p < 0.0001$ as indicated).

3.3. Detection of Reverse Transcribed BNT162b2 DNA in Huh7 Cells

A previous study has shown that entry of LINE-1 protein into the nucleus is associated with retrotransposition [35]. In the immunofluorescence staining experiment described above, increased levels of LINE-1 in the nucleus were observed already at the lowest concentration of BNT162b2 (0.5 $\mu\text{g}/\text{mL}$). To examine if BNT162b2 is reversely transcribed into DNA when LINE-1 is elevated, we purified genomic DNA from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6, 24, and 48 h. Purified DNA was treated with RNase to remove RNA and subjected to PCR using primers targeting BNT162b2, as illustrated in Figure 1. Amplified DNA fragments were then visualized by electrophoresis and gel-purified (Figure 5). BNT162b2 DNA amplicons were detected in all three time points (6, 24, and 48 h). Sanger sequencing confirmed that the DNA amplicons were identical to the BNT162b2 sequence flanked by the primers (Table 2). To ensure that the DNA amplicons were derived from DNA but not BNT162b2 RNA, we also performed PCR on RNA purified from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ BNT162b2 for 6 h, with or without RNase treatment (Ctrl 5 and 6 in Figure 5), and no amplicon was detected in the RNA samples subjected to PCR.

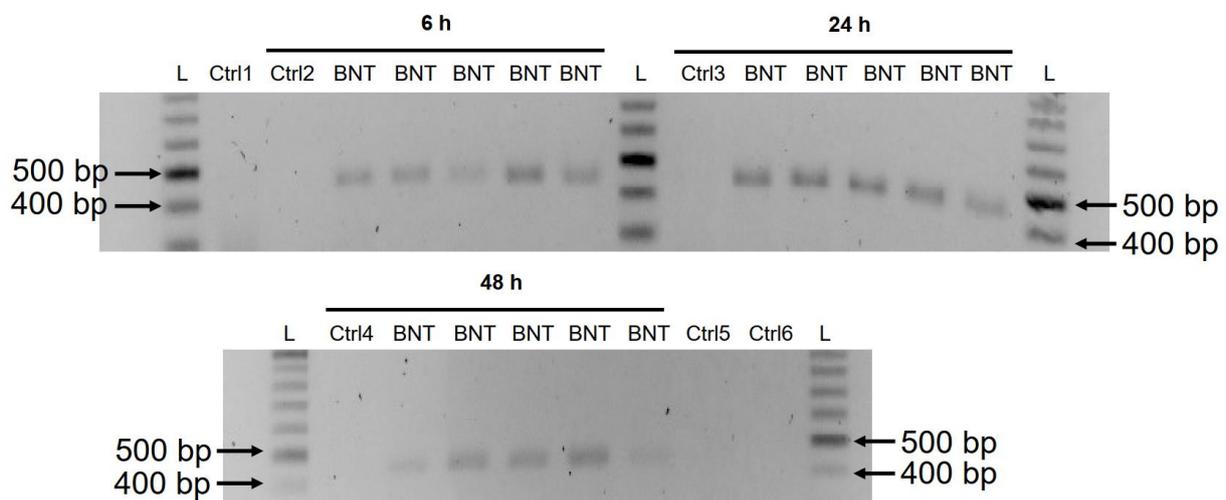


Figure 5. Detection of DNA amplicons of BNT162b2 in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6, 24, and 48 h. Genomic DNA was purified and digested with 100 $\mu\text{g}/\text{mL}$ RNase. PCR was run on all samples with primers targeting BNT162b2, as shown in Figure 1 and Table 1. DNA amplicons (444 bps) were visualized on agarose gel. BNT: BNT162b2; L: DNA ladder; Ctrl1: cultured Huh7 cells; Ctrl2: Huh7 cells without BNT162b2 treatment collected at 6 h; Ctrl3: Huh7 cells without BNT162b2 treatment collected at 24 h; Ctrl4: Huh7 cells without BNT162b2 treatment collected at 48 h; Ctrl5: RNA from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h; Ctrl6: RNA from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h, digested with RNase.

Table 2. Sanger sequencing result of the BNT162b2 amplicon.

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CGAGGTGGCCAAGAATCTGAACGAGAGCCTGATCGACCTGCAAGAACTGGGGAAGT
ACGAGCAGTACATCAAGTGGCCCTGGTACATCTGGCTGGGCTTTATCGCCGGACTGATTG
CCATCGTGATGGTCACAATCATGCTGTGTTCATGACCAGCTGCTGTAGCTGCCTGAAGG
GCTGTTGTAGCTGTGGCAGCTGCTGCAAGTTCGACGAGGACGATTCTGAGCCCGTGCTGA
AGGGCGTGAAACTGCACTACACATGATGACTCGAGCTGGTACTGCATGCACGCAATGCTA
GCTGCCCCTTTCCCGTCCTGGGTACCCCGAGTCTCCCCCGACCTCGGGTCCCAGGTATGC
TCCCACCTCCACCTGCCCCACTCACACCTCTGCTAGTTCAGACACCTCCCAAGCACGC
AGCAATGCAGCTCAAAACGCTTAGCCTA
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4. Discussion

In this study we present evidence that COVID-19 mRNA vaccine BNT162b2 is able to enter the human liver cell line Huh7 in vitro. BNT162b2 mRNA is reverse transcribed intracellularly into DNA as fast as 6 h after BNT162b2 exposure. A possible mechanism for reverse transcription is through endogenous reverse transcriptase LINE-1, and the nucleus protein distribution of LINE-1 is elevated by BNT162b2.

Intracellular accumulation of LNP in hepatocytes has been demonstrated in vivo [36]. A preclinical study on BNT162b2 showed that BNT162b2 enters the human cell line HEK293T cells and leads to robust expression of BNT162b2 antigen [37]. Therefore, in this study, we first investigated the entry of BNT162b2 in the human liver cell line Huh7 cells. The choice of BNT162b2 concentrations used in this study warrants explanation. BNT162b2 is administered as a series of two doses three weeks apart, and each dose contains 30 µg of BNT162b2 in a volume of 0.3 mL, which makes the local concentration at the injection site at the highest 100 µg/mL [31]. A previous study on mRNA vaccines against H10N8 and H7N9 influenza viruses using a similar LNP delivery system showed that the mRNA vaccine can distribute rather nonspecifically to several organs such as liver, spleen, heart, kidney, lung, and brain, and the concentration in the liver is roughly 100 times lower than that of the intra-muscular injection site [38]. In the assessment report on BNT162b2 provided to EMA by Pfizer, the pharmacokinetic distribution studies in rats demonstrated that a relatively large proportion (up to 18%) of the total dose distributes to the liver [26]. We therefore chose to use 0.5, 1, and 2 µg/mL of vaccine in our experiments on the liver cells. However, the effect of a broader range of lower and higher concentrations of BNT162b2 should also be verified in future studies.

In the current study, we employed a human liver cell line for in vitro investigation. It is worth investigating if the liver cells also present the vaccine-derived SARS-CoV-2 spike protein, which could potentially make the liver cells targets for previously primed spike protein reactive cytotoxic T cells. There has been case reports on individuals who developed autoimmune hepatitis [39] after BNT162b2 vaccination. To obtain better understanding of the potential effects of BNT162b2 on liver function, in vivo models are desired for future studies.

In the BNT162b2 toxicity report, no genotoxicity nor carcinogenicity studies have been provided [26]. Our study shows that BNT162b2 can be reverse transcribed to DNA in liver cell line Huh7, and this may give rise to the concern if BNT162b2-derived DNA may be integrated into the host genome and affect the integrity of genomic DNA, which may potentially mediate genotoxic side effects. At this stage, we do not know if DNA reverse transcribed from BNT162b2 is integrated into the cell genome. Further studies are needed to demonstrate the effect of BNT162b2 on genomic integrity, including whole genome sequencing of cells exposed to BNT162b2, as well as tissues from human subjects who received BNT162b2 vaccination.

Human autonomous retrotransposon LINE-1 is a cellular endogenous reverse transcriptase and the only remaining active transposon in humans, able to retrotranspose itself and other nonautonomous elements [40,41], and ~17% of the human genome are comprised of LINE-1 sequences [42]. The nonautonomous *Alu* elements, short, interspersed nucleotide elements (SINEs), variable-number-of-tandem-repeats (VNTR), as well as cellular mRNA-processed pseudogenes, are retrotransposed by the LINE-1 retrotransposition proteins working in *trans* [43,44]. A recent study showed that endogenous LINE-1 mediates reverse transcription and integration of SARS-CoV-2 sequences in the genomes of infected human cells [25]. Furthermore, expression of endogenous LINE-1 is often increased upon viral infection, including SARS-CoV-2 infection [45–47]. Previous studies showed that LINE-1 retrotransposition activity is regulated by RNA metabolism [48,49], DNA damage response [50], and autophagy [51]. Efficient retrotransposition of LINE-1 is often associated with cell cycle and nuclear envelope breakdown during mitosis [52,53], as well as exogenous retroviruses [54,55], which promotes entrance of LINE-1 into the nucleus. In our study, we observed increased LINE-1 ORF1p distribution as determined by immunohisto-

chemistry in the nucleus by BNT162b2 at all concentrations tested (0.5, 1, and 2 µg/mL), while elevated *LINE-1* gene expression was detected at the highest BNT162b2 concentration (2 µg/mL). It is worth noting that gene transcription is regulated by chromatin modifications, transcription factor regulation, and the rate of RNA degradation, while translational regulation of protein involves ribosome recruitment on the initiation codon, modulation of peptide elongation, termination of protein synthesis, or ribosome biogenesis. These two processes are controlled by different mechanisms, and therefore they may not always show the same change patterns in response to external challenges. The exact regulation of *LINE-1* activity in response to BNT162b2 merits further study.

The cell model that we used in this study is a carcinoma cell line, with active DNA replication which differs from non-dividing somatic cells. It has also been shown that Huh7 cells display significant different gene and protein expression including upregulated proteins involved in RNA metabolism [56]. However, cell proliferation is also active in several human tissues such as the bone marrow or basal layers of epithelia as well as during embryogenesis, and it is therefore necessary to examine the effect of BNT162b2 on genomic integrity under such conditions. Furthermore, effective retrotransposition of *LINE-1* has also been reported in non-dividing and terminally differentiated cells, such as human neurons [57,58].

The Pfizer EMA assessment report also showed that BNT162b2 distributes in the spleen (<1.1%), adrenal glands (<0.1%), as well as low and measurable radioactivity in the ovaries and testes (<0.1%) [26]. Furthermore, no data on placental transfer of BNT162b2 is available from Pfizer EMA assessment report. Our results showed that BNT162b2 mRNA readily enters Huh7 cells at a concentration (0.5 µg/mL) corresponding to 0.5% of the local injection site concentration, induce changes in *LINE-1* gene and protein expression, and within 6 h, reverse transcription of BNT162b2 can be detected. It is therefore important to investigate further the effect of BNT162b2 on other cell types and tissues both in vitro and in vivo.

5. Conclusions

Our study is the first in vitro study on the effect of COVID-19 mRNA vaccine BNT162b2 on human liver cell line. We present evidence on fast entry of BNT162b2 into the cells and subsequent intracellular reverse transcription of BNT162b2 mRNA into DNA.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/cimb44030073/s1>.

Author Contributions: M.A., F.O.F., D.Y., M.B. and C.L. performed in vitro experiments. M.A. and F.O.F. performed data analysis. M.R. and Y.D.M. contributed to the implementation of the research, designed, and supervised the study. Y.D.M. wrote the paper with input from all authors. All authors have read and agreed to the published version of the manuscript.

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Informed Consent Statement: Not applicable.

Data Availability Statement: All data supporting the findings of this study are available within the article and supporting information.

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Conflicts of Interest: The authors declare no conflict of interest.

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*Informed*CHOICEWA.org

Date: January 7, 2021

To: The Washington State Board of Health Members and COVID-19

TAG From: The Board and Members of Informed Choice WA

Dear Board of Health and TAG Members:

You are facing what may prove to be the most important decision you will ever face as a member of the board or a group, or perhaps in your life.

The mRNA and DNA COVID-19 shots are unlike any other vaccines given before. The global push for their uptake and the volume of reported adverse reactions and deaths following administration are unprecedented. The hundreds of thousands of medical and scientific professionals globally standing up and speaking out against the response to COVID and to the shots is unprecedented, as is censorship on scientific debate. When this nation's top doctors and scientists are being kicked off of social media platforms and being fired from their jobs for daring to speak on their findings and science critical of current policies, it is clear something has gone terribly wrong.

The CDC acknowledges the shots do not prevent infection or transmission and that any protection afforded fades rapidly, yet they refuse to abandon their push for increased uptake and boosters, and they refuse to promote existing early treatment protocols or acknowledge the mountain of evidence of the superior safety and effectiveness of naturally-acquired immunity. The systemic capture of federal agencies by the drug industry and globalists has never been more obvious.

Public Health in the U.S. is currently suffering from a lack of checks and balances and a dangerous dilution of critical facts. If every citizen were to watch the FDA's Vaccine and Related Biologicals Advisory Committee (VRBAC) meetings and to read the entirety of the clinical trial submissions to the FDA and the injury and death reports filed with Pfizer and VAERS, they would understand the experimental nature of the COVID shots and the known and suspected risks. They would question the clinical trial irregularities, the buried data, the lack of independent evaluation, and the high levels of conflicts of interest. But most do not. Votes for recommendation are made by federal entities

despite the lack of scientific justification and the details of the meetings are not incorporated into the language passed down to citizens. The messaging becomes, “The vaccines are safe and effective and recommended by the CDC.” This simplistic false messaging creates division at all levels of society, undermines fully informed consent, violating federal regulations and human rights declarations.

If after the past two years of witnessing the erratic federal response to COVID you still have faith in federal recommendations, we ask you to consider one clear example that reveals the federal agencies and committees do not deserve your trust. In the absence of a single co-administration safety study, the ACIP approved and the CDC actively promotes this message:

“COVID-19 vaccine and other vaccines may be administered on the same day.”

This is not science. This is not safety. This is not in the best interest of vaccine recipients. This is using Americans, especially our children who are most impacted, as unwitting test subjects. This is human experimentation without informed consent. This is criminal.

We are asking you today to honor the Precautionary Principle and First Do No Harm. We are asking you to dismantle the TAG, to halt rulemaking consideration for adding COVID shots to school requirements, and to adopt our Rulemaking Petition for a new rule that would prohibit mandating Emergency Use Authorized products and licensed products that lack completed Phase 3 trials.

Attached is our preliminary response to the “Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030” that supports our requests. There is far more scientific and medical information available. We hope this is just the beginning of your reviewing the critically important information you have likely been missing until now.

Sincerely,

The ICWA Board

Bernadette Pajer, Yael Kantor, Heidi Hartnell, Angela Dye

*Informed***CHOICE**WA.org

Informed Choice Washington Presents:

**A review of the COVID-19 shots
(Pfizer, Moderna, Janssen)
using the Washington State Board of Health’s “Criteria
for Reviewing Antigens for Potential Inclusion in WAC
246-105-030”**

<https://sboh.wa.gov/Portals/7/Doc/Publications/ImmunizationCriteria-Update2017-Final.pdf>

Before proceeding, it must be noted that the COVID-19 shots currently available do not meet the definition of “immunizing agent” per WAC 246.105.020(13), which states:

"Immunizing agent" means any vaccine or other immunologic drug licensed and approved by the United States Food and Drug Administration (FDA), or meeting World Health Organization (WHO) requirements, for immunization of persons against vaccine-preventable diseases.

None of the currently available COVID-19 shots are licensed and approved by the FDA for school-age children; the shots similarly do not meet WHO requirements and are only authorized by the WHO for emergency use.

WAC: <https://app.leg.wa.gov/WAC/default.aspx?cite=246-105-020>

For clarity, BOH’s criteria language is shown in red, and ICWA language is shown in black.

I. Criteria on the effectiveness of the vaccine

1. A vaccine containing this antigen is recommended by the Advisory Committee on Immunization Practices and included on its Recommended Childhood & Adolescent Immunization Schedule.

The vaccine **must** be recommended by the ACIP. The ACIP reviews **licensed** vaccines. It makes recommendations for newly licensed vaccines and regularly updates its recommendations. Its process includes:

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- (1) a review of the Food and Drug Administration (FDA) labeling/package inserts for each vaccine;
- (2) a thorough review of the scientific literature (both published and unpublished, when available) on the safety, efficacy, acceptability, and effectiveness of the immunizing agent, with consideration of the relevance, quality, and quantity of published and unpublished data; (3) an assessment of cost effectiveness;
- (4) a review of the morbidity and mortality associated with the disease in the population in general and in specific risk groups;

(5) a review of the recommendations of other groups; and
(6) a consideration of the feasibility of vaccine use in existing child and adult immunization programs. Feasibility issues include (but are not limited to) acceptability to the community, parents, and patients; vaccine distribution and storage; access to vaccine and vaccine administration; impact on the various health care delivery systems; population distribution effects; and social, legal, and ethical concerns. [emphasis added]

Do any of the COVID-19 shots fulfill this criterion? No.

The ACIP did NOT recommend a COVID-19 shot licensed by the FDA for use in ages 5-11 or 12-15, nor did it place such a shot on the CDC Recommended Schedule.

There is no FDA COVID-19 shot licensed for ages 5-15 and no COVID-19 shot whatsoever on any CDC Recommended Schedule for any age. CDC Immunization Schedules, <https://www.cdc.gov/vaccines/schedules/index.html>.

The CDC recommended schedule website page for ages 7-18 mentions the ACIP's EUA and BLA recommendations for COVID, but it DOES NOT include the shots on the schedule.

On May 12, 2021, the ACIP adopted the following recommendation: "The Pfizer-BioNTech COVID-19 vaccine is recommended for children 12-15 years of age in the U.S. population under the FDA's Emergency Use Authorization." *May 12, 2021 ACIP Meeting - Discussion and Vote*, CDC YouTube channel, <https://youtu.be/91FCQN1aYqk>.

On November 2, 2021, the ACIP adopted a similar recommendation for 5-11 year olds. *Nov 2, 2021 ACIP Meeting - Clinical considerations for COVID-19 vaccination & Votes*, CDC YouTube channel, <https://youtu.be/Fknv90AxSn8>.

Federal Emergency Use Authorization statutes indirectly prohibit school mandates of EUA products by requiring recipients be informed they have the option to accept or refuse the vaccine:

"The possible side effects of the vaccine are still being studied in clinical trials. . . Under the EUA, there is an option to accept or refuse receiving the vaccine."
Vaccine Information Fact Sheet for Recipients and Caregivers about the Pfizer-BioNTech COVID-19 Vaccine to Prevent Coronavirus Disease 2019

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(COVID-19) for Use in Individuals 5 through 11 Years of Age, pp. 4-5, <https://www.fda.gov/media/153717/download>.

The option to accept or refuse an EUA product is not conditioned upon written assertion of exemption. Medical, personal, or religious exemptions are not required in order to exercise the right to refuse. Under EUA law, a parent or guardian may simply

decline a shot for their minor child, without providing explanation or paperwork. A state-level daycare or school requirement would introduce the need for filing of exemptions, unlawfully exceeding the parameters set forth by Congress for EUA products.

“FDA believes that the terms and conditions of an EUA issued under section 564 preempt state or local law, both legislative requirements and common-law duties, that impose different or additional requirements on the medical product for which the EUA was issued in the context of the emergency declared under section

564.” *Vaccine EUA Questions and Answers for Stakeholders*, U.S. Food & Drug Administration,

<https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/vaccine-eua-questions-and-answers-stakeholders#61b6059d67093>

Alarming, the CDC and ACIP made this recommendation even though they acknowledged that for both age groups:

Regarding potential harms after vaccination, evidence was type 4 (very low certainty) for serious adverse events and type 1 (high certainty) for reactogenicity. No data were available to assess the other GRADE benefits and harms including prevention of hospitalization due to COVID-19, prevention of multisystem inflammatory syndrome in children (MIS-C), SARS-CoV-2 seroconversion to a non-spike protein, or prevention of asymptomatic SARS-CoV-2 infection.

The Advisory Committee on Immunization Practices’ Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine in Adolescents Aged 12–15 Years — United States, May 2021, CDC MMWR, May 21, 2021,

<https://www.cdc.gov/mmwr/volumes/70/wr/mm7020e1.htm> and *The Advisory Committee on Immunization Practices’ Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine in Children Aged 5–11 Years — United States, November 2021*, CDC MMWR November 12, 2021, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7045e1.htm>.

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Vaccines and Related Biological Products Advisory Committee (VRBPAC) member Dr. Eric Rubin stated “[Just b]ecause we give an EUA to the vaccine, doesn’t mean we have to use it. And I think we would have to think hard about how to use it given all of the concerns that have been raised.” Transcript of *FOOD AND DRUG*

ADMINISTRATION (FDA) Center for Biologics Evaluation and Research (CBER) 166th Vaccines and Related Biological Products Advisory Committee (VRBPAC) Meeting, June 10, 2021, p. 242. <https://www.fda.gov/media/150815/download>.

How can the CDC claim that benefits outweigh risks when they admit they do not know the risks?

Comirnaty is the only COVID-19 product that has ostensibly received FDA licensure for any pediatric populations—namely those 16 and up; however, that licensure is limited to manufacturing and delivery. The FDA has stated that this product is merely “**ready** for approval for **use** in individuals 16 years of age and older . . .” [emphasis added]. *August 23, 2021 Approval Letter - Comirnaty*, from FDA to BioNTech, p. 4, <https://www.fda.gov/media/151710/download>. The Comirnaty vaccine is not available anywhere in the United States, and there is debate about whether the vials of Pfizer’s EUA product are now “licensed” for those 16 and up, or if those are still EUA products. The FDA states that EUA Pfizer-BioNTech COVID-19 Vaccine and the Comirnaty (COVID-19 Vaccine, mRNA) “are legally distinct with certain differences that do not impact safety or effectiveness.” There is much debate over what “legally distinct” means, especially to consumers. If “legally distinct” means that the currently available Pfizer products in the U.S. are under EUA regulations, then there is no licensed product available for 16-18 year olds. Regardless of whether the Pfizer product is licensed for 16-18 year olds, the product lacks completed Phase 3 clinical trials, and the PREP Act still shields manufacturers for liability for injuries and deaths. As far as we can tell, never in history has the FDA licensed a product without completed clinical trials, nor when all the ongoing trials have been unblinded, subverting the ability to compare outcomes.

There are ZERO co-administration safety studies; therefore, it is highly concerning that the CDC states, and the Washington State Department of Health repeats: “COVID-19 vaccine and other vaccines may be administered on the same day.” CDC, Immunization Schedule, COVID-19 Vaccination, <https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html>

Disregarding the absence of any safety studies, the Washington DOH states, “Your child can get a COVID-19 vaccine at the same time they get other vaccines. You do not need to schedule your child’s required school vaccinations or other recommended vaccines separately from COVID-19 vaccination. A COVID-19 vaccine appointment is another opportunity to get your child caught up on all of their recommended vaccines.”

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Washington State Department of Health, Vaccinating Youth, <https://www.doh.wa.gov/Emergencies/COVID19/VaccineInformation/VaccinatingYouth#VaccineTiming>

As noted in our cover letter, this is not science. This is not safety. This is not in the

best interest of vaccine recipients. This is using Americans, especially our children who are most impacted, as unwitting test subjects. This is human experimentation without informed consent. This is criminal.

2. The vaccine containing this antigen is effective as measured by immunogenicity* and population-based prevention data in Washington State, as available.

*Immunogenicity means the ability of an antigen or vaccine to stimulate the body to produce an immune response. Vaccines often include antigens that stimulate an immune response to a particular disease but are not necessarily the same as the organism that would cause the disease.

In the clinical development of a vaccine, the effectiveness of the vaccine is studied using FDA-approved research protocols that evaluate whether a vaccine protects individuals from contracting the disease in population-based studies or generates an immunologic response (immunogenicity) comparable to vaccines that have been shown to be effective in preventing disease. More information about its population-based effectiveness is gained from large trials and community-based analyses after FDA approval. There may or may not be effectiveness data from Washington State, but the disease prevalence and incidence in the state should be sought and reviewed.

Do any of the COVID-19 shots fulfill this criterion? No.

Immunogenicity: While the COVID-19 shots trigger the recipient's cells to create spike proteins, which then trigger an immune response and antibodies to the self-created spike proteins, this immune response has proven incapable of preventing infection or transmission. In short, the COVID shots do not prevent recipients from "contracting the disease."

Some studies show recipients may be afforded a short window—a few weeks or months—during which their risk of infection or risk of severe disease is minimally reduced in comparison to those without natural immunity, but even this protection appears to be dropping with each new variant.

This preprint study shows that PCR-positive tests for Delta variant occurred in a higher percentage of vaccinated individuals than in unvaccinated. From this it could be concluded that, regardless of vaccination status, all individuals are able to spread COVID-19 with similar viral loads. Riemersma et al., *Shedding of Infectious SARS-CoV-2 Despite Vaccination*,

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<https://www.infosperber.ch/wp-content/uploads/2021/10/210731-Wisconsin.Viral-Load.pdf>.

Dr. Rochelle Walensky states that the vaccine does not prevent infection or transmission of the Delta variant, CNN interview with Wolf Blitzer, July 27, 2021, <https://www.youtube.com/watch?v=TKFWGvvlVLI>

Another pre-print study, Acharya et al., *No Significant Difference in Viral Load Between Vaccinated and Unvaccinated, Asymptomatic and Symptomatic Groups Infected with SARS-CoV-2 Delta Variant*, “found no significant difference in cycle threshold values between vaccinated and unvaccinated, asymptomatic and symptomatic groups infected with SARS-CoV-2 Delta.”

<https://www.medrxiv.org/content/10.1101/2021.09.28.21264262v1>.

The CDC reported that among the first U.S. cases of COVID-19 attributed to the Omicron variant, 79% of the 43 cases studied occurred in fully vaccinated individuals, including 14 who had received booster doses. *SARS-CoV-2 B.1.1.529 (Omicron) Variant — United States, December 1–8, 2021*, CDC *MMWR*, December 17, 2021, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7050e1.htm>.

The criterion explicitly requires that “information about population-based effectiveness is gained from large trials,” yet the clinical trial study on which the EUA was based for 5-11 year olds included only 2,268 children total. CDC and ACIP acknowledged that the study was too small to find serious adverse reactions. (See our response above to Criterion #1.) *Evaluation of the BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age*, *N Engl J Med* 2022; 386:35-46, DOI: 10.1056/NEJMoa2116298, <https://www.nejm.org/doi/full/10.1056/oa2116298>.

A pre-print study suggests that vaccine effectiveness wanes to negative effectiveness, therefore increasing chances of contracting COVID, after 90 days. The authors suggest a booster would be necessary in order to attain previous levels of protection. Do parents really want their child to get a booster every 90 days? Would this be practical or manageable? Hansen et al., *Vaccine effectiveness against SARS-CoV-2 infection with the Omicron or Delta variants following a two-dose or booster BNT162b2 or mRNA-1273 vaccination series: A Danish cohort study*, <https://www.medrxiv.org/content/10.1101/2021.12.20.21267966v3#p-5>

In contrast to the inability of the COVID shots to prevent disease, natural immunity has been found to prevent infection. This superior, broad protection will serve children well throughout their lives. “[C]hildren display a characteristically robust and sustained adaptive immune response against SARS-CoV-2 with substantial cross-reactivity against other hCoVs.” Dowel, et al., *Children develop robust and sustained*

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cross-reactive spike-specific immune responses to SARS-CoV-2 infection, <https://www.nature.com/articles/s41590-021-01089-8>

In study after study, it has been shown that natural immunity far exceeds vaccine-induced immunity in length and quality. Please view the following studies here that show the superiority of natural immunity: "144 Research Studies Affirm Naturally Acquired Immunity to Covid-19: Documented, Linked and Quoted," Brownstone Institute, October 17, 2021.

3. The vaccine containing this antigen is cost effective from a societal perspective.

This analysis should consider both the costs of the immunization (e.g. antigen, storage, administration, medical and societal costs of adverse reactions to the immunization, etc.) and the benefits of the immunization (e.g. lives saved, medical and societal benefits of preventing adverse reactions from vaccine-preventable disease, etc.). This process may include consultation with an economist as resources allow. Vaccines may be cost effective without being cost saving. In other words, the direct costs of some vaccines (e.g. antigen, storage, administration) balanced against direct savings (e.g. medical care, disability, death) may not result in net savings. Societal or indirect costs (e.g. lost productivity of care takers of ill children) will also need to be taken into consideration. These costs are much harder to quantify. Not all vaccines recommended by the ACIP are cost saving or equally effective, so some determination of the vaccine's relative cost effectiveness may need to be made for comparison purposes when applying the criteria.

Do any of the COVID-19 shots fulfill this criterion? No.

To parents and members of Informed Choice Washington, the most important consideration in this criterion is the “medical and societal costs of adverse reactions to the immunization” as well as what the criterion overlooks:

- the cost of ignoring or outright censoring lifesaving preventative and early treatment protocols, which lead to superior natural immunity;
- the cost of exposing children to genetic therapies, such as DNA and mRNA injections, in the absence of adequately sized and designed safety studies for either short or long-term outcomes;
- and the cost of interrupting a child's natural immune response to what is now an endemic virus without a complete understanding of how that interruption will impact their immunity to the virus and its mutations in the future.

Please see risk information provided under Criterion #4 below, in particular, the two graphs summarizing data from Pfizer's clinical trials that have already demonstrated that any benefits from the shots are outweighed by the injuries and death they cause. This does not account for long-term and yet unknown harms.

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4. Experience to date with the vaccine containing this antigen demonstrates that it is safe and has an acceptable level of side effects

Vaccinations are not without side effects. The known risks associated with each vaccine (or antigen) must be balanced against the risks of the disease. Vaccine safety will be evaluated using research and reports from: pre-licensure, the Vaccine Adverse Event Reporting System (VAERS) and the Vaccine Safety Datalink (VSD) project, and other reliable sources.

Do any of the COVID-19 shots fulfill this criterion? No.

While Pfizer's own randomized control trial data indicated a decrease in positive cases, they also showed an increase in illnesses and deaths compared to the placebo group. There is no benefit to reducing cases if it comes at the cost of increased illness, hospitalizations, and death.

The graphic below includes Table S3, *Participants Reporting at Least 1 Adverse Event From Dose 1 to 1 Month After Dose 2 During the Blinded Follow-up Period*, on page 11 of [Pfizer's six-month supplementary appendix](#) to its study entitled [Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine through 6 Months](#). Vaccinees experienced worse health outcomes than did placebo recipients.

The following graphic, which includes Table S4, *Causes of Death from Dose 1 to Unblinding*, on page 12 of [Pfizer's six-month supplementary appendix](#) to its study entitled [Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine through 6 Months](#), illustrates the increase in deaths within six months for those who received the injections. Of particular concern are the types of death, including cardiovascular events

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(in red); there are almost twice as many in the test group as in the control group. This is Level One evidence of harm, as the data is derived from a randomized control trial (RCT).

Although FDA press releases proclaim that the benefits of the product would outweigh its risks, this conclusion is based upon modeling, which is the lowest quality of evidence given its reliance on layers of assumptions and subjectivity. FDA already had access to a superior form of data: the RCT results from the manufacturer itself, which it disregarded; “Therefore, the FDA conducted its own benefit-risk assessment using modelling to predict how many symptomatic COVID-19 cases, hospitalizations, intensive care unit (ICU) admissions and deaths from COVID-19 the vaccine in children 5 through 11 years of age would prevent versus the number of potential myocarditis cases, hospitalizations, ICU admissions and deaths that the vaccine might cause. The FDA’s model predicts that overall, the benefits of the vaccine would outweigh its risks in children 5 through 11 years of age.” FDA NEWS RELEASE: “FDA Authorizes Pfizer-BioNTech COVID-19 Vaccine for Emergency Use in Children 5 through 11 Years of Age,” U.S. Food & Drug Administration, <https://www.fda.gov/news-events/press-announcements/fda-authorizes-pfizer-biontech-covid-19-vaccine-emergency-use-children-5-through-11-years-age>

One 12-year-old child, Maddie de Garay, participated in Pfizer’s study. She suffered multiple and severe injuries, requiring 9 ED visits and 3 hospital stays (totaling 64 days by June 1, 2021). She is still in a wheelchair today. The New England Journal of Medicine article in which Pfizer’s RCT results was reported, [Safety and Efficacy of the](#)

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[BNT162b2 mRNA Covid-19 Vaccine through 6 Months](#), failed to disclose any of Maddie’s adverse reactions. Pfizer disingenuously mischaracterized her injuries as “functional abdominal pain” in its *Emergency Use Authorization (EUA) Amendment for an Unapproved Product Review Memorandum*, p. 30.

<https://www.fda.gov/media/148542/download>. Senator Ron Johnson held a

roundtable, in which many individuals who took the COVID-19 vaccine shared their adverse reaction experiences that required medical attention.

<https://thehighwire.com/videos/stephanie-and-maddie-de-garay-testimony/> at 5:13.

This study asks a very pertinent question: Why are we vaccinating children against COVID-19? The abstract in this study explains the following:

A novel best-case scenario cost-benefit analysis showed very conservatively that there are five times the number of deaths attributable to each inoculation vs. those attributable to COVID-19 in the most vulnerable 65+ demographic. The risk of death from COVID-19 decreases drastically as age decreases, and the longer-term effects of the inoculations on lower age groups will increase their risk-benefit ratio, perhaps substantially... (emphasis added.)

This study goes on to say that:

... it will use the term 'inoculated' rather than vaccinated, because the injected material in the present COVID-19 inoculations prevents neither viral infection nor transmission (emphasis added.)

Kostoff, Ronald, et al., "Why Are We Vaccinating Children Against Covid-19?" Toxicology Reports, Vol 8 2021, pages 1665-1684,
<https://www.sciencedirect.com/science/article/pii/S221475002100161X>

Here is a list of websites where medical professionals and/or individuals have documented their experiences with reactions from the COVID-19 vaccine:

<https://openvaers.com/covid-data/adverse-events-by-state>

<https://vaers.hhs.gov/data.html>

<https://www.c19vaxreactions.com>,

<https://www.RealNotRare.com/>

<https://www.medalert.org>

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<https://www.scivisionpub.com/pdfs/us-covid19-vaccines-proven-to-cause-more-harm-than-good-based-on-pivotal-clinical-trial-data-analyzed-using-the-proper-scientific--1811.pdf>

Dr. Cody Meissner, VRBPAC member, stated: "I want to be sure that the risk of the vaccine is less than the risk of hospitalization because four [COVID hospitalizations per

million in children under 18] certainly does not constitute an emergency, and there are significant questions about the safety of this vaccine. . . . [This hospitalization rate is] on the CDC website. That is not an emergency. It is a very low hospitalization rate. And the rates may change as the season changes, but we're starting from a tiny, tiny rate. . . . [T]he rates are also falling pretty dramatically among adults and children. So as more people are immunized and become immune from infection, I think it's very likely that we're going to get this pandemic under pretty good control. Now the issue -- so the issue to me is safety. . . . [W]e can look at the 2,000 or 2,200 adolescents who are enrolled in the Pfizer vaccine between 12 through 15 years of age -- 2,200, so half got the vaccine, half got placebo. Nobody was hospitalized. Nobody died. And there were some who got URIs[upper respiratory infections] So 2,200 is not going to address the issue of safety. I'm worried about myocarditis. . . . [W]e don't know what that means on a longterm basis. Will there be scarring of the myocardium? Will there be a predisposition to arrhythmias later on? Will there be an early onset of heart failure? I think that's unlikely, but we don't know that. And so before we start vaccinating millions of adolescents and children, it is so important to find out what the consequences are because COVID-19 disease is disappearing in adolescents and children. And I think we have to be so clear about what we're dealing with. Let me make one more point. In 2003, there was a publication in JAMA regarding myocarditis following the Dryvax vaccine, the smallpox vaccine which is, of course, a live vaccine. But in that situation, the military -- it was given to young recruits. The rates of myocarditis in the military young men -- because it was mostly men in those days -- was 2 per 100,000. And after the Dryvax vaccine the rates were 7.8 cases of myocarditis in the 30 days afterwards. So there was a three-fold increase. And in fact, Dr. Tony Fauci wrote an editorial in that same issue of JAMA discussing these rates of myocarditis. So I am really concerned that the FDA may by not insisting on a full BLA, which to me means at least 12 months, maybe even 18 or 24 months of follow up in children and adolescents, before they are recommended to receive this vaccine. I do not feel we can justify a EUA including children under an Emergency Use Authorization. The burden of disease is so small, and the risks are just not clear. We don't know." June 10, 2021, VRBPAC meeting transcript, p. 62, p. 225- 228. <https://www.fda.gov/media/150815/download>

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From the front lines in medical care

Many medical professionals are speaking up and sharing their experiences of working in hospitals right now as they care for patients who are coming in with what they can associate to vaccine reactions. "More VC Nurses Blow Whistle on 'Overwhelming' Numbers of Heart Attacks, Clotting, Strokes," *The Conejo Guardian*, December 14, 2021. <https://conejoguardian.org/2021/12/14/more-vc-nurses-blow-whistle-on-overwhelming-numbers-of-heart-attacks-clotting-strokes/>

Individuals are sharing their own experiences with their health while taking the COVID shots. U.S. Senator Ron Johnson hosted a round table on November 2, 2021, to allow these individuals to tell their stories.

<https://childrenshealthdefense.org/defender/nov-2-sen-ron-johnson-cdh-covid-vaccine-injuries-federal-mandates/>

Colette Martin, an RN of 17 years, testified in front of the Louisiana House about the harms of vaccine reactions that she has witnessed. She also stated that more children have died from the vaccine than from covid itself. Louisiana House of Representatives Health and Welfare Committee Hearing, December 6, 2021, https://www.house.louisiana.gov/H_Video/VideoArchivePlayer?v=house/2021/dec/1206_21_HW (begin at 6:54:00)

In the first two and a half months after EUA was granted, 1,223 deaths were reported to Pfizer. This is a huge red flag that requires deep investigation. See Table 1, Page 7, showing fatal case outcomes in Pfizer's "5.3.6 Cumulative Analysis of Post-Authorization Adverse Event Reports of PF-07302048 (BNT162B2) Received Through 28-Feb-2021"

<https://phmpt.org/wp-content/uploads/2021/11/5.3.6-postmarketing-experience.pdf>,

While critics commonly question the veracity of VAERS data, as reported on the U.S. government's Healthy People 2020 site, 83% of the reporters to the Vaccine Adverse Events Reports System were health care workers or pharmaceutical and government-based sources during the years 1990-2010. "The majority of VAERS reports are submitted by vaccine manufacturers (37%) and health care providers (36%). The remaining reports are obtained from state immunization programs (10%), vaccine recipients (or their parents/guardians, 7%) [sic], and other sources (10%)." Office of Disease Prevention and Health Promotion, Vaccine Adverse Reporting System,

<https://www.healthypeople.gov/2020/data-source/vaccine-adverse-event-reporting-system>.

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Further, 72% of a sampling of 250 of the 1,644 VAERS reports of early death received in the first three months of 2021 were filed either by health service employees or pharmaceutical employees. "We identified health service employees as the reporter in at least 67% of the reports, while pharmaceutical employees were identified as the reporter in a further 5%." Even though the sample contained only people vaccinated early in the rollout, *i.e.*, those who were elderly or with significant health conditions, an adverse vaccine reaction could be ruled out in only 14% of the cases. Mclachlan, et al., *Analysis of COVID-19 vaccine death reports from the Vaccine Adverse Events*

“While it seems that the incidence of pericarditis during the vaccination campaign period is increased, a more comprehensive data collection on a wider scale should be done. We hope this report will raise awareness to the subject and will serve as a reminder to report events as part of the post-marketing investigations and allow for a thorough adverse events following immunization analysis.” *Transient Cardiac Injury in Adolescents Receiving the BNT162b2 mRNA COVID-19 Vaccine*, https://journals.lww.com/pidj/Fulltext/2021/10000/Transient_Cardiac_Injury_in_Adolescents_Receiving.1.aspx

II. Disease Burden Criteria

5. The vaccine containing this antigen prevents disease(s) that has significant morbidity and/or mortality in at least some sub-set of the population. Vaccines have the potential to reduce, or in some cases even eliminate, diseases that can result in serious illness, long-term disability, or death. For example, before measles vaccine was available, nearly everyone in the United States contracted measles and an average of 450 measles-associated deaths were reported each year between 1953 and 1963. The morbidity/mortality burden of measles was not equal for all members of the population. Examples of significant morbidity measures include rates of hospitalizations, long-term disability, disease incidence, and disproportionate impact.

Do any of the COVID-19 shots fulfill this criterion? No.

First, we must emphatically state that it is unethical to use children as shields for adults.

Peter Doshi, Ph.D: “I want to address this idea of vaccinating children to protect adults. I encourage the Advisory Committee to read Dr. Lavine et al.’s editorial to explain why, “Vaccinating children is likely to be of marginal benefit in reducing the risk to others.” And even if you think a small benefit is better than nothing, let’s not forget that it’s an unproven hypothetical benefit. We need confirmatory evidence, not just assumptions. And then there’s the ethics and the law. **FDA can only indicate a product for use in a**

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given population if benefits outweigh risks in that same population. So if benefits don’t outweigh risks in children themselves, it can’t be indicated for children, full stop. Whether vaccinating children might help adults is a moot point.” Comments before the Vaccines and Related Biological Products Advisory Committee, June 10, 2021 <https://www.fda.gov/media/150815/download>, pp. 171-172. (emphasis added)

Children and young adults are at an extremely low risk of mortality from COVID-19. When one subset of the population (children) carries a high risk for injury from an antigen but low risk for injury from the disease, we must consider the mandate of such an antigen to be unethical. Bhopal, "Children & Young People Remain at a Low Risk of

Covid-19 Mortality," *The Lancet Children & Adolescent Health*, Correspondence, Vol 5, Issue 5, E12-E13, May 1, 2021.

[https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(21\)00066-3/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(21)00066-3/fulltext)

The *Forbes* article "The Hideous Truths of Testing Vaccines on Humans" examined the testing of hepatitis vaccines on the residents of Willowbrook, a home for severely disabled children. The author states: "In 1966, renowned medical ethicist Henry K. Beecher published an article titled, "Ethics and Clinical Research," which listed Willowbrook as an example of an unethical clinical experiment and concluded that "there is no right to risk an injury to one person for the benefit of others." *Forbes*, June 12, 2020,

<https://www.forbes.com/sites/leahrosenbaum/2020/06/12/willowbrook-scandal-hepatitis-experiments-hideous-truths-of-testing-vaccines-on-humans/>

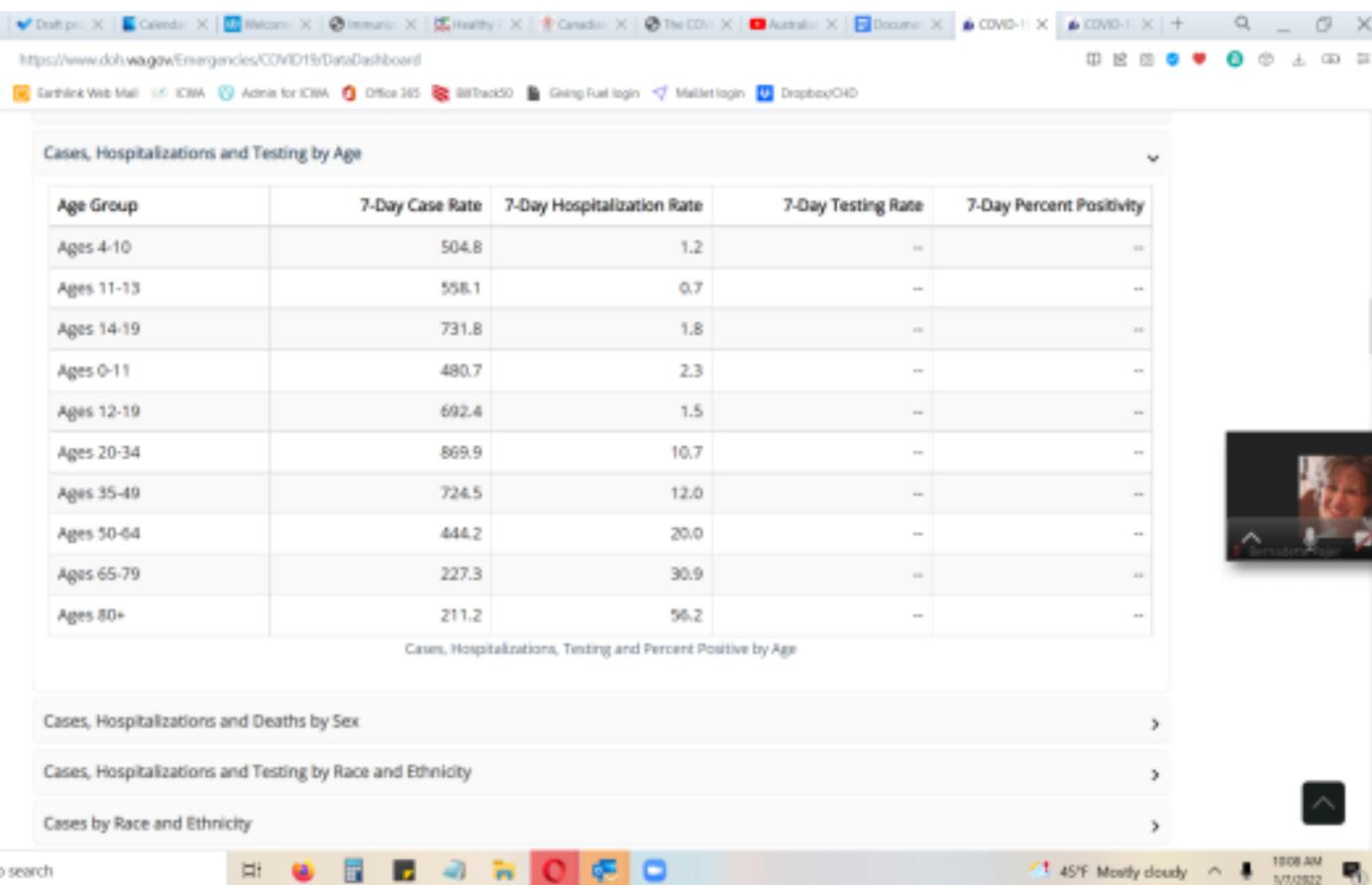
Second, the measles example given in this criterion reveals that historically the BOH and DOH have never stepped back to consider the long term or unintended consequences of mass-vaccination campaigns. We agree that nearly everyone in the United States used to be exposed to measles, mostly in childhood when it's safest to experience, and they developed lifetime immunity. Merck's on-trial-for-fraud MMR vaccine does not confer lifetime immunity for a significant portion of the population, pushing susceptibility into the very young and into adult populations. We are nearing a time when more people in the U.S. will be susceptible to measles than before the vaccines were released. And studies show a third dose doesn't help. Was there perhaps a better way to reduce those 450 annual deaths and the cases of very severe illness, without sacrificing superior natural immunity for the vast majority (99.99%) of the population—and without exposing millions of children annually to the risks of the MMR? What about the failure of the mumps portion of the shot? More information can be found here: <https://informedchoicewa.org/measles/> To learn about the politics surrounding the loss of the personal exemption to the MMR, see this post:

<https://informedchoicewa.org/education/were-wa-lawmakers-deceived-about-measles-1-a-st-session-part-1/>

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Is there perhaps a better way to protect those susceptible to severe disease and fatal COVID-19 outcomes, without sacrificing superior natural immunity for the >99.9% of the population who fully recover and develop natural immunity? Optimal nutritional support, early treatment protocols, and the benefits of natural immunity are tragically not part of public health's approach with any vaccine-targeted infection. With COVID, the neglect of these public health tools has cost many lives.

Third: as shown in our response to Criterion #1, the shots do not prevent transmission; any unethical attempt to use children as shields will fail.



As of January 6, 2022, the seven-day case rate in Washington State for ages 4-11 was 504.8 per 100,000. The seven-day hospitalization rate was 1.2 in 100,000. Compare this with the risk of myocarditis in vaccinated adolescents, which is 18.52 in 100,000 as seen in <https://pubmed.ncbi.nlm.nih.gov/34849657/>

Graph from <https://www.doh.wa.gov/Emergencies/COVID19/DataDashboard>

Between January 4, 2020, and January 6, 2022, 573 children between the ages of 5-18 have died with COVID in the entire United States. CDC Deaths by Sex, Ages 0-18

years, <https://data.cdc.gov/NCHS/Deaths-by-Sex-Ages-0-18-years/xa4b-4pzv>

On December 31, 2021, Anthony Fauci stated, “. . . [I]f a child goes into the hospital, they automatically get tested for COVID, and they get counted as a COVID-hospitalized individual, when in fact they may go in for a broken leg or appendicitis of something like that, so it’s *overcounting the number of children who are . . . hospitalized **with** COVID as opposed to **because** of COVID.*” MSNBC interview, <https://twitter.com/TheEliKlein/status/1476917049435856925>

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Vaccines and Related Biological Products Advisory Committee member Dr. Cody Meissner stated “[F]our per million [pediatric hospitalizations] certainly does not constitute an emergency, and there are significant questions about the safety of this product.” June 10, 2021, VRBPAC meeting transcript, p. 62.

<https://www.fda.gov/media/150815/download>

6. Vaccinating against this disease reduces the risk of person-to-person transmission, with transmission in a school or child care setting or activity being given the highest priority.

Having a large proportion of the population vaccinated with the antigen helps to stem person to person transmission of the disease (i.e., herd immunity). Even community members who are not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the high immunization rate results in the disease having less opportunity to spread within the community. Vaccinating children in school and/or child care can increase the percentage of children in these groups who are immune and thus reduce the risk of outbreaks of the disease in these groups and in the community at large. Special consideration of disease transmission in a school or child care setting or activity should be given the highest priority. For the purpose of this criterion, “activity” refers to school or child care extracurricular activities including, but not limited to, field trips, sports events, or other activities held on or off campus.

Do any of the COVID-19 shots fulfill this criterion? No.

The Pfizer, Moderna, and Janssen products do not prevent transmission, serious disease, or death.

The CDC director says that vaccines do not prevent transmission. “Fully vaccinated people who get a Covid-19 breakthrough infection can transmit the virus, CDC chief says,” *CNN Health*,

<https://www.cnn.com/2021/08/05/health/us-coronavirus-thursday/index.html>

“COVID-19 infections are increasing in Gibraltar, with 128 new infections reported on average each day. That’s 97% of the peak — the highest daily average reported on January 5. There have been 9,600 infections and 100 coronavirus-related deaths reported in the country since the pandemic began. . . Gibraltar has administered at least 108,323 doses of COVID vaccines so far. Assuming every person needs 2 doses,

that's enough to have vaccinated about 160.7% of the country's population." Reuters COVID-19 Tracker, accessed January 7, 2022, <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/gibraltar/>

Vaccinated people can still spread the Delta variant. Vaccination does not stop the transmission of COVID. "Testing a subset of low-Ct samples revealed infectious

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SARS-CoV-2 in 15 of 17 specimens (88%) from unvaccinated individuals and 37 of 39 (95%) from vaccinated people." Riemersma, "Shedding of Infectious SARS-CoV-2 Despite Vaccination," <https://www.medrxiv.org/content/10.1101/2021.07.31.21261387v4>

Individuals who have been previously infected do not show a need to be vaccinated. This is consistent with Chapter 246-105-020 WAC: "fully immunized" means an immunization status where a child has proof of acquired immunity . . . ' It is unreasonable to mandate that those with natural immunity be "boosted" with a vaccine when there is not scientific evidence that this practice is safe or effective in the long term. Boosting an individual's levels of antibodies to the vaccine-induced spike protein—which no longer matches the dominant strain now circulating—is experimental. Also see Shrestha, "Necessity of COVID-19 vaccination in previously infected individuals," <https://doi.org/10.1101/2021.06.01.21258176>.

Children have sustained and robust natural immunity after contracting COVID. Dowel, "Children develop robust and sustained cross-reactive spike-specific immune responses to SARS-CoV-2 infection," *Nat Immunol* 23, 40–49 (2022). <https://doi.org/10.1038/s41590-021-01089-8>.

Long-term effects of the vaccine trials in children are unknown. Deaths in children are a fraction of the percentage of deaths in all other age categories. Kostoff, "Why are we vaccinating children against COVID-19?" *Toxicology Reports*, Vol 8, 2021, Pages 1665-1684, <https://doi.org/10.1016/j.toxrep.2021.08.010>.

Barnstable County, Massachusetts, had an outbreak amongst a population of tourists that was approximately 74% vaccinated, which indicates that vaccination does not prevent contracting or transmitting COVID. Brown, "Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings - Barnstable County, Massachusetts, July 2021," *MMWR Morb Mortal Wkly Rep*, 2021 Aug 6;70(31):1059-1062. <https://pubmed.ncbi.nlm.nih.gov/34351882/>.

Despite 100% vaccination rate, consistent testing, and quarantining, a research station

in Antarctica still had an outbreak of COVID cases. "COVID-19 Outbreak Hits Research Station in Antarctica," WebMD News Brief, <https://www.webmd.com/lung/news/20220103/covid-19-outbreak-hits-research-station-in-antarctica>

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III. Implementation of the Criteria

7. The vaccine containing this antigen is acceptable to the medical community and the public.

It is possible to gauge the level of provider acceptance of a vaccine by querying state professional societies such as the Washington Academy of Family Physicians and the Washington State Chapter of the American Academy of Pediatrics. Vaccine uptake data are also available from the Department of Health to determine provider use of the vaccine. While there is generally a good correlation between the levels of physicians' and the general public's acceptance of particular vaccines, the TAG should consider additional ways of accurately gauging public acceptance of the particular vaccine. Adding an antigen to WAC 246- 105-030 related to a vaccine with poor provider or public acceptance would likely be resisted. Postponing the regulation until there is greater approval of the vaccine would assure more effective policy.

Do any of the COVID-19 shots fulfill this criterion? No.

There has never been more opposition from the medical and scientific community or the public to any type of vaccine or vaccine policy than there is to the COVID-19 products and policies.

EXAMPLES OF MEDICAL AND SCIENTIFIC OPPOSITION

- Over 15,000 members of the [International Alliance of Physicians and Medical Scientists](#) published a declaration resolving that healthy children shall not be subject to forced vaccination. They state:
 - Negligible clinical risks from SARS-CoV-2 infection exist for healthy children under eighteen.
 - Long term safety of the current COVID vaccines in children cannot be determined prior to instituting such policies. Without high-powered, reproducible, long term safety data, risks to the long-term health status of children remain too high to support use in healthy children.
 - Children risk severe, adverse events from receiving the vaccine. Permanent physical damage to the brain, heart, immune and reproductive system associated with SARS-CoV-2 spike protein-based genetic vaccines has been demonstrated in children.

- Healthy, unvaccinated children are critical to achieving herd immunity. Natural immunity is proven to tolerate infection, benefiting community protection while there is insufficient data to assess whether COVID vaccines assist herd immunity.

Supporting Evidence:

<https://doctorsandscientistsdeclaration.org/home/supporting-evidence/#children>

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- More than 500 scientists, medical doctors and health care and other professionals united as the [Canadian Covid Care Alliance](#). Their presentation *More Harm Than Good* reviews Pfizer's six-month data and reveals that Pfizer's COVID-19 inoculations cause more illness than they prevent. See the *More Harm than Good* video and PDF slides here: <https://www.canadiancovidcarealliance.org>

"It's clear that Pfizer - and the agencies overseeing their trials - failed to follow established, high quality safety and efficacy protocols right from the beginning. . . Any government that approved this medical intervention for its citizens should have ensured that the trial had used the appropriate clinical endpoints and high quality safety science. . . Any government official who possesses this evidence and continues to allow its citizens to be inoculated with a toxic agent is, at the very least, negligent."

1. The [Association of American Physicians and Surgeons](#), established in 1943, opposes COVID-19 vaccination mandates. In regards to children, AAPS states:
 - a. In the testing, only 1,518 children received the shots, and 750 received a placebo. This is far too few to see uncommon side effects, such as myocarditis/pericarditis, as Pfizer admits.
 - b. Follow-up was for two months in one group and only 2.5 weeks in another. The Pfizer application states that long-term sequelae of post-vaccination myocarditis/pericarditis in participants 5 to 12 years of age will be studied after the vaccine is authorized for children.
 - c. The children were not examined for mild, asymptomatic myocarditis, which might cause long-term damage, as by checking troponin levels or echocardiograms, or for blood clotting problems, as by checking platelet counts and D-dimers.
 - d. The only FDA-approved product, BioNTech's Comirnaty (not yet available in the U.S.) is required to do studies on myocarditis lasting 5 years.
 - e. Monthly safety report cards on the three available vaccines, which have different dosages, are supposedly required, but none have been produced or released.
 - f. The claim of 91% relative effectiveness against symptomatic COVID in children is based on 16 cases of COVID in the placebo group and

three cases in the vaccinated group over the brief follow-up period.

This is an absolute risk reduction of about 2%.

g. We do not and cannot know the long-term effects on cancer, fertility, or autoimmune diseases. “But we’re never going to learn about how safe this vaccine is unless we start giving it. That’s just the way it goes,” stated committee member Dr. Eric Rubin, physician at Boston’s Brigham and

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Women’s Hospital, immunology professor at the Harvard T.H. Chan School of Public Health, and current editor-in-chief of the New England Journal of Medicine. The alternative to giving a product to most of an entire generation is animal studies or restricting use to a defined group most likely to benefit, with close follow-up.

- h. The dosage for children is one-third the adult dose. Dosage in pediatrics is generally determined by weight. Not all children weigh the same, and their weight does not triple between age 11.9 and 12.0 years.
- i. The COVID products are not shown to interrupt infection and transmission. Masking and distancing are still being recommended or required for adults. Thus, hopes for a return to normalcy once vaccinated are misplaced.
- j. To give truly informed consent, parents need complete information about possible side effects, such as the outcome for Maddie de Garay, a 12-year-old whose public-spirited parents enrolled her in a trial. Post-shot, she experienced excruciating pain and a 2-month hospitalization, and is now in a wheelchair. Pfizer has not acknowledged a connection to the shot, nor did it fully disclose her injuries in it. The reaction may be “extremely rare,” but many would decline to take even a 1-in-1 million chance of this outcome.
- k. The government has already ordered 68 million doses, so authorization is anticipated, and likely will be followed by mandates.
- l. Several Nordic countries have paused the use of COVID vaccines in persons under the age of 30. Persons at low risk for COVID complications are more likely to die from the shot than from COVID.
- m. Dr. Harvey Risch, Yale epidemiologist, stated that he would home-school his children if public schools mandated this vaccine.
- n. No one should administer a COVID shot to a child unless parents have given fully informed, completely voluntary consent, without threats or inducements.
- o. SOURCE:

<https://aapsonline.org/aaps-statement-on-covid-shots-for-children/>

2. The [Physicians for Informed Consent](#) have compiled a Pfizer Vaccine Risk Statement for children that highlights FDA, CDC, and Pfizer clinical trial data finding:

- a. The clinical trial found there were zero cases of severe COVID-19 in children of any age who did not receive the vaccine. In contrast, the trial found that the vaccine causes severe (grade 3) and grade 4 systemic reactions in children.

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- b. The clinical trial indicates that vaccine efficacy declines significantly in less than six months. Although a booster dose of the vaccine is authorized for individuals 16 years of age or older, the clinical trial states that efficacy was not evaluated for Phase 3 BNT162b2 booster group participants. Instead, vaccine efficacy was inferred based on antibody levels observed in only about 300 vaccinated subjects over a one-month time period.
- c. The clinical trial provided no evidence that the vaccine prevents asymptomatic infection or transmission of SARS-CoV-2 or COVID-19. In addition, recent studies have observed that a significant proportion of severe, critical, and fatal cases of COVID-19 occurred in vaccinated individuals.

SOURCE:

<https://physiciansforinformedconsent.org/physicians-for-informed-consent-updates-its-pfizer-covid-19-vaccine-risk-statement-analyzes-new-safety-data-for-children/>

3. The [World Council for Health](#), whose leadership includes Dr. Tess Lawrie (PhD, MD, Founder, Evidence-Based Medicine Consultancy LTD, Bath, United Kingdom, 10-year Senior consultant to the WHO supporting health policy recommendations for countries globally), issued a statement in December 2021:
 - a. There is now more than enough evidence to declare the novel Covid-19 vaccines unsafe for use in humans. Victim testimonies and adverse reaction reporting systems have revealed millions of adverse reactions to the experimental vaccines, including life-changing injury and death.
 - b. The inoculations are capable of causing immeasurable harm to those who received them, with children being more likely to die from the Covid-19 vaccines than from actual SARS-CoV-2 infection.
 - c. World Council for Health anticipates that unprecedented humanitarian efforts will be essential to assist the people harmed by this global vaccination experiment, due to the known and unknown harms.
 - d. The World Council for Health demands an end to this crisis and hereby declares it illegal and unlawful for anyone to participate, directly or indirectly, in this harmful experimental vaccination programme. The World Council for Health declares individuals, governments, and other corporations will be held liable for their involvement.
 - e. World Council for Health Calls for an Immediate Stop to the Covid-19 Experimental “Vaccines” DECLARATION:

SOURCE:

<https://worldcouncilforhealth.org/news/2021/12/covid-19-vaccines/14001/> page 21

4. Paul E Alexander MSc PhD, Howard C. Tenenbaum DDS, Dip. Perio., PhD, Dr. Parvez Dara, MD, MBA: “We must not expose our children to ‘unnecessary’ harm.

We must not expose them to a substance that has not been tested on children (or plan to be) in the way it should be and for as long as necessary. We must not expose children to a vaccine that based on their risk, is absolutely not needed. Moreover, they can become infected naturally, if their immunity is needed.”

<https://www.aier.org/article/why-we-must-not-be-forced-into-vaccinating-our-children-from-covid-beware/>

5. Dr. Robert Malone (MD, Northwestern School of Medicine, MS, UC San Diego and Salk Institute Molecular Biology and Virology Laboratories, Giannini Postdoctoral Research Fellow, UC Davis, Harvard Medical School fellow -- Global Clinical Research Scholar (2016), original inventor of the mRNA vaccine platform used in the Pfizer and Moderna COVID-19 vaccines as well as the DNA vaccine platform used by Inovio): Interview in which Dr. Malone voices his grave medical and scientific concerns for the use of any of the COVID shots, especially in children:

<https://unityprojectonline.com/news/dr-robert-malone-md-on-the-joe-rogan-experience/>

6. Dr. Peter McCullough (MD, FACC, FAHA, FASN, FNKF, FNLA, FCRSA, Chief Medical Advisor, Truth for Health Foundation; President, Cardiorenal Society of America; Editor-in-Chief, Reviews in Cardiovascular Medicine; one of the most highly published medical specialists in practice today and an authoritative commentator for major media on COVID-19). Dr. McCullough has been interviewed hundreds of times and testified to numerous legislatures and to Congress. He is a tireless proponent for early treatment to save lives, and although he at first administered the EUA shots to his patients, as information began to emerge, he stayed informed and up-to-date. He no longer supports use of any of the existing COVID-19 shots. His interview by Joe Rogan is extensive and can be found here:

<https://unityprojectonline.com/news/dr-peter-a-mccullough-on-the-joe-rogan-experience/>

In an [interview in August 2021](#), Dr. McCullough reviewed his five main points of education:

- a. COVID-19 is NOT spread asymptotically
- b. Asymptomatic people should not get tested

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- c. Natural immunity is robust complete and durable
- d. COVID-19, no matter what variant, is easily treatable at home
- e. Current COVID-19 vaccines are obsolete and should be considered unfit for human use. “They [the vaccines] do not cover the new variants; patients are failing on these vaccines. They’re being hospitalized and getting sick despite having had the vaccines . . .the vaccines at this point in time have amounted to record mortality and injury and should be considered unsafe and unfit for human use.”

“Dr. Peter McCullough’s 5 most important truths about COVID-19,”
LifeSiteNews, August 4, 2021,

<https://www.lifesitenews.com/news/dr-peter-mcculloughs-5-most-important-truths-about-covid-19/>.

EXAMPLES OF ETHICAL, LEGAL, AND SOCIAL ISSUES LISTED BY THE UNITY PROJECT:

- [Why the CDC Ignores Natural Immunity](#), by Aaron Kheriaty
- [Judicial Precedents and Vaccine Mandates](#), by Aaron Kheriaty
- [Why I am Challenging in Court the University of California’s Vaccine Mandate](#), by Aaron Kheriaty
- [University Vaccine Mandates Violate Medical Ethics](#), by Aaron Kheriaty, *The Wall Street Journal*
- [Dear Pfizer: Leave the Children Alone](#), by Paul Alexander
- [Covid-19: Researcher blows the whistle on data integrity issues in Pfizer’s vaccine trial](#), by Paul Thacker
- [How College COVID Vaccine Mandates Put Students In Danger](#), by Boston, McCullough, Kheriaty, Rietsch, Cretella, and Bradley
- [Scientists Sue the FDA for Data it Relied Upon to License Pfizer’s Covid-19 Vaccine](#), by Aaron Siri
- [Covid-19 Vaccine Manufacturers Can Harm You With Near Complete Impunity](#), by Aaron Siri
- [FDA Buries Data on Seriously Injured Child in Pfizer’s Covid-19 Clinical Trial](#), by Aaron Siri
- [Whistleblower: FDA and CDC Ignore Damning Report that over 90% of a Hospital’s Admissions were Vaccinated for Covid-19 and No One Was Reporting This to VAERS](#), by Aaron Siri
- [Vaccine Mandates: The Next Prohibition?](#), by Justin Hart
- [Jab Mandates Are Both Unethical and Fail the Cost/Benefit Test](#), by Michael Tomlinson

DATA DISASTER: A Call for an Investigation Into the CDC's Conduct During COVID-19. <https://standforhealthfreedom.com/cdc-investigation/>

EXAMPLES OF PUBLIC OPPOSITION - GLOBAL

- Paris, France:
<https://rumble.com/vr0wcf-france-yellow-vests-stage-rally-in-paris-against-covid-measures-18.12.2021.html>
- Austria: <https://rumble.com/vridjv-rising-up-in-austria.html>
- London, England:
<https://rumble.com/vrcp2h-britain-sees-massive-protest-against-vaccine-passports.html>
- Australia:
<https://rumble.com/vpld09-australia-nov20th-nationwide-massive-vaccine-protests-from-perth-melbourne-.html>
- New Zealand
<https://rumble.com/vqve38-thousands-protest-covid-19-rules-in-new-zealand.htm>

| EXAMPLES OF U.S. PUBLIC OPPOSITION

Evidence that half the country refusing; people willing to lose jobs rather than comply; large organizations of professionals publishing position papers; example of LA Unified School district; Enumclaw example?

<https://www.cityofenumclaw.net/DocumentCenter/View/6670/Res-1734---Covid-19-Vaccine-Verification-Discrimination>

Less than half of parents support a requirement for middle and high school students to be vaccinated for COVID. "About One in Five Americans Remain

Vaccine-Resistant," Gallup, August 6, 2021,

<https://news.gallup.com/poll/353081/one-five-americans-remain-vaccine-resistant.aspx>

Healthcare workers are willing to lose their job rather than take the COVID vaccine. "Roughly 3,000 hospital workers lost jobs over Washington's COVID-19 vaccine mandate," KING 5 News, November 17, 2021,

<https://www.king5.com/article/news/local/washington-hospitals-lose-roughly-3000-workers-over-covid-19-vaccine-mandate/281-b0ff14de-27b6-4b0a-bcca-ed924c314ca0>

As of October 19, 2021, nearly 2,000 state workers chose to be fired rather than take the vaccine. "Nearly 1,900 Washington state workers quit or are fired over COVID vaccine mandate," *The Seattle Times*, October 19, 2021,

<https://www.seattletimes.com/seattle-news/politics/nearly-1900-washington-state-workers-quit-or-are-fired-over-covid-vaccine-mandate/>

There have also been many stories in the news describing our service members who are being discharged secondary to their declination of the shots.

8. The administrative burdens of delivery and tracking of vaccine containing this antigen are reasonable.

Many institutions and individuals are involved in implementation of the rule when the Board adds a new vaccine to WAC 246-105-030. These include: the Department of Health, the Department of Social and Health Services, the Office of Superintendent of Public Instruction (OSPI), local health

jurisdictions, schools, child care, health plans, health care providers, and families. For each of these key players, there are issues that affect the feasibility of implementing an immunization recommendation. For example, introduction of a new vaccine can result in schools conducting

more parental follow-up and making changes to record and information systems—this in turn can impact school staff workload. Assuring that a reasonable burden of work is present will enhance the effectiveness of the policy. The TAG includes representatives from affected parties such as OSPI, schools, and child care when assessing an antigen against this criterion.

Do any of the COVID-19 shots fulfill this criterion? No.

The burden on school nurses for tracking COVID cases and for managing all the COVID measures is already unreasonable. ICWA board member Heidi Hartnell is a teacher in Washington State and can speak to the amount of time schools already spend tracking COVID cases and close contacts. If the requirement of vaccination is added to the existing required measures, this would create an extensive amount of maintenance and updating of immunization records. She says, “With the demonstrated waning efficacy of the COVID vaccination in adults, it would seem that this would also be true with children. If children are required to be “up to date” with a booster every six months, this will be a huge burden on schools as vaccination records will constantly need to be checked and updated. Currently, a majority of the required vaccinations are completed by the time a child enters kindergarten and these forms do not require frequent updating. However, if the COVID shot and subsequent boosters were to be added, this would place a hardship on already wearied teachers and school personnel. Ultimately these shots do not prevent contracting or transmitting the virus, and so this work achieves nothing in the public health sense.”

The only thing that makes sense, given that >99.9% of children are at zero risk from COVID, is to simply enforce the “stay at home if symptomatic” rules that have served public health well for decades. We can never achieve, nor would we want to achieve, zero exposure schools. Children’s immune systems need exposure to the microbial world, including to viruses, to properly develop and protect them as adults. This is just as true for COVID, which has become endemic, so children will be encountering the virus and mutations for the rest of their lives. More than 140 studies demonstrate that natural immunity will serve them well and far longer than the shots, and it is their

parents who should make the risk-benefit decision, not the State of Washington. "144 Research Studies Affirm Naturally Acquired Immunity to Covid-19: Documented, Linked and Quoted," Brownstone Institute, October 17, 2021.

<https://brownstone.org/articles/79-research-studies-affirm-naturally-acquired-immunity-to-covid-19-documented-linked-and-quoted/>

Public health would be even better served if the BOH would acknowledge natural immunity, and support and promote early treatment protocols, so that everyone of all ages and of any vaccination status could see better outcomes.

<https://www.cdc.gov/media/releases/2021/s1227-isolation-quarantine-guidance.html> -

9. The burden of compliance for the vaccine containing this antigen is reasonable for the parent/caregiver.

Parents and caregivers are often involved in obtaining vaccines for children. This can include: transporting children to medical appointments, taking time off of work for medical appointments, maintaining the child's immunization records, etc. When a vaccine is required for child care and/or school entry it affects the health decisions that parents make on their child's behalf because parents must, at the very least, take the required vaccine into account.

Do any of the COVID-19 shots fulfill this criterion? No.

Considering the risks discussed in Criterion #4 above, the burden of compliance on parents is unacceptable.

Considering that any injury sustained by a child is borne completely by the parents because the manufacturers are shielded under the Public Readiness and Emergency Preparedness (PREP) Act, the burden of compliance is unacceptable.

<https://aspr.hhs.gov/legal/PREPact/Pages/default.aspx>

The shots are available everywhere, even grocery stores often without an appointment, so it is easy for most parents to find an opportunity to get their child a shot if they so choose, but for those parents who choose to opt out of a school vaccine requirement, the burden is out of balance.

Parents can't go to Safeway or Rite Aid for an appointment with a practitioner to get the required risk-benefit consultation and signature. They must make an appointment with a practitioner, take time off work, arrange transportation, etc. That first step is now the most burdensome. For the past several years, it has been increasingly difficult for parents to find any practitioner willing to give them the required risk-benefit consultation. Many doctors and clinics are kicking families out of their practices who do not vaccinate, or who do not fully vaccinate according to the CDC schedule. This has nothing to do with health or protection and everything to do with the financial incentives built into the

insurance and public health systems that reward high vaccination uptake. This practice is supported by the American Academy of Pediatrics, which has critical conflicts of interest associations with the pharmaceutical and medical industries. “The AAP recently issued a clinical report that stated it is an “acceptable option for pediatric care clinicians to dismiss families who refuse vaccines”

<https://www.infectiousdiseaseadvisor.com/home/topics/prevention/new-aap-policy-on-patient-dismissal-for-vaccine-refusal-may-erode-solidarity-among-pediatricians/>

The BOH’s criterion is based on the assumption that “a process exists to opt out of immunization requirements by children attending either child care or school.” If parents are unable to find a practitioner willing to provide the required risk-benefit consultation and sign an exemption form or letter stating that they have done so, then that opt-out does not exist.

And finally, a tremendous burden exists in the coercive aspect of any vaccine requirement. Parents who opt their children out of one or more vaccinations experience emotional and psychological stress because they know they face scrutiny by school staff, by health care providers, by surveillance systems, as well as cultural pressure. Children who lack one or more vaccinations are singled out at various times, excluded from school and extracurricular activities. If a vaccine is NOT on the schedule, a parent is able to choose what is best for their child without the added stress. It is an unreasonable burden to stress entire families with a requirement that should be a personal medical decision. It is incomprehensible that the Board would even consider such a requirement with products that cannot prevent infection or transmission.

BOARD CRITERIA FRAMEWORK:

The only purpose for which power can rightfully be exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant.” Harm to others cannot be prevented by requiring children attending school to take this vaccine.

InformedCHOICEWA.org

November 2, 2022

WA DOH Vaccine Advisory Committee
WA State Board of Health
Secretary of Health Shah
Chief Science Officer TaoSheng Kwan-Gett
Immunization Director Jamilia Sherls-Jones
COVID-19 Vaccine Director Heather Drummond

re: Public Comment

Dear Washington Public Health officials and VAC members:

We write to provide you with updated COVID-19 VAERS data and the link to informative videos to consider at your upcoming Vaccine Advisory Committee and Board of Health meetings.

We do understand that discussion regarding vaccine mandates for daycare and school attendance are not on either of your agendas. We, and many Washington parents, are writing so that you do not add such an item to any future agendas. In April, when the TAG assembled by the BOH voted against daycare/school mandates, and the BOH voted to accept the TAG's recommendation, it was made very clear they may revisit the issue. The April meeting minutes state:

“Tao Sheng Kwan-Gett, Chief Science Officer, TAG Co-Chair, . . .emphasized to the Board that the TAG's recommendation reflects what is known about the COVID-19 [sic] vaccine for children at this time, and that the **evolving science and further data could lead the TAG to a different recommendation in the future.**”

<https://sboh.wa.gov/sites/default/files/2022-06/WSBOH-Minutes-Final-Apr2022.pdf>

We also write because despite the data and science showing the shots do not prevent infection or transmission while they do pose an unacceptable level of risk, Governor Inslee illegally directed the Office of Financial Management to use the rulemaking process (there is no RCW to support their new WACs) to permanently mandate COVID shots on state workers. He also directed the use of financial incentives for booster uptake, with \$1000 per person payments, which amounts to coercion and undue influence.

As we have requested in previous communications, we earnestly ask you to review information beyond what federal agencies provide and to take steps to reverse the promotion of products whose risks far outweigh any perceived benefits. This nation is in a tragic position where there are no checks and balances in the public health system, and no one feels the least bit responsible for the negative outcomes of policies or the negative health impacts of promoted products. The fact that you all repeat the CDC's messaging that it's safe to administer the COVID shots with other vaccines—in the absence of any safety studies—exemplifies this lack of concern due to lack of responsibility.

The mandating and promotion of the failed COVID-19 shots by government officials and public health agencies has eroded public trust. As information previously labelled “misinformation” is revealed to be factual, such as the Wuhan lab origins of SARS-CoV-2 (per Senate committee analysis), and the inability of the shots to prevent infection and transmission, public health *is* responsible for taking heed, changing course, and notifying the public.

We also write to voice our objection to your continued promotion of Merck's HPV Vaccine, Gardasil. For an update on the many fraud and malfeasance lawsuits for injury and death that have been filed against Merck outside of Vaccine Court, see this law firm's page: <https://www.baumhedlundlaw.com/prescription-drugs/gardasil-lawsuit/>

Prevention of disease is a worthwhile goal, but when your chosen tool causes harm, you must re-examine your promotion of it and instead promote the other proven approaches. Early testing and detection, nutrition and lifestyle, and avoidance of risk factors such as smoking, for instance, all play a major role in cancer avoidance.

You all entered the field of public health for noble reasons, but public health has been captured by those who put financial and political goals ahead of health. It's up to you to restore your profession if trust is to be restored.

Sincerely,

The ICWA Board

COVID-19 Shot Data & Recent Studies

<https://openvaers.com/covid-data>

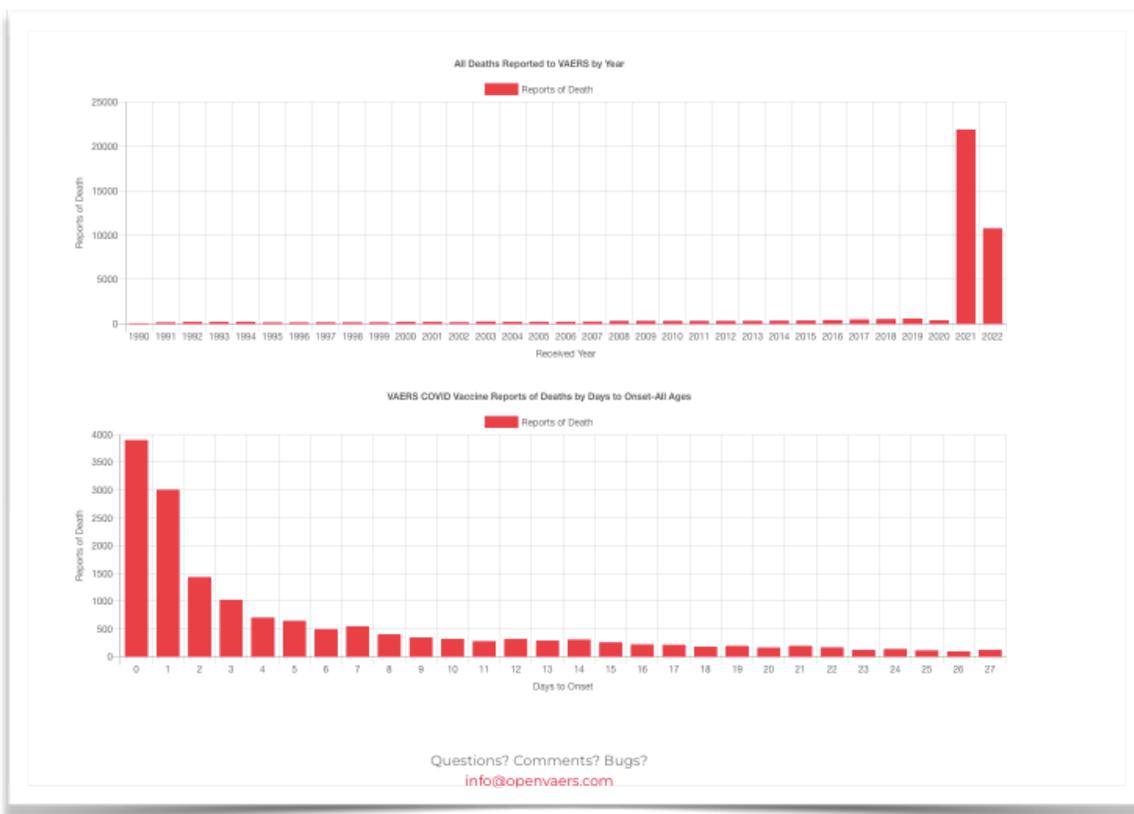
COVID VAERS Reports by STATE

COVID VAERS reports by Age Range, Adverse Event and State. To find the results for your state enter its two-letter abbreviation in the search box on the left.

Through October 21, 2022

Search: Show entries

AGE RANGE	STATE	DIED	LIFE THREAT	PERM. DISABLED	HOSPITALIZED	MYOCARDITIS	ANAPHYLAXIS	MISCARRIAGE	TOTAL REPORTS
6 MO-5 YR	WA	0	1	1	2	0	1	0	218
5-11	WA	1	1	2	5	4	0	0	536
12-18	WA	1	10	5	68	59	1	0	1,191
19-30	WA	1	34	54	108	76	6	11	2,382
31-49	WA	14	117	171	256	91	25	54	6,385
50-64	WA	32	112	171	265	53	16	0	4,642
65-80	WA	64	90	82	323	44	4	0	3,988
81-121	WA	72	20	16	142	11	0	0	668
ALL AGES	WA	207	388	506	1191	348	57	65	20,891



Video at CHD.TV: <https://live.childrenshealthdefense.org/shows/good-morning-chd/pby5mV2ula>

This video is about SARS-COV-2, mRNA COVID-19 shots, original antigenic sin, molecular mimicry, apoptosis, and much more.

In this one-hour conversation, Jessica Rose, Ph.D., and Steven Pelech, Ph.D., provide an overview of the current science and medical insights that the CDC is ignoring. If you want to understand why there are global protests against the shots, and why so many are refusing to get them or to get boosters, this video will provide some answers.

About Steven Pelech: <https://www.centreforbrainhealth.ca/faculty/steven-pelech/>

About Jessica Rose: <https://www.voiceforscienceandsolidarity.org/authors/jessica-rose>

New Peer-Reviewed Paper Calls for Suspension of COVID-19 Vaccines

“In a two-part paper entitled “Curing the pandemic of misinformation on COVID19 mRNA vaccines through real evidence-based medicine,” real-world data reveals that in the non-elderly population the number needed to vaccinate to prevent one death from Covid-19 runs into thousands and that re-analysis of randomised controlled trial data suggests a greater risk of suffering a serious adverse event from the vaccine than to be hospitalised with Covid-19.”

“Curing the pandemic of misinformation on COVID-19 mRNA vaccines through real evidence-based medicine” - Parts 1 and 2, published in the *Journal of Insulin Resistance*, 26 September 2022: <https://insulinresistance.org/index.php/jir>

Author Aseem Malhotra is a consultant cardiologist, Fellow of the Royal College of Physicians, and President of The Public Health Collaboration. An internationally renowned expert in the prevention, diagnosis and management of heart disease, he is an honorary council member to the Metabolic Psychiatry Clinic at Stanford University School of Medicine California.

Video at CHD.TV: <https://live.childrenshealthdefense.org/dr-aseem-malhotra>

Videos of those injured or who lost loved ones: <https://www.c19vaxreactions.com/>

Story (video) of a young girl who volunteered to participate in the new “vaccine for CoVid” trial so that we could rid the world of the disease. The story is very revealing and sad about this families reality.

<https://freedomfirstnetwork.com/2022/09/maddies-story-how-pfizers-rigged-injection-trials-destroyed-this-young-girls-life>

Epidemiology of Acute Myocarditis/Pericarditis in Hong Kong Adolescents Following Comirnaty Vaccination

Gilbert T. Chua,^{1,2,a} Mike Yat Wah Kwan,^{3,a} Celine S. L. Chui,^{4,5,6} Robert David Smith,⁴ Edmund Chi-Lok Cheung,⁷ Tian Ma,⁶ Miriam T. Y. Leung,^{6,7} Sabrina Siu Ling Tsao,^{1,2} Elaine Kan,⁸ Wing Kei Carol Ng,⁸ Victor Chi Man Chan,⁹ Shuk Mui Tai,⁹ Tak Ching Yu,⁹ Kwok Piu Lee,⁹ Joshua Sung Chih Wong,³ Ying Kit Lin,³ Chi Chiu Shek,³ Agnes Sze Yin Leung,¹⁰ Chit Kwong Chow,¹¹ Ka Wah Li,¹² Johnny Ma,^{13,14,15,16} Wai Yuk Fung,^{13,14,15,16} Daniel Lee,¹⁷ Ming Yen Ng,^{18,19} Wilfred Hing Sang Wong,¹ Hing Wai Tsang,¹ Janette Kwok,²⁰ Daniel Leung,¹ Kin Lai Chung,²¹ Chun Bong Chow,¹ Godfrey Chi Fung Chan,^{1,2} Wing Hang Leung,^{1,2} Kelvin Kai Wang To,^{22,6} Kwok Yung Yuen,²² Yu Lung Lau,^{1,2} Ian Chi Kei Wong,^{6,7,23} and Patrick Ip¹

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Background. Age-specific incidence of acute myocarditis/pericarditis in adolescents following Comirnaty vaccination in Asia is lacking. This study aimed to study the clinical characteristics and incidence of acute myocarditis/pericarditis among Hong Kong adolescents following Comirnaty vaccination.

Methods. This is a population cohort study in Hong Kong that monitored adverse events following immunization through a pharmacovigilance system for coronavirus disease 2019 (COVID-19) vaccines. All adolescents aged between 12 and 17 years following Comirnaty vaccination were monitored under the COVID-19 vaccine adverse event response and evaluation program. The clinical characteristics and overall incidence of acute myocarditis/pericarditis in adolescents following Comirnaty vaccination were analyzed.

Results. Between 14 June 2021 and 4 September 2021, 33 Chinese adolescents who developed acute myocarditis/pericarditis following Comirnaty vaccination were identified. In total, 29 (87.88%) were male and 4 (12.12%) were female, with a median age of 15.25 years. And 27 (81.82%) and 6 (18.18%) cases developed acute myocarditis/pericarditis after receiving the second and first dose, respectively. All cases are mild and required only conservative management. The overall incidence of acute myocarditis/pericarditis was 18.52 (95% confidence interval [CI], 11.67–29.01) per 100 000 persons vaccinated. The incidence after the first and second doses were 3.37 (95% CI, 1.12–9.51) and 21.22 (95% CI, 13.78–32.28 per 100 000 persons vaccinated, respectively. Among male adolescents, the incidence after the first and second doses were 5.57 (95% CI, 2.38–12.53) and 37.32 (95% CI, 26.98–51.25) per 100 000 persons vaccinated.

Conclusions. There is a significant increase in the risk of acute myocarditis/pericarditis following Comirnaty vaccination among Chinese male adolescents, especially after the second dose.

Keywords. myocarditis; pericarditis; adolescents; Comirnaty; Hong Kong.

The coronavirus disease 2019 (COVID-19) infection in children is generally mild, but serious complications, such as pediatric multisystem inflammatory syndrome—temporally associated

with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (PIMS-TS), can occur [1]. Prolonged social distancing policies have also led to significant psychosocial impacts on children and their families in the community [2]. Enormous efforts have been made to control the spread of the virus through universal vaccination to achieve herd immunity to return us to a semblance of normality.

Currently, the vaccination program of the Hong Kong Government has authorized 2 COVID-19 vaccines: the CoronaVac from Sinovac Biotech (Hong Kong) Limited and Comirnaty vaccine (BNT162b2) from Fosun-BioNTech. On 14 June 2021, the government of the Hong Kong Special Administrative Region (HKSAR) commenced vaccination of the Comirnaty vaccine (BNT162b2) from Fosun-BioNTech

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to adolescents by lowering of the age limit from 16 to 12 years after reviewing the available evidence by the advisory panel on COVID-19 Vaccines of the Food and Health Bureau, HKSAR Government [3]. The drug office of the Department of Health (DH), the drug regulatory authority in Hong Kong, has implemented a pharmacovigilance system for COVID-19 vaccines that monitors reports of adverse events following immunization (AEFI). The COVID-19 vaccine Adverse event Response and Evaluation (CARE) program was set up, an active surveillance system, to evaluate AEFI data from the general population using electronic medical records from Hospital Authority and vaccination records from the DH. The CARE program actively identifies AEFI and conduct epidemiological study to evaluate the association between vaccinations and subsequent adverse event [4, 5].

The Comirnaty is a messenger RNA (mRNA) vaccine that is highly effective in preventing hospitalizations and deaths due to COVID-19 [6]. Although Comirnaty has a favorable safety profile, various regulatory agencies have advocated continuous monitoring of its safety, as rare and long-term adverse reactions might not have been detected in the clinical trials and early post-marketing reports [7]. Recently, there have been emerging case reports of acute myocarditis following mRNA COVID-19 vaccination in healthy young adolescent and adult males [8–10]. The United Kingdom has only approved offering 1 dose of the Pfizer-BioNTech vaccine to healthy adolescents aged 12–15 years old so far, instead of giving the recommended 2 doses [11]. Yet an in-depth population-based investigation of the age-specific incidence of acute myocarditis/pericarditis following mRNA COVID-19 vaccination in Asian adolescents is lacking. This study aims to report the clinical characteristics and estimate the incidence of acute myocarditis following vaccination with Comirnaty in adolescents in Hong Kong.

METHODS

This was a population cohort study aimed at identifying all suspected cases of acute myocarditis in adolescents aged between 12 and 17 years who received the Comirnaty vaccine between 14 June 2021 and 4 September 2021. All individuals receiving the Comirnaty vaccine have also consented to their vaccination records being linked to their corresponding comprehensive electronic health records held by the Hospital Authority (HA), the major publicly funded healthcare provider, through the CARE program [4]. All suspected cases of acute myocarditis/pericarditis that occur within 14 days after receiving either the first or the second dose of the Comirnaty vaccine and admitted to one of the HA hospitals are reported to the Advanced Incident Reporting System (AIRS) on admission, a system for HA to report adverse drug events and AEFI to DH.

Suspected cases of acute myocarditis/pericarditis who received Comirnaty vaccines during the study period were

investigated according to the Hong Kong Pediatric Investigation Protocol for Comirnaty-related Myocarditis/Pericarditis (Supplementary file 1), which was implemented in all HA hospitals. Demographics including date of birth, sex, ethnicity, date of receiving the first and the second dose of COVID-19 vaccines, symptoms, date of onset, and past medical histories were reviewed. Microbiological investigations including nasopharyngeal swab (NPS) for SARS-CoV-2 and common respiratory viruses including influenza A/B/C, parainfluenza virus 1/2/3/4, adenovirus, human metapneumovirus, and respiratory syncytial virus, and throat and rectal swabs for enteroviruses were tested. SARS-CoV-2 anti-receptor binding domain (RBD) and anti-nucleocapsid protein (NP) antibodies were tested to differentiate whether the patients had a history of COVID-19 infection. Cardiac enzymes, including high-sensitivity troponin I (hsTnI), high-sensitivity troponin T (hsTnT or TnT), electrocardiogram (ECG), and echocardiogram were serially monitored. ECGs were interpreted by 1 single investigator (S. S. T.). Echocardiograms were performed and interpreted by the cardiologists of each admitting hospital. Cardiac magnetic resonance imaging (cMRI) was performed within two weeks of symptoms onset either at the admission hospital, or referred to the Hong Kong Children's Hospital if no slots were immediately available. The cMRI images were interpreted by the radiologists of each magnetic resonance imaging (MRI) unit. The study team followed the myocarditis and pericarditis case definitions created by the Cardiovascular Injury-Coalition for Epidemic Preparedness Innovations (CEPI) and the Brighton Working Group [12].

Estimation of Incidence and Statistical Analysis

Vaccination records within the study period were extracted from the DH in Hong Kong since the commencement of mass COVID-19 vaccinations in adolescents aged 12–17 years on 14 June 2021 to 4 September 2021. The cutoff date for follow-up time was 18 September 2021, allowing for all participants to have a 14-day follow-up period. De-identified electronic health records were retrieved from the HA Clinical Data Analysis and Reporting System (CDARS), which has been successfully used in a previous COVID-19 vaccine-related pharmacovigilance study [4]. Subjects with a history of primary myocarditis/pericarditis prior to the study period were excluded. Cases of acute myocarditis/pericarditis following Comirnaty vaccination were identified if they occurred within 14 days of either the first or the second vaccine dose. We estimated the background rate of acute myocarditis/pericarditis, cases of the first primary diagnosis were extracted from CDARS from 2011 to 2020 using data available from 14 June to 4 September of each year. For each year, those with a history of acute myocarditis/pericarditis in the prior year to the study period were censored.

Separated cases related to the first dose or to the second dose were also calculated. Acute myocarditis/pericarditis related to

the first dose was defined as the first cases within 14 days of the first dose. Acute myocarditis/pericarditis related to the second dose was defined as the first cases within 14 days of the second dose. The 14 days was the upper end of the reporting of myocarditis/pericarditis cases following vaccination according to the DH and HA reporting policies. The incidence of clinically confirmed myocarditis/pericarditis per 100 000 doses administered as well as number of cases per 100 000 doses for first dose and second dose were estimated. We calculated 95% confidence intervals (CI) for all incidences calculated using Poisson distribution. The incidence rate of acute myocarditis/pericarditis associated with the Comirnaty vaccine was compared with the background incidence rate of acute myocarditis/pericarditis in 2020 using 100 000 doses per 14-days. Sensitivity analyses were conducted using (1) the background incidence rate in 2018 and 2019 and the average background incidence rate from 2011 to 2020 using 100 000 doses per 14 days and (2) changed the incidence using doses per 28 days. Subgroup analysis was conducted by sex. Some comparisons to background years were not possible as there were zero cases of myocarditis/pericarditis recorded in background years. Median and interquartile ranges (IQR) were used to describe skewed data. All statistical tests were 2-sided, and *P*-values at a level of 5% were considered statistically significant. Statistical analyses were conducted using R version 4.0.3 (www.R-project.org). For quality assurance, 2 investigators (E. C. C. and R. D. S.) independently conducted the statistical analyses.

Ethical Approval

This study was approved by the Institutional Review Board of the University of Hong Kong/Hospital Authority Hong Kong West Cluster (UW21-149 and UW21-138) and the Department of Health Ethics Committee (LM21/2021).

RESULTS

Between 14 June and 4 September 2021, a total of 33 cases of myocarditis/pericarditis within 14 days following vaccination with Comirnaty were identified. Twenty-five (75.76%) were definite, 7 (21.21%) were probable, and 1 (3.03%) were possible cases (Table 1). The patients were all Chinese adolescents with no history of cardiac diseases; 29 (87.88%) were male and 4 (12.12%) were female, with a median age of 15.25 years. In total, 27 (81.82%) and 6 (18.18%) cases developed acute myocarditis/pericarditis after receiving the second and first dose, respectively. These patients developed myocarditis/pericarditis at a median of 2 days after receiving the last dose of the vaccine. All of them presented with chest pain. Three cases (9.09%) had normal troponin levels, 2 of them were cases of definite pericarditis and 1 had possible myocarditis. Six (18.18%) had normal ECGs, 25 (75.76%) had normal echocardiograms, and 7 (21.88%) had normal cMRI. None had

significant arrhythmias. All patients had no identifiable infections. They also had no current and past history of COVID-19 infection, as evidenced by a negative SARS-CoV-2 PCR on admission and the absent of anti-SARS-CoV-2 NP antibodies in their serum. All patients had mild diseases requiring no treatment or symptomatic relief by nonsteroidal anti-inflammatory drugs (NSAIDs). They spontaneously recovered without the need of systemic steroids, intravenous immunoglobulins, or inotropic or circulatory support.

There have been 305 406 doses of Comirnaty vaccine administered to 178 163 individuals aged 12–17 years (88 357 [49.59%] are female) since the commencement of the vaccination program on 14 June 2021 until 4 September 2021. This represented 51.84% of the population between 12 and 17 years (178 163/343 700) in Hong Kong in mid-2021 [13]. The overall incidence for acute myocarditis/pericarditis was 18.52 (95% CI, 11.67–29.09) per 100 000 persons. The incidence after the first and second doses were 3.37 (95% CI, 1.12–9.51) and 21.22 (95% CI, 13.78–32.28) per 100 000 persons vaccinated, respectively (Table 2). Incidence was higher among male adolescents compared to females (Table 2). Incidence rates compared with previous years' background rates are shown in Table 2 and Supplementary Tables 1–3. Compared to the background incidence rate of acute myocarditis/pericarditis in 2020 there were significantly higher incidence rate differences in those vaccinated (Table 2). Sensitivity analyses using the background incidence rate in 2018, 2019, and 2020 and the average background incidence rate from 2011 to 2020 using per 100 000 per 28-days also demonstrated significantly higher incidence rate differences in those vaccinated which was consistent with the main results (Supplementary Tables 4–8).

Among males after their first dose, there was a significantly higher incidence rate difference compared the background rate in 2020. After the second dose there was significantly higher incidence rate difference between the background rate in 2020 and all participants and males (Table 3).

DISCUSSION

To our best knowledge, this is the first study in adolescents using data from the territory-wide post-COVID-19 vaccination monitoring system to analyze the incidence of acute myocarditis/pericarditis associated with the Comirnaty vaccine for adolescents in Asia.

Our analysis revealed that the overall incidence of acute myocarditis/pericarditis in adolescent following the Comirnaty vaccination was 18.52 per 100 000 persons vaccinated. Majority cases involved healthy adolescent males after receiving the second dose. No other infective causes including SARS-CoV-2 infection were identified. Conservative management with NSAIDs was sufficient. This higher

Table 1. Clinical Characteristics of Adolescents With Myocarditis/Pericarditis Following Comirnaty Vaccination in Hong Kong

No.	Sex/Age at Presentation (years)	Present After First or Second Dose	No. of Days After Receiving the Last Dose	Symptoms	Peak Troponin Levels (hsTnT/hsTnI/TnT) (ng/L) ^a	Most Significant ECG Changes	ECHO	MRI Findings	Final Diagnosis (Level of Certainty) ^b
1	M/15.66	Second	2	Chest pain, headache	TnT 793 (elevated) hsTnI 2506 (elevated)	STE in II, III, aVF, V3-V5	Normal	Patchy edema; diffuse EGE; patchy pericardial and subepicardial LGE; normal ECV	Perimyocarditis (Definite)
2	M/14.52	Second	1	Chest pain, fever	TnT 646 hsTnI 6342 (elevated)	TWI and biphasic T waves in III, aVF, V4-V6	Normal	Borderline LV function; elevated T1 and T2 mapping values and ECV; presence of LGE	Myocarditis (Definite)
3	M/13.53	Second	2	Dizziness, SOB, chest pain	TnT 1749 (elevated)	STE in V2-V6; TWI in aVL; biphasic Ts in V3-V4	Normal	Elevated T1 and T2 mapping values and ECV; pericardium and subepicardial muscles LGE and T2 hyperintensity	Perimyocarditis (Definite)
4	M/13.05	First	2	Chest pain	TnT 302 (elevated)	STE in V3-V6; TWI in III; STD in aVR	Normal	Elevated T1 and T2 mapping values and ECV; pericardial LGE extending to subepicardial region	Perimyocarditis (Definite)
5	M/14.34	Second	1	Chest pain	TnT 993 (elevated)	STE in V3-V5; TWI in I, aVL; biphasic T waves in V3-V6	Normal	Borderline LV function; subepicardial LGE; elevated T1 and T2 mapping values and ECV; hyperintense pericardium	Perimyocarditis (Definite)
6	M/16.99	Second	3	Chest pain	TnT 948 (elevated)	STE in V2-V6	Mildly impaired LV global longitudinal strain	Borderline LV function, small pericardial effusion; elevated ECV, T1 and T2 mapping values; patchy LGE	Perimyocarditis (Definite)
7	M/15.22	Second	2	Chest pain	hsTnI 11415 (elevated)	Normal	Normal	Elevated T1 and T2 mapping values; presence of patchy EGE; normal ECV; subepicardial LGE	Myocarditis (Definite)
8	M/15.32	Second	2	Chest pain, fever	hsTnI 16806 (elevated)	STD and TWI in V1-2; STE in lead II, III, aVF; ST/T wave abnormality in II, III, aVF, V4-V6	Borderline LV function (LVFS 28%); minimal pericardial effusion	Mild increase STIR signal; faint patchy LGE; trace pericardial effusion	Perimyocarditis (Definite)
9	M/17.14	First	1	Chest pain	hsTnI 19110 (elevated)	STE in II, III, aVF, V4-V6	Tiny rim of pericardial effusion	Elevated T1 and T2 mapping values and ECV; no definite EGE; LGE present; patchy pericardial enhancement	Perimyocarditis (Definite)
10	F/14.07	Second	3	Chest discomfort, transient SOB	hsTnI 54.9 (elevated)	STE in V4-V5	Normal	Elevated T1 and T2 mapping values and ECV; LGE and pericardial enhancement	Perimyocarditis (Definite)
11	M/13.75	Second	2	Chest pain, palpitation, fever	hsTnI 6254 (elevated)	Sinus tach; STE in II, III, aVF, V3-V5	Normal	Elevated T1 and T2 mapping values and ECV; presence of LGE	Myocarditis (Definite)
12	M/12.74	Second	1	Chest pain, palpitations, dizziness	hsTnI 14766 (elevated)	STD in aVR and V1; STE I-II, aVF, V4-V6	Thin rim of pericardial effusion, hyperchoic pericardium	Elevated T1 mapping value; presence of myocardial edema with increased T2W signal	Perimyocarditis (Definite)
13	F/12.97	Second	1	Chest pain, fever, headache, palpitations, subjective SOB	hsTnI 2309 (elevated)	Normal	Normal	Elevated T1 and T2 mapping values and ECV; pericardial and subepicardial LGE; small pericardial effusion	Perimyocarditis (Definite)
14	M/17.85	Second	3	Chest pain	hsTnI 30267 (elevated)	STE in I, II, aVF, V4-V6, STD in aVR, V1-V2; TWI in III; biphasic Ts in V3-V5	Borderline contractility	Elevated T1 and T2 mapping values and ECV; subepicardial and mid-wall LGE; small pericardial effusion	Perimyocarditis (Definite)

Table 1. Continued

No.	Sex/Age at Presentation (years)	Present After First or Second Dose	No. of Days After Receiving the Last Dose	Symptoms	Peak Troponin Levels (hsTnI/hsTnI/TnT) (ng/L) ^b	Most Significant ECG Changes	ECHO	MRI Findings	Final Diagnosis (Level of Certainty) ^a
15	M/14.99	Second	1	Fever, chest pain, palpitation, SOB, dizziness	TnT 323 (elevated)	STE in V3-5TWI in aVR and V1	Normal	T2W hyperintensity within myocardium; regional LGE; 5mm pericardial effusion	Perimyocarditis (Definite)
16	M/16.88	Second	4	Chest pain, SOB	hsTnT < 14 (normal)	STE in V2 and V4	Increased echogenicity over LV free wall	Not done	Pericarditis (Definite)
17	M/17.33	Second	2	Chest pain, fever, palpitation	hsTnI 767 (elevated)	STE in II, III, aVF, V3-V6	Normal	T2W hyperintense myocardial edema at mid and apex of LV	Myocarditis (Definite)
18	M/14.25	First	3	Chest pain, fever	hsTnI 184 (elevated)	STD in II, III, aVF	Normal	T2W hyperintense myocardial edema at basal lateral and basal septal segments of LV	Myocarditis (Definite)
19	M/15.95	Second	2	Chest discomfort, palpitation	hsTnI 3561 (elevated)	STE in II, aVF, V4-V6	Normal	T2W hyperintense myocardial edema with LGE at apical lateral segment and subepicardial region	Myocarditis (Definite)
20	M/14.17	Second	2	Chest pain	TnT 1058 (elevated)	STE in V4-V6; TWI in III, aVF	Normal	Mild T2W hyperintense signals and increased T2 mapping value at inferolateral LV wall	Myocarditis (Definite)
21	M/15.70	Second	2	Chest pain	hsTnI 263 (elevated)	STE II, III, aVF, V4-V6	Normal	Mild subepicardial basal to mid-ventricular lateral wall LGE and elevated T1 mapping value	Myocarditis (Definite)
22	M/15.65	Second	1	Chest pain, palpitations	hsTnI 2210 (elevated) TnT 283 (elevated)	STE V2-V6	Normal	Generalized myocardial hyperintensity in T1RM sequence; presence of hyperemia; subepicardial LGE; small pericardial effusion	Perimyocarditis (Definite)
23	F/16.89	First	2	Palpitation, near syncope, nausea, vomiting	hsTnT 30 (elevated)	Normal	Normal	LV myocardium diffuse increased T2 signal; patchy early Gd enhancement	Myocarditis (Definite)
24	M/16.88	Second	2	Chest pain, headache, dizziness	TnT 669 (elevated)	Normal	Borderline LV function (LVFS 29.1%)	Normal	Myocarditis (Definite)
25	M/14.78	Second	2	Chest pain, palpitation	hsTnT < 14 (normal)	STE in I, II, V2-V6, and STD in aVR	Prominent pericardial echogenicity	Normal	Pericarditis (Definite)
26	M/14.18	First	2	Chest pain	hsTnI 513 (elevated)	Normal	Normal	Equivocal myocardial edema due to motion artefacts	Myocarditis (Probable)
27	F/15.25	Second	6	Chest pain	hsTnI 77 (elevated)	STE V2-V3; biphasic Ts in V3	Normal	Normal	Myocarditis (Probable)
28	M/14.31	Second	14	Chest discomfort, transient SOB, headache, dizziness	hsTnI 201 (elevated)	TWI and ST depression in II, III, aVF; biphasic Ts in V3-V5	Normal	Normal	Myocarditis (Probable)
29	M/17.87	First	2	Chest pain	hsTnI 29.2 (elevated)	STE in II, V3-V6	Normal	Normal	Myocarditis (Probable)
30	M/17.64	Second	2	Chest pain, fever, headache	hsTnI 4874 (elevated)	STE in V2-V6, TWI in aVF/III; biphasic Ts in II, aVF, V4-V6	Normal	Normal	Myocarditis (Probable)

Table 1. Continued

No.	Sex/Age at Presentation (years)	Present After First or Second Dose	No. of Days After Receiving the Last Dose	Symptoms	Peak Troponin Levels (hsTnT/hsTnI/ ^a TnT) (ng/L) ^b	Most Significant ECG Changes	ECHO	MRI Findings	Final Diagnosis (Level of Certainty) ^a
31	M/12.85	Second	2	Chest pain, vomiting, SOB	hsTnT 39	Sinus tachycardia; STE in II, III, aVF; V2–V6	Normal	Global hyperintensity in myocardium in T2W images with hyperintensity in early post-Gd images but no LGE. Suspicious of myocarditis	Myocarditis (Probable)
32	M/15.79	Second	10	Chest pain, dizziness, near syncope	hsTnT 25 (elevated)	Normal	Normal	Normal	Myocarditis (Probable)
33	M/16.76	Second	2	Fever, chest discomfort, palpitation, transient SOB	hsTnT < 14 (normal)	STE in V2–V6	Normal	Normal	Myocarditis (Possible—elevated CRP)
34 ^c	M/15.07	Second	25	Chest pain	TnT 269 hsTnI 3850	STE in V2–V6	Mild pericardial and LV free wall echogenicity	Not done	Perimyocarditis (Definite)
35 ^c	F/12.78	Second	26	Vomiting, palpitation, reduced exercise tolerance	hsTnI 566	STE in II, V2–V5; STD in aVR; TWI in aVL; Q waves in I and aVL	Hyperechoic pericardium	Elevated T1 mapping values; subepicardial LGE	Perimyocarditis (Definite)

Abbreviations: CRP, C reactive protein; ECG, electrocardiogram; ECHO, echocardiogram; ECV, extracellular volume; EGE, early gadolinium enhancement; Gd, gadolinium; hsTnI, high-sensitivity troponin I; hsTnT, high-sensitivity troponin T; LGE, late gadolinium enhancement; LV, left ventricle; LVFS, left ventricle fractional shortening; MRI, magnetic resonance imaging; SOB, shortness of breath; STD, ST depression; STE, ST elevation; STIR, short tau inversion recovery; T2W, T2-weighted; TWI, T wave inversion; TnT, troponin T.

^aBrighton Collaboration Myocarditis Case Definition Level of Certainty (LOC) Classification.

^bElevated troponin level based on reference values provided by each laboratory. Subjects with two different troponin measures were because of transfer to another hospital.

^cCases 34 and 35 presented > 14 days after receiving the second doses, therefore they were only included in the sensitivity analyses (Supplementary Tables 4–8).

Table 2. Incidence Rate Differences of Myocarditis/Pericarditis Cases Following Comirnaty Vaccination Stratified by Sex and Compared to Background Rate in 2020

	Incidence Rate (per 100 000 person-14 days, 95% CI)	Background Incidence Rate in 2020 ^a (per 100 000 person-14 days, 95% CI)	Incidence Rate Difference (per 100 000 person-14 days, 95% CI)
Comirnaty			
Total	18.52 (11.67–29.01)	0.11 (.01–20.36)	18.41 (9.95–26.87)
Male	32.29 (22.78–45.4)	0.21 (.01–10.34)	32.08 (20.91–43.25)
Female	4.53 (1.76–11.11)	0	-

Values in bold represent a statistically significant difference ($P < .05$).

Abbreviation: CI, confidence interval.

^aThe background incidence rates were calculated using the reporting period (14 June to 4 September) in 2020 and truncated to incidence rate per 14 days.

incidence of myocarditis/pericarditis following Comirnaty vaccination than other jurisdictions is likely related to the heightened vigilance of healthcare professionals and the public [14], as well as the highly efficient CARE program for the monitoring and reporting of AEFI across Hong Kong [10]. Our pharmacovigilance system was able to capture mild cases of acute myocarditis/pericarditis and reveal the real-world incidence of acute myocarditis/pericarditis following the Comirnaty vaccination. Because the Pfizer-BioNTech vaccine was approved for large-scale immunization in many countries, there has been a higher observed risk of acute myocarditis/pericarditis among younger males receiving this vaccine [15]. The first reports in Israel were of 5 young males who developed mild myocarditis following vaccination with the BioNTech mRNA COVID-19 vaccine [16]. Subsequently, 23 US military males reported developing myocarditis after administering more than 2.8 million doses of either the Moderna or BioNTech mRNA COVID-19 vaccines to military personnel [9]. In children, so far, only 1 case series reported myocarditis following vaccinations with mRNA COVID-19 vaccines. These 7 cases were males aged 14–19 years who presented with transient mild symptoms, elevated troponin, and MRI changes suggestive of acute myocarditis or perimyocarditis. They were treated with NSAIDs, steroids, or intravenous immunoglobulin [8]. So far, all adults

and adolescents with myocarditis/pericarditis following COVID-19 vaccinations, including those reported in the current study, have been mild cases [17]. However, the pathophysiology of acute myocarditis/pericarditis following the mRNA COVID-19 vaccine is still unclear, and the observation that only mRNA-based COVID-19 vaccines are associated with acute myocarditis remains unexplained. The causal association between mRNA vaccine and myopericarditis has recently been suggested in a mouse model. Higher systemic levels of mRNA lipid nanoparticles due to inadvertent intravenous injection or rapid return from the lymphatic circulation was proposed to increase this risk [18]. Further studies to delineate the pathophysiology of acute myocarditis/pericarditis associated with mRNA-based COVID-19 vaccines is urgently needed.

The US Center for Disease Control and Prevention (CDC) reported that the expected rates of myocarditis/pericarditis following the Comirnaty vaccination would be the highest among males aged between 12 and 29 years old, estimating 40.6 per million second doses administered [10]. The incidence rate of myocarditis/pericarditis following the Comirnaty vaccination in Hong Kong was much higher than those reported from the United States [10, 19]. However, it is important to note that the risk of myocardial injury in healthy young individuals including athletes following

Table 3. Incidence Rate Differences of Myocarditis/Pericarditis Cases Following the First and Second Doses of Comirnaty Vaccination Stratified by Sex and Compared to Background Rate in 2020

	Incidence Rate (per 100,000 person-14 days, 95% CI)	Background Incidence Rate in 2020 ^a (per 100 000 person-14 days, 95% CI)	Incidence Rate Difference (per 100 000 person-14 days, 95% CI)
First dose of Comirnaty			
Total	3.37 (1.12–9.51)	0.11 (.01–20.36)	3.26 (–0.40 to 6.92)
Male	5.57 (2.38–12.53)	0.21 (.01–10.34)	5.36 (0.65–10.07)
Females	1.13 (0.16–6.58)	0	-
Second dose of Comirnaty			
Total	21.22 (13.78–32.28)	0.11 (.01–20.36)	21.11 (12.06–30.16)
Male	37.32 (26.98–51.25)	0.21 (.01–10.34)	37.11 (25.10–49.12)
Female	4.77 (1.90–11.44)	0	-

Values in bold represent a statistically significant difference ($P < .05$).

Abbreviation: CI, confidence interval.

^aThe background incidence rates were calculated using the reporting period (14 June to 4 September) in 2020 and truncated to incidence rate per 14 days.

COVID-19 infection is also considerably high [20], ranging from asymptomatic cases with abnormal cMRI only to fulminant myocarditis due to COVID-19 [21, 22]. Preliminary data in Israel demonstrated a 51% effectiveness after receiving 1 dose Pfizer-BioNTech vaccine among older adults [23]. As there have been essentially no local transmission of SARS-CoV-2 in Hong Kong since May 2021 [24], balancing the risk of acute myocarditis/pericarditis after receiving the second dose and the benefit of vaccination to protect complications related to COVID-19 infection, the Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on Emerging and Zoonotic Diseases under the Centre for Health Protection of the Department of Health of Hong Kong recommended adolescents between 12 and 17 years to receive 1 dose of the Comirnaty vaccine, instead of 2 doses, on 15 September 2021 [25]. Although our study provided the most comprehensive epidemiology of myocarditis/pericarditis following Comirnaty vaccination before the policy change, ongoing observations on the incidence of myocarditis/pericarditis following the Comirnaty vaccination with 1-dose Comirnaty vaccination as well as the rate of COVID-19 infections among adolescents in Hong Kong shall be conducted to provide real-world evidence on the risk and benefit of the policy change.

This study has several strengths and limitations. All subjects presented to the accident and emergency department or in the outpatient clinics in the public system received comprehensive reviews and investigations to rule out the possibility of myocarditis/pericarditis because of viral infection, and cMRI to confirm subtle inflammation of the myocardium. However, asymptomatic subjects and subjects with transient and subtle symptoms of acute myocarditis/pericarditis, such as tachycardia and mild chest discomfort, might not seek medical consultation or have sought medical consultation in the private sector which were not reported. Some patients had negative MRI results because not all MRI suites in Hong Kong's public hospitals have the capability for T1 and T2 mapping to calculate the extracellular volume, leading to lower sensitivities and unable to meet the 2018 Lake Louise Criteria for the diagnosis of myocarditis. Furthermore, the incidence of acute myocarditis/pericarditis following the COVID-19 vaccination remained to be high, possibly attributed to increased awareness of possible acute myocarditis/pericarditis following vaccination with COVID-19 vaccines compared with other jurisdictions, as well as to the CARE program to capture AEFI. The high incidence of acute myocarditis/pericarditis following Comirnaty vaccination among adolescents presented in this study is representable as the HA receives majority of emergency admissions in Hong Kong [4]. Finally, different criteria were likely used by clinicians in generating a diagnostic code among the nonvaccinated individuals for the calculation of the background myocarditis/pericarditis incidence as it was in a nonresearch setting.

Nevertheless, we have included myocarditis and pericarditis of all causes, including idiopathic cases, for the calculation of the background incidence.

Conclusion

Chinese adolescent males have a higher risk of acute myocarditis/pericarditis following vaccination with Comirnaty, especially after the second dose. Medical professionals and recipients of the Comirnaty vaccine should be vigilant regarding the symptoms of acute myocarditis/pericarditis. Observations on the incidence of myocarditis/pericarditis following the Comirnaty vaccination after changing to 1-dose vaccination as well as the rate of COVID-19 infections among adolescents shall be conducted.

Supplementary Data

Supplementary materials are available at *Clinical Infectious Diseases* online. Consisting of data provided by the authors to benefit the reader, the posted materials are not copyedited and are the sole responsibility of the authors, so questions or comments should be addressed to the corresponding author.

Notes

Author contributions. P. I. and I. W. assessed and verified the data.

Concept and design. M. K., Y. L. L., I. W., and P. I.

Acquisition of data. M. K., J. W., V. C., S. M. T., K. P. L., Y. K. L., C. C. S., S. T., E. K., J. M., D. L., J. K. K. T., G. C. H. W. T., A. L., M. Y. N., C. K. C., and K. W. L.

Statistical analysis. C. C., W. W., E. C., T. T. M., and R. S.

Interpretation of data. All authors.

Literature review. H. W. T., D. L., M. L., K. Y. Y., W. H. L., K. L. C., and G. C.

Drafting of the manuscript. G. C. and M. K.

Figures. R. S.

Critical revision of the manuscript for important intellectual content. All authors.

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Potential conflict of interest. C. C. has received grants outside of the submitted work from the Food and Health Bureau of the Hong Kong Government, Hong Kong Research Grants Council, Hong Kong Innovation and Technology Commission, Pfizer, IQVIA, and Amgen; and a personal fee from Primevigilance Ltd. A. S. Y. L. received grants outside of the submitted work from the Health and Medical Research Fund, Food and Health Bureau of the Hong Kong Government Special Administrative Region. M. Y. N. has received funding/education grants from the Food and Health Bureau of the Hong Kong Government, Radiological Society of North America, GE, Lode, Arterys, Bayer, Circle Cardiovascular Imaging and TeraRecon; honoraria for education activities from Boehringer Ingelheim; reports the following leadership roles: Vice Chair of the Education Committee for Society of Cardiovascular Magnetic Resonance and Member of the Corporate

Relations Committee for Society of Cardiovascular Computed Tomography. G. C. F. C. is the CMO of Xellera and advisor of Pangenia. Y. L. L. received Government funding for COVID-19 Vaccinations in Adolescents (COVA) and is the Chairman of the Scientific Committee on Vaccine Preventable Diseases, Centre for Health Protection, HKSAR. I. W. has received research funding outside of the submitted work from Amgen, Bristol-Myers Squibb, Pfizer, Janssen, Bayer, GSK, Novartis, Hong Kong Research Grants Council, Hong Kong Health and Medical Research Fund, National Institute for Health Research in England, European Commission, and National Health and Medical Research Council in Australia (Research grants on pharmacoepidemiology to The University of Hong Kong outside of the submitted work); consultancy fee for advising IQVIA on pharmacoepidemiology studies outside of the submitted work; payment for expert testimony from Appeal Court in Hong Kong (expert report on effects of cannabis outside of the submitted work); and speaker fees from Janssen and Medicine in the previous 3 years; reports the following leadership roles: Member of Pharmacy and Poisons Board (this is the regulatory agency in pharmaceutical product licensing), Member of the Expert Committee on Clinical Events Assessment Following COVID-19 Immunization (advise the Hong Kong Government on safety of COVID-19 vaccines), and Member of the Advisory Panel on COVID-19 Vaccines of the Hong Kong Government (advise the Hong Kong Government on the emergency use of COVID-19 vaccines). He is also an independent nonexecutive director of Jacobson Medical in Hong Kong (salaried). P. I. has received grants outside of the submitted work from the Food and Health Bureau of the Hong Kong Government, Hong Kong Research Grants Council, and Hong Kong Jockey Club Charities Trust. M. T. Y. L. reports receiving Honorarium for a talk on ADHD. W. K. C. N. reports personal honoraria for Guerbet online lecture on pediatric cardiac imaging; holds 100 shares in Moderna stock, 50 shares in Biotech stock since April, owned 100 shares in Pfizer stock from July 2020 to January 2021. All other authors report no potential conflicts. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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THURSDAY, NOVEMBER 3RD, 2022 |



BREAKING NEWS

OFFICIAL CDC FIGURES – 58k Children injured, 15k hospitalised, 1.2k disabled & 163 dead due to COVID-19 Vaccination in the USA

BY THE EXPOSÉ ON OCTOBER 25, 2022 • (16 COMMENTS)

Print PDF Email

An advisory committee to the Centers for Disease Control and Prevention (CDC) voted on Thursday 20th October in favour of adding the Covid vaccine to the recommended immunisation schedule (<https://www.cdc.gov/vaccines/schedules/index.html>) for children aged 6 months and over.

Was the CDC’s advisory committee aware of figures published by the Centers for Disease Control that reveal nearly 58,000 children had been injured due to Covid-19 vaccination across the USA by September 29th 2022?

Was the committee aware that 1,201 of these children either suffered a life-threatening event or a permanent disability?

Did the advisory committee know that a further 163 children tragically lost their lives?

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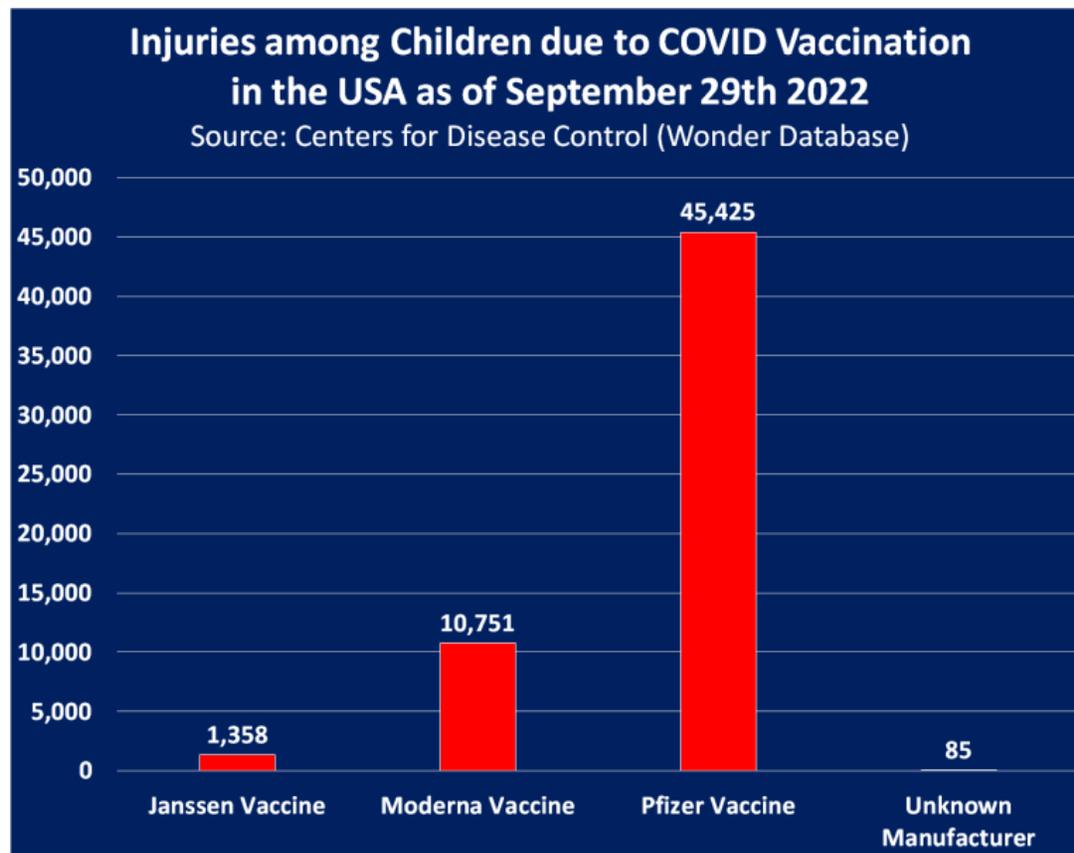
The Centers for Disease Control (CDC) hosts a Vaccine Adverse Event Reporting System (VAERS) that can be found [here](https://wonder.cdc.gov/controller/datarequest/D8;jsessionid=4715088FA3527C5B25E9F044F276) (<https://wonder.cdc.gov/controller/datarequest/D8;jsessionid=4715088FA3527C5B25E9F044F276>).

Unfortunately, the CDC reveals that at least 57,622 children (Aged 0 to 17) have suffered an injury due to Covid-19 vaccination as of September 29th 2022.

Vaccine Manufacturer	Events Reported	Percent (of 56,205)
JANSSEN	1,358	2.42%
MODERNA	10,751	19.13%
NOVAVAX	3	0.01%
PFIZER\BIONTECH	45,425	80.82%
UNKNOWN MANUFACTURER	85	0.15%
Total	57,622	102.52%

Source

The Janssen vaccine is responsible for 1,358 of these injuries, the Moderna vaccine for 10,751, and the Pfizer vaccine for 45,425.

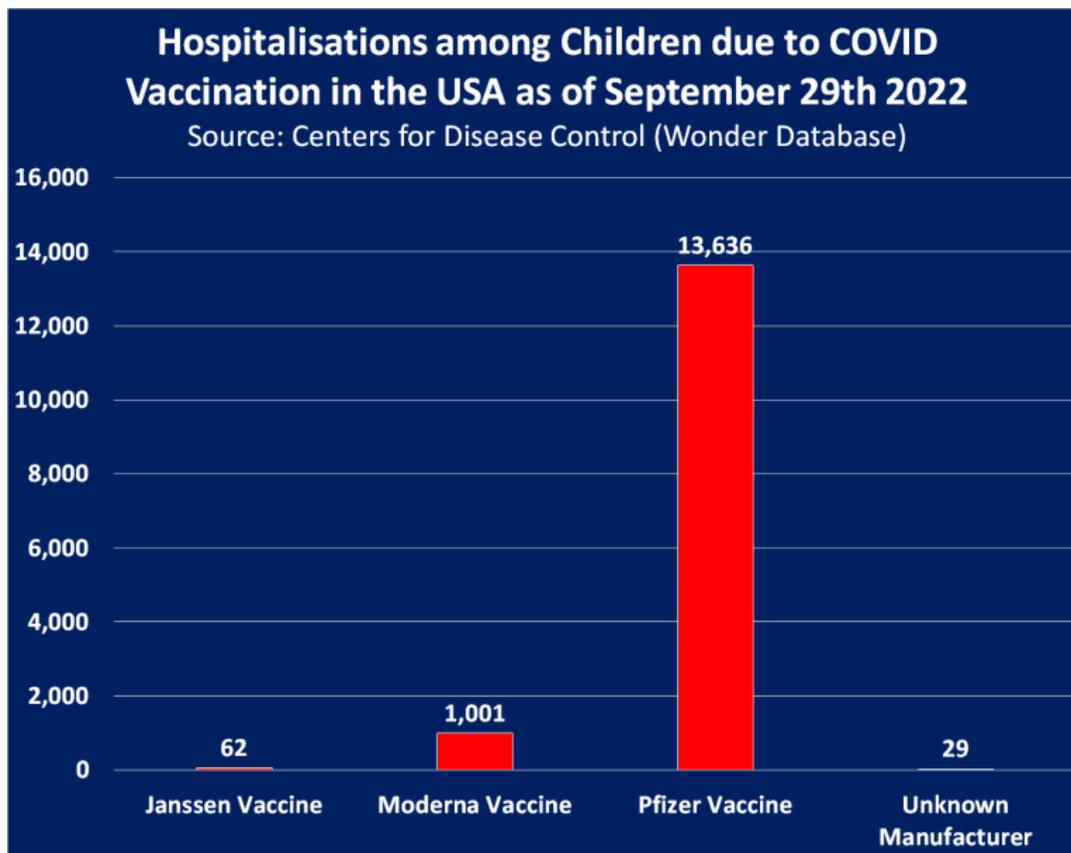


The CDC also reveals that 14,728 children have either visited a hospital or been hospitalised due to an injury caused by Covid-19 vaccination.

Vaccine Manufacturer ↓	Events Reported ↑↓	Percent (of 14,108) ↑↓
JANSSEN	62	0.44%
MODERNA	1,001	7.10%
PFIZER\BIONTECH	13,636	96.65%
UNKNOWN MANUFACTURER	29	0.21%
Total	14,728	104.39%

Source

The Pfizer vaccine has caused 13,636 children to be hospitalised, the Moderna vaccine 1,001, and the Janssen vaccine 62.

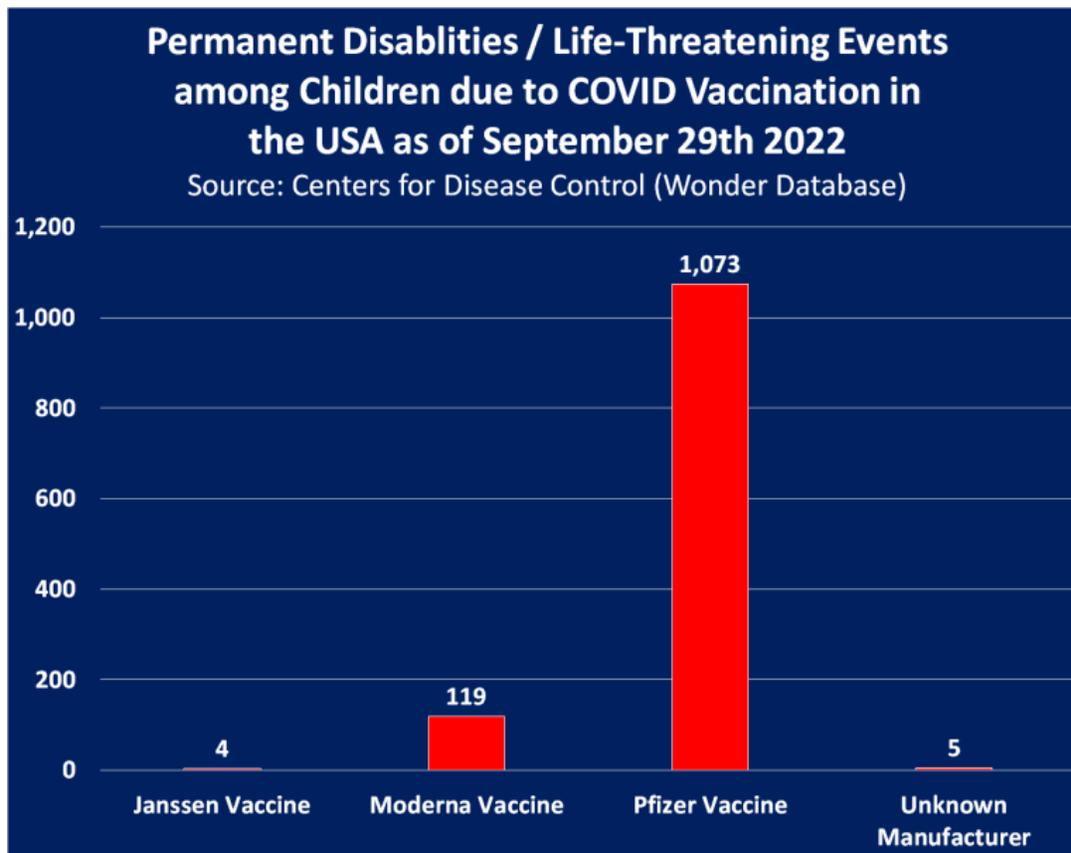


Sadly, the CDC reveals that 1,201 children have either suffered a life-threatening event or been left permanently disabled due to Covid-19 vaccination.

Vaccine Manufacturer ↓	Events Reported ↑↓	Percent (of 1,134) ↑↓
JANSSEN	4	0.35%
MODERNA	119	10.49%
PFIZER\BIONTECH	1,073	94.62%
UNKNOWN MANUFACTURER	5	0.44%
Total	1,201	105.91%

Source

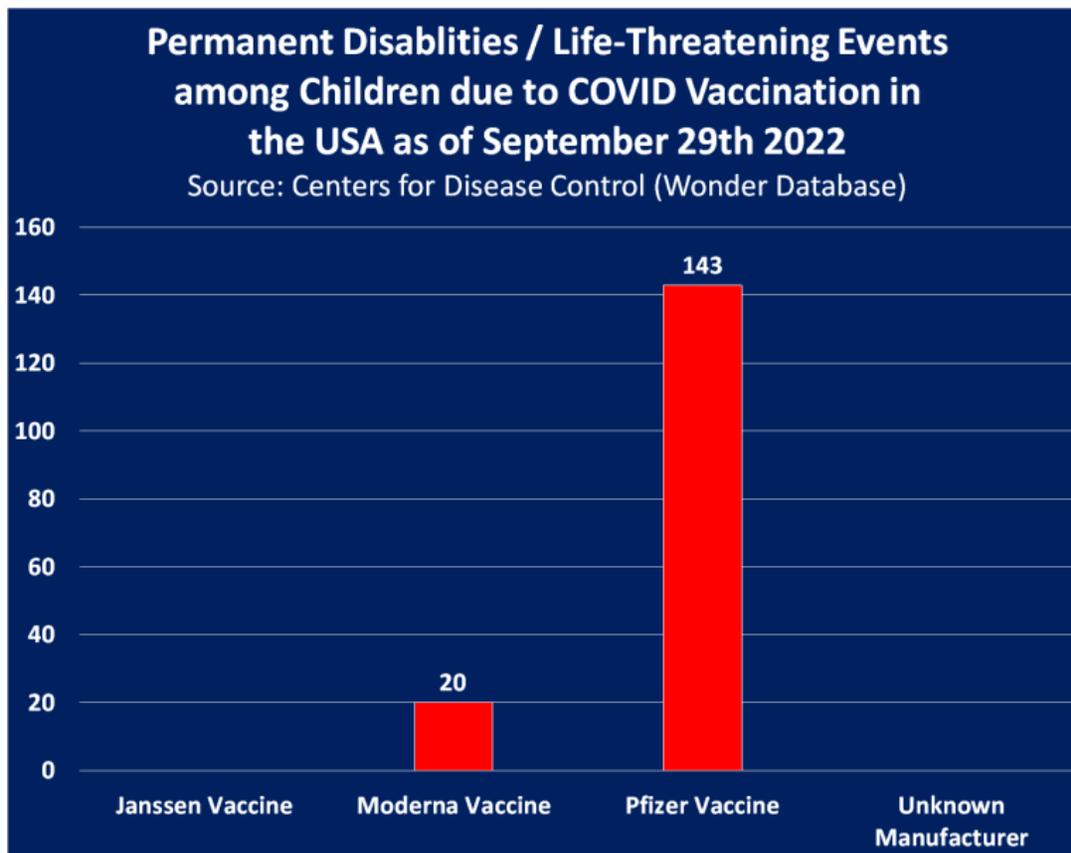
The Pfizer jab has nearly killed or permanently disabled 1,073 children, the Moderna jab 119 children, and the Janssen jab 4 children.



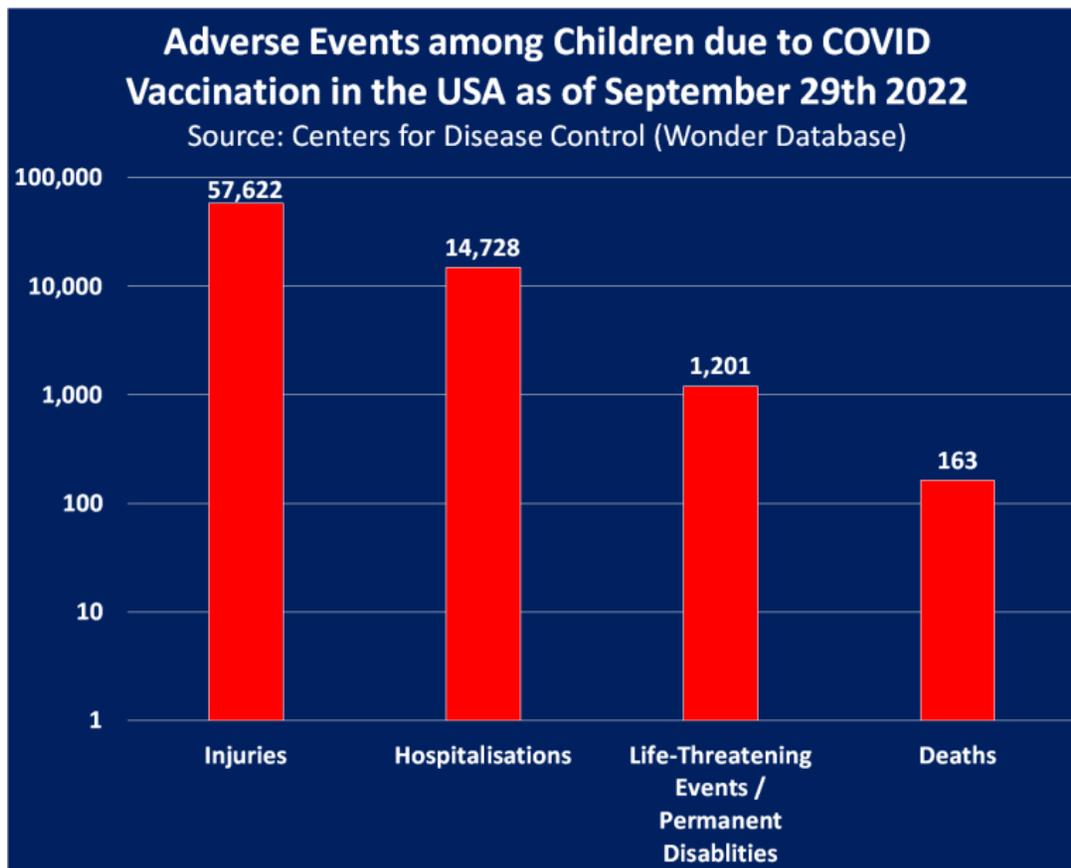
Tragically, the CDC reveals that at least 163 children have lost their lives due to Covid-19 vaccination.

Vaccine Manufacturer	Events Reported	Percent (of 155)
MODERNA	20	12.90%
PFIZER\BIONTECH	143	92.26%
Total	163	105.16%

The Pfizer vaccine has killed 143 children, whilst the Moderna vaccine has killed 20 children.



What's even more unfortunate is that these figures do not illustrate the true consequences of Covid-19 vaccination among children. This is because the CDC estimates just 1 to 10% of adverse events are actually reported to VAERS.



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Nov. 2, 2022

To the WA Department of Health (DOH) Vaccine Advisory Committee (VAC),

I am opposed to all vaccine mandates! Where there are risks, there should always be choice! The decision should be made by the recipient if it's for an adult, or parent or legal guardian for a child.

I am more opposed to the COVID vaccines being added to the schedule. In the first case, we are supposed to have **informed consent**. Did you know the COVID vaccine inserts were blank for quite some time? At a minimum, they should have included all of the ingredients just in case someone has allergies to one of those ingredients. I recently found out that the COVID vaccine Moderna and Pfizer did not disclose all ingredients on their patents. Some are considered Trademark Secretes. Both companies have **PEG lipids**. In addition, this mRNA technology should not be used in flu vaccines or other vaccines until long term effects are known.

US Patent 10,703,789 B2

Modified polynucleotides for the production of secreted proteins

Abstract

A pharmaceutical composition which has a plurality of lipid nanoparticles that has a mean particle size of between 80 nm and 160 nm and contains a modified mRNA encoding a polypeptide. The lipid nanoparticles include a cationic lipid, a neutral lipid, a cholesterol, and a PEG lipid. The mRNA contains a 5'-cap, 5'-UTR, N1-methyl-pseudouridine, a 3'-UTR, and a poly-A region with at least 100 nucleotides.

<https://patents.google.com/patent/US10703789B2/en>

Moderna's patent US 10,703,789 B2 mentions the PEG lipid in it's abstract. In section **218:10**, it talks about Self-Assembled Nanoparticles Nucleic Acid Self-Assemble Nanoparticles. In **218:50**, it talks about the Polymer-Based Self-Assemble Nanoparticles. "Polymers may be used to form sheets which self-assembled into nanoparticles." Section **219** and **220** it says "hydrogels are a network of polymer shains that are hydrophilic and sometimes found as a colloidal gel in which water is the dispersion medium. ..."

The article below is about fibrous clots, foreign matter in blood found after COVID Jabs. It mentions graphene oxide. Graphene has been used for telecommunication infrastructures. The EMFs from 5G cell phones, wireless communications, microwaves, electrical appliances, etc. can affect our health. Graphene is an excellent conductor. Was the graphene used as an adjuvant?

Fibrous Clots, Foreign Matter in Blood After COVID Jabs: Is There a Way to Detox?

Recently unusual blood clots as well as metal-like foreign objects found in the vessels of COVID-19 jab recipients have been reported across the country. Both types of substances are unusual and are likely to be harmful to our bodies. What are the potential causes and ramifications of these substances, and is there any chance of [...]

Findings From Embalmers: Numerous Long, String-like Fibrous Clots

Several embalmers across the country have been observing many large, and sometimes very long, “fibrous” and “rubbery” clots inside corpses, starting from either 2020 or 2021.

It’s not yet known if the cause of the new clot phenomenon is due to a COVID-19 infection, the vaccines, both, or something different. However, the Korean and Italian studies have provided quite a bit of evidence that it is possible that the COVID-19 jabs cause these strange blood components.

Mike Adams, who runs an ISO-17025 accredited lab in Texas, analyzed clots in August and found them to be lacking iron, potassium, magnesium, and zinc.

The string-like structures differ in size, but the longest can be as long as a human leg and the thickest can be as thick as a pinky finger.

Richard Hirschman, a licensed funeral director and embalmer in Alabama, said “Prior to 2020, 2021, we probably would see somewhere between 5 to 10 percent of the bodies that we would embalm [having] blood clots,” however now, 50 percent to 70 percent of the bodies he sees have clots.

According to experienced embalmers, they are not “normal” post-mortem clots but rather the long tiny strings may have been a contributing factor in the deaths, preventing circulation to those regions.



SEPTEMBER 18, 2022 BY DR. YUHONG DONG, DR. ANN CORSON

https://www.theepochtimes.com/health/fibrous-clots-foreign-matter-in-blood-after-covid-jabs-is-there-a-way-to-detox_4738079.html?utm_source=ai&utm_medium=search

Foundation for Alternative and Integrative Medicine

<https://www.faim.org/is-polyethylene-glycol-peg-toxic>

So, Is Polyethylene Glycol Toxic to Humans?

.....

Despite a lack of studies or a clear picture of the exact impact PEG compounds have on our bodies, we do know that this compound can have some negative side effects.

Polyethylene Glycol Side Effects

Some of the confirmed and documented side effects of polyethylene glycol include:

- Polyethylene glycol allergy: Although not commonly seen, there have been documented cases of an allergy to PEG. Some cases have even resulted in anaphylaxis – a severe and potentially life-threatening allergic reaction. Due to the risk of exposure to polyethylene glycol, the FDA has issued a warning to anyone with a known or suspected PEG allergy to communicate clearly with healthcare professionals as PEGs can be found lurking in medications, vaccines, contrast agents, and more.
- Digestive issues: If taken orally, polyethylene glycol can cause stomach upset such as diarrhea, flatulence, abdominal pain, nausea, vomiting, etc.
- Electrolyte imbalances: Because of its ability to disrupt the flow of water, PEG can also cause electrolyte imbalances. This may involve a decrease or increase in crucial electrolytes like calcium, sodium, potassium, and phosphate. It has also been linked to an increased risk of metabolic acidosis, which is a build-up of acid and toxins in the body.

While these side effects are well-documented, there are growing concerns about other possible polyethylene glycol toxicity symptoms.

Self-Assembly of Polymer Brush-Functionalized Inorganic Nanoparticles

<https://www.bing.com/videos/search?q=Self-Assemble+Nanoparticles&view=detail&mid=183B17EDF7CD77BDD38A183B17EDF7CD77BDD38A&FORM=VIRE>

Poly(Ethylene Glycol) Functionalized Graphene Oxide in Tissue Engineering: A Review on Recent Advances

Dovepress

April 21, 2020

By Ghosh S, Chatterjee K

<https://www.dovepress.com/polyethylene-glycol-functionalized-graphene-oxide-in-tissue-engineerin-peer-reviewed-fulltext-article-IJN>

Besides being an attractive candidate for drug delivery, PEG-GO can aid in the attachment, proliferation, and differentiation of stem cells, thereby augmenting tissue engineering.

Material Safety Data Sheet Graphene Oxide

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses:

Additive material for energy, coating, electronics, composites, etc. For professional use only. For R&D and industrial use only.

11.1 Information on toxicological effects

Acute toxicity

No data available

<https://www.ceylongraphene.com/pdf/graphene-oxide-msds.pdf>

The Science Behind Florida's Recent Recommendation Against mRNA COVID Vaccines for Men 18–39

IN-BRIEF Florida is the first state to recommend against mRNA COVID vaccination of children and men up to age 39, but it joins the UK, Sweden, and Denmark in some regards. The Florida Department of Health conducted a self-controlled case series (SCCS) with a 25-week observation period, similar to an analysis done in the UK. [...]

OCTOBER 17, 2022 BY DR. YUHONG DONG

https://www.theepochtimes.com/health/the-science-behind-floridas-recent-recommendation-against-mrna-covid-vaccines-for-men-18-39-4801126.html?utm_source=ai&utm_medium=search

COVID Vaccines Contaminate Breastmilk With mRNA: Study

A new study published on the JAMA network concludes that mRNA from COVID vaccines can be transmitted in small amounts through breast milk. The authors of the study examined 11 “lactating individuals,” after getting either the Pfizer or Moderna mRNA shots. Nine of them were white, one black, and one Asian. Five of the participants [...]

SEPTEMBER 27, 2022 BY ENRICO TRIGOSO

https://www.theepochtimes.com/covid-vaccines-contaminate-breastmilk-with-mrna-jama-study-4757809.html?utm_source=ai&utm_medium=search

Free mRNA for Your Baby?

Scientists at New York University’s Long Island School of Medicine have detected messenger RNA COVID-19 vaccines in human breast milk, according to a new study. This peer-reviewed research, published on September 26, 2022 in the journal JAMA Pediatrics, looked at the breastmilk of 11 healthy breastfeeding women, five of whom had received the Moderna vaccine [...]

OCTOBER 6, 2022 BY JENNIFER MARGULIS, JOE WANG

https://www.theepochtimes.com/health/free-mrna-for-your-infant-baby-4779439.html?utm_source=ai&utm_medium=search

Unsettling Research Links COVID Vaccine to Parkinson’s

The list of complications, conditions, and diseases resulting from the COVID shots is nearly endless and can affect any organ system in the body. Pfizer knew. Here’s their document. Look at the last 8 pages, which lists more than 1100 serious side effects and life-threatening illnesses Pfizer knew would happen from the first shot. We [...]

OCTOBER 4, 2022 BY SHERRI TENPENNY

https://www.theepochtimes.com/unsettling-research-links-covid-vaccine-to-parkinsons-4765232.html?utm_source=ai&utm_medium=search

Growing Number of Governors Reject COVID Vaccines for School Entry After CDC Vote

The GOP governors of several states indicated they will not implement mandates for children to receive a COVID-19 vaccine to enter school after a Centers for Disease Control and Prevention (CDC) advisory panel voted last week to recommend adding the vaccine to the childhood immunization schedule. Governors in Tennessee, South Carolina, Virginia, Montana, Alabama, Oklahoma, Florida, [...]

OCTOBER 23, 2022 BY JACK PHILLIPS

https://www.theepochtimes.com/growing-number-of-governors-reject-covid-vaccines-for-school-entry-after-cdc-vote_4814957.html?utm_source=ai&utm_medium=search

You are supposed to have informed consent when you take a vaccine. How many knew the list of ingredients for the COVID-19 including the Trademark Secretes? The original inserts were blank. Don't tell me the manufactures didn't know what was in these COVID-19 vaccines (actually experimental gene therapy). How many people would have taken these vaccines if they knew they had self assembly nanoparticles inside of them?

I believe that these clots are self assembled nanoparticles. That would clearly explain the heart attacks and stokes after the jabs.

Some people have anaphylaxis from the Polyethylene Glycol. How many people were given COVID-19 vaccines knew PEG was in it? Side effects of PEG include PEG allergy, digestive issues, and electrolyte imbalances. It can be lethal to some people. Anaphylaxis was also on the VAERS report for COVID-19 vaccines.

If you look at **acute toxicity of graphene oxide, is says no data available**. The MSDS has identified uses: additive material for energy coating, electronics, composites, etc. For professional use only. For R & D and industrial use only. It seems like Moderna wanted to rewire people like computers. The graphene oxide could possibly used as an antenna. Was this an attempt to see if they could control people remotely? Were these vaccines a transhuman experiment?

The spike proteins from the COVID vaxxed have been found in all parts of the body. The Epoch Times shows it crosses the blood brain barrier and can cause Parkinson's and Lewy body dementia. The Epoch Times also showed in in breastmilk. What kind of danger are you putting breastfed babies in? The first thing I remember reading on one of the VAERS report was about a woman that got the COVID-19 vaccine and breastfed her 4-5 month old baby. The baby died the next day.

You can not prove these COVID vaccines are safe! Nor can you prove they are effective being you still can get the virus and spread the virus. In addition, there is no data for long term effects.

I believe anyone that adds this to the vaccine schedule or mandates these COVID-19 vaccines should be liable for all that become vaccine injured or dead. According to VAERS, there is more vaccine injured and dead as a result of these COVID-19 vaccines than all other vaccines combined. The proof is there even if the CDC, FDA, NIAID, etc. chooses to ignore it.

The last article shows a growing number of governors reject COVID Vaccines for school entry after CDC Vote. I believe that they recognize the problems, but ultimately believe parents know what is best for their children, not the government.

The government is not my doctor, nor does it know my health history. What gives them the right to make this kind of one size fits all health decision when for many people, the risks outweigh the gain? These EUA vaccines and mandates violate the Nuremberg Code. Some day those involved will be held accountable, if not by man than by God.

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COVID-19 Vaccine Associated Parkinson's Disease, A Prion Disease Signal in the UK Yellow Card Adverse Event Database

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ABSTRACT

Many have argued that SARS-CoV-2 spike protein and its mRNA sequence, found in all COVID-19 vaccines, are prionogenic. The UK's Yellow Card database of COVID-19 vaccine adverse event reports was evaluated for signals consistent with a pending epidemic of COVID vaccine induced prion disease. Adverse event reaction rates from AstraZeneca's vaccine were compared to adverse event rates for Pfizer's COVID vaccines. The vaccines employ different technologies allowing for potential differences in adverse event rates but allowing each to serve as a control group for the other. The analysis showed a highly statistically significant and clinically relevant (2.6-fold) increase in Parkinson's disease, a prion disease, in the AstraZeneca adverse reaction reports compared to the Pfizer vaccine adverse reaction reports ($p = 0.000024$). These results are consistent with monkey toxicity studies showing infection with SARS-CoV-2 results in Lewy Body formation. The findings suggest that regulatory approval, even under an emergency use authorization, for COVID vaccines was premature and that widespread use should be halted until full long term safety studies evaluating prion toxicity has been complete. Alternative vaccines like the Measles Mumps Rubella (MMR) vaccine should be explored for those desiring immunization against COVID-19.

Keywords

COVID-19, Immunization, Vaccines, Parkinson's disease.

Introduction

Many have raised the alarm about the wisdom of wide spread immunization campaigns using COVID-19 vaccines without first performing long term human safety studies and well-planned animal toxicity studies. Concern has been raised regarding evidence that the SARS-CoV-2 virus, which causes COVID-19, is actually a lab derived bioweapon [1-4]. Several peer reviewed papers [3,5,6] have indicated that the spike protein of the SARS-CoV-2 virus and its nucleic acid sequence are actually prion forming toxins. A toxicity study in monkeys infected with SARS-CoV-2 showed the formation of Lewy Bodies [8] and supports these findings. All the COVID-19 vaccines on the market contain spike protein or its nucleic acid sequence creating a possible catastrophic epidemic of prion disease in the future.

The COVID vaccines from AstraZeneca and Pfizer are quite different in their composition. The AstraZeneca COVID vaccine

utilizes live adenoviruses that are genetically engineered to make the spike protein. Pfizer's COVID vaccine utilizes mRNA encapsulated in lipids to cause formation of spike protein in the recipient. Both vaccines technologies have the potential to induce prion disease [4]. Because the technologies are unique it was hypothesized their rates of prion induction may be contrasting enough to be detected as a difference in a spontaneous adverse event reporting database. The UK's Yellow Card adverse event reporting system was chosen to evaluate whether a difference in prion related vaccine's reaction reports could be detected. As discussed below there were theoretical benefits for studying this effect in a database from a single small country as opposed to larger EU or US databases.

Method

Yellow Card adverse reporting data from the United Kingdom government website (<https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting>) was

downloaded. Data was in the form of 4 PDF documents, one each for vaccines from AstraZeneca, Pfizer, Moderna, and one for reports where the vaccine was not identified. Each document categorized adverse event reports into specific groups primarily sorted by organ system as summarized in Table 1. Adverse events in each major category are further classified more or less by specific disease or symptom. While the documents do not specifically say outright, the website indicates the reports may come from both lay persons and healthcare professionals and may include both spontaneous reports and reports derived from clinical trials.

Table 1.

General Categories	Pfizer	AstraZeneca	Risk
Blood Disorders	7164	6645	0.93
Cardiac Disorders	2776	7879	2.84
Congenital Disorders	32	65	2.03
Ear Disorders	2855	8250	2.89
Endocrine Disorders	85	263	3.09
Eye Disorders	3558	12181	3.42
Gastrointestinal	21225	73305	3.45
General Disorders	57080	233977	4.10
Hepatic Disorders	84	363	4.32
Immune System Disorders	1188	2594	2.18
Infections	5202	16093	3.09
Injuries	2343	7065	3.02
Investigations	2552	9499	3.72
Metabolic Disorders	1268	8090	6.38
Muscle and Tissue Disorders	27007	90733	3.36
Neoplasm	140	317	2.26
Nervous Disorders	38876	160834	4.14
Pregnancy	186	191	1.03
null	62	117	1.89
Psychiatric Disorders	3900	15206	3.90
Renal and Urinary Disorders	581	2234	3.85
Reproductive and Breast Disorders	3839	7839	2.04
Respiratory Disorders	9087	24655	2.71
Skin Disorders	15642	45995	2.94
Social Circumstances	85	266	3.13
Surgical and Medical Procedures	186	584	3.14
Vascular Disorders	3165	10725	3.39
Total Reactions	210168	745965	3.55
Total Reports	73944	205221	2.78
Fatal Reports	425	904	2.13
Reactions per Report	2.84	3.63	1.28
Fatalities per Report	0.006	0.004	0.77

The frequency of adverse event reports pertaining to possible prion induced neurological symptoms were compared between AstraZeneca and Pfizer vaccines. No analysis was made for other potential adverse events except that the rates of total psychological reactions (“Psychiatric Disorders”) was also compared. The analysis was specifically intended for detecting prion disease in the “Nervous Disorders” reaction reports. An analysis was not performed on the “Psychiatric Disorders” reactions or any other category of diseases listed in Table 1. A Chi square analysis using a 2x2 table was used to calculate statistical p values for just 3 clearly specific signals. An online statistical chi square calculator (<https://www.socscistatistics.com/tests/chisquare>) was used. Chi square

analysis was also performed, one each, for “Nervous Disorders” and “Psychiatric Disorders” in Table 1. In addition, a separate chi square analysis was performed for 3 specific neurological reactions that could relate to prion disease. A single “negative” control chi square analysis was performed to verify that the calculator software was functioning properly.

Results

Four documents were downloaded from the UK government database. The documents state the data lock date was June 16th, 2021 and the Report Run Date was June 17, 2021. The documents indicated that the following number of adverse event reactions were reported for each vaccine, Pfizer: 210,168; AstraZeneca: 745,965; Moderna: 14,781; brand unspecified: 2,521. Because of insufficient data only the Pfizer and AstraZeneca adverse event reports were analyzed. According to the documents the Pfizer adverse events were reported between December 9, 2020 and June 16, 2021 while the AstraZeneca adverse events were reported between January 4, 2021 and June 16, 2021. There were thus only a few days difference in the dates the adverse events were reported. Additional publicly available data from the UK indicates by June 16th, 72,891,861 vaccine doses had been administered (<https://coronavirus.data.gov.uk/details/vaccinations>). The proportion of these doses attributed to Pfizer or AstraZeneca vaccines was not readily available.

Adverse reactions to the Pfizer and AstraZeneca vaccines were categorized by Yellow Card into major categories based on organ system and are summarized in Table 1. Table 1 shows that in general there are 3.55 times more adverse reactions reported and 2.78 more reports filed for the AstraZeneca vaccine than for the Pfizer vaccine. In general, there were 3.63 adverse reaction disclosed for each report pertaining to the AstraZeneca vaccine compared 2.84 reactions for each report pertaining to the Pfizer vaccine.

Data in Table 1 was specifically analyzed looking for a signal of a potential difference in prion disease between the vaccine groups. There were 4.14 times ($p=0.00001$) as many “Nervous Disorders” reactions and 3.9 times ($p=0.00001$) as many “Psychiatric Disorders” reactions reported for the AstraZeneca Vaccine compared to the Pfizer vaccine. These differences were elevated compared to a 3.55 times difference for all adverse event reactions reported between the two groups respectively.

Analysis of the “Nervous Disorders” data, Table 2, showed a highly significant and specific increase in Parkinson’s disease reactions in the AstraZeneca reports compared to the Pfizer vaccine reports. There were 185 reactions listing Parkinson’s disease reactions in the AstraZeneca reports compared to only 20 in the Pfizer vaccine reports ($p=0.000024$). Table 3 shows how the Parkinson’s disease patients were classified in the reactions. These Parkinson’s disease cases were primarily identified using a highly specific, pathognomonic, symptom “Freezing Phenomenon”. Table 3 shows that “tremor”, a less specific but more sensitive

symptom found in Parkinson's disease patients was present in 9,288 reactions reported for the AstraZeneca vaccine but found in only 937 reactions reported for the Pfizer vaccine (p=0.00001).

Table 2: Nervous Disorders

	Pfizer	Ratio	AstraZeneca
Abnormal reflexes	11	4.73	52
Abnormal sleep-related events	11	2.09	23
Absence seizures	16	2.06	33
Acute polyneuropathies	39	8.44	329
Autonomic nervous system disorders	7	2.71	19
Central nervous system aneurysms and dissections	2	2.00	4
Central nervous system haemorrhages and cerebrovascular accidents	404	4.13	1668
Central nervous system inflammatory disorders NEC	1	17.00	17
Central nervous system vascular disorders NEC	5	5.40	27
Cerebrovascular venous and sinus thrombosis	36	7.17	258
Cervical spinal cord and nerve root disorders	3	3.00	9
Choreiform movements	2	2.50	5
Chronic polyneuropathies	1	14.00	14
Coma states	6	3.67	22
Coordination and balance disturbances	283	3.58	1013
Cortical dysfunction NEC	43	3.37	145
Cranial nerve disorders NEC	2	3.00	6
Dementia (excl Alzheimer's type)	11	2.55	28
Demyelinating disorders NEC	12	2.08	25
Disturbances in consciousness NEC	3236	2.96	9592
Disturbances in sleep phase rhythm	1	10.00	10
Dyskinesias and movement disorders NEC	143	3.08	440
Dystonias	14	1.86	26
Encephalitis NEC	3	2.00	6
Encephalopathies NEC	3	4.00	12
Encephalopathies toxic and metabolic	0		2
Eye movement disorders	14	1.21	17
Facial cranial nerve disorders	587	1.45	854
Generalised tonic-clonic seizures	22	3.55	78
Headaches NEC	16896	4.68	79069
Hydrocephalic conditions	1	11.00	11
Hypoglossal nerve disorders	1	5.00	5
Increased intracranial pressure disorders	6	9.00	54
Intellectual disabilities	1	9.00	9
Lumbar spinal cord and nerve root disorders	44	3.75	165
Memory loss (excl dementia)	163	3.38	551
Mental impairment (excl dementia and memory loss)	242	3.56	861
Migraine headaches	1689	4.29	7248
Mixed cranial nerve disorders	1	1.00	1
Mononeuropathies	35	2.91	102
Motor neurone diseases	0		1
Multiple sclerosis acute and progressive	40	2.58	103
Muscle tone abnormal	14	3.14	44

Myelitis (incl infective)	20	3.20	64
Narcolepsy and hypersomnia	57	3.46	197
Nervous system cysts and polyps	0		1
Nervous system disorders NEC	8	6.50	52
Neurologic visual problems NEC	13	1.92	25
Neurological signs and symptoms NEC	6599	3.63	23971
Neuromuscular disorders NEC	22	3.05	67
Neuromuscular junction dysfunction	8	1.75	14
Olfactory nerve disorders	274	2.33	639
Optic nerve disorders NEC	19	2.16	41
Paraesthesias and dysaesthesias	3987	3.58	14281
Paralysis and paresis (excl cranial nerve)	205	3.04	623
Parkinson's disease and parkinsonism	20	9.25	185
Partial complex seizures	8	3.88	31
Partial simple seizures NEC	0		8
Peripheral neuropathies NEC	73	3.00	219
Seizures and seizure disorders NEC	509	3.40	1732
Sensory abnormalities NEC	1765	3.02	5330
Sleep disturbances NEC	3	16.00	48
Speech and language abnormalities	140	3.37	472
Spinal cord and nerve root disorders NEC	11	2.82	31
Structural brain disorders NEC	4	8.75	35
Transient cerebrovascular events	99	3.91	387
Tremor (excl congenital)	937	9.91	9288
Trigeminal disorders	43	2.98	128
Vertigos NEC	1	2.00	2

Table 3: Parkinson's Disease

	Pfizer	Ratio	AstraZeneca
Parkinson's disease and parkinsonism	20	9.25	185
Freezing phenomenon	7		152
Parkinson's disease	3		15
Parkinsonian gait	1		0
Parkinsonism	4		10
Reduced facial expression	5		7
Vascular parkinsonism	0		1
Tremor (excl congenital)	937	9.91	9288
Action tremor	1		2
Asterixis	0		1
Essential tremor	3		5
Head titubation	5		15
Intention tremor	0		1
Postural tremor	0		1
Resting tremor	2		5
Tremor	926		9258

Another striking imbalance found in the analysis of “Nervous Disorders” of Table 2 was sleep disturbance. This is of interest because sleep disorders are a hallmark symptom of a genetically transmitted prion disease called Fatal Familial Insomnia. A detailed analysis of neurologically characterized sleep disturbance reactions is disclosed in Table 4. The data indicate there were 4 sleep disturbance or sleep phase rhythm reactions in the reports pertaining to the Pfizer vaccine versus 58 reactions in reports pertaining to the AstraZeneca vaccine (p=0.003).

Table 4: Sleep Disorders

	Pfizer	Ratio	AstraZeneca
Disturbances in sleep phase rhythm	1	10.00	10
Advanced sleep phase	0		1
Circadian rhythm sleep disorder	0		5
Delayed sleep phase	0		1
Irregular sleep phase	0		1
Irregular sleep wake rhythm disorder	1		1
Non-24-hour sleep-wake disorder	0		1
Sleep disturbances NEC	3	16.00	48
Microsleep	0		2
Periodic limb movement disorder	0		1
Sleep deficit	2		45
Sudden onset of sleep	1		0

Discussion

The current analysis was performed on COVID vaccine adverse reactions reported through the UK's Yellow Card system. While analysis is challenging a clear signal of a specific prion disease, Parkinson's disease, was found as discussed below. The findings are consistent with knowledge of the spike protein and its nucleic acid sequence [3-7], well accepted pathophysiology of prion disease, and animal toxicity data in monkeys [8]. The findings in this paper represent an urgent warning to halt mass immunization with COVID vaccines until proper safety studies are complete. Alternative vaccines like the Measles Mumps Rubella (MMR) vaccine should be explored for those desiring immunization against COVID-19 outside of clinical trials [4].

Analysis of spontaneous reporting data, as found in the Yellow Card system is limited for several reasons including the historical finding that spontaneous reporting under reports adverse events 95% of the time. Only 5% of drug adverse events are typically reported [9]. These figures on reporting of adverse events pertain to acute adverse events, essentially none of the adverse events occurring years or decades after administration of a pharmaceutical are ever reported. Analysis of the adverse events that are reported may be difficult to interpret, outside a controlled clinical trial, since it is often difficult to know the expected rate of a specific event in the recipient population.

The current study attempted to avoid previous problems associated with analysis of spontaneous adverse event reports by comparing reports between groups receiving different COVID vaccines. In this case those receiving the Pfizer COVID vaccine acted as the controls for those receiving the AstraZeneca COVID vaccine and visa versus. The fact that mass administration of both vaccines was started within days of each other worked in favor of the analysis as did the fact that there was an acute shortage of vaccines. People wanting a COVID vaccine would likely be forced to take what was available and not allowed much choice. These factors as well as government policies on what populations would be offered the vaccine first may have helped minimize demographics differences relating to which vaccine was received, at least in regards to age and sex. However, this is only theoretical since demographic data pertaining to use of specific vaccines was not readily available on the internet at the time this paper was written.

The data shows that that there are more adverse reactions reported for the AstraZeneca vaccine than for the Pfizer vaccine. On a whole there are 3.55 time more adverse reactions and 2.78 times more reports for the AstraZeneca vaccine than for the Pfizer vaccine. This may be explained in part by the number of vaccine doses administered but this information was not readily available. However, it is also possibly that there may be more acute reactions to the AstraZeneca vaccine. On average there were 3.63 adverse reactions per report for the AstraZeneca vaccine compared to 2.84 adverse reactions per report for the Pfizer vaccine. Demographics of the recipients and also the reporters (academic versus community clinicians) may also account for some of the differences.

The goal of this research was to determine if there was an early signal of prion disease. Because of the differences in vaccine composition [4] it was hoped that differences between vaccine groups may manifest early enough to create a signal. The analysis was specifically geared to look for evidence of a few prion diseases. No analysis was performed for non prion diseases such as autoimmune diseases or clotting diseases for example. The prion diseases of interest included: ALS, frontotemporal lobar degeneration, Alzheimer's disease, CJD, Parkinson's disease, and Fatal Familial Insomnia. Unfortunately, many of these prion diseases are characterized by non specific neurological and psychological symptoms [10]. There is overlap of symptoms between prion diseases making a definitive diagnosis slow at times.

Prion disease may take years or decades to manifest from onset however there were several reasons to hope that a signal may be detected within months of the immunization. First it was believed that there was a pool of people with either subclinical prion disease or mild prion disease that had not been correctly diagnosed. One theory is that COVID vaccines may accelerate disease progression causing these undiagnosed patients to have frank disease that is rapidly diagnosed after immunization.

A second reason to believe that a signal could be detected soon after immunization relates to knowledge of the spike protein. It is believed that the spike protein and its nucleic acid sequence may be a complex bioweapon capable of inducing prion disease by several different mechanisms. The mRNA nucleic acid may cause certain intrinsic proteins like TDP-43 and FUS to fold into prions which eventually leads to disease [3,4]. The spike protein also has a prion like region [5] which may catalyze a chain reaction and eventually lead to prion disease. However, a third group published data [6] that the spike protein may cause proteins including prions already in cells to aggregate, forming Lewy Bodies for example, and causing relatively rapid cell death. It is this third method that could allow fairly rapid detection of prion disease after immunization.

The current analysis showed a specific signal for an increased risk of Parkinson's disease. There were 20 Parkinson's disease reactions reported with the Pfizer vaccine and while 71 reactions (3.55 x 20) were expected in the AstraZeneca reports, there were 185 reactions actually reported (p=0.000024). The analysis was able to detect this signal because adverse event reports were filed

disclosing a very disease specific, pathognomonic, symptom “Freezing Phenomenon” which made up the bulk of the Parkinson’s disease reports. It is not clear if the reports were primarily related to new onset Parkinson’s disease or worsening of a previously diagnosed patient. The signal is supported by a proportionally similar imbalance in reports of a more sensitive, but less specific symptom of Parkinson’s disease, tremor (Table 3). A total of 937 tremor reactions were reported for the Pfizer vaccine and while 3,326 reactions (9.37 x 3.55) were expected to be reported for the AstraZeneca vaccine, a total of 9,288 reactions were reported (p=0.00001). The net effect is that the clinical relevance could be logs in magnitudes higher than the reports of Parkinson’s disease even after adjusting approximately 20-fold for under reporting [9].

Many but not all cases of Parkinson’s disease are believed to be caused by prion disease [11]. It is believed that α -synuclein aggregates in the substantia nigra of the brain in Parkinson’s disease patients causing the formation of Lewy Bodies. The relation of Lewy Bodies to Parkinson disease provides strong bio plausible support for a causal effect with this signal because infections of monkeys [8] with the SARS-CoV-2 virus lead to development of Lewy Bodies. The relative rapid onset of Parkinson’s disease symptom after immunization may be explained by the vaccine derived spike protein’s heparin binding site. One group [6] showed that the spike protein heparin binding site binds “to a number of aggregation-prone, heparin binding proteins including $A\beta$, α -synuclein, tau, prion, and TDP 43 RRM. These interactions suggests that the heparin-binding site on the S1 protein might assist the binding of amyloid proteins to the viral surface and thus could initiate aggregation of these proteins and finally leads to neurodegeneration in brain.”

Another prion disease with some more unique features is Fatal Familial Insomnia. It is a rare genetic prion disorder characterized by an inability to sleep [12]. It was noted in the analysis of Nervous Disorder data of Table 2 and Table 4 that there was an imbalance of sleep reports between vaccine groups. There were 4 sleep reactions reported for Pfizer’s vaccine and while 14 reactions (4 x 3.55) were expected in the AstraZeneca reports, a total of 58 reactions were reported (p=0.003). A rapid onset of difference between the two groups could be explained by the spike protein aggregating prion molecules already in the cells as discussed with Parkinson’s disease symptoms above.

The Yellow Card database does not provide good insight on possible risk of developing many different prion diseases as can be expected. There is however an highly statistical increase in Nervous Disorders and Psychiatric Disorders reactions reported for the AstraZeneca vaccine compared to Pfizer vaccine, Table 1. This imbalance suggests that there may be underlying differences in prion disorders other than Parkinson’s disease. Unfortunately most prion diseases have symptoms not specific to prion disorders and symptoms of different prion diseases overlap [10]. This fact delays diagnosis and, in some cases, the definitive diagnosis is delayed until post mortem autopsy.

The current analysis is not intended to indicate that one COVID vaccine is safer than another in regards to prion disease. One limitation of the analysis is that both vaccines may equally increase the rates of one or more prion diseases and no difference will be detected in the Yellow Card database. Imbalances in rates of reactions detected in this analysis can be explained by the striking differences in composition of the two vaccines allowing one vaccine to induce some prion diseases quicker. The AstraZeneca adenoviral virus based COVID vaccine may concentrate in the gastrointestinal system [4] to a greater extent leading to faster transport of the spike protein via the vagus nerve to the brain [13]. By contrast over the long run the Pfizer mRNA vaccine may induce more TDP-43 and FUS to form prions [3] and lead to more prion disease.

This analysis should serve as an urgent warning to those mindlessly following advice of politicians and public health officials regarding COVID immunization. Both groups have had a dismal record of protecting the health of the public. US public health officials ran the infamous Tuskegee syphilis study allowing people of color to die from syphilis because the public health officials refused to inform the patients, they had syphilis and that a treatment existed. There have been numerous less well-known experiments on prisoners and other vulnerable populations in North America. The infamous Nazi physician Josef Mengele was a public health doctor. Founding father politicians in the US championed civil liberties while owning slaves and running extermination campaigns against Native Americans. The current policy to immunize the masses with COVID vaccines before proper safety studies are complete is likely to follow in the steps of the previously mentioned historical acts.

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V-Safe Database Confirms COVID Jab Hazards



Aluminum in Vaccines Linked to Persistent Asthma

STORY AT-A-GLANCE

- V-Safe, a database managed and monitored by the U.S. Centers for Disease Control and Prevention, is a voluntary “after vaccination health checker” deployed to collect data on those who got the COVID jab. For the past 15 months, the Informed Consent Action Network (ICAN) have fought a legal battle to get the CDC to release the V-Safe data
- The V-Safe data confirms suspicions that the COVID jabs are dangerous in the extreme
- Of the 10 million people enrolled in V-Safe, 7.7% (770,000 people) required medical care after getting the shot and 25% (2.5 million people) missed work or school or suffered a serious side effect that affected their day-to-day life
- The V-Safe data also shows a massive immune reaction signal. Four million people – 40% – reported joint pain. Two million, or 20%, reported “moderate” joint pain and 400,000, 4%, classified the pain as “severe”
- The formula the CDC uses to trigger a safety signal is seriously flawed, as the more dangerous a vaccine is, the less likely it is that a safety signal will be triggered. Still, even using that flawed formula, “death” meets all three safety signal criteria and should have been flagged, yet the CDC has taken no action. Congress has a duty to investigate the CDC’s failure to monitor safety

In an October 4, 2022, Fox News interview, civil rights attorney Aaron Siri, legal counsel for the Informed Consent Action Network (ICAN), shared shocking V-

Safe data obtained from the Centers for Disease Control and Prevention after multiple legal demands.

For more than 15 months, the CDC fought to not release any of these data. ICAN had to file two lawsuits and multiple appeals to get the CDC to hand it over, and when you see the data, you understand why.

What Is V-Safe?

By now, many know about the existence of the Vaccine Adverse Events Reporting System (VAERS), a publicly available database for vaccine adverse event reports, jointly managed by the CDC and the U.S. Food and Drug Administration.

V-Safe is another database managed and monitored by the CDC. It's a voluntary "after vaccination health checker" deployed to collect data on those who got the COVID jab.

Anyone in the United States can enroll in V-Safe, using their smartphone, after receiving any dose of COVID-19 vaccine. Parents can also enroll their underage children to keep tabs on health effects. During the first week after each dose, V-Safe will send you a daily text message asking for details on your health and well-being. After that, check-ins are sent out on an intermittent basis.

What Does V-Safe Show?

So, what does the V-Safe data, which the CDC was so reluctant to release, actually show? Are the COVID jabs as harmless as they're claimed to be? Far from it.

As detailed by Siri, out of the 10 million people enrolled in V-Safe, 7.7% (770,000 people) required medical care after getting the shot and 25% (2.5 million people) missed work or school or suffered a serious side effect that affected their day-to-day life.



As noted by Siri, these numbers are extraordinary. One of the key messages we were given was that while COVID was not a significant threat to all people, getting the shot would limit the number of hospitalizations, deaths and days missed from work due to infection.

Well, we now see that 25% of those who got the shot ended up missing work or school because of the side effects, and 7.7% needed medical care. That's staggering, and completely nullifies the CDC's argument that everyone should get the shot, whether they're in a high-risk category or not, and whether they've already had COVID-19 or not.

Massive Immune Reaction Signal

The V-Safe data also show a massive signal with regard to the jab causing an adverse immune reaction. Four million people, out of the 10 million – 40% –

reported joint pain. Two million, or 20%, reported "moderate" joint pain and 400,000, or 4%, classified the pain as "severe."

As noted by Siri, joint pain is often a sign of an immune reaction and could be cause for concern when it occurs after vaccination, especially when you consider that the shots were supposed to protect the elderly, who already tend to have joint problems.



The V-Safe database also reveals that even though fewer doses of Moderna were registered, it's mRNA shot accounts for a larger portion of negative effects, compared to Pfizer's jab.

ICAN has now built a [searchable dashboard of this V-Safe data](#).² In the video below, Albert Benavides (who goes by the name Welcome the Eagle 88), an RCM expert, data analyst and auditor, provides a tour and overview of how to use the dashboard, including some of its strengths and weaknesses.

[Video Link](#)

Why Did the CDC Fight to Keep V-Safe Data Hidden?

In an October 5, 2022, Substack article, Steve Kirsch commented on the V-Safe data dump:³

"V-Safe is a voluntary safety monitoring program put in place by the CDC to monitor adverse reactions after people take a vaccine. The V-Safe data shows that 33.1% of the people who got the vaccine suffered from a significant adverse event and 7.7% had to seek professional medical care.

These are extraordinary numbers. They clearly show the vaccines are unsafe, that the CDC deliberately hid this information from the American public, and that the drug companies falsified the data in the trials ... the CDC is not protecting the American people. They are protecting the manufacturers of the vaccines."

As noted by Kirsch, side effects could be either under- or overestimated in V-Safe, or both, as some might ignore V-Safe requests to answer questions, and others may only sign up or be incentivized to fill out the questionnaire if they suffer a problem.

Additionally, the options for reporting a side effect are predefined and very generic, so people might be experiencing effects that didn't fit any of the predefined categories of injury. Importantly, death is not reportable to V-Safe, as dead people cannot use their phones. So, we have no way of knowing how many of these 10 million registered V-Safe users have died.

However, "Whether the rates in V-Safe is over-reported or under-reported is a red herring," Kirsch says. "The issue that should concern everyone is the CDC concealed all the V-Safe data from everyone the entire time."

In addition to spending taxpayer dollars to prevent the release of this information – which we have every right to – the CDC also stopped promoting use of V-Safe around May 2021, mere months into the COVID jab rollout. As noted by Kirsch, this was probably because "it became crystal clear that it was accumulating data that showed the vaccines were unsafe."

CDC Ignored Clear 'Death' Signal

In an October 3, 2022, article,⁴ Kirsch also points out that the formula the CDC uses to trigger safety signals — described in its VAERS standard operating procedures manual⁵ — is "seriously flawed." Could that be intentional as well?

In July 2021, Matthew Crawford published a three-part series^{6,7,8} on how the CDC was hiding safety signals. In August 2021, Kirsch also informed the agency of these problems, but was, of course, ignored. Still, "even using their own flawed formula, 'death' should have triggered a signal," he writes. Yet the CDC did not notify the public of what they'd found. Here's an excerpt from Kirsch article:⁹

"If you want objective proof of total ineptitude by the CDC and the medical community in monitoring the safety of the COVID vaccines, this is the article you've been waiting for. We use their numbers and their own algorithm and show that it should have triggered a safety signal for 'death.'

There is no way they can argue their way out of this one ... We need look no further than the vaccine safety signal monitoring formula¹⁰ used by the CDC to prove our point ...

The formula the CDC uses for generating safety signals is fundamentally flawed; a 'bad' vaccine with lots of adverse events will 'mask' large numbers of important safety signals ... Let me summarize the key points for you in a nutshell:

PRR [proportional reporting ratio] is defined on page 16 in the CDC document¹¹ as follows ...

Table 4. Calculation of Proportional Reporting Ratio (PRR)

	Specific AE	All other AE
Specific vaccine	A	B
All other vaccines	C	D

$$\text{PRR} = \frac{[a/(a+b)]}{[c/(c+d)]}$$

*A 'safety signal' is defined on page 16 in the CDC document as a PRR of at least 2, chi-squared statistic of at least 4, **and** 3 or more cases of the AE [adverse*

event] following receipt of the specific vaccine of interest. This is the famous 'and clause.' Here it is from the document:

2.3.1 Proportional Reporting Ratio (PRR)

CDC will perform PRR data mining on a weekly basis or as needed. PRRs compare the proportion of a specific AE following a specific vaccine versus the proportion of the same AE following receipt of another vaccine (see equation below Table 4). A safety signal is defined as a PRR of at least 2, chi-squared statistic of at least 4, and 3 or more cases of the AE following receipt of the specific vaccine of interest.

CDC will apply appropriate comparator vaccines (e.g., adjuvanted vaccines like Shingrix and/or Fludac for adjuvanted COVID-19 vaccines) and adjust for severity and age distributions where applicable.

Table 4. Calculation of Proportional Reporting Ratio (PRR)

	Specific AE	All other AE
Specific vaccine	A	B
All other vaccines	C	D

$$\text{PRR} = \frac{[a/(a+b)]}{[c/(c+d)]}$$

Only someone who is incompetent or is deliberately trying to make the vaccines look safe would use the word 'and' in the definition of a safety signal. Using 'and' means that if any one of the conditions isn't satisfied, no safety signal will be generated. As noted below, the PRR will rarely trigger which virtually guarantees that most events generated by an unsafe vaccine will never get flagged.

The PRR value for the COVID vaccines will rarely exceed 1 because there are so many adverse events from the COVID vaccine because it is so dangerous (i.e., B in the formula is a huge number) so the numerator is always near zero. Hence, the 'safety signal' is rarely triggered because the vaccine is so dangerous."

A Fictitious Example

Using a fictitious vaccine as the example, Kirsch goes on to explain how an exceptionally dangerous vaccine will fly under the radar and not get flagged, thanks to the CDC's flawed formula:¹²

"Suppose we have the world's most dangerous vaccine that causes adverse events in everyone who gets it and generates 25,000 different adverse events, and each adverse event has 1,000 instances.

That means that the numerator is 1,000/25,000,000 which is just 40 events per million reported events. Now let's look at actuals for something like deaths. For all other vaccines, there are 6,200 deaths and 1 million adverse events total.

Since 40 per million is less than 6,200 deaths per million, we are not even close to generating a safety signal for deaths from our hypothetical vaccine which killed 1,000 people in a year ... The point is that a dangerous vaccine can look very 'safe' using the PRR formula."

Calculating Death Signal for COVID Jab

Next, Kirsch calculates the PRR (proportional reporting ratio) for death for the COVID jab, using VAERS data and the CDC's definitions and formula.

Even using the CDC's flawed formula, 'death' meets all three safety signal criteria and should have been flagged, yet the CDC has taken no action. Congress has a duty to investigate the CDC's failure to monitor safety.

As of December 31, 2019, there were 6,157 deaths and 918,717 adverse events total for all vaccines other than the COVID shot. As of September 23, 2022, there were 31,214 deaths and 1.4 million adverse events total for the COVID jabs. Here's the formula as explained by Kirsch:¹³

*" $PRR = (31,214/1.4e6) / (6,157/918,717) = 3.32$, which exceeds the required threshold of 2. In other words, **the COVID vaccine is so deadly that even with all the adverse events generated by the vaccine, the death signal did not get drowned out!***

*But there is still the chi-square test. **Chi-square test results were 18,549 for 'death,' which greatly exceeds the required threshold of 4.** The CDC chi-square test is clearly satisfied for the COVID vaccine. Because the death signal is so huge, it even survived the PRR test.*

This means that even using the CDCs own erroneous ... formula, all three criteria were satisfied:

1. $PRR > 2$ [*PRR greater than 2*]: It was 3.32

2. $Chi\text{-square} > 2$ [*Chi-square greater than 2*]: It was 18,549

3.3 or more reports: There were over 31,214 death reports received by VAERS ... which is more than 3

A safety signal should have been generated but wasn't. Why not? ... Does anyone care? Hundreds of thousands of American lives have been lost due to the inability of the CDC to deploy their own flawed safety signal analysis ...

It's been known since at least 2004 that using reporting odds ratio (ROR) is a better estimate of relative risk than PRR.¹⁴ I don't know why the CDC doesn't use it."

CDC Cannot Claim It Didn't Know

The CDC is responsible for monitoring both VAERS and V-Safe, and between these two databases, there's no possible way they could ever say they didn't know the shots were harming and killing millions of Americans.

The CDC also has access to other databases, including the Defense Medical Epidemiology Database (DMED), which (before it was intentionally altered¹⁵) showed massive increases in debilitating and lethal conditions, including a tripling of cancer cases.¹⁶

The findings in these databases have never been brought forward during any of the CDC's Advisory Committee on Immunization Practices (ACIP) meetings or the FDA's Vaccines and Related Biological Products Advisory Committee (VRBPAC) meetings, at which members have repeatedly voted to authorize the jabs to people of all ages, including infants and pregnant women.

If the CDC was in fact monitoring these databases, as required, there's simply no way they could have continued to authorize these shots based on the data. Is that why these data were never reviewed? Probably. ACIP and VRBPAC members, for whatever reason, simply didn't want to know the truth. But the CDC has known all along, and there's no excuse for not sharing and acting on that data.

Help Spread the Word

The media are ignoring all of this – the V-Safe data and the CDC's failure to act on a clear safety signal (and the signal being death, of all things!), even when using a formula that was flawed from the start. So, spread the word. Everyone needs to know these facts. It's not speculation, it's the CDC's own data.

The CDC needs to explain why they spent our tax dollars to fight the release of the V-Safe data for 15 months, and why they didn't halt the shots when a "death" signal was evident. The mainstream press, members of Congress, the medical community and Universities also need to explain why they refuse to investigate these CDC data. To that end, here are a few suggestions for how you can help:

Support Sen. Ron Johnson, currently the only senator willing to investigate the truth of the COVID jabs.

Write or call your members of Congress and ask them to investigate the CDC's safety monitoring. As noted by "You simply cannot have a safety agency not be able to monitor safety."

Contact your local newspaper and urge them to investigate and report on the V-Safe data, the VAERS data and CDC's failure to act when a safety signal was detected.

Share the data on social media and ask why no one in the media, Congress, academia or medical community is investigating these matters.

Share this information with your doctor and members of the medical community.

Also share it with university administrators, and ask them to explain how and why, in light of these facts, they mandating COVID shots for their students.

From: Gregory Lawson
Sent: 11/2/2022 7:59:57 PM
To: DOH Secretary's Office
Cc:
Subject: Covid vaccines for children

External Email

If they are made mandatory, I know all of my grandchildren and many of my friends will be moving out of WA. This includes several small businesses. Their reasons are that they see that these decisions are not based on science or logic. They are political and financial.

Greg Lawson
Camano Island

From: Malisa DeOchoa
Sent: 10/31/2022 11:04:12 PM
To: DOH Secretary's Office
Cc:
Subject: Re: Injection Choice

External Email

I implore you to vote AGAINST adding this "vaccine" which really isn't a vaccine to the childhood schedule of required vaccines. At this point it is clearly evident that it is dangerous and children don't die from this illness anyway. The survival rate is 99.99996%.

From: Jamie Dreyer
Sent: 11/1/2022 11:10:15 AM
To: DOH WSBOH
Cc:
Subject: Say NO to Covid Shot Mandates for Our Children!

External Email

To whom it may concern,

I am writing you today to voice a public opinion against adding this experimental Covid shot requirement for Washington's school kids. This shot does not stop infection, transmission, hospitalization or death and it is absolutely not safe or effective for everyone. Our children do not benefit from this experimental injection. It is all risk.

Please stop this arbitrary and capricious mandate from entering our Washington schools!

Sincerely,

Jamie Dreyer

From: Matthew Minnick
Sent: 10/31/2022 9:36:56 AM
To: DOH WSBOH
Cc:
Subject: Covid vaccine

External Email

I am writing to voice my concern about the BOH adding the Covid vaccine to the list of childhood required vaccinations to attend school in WA state. I oppose this action, and strongly disagree that this is beneficial to the healthy immune systems of our children. There is simply not enough data to prove this is safe or effective, especially for children.

Thank you,
Michaella Minnick

From: Anya Weil
Sent: 11/2/2022 9:16:55 PM
To: DOH WSBOH
Cc:
Subject: Oppose Vaccine mandates

External Email

To whom it may concern

I oppose liability-free COVID-19 products to be mandated for our kids. I support parent choice in medical decisions, not mandates..

Anya Weil

. Thanks to a matching gift from longtime Fred Hutch supporter John Delo, any gift you give by November 29 will be doubled — up to \$100,000

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With help from generous friends like you, our scientists have already made progress toward curing some of the deadliest cancers, but there is more to be done.

We must keep moving forward.

That's why the opportunity to double your gift and propel our scientists to new discoveries is so important. Remember, whatever you give by November 29 will go twice as far to help find cures and save more lives

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Don't miss this great opportunity!

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Fred Hutchinson Cancer Center is an independent organization that serves as UW Medicine's cancer program.

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From: Gregory Lawson
Sent: 11/2/2022 7:57:58 PM
To: DOH WSBOH
Cc:
Subject: Covid Vaccines for children

External Email

Please do not make these mandatory or highly recommended. There is no substantial science to show that these are beneficial in children and they may even have a higher risk vs benefit ratio. And children are already at such a low risk of dying from covid. Vaccines for children do not make sense.

Greg Lawson
Camano Island

From: Kay Hibbard
Sent: 11/2/2022 10:55:56 AM
To: DOH WSBOH
Cc:
Subject: COVID vaccines for kids

External Email

I oppose COVID vaccine mandates for all kids. The virus is not dangerous for kids and should not be one of the required vaccines for school. Parents need to make the informed medical choice for their children, not the government. Many health problems have been reported as a result of receiving COVID vaccines.

Please hear the voice of the people in Washington state who are urging you to oppose all COVID vaccine requirements for school aged children.

Sincerely,
Kay Hibbard

Sent from my iPhone

From: Connie J
Sent: 11/1/2022 12:37:26 PM
To: DOH WSBOH
Cc:
Subject: Experimental injections for children

External Email

Please read all public comments regarding adding Covid-19 EUA injections to the childhood vaccines requirements for attending public schools before making a decision.

No child should need an EUA injection to attend school. This COVID-19 injection will cause deliberate induced harm (according to the VAERS reports) if mandated! Parents should be free to either vaccinate or not vaccinate their children. The current EUA injection is a "gene therapy" injection, as per Moderna and Pfizer, which does not stop transmission or protect against infection per their own admission.

I am pro-medical freedom. No medical treatment should be mandated.

The new bivalent booster vaccines have never been tested in humans at all, neither adults nor children. We do not have enough safety documentation to mandate any of these so-called vaccines.

I ask you to vote "No" on adding the COVID-19 injections to the Washington State list of required vaccines to attend public schools.

I've heard from several concerned parents that they will do either homeschooling or relocate to another state than to let their precious children have these shots.

There are staggering reports of deaths and injuries from these already.

Thank you,
Connie Miyata

From: Haley Howry
Sent: 11/1/2022 2:14:29 AM
To: DOH WSBOH
Cc:
Subject: Immunizations

External Email

To whom it's concerned;
To even consider adding the covid jab to the "required vaccinations" for public schools is outright evil. If this is brought into law you will have a huge issue on hand.

Signed,
A very concerned parent

From: Keith K
Sent: 11/1/2022 9:04:58 PM
To: DOH WSBOH,DOH Secretary's Office,Kwan-Gett, Tao (DOH),Sherls-Jones, Jamilia J (DOH),Drummond, Heather M (DOH)
Cc:
Subject: Vaccine Advisory Committee - PUBLIC COMMENT

External Email

To Whom It May Concern-

With every fiber of my being, I OPPOSE INCLUSION OF COVID VACCINES AS COMPULSORY IN ANY MANNER/ARENA. The FDA & CDC's ineptitude, blatant disregard for crystal clear data, and cooperation with corporate interests has demonstrated the intent of the earlier ACIP vote has nothing to do with the best interest of children's health OR the nation as a whole. At this point, based on all the data and all other nefarious truths that have come to light over recent years - there is no rational argument to the contrary. Frankly, the VAC/BOH/DOH even considering any kind of mandate and/or recommendation to inject children with this proven ineffective "vaccine" is preposterous.

Children are not in mortal peril from a Covid infection - period. The data could not be more clear. Children will fully recover from natural covid infection 99.9994% of the time. The "vaccine" does not stop transmission. Pfizer has now acknowledged - under oath - they never tested the vaccine for transmission prevention. However, this is not what the public was told by the purveyors & proponents of the "vaccine". The public was demonstrably deceived, manipulated, and coerced. Not to mention, those who spoke against the vaccination narrative were demonized, fired, and alienated. So, what purpose does this ineffective drug provide? Other than enriching corporations, removing healthcare autonomy from US Citizens, and as a tool for the media to sow division.

Another lie the public was sold.....99% effective. You can't get Covid if you're vaccinated. OK, it's 85% effective. Wait, 75% effective. OK you need to get a booster. Wait, you need to get another booster. Ok it doesn't stop transmission. Pure insanity! - and who is making record profits? Big Pharma. Does the FDA & CDC have members that were prior Board Members at Big Pharma? If the Covid "vaccine" makes it onto the vaccination schedule, does this eliminate all vaccine injury liability from the producers? With anything in life - you show me the benefit and I can show you the motive. If the vaccine has been proven to be ineffective in every way - what is the remaining benefit? The answer is obvious.

The CDC and FDA have lost all credibility - seems the VAC/BOH/DOH want to follow in their footsteps. If the vaccination schedule is updated to include any Covid "vaccine" I can assure you parents across this state & nation will be outraged. Which will lead to additional societal stress - a completely avoidable situation. The correct path is to allow this choice to remain with a family - not with unelected individuals in bureaucratic agencies.

Thank you,

Keith Kirby

From: kathy brody
Sent: 11/3/2022 9:40:42 AM
To: DOH WSBOH
Cc:
Subject: Children are not at risk

External Email

If you vote for the children to be vaccinated you will be making a huge mistake. I watched the zoom meeting Feb. 17. These expert presenters were too connected to government and organizations who are and who continue to profit from the wreckage this planned pandemic is inflicting. Widen your circle of information gathering, say to Senator Ron Johnson's experts, or to the countries who are gathering data and reporting more honestly than the USA. Changing our immune systems with jabs or RNA is destroying those immune systems. We are heading for further disasters. Here is what Scotland is finding. The unvaccinated will survive.

My post graduate work was in Epidemiology, I was a public health nurse, and my career was in Health Care Research.

Please let the parents decide for their own children, without discrimination for the unvaccinated. <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdailyexpose.uk%2F2022%2F03%2Frefuse-publish-covid-data-shows-fully-vaccinated-have-aids%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cd879a5730a794a23680608dabdba2422%7>

From: Garry Blankenship
Sent: 10/31/2022 1:17:01 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Jamilya.Sheris-Jones@doh.wa.gov, Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: mRNA injections on the pediatric schedule

External Email

Good Day All,

As a lifetime Washington State resident, now retired, I am commenting on the possibility of adding mRNA injections to the State pediatric schedule. I have done a deep dive into the "pandemic" and the experimental mRNA drugs. The question that must be answered is why. The possibility of children becoming hospitalized or dying from COVID is so statistically small, (below 1%), there is no benefit to be derived from the injections. Further, study data of the injected proves that the drugs do not stop infection, transmission, illness or death. While statistically small, adverse reactions to these drugs are innumerable and growing. Clearly documented adverse reactions are voluminous, but include; sudden adult death syndrome, young athletes in the prime of their lives dropping on fields and courts, coroners and morticians finding blood clots of unprecedented size and abundance, reproductive system disruption, immunity system degradation, autoimmune disorders, sharp rise in aggressive cancers and so many more. The risk of adverse reactions far exceeds the risk of the virus. I find it inconceivable that injecting children with these drugs would even be considered. These drugs have already killed more people than all other vaccines combined. Please feel free to disprove anything I have asserted here-in and please do not harm our children with these still experimental drugs.

Sincerely,

Garry Blankenship
Sequim, WA

From: Barbara Gallier-Bange
Sent: 11/2/2022 9:21:52 PM
To: DOH Secretary's Office
Cc:
Subject: Covid Vaccine

External Email



Hello,

I write to to you today to IMPLORE you to NOT add the Covid experimental mRNA shot to the list of school required immunizations. More and more data has become available and numerous studies have been conducted that now show this experimental mRNA shot is not providing the protection it was originally touted to. It DOES NOT prevent the transmission of Covid and it DOES NOT prevent a person from contracting it!

Our children are MORE AT RISK to contract myocarditis or some other ill-fated side effect from this shot than any false "protection" it was claimed to provide. We have lost all trust in the 3 letter agencies that were claiming to be for public health. THIS SHOT IS NOT FOR PUBLIC HEALTH AND SHOULD NOT BE ADDED TO THE IMMUNIZATION REQUIREMENTS FOR OUR CHILDREN.

PLEASE, PLEASE, PLEASE LET THE PARENTS DECIDE WHAT'S BEST FOR THEIR CHILDREN!!!

Sincerely,
A Very Angry and Exhausted Washingtonian Resident

From: Nancy Flint

Sent: 11/2/2022 5:52:57 PM

To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)

Cc:

Subject: Reason why I oppose the COVID-19 as a vaccination being a school requirement

External Email

To the WA Department of Health,

I am the grandmother of 3 school aged youth, 4, 8, and 14. Each one has been vaccinated because their parents made that decision...which is what parents are supposed to have the right to do.

As the daughter of a veteran who's family lived abroad while he was serving in the US Navy in Japan, I am not an "anti-laxer" - I can't even count how many shots I had in preparation for arriving there, and so many more while living there. Those inoculations were not new, were not rushed through the process had years of scientific results to follow back on to ease any concerns people may have had. It created a trust within the citizenry in our government, in our medical community.

I'm sad to say I no longer have that trust, for many reasons, which I won't go into in this letter - only to say - I understand the narrative you're all supposed to follow.

It wasn't that long ago when we were told to get the tax - it would prevent someone from getting COVID. FALSE - both my husband I have had the shots (boosters too) and we both "had Covid".

It wasn't that long ago when we were told it would stop the spread...FALSE - I got it from being around people WHO ALL were vaccinated. So did so many family members last Christmas. The Director of the CDC admitted this in January. CDC Director: Covid vaccines can't prevent transmission anymore (msn.com)

I have concern over the complete neglect that you, the medical community, our governing bodies show in the escalating numbers of young men, dropping dead for no reason. I have two athletic grandsons...I'm terrified for them. And nothing, no concern or even mention as to why this is happening. I'm not saying it's the vaccination, but at least find out if it is instead of ignoring it. But I can only guess why and I can only surmise that you don't care. It doesn't fit the narrative?

But here is my very personal reason - one that I hope I never have to see as mother again. While sitting down, folding laundry, my 30 year old daughter was enjoying a quiet afternoon when without any pre-warnings, had what we can only describe as a brain malfunction. She was frozen. She could not move any part of her body, even though her brain was telling her to move. When her husband found her in this frozen state, he touched her, and her body went into convulsive type actions, with her head shaking violently back and forth, and her arms and legs flailing like an octopus put into boiling water. I was called to come take care of my 4 year granddaughter while 911 took our daughter to the hospital.

After experiencing several of these episodes while in the hospital over a 36 hour timeline, they finally stopped. After MRI, CT scans, and other tests to ensure she had no brain tumor, the neurologist told us they could find no reason for what she experienced. She told us "her brain is perfect". So what happened?

In researching this, I found that this is happening to young women across our country...yet no one is talking about it...again why....because it doesn't fit the narrative?

I'm an angry mom, I'm a terrified mom that my daughter will have other episodes. I'm a worried grandmother and all I want is for you all to be transparent and make the admissions that you DON'T know everything this vaccination is doing and might be doing to our citizens, particularly our youth.

The vaccine has only been approved for emergency use only at this point. No other vaccines that are required to go to school are for emergency use ONLY. Also, since it is emergency use only that means the manufacturers of the vaccine are not held responsible if something was to happen to someone that experiences side effects, does that mean the Board of Health can be held responsible if you focus our children have the vaccine to attend school? Per our state's constitution and laws, we must send our children to school and not all parents are able to home school.

There are no long-term studies on the side effects of the covid vaccine and we don't know what kind of harm it could cause our children in the future. Pfizer tried to keep their list of side effects hidden for 75 years, but when the courts forced them to reveal them there were 9 pages worth of adverse effects from the vaccine. On the list includes auto-immune conditions, multitudinous heart issues, hemorrhaging, kidney disease, many syndromes relayed to other viruses and even anti-sperm antibodies. (See page 30 - <https://phmpt.org/wp-content/uploads/2021/11/5.3.6-postmarketing-experience.pdf>) As I stated earlier, we know that there is a risk for teens and young adults to get myocarditis and pericarditis from the vaccine and that children have died from taking the vaccine. <https://openvaers.com/covid-data/adverse-events-by-state> And a new Swiss study shows the COVID vaccine increase risk of myocarditis by 800 times in young adults. New Swiss Study: Covid Shots Increase Risk of Myocarditis by 800 TIMES in Young Adults - Becker News

Other facts we know: Kids are not dying from COVID, the percentage is less than 1%. <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-state-level-data-report/>

Lab studies show that mRNA vaccine DOES integrate itself into human cellular DNA, which means that the vaccine can permanently changes the DNA of affected cells, what does this mean to our kids? <https://www.mdpi.com/1467-3045/44/3/73>

The vaccine does not stop the spread of COVID nor does it prevent someone from getting COVID.

This is not a vaccine like the Measles, Mumps, Polio, Chicken Pox, and it shouldn't be required just like the flu shot is NOT required for schools.

This should be a parent decision on whether a child should take have the vaccine.

There has already been about 40K children removed from public schools within the last year, if you make the vaccine a requirement you are going to see thousands more unless they are granted an exemption.

The COVID cases are down, we are no longer in a pandemic and our governor has lifted all mask mandates and the state is no longer in a State of Emergency. Earlier in the year, TAG recommended NOT to make the COVID-19 vaccine a requirement to attend schools and I ask that you move forward with their recommendation.

Thank you for taking the time to hear my concerns and the concerns of many other Washington parents.

Without trying to sound flippant, I just want to say that we don't live in China or under a dictatorship where the government owns the children. Please do what is right for our children. Stop this mandate, take the time needed to really know what side affects can

happen, and educate people so parents can make this decision for their own children.
Nancy Flint
Gig Harbor, WA

From: karen graff
Sent: 11/1/2022 1:23:39 PM
To: DOH WSBOH
Cc:
Subject: Say no to adding covid vaccine to childhood schedule

External Email

Please do not add covid vaccine to childhood schedule. There is way too much controversy with it not being researched well enough to prove its safety as well as it definitely does not prevent transmission or infection.

Several of my vaccinated friends and family have had covid several times after vaccination. Most work around mostly vaccinated people.

I understand the covid emergency has been lifted from Washington state and that the vaccine is still emergency use authorized only - I do not consider that this is informed consent.

I know few children that even had any symptoms or even got sick if tested positive. I am extremely concerned about the very high risk of myocarditis cases and sudden deaths of vaccinated young people.

Please do not do that to our children and our future.
Karen Graff - grandmother.

From: Rich and Nancy Lindsley
Sent: 10/22/2022 7:41:43 PM
To: DOH WSBOH
Cc:
Subject: Covid 19 vaccinations for children

External Email

I am voicing my total opposition to adding the Covid vaccination to children's slate of immunizations to attend school! It is unproven and harmful to our children's health!
Nancy Lindsley

From: karen graff
Sent: 11/1/2022 1:19:36 PM
To: DOH Secretary's Office
Cc:
Subject: No to covid added to childhood schedule

External Email

Please do not add covid vaccine to childhood schedule. There is way too much controversy with it not being researched well enough to prove its safety as well as it definitely does not prevent transmission or infection.

Several of my vaccinated friends and family have had covid several times after vaccination. Most work around mostly vaccinated people.

I understand the covid emergency has been lifted from Washington state and that the vaccine is still emergency use authorized only - I do not consider that this is informed consent.

I know few children that even had any symptoms or even got sick if tested positive. I am extremely concerned about the very high risk of myocarditis cases and sudden deaths of vaccinated young people.

Please do not do that to our children and our future.
Karen Graff - grandmother.

Sent from my iPad

From: Julie Matthews
Sent: 11/1/2022 12:51:07 PM
To: DOH Secretary's Office
Cc:
Subject: No COVID shot mandate , please

External Email

To whom it may concern,

I am in great opposition of this advisory committee recommending that the liability-free COVID-19 products being mandated for my children.

Thank you for receiving my unwavering request!

Blessings, Julie Matthews (mother of 5 public school age children)

From: CindyAnn Haflich
Sent: 10/31/2022 4:21:07 PM
To: DOH WSBOH
Cc:
Subject: Covid shots for children

External Email

Please note for the record that I strongly oppose any mandate or recommendation that anyone, especially children take the Covid-19 injection. It is useless and corrupt. If mandated you will be tied to the corrupt.

Sincerely
Cindy A Haflich

Powered by Cricket Wireless

From: Oksana Pitchenko
Sent: 11/1/2022 10:30:49 AM
To: DOH WSBOH
Cc:
Subject: Comment on vaccine recommendation for kids

External Email

To whom it may concern.

Hello, my name is Oksana and we have two beautiful children. We would like to comment on the bill and say that we are strongly disagree with the Washington vaccine immunization against COVID-19.

First there is no proven data to support COVID vaccine effectiveness.

Second of all there been recorded a lot of injuries since the shot.

Third it's decision should parent make not mandated.

Fourth of all my there is no liability of those manufacturing companies, so if any of injuries occurred, who is going to be responsible?

We strongly asking you to stop this bill that is mandating kids to get a shot agains COVID-19! We do not want liability free COVID-19 products or vaccine!

Sincere Oksana

Sent from my iPhone

From: Gina Messenger
Sent: 11/3/2022 6:07:47 PM
To: DOH WSBOH
Cc:
Subject: Vaccine Requirements for Children

External Email

Dear Sirs:

Please do not mandate COVID vaccines for children. WE know there is no reason to give this group the vaccine as they have little to no risk from Covid. Older children are having serious reactions that are life threatening like Myocarditis. This is still an experimental treatment and not appropriate to force on children. Parents deserve authority over their children's health care decisions. WE have seen from all the fully vaccinated and boosted people who got COVID were not protected like promised and science has demonstrated the highly boosted were more prone to death from COVID.

Please cease and desist from trying to force these shots on children. It is unjustifiable. It will only result in more families abandoning public schools and health programs.

Sincerely yours, Gina Messenger
Shoreline WA

From: Drew Hulscher
Sent: 10/31/2022 7:16:51 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccine

External Email

Hi there,
Please do not make the Covid vaccines mandatory for kids to attend school. We all know they do not stop transmission of the virus so there is no reason.
Thanks
Laurie Hulscher
Sent from my iPhone

From: Joanne Edinberg
Sent: 11/3/2022 10:19:48 AM
To: DOH WSBOH
Cc:
Subject: Please-no Covid shots for children

External Email

Please do not add the COVID-19 shots to the childhood immunization schedule. There is simply no evidence that they are necessary. Parents can choose to immunize their children if they want.

Thank you for your thoughtful consideration of this decision.

Joanne

"A moment of self-compassion can change your entire day. A string of such moments can change the course of your life."
-Christopher Germer

From: Carrie Lippold
Sent: 11/3/2022 9:41:14 AM
To: DOH Secretary's Office
Cc:
Subject: Committee Meeting: November 3 2022

External Email

Dear Secretary of Dept. Of Health, Washington

This email is to share my request: please advise all committee members that myself, my family, my siblings and their children and all agree that there should be No Vaccine Mandates in our state. Ever.

Why use force when the law requires informed consent?

Why risk health problems from side effects previously unknown due to rushed time constraints?

Why put the government, the state and the citizens of Washington at risk for possible potential legal claims, against said government, for compensation for damages?

It's clear more time is needed to research these concerns, to gather and review all the current information coming forth, and share this with the public.

People deserve a government that allows for informed consent.

With new information coming forth daily, including updates on efficacy and side effects, statements on the C.D.C.'s official website, as well as countless other recent scientific medical control studies, indicating that the current vaccines do not prevent transmission of Covid, and this apparently following the statements made by Pfizer executives last week stating this, it is becoming increasingly clear that after two years of efforts to stop the spread of covid, the manufacturers of the experimental vaccines are now disclosing through FOIA requests information that says the vaccines don't prevent infection or transmission.

Which brings me to my point:

There seems to be plenty of information available, because enough time has passed, that any mandate would and could possibly lead to legal claims against governmental bodies who forced mandates and vaccinations.

Let's please not put our state in that precarious position. For all the many obvious reasons.

Thank you for your time and consideration in these matters.

Sincerely,

Carrie Lippold

carrie.lippold@gmail.com

Washington

From: Joy Felgitscher
Sent: 10/21/2022 5:56:10 PM
To: DOH WSBOH
Cc:
Subject: Covid vax for children

External Email

I am writing in regards to the CDCs decision to add the Covid shot to the recommended childhood vaccines. I see strong evidence that that was a move mostly informed by financial interest and not the CDCs concern for our childrens Health. We have seen enough scientific proof by now to inform us that Covid is not harming healthy children and on the contrary the so called COVID vaccine is doing irreversible damage, including myocarditis and death.

I would like to make my voice heard in the matter of the questions of whether or not to add this shot to the requirements for our children to attend school and ask the BOH to vote to keep the Covid shot out of school requirements. I will pull my children out of public school should that become a requirement.

It's time to stand up to the fact that this move to add the Covid shot to the recommended childhood vaccines is purely aimed towards blanket legal immunity for the pharmaceutical industry and not towards health.

Sincerely

Joy Felgitscher

From: Mary Ressa
Sent: 11/1/2022 11:14:10 AM
To: DOH Secretary's Office, Sherls-Jones, Jamilia J (DOH), Kwan-Gett, Tao (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: re: covid shots for children

External Email

To the Powers that be:

I hope you hear my voice and the voice of others. I do not want the COVID 19 vaccine a required shot for children. Parents have the option to vaccinate their children if they so choose. This virus is not a major threat to children. I know 3 kids who experienced complications because of this vaccine. I hope you take my concerns seriously and do not allow this to become a mandate.

Thank you.

Sincerely,
Mary Ressa

From: BAMBI HIRON
Sent: 11/2/2022 11:39:45 AM
To: DOH WSBOH
Cc:
Subject: Covid Vax

External Email

Do not add this dangerous shot that does absolutely nothing to stop Covid to the required list of vaccines. Kids who are the lowest risk to Covid absolutely do not need this. If you ignore the parents who know what is best for their children you will see another mass exodus from public schools. This is an extremely dangerous shot that is not really a vaccine at all and it will cause more harm to our children.

Bambi Hiron

Sent from my iPad

From: Carol Chapman
Sent: 11/1/2022 3:06:24 PM
To: DOH WSBOH
Cc:
Subject: covid vaccine mandate

External Email

Dear WSBOH,

I am writing to you to express my recommendation that you not mandate covid vaccines for public school children. I have read many reports that the risk for children for any serious effects from covid is less than the possible adverse events from the vaccine. As we now know, this shot does not prevent people from getting covid or from being able to transmit it. We still do not know the long term effect from the shot and our children should not be required to be the test subjects for finding out. As with anything else in life, if there is risk, especially with children, there needs to be choice. Parents are ultimately the ones who need to decide this....unless you are willing to take the moral and financial responsibility for the outcome. If long term effects turn out to be dire, you are the one responsible for putting them in jeopardy. Do you want that on your conscience for the rest of your life? Be responsible and check the facts before you make a decision that may affect the life of our precious children. Because in the end, you will be responsible.

Carol Chapman
retired teacher

From: Susan Horst
Sent: 11/2/2022 6:28:16 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Subject: no vaccine mandates for Washington kids!

External Email

Dear Washington Dept of Health Vaccine Advisory Committee member,

Please recommend against COVID shot mandates in our state.

* The risk of COVID-19 for children is low

Data from the U.S. and five other countries show "minimal" risk of COVID-19 disease to children, on the order of 0.17 deaths per 100,000 cases, according to an article in BMJ Journal of Medical Ethics.

* The risks of the shot are greater than the benefit

CDC VAERS data show 1,277,980 reports of adverse events from all age groups following COVID-19 vaccines, including 28,312 deaths and 232,694 serious injuries between Dec. 14, 2020, and May 20, 2022.

More than 1,000 reports of adverse events have been lodged with U.S. authorities following COVID-19 vaccination in children aged 5 and younger.

A statistically significant safety signal for myocarditis in males ages 8 to 21 appears in the CDC's VAERS

* COVID vaccines do not prevent transmission

This is abundantly clear from everyone's personal experience, even before a Pfizer executive admitted the COVID vaccine was not tested for preventing transmission

Thank you for your service on this committee.

Susan Horst
Bellingham, Washington

From: Eric Stanton
Sent: 11/1/2022 11:10:33 AM
To: DOH WSBOH
Cc:
Subject: Covid-19 vaccine mandate

External Email

Do not mandate Covid-19 vaccine for school children. It is not safe, and I will NOT allow my children to get it.

Sincerely,
Eric Stanton
Concerned parent

From: Jeanne Barnum
Sent: 11/1/2022 7:39:35 PM
To:
Cc:
Subject: Say NO To Mandatory Covid-19 Shots for Children

External Email

I urge you to advise against mandatory covid-19 shots for kids. This is a serious and personal choice that only a parent should make, based on their child's current health, past infection status, and individual conscience. Numerous respected and experienced medical professionals recommend against a "one size fits all" shot for children, given the low risk¹. Several European countries have advised against the Moderna shot for people under 30 due to heart inflammation². Please pay close attention to what the publicly available data tell us:

* Children are the least likely of any age group to suffer ill effects from covid-19. They have almost no risk of severe disease and virtually zero risk of death.³ The hospitalization rate for children with covid is .8%⁴, and that is overblown, per Dr. Fauci, as kids being hospitalized for non-covid reasons, like a broken leg, are still counted.⁵ The case fatality rate meanwhile is .01%⁶.

*

Children are not a major source of transmission and rarely infect adults.⁷

* Vaccine safety cannot be ignored. While rare, it still occurs, as easily verified by the VAERS database. Through October 7, 2022, there have been 31,470 deaths of adults and children in the United States reported from the covid-19 shots. In the past this injection would have been pulled from the market for safety concerns after only a few deaths.

* There is no long term safety data. We simply cannot pretend otherwise. It is irresponsible and potentially criminal to do so.

* Omicron has proven highly contagious among the vaccinated while at the same time it is a less severe disease than the Delta variant. A Danish study released 1/3/22 confirms this.⁸ Outbreaks on fully vaccinated cruise ships confirm this.⁹ The Dec, 2021 outbreak in a fully vaccinated research station in Antarctica confirms this.

* Federal Law expressly mandates that drugs under an EUA, such as the covid shots, are strictly voluntary.

* Worldwide, countries including the United Kingdom and Denmark are banning or limiting covid injections for children and adolescents due to the lack of severity of the illness, and safety concerns.

There are too many unknowns about this new and relatively untested technology, especially with the swiftly changing landscape. Children have suffered enough during the pandemic due to a huge increase in anxiety related conditions (including drug overdose and suicide), loss of education, parental loss of income, and compromised physical health from lockdowns and mask wearing. Don't add to this already staggering burden on our children. It will be on your conscience if even one child is damaged because of a mandate.

For these reasons I urge you to vote against mandatory covid-19 vaccination. If instituted, this mandate would mainly serve to assuage adult fear. Should our children be forced to bear this burden?

Sincerely,

Jeanne Barnum

Fall City, WA 98024

1 <https://pubmed.ncbi.nlm.nih.gov/34732388/>

2

<https://www.forbes.com/sites/roberthart/2021/11/10/germany-france-restrict-modernas-covid-vaccine-for-under-30s-over-r-are-heart-risk-despite-surgin-cases/?sh=436329c2a8a6>

3 <https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-state-level-data-report/> 4

<https://downloads.aap.org/AAP/PDF/AAP%20and%20CHA%20-%20Children%20and%20COVID-19%20State%20Data%20Report%2012.30%20FINAL.pdf>, slide 18

5 <https://www.newsweek.com/fauci-children-hospital-covid-omicron-1664676>

6

<https://downloads.aap.org/AAP/PDF/AAP%20and%20CHA%20-%20Children%20and%20COVID-19%20State%20Data%20Report%2012.30%20FINAL.pdf>, slide 25

7 <https://www.healthline.com/health-news/study-finds-kids-under-10-unlikely-to-spread-coronavirus-at-school>

<https://www.reuters.com/business/healthcare-pharmaceuticals/omicron-evades-immunity-better-than-delta-danish-study-finds-2022-01-03/>

9 <https://wwwnc.cdc.gov/travel/notices/covid-4/coronavirus-cruise-ship>

From: Schneider, Tanya L
Sent: 10/25/2022 5:38:52 AM
To: DOH WSBOH
Subject: Immunization for children

External Email

To BOH,

Please do not require Covid-19 vaccine to the already exhausting list of drugs that are injected into our babies and children. This should not be a requirement on the immunization schedule. Covid-19 is a virus and should be treated by each family in the way they embrace. The vaccine should be a choice and not mandated. There is no proof that the vaccine provides herd immunity.

Respectfully,

Concerned citizen

From: Jan Yokers
Sent: 10/25/2022 1:55:54 PM
To: DOH WSBOH
Cc:
Subject: Mandatory vaccine for school-aged children

External Email

Dear members of the Board of Health:

I am strongly opposed to forcing healthy, school-aged children to take the Covid vaccine for a number of reasons: Lack of medical consensus; faulty rationale given the low risk and anomalies; serious adverse events; and potentially irreversible damage from experimental vaccination.

1. Lack of Medical Consensus. More than 16,000 doctors and scientists have signed a declaration that "healthy children shall not be subjected to forced vaccination" as their clinical risk from infection is negligible, and long-term safety is yet undetermined. One of the most academically cited American epidemiologists, Dr. Harvey Risch says he would pull a healthy child out of school before administering a Covid vaccination.

2. Faulty Rationale. Vaccinating for childhood diseases (measles, mumps, rubella) is not the same as vaccinating for COVID, which is not a childhood disease. Moreover, healthy, unvaccinated children within the population are crucial to achieving herd immunity.

3. Low Risk. Children are more likely to contract serious disease or die from the annual influenza, or the flu, than COVID-19. According to all evidence submitted by multiple physicians and scientists, the virus has a 99.8% recovery rate (lower than the seasonal flu). Be sure children make up a minuscule percentage of severe COVID-19 cases. If infected, most children and youth experience a relatively short duration of illness with low rates of hospitalizations and few deaths.

* Safety Factors at Home. Transmission rates between children and within families are lower than between adults.

* Safety Factors at School. School environments, with some precautions and good ventilation, are surprisingly safe places.

4. Questionable Standards. The ethics of child vaccines should reflect the high standards of the National Childhood Vaccine Injury Act (1986). However, in this case, data-based, risk-cost-benefit analyses are lacking.

* Lacking Data. Even World Health Organization Chief Scientist Dr. Soumya Swaminathan admits there's no evidence available to support this.

* Red Flag. A governmental health authority that makes a recommendation for vaccination based on a small number of events is concerning.

5. Anomalies. Potential long-term risks and benefits are not fully understood. Children who get the most severe adverse events were vaccinated, and vaccinated children are known to contract multiple COVID infections. According to data released by the CDC, since February, higher COVID-19 case rates have been recorded among fully vaccinated children than unvaccinated in the age group 5-11 (May 2022).

6. Serious Adverse Events. Real-world data from Singapore show that nearly two dozen children suffered serious adverse events from mRNA shots. In December of 2021, practicing nurse Collette Martin testified

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fthe-covid-world.com%2Fnews-blow-the-whistle-we-have-had-more-children-die-from-the-covid-vaccine-than-of-covid-itself%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cdd456d348b2a40e6eb8708dab6cb3292%7C11c>

before a Louisiana Health and Welfare Committee hearing about her colleagues and her having witnessed “terrifying” reactions to the COVID shots among children—including blood clots, heart attacks, encephalopathy and arrhythmias.

7. Immunity. Alarming, the vaccine can trigger fundamental changes to a child’s immune system. Without being vaccinated, healthy children are able to eliminate and sterilize the virus to prevent infection, replication, and transmission. Studies have shown https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.theepochtimes.com%2Fomicron-virus-variant-linked-to-less-severe-outcomes-in-children-in-new-study_4218068.html&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cdd456d348b2a40e6eb8708dab6cb33 that children have robust innate immune systems that can effectively eliminate the virus.

8. Irreversible Damage. With regard to mRNA-based COVID-19 vaccines, a viral gene injected into a child’s cells forces the body to make toxic spike proteins, which often cause permanent damage in children’s critical organs [brain, nervous system, heart and blood vessels (including blood clots)], and their reproductive systems. Children are at risk for potentially lifelong health effects from Covid vaccination. Myocarditis (heart inflammation) has emerged as one of the most common problems, especially among boys and young men. As of Sept 2021, more than 86% of 12 to 17-year-olds who reported symptoms of myocarditis required hospitalization. While there’s a good chance that a child who takes the vaccine won’t be damaged, they may suffer subclinical damage.

Thank you for your considerations.

Jan Yokers

From: David and Karen Smith
Sent: 11/1/2022 5:43:30 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: COVID-19 ruling

External Email

Dear Sirs,

It is my understanding that the DOH Vaccine Advisory Committee will be meeting this Thursday to make a decision regarding recommendations to the Board of Health about mandating COVID-19 products to our kids. I am writing to express my strong opposition to this concept. COVID-19 products are experimental and should not be used on an age group of the population that is at such a miniscule risk of serious illness or death from contracting COVID. Furthermore, there is plenty of evidence proving that the vaccines are not an actual immunization as recipients are still contracting COVID and still spreading it. Since it does not actually immunize a child, it should not be mandated. The risk of serious injury or death has been shown to be far greater by receiving the COVID vaccine rather than the virus itself. Unfortunately, this information has been suppressed by our government officials and the media, and our children are paying the price.

Thank you for your time,

Karen Smith

Chattaroy, WA

(509) 340-2418

From: Victoria Thompson
Sent: 11/2/2022 2:16:21 PM
To: DOH WSBOH
Cc:
Subject: Adding the COVID-19 shots to the CDC pediatric schedule

External Email

To whom it may concern,
Considering the recent data showing serious reactions to the vaccine, including autism, seizures, and even deaths along with there being absolutely no evidence of the need for children to be vaccinated for COVID, I believe it is imperative that there needs to be an understanding that the public does not want any liability-free COVID-19 products to be mandated for our kids. It's been proven now after these past 2 years that the shots do not stop the spread of the virus or keep people from getting it.
Thank you, Victoria Thompson
Shoreline, WA

From: Andrew McNabb
Sent: 11/3/2022 10:06:38 AM
To: DOH WSBOH
Cc:
Subject: Immunization Requirements - Daycare & K-12

External Email

Hello,

As a citizen of Washington State, I insist that the WA Board of Health NOT add the COVID-19 MRNA gene therapy shot to the pediatric schedule or as an immunization requirement for daycare and K-12 education.

I refuse to accept the mandates forced upon the people of this great state and have been consistent throughout the past THREE YEARS of this nonsense. If we, as a society, have learned anything during this time, it is that this is NOT about public health and safety, but about power and control. The public health authorities have continued to perpetuate lies, obfuscate the truth, and sow distrust amongst the people. There is no open dialogue, but censorship of the truth. Where is the transparency?

This latest attack on our children and their health is yet another example of our government overstepping its authority. We THE PARENTS demand choice regarding our children's health. This is no longer a public emergency and there is reason to believe that it never was, so why do our leaders and lawmakers still act as such? REGARDLESS, our children's safety was never at risk. As we have learned, they are unaffected by COVID and there is absolutely no reason why they should be subject to experimental and unauthorized medical treatment. We do NOT know the long-term effects. We know that the shot does not prevent transmission, which has been admitted by PFIZER and the CDC. This is and always was a personal decision. Our local authorities have no authority on this matter. It is solely the responsibility of the parents to decide what is best for our children.

DO NOT ADD THE COVID SHOT TO CURRENT IMMUNIZATION REQUIREMENTS. IT SHOULD NOT BE LAW!

Respectfully,

Andrew McNabb

From: Ioana
Sent: 11/1/2022 2:35:51 PM
To: DOH Secretary's Office
Cc:
Subject: Vaccine Advisory Committee



attachments\3A5BFBCA3238488F_authopsy cardiac findings.pdf



attachments\9673911298B84D38_5.3.6-postmarketing-experience.pdf



attachments\2922111196C841CA_myocarditiscomirnaty.pdf

External Email
Dear Mrs/Mr,

Please consider not adding the Covid vaccine on the school schedule until the studies show that it is without major risks. The risk of myocarditis is high and the risk of mRNA being transcribed into the genome has not been ruled out - the in-vitro studies show that this risk exists.

The links below are just a glimpse of the hundred studies showing the harm on kids. At least consider waiting until more studies show otherwise, as the harm once done can not be undone.

Sincerely,
IoanaT

<https://www.mdpi.com/1467-3045/44/3/73/htm>

Autopsy Histopathologic Cardiac Findings in 2 Adolescents Following the Second COVID-19 Vaccine Dose

James R. Gill, MD; Randy Tashjian, MD; Emily Duncanson, MD

• **Context.**—Myocarditis in adolescents has been diagnosed clinically following the administration of the second dose of an mRNA vaccine for coronavirus disease 2019 (COVID-19).

Objective.—To examine the autopsy microscopic cardiac findings in adolescent deaths that occurred shortly following administration of the second Pfizer-BioNTech COVID-19 dose to determine if the myocarditis described in these instances has the typical histopathology of myocarditis.

Design.—Clinical and autopsy investigation of 2 teenage boys who died shortly following administration of the second Pfizer-BioNTech COVID-19 dose.

Results.—The microscopic examination revealed features resembling a catecholamine-induced injury, not typical myocarditis pathology.

Conclusions.—The myocardial injury seen in these postvaccine hearts is different from typical myocarditis and has an appearance most closely resembling a catecholamine-mediated stress (toxic) cardiomyopathy. Understanding that these instances are different from typical myocarditis and that cytokine storm has a known feedback loop with catecholamines may help guide screening and therapy.

(*Arch Pathol Lab Med.* 2022;146:925–929; doi: 10.5858/arpa.2021-0435-SA)

Myocarditis in adolescents (particularly teenage boys) has been reported following the second dose of the Pfizer-BioNTech COVID-19 vaccine.^{1–7} Since cardiac biopsies are rarely performed in these instances with clinically stable patients, the myocardial pathology has not been clearly elucidated.⁸ Myocarditis is rarely diagnosed at autopsy in deaths due to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.^{9,10} The incidence of myocarditis, although low, has been shown to increase after the receipt of the BNT162b2 vaccine, particularly after the second dose among young male recipients.¹¹ In addition, the first week after the second vaccine dose was found to be the main risk window.¹¹ The clinical presentation of myocarditis after vaccination was usually mild.¹¹

We report the autopsy results, including microscopic myocardial findings, of 2 teenage boys who died within the first week after receiving the second Pfizer-BioNTech

COVID-19 dose. The microscopic findings are not the alterations seen with typical myocarditis. This suggests a role for cytokine storm, which may occur with an excessive inflammatory response, as there also is a feedback loop between catecholamines and cytokines.¹²

Also see p. 921 and p. 924.

MATERIALS AND METHODS

The Connecticut Office of the Chief Medical Examiner and the Michigan Institute of Forensic Science and Medicine investigate all unexpected and unnatural deaths in their respective jurisdictions: Connecticut and the Michigan counties of Alcona, Gladwin, Huron, Lapeer, Ogemaw, and Saginaw.

Standard medicolegal autopsies were performed including gross, microscopic, and toxicologic testing. SARS-CoV-2 nasal swab testing was performed by reverse transcriptase–polymerase chain reaction assay. Tissues were sent to the National Center for Emerging and Zoonotic Infectious Diseases branch of the Centers for Disease Control and Prevention for molecular studies.

Cardiac molecular testing with sequence analysis and deletion/duplication testing of the 100 genes listed in Invitae's arrhythmia and cardiomyopathy comprehensive panel was performed.

RESULTS

The results of autopsies for 2 teenage boys who were found dead in bed 3 and 4 days after receiving the second dose of the Pfizer-BioNTech COVID-19 vaccine are presented (Table). Both boys were pronounced dead at home without attempted resuscitation.

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From the Connecticut Office of the Chief Medical Examiner, Farmington, Connecticut, (Gill); the Department of Pathology, Yale School of Medicine, New Haven, Connecticut (Gill); the Wayne County Medical Examiners' Office, Detroit, Michigan (Tashjian); the Department of Pathology, University of Michigan, Ann Arbor (Tashjian); and the Jesse E. Edwards Registry of Cardiovascular Disease, St Paul, Minnesota (Duncanson).

The authors have no relevant financial interest in the products or companies described in this article.

Corresponding author: James Gill, MD, OCME, 11 Shuttle Rd, Farmington, CT 06032 (email: jgill@ocme.org).

Summary of Clinical and Autopsy Findings		
Patient	Heart Gross	Microscopic and Molecular
<p>Teenage boy A, BMI = 21. History of attention deficit hyperactivity syndrome</p>	<p>280 g, normal</p>	<p>There was global myocardial injury with areas of coagulative myocytolysis and contraction bands, with a perivascular pattern of inflammation consisting of predominantly neutrophils with histiocytes, scant lymphocytes, and occasional eosinophils (Figures 1 through 4; Supplemental Figures 1 and 2). In some sections, the myocardial injury was predominantly subepicardial, and in other sections it was patchy and transmural. In the posterior wall, there was subepicardial/transmural fibrous scar, without fatty replacement. There were no acute or organizing thrombi. The overall pattern of injury was consistent with stress cardiomyopathy with contraction bands and a neutrophilic/histiocytic infiltrate</p> <p>PCR tissue testing performed by the CDC on heart and lung found no molecular evidence of SARS-CoV-2 infection</p> <p>Molecular testing on postmortem blood detected 2 variants of uncertain significance: <i>DOLK</i> (c.1257C.G [p.Ile419Met] heterozygous) and <i>MAP2K2</i> (c.581-3C>T [intronic] heterozygous)</p>
<p>Teenage boy B, BMI = 30 with obesity</p>	<p>520 g with biventricular dilatation and marked pulmonary edema (combined lung weight = 1481 g)</p>	<p>There was global myocardial injury similar to that seen above, but with more widespread transmural ischemic changes and more interstitial inflammation, again with a predominant neutrophil component with histiocytes and scant lymphocytes (Figures 5 through 7; Supplemental Figures 3 and 4). Several sections had transmural, confluent areas of hypereosinophilic myocytes; confluent areas of contraction bands apart from any inflammation; and florid neutrophilic inflammation with some histiocytes. In this case, a subepicardial distribution of injury was not seen. There were no acute or organizing thrombi. PCR tissue testing performed by the CDC on heart and lung found no molecular evidence of SARS-CoV-2 infection</p>

Abbreviations: BMI, body mass index; CDC, Centers for Disease Control and Prevention; PCR, polymerase chain reaction.

Boy A complained of a headache and gastric upset but felt better by postvaccine day 3. There was no history of prior medical problems (he took prescribed amphetamine/dextroamphetamine during the school year for attention deficit hyperactivity disorder but was not currently receiving it) or prior SARS-CoV-2 infection. Boy B had no complaints, prior health issues, or prior SARS-CoV-2 infection. Neither boy complained of fever, chest pain, palpitations, or dyspnea. The autopsies were unremarkable except for obesity in one boy and the cardiac findings (Figures 1 through 7; Supplemental Figures 1 through 4 [see supplemental digital content at <https://meridian.allenpress.com/aplm> in the August 2022 table of contents]). Unique cardiac findings in boy A included myocardial fibrosis and in boy B cardiac hypertrophy. There were no rashes or lymphadenopathy.

Expanded forensic toxicologic testing was negative for medications and drugs of abuse. SARS-CoV-2 was not detected by postmortem swab (reverse transcriptase–polymerase chain reaction assay) in either boy. Cardiac sections were submitted from the right and left ventricles (12 sections in boy A and 29 sections in boy B). The cardiac conduction systems were not examined.

DISCUSSION

Myocarditis is an inflammatory disease of the myocardium, which may occur in isolation or as part of multiorgan/systemic immune-mediated disorders or reactions to exogenous/endogenous substances.¹³ The etiologies are varied and include infectious and noninfectious causes. Noninfectious causes include immune/autoimmune conditions (autoantigens, association with immune-mediated diseases, alloantigens, and allergens), drugs/toxic substances (eg, hypersensitivity or direct toxic effects), and other causes (eg, radiation, insect stings, snake bites).¹³ Lymphocytic myocarditis is the commonest histologic subtype, charac-

terized by an inflammatory myocardial infiltrate typically comprising mononuclear cells. In the acute/active phases, it is usually accompanied by myocyte damage/necrosis.¹³ Although criteria are evolving, the Dallas criteria require “inflammatory infiltrates of the myocardium with necrosis and/or degeneration of *adjacent* myocytes, not typical of ischemic damage associated with coronary artery disease.”^{14–16}

Toxic myocarditis is an etiologic classification involving direct myocardial injury by various drugs or substances.^{13,17,18} Although variable, the histologic features consist of 2 main patterns: an early stage with foci of solely necrotic/damaged myocytes and the later phase of “myocarditis.” Toxic myocarditis usually indicates inflammatory stages of catecholamine-induced myocardial injury. Catecholamine toxicity on the heart was first described in patients with pheochromocytoma.^{19–21} These lesions have been described in patients with subarachnoid hemorrhages and, more recently, in donor hearts rejected for transplantation in persons declared dead by neurologic criteria, secondary to catecholamine release during the “sympathetic storm” following brain death or administered as pharmacologic support (see supplemental material).^{22,23} The wide spectrum of these lesions has been studied in detail in routine pathology examination of donor hearts unsuitable for transplantation.²²

Both teenage boys had similar clinical presentations with no obvious cardiac symptoms. Their histopathology did not demonstrate a typical myocarditis. In those instances, one sees lymphocytic (or giant cell) infiltrates with adjacent myocyte necrosis; changes such as hypereosinophilic myocytes and contraction bands are absent. In these 2 postvaccination instances, there are areas of contraction bands and hypereosinophilic myocytes distinct from the inflammation. This injury pattern is instead similar to what

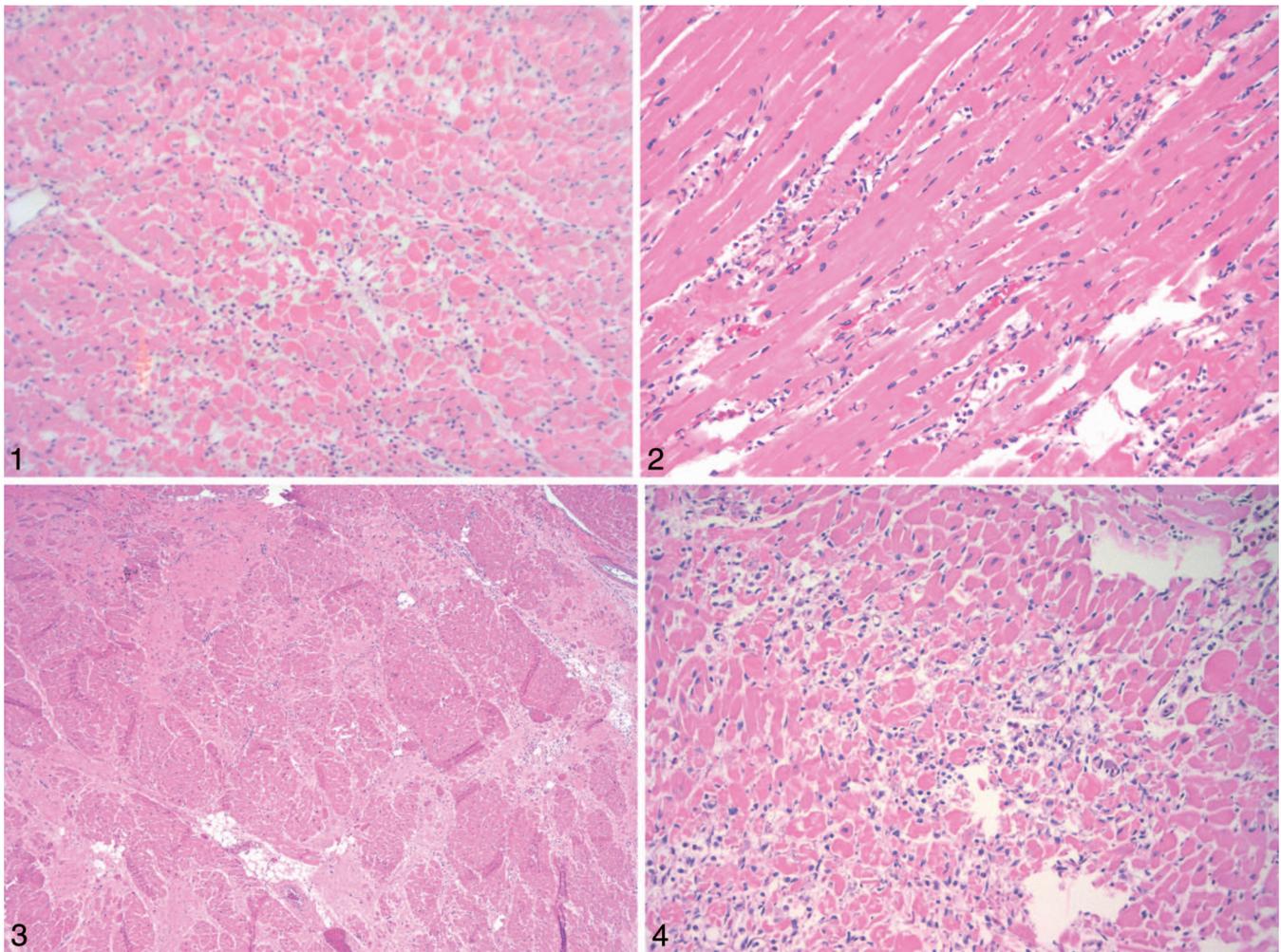


Figure 1. Case A, heart: confluent areas of ischemia (hematoxylin-eosin, original magnification $\times 100$).

Figure 2. Case A, heart: coagulative and contraction band necrosis (hematoxylin-eosin, original magnification $\times 200$).

Figure 3. Case A, heart: subepicardial fibrosis. This appears older than the timing of the first vaccine dose. This is a possible arrhythmogenic cardiomyopathy, but its appearance is more consistent with healed ischemia or inflammation (hematoxylin-eosin, original magnification $\times 40$).

Figure 4. Case A, heart: confluent areas of ischemia with contraction bands and coagulative myocytolysis (hematoxylin-eosin, original magnification $\times 200$).

is seen in the myocardium of patients who are clinically diagnosed with Takotsubo, toxic, or stress cardiomyopathy, which is a temporary myocardial injury that can develop in patients with extreme physical, chemical, or sometimes emotional stressors.^{24–31}

Stress cardiomyopathy is a catecholamine-mediated ischemic process seen in high catecholamine states in the absence of coronary artery disease or spasm.^{17,31} It has also been called “neurogenic myocardial injury” and “broken heart syndrome.”^{18,24–36} Surges in catecholamines may have several triggers (fight/flight response, adrenal pathology, etc). Proposed mechanisms for catecholamine-mediated stunning in stress cardiomyopathy include epicardial spasm, microvascular dysfunction, hyperdynamic contractility with midventricular or outflow tract obstruction, and direct effects of catecholamines on cardiomyocytes.³³

Catecholamine-mediated myocardial stunning may be due to direct myocyte injury, as elevated catecholamines decrease the viability of myocytes through cyclic adenosine

monophosphate-mediated calcium overload. Catecholamines also are a potential source of oxygen-derived free radicals, which can interfere with sodium and calcium transporters, possibly resulting in myocyte dysfunction through increased transsarcolemmal calcium influx and cellular calcium overload.³⁷

Histologically, catecholamine effects have been associated with contraction band necrosis, characterized by hypercontracted sarcomeres, dense eosinophilic transverse bands, and an interstitial mononuclear inflammatory response that is distinct from the polymorphonuclear inflammation seen with infarction. In addition, the mononuclear cells are not causing the myocyte necrosis; there is a distinct, separate distribution.³⁷

We suspect that the acute cardiac changes seen in these 2 boys are the result of epinephrine-mediated effects on cardiomyocytes. These occurrences generally have a favorable prognosis; however, some patients may die from the underlying (noncardiac) cause of the myocardial findings

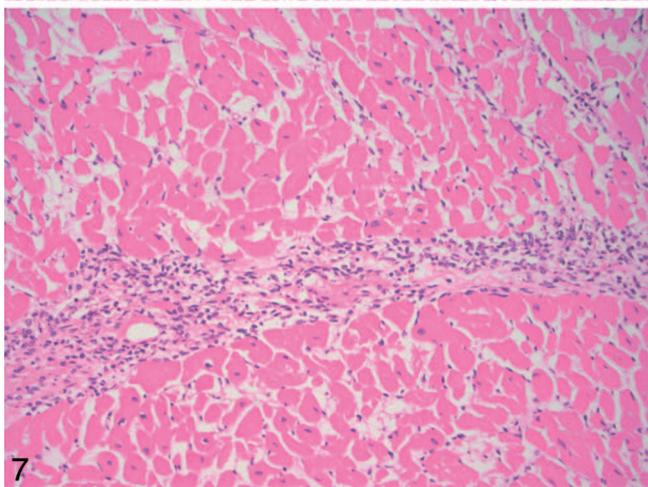
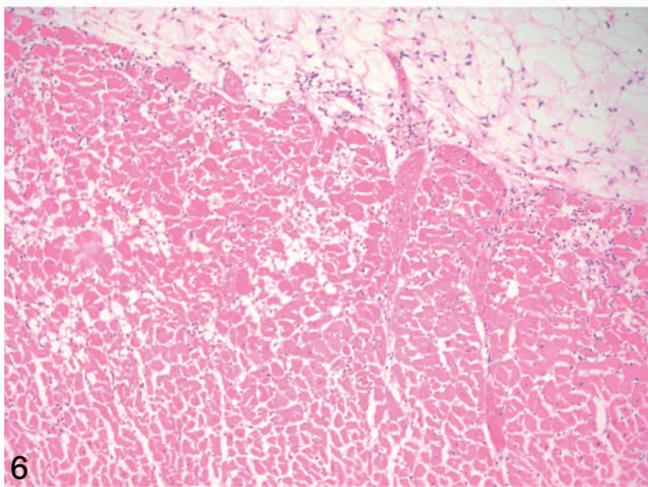
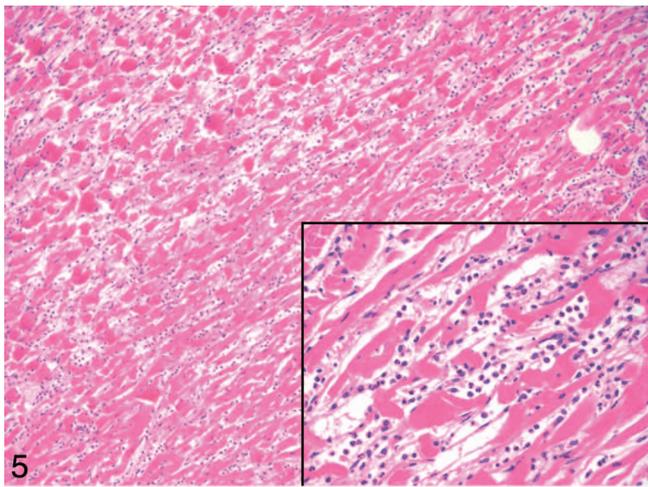


Figure 5. Case B, heart: hyper eosinophilic myocytes, contraction band necrosis, and coagulative myocytolysis. Inset: the infiltrate is predominantly neutrophilic (hematoxylin-eosin, original magnifications $\times 100$ and $\times 400$ [inset]).

Figure 6. Case B, heart: subepicardial coagulative myocytolysis/contraction band necrosis (hematoxylin-eosin, original magnification $\times 100$).

Figure 7. Case B, heart: perivascular inflammation (hematoxylin-eosin, original magnification $\times 200$).

(eg, as with subarachnoid hemorrhage). Histologically, diffuse hyper eosinophilic myocytes, contraction bands, and coagulative myocytolysis are seen, with a patchy and random pattern and a neutrophilic/mononuclear cell infiltrate. With longer survival, global myocardial ischemia may develop.³⁷

This postvaccine reaction may represent an overly exuberant immune response, with the myocardial injury mediated by similar immune mechanisms to those described with SARS-CoV-2 and multisystem inflammatory syndrome cytokine storms.³⁸ Multisystem inflammatory syndrome is a rare systemic illness presenting with persistent fever and extreme inflammation following exposure to SARS-CoV-2. Affected children have persistent fever and may have acute abdominal pain with diarrhea or vomiting, muscle pain/malaise, and hypotension. Other reported symptoms include rashes, enlarged lymph nodes, and swelling.

A hypersensitivity reaction is in the differential diagnosis; however, infrequency or lack of eosinophils would be unusual. The common denominator of a hypersensitivity reaction is the eosinophilic infiltrate, which may be the major inflammatory component or part of a complex picture of mixed inflammation with lymphocytes, macrophages, plasma cells, poorly formed microgranulomas, and giant cells.³⁹ An autopsy study of 69 cases of hypersensitivity myocarditis examined the spectrum of histologic findings, including the distribution of infiltrates and the extent and composition of the infiltrates.⁴⁰ The authors reported that hypersensitivity myocarditis was “defined by the presence of eosinophils, a mixed lymphohistiocytic infiltrate along natural planes of separation, and an absence of fibrosis or granulation tissue in areas of infiltrate.”⁴⁰

Despite a molecular investigation, the etiology of the fibrosis in case A is unclear. It is conceivable that this process first started with the first vaccination dose and the initial myocardial effects resolved and healed over time. The second dose may have restarted the process. One might expect some scarring/repair after a few weeks, although the scarring in case A appears more organized than the 3-week interval between the vaccine doses. Also, it is only in one of the cases. It remains possible that the fibrosis represents arrhythmogenic cardiomyopathy. Unfortunately, cardiac molecular testing was equivocal.

Regardless of the etiology of the fibrosis, the extent of scarring by itself is potentially arrhythmogenic and may be a contributing factor with the acute postvaccine myocardial injury. Similarly, the cardiac hypertrophy in case B may have made the heart more susceptible to an arrhythmia. The key point is that since these boys died suddenly and unexpectedly in their sleep without resuscitation, if the arrhythmia had been due to the myocardial scar (boy A) or cardiomegaly (boy B), then the fulminant, global myocardial injury would not be an expected finding. These 2 clinical histories support the etiology of the acute myocardial injury as a primary factor, not a secondary agonal or postresuscitative artifact.

Two adults (ages 42 and 45 years) with myocarditis diagnosed histologically (one at autopsy and one by biopsy) following SARS-CoV-2 mRNA vaccinations were recently reported.⁴¹ One occurred 10 days after receiving the first Pfizer-BioNTech COVID-19 vaccine dose and the other occurred 14 days after receiving the second mRNA-1273 (Moderna) dose. Histologically, both were described as “fulminant” myocarditis with “multifocal cardiomyocyte

damage associated with mixed inflammatory infiltration." In addition to areas of myocyte necrosis associated with the inflammatory infiltrate, the photomicrographs demonstrate ischemic changes distinct from the inflammation, similar to our findings.

Cytokine storm has been described with an excessive and uncontrolled inflammatory response, and there is a feedback loop between catecholamines and cytokines.¹² Clinical complications may include cardiac compromise, respiratory distress, and hypercoagulation.⁴² The myocardial injury seen in these postvaccine hearts has a similar histologic appearance to catecholamine-mediated stress cardiomyopathy and severe SARS-CoV-2 infection, including myocarditis, which is associated with cytokine release syndrome.³⁸ Recognition that these instances are different from typical myocarditis and that cytokine storm has a known feedback loop with catecholamines may help guide screening, diagnosis, and therapy.

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From: Lynnette Monpas
Sent: 11/1/2022 12:30:35 PM
To: DOH WSBOH
Cc:
Subject: Against covid vaccine mandates

External Email

To Whom It May Concern,

I'm writing to express my desires and concern, as a Washington state citizen, to NOT have covid vaccines added to the vaccine protocol for children.

This disease is not considered high risk for children so to add it to the current protocols would be irresponsible and unnecessary.

There would be higher risk of side effects from the vaccine than risk of disease.

Sincerely,

Lynnette Monpas

Sent from my iPhone

From: Shelley Pattison
Sent: 11/1/2022 7:13:17 AM
To: DOH Secretary's Office,gett@doh.wa.gov,jones@doh.wa.gov,DOH WSBOH
Cc:
Subject: Public Comment: opposed to requiring COVID vaccine for pre-k & k-12

External Email

Good morning WA State Vaccine Advisory Committee & Board Health Members,

I am writing you today with strong opposition to adding the COVID vaccine to the list of required immunizations.

What is a vaccination? The act of introducing a vaccine into the body to produce protection from a specific disease.

What is an immunization? A process by which a person becomes protected against a disease through vaccination.

It has been proven that neither of these are true for the COVID vaccine. The COVID vaccine DOES NOT protect ANYONE from getting the virus OR spreading the virus.

Please ask yourselves why you would require a vaccine that does not serve a purpose. The risks DO NOT outweigh the benefits.

An uptick of myocarditis resulting in lasting damage to the heart and, in some cases, death is a much greater concern than a case of COVID in which kids have essentially ZERO risk.

Please, I beg you, open your eyes to the truth and the learnings of the last few years. DO NOT require a vaccine that could do more harm than good.

Thank you.

Shelley Pattison

Everett, WA

Sent from Mail

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Ffwlink%2F%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Ffwlink%2F%2F)
for Windows

From: meredith prystas
Sent: 11/3/2022 12:08:16 PM
To: DOH Secretary's Office
Cc:
Subject: urgent

External Email

It is well known that the mRNA injection causes Myocarditis and Pericarditis in young people, particularly young males. The data collected on VAERS makes it clear that the risks do not stop there.

This cannot be ignored! Whenever there is risk, there must be choice.

In addition, just two weeks ago, Janine Small admitted to the European Union Parliament that the Pfizer vaccine was never tested for transmission. This declaration alone should stop you from forcing a medical procedure on young people on the grounds of 'keeping the community safe'. That is a fictitious statement with no scientific backing.

We are counting on you to do the right thing.

Signed,
A Concerned Citizen

From: RICHARD HUNDVEN
Sent: 10/31/2022 12:48:21 PM
To: DOH WSBOH
Cc:
Subject: pediatric schedule and Covid vaccinations

External Email

My opinion is that Covid 19 vaccinations should not be added to the pediatric schedule.

Rich Hundven

From: Rick Miller
Sent: 11/3/2022 5:26:44 AM
To: DOH WSBOH
Cc:
Subject: DO NOT MANDATE THE COVID VACCINE AS AN IMMUNIZATION REQUIREMENT FOR WA ST SCHOOLS

External Email

To whom (all) it may concern,

I am writing to you in regards to your intent/desire to mandate the "covid" vaccination as part of the immunization requirements for attending school in Washington state.

I fully disagree with even the thought of considering this mandate. The CDC does not have the power to force these shots on people. They are not an elected body and have no power to force or control anything, including these "vaccines".

I cannot believe that this would even be a consideration in light of the factual evidence proving that all versions of these vaccinations have literally caused injury and fatalities to a vast majority of people who have received them.

It's been proven that children are least likely to contract the "covid" virus and even if they do, they suffer no more than they would if they had contracted influenza. So why even consider a mandate? Do you hate children that much?

It has also been proven that these shots also cause myocarditis, pericarditis, significant clotting of arteries and vessels within the vascular system, not to mention the effects it has on the neurological and nervous system.

To even consider mandating these shots as a requirement to attend school is sheer lunacy and extremely irresponsible.

We are already experiencing some of the most upsetting times this country has ever faced at the hands of a federal government who has shown itself to be the most anti-American government in the history of our nation.

Our children are our future but, if you mandate this "vaccination" that would change, for the worse. Mandating this vaccine could even be considered genocidal.

It is up to you to stop the assault on our children. You need to protect them, not endanger them with decisions like the one you are promoting with this mandate.

If you do one good thing in life, let it be not mandating our children to a life of injury or potential death.

To mandate this "vaccine" makes you nothing less than monsters. It would prove you to be evil and unworthy of the public's trust and respect.

Do the right thing.

And you can rest assured that I am not alone in this battle for the health and safety of our children and that includes not mandating this lethal cocktail as a requirement for attending school in Washington state on ANY level.

PROTECT OUR CHILDREN! DO NOT MANDATE THIS POISON!

Sincerely,

Richard M Miller

From: teri60wat@yahoo.com
Sent: 10/31/2022 5:52:38 PM
To: DOH WSBOH
Cc:
Subject: Immunization requirement

External Email

I am writing to express my opposition to mandating this liability- free Covid 19 vaccine requirement for Washington students.

Infants, children, and teens handle COVID-19 well. They also have higher risks of vaccine reactions, such as myocarditis or blood clots, than they do ill effects from natural infection. The risks of mandatory vaccination far outweigh the benefits in this age group. It is neither safe nor responsible for the legislature to seek to mandate a new mRNA technology injection when the long-term implications of this jab have not been fully explored.

If Washington seeks to pass legislation to mandate the COVID injection, parents will be coerced to accept a potentially unwanted medical intervention for their child to avoid loss of access to education.

Will parents be given full informed consent when receiving the COVID vaccine? Consent implies choice and choices must be made using a risk vs. benefit analysis between doctor, parent, and patient.

I urge you to ensure that public health policy paves the way for parents in our state to make responsible, informed choices about the best way to care for the health of their children.

A concerned parent,
Terri

From: Irene Hill
Sent: 10/31/2022 10:30:39 PM
To: DOH WSBOH
Cc:
Subject: Immunization requirements for schools

External Email

To those whom should be concerned:

I am a WA state voter, residing in Appleton, Klickitat county.

I am strongly opposed to any mandates of Covid-19 products particularly to children. Of special concern is the fact that companies can not be held liable for negative and/or life threatening side effects.

I believe it is imperative that individuals have freedom to choose their own health interventions.

Please preserve that freedom.

Sincerely,
Irene Hill

From: Cathy Hayden
Sent: 11/2/2022 11:08:49 AM
To: DOH WSBOH
Cc:
Subject: COVID 19 Mandate for children

External Email

I do not think it is a good idea to mandate COVID 19 mandates for our children when the science isn't in yet.

Thank you.

Cathy Hayden

41116 State Route 530 NE

Arlington, WA 98223

From: Tim Hilmes
Sent: 11/2/2022 12:46:07 PM
To: DOH Secretary's Office
Cc:
Subject: Vaccine recommendation

External Email
Dear Secretary;

I'm writing this note to inform you of my opposition to a covid vaccine mandate for school children. This vaccine has not gone through the rigors of other vaccines and children are not a high risk group for the covid virus so please DO NOT recommend the covid vaccine for our school children.

Sincerely;

Tim Hilmes

From: Gerry Whitmarsh
Sent: 11/3/2022 10:38:41 AM
To: DOH WSBOH
Cc:
Subject: No Covid-19 Vax Requirements for Children

External Email

There is no reason to have vaccination requirements for children for a vax that does not stop transmission of the disease, especially for a disease that poses such a low risk in children.

Regards,

Gerald Whitmarsh
Edmonds WA

From: heidi lueken
Sent: 11/2/2022 2:29:09 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: Covid vaccines

External Email

Hello WA State Vaccine Advisory Committee and Board of Health Members -

I'm sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school. Here's why...

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits!!! The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science!!! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school!!!

Sincerely,
Parent of 3
Heidi Lueken

Sent from Yahoo Mail on Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.onelink.me%2F107872968%3F>>

From: Madelyn Mara
Sent: 11/3/2022 1:44:37 PM
To: DOH Secretary's Office
Cc:
Subject: Mandated CDC Pediatric Vaccine Schedule

External Email
Dear Sirs,

I am against adding Covid Shots to the CDC Pediatric Schedule and do not want any COVID shot mandated in Washington.

When my children were growing up, they got approx. 10 immunization shots. Now the number of shots is over 70 on the schedule starting at birth.

This is not healthy for any child.

Please vote against adding the COVID shot to the schedule.

Thank you.

Madelyn Mara

not mandates in our state.

From: Gwen Reandeau
Sent: 10/31/2022 8:40:46 PM
To: DOH WSBOH
Cc:
Subject: Vaccine Mandates

External Email

There are too many known health complications from enforcing the covid vaccines on our children, and no real benefit. It's like we are agreeing with Bill Gates and the CDC that by targeting our kids, we can accomplish our goals toward depopulating and weakening the people and what on earth for? Known complications include myocarditis, paralysis and neuropathy. These senseless mandates must stop NOW! Sincerely, Gwen Reandeau.

From: Tina Terada, MBA Realtor - 425-681-7061
Sent: 10/31/2022 6:26:46 PM
To: DOH WSBOH
Cc:
Subject: Do not mandate the vaccine again

External Email

Do not mandate the vaccination again. I do not support it. The evidence is coming out that it is not effective and is in fact hurting many categories of people. It should be a choice. As it always has been.

Thank you

Tina

From: ICWA from InformedChoiceWa's News & Action Alerts
<informedchoicewa@substack.com>
Date: Monday, October 31, 2022 at 6:20 PM
To: Tina Terada, MBA Realtor - 425-681-7061 <tina@nwrealtyconnection.com>
Subject: WA DOH's Vaccine Advisory Committee Meets November 3 & WA BOH Meets November 9.

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Email your comments & attend the Zoom meetings!

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<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fopen.substack.com%2Fpub%2Finfo-dohs-vaccine-advisory-committee%3Futm_source%3Demail%26redirect%3Dapp-store&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7Cf5039a33acba4aad440008dabba7f481%7C11d0>
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WA DOH's Vaccine Advisory Committee Meets November 3 & WA BOH Meets November 9.

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Email your comments & attend the Zoom meetings!

ICWA

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b. Register for the Zoom meeting and see agenda HERE

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40c474014303%3Fr%3D1t05e1&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7Cf5039a33acba4aad44

Recall that BOH convened a Technical Advisory Group (TAG) last winter to consider whether to require Covid shots for Washington's school kids. Although TAG members sat through days of pro-vax presentations, they voted not to recommend the addition, citing in part the 40,000 opposition comments from the public. Our voices made a difference!

However, another reason TAG decided against the shots was that ACIP had not yet recommended them, which is one of BOH's considerations for adding new vaccine products. Therefore, we are one step closer to a school "mandate."

See ICWA's COVID shot review of the BOH's Criteria for adding vaccines to daycare and school requirements.

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(Since this was written, even more evidence has become available regarding lack of safety and effectiveness.)

Fortunately, Del Bigtree's ICAN and Aaron Siri will challenge any state mandates of COVID-19 vaccines for school attendance

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, but we must not let it come to that.

We need to roar even louder than last time. Be passionate and respectful, but be heard. The children of WA need us to Be Brave!

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From: Jill Warne
Sent: 11/2/2022 11:03:53 PM
To: DOH WSBOH
Cc:
Subject: Opposed to COVID Vaccine Requirement for School Children

External Email

Please do not require COVID vaccines for school children! This is not a true vaccine! It does not prevent getting the Virus, nor the spread of the Virus! It is not without risk! In fact there is far greater risk of harm or death than any other vaccine!

Please allow parents to determine what is best for their children, not the government!

Thank you!

Jill Warne
360.470.0013

GOD BLESS AMERICA!

From: Carol Volk
Sent: 10/31/2022 3:50:10 PM
To: DOH WSBOH
Cc:
Subject: COVID injections

External Email

Washington Board of Health:

Please do NOT add the COVID injection to the list of vaccines recommended for our children.

The product does not prevent COVID infection or transmission, and has adverse effects. We now know that a vaccinated individual is more likely to get COVID, more likely to be hospitalized with COVID, and more likely to die of COVID than an UNvaccinated individual! The "vaccines" make no sense, and certainly mandating them makes no sense!

I was so proud of you when you previously bucked the CDC narrative, and hope you have the sense and courage to do it again.

Carol Volk, DVM
Joyce, WA

From: sue coffman
Sent: 11/4/2022 9:57:30 AM
To: DOH WSBOH
Cc:
Subject: BOH Nov 9 Public Comment

External Email

To all members,

This email letter to the WA state Board of Health is in lieu of a Public Comment for your November 9 meeting. I am Sue Coffman, I reside in Clallam County, and I represent the organization Informed Choice WA. We advocate for health freedom, watch the legislative sessions as bills are introduced and let our members know about important ones that involve medical overreach, and keep the public informed of their legal rights as far as medical procedures go.

Last month the CDC recommended COVID omicron booster shots for children as young as 5 years old, just hours after the FDA authorized them. There was a very serious media push to ensure that people were aware of this. There has never been any media coverage of actual risks associated with these injections, even though there have been thousands of reported reactions: <https://www.openvaers.com/covid-data>

Earlier this year, your Technical Advisory Group decided against approving that the shots be placed onto the childhood schedule, and thankfully the Board decided not to move forward with recommendation. However, another reason the TAG decided against the shots was that ACIP had not yet recommended them, which is one of the BOH's considerations for adding new vaccine products. Therefore, we are one step closer to a school "mandate."

To be clear, all of the Covid shots and subsequent boosters are NOT vaccines. In fact, the CDC had a hand in creating a new definition of what a vaccine is, in order for these gene-altering shots to fit the current narrative. All of this under the extreme supervision of the pharmaceutical cartel. Our government has bought their claim that vaccinations are our only way through any medical emergency. There are plenty of alternatives, but they are being censored, shadow-banned, and completely hidden from the general populace.

I come from a period in history (in the 1970s) when injections/vaccines were actually studied under the public and media eye, and reported on fairly accurately. During every reported "outbreak" in the past 30+ years, the vaccines created in-the-moment for the government-and-pharmaceutical-created epidemic proved to not be protective and in fact created many harms, including death. Adverse reactions to any injections have only increased over the years, and since 1986 the manufacturers are no longer held liable for any harms caused. The new products don't even have to be studied anymore, as the FDA has claimed recently, and our next generations are at extreme risk of being injured for life or even killed outright, due to the medical conditions they are facing after the injections. Now I ask you WHY should our children be subjected to these very possible reactions when they are at almost ZERO risk from Covid?

The media loves to spout the codewords "misinformation" and "disinformation." What are they afraid of? The Truth? The Science? It has been proven that the Covid shots don't stop transmission, so WHY do they keep getting advised and approved?? Our future generations are at extreme risk as far as their health is concerned. Will our children and grandchildren be forced to wear a mask or take an experimental shot in order to attend school? Will our religious views and right to refrain from vaccines be set aside for what is

deemed as “the greater good”? Will our access to alternative and affordable health treatments be restricted? Will our voices be silenced when we ask questions in good faith of the medical establishment? Will we fall under global health governance and be subjected to standing surveillance and data sharing led by the World Health Organization (WHO)?

It is imperative that you understand the public does not want these liability-free products to be mandated for our kids. If there is even the slightest doubt in any of your minds that this shot might not be completely safe and effective for our kids, then you have a moral obligation to keep the Covid-19 vaccine off the list of Washington State’s requirements for attending school. I encourage you, as an Agency of the people and by the people (but sadly not “FOR” the people), to look into your own hearts and souls, and quit listening to the jargon heaped upon you by the pharmaceutical cartel. Humanity is in danger, not from germs, but from how we are treated medically in this country. Stop the Spread of Lies.

We The People know better, and are smarter than you think!

Submitted respectfully as Public Comment,

Sue Coffman

714-337-4331

ICWA Team Leader

Legislative District #24

<https://informedchoicewa.org/>

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vaccine;

<https://www.bbc.com/news/health-57766717>

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With the evidences stated above, it is the sensible decision to remove even the idea of mandating these "vaccines" for children.

Sincerely,

Angela (BSN) and Mike Gross (BS, MS)

From: Mary Menard
Sent: 10/31/2022 6:50:28 PM
To: DOH WSBOH
Cc:
Subject: Covid vaccine for children

External Email

I am strongly opposed to the covid vaccine for children. The research indicates it's side effects can be dangerous for older children, and younger children are not medically threatened by the virus. Please vote against the covid virus vaccine for children. I am grandmother to 10 children in the Spokane area, none of whom will get the vaccine.
Mary Menard 7107 N Drumheller - Spokane Wa 99208

Sent from my iPhone

From: Scott Holbrook
Sent: 10/26/2022 11:32:35 AM
To: DOH WSBOH
Cc:
Subject: Ref

External Email

Is there a reference to what I sent you? I can't remember what I need to do.

From: BadBlanche Dawson
Sent: 11/2/2022 8:56:31 PM
To: DOH Secretary's Office
Cc:
Subject: Thursday's vaccine recommendations

External Email

Dear Secretary at the Dept. of Health,

About our BOH and the TAG's last meeting; I was pleased when they delayed recommending the addition of the covid vax to our state's immunization requirements.

I'm assured of the competency and thoroughness you bring to the table when evaluating [the evidence] surrounding the health concerns of Washington State residents and I also know it's the reason why more than a dozen states around the country routinely follow your lead when crafting their own regulations.

And because of this, I'm sure we can count on you once again to pass on this unnecessary intervention into what amounts to, what is turning out to be, yet another predictable winter flu annoyance and certainly not a reason to include an injection, (considering lack of efficacy, uncertain side effects or long term testing) alongside those vaccinations we currently accept in the standard model.

Thank you for taking the time to deliberate; as a grandmother I appreciate this.
Sincerely, Julie Dawson

From: Michele Madasz
Sent: 10/21/2022 4:50:54 PM
To: DOH WSBOH
Cc:
Subject: No covid shots for school!

External Email

ACIP vote to add the covid shot to the schedule for school aged kids is nothing short of reckless. Further it is completely unethical to add this EUA vaccine to the schedule WHILE IT'S STILL BEING STUDIED. Parents do not want this mandate for WA state! Protect our kids from this terrible policy!

Michele Madasz
Vancouver WA

Sent from Yahoo Mail on Android

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From: Lori
Sent: 10/21/2022 8:34:36 PM
To: DOH WSBOH
Cc:
Subject: Vaccine

External Email

There is proof now that the vaccine does not prevent people from getting covid or transmitting covid. So why would you make a vaccine mandatory when you don't know the long term affects? There has been a large number of young men dying unexpectedly with no follow up on the cause. Why do you also require to sign a waiver if you are so sure of the vaccine is so safe? This is wrong.
Sent from my iPhone

From: Angel Miller
Sent: 11/1/2022 1:02:20 PM
To: DOH WSBOH
Cc:
Subject: Please do not add COVID Vaccine to mandated list

External Email

Please don't make this mandatory for kids to be at school. Let it be up to each family to decide if this new and experimental vaccine is right for them. There are risks, and more and more keep being identified.

Thank you,

Angel Miller

Sent from Mail

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for Windows

From: StartMail
Sent: 10/31/2022 6:41:50 PM
To: DOH WSBOH
Cc:
Subject: NO! To mandatory C19 shots

External Email

I am vehemently against mandatory COVID-19 shots for children to attend public school in the state of Washington. Just say no to the mandatory experimental COVID-19 shots for our children.

Thank you.

Sincerely,
Jeff Likes

Sent from my iPhone

From: Lisa Hall
Sent: 11/3/2022 7:00:11 AM
To: DOH Secretary's Office
Cc:
Subject: Vaccine meeting

External Email
Hello,

I would like to express my deepest concern regarding child COVID-19 vaccination mandates. I live here in WA state and DO NOT want any COVID-19 products to be mandated for our kids. Despite the political pressure to do so, please vote against these mandates!! For our children's sake, please say NO and stand against this mandate.

Thank you,
Lisa Hall

Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android

From: Wendy Hall
Sent: 10/31/2022 11:10:43 AM
To: DOH WSBOH
Cc:
Subject: Covid Vaccines

External Email

To Whom it May Concern;

Freedom in health care should be protected as a primary right of all citizens.

No entity, private or public, should be entitled to dictate, coerce, compel, or cause citizens to suffer penalties for refusing vaccines, which, not incidentally, are being proven ineffectual, and unsafe.

Thank you,

Wendy Hall

From: Jessica Yaeger
Sent: 10/31/2022 4:33:23 PM
To: DOH WSBOH
Cc:
Subject: Injection

External Email

Genocide is what is going on in our world due to this experimental injection. If you mandate, kids will be pulled from school, there will be more paperwork due to the exemptions, and you will be wasting so much time on what should be made for learning and exceeding objectives which we are not in this state.

Should you mandate this, ALL of the sudden deaths will be due to your lack of responsibility. You will know in your heart that you made the wrong decision. When you meet your maker, you will have to justify your actions and there is no justification for genocide.

--

Sincerely,

Jessica Yaeger

From: Diane Vasey
Sent: 11/2/2022 1:56:34 PM
To: DOH Secretary's Office
Cc:
Subject: Vaccinations

External Email

I am speaking out against mandating the vaccines for children. They have an amazing immune system and do not need to be vaccinated for COVID. Please stop this.

Diane Vasey

From: Darlene Gray
Sent: 10/31/2022 4:32:14 PM
To: DOH WSBOH
Cc:
Subject: Mandates

External Email

Hi,

I am sending notice to you in regards to the message that was sent to me about vaccines and our children.

I "for one" do not want any liability-free COVID-19 products to be mandated for our children.

The Public schools do not have (nor should not have) the authority to mandate giving these vaccines or any vaccines to our Children.

darlene gray

Sent from my iPad

From: Kent Aggers
Sent: 10/31/2022 11:00:24 AM
To: DOH WSBOH
Cc:
Subject: Please Say NO to Mandatory Covid Vacs for Children

External Email

I understand that you are considering mandatory vaccinations for children as young as 5 as the US Health Agency has recommended. I am against this mandatory vaccination in order to be allowed in school. This ruling is going to have very adverse consequences for children's learning and very limited consequences on their health. Please say NO to mandatory vaccinations.

Sincerely,

Kent Aggers

1402 N McKenzie River Street

Spokane, Wa 99224

email: kentcleodogie@comcast.net

From: Nancy Grossi
Sent: 11/1/2022 12:41:58 PM
To: DOH WSBOH
Cc:
Subject: NO- to adding Covid vaccine to pediatric schedule

External Email

To the WA Board of Health,

I strongly OPPOSE the addition of the Covid shot to the schedule of vaccines required for children from preschool – 12th grade to attend public school.

In a Covid hearing held on Oct 12, 2022 the European parliament asked a top Pfizer executive if the vaccine was tested to STOP the transmission of the Covid Virus and she said, "NO". This vaccine is not helpful in stopping the spread of the disease and not helpful in stopping anybody from contracting it. Stop this nonsense. Healthy people have a 98% survival rate. Dr. Robert Malone, creator of the mRNA technology, is quoted saying the spike protein in the vaccine does disrupt the blood brain barrier, which causes epilepsy and other neurological conditions including multiple sclerosis, stroke and other neurodegenerative diseases. Our children don't need that. This vaccine is still experimental. There is no testing results that show its effectiveness in managing the disease. Anybody with high morbidity are the people who should be receiving this vaccine. Their immune systems are already compromised, distribute to them. Not healthy thriving young children.

There are Global predators in our midst, making catastrophic decisions for the world and their decisions have a heavy price. A research team at Johns Hopkins analyzed approximately 48,000 children under 18-years of age that were diagnosed with COVID-19 and found a mortality rate of zero among children who did not have a pre-existing medical condition such as leukemia. Neither the FDA not the CDC have put forth data to dispute this.

Because of the many children injured by this vaccine and have not been offered any treatments to help them, stop administering the vaccine to them. Every parent offered the COVID-19 vaccine should be informed of the risks prior to giving or withholding consent on behalf of their child. Without a true picture of the benefits and risks of this vaccine, no parents consent can be truly informed. You should be asked to reconsider and question the CDC's recent vote to recommend that the COVID-19 vaccine be included on the child's scheduled immunization records to attend a public school. Not one person on the CDC Committee had one negative thing to say or question about the vaccine and its effect on children. Why is that? They just roll over and deem it so? So 331.45 million people are to follow what 15 medical people on the CDC Board decide for

From: Jessica Izem
Sent: 10/25/2022 3:48:10 AM
To: DOH WSBOH
Cc:
Subject: No COVID shots for our children

External Email

You already decided to not include the COVID shot in WA state vaccination schedule. You know and have learned the dangers in children taking any form of the the COVID vaccination.

I implore you please do not be personally responsible for another young man diagnosed with myocarditis their physical world destroyed. Please implore you do not submit your souls to being responsible for another young lady beseeched with neurological damage for the remainder of her life. Their lives have been shortened for nothing, monetary gains, protection of the elderly? What have we done?

You have seen the real science, read a real study, there is absolutely no benefit to children to take the COVID-19 vaccination. It is more risky for them to take the shot than for them to have COVID. You know this.

I implore you, protect the innocent, protect parental rights.

Thank you for reading this.
Jessica Izem
Parent of 4 under 18
Public school attender
WA state citizen

From: Brandon Hall
Sent: 11/3/2022 6:50:17 AM
To:
Cc:
Subject: Vaccine advisory committee meeting

External Email
Hello,

I would like to express my deepest passion about child COVID-19 vaccination mandates. I live here in WA state and do not want any COVID-19 products to be mandated for our kids. Despite the political pressure to do so, please vote against these mandates!!

Thanks,
Brandon Hall

From: Beverly Peterson
Sent: 11/2/2022 12:26:58 AM
To: DOH WSBOH
Cc:
Subject: Covid Mandates for Children

External Email

WA State Board of Health

I urge you to vote NO on Covid vaccine mandates for children. Physicians nationwide have said children DO NOT need this vaccine and since every medication or vaccine has potential lethal side effects we should not expose them to this risk.

Sincerely,

Beverly Peterson

What sorrow for those who say that evil is good and good is evil,
that dark is light and light is dark, that bitter is sweet and sweet is bitter. Isaiah 5:20

From: React19
Sent: 11/4/2022 10:16:07 AM
To: naomi@aldort.com
Cc:
Subject: comments on Covid vaccines for children

External Email

MY comment is the statistics and analysis bellow, please read to the end to see the proofs that many more children die from the vaccines than from Covid. And the few children who died from Covid had morbitibidities. (not mentioned here). The risk from the shot even short term are much greater than the disease, and long term are unknown. Please please READ the evidence:

COVID and Kids: Is My Child At Risk?

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On Oct. 19, 2022, the Center for Disease Control claimed the benefits outweigh the risks and voted YES to approve adding COVID-19 vaccines to the children's immunization schedule. However, no pharmaceutical product is 100% safe. There are risks with all drugs and vaccines. The important point to note is that if your child is harmed by the COVID vaccine there is no support for your child. The drug companies are not liable, the government is not liable, only you are liable if something goes wrong.

When looking at natural immunity, 86.3% of kids in the U.S. have already had COVID-19 so for the remaining 13%, the risk vs. benefit profile needs to be broken down. According to CDC data, 32 children aged 0-17 died from COVID-19 in 2022. Compare that to 167 reports for children aged 0-17 who died from the COVID-19 vaccine.

Upon further analysis, we believe the child deaths reported in VAERS to be 400+. A large quantity of VAERS reports, including death reports, do not have an age range designated. Unspecified death reports reviewed have identified hundreds of adolescent deaths that are not included in the automatic search for age.

Are there adverse events involving kids? YES. What happens if my child is harmed? Of the 49,598 VAERS reports of child COVID-19 vaccine injury, U.S. government programs like the Vaccine Injury Compensation Program or Countermeasures Injury Compensation Program have paid out zero claims. The FDA made an unprecedented move to approve the most recent bivalent booster based on a study of eight mice, zero humans. Source: NPR

Part of React19's mission is to call for an investigation into continued lack of transparency and proper acknowledgement of adverse events by the health agencies so it's concerning to learn Weber Shandwick, the same public relations firm employed by Moderna and Pfizer, also has staff embedded in the CDC's vaccine office. This raises questions about a possible conflict of interest between drugmakers and the organization responsible for protecting public health.
Source: Daily Mail (UK)

Between looking at data, lack of accountability by the FDA and CDC, and knowing if

something goes wrong there is no safety net, the public must be made aware of the potential risks to their child so they can make an informed decision.

For more information, stories, and science visit <https://react19.org/kids>

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Pharma Professor: "We're in an era of open science, not secret science."

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Peter Doshi, PhD, Asst. Professor, Pharmaceutical Health Services Research was recently interviewed by German mainstream media to discuss vaccine data and the serious health risks found in studies.

"It's very concerning to think that we have a product that's been rolled out globally to billions of people, yet the raw data for these products is not accessible. On that basis, why should we be considering these products to be based on science? Science is about the sharing of data. Science depends on that. We're in an era of open science, not secret science," Doshi said.

The full interview can be watched here:

<https://www.mdr.de/nachrichten/deutschland/panorama/video-664028.html>

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BBC Helps Facebook Purge

Vaccine-Injured Support Groups

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In what could be described as a dangerous move, the BBC collaborated with Facebook to shut down vaccine injury support groups by universally referring to them as "anti-vaccine" or "anti-vaxxers" and calling out the ways that they use carrot emojis to hide from Facebook censorship algorithms.

Source: BBC

"Well over 20,000 COVID vaccine injuries have been systematically shut down leaving us no choice but to reboot and hope people find us. These groups are an essential source of support and for many, they are a lifeline," React19 Co-Founder Brianne Dressen said.

Watch the TrialSite News report here:

https://www.youtube.com/watch?v=xjj30knCC84&ab_channel=TrialsiteNews

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv=xjj30knCC84&ab_channel=TrialsiteNews>

Informed Consent Action Network Data Dump: Millions of Adverse Reactions

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After numerous legal demands, the CDC handed over V-Safe data, obtained by Informed Consent Action Network, which details millions of adverse reactions to the COVID-19 vaccine.

Source: Fox News

Some key highlights of their findings:

- 1.2 million unable to perform normal activities.
- 1.3 million missed work.
- 800,000 required medical care.

View the interactive data here:

<https://www.icandecide.org/v-safe-data/>

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.icandecide.org%2Fv-safe-](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.icandecide.org%2Fv-safe-data%2F&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C3ed3564e6fcd4e82fd3e08dabe88404d%7C1)

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React19 COVID-19 Vaccine

Injury Registry

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This registry is crucial to help government agencies and the scientific community understand just how many COVID-19 vaccine-injured people exist. Each person matters, each and every injured individual can be counted. This is where we need your help!

Please fill out this registry to help us properly quantify how many injured truly exist:

<https://react19.org/registry>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Freact19.org%2Fregistry&data=05>

Eeeeeeeeeeeee! Do You Hear That? Researchers Want to Hear from You!

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Did you develop tinnitus due to the COVID-19 vaccine or the virus itself? Tinnitus Study

Link: https://illinoisahs.co1.qualtrics.com/jfe/form/SV_afTJflpRnk1Kdj8?Q_CHL=qr

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fillinoisahs.co1.qualtrics.com%2Fjfe/form/SV_afTJflpRnk1Kdj8?Q_CHL=qr

Stories of Hope: Alyssa

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Alyssa made it through her first two shots with no reaction, but the 3rd left her with tingling and numbness in her arms and hands, along with severe cardiac pain which sent

her to the ER.

Many of the injured try a whole host of treatments to try to calm down their symptoms, but the only things Alyssa tried were anti-histamines and D-Ribose. Above all else, she attributes her healing to avoiding certain triggers like caffeine, alcohol, and sugar, as well as time.

To celebrate her 21st birthday she was able to attend a four day music festival, dance to her favorite DJ's, and have fun with her boyfriend, who has stood beside her throughout this ordeal. While she isn't fully at 100% yet, she is now able to hold down a job and slowly introduce things like caffeine and sweets again.

"If I could say anything to those still struggling, it would be to give it time. Only do what you must and don't push yourself! I felt pressure from society and people close to me to be pushing myself to get out of bed and do things, but many days I couldn't, and that's okay! Healing yourself mentally is the first step, and then you can heal physically. Time is the best healer and remember that for many of us, this is temporary. And once you come out on the other side, you'll be infinitely more grateful for the little things in life. There are brighter days ahead, and you need to take care of yourself to be ready for them!

Make a Change: React19 CARE-fund

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React19 is dedicated to providing support to those suffering lasting effects from the COVID-19 vaccines. These are real people, real lives, real families. These individuals need financial help to be able to access essential medical care. Through our React CARE-fund program, we help patients gain access to financial assistance, which is funded entirely through the generosity of independent donors. We are dedicated to supporting these individuals to get them on the path toward healing. Contributing to this fund allows us the capability to do this. If you're in a position to help make a tax deductible donation before the end of the year, please Text REACT to 50155 or follow this link:

<https://react19.org/donate>

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Freact19.org%2Fdonate&data=05%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Freact19.org%2Fdonate&data=05%2F)

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Did you know that you can make a donation to the React-CARE fund at no cost to yourself – just by doing your regular shopping on Amazon! All you have to do is sign up

for Amazon Smile and React 19 will receive 0.5% of the price of every eligible purchase you make.

The program is free and signing up is easy:

1. Visit our Amazon Smile link at smile.amazon.com/ch/87-3643837

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2. Set "React 19" as your charity of choice

3. Bookmark the page.

Be sure to always start shopping on Amazon by using that bookmark or by typing in smile.amazon.com

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This fund is currently available for U.S. residents only.

Donation Via Venmo

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To donate via Venmo by scanning the above QR Code.

If you scan a QR code with your Android or iPhone Camera, you can open a browser, view text, or open apps like a payment app.

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Open Camera <<https://storage.googleapis.com/support-kms-prod/KzTldsxEi9PJqSnXiH29DSM1zq3v7aQ2WreK>> and choose option to scan:

To scan with the QR mode of Camera, tap QR <<https://storage.googleapis.com/support-kms-prod/tLf6FXPkYtVu9bXVtByR8siFmbzXNWSjz9pH>> , and point your camera at a QR code.

To scan with your camera's default photo mode, point your camera at a QR code.

To open a browser page, app, or payments app after a QR code is scanned, click the banner that appears.

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Text REACT to 50155 to donate via text

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Forward

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React19 is a 501(c) non-profit organization dedicated to advocacy and support for those suffering Post-Covid and Post Covid Vaccine Syndrome

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From: nychavez@aol.com
Sent: 11/4/2022 10:26:11 AM
To: DOH WSBOH
Subject: Experimental COVID-19 Vaccines

External Email

Good Morning WA State Board of Health,

It was unfortunate that the Vaccine Advisory Committee Meeting was cancelled yesterday, I was registered to speak during the Public Comment session.

I want to share with you all that my friend's 12 year old Goddaughter was hospitalized with a pulmonary embolism after receiving the experimental covid vaccine. And a mother of a teenage boy spoke during the Public Comment session at a Whatcom County Council meeting months ago. She informed Council members that her son got myocarditis after his first dose of Pfizer's experimental covid vaccine and so he never received the 2nd dose. He is now on medications following his covid vaccine injury and his life will never be the same.

A former pilot, now unable to fly after a covid vaccine injury, also spoke at one of the Council meetings in the past, along with a community member who was hospitalized due to blood clots following the experimental covid vaccine injection.

When I was visiting a relative in Colorado in August, I chatted with a cashier at King Soopers about the experimental covid vaccines and he informed me that his 12 year old niece had seizures following the experimental covid vaccine. And most recently, my friend who teaches in Canada informed me that three of her students (10 years old) suffered severe adverse reactions last month in October following their experimental covid bivalent booster injections. One student, a 10 year old boy has been in and out of Children's Hospital following the booster and he was a star player on his hockey team. He will most likely never be able to play hockey again, and will most likely will be on medications for the rest of his life, and have a shortened life-span.

My Canadian teacher friend also informed me that her students began getting sick following their experimental covid bivalent boosters and almost half of the class ended up out sick from school following the boosters, and 7 students were out sick for an entire week on the 2nd week following the boosters. And her boosted students ended up getting her sick too, so she ended up out sick as well.

One of the adverse reactions listed for Pfizer's experimental covid vaccine is: GETTING COVID. So it appears like we are getting more covid cases and infections after people get these experimental covid vaccines and booster injections. This makes NO SENSE.

The administration of these experimental covid vaccine injections must be stopped immediately. They are destroying people's lives and immune systems. You are all engaging in fraud, following corrupt science, and promoting profits for Big Pharma rather than caring for the lives and health of Washingtonians.

Also, please consider watching the replay of the Oct. 11, 2022 Press Conference with six members of the European Parliament at:

<https://youtu.be/2jTgDj7uiX8>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2F2jTgDj7uiX8&data=0>

It is important to note that Pfizer representative, Janine Small, testified before the European Union Parliament on Oct. 10th and informed EU representatives that no testing had been done on these experimental covid vaccines in regards to whether or not they PREVENT TRANSMISSION.

I also hope that you will take the time to watch the recently released UK documentary~
Safe and Effective: A Second Opinion at:

<https://www.oraclefilms.com/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.oraclefilms.com%2F&data=0>

Regards,
Natalie Y. Chavez

From: C
Sent: 10/31/2022 5:51:24 PM
To: DOH WSBOH
Cc:
Subject: Please Do Not put our children at risk by allowing liability-free COVID-19 products to be mandated

External Email

What purpose would be served by requiring our children to be injected with experimental, liability-free Covid-19 products, without informed consent?

It would be a travesty to pretend there is any emergency or benefit -- other than to drug companies, patent holders, corrupt government officials and others in power who would benefit.

If you truly want to protect our children, please:

- * remove Covid-19 products from their liability-free shield,
 - * require adequate testing and disclosure of results to facilitate informed consent,
- and
- * return our rights to privacy, choice, and free-speech.

Thank you for your consideration in this matter.

Carol Kinoshita
Vancouver, WA

From: Lacy Sutter
Sent: 11/3/2022 9:45:06 AM
To: DOH Secretary's Office
Cc:
Subject: Nov. 3 VAC meeting

External Email

Dear Secretary,

As a mom of a vaccine injured child, I do NOT want liability-free Covid-19 vaccines to be mandated to our kids.

Please do NOT recommend to the Board of Health to add the Covid-19 vaccine as a requirement for daycare and K-12 school children.

Lacy Sutter

Sent from my iPhone

From: Terry Peterson
Sent: 10/31/2022 2:19:11 PM
To: DOH WSBOH
Cc:
Subject: Health Freedom

External Email

We do not care about any of your Covid bs. You show you are truly moronic trying to sell a criminal idea to the public who owns this country--by, for, and of the people. Your bs does not and never will go on the books of law. God is in charge of this universe and He sets and makes all the rules. You have nothing legitimate to say and we are not listening to you!

From: Roland Dunatov
Sent: 11/1/2022 8:08:04 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: ACIP recently recommended adding Covid shots to the CDC pediatric schedule

External Email

Washington State DOH, VAC, and BOH;

Good morning. It has come to my attention that the ACIP has recommended Adding Covid shots to the CDC pediatric schedule. Frankly I am shocked. Here is recent research that shows that the median IFR rate (Infection Fatality Rate) for ages 0-19 is 0.0003%. That is 3 in 1 million. This was researched by John P.A. Ioannidis of Stanford and posted by medRxIV and I am pasting a link below. Why are you even considering this and why are you not focusing on childhood obesity and other issues that are more critical to our children's health. Is that not what you are paid by the TAX PAYERS to do?

https://www.medrxiv.org/content/10.1101/2022.10.11.22280963v1.full?utm_source=substack&utm_medium=email

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.medrxiv.org%2Fcontent%2F10.1101%2F2022.10.11.22280963v1.full?utm_source=substack&utm_medium=email>

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.medrxiv.org%2Fcontent%2F10.1101%2F2022.10.11.22280963v1.full?utm_source=substack&utm_medium=email>

Age-stratified infection fatality rate of COVID-19 in the non-elderly informed from pre-vaccination national seroprevalence studies

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.medrxiv.org%2Fcontent%2F10.1101%2F2022.10.11.22280963v1.full?utm_source=substack&utm_medium=email>

www.medrxiv.org

Why is it that a citizen like myself who pays taxes to fund government jobs has to look this stuff up while folks in your position want to ram another vaccine into our children's arms? It would seem likely that you would try to get as much information as possible from as many resources as possible rather than listen to the CDC which is partially funded by big pharma. I can go on and on, but Pfizer was fined \$2.4 BILLION dollars back in the year 2010 or 2011 (look it up) for miss marketing one of their drugs. And now all of a sudden they are sacrosanct and blessed by the CDC? What is going on with big government and collusion, lobbying, greed, and either general lack of critical thinking or concerted deception on the American public?

I can send many more of these studies from Europe, Israel and other places showing the effectiveness of these vaccines, injuries and deaths after vaccination, and heart issues all across the board. Do I need to send these to you or are you aware, and just putting your heads in the sand?

Frankly a large number of Americans have had enough and are changing votes to get rid of the powers that be in office, and try to bring in fresh minds that are not corrupted by media that gets advertising dollars from big pharma. You can tell Jay Inslee that he will never receive my vote again and neither will any other Democrat that goes all in on the deception that has occurred over the last 2 years.

Thank You, Roland Dunatov, Sammamish, WA

From: Jotform
Sent: 10/23/2022 6:08:42 PM
To: DOH WSBOH
Cc:
Subject: Re: Stop The Child Vaccine Mandate Petition - Floyd Baker

External Email

<<https://cdn.jotform.ms/assets/img/logo2021/jotform-logo.png>>

Stop The Child Vaccine Mandate Petition

Name

Floyd Baker

Email

bakersplus4@yahoo.com

Zip

98338

You can edit this submission

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Fedit%2F542>

and view all your submissions

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Ftables%2F2>

easily.

From: Alison1jane
Sent: 10/19/2022 7:23:10 PM
To: DOH WSBOH
Cc:
Subject: Thank You for Listening to the Citizens of WA State

External Email

Dear BOH Members: Thank you for listening to the concerns of us as citizens of Washington State and for voting to adopt the TAG's recommendation to not add the COVID-19 vaccine to Washington's list of required immunizations for child care and school entry at your April 13 virtual public meeting. We are confident that the emerging scientific data will continue to affirm your decision. Thank you for your thoughtful consideration in your role to protect the health of the children in our State. respectfully,

From: Virginia McManus
Sent: 11/2/2022 3:21:08 AM
To: DOH Secretary's Office
Cc:
Subject: no covid requirement please

External Email

Hello WA State Vaccine Advisory Committee and Board of Health Members -

I'm sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school. Here's why...

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (some of my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits!!! The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science!!! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school!!!

Sincerely, Virginia McManus

From: sue coffman
Sent: 11/3/2022 10:19:29 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Vaccine Advisory Council meeting Nov 3

External Email

Dear VAC Board,

I live in WA state, am a resident of Clallam County, and I represent the health-freedom-related group, Informed Choice Washington. I continue to be saddened at the way our health agencies are spreading illogical and unfounded lies about the efficacy and safety of today's so-called "vaccinations" for Covid19.

Your job as an advisory committee is to truly look at the reality behind these shots. You must look at ALL the evidence, and not just advise that these procedures move forward because you are told they will work by another Agency. Look at all the reports and reactions. Look at the science. Look into your hearts and stop believing all those agencies out there that just want to push an unproven medical procedure upon the populace.

And now the CDC and the FDA recommend that these shots get approved for the childhood vaccine schedule! Look at your children and ask yourself if they are important enough to you to save them from the harms that these experimental protocols are having on our society's future. Just LOOK.

I thank you for doing just that.

Sincerely,

Sue Coffman
714-337-4331
ICWA Team Leader
Legislative District #24
<https://informedchoicewa.org/>

From: Jotform
Sent: 11/2/2022 9:17:46 AM
To: DOH WSBOH
Cc:
Subject: Re: Stop The Child Vaccine Mandate Petition - Carman Henderson

External Email

<<https://cdn.jotform.ms/assets/img/logo2021/jotform-logo.png>>

Stop The Child Vaccine Mandate Petition

Name

Carman Henderson

Email

cvhenderson69@gmail.com

Zip

98367

Cell Phone Number

(253) 5092826

You can edit this submission

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Fedit%2F543>

and view all your submissions

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Ftables%2F2>
easily.

From: Dan Sizer
Sent: 11/2/2022 3:47:03 PM
To: DOH WSBOH
Cc:
Subject: Covid-19

External Email

To whom this may concern,

We the residence of Washington state do not want COVID-19 injections added to immunization requirement.

This is outrageous and it is proven with science that it is not needed for children or adults. The efficacy is terrible and does no good.

We also know that it is causing tremendous health issues in children and adults. In some cases it's killing people.

If these are added to the immunization requirements for public school or private school, my children will not be attending either. I have not given him any injections and I will not.

You people need to wake up and listen to the true science and good doctors and researchers and listen to their voice. Because right now you're listening to the voice of Pfizer and all the other pharmaceutical companies and it's all about money, has nothing to do with my health or my children's health or safety.

Dan Sizer

From: CenturyLink Customer
Sent: 11/2/2022 6:31:02 PM
To:
Subject: Public Comment re: Adding Covid Shots to Childhood Vaccine Schedule

External Email

Please follow the science, and do NOT add covid shots to the WA state pediatric vaccine schedule.

The covid-19 shots are still only Emergency Use Authorized (EUA). The CDC tried to fool us by approving a bio licensing application for Comirnaty, and many people did indeed fall for it. The CDC admitted Comirnaty has never and will never be made. EVERY covid shot administered in the United States is still only EUA. An EUA product cannot be mandated. The US government has maintained an Emergency Declaration so they could continue to extend the EUA for these thoroughly failed shots. They understand that they cannot keep an Emergency Proclamation forever. The primary reason they put these shots on the Childhood Vaccine Schedule is because doing so allows the shot makers and shot givers total liability protection for not only children, but also adults. We see what they are doing. We are not all stupid. You are complicit in this. We see what WA state has been doing as well, with Inslee maintaining his Emergency Declaration until right before midterm elections. Now he has dropped his proclamation, which means school teachers and volunteers are no longer required to have covid shots. Yet you want to add these shots to the pediatric schedule, which will allow them to be mandated for school attendance, when children have NEVER been at high risk for covid??!

Healthy children would not need these shots even if they were effective. They are entirely risk with no benefit for them. All but SEVERELY immune-compromised children and young adults successfully fight covid off, and then have natural immunity against future infection. But these shots are not effective. Even Pfizer admits they did not test them for stopping transmission or infection. And judging from the number of people dying and in the hospital who are "vaccinated," they are not reducing severity either. These shots in fact make the recipient MORE likely to get covid within a couple months of taking the shot. Add to that the serious risk of myocarditis for young people and children. There is no such thing as "mild myocarditis." No, it is NOT normal for children to experience blood clots and cardiac arrest. These shots are NOT vaccines. The CDC redefined the word "vaccine" to make these gene therapy treatments fit the definition. (They redefined "herd immunity" and "pandemic" as well.) Again, we see what they are doing. They called these things "vaccines" so that they would not have to do the more rigorous testing required for gene therapy products. And speaking of testing, they aren't even doing that for these shots anymore. These so-called bivalent shots were not tested in humans; they were tested on EIGHT MICE! These mice were euthanized at the conclusion of the trial so it is now impossible to observe long-term effects. Presence of antibodies means nothing! I am horrified that our government and supposed experts have so little regard for our future generations that they would add these to the Childhood Vaccine Schedule, which I'm sure will not mean one shot, but EIGHTEEN over an individual's childhood. We have no idea what the long-term effects of these shots will be. How many of our children will even make it to adulthood after multiple doses of these shots that direct their bodies to create a toxic spike protein? How many will actually be able to have healthy children? We have no idea. All for an illness that Moderna admits is like a flu. Surely you've seen the data on excess mortality from the US and other countries. Notice there was no excess mortality during covid. But the excess mortality has increased dramatically since the rollout of these shots. Please do not continue to be complicit in allowing millions of WA state residents to be injected with these failed shots, and even worse, in forcing them upon children. We are not all stupid. We see what you

are doing. We also know about how you mandated these shots for childhood sports to coerce parents into getting their kids injected. Please, I beg of you, stop this madness, vote AGAINST adding these failed shots to the Pediatric Vaccine Schedule in WA state.

Sincerely,
M. Tyler

From: Jodi Hassell
Sent: 10/31/2022 1:51:56 PM
To: DOH WSBOH
Cc:
Subject: immunization requirements

External Email

The COVID "vaccination" has been proven to be ineffective. It has been proven to NOT stop infection, NOT stop transmission, and not even stop severe disease. In fact, the more injections a person has gotten, causes NEGATIVE efficacy!

Science has proven that children are at zero risk of dying from COVID and they receive NO benefits from receiving the Covid 'vaccine,' and instead, it actually causes HARM to children.

PLEASE do not mandate these ineffective and harmful 'vaccines' on our children.

Jodi Hassell

From: Lee Hammon
Sent: 11/1/2022 3:06:34 PM
To: DOH WSBOH
Cc:
Subject: covid 19 products

External Email

Please do not mandate any liability-free covid-19 products for our kids! The risks clearly outweigh any benefits!

Thank you!

Robert L. Hammon
108 Inglewood Partk
Longview, WA

From: Lauren Gonzalez
Sent: 11/3/2022 6:18:59 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Subject: CDC Pediatric Schedule

External Email

Dear Vaccine Advisory Committee,

After receiving the news that the CDC had recommended the mandatory COVID vaccine for kids ages K-12 it has come to my attention that the VAC will meet on this point and will recommend to the Washington Board of Health about mandating this in Washington.

I am a mother of 2 kids and I am completely opposed to this mandate.

First of all, kids are the least of all age groups to be a high risk for COVID and secondly, the government should not be mandating any medical regulations. This should stay between me and our pediatrician.

Every case is unique, and while some kids are at a higher risk of COVID due to their own physical condition and perhaps a pediatrician will recommend this vaccine, this is not the case for all.

My kids already had COVID, and they have acquired immunity. I will NOT vaccinate them just because the governments say so.

The government is NOT my pediatrician.

We know very little about the long-term effects of these vaccines in kids and also we know these vaccines DO NOT stop anyone from getting the virus, I have seen this over and over and over.

Therefore I want to inform you I completely disagree with mandating this as a point-blank rule.

Thank you for your understanding.

Lauren Elyse Gonzalez

From: shellbellemail
Sent: 11/3/2022 11:45:11 AM
To: DOH WSBOH,DOH Secretary's Office,Jamila.Sherls-Jones@DOH.WA.GOV,Drummond,
Heather M (DOH)
Cc:
Subject: Vote No Mandate for kids

External Email
November 3, 2022

Hello,

My name is Shelly Schweigert, Resident of Arlington Washington. District 10.

I'm writing to all who make a difference in Washington State to VOTE NO MANDATE FOR CHILDREN . The public doesn't want LIABILITY - FREE COVID 19 VACCINE PRODUCTS TO BE MANDATED FOR OUR KIDS!!!!

I respectfully disagree with all who choose to Mandate our kids.

Patty Murray stands up for children who choose "MY BODY MY CHOICE";.

Medical Freedom including Covid 19 vaccine Mandate is no different than abortion rights for our girls.

Thank you

Shelly Schweigert

From: Contact ICWA
Sent: 11/2/2022 4:52:09 PM
To: DOH WSBOH,tao.kwan-gett@sboh.wa.gov,DOH Secretary's Office,Sherls-Jones,
Jamilia J (DOH),Drummond, Heather M (DOH)
Cc:
Subject: Public Comment



attachments\4A4D20E4011A4946_ICWA to VACBOH 11.02.22.pdf

External Email

Please see the attached PDF for ICWA's public comment to WA State Public Health Officials and the DOH Vaccine Advisory Committee.

Thank you.

*Informed*CHOICEWA.org

November 2, 2022

WA DOH Vaccine Advisory Committee
WA State Board of Health
Secretary of Health Shah
Chief Science Officer TaoSheng Kwan-Gett
Immunization Director Jamilia Sherls-Jones
COVID-19 Vaccine Director Heather Drummond

re: Public Comment

Dear Washington Public Health officials and VAC members:

We write to provide you with updated COVID-19 VAERS data and the link to informative videos to consider at your upcoming Vaccine Advisory Committee and Board of Health meetings.

We do understand that discussion regarding vaccine mandates for daycare and school attendance are not on either of your agendas. We, and many Washington parents, are writing so that you do not add such an item to any future agendas. In April, when the TAG assembled by the BOH voted against daycare/school mandates, and the BOH voted to accept the TAG's recommendation, it was made very clear they may revisit the issue. The April meeting minutes state:

“Tao Sheng Kwan-Gett, Chief Science Officer, TAG Co-Chair, . . .emphasized to the Board that the TAG's recommendation reflects what is known about the COVID-19 [sic] vaccine for children at this time, and that the **evolving science and further data could lead the TAG to a different recommendation in the future.**”

<https://sboh.wa.gov/sites/default/files/2022-06/WSBOH-Minutes-Final-Apr2022.pdf>

We also write because despite the data and science showing the shots do not prevent infection or transmission while they do pose an unacceptable level of risk, Governor Inslee illegally directed the Office of Financial Management to use the rulemaking process (there is no RCW to support their new WACs) to permanently mandate COVID shots on state workers. He also directed the use of financial incentives for booster uptake, with \$1000 per person payments, which amounts to coercion and undue influence.

As we have requested in previous communications, we earnestly ask you to review information beyond what federal agencies provide and to take steps to reverse the promotion of products whose risks far outweigh any perceived benefits. This nation is in a tragic position where there are no checks and balances in the public health system, and no one feels the least bit responsible for the negative outcomes of policies or the negative health impacts of promoted products. The fact that you all repeat the CDC's messaging that it's safe to administer the COVID shots with other vaccines—in the absence of any safety studies—exemplifies this lack of concern due to lack of responsibility.

The mandating and promotion of the failed COVID-19 shots by government officials and public health agencies has eroded public trust. As information previously labelled “misinformation” is revealed to be factual, such as the Wuhan lab origins of SARS-CoV-2 (per Senate committee analysis), and the inability of the shots to prevent infection and transmission, public health *is* responsible for taking heed, changing course, and notifying the public.

We also write to voice our objection to your continued promotion of Merck's HPV Vaccine, Gardasil. For an update on the many fraud and malfeasance lawsuits for injury and death that have been filed against Merck outside of Vaccine Court, see this law firm's page: <https://www.baumhedlundlaw.com/prescription-drugs/gardasil-lawsuit/>

Prevention of disease is a worthwhile goal, but when your chosen tool causes harm, you must re-examine your promotion of it and instead promote the other proven approaches. Early testing and detection, nutrition and lifestyle, and avoidance of risk factors such as smoking, for instance, all play a major role in cancer avoidance.

You all entered the field of public health for noble reasons, but public health has been captured by those who put financial and political goals ahead of health. It's up to you to restore your profession if trust is to be restored.

Sincerely,

The ICWA Board

COVID-19 Shot Data & Recent Studies

<https://openvaers.com/covid-data>

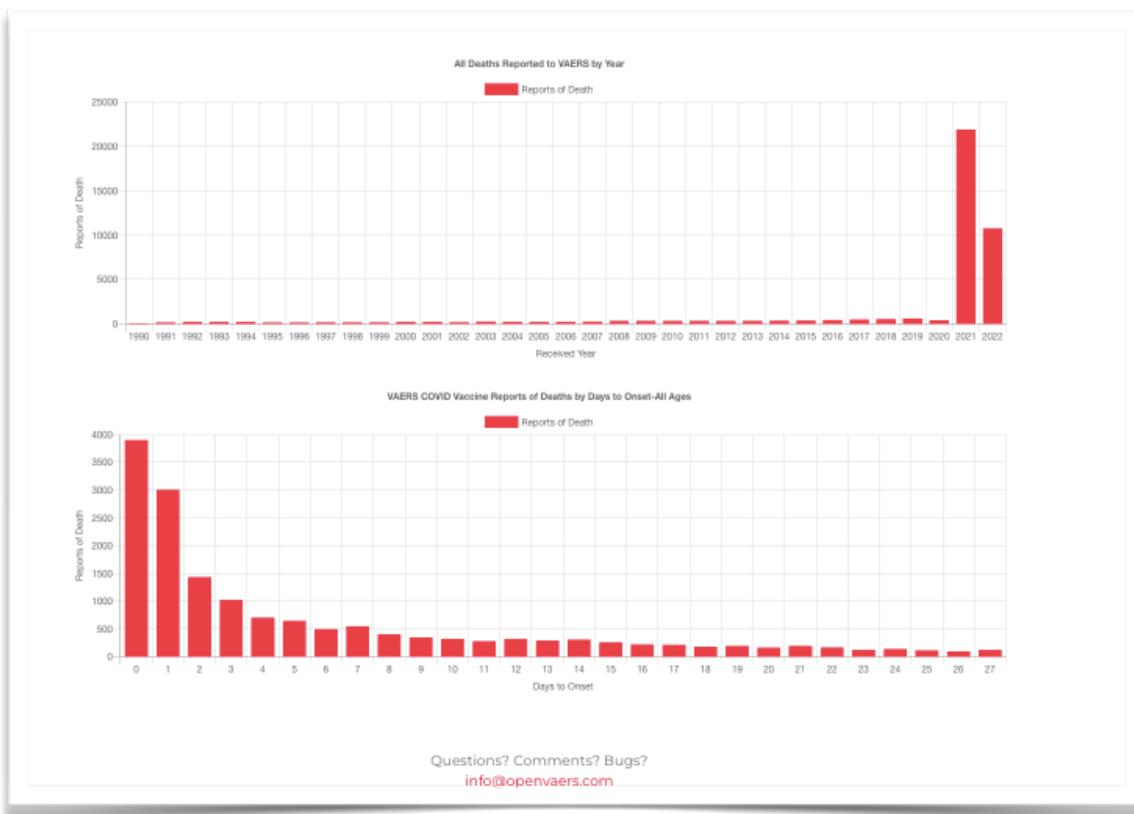
COVID VAERS Reports by STATE

COVID VAERS reports by Age Range, Adverse Event and State. To find the results for your state enter its two-letter abbreviation in the search box on the left.

Through October 21, 2022

Search: Show entries

AGE RANGE	STATE	DIED	LIFE THREAT	PERM. DISABLED	HOSPITALIZED	MYOCARDITIS	ANAPHYLAXIS	MISCARRIAGE	TOTAL REPORTS
6 MO-5 YR	WA	0	1	1	2	0	1	0	218
5-11	WA	1	1	2	5	4	0	0	536
12-18	WA	1	10	5	68	59	1	0	1,191
19-30	WA	1	34	54	108	76	6	11	2,382
31-49	WA	14	117	171	256	91	25	54	6,385
50-64	WA	32	112	171	265	53	16	0	4,642
65-80	WA	64	90	82	323	44	4	0	3,988
81-121	WA	72	20	16	142	11	0	0	668
ALL AGES	WA	207	388	506	1191	348	57	65	20,891



Video at CHD.TV: <https://live.childrenshealthdefense.org/shows/good-morning-chd/pby5mV2ula>

This video is about SARS-COV-2, mRNA COVID-19 shots, original antigenic sin, molecular mimicry, apoptosis, and much more.

In this one-hour conversation, Jessica Rose, Ph.D., and Steven Pelech, Ph.D., provide an overview of the current science and medical insights that the CDC is ignoring. If you want to understand why there are global protests against the shots, and why so many are refusing to get them or to get boosters, this video will provide some answers.

About Steven Pelech: <https://www.centreforbrainhealth.ca/faculty/steven-pelech/>

About Jessica Rose: <https://www.voiceforscienceandsolidarity.org/authors/jessica-rose>

New Peer-Reviewed Paper Calls for Suspension of COVID-19 Vaccines

“In a two-part paper entitled “Curing the pandemic of misinformation on COVID19 mRNA vaccines through real evidence-based medicine,” real-world data reveals that in the non-elderly population the number needed to vaccinate to prevent one death from Covid-19 runs into thousands and that re-analysis of randomised controlled trial data suggests a greater risk of suffering a serious adverse event from the vaccine than to be hospitalised with Covid-19.”

“Curing the pandemic of misinformation on COVID-19 mRNA vaccines through real evidence-based medicine” - Parts 1 and 2, published in the *Journal of Insulin Resistance*, 26 September 2022: <https://insulinresistance.org/index.php/jir>

Author Aseem Malhotra is a consultant cardiologist, Fellow of the Royal College of Physicians, and President of The Public Health Collaboration. An internationally renowned expert in the prevention, diagnosis and management of heart disease, he is an honorary council member to the Metabolic Psychiatry Clinic at Stanford University School of Medicine California.

Video at CHD.TV: <https://live.childrenshealthdefense.org/dr-aseem-malhotra>

Videos of those injured or who lost loved ones: <https://www.c19vaxreactions.com/>

From: Dave Matz
Sent: 10/21/2022 4:33:58 PM
To: DOH WSBOH
Cc:
Subject: Covid shots

External Email

If you mandate the kill shot for public school, That would be awesome,
that will propel the home school private school debate to center stage.

From: Stephanie Breuner
Sent: 10/22/2022 12:10:33 PM
To: DOH WSBOH
Cc:
Subject: NO! to vaccine mandates

External Email

Do not add the COVID shot to the childhood immunization schedule. Do not mandate it for anyone.

Stephanie Breuner
Camas, WA

From: Tim Dever
Sent: 11/2/2022 4:57:35 PM
To: DOH WSBOH
Cc:
Subject: Immunization requirements

External Email

Hello,

Good afternoon. A few comments below for your consideration as this board entertains the idea of adding the Covid vaccine to the childhood schedule.

1. The vaccine was designed for a strain that is out of circulation for 18+ months now.
a. No one goes to the doc and asks for a flu vaccine that was designed for the stain from two years ago. Those have been thrown out for good reason, lets remember that reason going forward.

2. The IFR rate for children, during the original strain before the vaccine, was so minute, it's not even a blip on the radar, statistically irrelevant. We now know that the vaccine does not, nor tested in the case of Pfizer, prevent transmission. Here is the IFR before vaccines, to put into perspective, it is around 0.0023%. Here is the article -

<https://pubmed.ncbi.nlm.nih.gov/35219376/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F35219376/>

here is the video of the Pfizer exec admitting that transmission was not a part of the testing. <https://www.youtube.com/watch?v=mnxlzxoZx0>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DmnxlzxoZx0>

a. If this committee is considering adding the Covid vaccine for children at this extremely low risk, what won't be added?

The credibility of the board will be severely damaged if they decide to add the Covid vaccine into the required category. All the data coming out in the last 6 months shows how irrelevant the vaccine is for children and should be reviewed and documented in your decision. The quantity of data is overwhelming, you are at risk of showing your constituents that you are not willing, or purposefully not researching, to take the time and truly weigh the risks and benefits.

Thank you for your consideration,

Tim Dever

From: Camerer, Cassie
Sent: 11/1/2022 8:11:04 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: NO Vax Mandate

External Email

To WA State Health Officials,

I am writing to convey my strong stand against any COVID vaccine mandates in our state, including our schools. Evidence continues to mount that these vaccines are ineffective, while long-term effects continue to present, and are at times, fatal. With even the CDC acknowledging the shots do not prevent infection or transmission, and that any protection fades rapidly, the cost does not justify making our children test subjects for drug companies.

Furthermore, it has been proven that the existing COVID vaccines fail to meet your own Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030. This will undoubtedly result in lawsuits at the cost of taxpayer's money, a fiscally irresponsible move during a recession when we need to be utilizing state funds as wisely as ever.

I implore you to vote NO to this mandate.

Thank you,

Cassie Camerer

From: Kay Hibbard
Sent: 11/3/2022 7:47:28 AM
To: DOH Secretary's Office
Cc:
Subject: Covid mandated vaccines for school age children

External Email

I oppose COVID vaccine mandates for all kids. The virus is not dangerous for kids and should not be one of the required vaccines for school. Parents need to make the informed medical choice for their children, not the government. Many health problems have been reported as a result of receiving COVID vaccines.

Please hear the voice of the people in Washington state who are urging you to oppose all COVID vaccine requirements for school aged children.

Sincerely,

Kay Hibbard

From: Flaaten
Sent: 11/1/2022 5:40:15 PM
To: DOH WSBOH
Cc:
Subject: VACCINE MANDATES

External Email

Absolutely NOT!! Do not violate my human rights, nor the rights of our most precious resource, our children!! Lynn Flaaten, Greenbank, WA 360 222-3143

From: Annemarie Kebre

Sent: 11/2/2022 4:54:56 PM

To: Drummond, Heather M (DOH),DOH Secretary's Office,Kwan-Gett, Tao (DOH),Sherls-Jones, Jamilia J (DOH),Drummond, Heather M (DOH),DOH WSBOH

Subject: Please vote against Covid 19 mandated on the vaccine schedule for children

External Email

To WA State Department of Health/BOH,

I am concerned about liability-free COVID-19 products, particularly for young adults. A new Swiss study* reveals the risk of myocarditis with the Covid 19 injection are 800x higher for children.

This, in of itself, is extremely alarming.

Please vote no and thank you for considering the harmful impacts of this study.

Annemarie Kebre

* Based on a presentation; Prof Christian Mueller, (Basal Switzerland) at the European Society of Cardiology Congress, August 2022, "Myocardial Inflammation/Myocarditis After Covid 19 mRNA Booster Vaccination"

From: Kelsey Anderson
Sent: 11/2/2022 8:36:20 PM
To: Drummond, Heather M (DOH),Sherls-Jones, Jamilya J (DOH),Kwan-Gett, Tao (DOH),DOH Secretary's Office
Cc:
Subject: Covid-19 Mandates for Children

External Email
All -

As a Washington state mom of three kids under five, please hear me when I say - we are absolutely opposed to Covid vaccine mandates for children. The choice to vaccinate my children against Covid 19 (which they have all had multiple times) should be the choice of my husband and I, and our choice alone. Just as it is with the seasonal flu vaccine, this should be at the discretion of the parents who have birthed and raised and cared for their babies. NOT a decision made by the state.

Thank you,
Kelsey Anderson, Kennewick WA

From: Chris Marrs
Sent: 10/31/2022 6:09:08 PM
To: DOH WSBOH
Cc:
Subject: Covid Mandates

External Email

For a shot that does not prevent getting or transmitting this virus, I say no to mandates.

To mandate products for our children that are free of liability is criminal. These shots have Problems!

Thank you,
Christopher Marrs
Port Townsend, WA.

From: Roberta Wolf
Sent: 10/31/2022 5:52:13 PM
To: DOH WSBOH
Cc:
Subject: Childhood Vaccine Requirements



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External Email

Please review the following before making a decision about adding the Covid-19 EAU injections to the childhood vaccines requirements for attending public schools:

No child should need an EAU injection to attend school. This COVID-19 injection will cause deliberate induced harm (according to the VAERS reports) if mandated! Parents should be free to either vaccinate or not vaccinate their children. The current EAU injection is a "gene therapy" injection, as per Moderna and Pfizer, which does not stop transmission or protect against infection per their own admission.

I am not anti-vaccine but pro-medical freedom. No medical treatment should be mandated.

The new bivalent booster vaccines have never been tested in humans at all, neither adults nor children. We do not have enough safety documentation to mandate any of these so-called vaccines.

I ask you to vote "No" on adding the COVID-19 injections to the Washington State list of required vaccines to attend public schools.

Thank you,

Roberta Wolf

Sent from my iPad

From: Peter & Anne Selby
Sent: 11/1/2022 8:41:03 AM
To: DOH Secretary's Office
Cc:
Subject: No to Covid vaccine mandates

External Email
Dear Wa BOH Secretary,

We are writing to oppose mandating Covid jabs for our Washington children. We consider these shots to be dangerous and ineffective both in preventing infection and also blocking transmission. Please vote no to adding this Covid vaccine mandate to the current Washington Vaccine schedule.

Sincerely,

Peter and Anne Selby
Washougal Wa 98671
360 837 1592h
916 719 6948c
--

Peter & Anne Selby

1916 NE 380th Avenue
Washougal, WA 98671
Home/Office: 541 549-1927
Cell: 916 719-6948

<http://www.youangelyou.com>

From: Ingrid Grant
Sent: 10/31/2022 12:38:21 PM
To: DOH WSBOH
Cc:
Subject: Inslee

External Email

Inslee has no business mandating a vaccine for children when there is no evidence that the vaccines are effective. He should be sued for unnecessary harm to children and negligence.

Ingrid Grant

Sent from my iPhone

From: Kathy Egbert
Sent: 11/1/2022 6:48:35 AM
To: DOH Secretary's Office
Cc:
Subject: Mandating the COVID shot on our kids

External Email

Please see the following message I sent regarding the COVID shots:

Washington State Board of Health members:

I am STRONGLY OPPOSED TO ADDING THE COVID SHOT to the pediatric schedule. As time and science have shown that the Covid shots have proven not to be effective and, in many cases, harmful/deadly, it seems extremely unwise and dangerous to add the shot to the CDC pediatric schedule here in Washington State, or anywhere for that matter. The public does not want any liability-free Covid-19 products to be mandated for our kids.

Since the TAG group last took comments, even more evidence has become available regarding the lack of safety and effectiveness of the shot. I strongly urge that the TAG group and Washington State BOH reject adding this to the long list of mandated shots that the children of Washington State are already subject to.

Given all that we currently know about this so-called vaccine, it would be totally against common sense to require this be given to our school children. Please make the intelligent decision for the people of the State of Washington.

Thank you very much,
Kathy Egbert
301 Sable Drive
Everson, WA 98247

--

Kathy Egbert
KathyEgbert15@gmail.com

Abraham Lincoln once said, "America will never be destroyed from outside. If we falter and lose our freedoms, it will be because we destroyed ourselves."

Freedom is never more than one generation away from extinction. We don't pass it on to our children in our blood. It must be fought for, protected and handed to them by our example or one day we will spend our sunset years telling our children and our children's children what it was once like in the United States when men were free. Ronald Reagan

From: Esther Davis Dodge
Sent: 10/31/2022 11:40:37 AM
To: DOH WSBOH
Cc:
Subject: No More!

External Email

Dear WA Board of Health,

I understand that the BOH will be meeting on November 9th about immunization requirements.

Please know that the public does not want any COVID-19 products mandated for our kids.

Thank you!

Esther Dodge

25330 157th Pl SE, Covington, WA 98042

From: Lisa Hall
Sent: 11/3/2022 7:01:39 AM
To: DOH WSBOH
Cc:
Subject: Child vaccine mandate

External Email

Hello,

I would like to express my deepest concern regarding child COVID-19 vaccination mandates. I live here in WA state and DO NOT want any COVID-19 products to be mandated for our kids. Despite the political pressure to do so, please vote NO and stand against this mandate!

Thank you,
Lisa Hall

Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Faka.ms%2FAAb9ysg&data=05%7>>

From: Russ hamerly
Sent: 11/2/2022 9:34:07 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Reasons not to add Covid shots to the CDC pediatric schedule



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attachments\520CE62E64A744F1_BOMBSHELL - Pfizer Doc Admits Num_PRDTOOL_NAMETOOLONG.pdf



attachments\87F1FC219B534BFF_OFFICIAL CDC FIGURES - 58k Childr_PRDTOOL_NAMETOOLONG.pdf



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External Email

To: WA Department of Health (DOH) Secretary
Tao Sheng Kwan-Gett
Jamilya Sherls-Jones
Heather Drummond

I'm writing in regards to the ACIP (the Advisory Committee on Immunization Practices) recommendation to add Covid shots to the CDC pediatric schedule.

I am opposed to this recommendation. I, and most parents, do not want COVID shot mandates for our children. Here are the main reasons:

- * Young healthy children are at statistically zero risk for bad outcomes from a Covid infection. Their chances of dying from Covid are less than that of being hit by lightning.
- * The majority of children have already had Covid and therefore have natural immunity,
- * Unlike many of the other required childhood immunizations, the Covid shots do not prevent infection or spread and any immunity they may provide is short lived and wanes quickly, so there is no justification for this.
- * There are zero long term safety studies for these shots.
- * There are an astonishing number of documented side effects (see #1 below).
- * There is an astronomical number of reports of injury, hospitalization, or death to VAERS from this product – more than all other vaccines combined (see #2 below).

* Covid vaccine injured people are suffering terribly and being ignored,

* Adding the COVID-19 shots to the childhood vaccination schedule will shield manufacturers from liability, ...

#1 - Here is a summary of the documented side effects:

I have attached the complete 45 page list of these side effects as a PDF to this email.

Would you ever administer a vaccine with this many side effects to your children?

#2 - Here is the most recent recap of documented injuries and deaths to children in the United States from the CDC VAERS database since Covid shots were provided to them:

I have also attached a PDF of this article with more details.

Would you ever administer a vaccine with this track record to your children?

In summary, I believe approving these experimental vaccines for the children of Washington state knowing the above information would be considered immoral, unethical, and illegal.

Thank you for considering this information.

Russ Hamerly
821 NE 88th St
Seattle, WA 98115
russhamerly@yahoo.com

BOMBHELL: Pfizer Doc Admits Numerous Severe Adverse Reactions Following Jab

<https://newspunch.com/bombshell-pfizer-doc-admits-numerous-severe-adverse-reactions-following-jab/>

A newly released document reveals a massive number of serious adverse reactions people are likely to suffer from as a result of getting the Pfizer jab.

It appears that Pfizer was desperate for the information to remain hidden from the public, with a blurb on the first page warning that “dissemination of this information outside of Pfizer, its Affiliates, its Licensees, or Regulatory Agencies is strictly prohibited.”

The information contained in this document is proprietary and confidential. Any disclosure, reproduction, distribution, or other dissemination of this information outside of Pfizer, its Affiliates, its Licensees, or Regulatory Agencies is strictly prohibited. Except as may be otherwise agreed to in writing, by accepting or reviewing these materials, you agree to hold such information in confidence and not to disclose it to others (except where required by applicable law), nor to use it for unauthorized purposes.

Bigleaguepolitics.com reports:

The number of adverse events listed remained numerous. One notable condition found in Pfizer’s data is 1p36 deletion syndrome, which the National Library of Medicine **describes** as “a disorder that typically causes severe intellectual disability.” They also point out the severity of the disease, noting that “most affected individuals do not

“speak, or speak only a few words” and “may have temper tantrums, bite themselves, or exhibit other behavior problems.”

The “Adverse Events of Special Interest” identified from pages 30-38 can be found below:

APPENDIX 1. LIST OF ADVERSE EVENTS OF SPECIAL INTEREST

1. *1p36 deletion syndrome*
2. *2-Hydroxyglutaric aciduria*
3. *5'nucleotidase increased*
4. *Acoustic neuritis*
5. *Acquired C1 inhibitor deficiency*
6. *Acquired epidermolysis bullosa*
7. *Acquired epileptic aphasia*
8. *Acute cutaneous lupus erythematosus*
9. *Acute disseminated encephalomyelitis*
10. *Acute encephalitis with refractory, repetitive partial seizures*
11. *Acute febrile neutrophilic dermatosis*
12. *Acute flaccid myelitis*
13. *Acute haemorrhagic leukoencephalitis*
14. *Acute haemorrhagic oedema of infancy*
15. *Acute kidney injury*
16. *Acute macular outer retinopathy*
17. *Acute motor axonal neuropathy*
18. *Acute motor-sensory axonal neuropathy*
19. *Acute myocardial infarction*
20. *Acute respiratory distress syndrome*
21. *Acute respiratory failure*

22. *Addison's disease*
23. *Administration site thrombosis*
24. *Administration site vasculitis*
25. *Adrenal thrombosis*
26. *Adverse event following immunization*
27. *Ageusia*
28. *Agranulocytosis*
29. *Air embolism*
30. *Alanine aminotransferase abnormal*
31. *Alanine aminotransferase increased*
32. *Alcoholic seizure*
33. *Allergic bronchopulmonary mycosis*
34. *Allergic oedema*
35. *Alloimmune hepatitis*
36. *Alopecia areata*
37. *Alpers disease*
38. *Alveolar proteinosis*
39. *Ammonia abnormal*
40. *Ammonia increased*
41. *Amniotic cavity infection*
42. *Amygdalohippocampectomy*
43. *Amyloid arthropathy*
44. *Amyloidosis*
45. *Amyloidosis senile*
46. *Anaphylactic reaction*
47. *Anaphylactic shock*
48. *Anaphylactic transfusion reaction*
49. *Anaphylactoid reaction*
50. *Anaphylactoid shock*
51. *Anaphylactoid syndrome of pregnancy*

52. *Angioedema*
53. *Angiopathic neuropathy*
54. *Ankylosing spondylitis*
55. *Anosmia*
56. *Anti-acetylcholine receptor antibody positive*
57. *Anti-actin antibody positive*
58. *Anti-aquaporin-4 antibody positive*
59. *Anti-basal ganglia antibody positive*
60. *Anti-cyclic citrullinated peptide antibody positive*
61. *Anti-epithelial antibody positive*
62. *Anti-erythrocyte antibody positive*
63. *Anti-exosome complex antibody positive*
64. *AntiGAD antibody negative*
65. *Anti-GAD antibody positive*
66. *Anti-ganglioside antibody positive*
67. *Antigliadin antibody positive*
68. *Anti-glomerular basement membrane antibody positive*
69. *Anti-glomerular basement membrane disease*
70. *Anti-glycyl-tRNA synthetase antibody positive*
71. *Anti-HLA antibody test positive*
72. *Anti-IA2 antibody positive*
73. *Anti-insulin antibody increased*
74. *Anti-insulin antibody positive*
75. *Anti-insulin receptor antibody increased*
76. *Antiinsulin receptor antibody positive*
77. *Anti-interferon antibody negative*
78. *Anti-interferon antibody positive*
79. *Anti-islet cell antibody positive*
80. *Antimitochondrial antibody positive*

81. *Anti-muscle specific kinase antibody positive*
82. *Anti-myelin-associated glycoprotein antibodies positive*
83. *Anti-myelin-associated glycoprotein associated polyneuropathy*
84. *Antimyocardial antibody positive*
85. *Anti-neuronal antibody positive*
86. *Antineutrophil cytoplasmic antibody increased*
87. *Antineutrophil cytoplasmic antibody positive*
88. *Anti-neutrophil cytoplasmic antibody positive vasculitis*
89. *Anti-NMDA antibody positive*
90. *Antinuclear antibody increased*
91. *Antinuclear antibody positive*
92. *Antiphospholipid antibodies positive*
93. *Antiphospholipid syndrome*
94. *Anti-platelet antibody positive*
95. *Anti-prothrombin antibody positive*
96. *Antiribosomal P antibody positive*
97. *Anti-RNA polymerase III antibody positive*
98. *Anti-saccharomyces cerevisiae antibody test positive*
99. *Anti-sperm antibody positive*
100. *Anti-SRP antibody positive*
101. *Antisynthetase syndrome*
102. *Anti-thyroid antibody positive*
103. *Anti-transglutaminase antibody increased*
104. *Anti-VGCC antibody positive*
105. *AntiVGKC antibody positive*
106. *Anti-vimentin antibody positive*
107. *Antiviral prophylaxis*

108. *Antiviral treatment*
109. *Anti-zinc transporter 8 antibody positive*
110. *Aortic embolus*
111. *Aortic thrombosis*
112. *Aortitis*
113. *Aplasia pure red cell*
114. *Aplastic anaemia*
115. *Application site thrombosis*
116. *Application site vasculitis*
117. *Arrhythmia*
118. *Arterial bypass occlusion*
119. *Arterial bypass thrombosis*
120. *Arterial thrombosis*
121. *Arteriovenous fistula thrombosis*
122. *Arteriovenous graft site stenosis*
123. *Arteriovenous graft thrombosis*
124. *Arteritis*
125. *Arteritis coronary*
126. *Arthralgia*
127. *Arthritis*
128. *Arthritis enteropathic*
129. *Ascites*
130. *Aseptic cavernous sinus thrombosis*
131. *Aspartate aminotransferase abnormal*
132. *Aspartate aminotransferase increased*
133. *Aspartate-glutamate-transporter deficiency*
134. *AST to platelet ratio index increased*
135. *AST/ALT ratio abnormal*
136. *Asthma*
137. *Asymptomatic COVID19*

138. *Ataxia*
139. *Atheroembolism*
140. *Atonic seizures*
141. *Atrial thrombosis*
142. *Atrophic thyroiditis*
143. *Atypical benign partial epilepsy*
144. *Atypical pneumonia*
145. *Aura*
146. *Autoantibody positive*
147. *Autoimmune anaemia*
148. *Autoimmune aplastic anaemia*
149. *Autoimmune arthritis*
150. *Autoimmune blistering disease*
151. *Autoimmune cholangitis*
152. *Autoimmune colitis*
153. *Autoimmune demyelinating disease*
154. *Autoimmune dermatitis*
155. *Autoimmune disorder*
156. *Autoimmune encephalopathy*
157. *Autoimmune endocrine disorder*
158. *Autoimmune enteropathy*
159. *Autoimmune eye disorder*
160. *Autoimmune haemolytic anaemia*
161. *Autoimmune heparin-induced thrombocytopenia*
162. *Autoimmune hepatitis*
163. *Autoimmune hyperlipidaemia*
164. *Autoimmune hypothyroidism*
165. *Autoimmune inner ear disease*
166. *Autoimmune lung disease*
167. *Autoimmune lymphoproliferative syndrome*

168. *Autoimmune myocarditis*
169. *Autoimmune myositis*
170. *Autoimmune nephritis*
171. *Autoimmune neuropathy*
172. *Autoimmune neutropenia*
173. *Autoimmune pancreatitis*
174. *Autoimmune pancytopenia*
175. *Autoimmune pericarditis*
176. *Autoimmune retinopathy*
177. *Autoimmune thyroid disorder*
178. *Autoimmune thyroiditis*
179. *Autoimmune uveitis*
180. *Autoinflammation with infantile enterocolitis*
181. *Autoinflammatory disease*
182. *Automatism epileptic*
183. *Autonomic nervous system imbalance*
184. *Autonomic seizure*
185. *Axial spondyloarthritis*
186. *Axillary vein thrombosis*
187. *Axonal and demyelinating polyneuropathy*
188. *Axonal neuropathy*
189. *Bacterascites*
190. *Baltic myoclonic epilepsy*
191. *Band sensation*
192. *Basedow's disease*
193. *Basilar artery thrombosis*
194. *Basophilopenia*
195. *B-cell aplasia*
196. *Behcet's syndrome*
197. *Benign ethnic neutropenia*

198. *Benign familial neonatal convulsions*
199. *Benign familial pemphigus*
200. *Benign rolandic epilepsy*
201. *Beta-2 glycoprotein antibody positive*
202. *Bickerstaff's encephalitis*
203. *Bile output abnormal*
204. *Bile output decreased*
205. *Biliary ascites*
206. *Bilirubin conjugated abnormal*
207. *Bilirubin conjugated increased*
208. *Bilirubin urine present*
209. *Biopsy liver abnormal*
210. *Biotinidase deficiency*
211. *Birdshot chorioretinopathy*
212. *Blood alkaline phosphatase abnormal*
213. *Blood alkaline phosphatase increased*
214. *Blood bilirubin abnormal*
215. *Blood bilirubin increased*
216. *Blood bilirubin unconjugated increased*
217. *Blood cholinesterase abnormal*
218. *Blood cholinesterase decreased*
219. *Blood pressure decreased*
220. *Blood pressure diastolic decreased*
221. *Blood pressure systolic decreased*
222. *Blue toe syndrome*
223. *Brachiocephalic vein thrombosis*
224. *Brain stem embolism*
225. *Brain stem thrombosis*
226. *Bromosulphthalein test abnormal*
227. *Bronchial oedema*

228. *Bronchitis*
229. *Bronchitis mycoplasmal*
230. *Bronchitis viral*
231. *Bronchopulmonary aspergillosis allergic*
232. *Bronchospasm*
233. *BuddChiari syndrome*
234. *Bulbar palsy*
235. *Butterfly rash*
236. *C1q nephropathy*
237. *Caesarean section*
238. *Calcium embolism*
239. *Capillaritis*
240. *Caplan's syndrome*
241. *Cardiac amyloidosis*
242. *Cardiac arrest*
243. *Cardiac failure*
244. *Cardiac failure acute*
245. *Cardiac sarcoidosis*
246. *Cardiac ventricular thrombosis*
247. *Cardiogenic shock*
248. *Cardiolipin antibody positive*
249. *Cardiopulmonary failure*
250. *Cardio-respiratory arrest*
251. *Cardio-respiratory distress*
252. *Cardiovascular insufficiency*
253. *Carotid arterial embolus*
254. *Carotid artery thrombosis*
255. *Cataplexy*
256. *Catheter site thrombosis*
257. *Catheter site vasculitis*

258. *Cavernous sinus thrombosis*
259. *CDKL5 deficiency disorder*
260. *CEC syndrome*
261. *Cement embolism*
262. *Central nervous system lupus*
263. *Central nervous system vasculitis*
264. *Cerebellar artery thrombosis*
265. *Cerebellar embolism*
266. *Cerebral amyloid angiopathy*
267. *Cerebral arteritis*
268. *Cerebral artery embolism*
269. *Cerebral artery thrombosis*
270. *Cerebral gas embolism*
271. *Cerebral microembolism*
272. *Cerebral septic infarct*
273. *Cerebral thrombosis*
274. *Cerebral venous sinus thrombosis*
275. *Cerebral venous thrombosis*
276. *Cerebrospinal thrombotic tamponade*
277. *Cerebrovascular accident*
278. *Change in seizure presentation*
279. *Chest discomfort*
280. *ChildPugh-Turcotte score abnormal*
281. *Child-Pugh-Turcotte score increased*
282. *Chillblains*
283. *Choking*
284. *Choking sensation*
285. *Cholangitis sclerosing*
286. *Chronic autoimmune glomerulonephritis*
287. *Chronic cutaneous lupus erythematosus*

288. *Chronic fatigue syndrome*
289. *Chronic gastritis*
290. *Chronic inflammatory demyelinating polyradiculoneuropathy*
291. *Chronic lymphocytic inflammation with pontine perivascular enhancement responsive to steroids*
292. *Chronic recurrent multifocal osteomyelitis*
293. *Chronic respiratory failure*
294. *Chronic spontaneous urticaria*
295. *Circulatory collapse*
296. *Circumoral oedema*
297. *Circumoral swelling*
298. *Clinically isolated syndrome*
299. *Clonic convulsion*
300. *Coeliac disease*
301. *Cogan's syndrome*
302. *Cold agglutinins positive*
303. *Cold type haemolytic anaemia*
304. *Colitis*
305. *Colitis erosive*
306. *Colitis herpes*
307. *Colitis microscopic*
308. *Colitis ulcerative*
309. *Collagen disorder*
310. *Collagen-vascular disease*
311. *Complement factor abnormal*
312. *Complement factor C1 decreased*
313. *Complement factor C2 decreased*
314. *Complement factor C3 decreased*
315. *Complement factor C4 decreased*

316. *Complement factor decreased*
317. *Computerised tomogram liver abnormal*
318. *Concentric sclerosis*
319. *Congenital anomaly*
320. *Congenital bilateral perisylvian syndrome*
321. *Congenital herpes simplex infection*
322. *Congenital myasthenic syndrome*
323. *Congenital varicella infection*
324. *Congestive hepatopathy*
325. *Convulsion in childhood*
326. *Convulsions local*
327. *Convulsive threshold lowered*
328. *Coombs positive haemolytic anaemia*
329. *Coronary artery disease*
330. *Coronary artery embolism*
331. *Coronary artery thrombosis*
332. *Coronary bypass thrombosis*
333. *Coronavirus infection*
334. *Coronavirus test*
335. *Coronavirus test negative*
336. *Coronavirus test positive*
337. *Corpus callosotomy*
338. *Cough*
339. *Cough variant asthma*
340. *COVID-19*
341. *COVID-19 immunisation*
342. *COVID-19 pneumonia*
343. *COVID-19 prophylaxis*
344. *COVID-19 treatment*
345. *Cranial nerve disorder*

346. *Cranial nerve palsies multiple*
347. *Cranial nerve paralysis*
348. *CREST syndrome*
349. *Crohn's disease*
350. *Cryofibrinogenaemia*
351. *Cryoglobulinaemia*
352. *CSF oligoclonal band present*
353. *CSWS syndrome*
354. *Cutaneous amyloidosis*
355. *Cutaneous lupus erythematosus*
356. *Cutaneous sarcoidosis*
357. *Cutaneous vasculitis*
358. *Cyanosis*
359. *Cyclic neutropenia*
360. *Cystitis interstitial*
361. *Cytokine release syndrome*
362. *Cytokine storm*
363. *De novo purine synthesis inhibitors associated acute inflammatory syndrome*
364. *Death neonatal*
365. *Deep vein thrombosis*
366. *Deep vein thrombosis postoperative*
367. *Deficiency of bile secretion*
368. *Deja vu*
369. *Demyelinating polyneuropathy*
370. *Demyelination*
371. *Dermatitis*
372. *Dermatitis bullous*
373. *Dermatitis herpetiformis*
374. *Dermatomyositis*

375. *Device embolisation*
376. *Device related thrombosis*
377. *Diabetes mellitus*
378. *Diabetic ketoacidosis*
379. *Diabetic mastopathy*
380. *Dialysis amyloidosis*
381. *Dialysis membrane reaction*
382. *Diastolic hypotension*
383. *Diffuse vasculitis*
384. *Digital pitting scar*
385. *Disseminated intravascular coagulation*
386. *Disseminated intravascular coagulation in newborn*
387. *Disseminated neonatal herpes simplex*
388. *Disseminated varicella*
389. *Disseminated varicella zoster vaccine virus infection*
390. *Disseminated varicella zoster virus infection*
391. *DNA antibody positive*
392. *Double cortex syndrome*
393. *Double stranded DNA antibody positive*
394. *Dreamy state*
395. *Dressler's syndrome*
396. *Drop attacks*
397. *Drug withdrawal convulsions*
398. *Dyspnoea*
399. *Early infantile epileptic encephalopathy with burst-suppression*
400. *Eclampsia*
401. *Eczema herpeticum*
402. *Embolia cutis medicamentosa*
403. *Embolic cerebellar infarction*

404. *Embolic cerebral infarction*
405. *Embolic pneumonia*
406. *Embolic stroke*
407. *Embolism*
408. *Embolism arterial*
409. *Embolism venous*
410. *Encephalitis*
411. *Encephalitis allergic*
412. *Encephalitis autoimmune*
413. *Encephalitis brain stem*
414. *Encephalitis haemorrhagic*
415. *Encephalitis periaxialis diffusa*
416. *Encephalitis post immunisation*
417. *Encephalomyelitis*
418. *Encephalopathy*
419. *Endocrine disorder*
420. *Endocrine ophthalmopathy*
421. *Endotracheal intubation*
422. *Enteritis*
423. *Enteritis leukopenic*
424. *Enterobacter pneumonia*
425. *Enterocolitis*
426. *Enteropathic spondylitis*
427. *Eosinopenia*
428. *Eosinophilic fasciitis*
429. *Eosinophilic granulomatosis with polyangiitis*
430. *Eosinophilic oesophagitis*
431. *Epidermolysis*
432. *Epilepsy*
433. *Epilepsy surgery*

- 434. *Epilepsy with myoclonic-atonic seizures*
- 435. *Epileptic aura*
- 436. *Epileptic psychosis*
- 437. *Erythema*
- 438. *Erythema induratum*
- 439. *Erythema multiforme*
- 440. *Erythema nodosum*
- 441. *Evans syndrome*
- 442. *Exanthema subitum*
- 443. *Expanded disability status scale score decreased*
- 444. *Expanded disability status scale score increased*
- 445. *Exposure to communicable disease*
- 446. *Exposure to SARS-CoV-2*
- 447. *Eye oedema*
- 448. *Eye pruritus*
- 449. *Eye swelling*
- 450. *Eyelid oedema*
- 451. *Face oedema*
- 452. *Facial paralysis*
- 453. *Facial paresis*
- 454. *Faciobrachial dystonic seizure*
- 455. *Fat embolism*
- 456. *Febrile convulsion*
- 457. *Febrile infection-related epilepsy syndrome*
- 458. *Febrile neutropenia*
- 459. *Felty's syndrome*
- 460. *Femoral artery embolism*
- 461. *Fibrillary glomerulonephritis*
- 462. *Fibromyalgia*
- 463. *Flushing*

464. *Foaming at mouth*
465. *Focal cortical resection*
466. *Focal dyscognitive seizures*
467. *Foetal distress syndrome*
468. *Foetal placental thrombosis*
469. *Foetor hepaticus*
470. *Foreign body embolism*
471. *Frontal lobe epilepsy*
472. *Fulminant type 1 diabetes mellitus*
473. *Galactose elimination capacity test abnormal*
474. *Galactose elimination capacity test decreased*
475. *Gamma-glutamyltransferase abnormal*
476. *Gamma-glutamyltransferase increased*
477. *Gastritis herpes*
478. *Gastrointestinal amyloidosis*
479. *Gelastic seizure*
480. *Generalised onset non-motor seizure*
481. *Generalised tonic-clonic seizure*
482. *Genital herpes*
483. *Genital herpes simplex*
484. *Genital herpes zoster*
485. *Giant cell arteritis*
486. *Glomerulonephritis*
487. *Glomerulonephritis membranoproliferative*
488. *Glomerulonephritis membranous*
489. *Glomerulonephritis rapidly progressive*
490. *Glossopharyngeal nerve paralysis*
491. *Glucose transporter type 1 deficiency syndrome*
492. *Glutamate dehydrogenase increased*
493. *Glycocholic acid increased*

494. *GM2 gangliosidosis*
495. *Goodpasture's syndrome*
496. *Graft thrombosis*
497. *Granulocytopenia*
498. *Granulocytopenia neonatal*
499. *Granulomatosis with polyangiitis*
500. *Granulomatous dermatitis*
501. *Grey matter heterotopia*
502. *Guanase increased*
503. *GuillainBarre syndrome*
504. *Haemolytic anaemia*
505. *Haemophagocytic lymphohistiocytosis*
506. *Haemorrhage*
507. *Haemorrhagic ascites*
508. *Haemorrhagic disorder*
509. *Haemorrhagic pneumonia*
510. *Haemorrhagic varicella syndrome*
511. *Haemorrhagic vasculitis*
512. *Hantavirus pulmonary infection*
513. *Hashimoto's encephalopathy*
514. *Hashitoxicosis*
515. *Hemimegalencephaly*
516. *Henoch-Schonlein purpura*
517. *HenochSchonlein purpura nephritis*
518. *Hepaplastin abnormal*
519. *Hepaplastin decreased*
520. *Heparin-induced thrombocytopenia*
521. *Hepatic amyloidosis*
522. *Hepatic artery embolism*
523. *Hepatic artery flow decreased*

524. *Hepatic artery thrombosis*
525. *Hepatic enzyme abnormal*
526. *Hepatic enzyme decreased*
527. *Hepatic enzyme increased*
528. *Hepatic fibrosis marker abnormal*
529. *Hepatic fibrosis marker increased*
530. *Hepatic function abnormal*
531. *Hepatic hydrothorax*
532. *Hepatic hypertrophy*
533. *Hepatic hypoperfusion*
534. *Hepatic lymphocytic infiltration*
535. *Hepatic mass*
536. *Hepatic pain*
537. *Hepatic sequestration*
538. *Hepatic vascular resistance increased*
539. *Hepatic vascular thrombosis*
540. *Hepatic vein embolism*
541. *Hepatic vein thrombosis*
542. *Hepatic venous pressure gradient abnormal*
543. *Hepatic venous pressure gradient increased*
544. *Hepatitis*
545. *Hepatobiliary scan abnormal*
546. *Hepatomegaly*
547. *Hepatosplenomegaly*
548. *Hereditary angioedema with C1 esterase inhibitor deficiency*
549. *Herpes dermatitis*
550. *Herpes gestationis*
551. *Herpes oesophagitis*
552. *Herpes ophthalmic*

553. *Herpes pharyngitis*
554. *Herpes sepsis*
555. *Herpes simplex*
556. *Herpes simplex cervicitis*
557. *Herpes simplex colitis*
558. *Herpes simplex encephalitis*
559. *Herpes simplex gastritis*
560. *Herpes simplex hepatitis*
561. *Herpes simplex meningitis*
562. *Herpes simplex meningoencephalitis*
563. *Herpes simplex meningomyelitis*
564. *Herpes simplex necrotising retinopathy*
565. *Herpes simplex oesophagitis*
566. *Herpes simplex otitis externa*
567. *Herpes simplex pharyngitis*
568. *Herpes simplex pneumonia*
569. *Herpes simplex reactivation*
570. *Herpes simplex sepsis*
571. *Herpes simplex viraemia*
572. *Herpes simplex virus conjunctivitis neonatal*
573. *Herpes simplex visceral*
574. *Herpes virus infection*
575. *Herpes zoster*
576. *Herpes zoster cutaneous disseminated*
577. *Herpes zoster infection neurological*
578. *Herpes zoster meningitis*
579. *Herpes zoster meningoencephalitis*
580. *Herpes zoster meningomyelitis*
581. *Herpes zoster meningoradiculitis*
582. *Herpes zoster necrotising retinopathy*

583. *Herpes zoster oticus*
584. *Herpes zoster pharyngitis*
585. *Herpes zoster reactivation*
586. *Herpetic radiculopathy*
587. *Histone antibody positive*
588. *Hoigne's syndrome*
589. *Human herpesvirus 6 encephalitis*
590. *Human herpesvirus 6 infection*
591. *Human herpesvirus 6 infection reactivation*
592. *Human herpesvirus 7 infection*
593. *Human herpesvirus 8 infection*
594. *Hyperammonaemia*
595. *Hyperbilirubinaemia*
596. *Hypercholia*
597. *Hypergammaglobulinaemia benign monoclonal*
598. *Hyperglycaemic seizure*
599. *Hypersensitivity*
600. *Hypersensitivity vasculitis*
601. *Hyperthyroidism*
602. *Hypertransaminasaemia*
603. *Hyperventilation*
604. *Hypoalbuminaemia*
605. *Hypocalcaemic seizure*
606. *Hypogammaglobulinaemia*
607. *Hypoglossal nerve paralysis*
608. *Hypoglossal nerve paresis*
609. *Hypoglycaemic seizure*
610. *Hyponatraemic seizure*
611. *Hypotension*
612. *Hypotensive crisis*

613. *Hypothenar hammer syndrome*
614. *Hypothyroidism*
615. *Hypoxia*
616. *Idiopathic CD4 lymphocytopenia*
617. *Idiopathic generalised epilepsy*
618. *Idiopathic interstitial pneumonia*
619. *Idiopathic neutropenia*
620. *Idiopathic pulmonary fibrosis*
621. *IgA nephropathy*
622. *IgM nephropathy*
623. *IIIrd nerve paralysis*
624. *IIIrd nerve paresis*
625. *Iliac artery embolism*
626. *Immune thrombocytopenia*
627. *Immunemediated adverse reaction*
628. *Immune-mediated cholangitis*
629. *Immune-mediated cholestasis*
630. *Immune-mediated cytopenia*
631. *Immune-mediated encephalitis*
632. *Immune-mediated encephalopathy*
633. *Immune-mediated endocrinopathy*
634. *Immune-mediated enterocolitis*
635. *Immunemediated gastritis*
636. *Immune-mediated hepatic disorder*
637. *Immune-mediated hepatitis*
638. *Immunemediated hyperthyroidism*
639. *Immune-mediated hypothyroidism*
640. *Immune-mediated myocarditis*
641. *Immune-mediated myositis*
642. *Immune-mediated nephritis*

643. *Immune-mediated neuropathy*
644. *Immune-mediated pancreatitis*
645. *Immune-mediated pneumonitis*
646. *Immune-mediated renal disorder*
647. *Immune-mediated thyroiditis*
648. *Immune-mediated uveitis*
649. *Immunoglobulin G4 related disease*
650. *Immunoglobulins abnormal*
651. *Implant site thrombosis*
652. *Inclusion body myositis*
653. *Infantile genetic agranulocytosis*
654. *Infantile spasms*
655. *Infected vasculitis*
656. *Infective thrombosis*
657. *Inflammation*
658. *Inflammatory bowel disease*
659. *Infusion site thrombosis*
660. *Infusion site vasculitis*
661. *Injection site thrombosis*
662. *Injection site urticaria*
663. *Injection site vasculitis*
664. *Instillation site thrombosis*
665. *Insulin autoimmune syndrome*
666. *Interstitial granulomatous dermatitis*
667. *Interstitial lung disease*
668. *Intracardiac mass*
669. *Intracardiac thrombus*
670. *Intracranial pressure increased*
671. *Intrapericardial thrombosis*
672. *Intrinsic factor antibody abnormal*

673. *Intrinsic factor antibody positive*
674. *IPEX syndrome*
675. *Irregular breathing*
676. *IRVAN syndrome*
677. *IVth nerve paralysis*
678. *IVth nerve paresis*
679. *JC polyomavirus test positive*
680. *JC virus CSF test positive*
681. *Jeavons syndrome*
682. *Jugular vein embolism*
683. *Jugular vein thrombosis*
684. *Juvenile idiopathic arthritis*
685. *Juvenile myoclonic epilepsy*
686. *Juvenile polymyositis*
687. *Juvenile psoriatic arthritis*
688. *Juvenile spondyloarthritis*
689. *Kaposi sarcoma inflammatory cytokine syndrome*
690. *Kawasaki's disease*
691. *Kayser-Fleischer ring*
692. *Keratoderma blenorrhagica*
693. *Ketosisprone diabetes mellitus*
694. *Kounis syndrome*
695. *Lafora's myoclonic epilepsy*
696. *Lambl's excrescences*
697. *Laryngeal dyspnoea*
698. *Laryngeal oedema*
699. *Laryngeal rheumatoid arthritis*
700. *Laryngospasm*
701. *Laryngotracheal oedema*
702. *Latent autoimmune diabetes in adults*

- 703. *LE cells present*
- 704. *Lemierre syndrome*
- 705. *Lennox-Gastaut syndrome*
- 706. *Leucine aminopeptidase increased*
- 707. *Leukoencephalomyelitis*
- 708. *Leukoencephalopathy*
- 709. *Leukopenia*
- 710. *Leukopenia neonatal*
- 711. *Lewis-Sumner syndrome*
- 712. *Lhermitte's sign*
- 713. *Lichen planopilaris*
- 714. *Lichen planus*
- 715. *Lichen sclerosus*
- 716. *Limbic encephalitis*
- 717. *Linear IgA disease*
- 718. *Lip oedema*
- 719. *Lip swelling*
- 720. *Liver function test abnormal*
- 721. *Liver function test decreased*
- 722. *Liver function test increased*
- 723. *Liver induration*
- 724. *Liver injury*
- 725. *Liver iron concentration abnormal*
- 726. *Liver iron concentration increased*
- 727. *Liver opacity*
- 728. *Liver palpable*
- 729. *Liver sarcoidosis*
- 730. *Liver scan abnormal*
- 731. *Liver tenderness*
- 732. *Low birth weight baby*

- 733. *Lower respiratory tract herpes infection*
- 734. *Lower respiratory tract infection*
- 735. *Lower respiratory tract infection viral*
- 736. *Lung abscess*
- 737. *Lupoid hepatic cirrhosis*
- 738. *Lupus cystitis*
- 739. *Lupus encephalitis*
- 740. *Lupus endocarditis*
- 741. *Lupus enteritis*
- 742. *Lupus hepatitis*
- 743. *Lupus myocarditis*
- 744. *Lupus myositis*
- 745. *Lupus nephritis*
- 746. *Lupus pancreatitis*
- 747. *Lupus pleurisy*
- 748. *Lupus pneumonitis*
- 749. *Lupus vasculitis*
- 750. *Lupus-like syndrome*
- 751. *Lymphocytic hypophysitis*
- 752. *Lymphocytopenia neonatal*
- 753. *Lymphopenia*
- 754. *MAGIC syndrome*
- 755. *Magnetic resonance imaging liver abnormal*
- 756. *Magnetic resonance proton density fat fraction measurement*
- 757. *Mahler sign*
- 758. *Manufacturing laboratory analytical testing issue*
- 759. *Manufacturing materials issue*
- 760. *Manufacturing production issue*
- 761. *Marburg's variant multiple sclerosis*

762. *Marchiafava-Bignami disease*
763. *Marine Lenhart syndrome*
764. *Mastocytic enterocolitis*
765. *Maternal exposure during pregnancy*
766. *Medical device site thrombosis*
767. *Medical device site vasculitis*
768. *MELAS syndrome*
769. *Meningitis*
770. *Meningitis aseptic*
771. *Meningitis herpes*
772. *Meningoencephalitis herpes simplex neonatal*
773. *Meningoencephalitis herpetic*
774. *Meningomyelitis herpes*
775. *MERS-CoV test*
776. *MERS-CoV test negative*
777. *MERS-CoV test positive*
778. *Mesangioproliferative glomerulonephritis*
779. *Mesenteric artery embolism*
780. *Mesenteric artery thrombosis*
781. *Mesenteric vein thrombosis*
782. *Metapneumovirus infection*
783. *Metastatic cutaneous Crohn's disease*
784. *Metastatic pulmonary embolism*
785. *Microangiopathy*
786. *Microembolism*
787. *Microscopic polyangiitis*
788. *Middle East respiratory syndrome*
789. *Migraine-triggered seizure*
790. *Miliary pneumonia*
791. *Miller Fisher syndrome*

792. *Mitochondrial aspartate aminotransferase increased*
793. *Mixed connective tissue disease*
794. *Model for end stage liver disease score abnormal*
795. *Model for end stage liver disease score increased*
796. *Molar ratio of total branched-chain amino acid to tyrosine*
797. *Molybdenum cofactor deficiency*
798. *Monocytopenia*
799. *Mononeuritis*
800. *Mononeuropathy multiplex*
801. *Morphoea*
802. *Morvan syndrome*
803. *Mouth swelling*
804. *Moyamoya disease*
805. *Multifocal motor neuropathy*
806. *Multiple organ dysfunction syndrome*
807. *Multiple sclerosis*
808. *Multiple sclerosis relapse*
809. *Multiple sclerosis relapse prophylaxis*
810. *Multiple subpial transection*
811. *Multisystem inflammatory syndrome in children*
812. *Muscular sarcoidosis*
813. *Myasthenia gravis*
814. *Myasthenia gravis crisis*
815. *Myasthenia gravis neonatal*
816. *Myasthenic syndrome*
817. *Myelitis*
818. *Myelitis transverse*
819. *Myocardial infarction*
820. *Myocarditis*

821. *Myocarditis post infection*
822. *Myoclonic epilepsy*
823. *Myoclonic epilepsy and ragged-red fibers*
824. *Myokymia*
825. *Myositis*
826. *Narcolepsy*
827. *Nasal herpes*
828. *Nasal obstruction*
829. *Necrotising herpetic retinopathy*
830. *Neonatal Crohn's disease*
831. *Neonatal epileptic seizure*
832. *Neonatal lupus erythematosus*
833. *Neonatal mucocutaneous herpes simplex*
834. *Neonatal pneumonia*
835. *Neonatal seizure*
836. *Nephritis*
837. *Nephrogenic systemic fibrosis*
838. *Neuralgic amyotrophy*
839. *Neuritis*
840. *Neuritis cranial*
841. *Neuromyelitis optica pseudo relapse*
842. *Neuromyelitis optica spectrum disorder*
843. *Neuromyotonia*
844. *Neuronal neuropathy*
845. *Neuropathy peripheral*
846. *Neuropathy, ataxia, retinitis pigmentosa syndrome*
847. *Neuropsychiatric lupus*
848. *Neurosarcoidosis*
849. *Neutropenia*
850. *Neutropenia neonatal*

851. *Neutropenic colitis*
852. *Neutropenic infection*
853. *Neutropenic sepsis*
854. *Nodular rash*
855. *Nodular vasculitis*
856. *Noninfectious myelitis*
857. *Noninfective encephalitis*
858. *Noninfective encephalomyelitis*
859. *Noninfective oophoritis*
860. *Obstetrical pulmonary embolism*
861. *Occupational exposure to communicable disease*
862. *Occupational exposure to SARS-CoV-2*
863. *Ocular hyperaemia*
864. *Ocular myasthenia*
865. *Ocular pemphigoid*
866. *Ocular sarcoidosis*
867. *Ocular vasculitis*
868. *Oculofacial paralysis*
869. *Oedema*
870. *Oedema blister*
871. *Oedema due to hepatic disease*
872. *Oedema mouth*
873. *Oesophageal achalasia*
874. *Ophthalmic artery thrombosis*
875. *Ophthalmic herpes simplex*
876. *Ophthalmic herpes zoster*
877. *Ophthalmic vein thrombosis*
878. *Optic neuritis*
879. *Optic neuropathy*
880. *Optic perineuritis*

881. *Oral herpes*
882. *Oral lichen planus*
883. *Oropharyngeal oedema*
884. *Oropharyngeal spasm*
885. *Oropharyngeal swelling*
886. *Osmotic demyelination syndrome*
887. *Ovarian vein thrombosis*
888. *Overlap syndrome*
889. *Paediatric autoimmune neuropsychiatric disorders associated with streptococcal infection*
890. *Paget-Schroetter syndrome*
891. *Palindromic rheumatism*
892. *Palisaded neutrophilic granulomatous dermatitis*
893. *Palmoplantar keratoderma*
894. *Palpable purpura*
895. *Pancreatitis*
896. *Panencephalitis*
897. *Papillophlebitis*
898. *Paracancerous pneumonia*
899. *Paradoxical embolism*
900. *Parainfluenzae viral laryngotracheobronchitis*
901. *Paraneoplastic dermatomyositis*
902. *Paraneoplastic pemphigus*
903. *Paraneoplastic thrombosis*
904. *Paresis cranial nerve*
905. *Parietal cell antibody positive*
906. *Paroxysmal nocturnal haemoglobinuria*
907. *Partial seizures*
908. *Partial seizures with secondary generalisation*
909. *Patient isolation*

910. *Pelvic venous thrombosis*
911. *Pemphigoid*
912. *Pemphigus*
913. *Penile vein thrombosis*
914. *Pericarditis*
915. *Pericarditis lupus*
916. *Perihepatic discomfort*
917. *Periorbital oedema*
918. *Periorbital swelling*
919. *Peripheral artery thrombosis*
920. *Peripheral embolism*
921. *Peripheral ischaemia*
922. *Peripheral vein thrombus extension*
923. *Periportal oedema*
924. *Peritoneal fluid protein abnormal*
925. *Peritoneal fluid protein decreased*
926. *Peritoneal fluid protein increased*
927. *Peritonitis lupus*
928. *Pernicious anaemia*
929. *Petit mal epilepsy*
930. *Pharyngeal oedema*
931. *Pharyngeal swelling*
932. *Pityriasis lichenoides et varioliformis acuta*
933. *Placenta praevia*
934. *Pleuroparenchymal fibroelastosis*
935. *Pneumobilia*
936. *Pneumonia*
937. *Pneumonia adenoviral*
938. *Pneumonia cytomegaloviral*
939. *Pneumonia herpes viral*

940. *Pneumonia influenzal*
941. *Pneumonia measles*
942. *Pneumonia mycoplasmal*
943. *Pneumonia necrotising*
944. *Pneumonia parainfluenzae viral*
945. *Pneumonia respiratory syncytial viral*
946. *Pneumonia viral*
947. *POEMS syndrome*
948. *Polyarteritis nodosa*
949. *Polyarthrititis*
950. *Polychondritis*
951. *Polyglandular autoimmune syndrome type I*
952. *Polyglandular autoimmune syndrome type II*
953. *Polyglandular autoimmune syndrome type III*
954. *Polyglandular disorder*
955. *Polymicrogyria*
956. *Polymyalgia rheumatica*
957. *Polymyositis*
958. *Polyneuropathy*
959. *Polyneuropathy idiopathic progressive*
960. *Portal pyaemia*
961. *Portal vein embolism*
962. *Portal vein flow decreased*
963. *Portal vein pressure increased*
964. *Portal vein thrombosis*
965. *Portosplenomesenteric venous thrombosis*
966. *Post procedural hypotension*
967. *Post procedural pneumonia*
968. *Post procedural pulmonary embolism*
969. *Post stroke epilepsy*

970. *Post stroke seizure*
971. *Post thrombotic retinopathy*
972. *Post thrombotic syndrome*
973. *Post viral fatigue syndrome*
974. *Postictal headache*
975. *Postictal paralysis*
976. *Postictal psychosis*
977. *Postictal state*
978. *Postoperative respiratory distress*
979. *Postoperative respiratory failure*
980. *Postoperative thrombosis*
981. *Postpartum thrombosis*
982. *Postpartum venous thrombosis*
983. *Postpericardiotomy syndrome*
984. *Post-traumatic epilepsy*
985. *Postural orthostatic tachycardia syndrome*
986. *Precerebral artery thrombosis*
987. *Pre-eclampsia*
988. *Preictal state*
989. *Premature labour*
990. *Premature menopause*
991. *Primary amyloidosis*
992. *Primary biliary cholangitis*
993. *Primary progressive multiple sclerosis*
994. *Procedural shock*
995. *Proctitis herpes*
996. *Proctitis ulcerative*
997. *Product availability issue*
998. *Product distribution issue*
999. *Product supply issue*

1000. *Progressive facial hemiatrophy*
1001. *Progressive multifocal leukoencephalopathy*
1002. *Progressive multiple sclerosis*
1003. *Progressive relapsing multiple sclerosis*
1004. *Prosthetic cardiac valve thrombosis*
1005. *Pruritus*
1006. *Pruritus allergic*
1007. *Pseudovasculitis*
1008. *Psoriasis*
1009. *Psoriatic arthropathy*
1010. *Pulmonary amyloidosis*
1011. *Pulmonary artery thrombosis*
1012. *Pulmonary embolism*
1013. *Pulmonary fibrosis*
1014. *Pulmonary haemorrhage*
1015. *Pulmonary microemboli*
1016. *Pulmonary oil microembolism*
1017. *Pulmonary renal syndrome*
1018. *Pulmonary sarcoidosis*
1019. *Pulmonary sepsis*
1020. *Pulmonary thrombosis*
1021. *Pulmonary tumour thrombotic microangiopathy*
1022. *Pulmonary vasculitis*
1023. *Pulmonary veno-occlusive disease*
1024. *Pulmonary venous thrombosis*
1025. *Pyoderma gangrenosum*
1026. *Pyostomatitis vegetans*
1027. *Pyrexia*
1028. *Quarantine*
1029. *Radiation leukopenia*

- 1030. *Radiculitis brachial*
- 1031. *Radiologically isolated syndrome*
- 1032. *Rash*
- 1033. *Rash erythematous*
- 1034. *Rash pruritic*
- 1035. *Rasmussen encephalitis*
- 1036. *Raynaud's phenomenon*
- 1037. *Reactive capillary endothelial proliferation*
- 1038. *Relapsing multiple sclerosis*
- 1039. *Relapsing-remitting multiple sclerosis*
- 1040. *Renal amyloidosis*
- 1041. *Renal arteritis*
- 1042. *Renal artery thrombosis*
- 1043. *Renal embolism*
- 1044. *Renal failure*
- 1045. *Renal vascular thrombosis*
- 1046. *Renal vasculitis*
- 1047. *Renal vein embolism*
- 1048. *Renal vein thrombosis*
- 1049. *Respiratory arrest*
- 1050. *Respiratory disorder*
- 1051. *Respiratory distress*
- 1052. *Respiratory failure*
- 1053. *Respiratory paralysis*
- 1054. *Respiratory syncytial virus bronchiolitis*
- 1055. *Respiratory syncytial virus bronchitis*
- 1056. *Retinal artery embolism*
- 1057. *Retinal artery occlusion*
- 1058. *Retinal artery thrombosis*
- 1059. *Retinal vascular thrombosis*

1060. *Retinal vasculitis*
1061. *Retinal vein occlusion*
1062. *Retinal vein thrombosis*
1063. *Retinol binding protein decreased*
1064. *Retinopathy*
1065. *Retrograde portal vein flow*
1066. *Retroperitoneal fibrosis*
1067. *Reversible airways obstruction*
1068. *Reynold's syndrome*
1069. *Rheumatic brain disease*
1070. *Rheumatic disorder*
1071. *Rheumatoid arthritis*
1072. *Rheumatoid factor increased*
1073. *Rheumatoid factor positive*
1074. *Rheumatoid factor quantitative increased*
1075. *Rheumatoid lung*
1076. *Rheumatoid neutrophilic dermatosis*
1077. *Rheumatoid nodule*
1078. *Rheumatoid nodule removal*
1079. *Rheumatoid scleritis*
1080. *Rheumatoid vasculitis*
1081. *Saccadic eye movement*
1082. *SAPHO syndrome*
1083. *Sarcoidosis*
1084. *SARS-CoV-1 test*
1085. *SARS-CoV-1 test negative*
1086. *SARS-CoV-1 test positive*
1087. *SARS-CoV-2 antibody test*
1088. *SARS-CoV-2 antibody test negative*
1089. *SARS-CoV-2 antibody test positive*

1090. *SARS-CoV-2 carrier*
1091. *SARS-CoV-2 sepsis*
1092. *SARS-CoV-2 test*
1093. *SARSCoV-2 test false negative*
1094. *SARS-CoV-2 test false positive*
1095. *SARS-CoV-2 test negative*
1096. *SARSCoV-2 test positive*
1097. *SARS-CoV-2 viraemia*
1098. *Satoyoshi syndrome*
1099. *Schizencephaly*
1100. *Scleritis*
1101. *Sclerodactylia*
1102. *Scleroderma*
1103. *Scleroderma associated digital ulcer*
1104. *Scleroderma renal crisis*
1105. *Scleroderma-like reaction*
1106. *Secondary amyloidosis*
1107. *Secondary cerebellar degeneration*
1108. *Secondary progressive multiple sclerosis*
1109. *Segmented hyalinising vasculitis*
1110. *Seizure*
1111. *Seizure anoxic*
1112. *Seizure cluster*
1113. *Seizure like phenomena*
1114. *Seizure prophylaxis*
1115. *Sensation of foreign body*
1116. *Septic embolus*
1117. *Septic pulmonary embolism*
1118. *Severe acute respiratory syndrome*
1119. *Severe myoclonic epilepsy of infancy*

- 1120. *Shock*
- 1121. *Shock symptom*
- 1122. *Shrinking lung syndrome*
- 1123. *Shunt thrombosis*
- 1124. *Silent thyroiditis*
- 1125. *Simple partial seizures*
- 1126. *Sjogren's syndrome*
- 1127. *Skin swelling*
- 1128. *SLE arthritis*
- 1129. *Smooth muscle antibody positive*
- 1130. *Sneezing*
- 1131. *Spinal artery embolism*
- 1132. *Spinal artery thrombosis*
- 1133. *Splenic artery thrombosis*
- 1134. *Splenic embolism*
- 1135. *Splenic thrombosis*
- 1136. *Splenic vein thrombosis*
- 1137. *Spondylitis*
- 1138. *Spondyloarthropathy*
- 1139. *Spontaneous heparin-induced thrombocytopenia syndrome*
- 1140. *Status epilepticus*
- 1141. *Stevens-Johnson syndrome*
- 1142. *Stiff leg syndrome*
- 1143. *Stiff person syndrome*
- 1144. *Stillbirth*
- 1145. *Still's disease*
- 1146. *Stoma site thrombosis*
- 1147. *Stoma site vasculitis*
- 1148. *Stress cardiomyopathy*

- 1149. *Stridor*
- 1150. *Subacute cutaneous lupus erythematosus*
- 1151. *Subacute endocarditis*
- 1152. *Subacute inflammatory demyelinating polyneuropathy*
- 1153. *Subclavian artery embolism*
- 1154. *Subclavian artery thrombosis*
- 1155. *Subclavian vein thrombosis*
- 1156. *Sudden unexplained death in epilepsy*
- 1157. *Superior sagittal sinus thrombosis*
- 1158. *Susac's syndrome*
- 1159. *Suspected COVID19*
- 1160. *Swelling*
- 1161. *Swelling face*
- 1162. *Swelling of eyelid*
- 1163. *Swollen tongue*
- 1164. *Sympathetic ophthalmia*
- 1165. *Systemic lupus erythematosus*
- 1166. *Systemic lupus erythematosus disease activity index abnormal*
- 1167. *Systemic lupus erythematosus disease activity index decreased*
- 1168. *Systemic lupus erythematosus disease activity index increased*
- 1169. *Systemic lupus erythematosus rash*
- 1170. *Systemic scleroderma*
- 1171. *Systemic sclerosis pulmonary*
- 1172. *Tachycardia*
- 1173. *Tachypnoea*
- 1174. *Takayasu's arteritis*

- 1175. *Temporal lobe epilepsy*
- 1176. *Terminal ileitis*
- 1177. *Testicular autoimmunity*
- 1178. *Throat tightness*
- 1179. *Thromboangiitis obliterans*
- 1180. *Thrombocytopenia*
- 1181. *Thrombocytopenic purpura*
- 1182. *Thrombophlebitis*
- 1183. *Thrombophlebitis migrans*
- 1184. *Thrombophlebitis neonatal*
- 1185. *Thrombophlebitis septic*
- 1186. *Thrombophlebitis superficial*
- 1187. *Thromboplastin antibody positive*
- 1188. *Thrombosis*
- 1189. *Thrombosis corpora cavernosa*
- 1190. *Thrombosis in device*
- 1191. *Thrombosis mesenteric vessel*
- 1192. *Thrombotic cerebral infarction*
- 1193. *Thrombotic microangiopathy*
- 1194. *Thrombotic stroke*
- 1195. *Thrombotic thrombocytopenic purpura*
- 1196. *Thyroid disorder*
- 1197. *Thyroid stimulating immunoglobulin increased*
- 1198. *Thyroiditis*
- 1199. *Tongue amyloidosis*
- 1200. *Tongue biting*
- 1201. *Tongue oedema*
- 1202. *Tonic clonic movements*
- 1203. *Tonic convulsion*
- 1204. *Tonic posturing*

1205. *Topectomy*
1206. *Total bile acids increased*
1207. *Toxic epidermal necrolysis*
1208. *Toxic leukoencephalopathy*
1209. *Toxic oil syndrome*
1210. *Tracheal obstruction*
1211. *Tracheal oedema*
1212. *Tracheobronchitis*
1213. *Tracheobronchitis mycoplasmal*
1214. *Tracheobronchitis viral*
1215. *Transaminases abnormal*
1216. *Transaminases increased*
1217. *Transfusion-related alloimmune neutropenia*
1218. *Transient epileptic amnesia*
1219. *Transverse sinus thrombosis*
1220. *Trigeminal nerve paresis*
1221. *Trigeminal neuralgia*
1222. *Trigeminal palsy*
1223. *Truncus coeliacus thrombosis*
1224. *Tuberous sclerosis complex*
1225. *Tubulointerstitial nephritis and uveitis syndrome*
1226. *Tumefactive multiple sclerosis*
1227. *Tumor embolism*
1228. *Tumor thrombosis*
1229. *Type 1 diabetes mellitus*
1230. *Type I hypersensitivity*
1231. *Type III immune complex mediated reaction*
1232. *Uhthoff's phenomenon*
1233. *Ulcerative keratitis*
1234. *Ultrasound liver abnormal*

1235. *Umbilical cord thrombosis*
1236. *Uncinate fits*
1237. *Undifferentiated connective tissue disease*
1238. *Upper airway obstruction*
1239. *Urine bilirubin increased*
1240. *Urobilinogen urine decreased*
1241. *Urobilinogen urine increased*
1242. *Urticaria*
1243. *Urticaria papular*
1244. *Urticarial vasculitis*
1245. *Uterine rupture*
1246. *Uveitis*
1247. *Vaccination site thrombosis*
1248. *Vaccination site vasculitis*
1249. *Vagus nerve paralysis*
1250. *Varicella*
1251. *Varicella keratitis*
1252. *Varicella post vaccine*
1253. *Varicella zoster gastritis*
1254. *Varicella zoster oesophagitis*
1255. *Varicella zoster pneumonia*
1256. *Varicella zoster sepsis*
1257. *Varicella zoster virus infection*
1258. *Vasa praevia*
1259. *Vascular graft thrombosis*
1260. *Vascular pseudoaneurysm thrombosis*
1261. *Vascular purpura*
1262. *Vascular stent thrombosis*
1263. *Vasculitic rash*
1264. *Vasculitic ulcer*

1265. *Vasculitis*
1266. *Vasculitis gastrointestinal*
1267. *Vasculitis necrotising*
1268. *Vena cava embolism*
1269. *Vena cava thrombosis*
1270. *Venous intravasation*
1271. *Venous recanalisation*
1272. *Venous thrombosis*
1273. *Venous thrombosis in pregnancy*
1274. *Venous thrombosis limb*
1275. *Venous thrombosis neonatal*
1276. *Vertebral artery thrombosis*
1277. *Vessel puncture site thrombosis*
1278. *Visceral venous thrombosis*
1279. *VIth nerve paralysis*
1280. *VIth nerve paresis*
1281. *Vitiligo*
1282. *Vocal cord paralysis*
1283. *Vocal cord paresis*
1284. *Vogt-Koyanagi-Harada disease*
1285. *Warm type haemolytic anaemia*
1286. *Wheezing*
1287. *White nipple sign*
1288. *XIth nerve paralysis*
1289. *X-ray hepatobiliary abnormal*
1290. *Young's syndrome*
1291. *Zika virus associated Guillain Barre syndrome.*

THURSDAY, NOVEMBER 3RD, 2022 |



BREAKING NEWS

OFFICIAL CDC FIGURES – 58k Children injured, 15k hospitalised, 1.2k disabled & 163 dead due to COVID-19 Vaccination in the USA

BY THE EXPOSÉ ON OCTOBER 25, 2022 • (16 COMMENTS)

Print PDF Email

An advisory committee to the Centers for Disease Control and Prevention (CDC) voted on Thursday 20th October in favour of adding the Covid vaccine to the recommended immunisation schedule (<https://www.cdc.gov/vaccines/schedules/index.html>) for children aged 6 months and over.

Was the CDC’s advisory committee aware of figures published by the Centers for Disease Control that reveal nearly 58,000 children had been injured due to Covid-19 vaccination across the USA by September 29th 2022?

Was the committee aware that 1,201 of these children either suffered a life-threatening event or a permanent disability?

Did the advisory committee know that a further 163 children tragically lost their lives?

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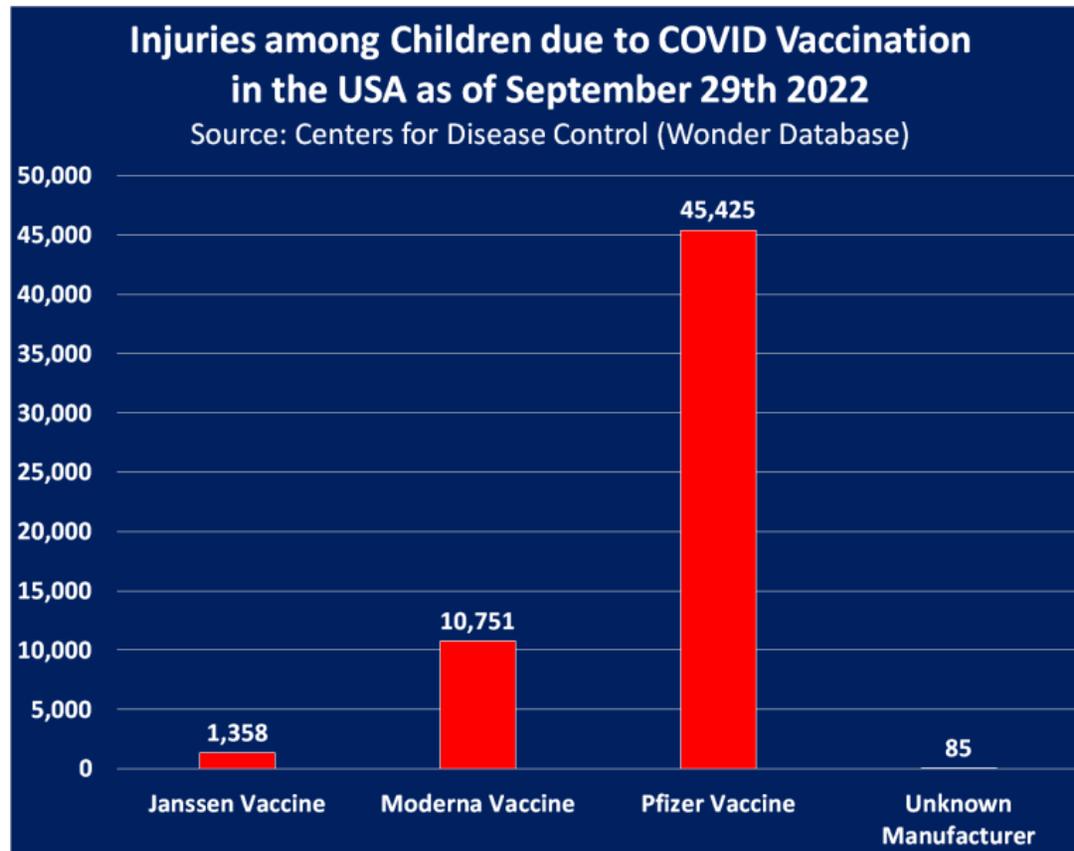
The Centers for Disease Control (CDC) hosts a Vaccine Adverse Event Reporting System (VAERS) that can be found [here](https://wonder.cdc.gov/controller/datarequest/D8;jsessionid=4715088FA3527C5B25E9F044F276) (<https://wonder.cdc.gov/controller/datarequest/D8;jsessionid=4715088FA3527C5B25E9F044F276>).

Unfortunately, the CDC reveals that at least 57,622 children (Aged 0 to 17) have suffered an injury due to Covid-19 vaccination as of September 29th 2022.

Vaccine Manufacturer	Events Reported	Percent (of 56,205)
JANSSEN	1,358	2.42%
MODERNA	10,751	19.13%
NOVAVAX	3	0.01%
PFIZER\BIONTECH	45,425	80.82%
UNKNOWN MANUFACTURER	85	0.15%
Total	57,622	102.52%

Source

The Janssen vaccine is responsible for 1,358 of these injuries, the Moderna vaccine for 10,751, and the Pfizer vaccine for 45,425.

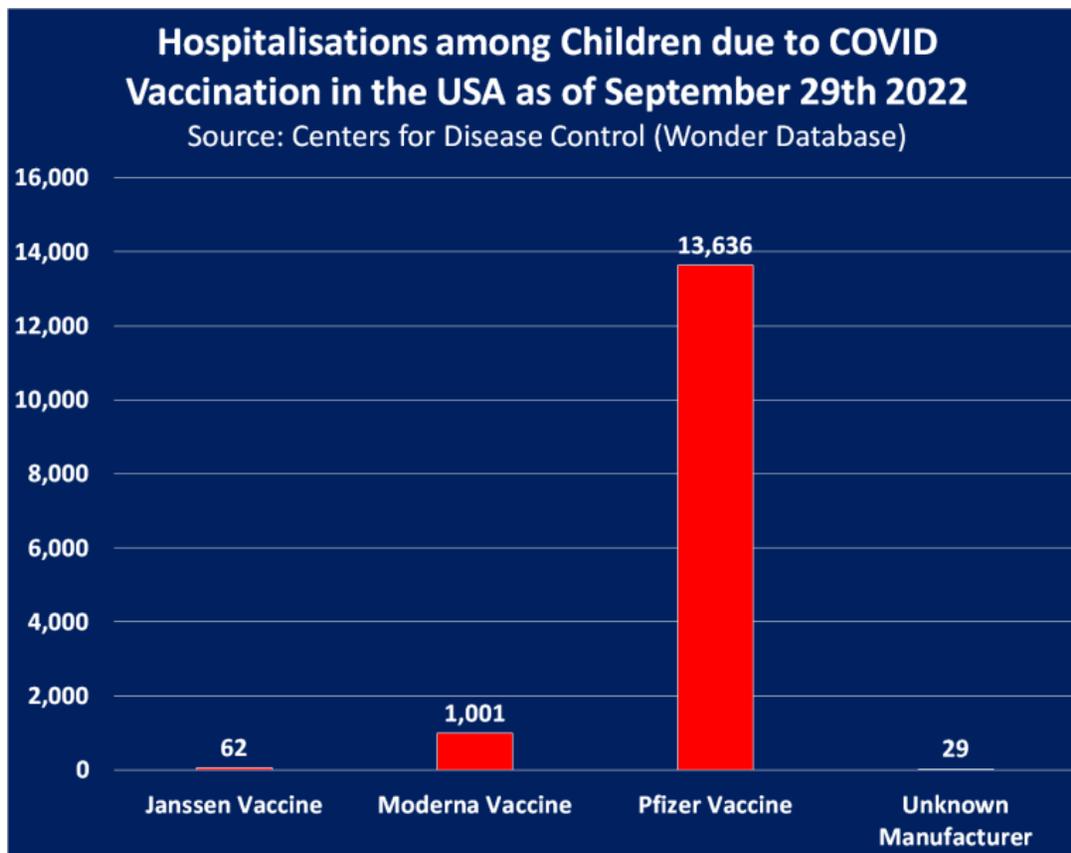


The CDC also reveals that 14,728 children have either visited a hospital or been hospitalised due to an injury caused by Covid-19 vaccination.

Vaccine Manufacturer ↓	Events Reported ↑↓	Percent (of 14,108) ↑↓
JANSSEN	62	0.44%
MODERNA	1,001	7.10%
PFIZER\BIONTECH	13,636	96.65%
UNKNOWN MANUFACTURER	29	0.21%
Total	14,728	104.39%

Source

The Pfizer vaccine has caused 13,636 children to be hospitalised, the Moderna vaccine 1,001, and the Janssen vaccine 62.

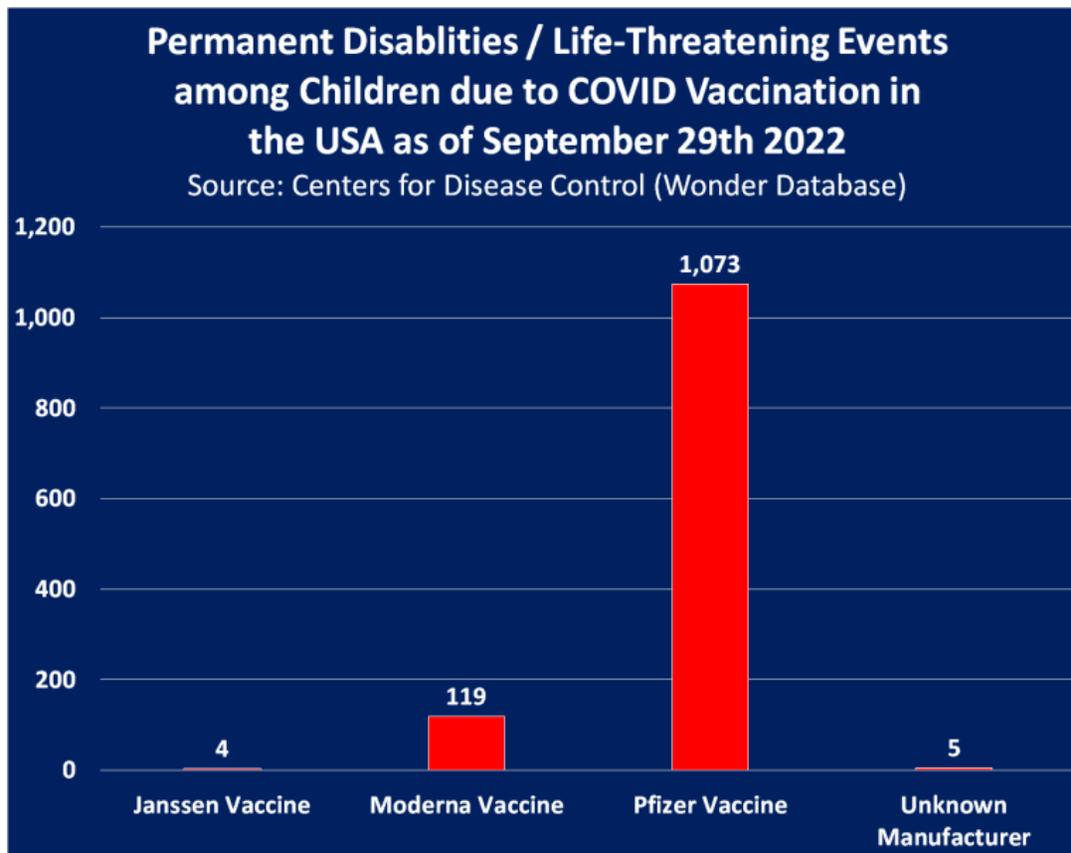


Sadly, the CDC reveals that 1,201 children have either suffered a life-threatening event or been left permanently disabled due to Covid-19 vaccination.

Vaccine Manufacturer ↓	Events Reported ↑↓	Percent (of 1,134) ↑↓
JANSSEN	4	0.35%
MODERNA	119	10.49%
PFIZER\BIONTECH	1,073	94.62%
UNKNOWN MANUFACTURER	5	0.44%
Total	1,201	105.91%

Source

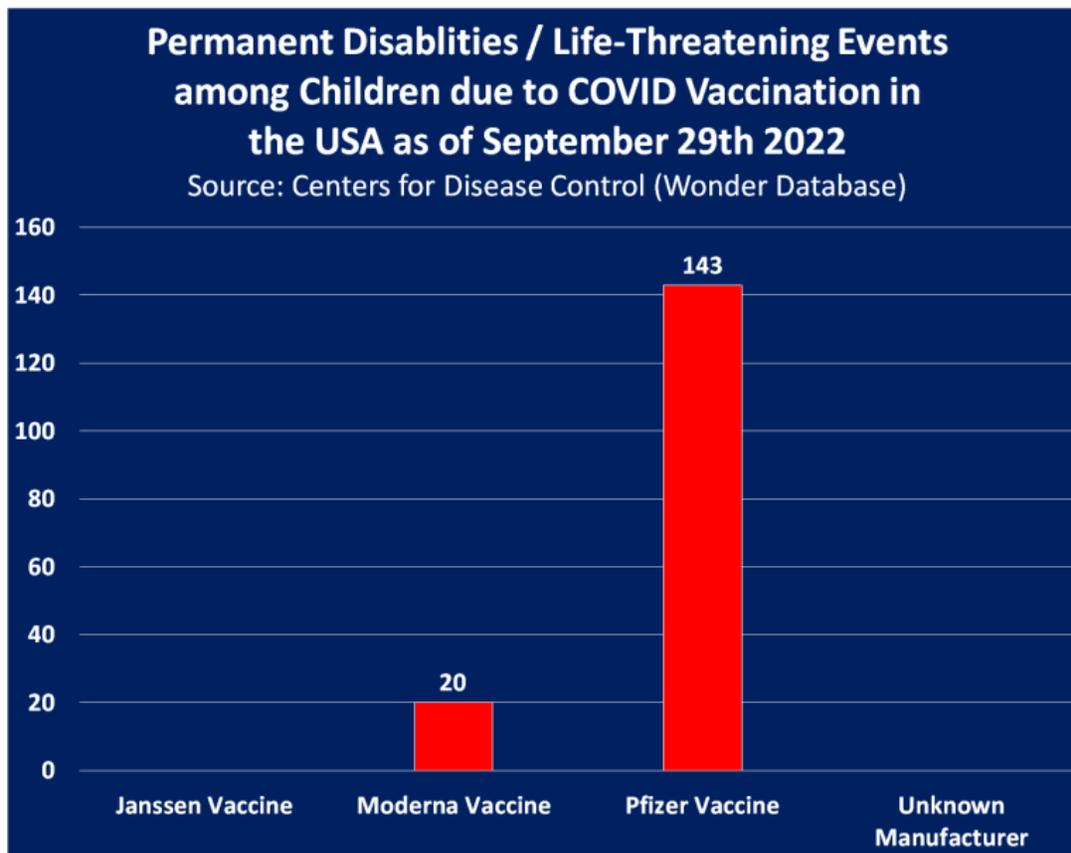
The Pfizer jab has nearly killed or permanently disabled 1,073 children, the Moderna jab 119 children, and the Janssen jab 4 children.



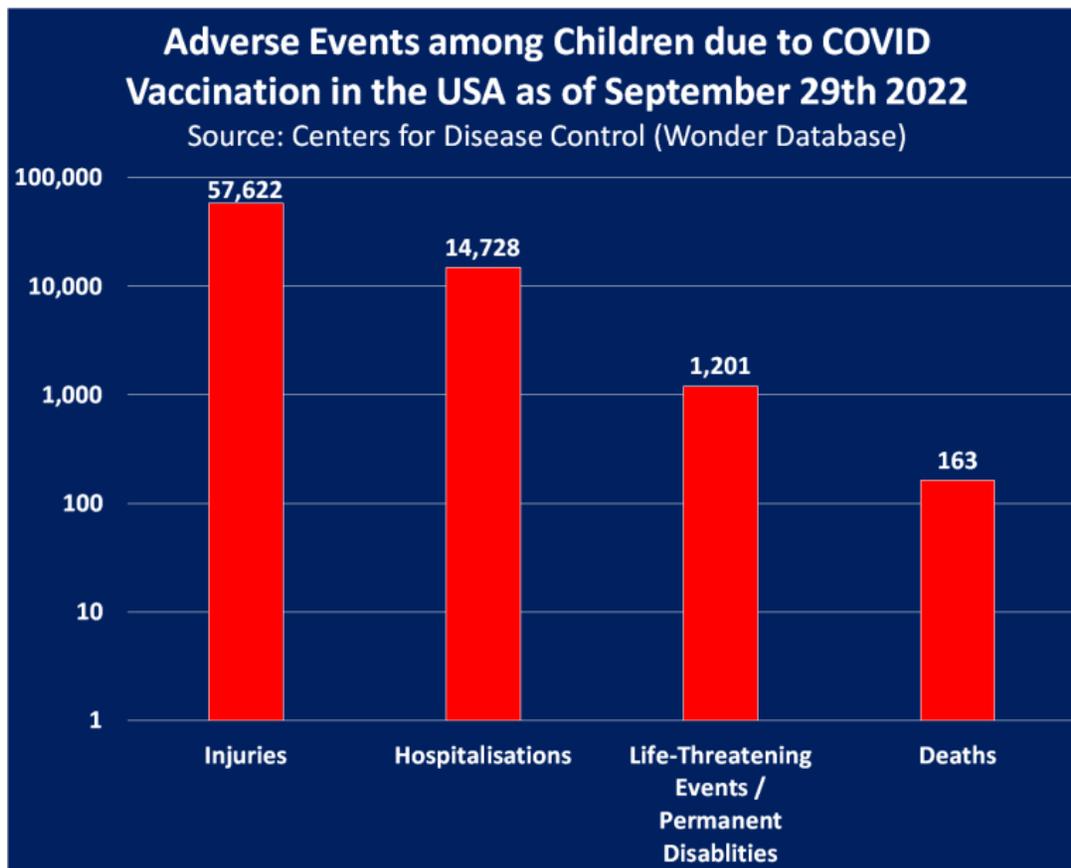
Tragically, the CDC reveals that at least 163 children have lost their lives due to Covid-19 vaccination.

Vaccine Manufacturer	Events Reported	Percent (of 155)
MODERNA	20	12.90%
PFIZER\BIONTECH	143	92.26%
Total	163	105.16%

The Pfizer vaccine has killed 143 children, whilst the Moderna vaccine has killed 20 children.



What's even more unfortunate is that these figures do not illustrate the true consequences of Covid-19 vaccination among children. This is because the CDC estimates just 1 to 10% of adverse events are actually reported to VAERS.



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From: Terry Hodges
Sent: 11/3/2022 1:06:00 PM
To: DOH WSBOH
Cc:
Subject: CDC's Recommendation to Add Covid Shots to the School Children's Vaccine Schedule

External Email

* Children are not at risk for this Covid-19 infection, and if they do get infected, they recover quickly

* In April 2020, the CDC said this about these shots: "mRNA is considered a gene therapy product," but that is not how the shots were promoted. The fact is that the mRNA technology can actually modify the DNA.

* It is now a matter of public record that these treatments DO NOT stop infection or transmission so they cannot be called "vaccines" (that would be a violation of the Wheeler-Lei Act of 1938, which made it illegal to imply that something does what it does not do, (i.e., make false claims about products and treatments. Look it up), which is why the FDA and CDC hijacked the term in April. Calling this experimental treatment a vaccine is an ILLEGAL act and should be litigated.

This is a scam -- an illegal experimental gene modification therapy using human beings, including our children, as the experimental animals. Think about that. Nuremberg 2.0?

* This also violates Section [7](1) of the Clayton Antitrust Act of 1914, which specifically barred the use of deceptive or false advertising

* The EUA is only legal if there are no safe and effective alternative treatments, but there ARE safe and effective alternative treatments. The late Dr. Zelenko proved that early on, and many others have done so since then. There is abundant evidence (as opposed to the science fiction promulgated by Fauci and others) that Ivermectin and Hydroxychloroquine/Zinc treatments ARE safe and effective.

* Furthermore, the required ingredients list is usually empty (I have seen some of them), and there is evidence that each batch is different, which is what you would expect if this is all about using human beings as experimental animals, and all of this makes the legally mandatory Informed Consent impossible.

* Embalmers across the world are pulling huge "clots" from the veins of the deceased who have had the "clot shot"

* STOP THIS MADNESS NOW. To inflict this experiment on our children is nothing short of criminal child abuse.

* I assure you, I have resources available to assist any parents and teachers who want to withdraw from the totally corrupt public and charter school system to establish private homeschooling associations to protect children from this criminal insanity.

From: Tawana Jones
Sent: 11/1/2022 12:02:58 PM
To: DOH WSBOH
Cc:
Subject: NO on Covid shot mandates for kids

External Email

Please do not mandate the COVID-19 shots for children. This removes the rights of parents to govern and protect their children as they see fit. Children are the least likely to be affected by the Covid disease so they should not be forced to take an experimental shot that can never be undone.

--

Tawana Jones
509-570-4440

From: Dr. Lisa DVM

Sent: 11/1/2022 9:38:15 PM

To: DOH WSBOH

Cc:

Subject: I respectfully urge you to recommend AGAINST the COVID-19 injection for the childhood vaccine schedule



attachments\A22A14D71CD1400A_Vaccine related Prion Disease.pdf



attachments\A6000233C19A44DC_Pathophysiologic alterations post vaccine.pdf



attachments\640EC08E932B42E6_cimb-44-00073 (1).pdf

External Email

Dear Board of Health,

I know I already sent these articles to the board on a previous request, but they are still relevant as to why the Covid-19 injection makes no sense for children. Once again, I respectfully urge you to recommend against including the COVID-19 injection for the state's daycare and K-12 requirements. First many of these children have already been exposed and achieved immunity, the risk of serious disease in these individuals is extremely low, next this injection does not stimulate neutralizing antibodies against the variants and has been demonstrated in some individuals to allow the variants to create a more severe disease through antibody dependent enhancement, plus the mRNA therapy is typically a therapy that requires 10-15 years of observation for aberrant effects and we are just a bit over 2 years and we are seeing a number of structural injuries to various important reproductive and circulatory organs, neurologic injuries, autoimmune disease and physiologic injuries. New studies indicate that the mRNA stays in the body for several months. During the initial CDC vaccine roll out lectures I participated in showed slides of the mRNA quickly being broken down and being removed by the immune system (this was Oct or Nov 2020). We now know they remain in the body many months and the 3rd attachment discusses this research and "Furthermore, a recent study showed that SARS-CoV-2 RNA can be reverse-transcribed and integrated into the genome of human cells." The second study discusses many different ailments besides neurologic injury and has some interesting adverse event comparison tables.

It is one thing for an adult with free will to voluntarily receive this injection, it is completely different matter to mandate unknown life long effects on a child who is trusting us to make decisions for their highest good.

Sincerely,

Dr. Lisa Brien

COVID-19 Vaccine Associated Parkinson's Disease, A Prion Disease Signal in the UK Yellow Card Adverse Event Database

J. Bart Classen, MD*

Classen Immunotherapies, Inc., 3637 Rockdale Road, Manchester, MD 21102, E-mail: classen@vaccines.net.

*Correspondence:

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Received: 25 June 2021; Accepted: 18 July 2021

Citation: Classen JB. COVID-19 Vaccine Associated Parkinson's Disease, A Prion Disease Signal in the UK Yellow Card Adverse Event Database. J Med - Clin Res & Rev. 2021; 5(7): 1-6.

ABSTRACT

Many have argued that SARS-CoV-2 spike protein and its mRNA sequence, found in all COVID-19 vaccines, are prionogenic. The UK's Yellow Card database of COVID-19 vaccine adverse event reports was evaluated for signals consistent with a pending epidemic of COVID vaccine induced prion disease. Adverse event reaction rates from AstraZeneca's vaccine were compared to adverse event rates for Pfizer's COVID vaccines. The vaccines employ different technologies allowing for potential differences in adverse event rates but allowing each to serve as a control group for the other. The analysis showed a highly statistically significant and clinically relevant (2.6-fold) increase in Parkinson's disease, a prion disease, in the AstraZeneca adverse reaction reports compared to the Pfizer vaccine adverse reaction reports ($p = 0.000024$). These results are consistent with monkey toxicity studies showing infection with SARS-CoV-2 results in Lewy Body formation. The findings suggest that regulatory approval, even under an emergency use authorization, for COVID vaccines was premature and that widespread use should be halted until full long term safety studies evaluating prion toxicity has been complete. Alternative vaccines like the Measles Mumps Rubella (MMR) vaccine should be explored for those desiring immunization against COVID-19.

Keywords

COVID-19, Immunization, Vaccines, Parkinson's disease.

Introduction

Many have raised the alarm about the wisdom of wide spread immunization campaigns using COVID-19 vaccines without first performing long term human safety studies and well-planned animal toxicity studies. Concern has been raised regarding evidence that the SARS-CoV-2 virus, which causes COVID-19, is actually a lab derived bioweapon [1-4]. Several peer reviewed papers [3,5,6] have indicated that the spike protein of the SARS-CoV-2 virus and its nucleic acid sequence are actually prion forming toxins. A toxicity study in monkeys infected with SARS-CoV-2 showed the formation of Lewy Bodies [8] and supports these findings. All the COVID-19 vaccines on the market contain spike protein or its nucleic acid sequence creating a possible catastrophic epidemic of prion disease in the future.

The COVID vaccines from AstraZeneca and Pfizer are quite different in their composition. The AstraZeneca COVID vaccine

utilizes live adenoviruses that are genetically engineered to make the spike protein. Pfizer's COVID vaccine utilizes mRNA encapsulated in lipids to cause formation of spike protein in the recipient. Both vaccines technologies have the potential to induce prion disease [4]. Because the technologies are unique it was hypothesized their rates of prion induction may be contrasting enough to be detected as a difference in a spontaneous adverse event reporting database. The UK's Yellow Card adverse event reporting system was chosen to evaluate whether a difference in prion related vaccine's reaction reports could be detected. As discussed below there were theoretical benefits for studying this effect in a database from a single small country as opposed to larger EU or US databases.

Method

Yellow Card adverse reporting data from the United Kingdom government website (<https://www.gov.uk/government/publications/coronavirus-covid-19-vaccine-adverse-reactions/coronavirus-vaccine-summary-of-yellow-card-reporting>) was

downloaded. Data was in the form of 4 PDF documents, one each for vaccines from AstraZeneca, Pfizer, Moderna, and one for reports where the vaccine was not identified. Each document categorized adverse event reports into specific groups primarily sorted by organ system as summarized in Table 1. Adverse events in each major category are further classified more or less by specific disease or symptom. While the documents do not specifically say outright, the website indicates the reports may come from both lay persons and healthcare professionals and may include both spontaneous reports and reports derived from clinical trials.

Table 1.

General Categories	Pfizer	AstraZeneca	Risk
Blood Disorders	7164	6645	0.93
Cardiac Disorders	2776	7879	2.84
Congenital Disorders	32	65	2.03
Ear Disorders	2855	8250	2.89
Endocrine Disorders	85	263	3.09
Eye Disorders	3558	12181	3.42
Gastrointestinal	21225	73305	3.45
General Disorders	57080	233977	4.10
Hepatic Disorders	84	363	4.32
Immune System Disorders	1188	2594	2.18
Infections	5202	16093	3.09
Injuries	2343	7065	3.02
Investigations	2552	9499	3.72
Metabolic Disorders	1268	8090	6.38
Muscle and Tissue Disorders	27007	90733	3.36
Neoplasm	140	317	2.26
Nervous Disorders	38876	160834	4.14
Pregnancy	186	191	1.03
null	62	117	1.89
Psychiatric Disorders	3900	15206	3.90
Renal and Urinary Disorders	581	2234	3.85
Reproductive and Breast Disorders	3839	7839	2.04
Respiratory Disorders	9087	24655	2.71
Skin Disorders	15642	45995	2.94
Social Circumstances	85	266	3.13
Surgical and Medical Procedures	186	584	3.14
Vascular Disorders	3165	10725	3.39
Total Reactions	210168	745965	3.55
Total Reports	73944	205221	2.78
Fatal Reports	425	904	2.13
Reactions per Report	2.84	3.63	1.28
Fatalities per Report	0.006	0.004	0.77

The frequency of adverse event reports pertaining to possible prion induced neurological symptoms were compared between AstraZeneca and Pfizer vaccines. No analysis was made for other potential adverse events except that the rates of total psychological reactions (“Psychiatric Disorders”) was also compared. The analysis was specifically intended for detecting prion disease in the “Nervous Disorders” reaction reports. An analysis was not performed on the “Psychiatric Disorders” reactions or any other category of diseases listed in Table 1. A Chi square analysis using a 2x2 table was used to calculate statistical p values for just 3 clearly specific signals. An online statistical chi square calculator (<https://www.socscistatistics.com/tests/chisquare>) was used. Chi square

analysis was also performed, one each, for “Nervous Disorders” and “Psychiatric Disorders” in Table 1. In addition, a separate chi square analysis was performed for 3 specific neurological reactions that could relate to prion disease. A single “negative” control chi square analysis was performed to verify that the calculator software was functioning properly.

Results

Four documents were downloaded from the UK government database. The documents state the data lock date was June 16th, 2021 and the Report Run Date was June 17, 2021. The documents indicated that the following number of adverse event reactions were reported for each vaccine, Pfizer: 210,168; AstraZeneca: 745,965; Moderna: 14,781; brand unspecified: 2,521. Because of insufficient data only the Pfizer and AstraZeneca adverse event reports were analyzed. According to the documents the Pfizer adverse events were reported between December 9, 2020 and June 16, 2021 while the AstraZeneca adverse events were reported between January 4, 2021 and June 16, 2021. There were thus only a few days difference in the dates the adverse events were reported. Additional publicly available data from the UK indicates by June 16th, 72,891,861 vaccine doses had been administered (<https://coronavirus.data.gov.uk/details/vaccinations>). The proportion of these doses attributed to Pfizer or AstraZeneca vaccines was not readily available.

Adverse reactions to the Pfizer and AstraZeneca vaccines were categorized by Yellow Card into major categories based on organ system and are summarized in Table 1. Table 1 shows that in general there are 3.55 times more adverse reactions reported and 2.78 more reports filed for the AstraZeneca vaccine than for the Pfizer vaccine. In general, there were 3.63 adverse reaction disclosed for each report pertaining to the AstraZeneca vaccine compared 2.84 reactions for each report pertaining to the Pfizer vaccine.

Data in Table 1 was specifically analyzed looking for a signal of a potential difference in prion disease between the vaccine groups. There were 4.14 times ($p=0.00001$) as many “Nervous Disorders” reactions and 3.9 times ($p=0.00001$) as many “Psychiatric Disorders” reactions reported for the AstraZeneca Vaccine compared to the Pfizer vaccine. These differences were elevated compared to a 3.55 times difference for all adverse event reactions reported between the two groups respectively.

Analysis of the “Nervous Disorders” data, Table 2, showed a highly significant and specific increase in Parkinson’s disease reactions in the AstraZeneca reports compared to the Pfizer vaccine reports. There were 185 reactions listing Parkinson’s disease reactions in the AstraZeneca reports compared to only 20 in the Pfizer vaccine reports ($p=0.000024$). Table 3 shows how the Parkinson’s disease patients were classified in the reactions. These Parkinson’s disease cases were primarily identified using a highly specific, pathognomonic, symptom “Freezing Phenomenon”. Table 3 shows that “tremor”, a less specific but more sensitive

symptom found in Parkinson's disease patients was present in 9,288 reactions reported for the AstraZeneca vaccine but found in only 937 reactions reported for the Pfizer vaccine (p=0.00001).

Table 2: Nervous Disorders

	Pfizer	Ratio	AstraZeneca
Abnormal reflexes	11	4.73	52
Abnormal sleep-related events	11	2.09	23
Absence seizures	16	2.06	33
Acute polyneuropathies	39	8.44	329
Autonomic nervous system disorders	7	2.71	19
Central nervous system aneurysms and dissections	2	2.00	4
Central nervous system haemorrhages and cerebrovascular accidents	404	4.13	1668
Central nervous system inflammatory disorders NEC	1	17.00	17
Central nervous system vascular disorders NEC	5	5.40	27
Cerebrovascular venous and sinus thrombosis	36	7.17	258
Cervical spinal cord and nerve root disorders	3	3.00	9
Choreiform movements	2	2.50	5
Chronic polyneuropathies	1	14.00	14
Coma states	6	3.67	22
Coordination and balance disturbances	283	3.58	1013
Cortical dysfunction NEC	43	3.37	145
Cranial nerve disorders NEC	2	3.00	6
Dementia (excl Alzheimer's type)	11	2.55	28
Demyelinating disorders NEC	12	2.08	25
Disturbances in consciousness NEC	3236	2.96	9592
Disturbances in sleep phase rhythm	1	10.00	10
Dyskinesias and movement disorders NEC	143	3.08	440
Dystonias	14	1.86	26
Encephalitis NEC	3	2.00	6
Encephalopathies NEC	3	4.00	12
Encephalopathies toxic and metabolic	0		2
Eye movement disorders	14	1.21	17
Facial cranial nerve disorders	587	1.45	854
Generalised tonic-clonic seizures	22	3.55	78
Headaches NEC	16896	4.68	79069
Hydrocephalic conditions	1	11.00	11
Hypoglossal nerve disorders	1	5.00	5
Increased intracranial pressure disorders	6	9.00	54
Intellectual disabilities	1	9.00	9
Lumbar spinal cord and nerve root disorders	44	3.75	165
Memory loss (excl dementia)	163	3.38	551
Mental impairment (excl dementia and memory loss)	242	3.56	861
Migraine headaches	1689	4.29	7248
Mixed cranial nerve disorders	1	1.00	1
Mononeuropathies	35	2.91	102
Motor neurone diseases	0		1
Multiple sclerosis acute and progressive	40	2.58	103
Muscle tone abnormal	14	3.14	44

Myelitis (incl infective)	20	3.20	64
Narcolepsy and hypersomnia	57	3.46	197
Nervous system cysts and polyps	0		1
Nervous system disorders NEC	8	6.50	52
Neurologic visual problems NEC	13	1.92	25
Neurological signs and symptoms NEC	6599	3.63	23971
Neuromuscular disorders NEC	22	3.05	67
Neuromuscular junction dysfunction	8	1.75	14
Olfactory nerve disorders	274	2.33	639
Optic nerve disorders NEC	19	2.16	41
Paraesthesias and dysaesthesias	3987	3.58	14281
Paralysis and paresis (excl cranial nerve)	205	3.04	623
Parkinson's disease and parkinsonism	20	9.25	185
Partial complex seizures	8	3.88	31
Partial simple seizures NEC	0		8
Peripheral neuropathies NEC	73	3.00	219
Seizures and seizure disorders NEC	509	3.40	1732
Sensory abnormalities NEC	1765	3.02	5330
Sleep disturbances NEC	3	16.00	48
Speech and language abnormalities	140	3.37	472
Spinal cord and nerve root disorders NEC	11	2.82	31
Structural brain disorders NEC	4	8.75	35
Transient cerebrovascular events	99	3.91	387
Tremor (excl congenital)	937	9.91	9288
Trigeminal disorders	43	2.98	128
Vertigos NEC	1	2.00	2

Table 3: Parkinson's Disease

	Pfizer	Ratio	AstraZeneca
Parkinson's disease and parkinsonism	20	9.25	185
Freezing phenomenon	7		152
Parkinson's disease	3		15
Parkinsonian gait	1		0
Parkinsonism	4		10
Reduced facial expression	5		7
Vascular parkinsonism	0		1
Tremor (excl congenital)	937	9.91	9288
Action tremor	1		2
Asterixis	0		1
Essential tremor	3		5
Head titubation	5		15
Intention tremor	0		1
Postural tremor	0		1
Resting tremor	2		5
Tremor	926		9258

Another striking imbalance found in the analysis of “Nervous Disorders” of Table 2 was sleep disturbance. This is of interest because sleep disorders are a hallmark symptom of a genetically transmitted prion disease called Fatal Familial Insomnia. A detailed analysis of neurologically characterized sleep disturbance reactions is disclosed in Table 4. The data indicate there were 4 sleep disturbance or sleep phase rhythm reactions in the reports pertaining to the Pfizer vaccine versus 58 reactions in reports pertaining to the AstraZeneca vaccine (p=0.003).

Table 4: Sleep Disorders

	Pfizer	Ratio	AstraZeneca
Disturbances in sleep phase rhythm	1	10.00	10
Advanced sleep phase	0		1
Circadian rhythm sleep disorder	0		5
Delayed sleep phase	0		1
Irregular sleep phase	0		1
Irregular sleep wake rhythm disorder	1		1
Non-24-hour sleep-wake disorder	0		1
Sleep disturbances NEC	3	16.00	48
Microsleep	0		2
Periodic limb movement disorder	0		1
Sleep deficit	2		45
Sudden onset of sleep	1		0

Discussion

The current analysis was performed on COVID vaccine adverse reactions reported through the UK's Yellow Card system. While analysis is challenging a clear signal of a specific prion disease, Parkinson's disease, was found as discussed below. The findings are consistent with knowledge of the spike protein and its nucleic acid sequence [3-7], well accepted pathophysiology of prion disease, and animal toxicity data in monkeys [8]. The findings in this paper represent an urgent warning to halt mass immunization with COVID vaccines until proper safety studies are complete. Alternative vaccines like the Measles Mumps Rubella (MMR) vaccine should be explored for those desiring immunization against COVID-19 outside of clinical trials [4].

Analysis of spontaneous reporting data, as found in the Yellow Card system is limited for several reasons including the historical finding that spontaneous reporting under reports adverse events 95% of the time. Only 5% of drug adverse events are typically reported [9]. These figures on reporting of adverse events pertain to acute adverse events, essentially none of the adverse events occurring years or decades after administration of a pharmaceutical are ever reported. Analysis of the adverse events that are reported may be difficult to interpret, outside a controlled clinical trial, since it is often difficult to know the expected rate of a specific event in the recipient population.

The current study attempted to avoid previous problems associated with analysis of spontaneous adverse event reports by comparing reports between groups receiving different COVID vaccines. In this case those receiving the Pfizer COVID vaccine acted as the controls for those receiving the AstraZeneca COVID vaccine and visa versus. The fact that mass administration of both vaccines was started within days of each other worked in favor of the analysis as did the fact that there was an acute shortage of vaccines. People wanting a COVID vaccine would likely be forced to take what was available and not allowed much choice. These factors as well as government policies on what populations would be offered the vaccine first may have helped minimize demographics differences relating to which vaccine was received, at least in regards to age and sex. However, this is only theoretical since demographic data pertaining to use of specific vaccines was not readily available on the internet at the time this paper was written.

The data shows that that there are more adverse reactions reported for the AstraZeneca vaccine than for the Pfizer vaccine. On a whole there are 3.55 time more adverse reactions and 2.78 times more reports for the AstraZeneca vaccine than for the Pfizer vaccine. This may be explained in part by the number of vaccine doses administered but this information was not readily available. However, it is also possibly that there may be more acute reactions to the AstraZeneca vaccine. On average there were 3.63 adverse reactions per report for the AstraZeneca vaccine compared to 2.84 adverse reactions per report for the Pfizer vaccine. Demographics of the recipients and also the reporters (academic versus community clinicians) may also account for some of the differences.

The goal of this research was to determine if there was an early signal of prion disease. Because of the differences in vaccine composition [4] it was hoped that differences between vaccine groups may manifest early enough to create a signal. The analysis was specifically geared to look for evidence of a few prion diseases. No analysis was performed for non prion diseases such as autoimmune diseases or clotting diseases for example. The prion diseases of interest included: ALS, frontotemporal lobar degeneration, Alzheimer's disease, CJD, Parkinson's disease, and Fatal Familial Insomnia. Unfortunately, many of these prion diseases are characterized by non specific neurological and psychological symptoms [10]. There is overlap of symptoms between prion diseases making a definitive diagnosis slow at times.

Prion disease may take years or decades to manifest from onset however there were several reasons to hope that a signal may be detected within months of the immunization. First it was believed that there was a pool of people with either subclinical prion disease or mild prion disease that had not been correctly diagnosed. One theory is that COVID vaccines may accelerate disease progression causing these undiagnosed patients to have frank disease that is rapidly diagnosed after immunization.

A second reason to believe that a signal could be detected soon after immunization relates to knowledge of the spike protein. It is believed that the spike protein and its nucleic acid sequence may be a complex bioweapon capable of inducing prion disease by several different mechanisms. The mRNA nucleic acid may cause certain intrinsic proteins like TDP-43 and FUS to fold into prions which eventually leads to disease [3,4]. The spike protein also has a prion like region [5] which may catalyze a chain reaction and eventually lead to prion disease. However, a third group published data [6] that the spike protein may cause proteins including prions already in cells to aggregate, forming Lewy Bodies for example, and causing relatively rapid cell death. It is this third method that could allow fairly rapid detection of prion disease after immunization.

The current analysis showed a specific signal for an increased risk of Parkinson's disease. There were 20 Parkinson's disease reactions reported with the Pfizer vaccine and while 71 reactions (3.55 x 20) were expected in the AstraZeneca reports, there were 185 reactions actually reported (p=0.000024). The analysis was able to detect this signal because adverse event reports were filed

disclosing a very disease specific, pathognomonic, symptom “Freezing Phenomenon” which made up the bulk of the Parkinson’s disease reports. It is not clear if the reports were primarily related to new onset Parkinson’s disease or worsening of a previously diagnosed patient. The signal is supported by a proportionally similar imbalance in reports of a more sensitive, but less specific symptom of Parkinson’s disease, tremor (Table 3). A total of 937 tremor reactions were reported for the Pfizer vaccine and while 3,326 reactions (9.37 x 3.55) were expected to be reported for the AstraZeneca vaccine, a total of 9,288 reactions were reported (p=0.00001). The net effect is that the clinical relevance could be logs in magnitudes higher than the reports of Parkinson’s disease even after adjusting approximately 20-fold for under reporting [9].

Many but not all cases of Parkinson’s disease are believed to be caused by prion disease [11]. It is believed that α -synuclein aggregates in the substantia nigra of the brain in Parkinson’s disease patients causing the formation of Lewy Bodies. The relation of Lewy Bodies to Parkinson disease provides strong bio plausible support for a causal effect with this signal because infections of monkeys [8] with the SARS-CoV-2 virus lead to development of Lewy Bodies. The relative rapid onset of Parkinson’s disease symptom after immunization may be explained by the vaccine derived spike protein’s heparin binding site. One group [6] showed that the spike protein heparin binding site binds “to a number of aggregation-prone, heparin binding proteins including $A\beta$, α -synuclein, tau, prion, and TDP 43 RRM. These interactions suggests that the heparin-binding site on the S1 protein might assist the binding of amyloid proteins to the viral surface and thus could initiate aggregation of these proteins and finally leads to neurodegeneration in brain.”

Another prion disease with some more unique features is Fatal Familial Insomnia. It is a rare genetic prion disorder characterized by an inability to sleep [12]. It was noted in the analysis of Nervous Disorder data of Table 2 and Table 4 that there was an imbalance of sleep reports between vaccine groups. There were 4 sleep reactions reported for Pfizer’s vaccine and while 14 reactions (4 x 3.55) were expected in the AstraZeneca reports, a total of 58 reactions were reported (p=0.003). A rapid onset of difference between the two groups could be explained by the spike protein aggregating prion molecules already in the cells as discussed with Parkinson’s disease symptoms above.

The Yellow Card database does not provide good insight on possible risk of developing many different prion diseases as can be expected. There is however an highly statistical increase in Nervous Disorders and Psychiatric Disorders reactions reported for the AstraZeneca vaccine compared to Pfizer vaccine, Table 1. This imbalance suggests that there may be underlying differences in prion disorders other than Parkinson’s disease. Unfortunately most prion diseases have symptoms not specific to prion disorders and symptoms of different prion diseases overlap [10]. This fact delays diagnosis and, in some cases, the definitive diagnosis is delayed until post mortem autopsy.

The current analysis is not intended to indicate that one COVID vaccine is safer than another in regards to prion disease. One limitation of the analysis is that both vaccines may equally increase the rates of one or more prion diseases and no difference will be detected in the Yellow Card database. Imbalances in rates of reactions detected in this analysis can be explained by the striking differences in composition of the two vaccines allowing one vaccine to induce some prion diseases quicker. The AstraZeneca adenoviral virus based COVID vaccine may concentrate in the gastrointestinal system [4] to a greater extent leading to faster transport of the spike protein via the vagus nerve to the brain [13]. By contrast over the long run the Pfizer mRNA vaccine may induce more TDP-43 and FUS to form prions [3] and lead to more prion disease.

This analysis should serve as an urgent warning to those mindlessly following advice of politicians and public health officials regarding COVID immunization. Both groups have had a dismal record of protecting the health of the public. US public health officials ran the infamous Tuskegee syphilis study allowing people of color to die from syphilis because the public health officials refused to inform the patients, they had syphilis and that a treatment existed. There have been numerous less well-known experiments on prisoners and other vulnerable populations in North America. The infamous Nazi physician Josef Mengele was a public health doctor. Founding father politicians in the US championed civil liberties while owning slaves and running extermination campaigns against Native Americans. The current policy to immunize the masses with COVID vaccines before proper safety studies are complete is likely to follow in the steps of the previously mentioned historical acts.

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ARTICLE

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Comprehensive investigations revealed consistent pathophysiological alterations after vaccination with COVID-19 vaccines

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Abstract

Large-scale COVID-19 vaccinations are currently underway in many countries in response to the COVID-19 pandemic. Here, we report, besides generation of neutralizing antibodies, consistent alterations in hemoglobin A1c, serum sodium and potassium levels, coagulation profiles, and renal functions in healthy volunteers after vaccination with an inactivated SARS-CoV-2 vaccine. Similar changes had also been reported in COVID-19 patients, suggesting that vaccination mimicked an infection. Single-cell mRNA sequencing (scRNA-seq) of peripheral blood mononuclear cells (PBMCs) before and 28 days after the first inoculation also revealed consistent alterations in gene expression of many different immune cell types. Reduction of CD8⁺ T cells and increase in classic monocyte contents were exemplary. Moreover, scRNA-seq revealed increased NF-κB signaling and reduced type I interferon responses, which were confirmed by biological assays and also had been reported to occur after SARS-CoV-2 infection with aggravating symptoms. Altogether, our study recommends additional caution when vaccinating people with pre-existing clinical conditions, including diabetes, electrolyte imbalances, renal dysfunction, and coagulation disorders.

Introduction

The COVID-19 pandemic has profoundly affected humanity. The development of COVID-19 vaccines in various forms has been underway in an unprecedented and accelerated manner. Despite some uncertainties regarding potential consequences, large-scale vaccinations are taking place in many countries. There have been different COVID-19 vaccines developed, including inactivated viral

particles, mRNA vaccines, adenoviral-based vaccines, and etc.^{1–5}. Historically, vaccine research has been focused on whether or not vaccination could generate neutralizing antibodies to protect against viral infections, whereas short-term and long-term influences of the various newly developed vaccines to human pathophysiology and other perspectives of the human immune system have not been fully investigated.

With the development of large-scale single-cell mRNA sequencing (scRNA-seq) technology, systematic investigation of people's immune system function with precision became possible, primarily through scRNA-seq of peripheral blood mononuclear cells (PBMCs). During the COVID-19 pandemic, a large body of studies using scRNA-seq of PBMCs had revealed detailed changes in gene expression in different immune cell subtypes including different types of T and B cells, NK cells, monocytes, dendritic cells, etc. during and

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after infection, results from which indicated greatly reduced CD4⁺ and CD8⁺ T-cell numbers and T-cell exhaustion upon SARS-CoV-2 infection. Reduced peripheral mucosal-associated invariable T (MAIT) cell numbers and their migration in and out of the lung had also been observed. Highly activated inflammatory immune responses, including Interferon-gamma (IFN- γ), interleukin-6 (IL-6), and NF- κ B responses, had been reported in COVID-19 patients^{6–12}. Many studies had revealed immune state differences between people with severe versus mild symptoms, in that strong type I interferon (IFN- α/β) responses were beneficial after COVID-19 infection and attenuated IFN- α/β responses were associated with the development of severe symptoms¹³. In contrast, stronger NF- κ B inflammatory responses were associated with more severe symptoms¹⁴. In addition, increased $\gamma\delta$ -T cell and reduced neutrophil contents were reported to be associated with milder symptoms¹⁵.

Upon SARS-CoV-2 infections, many people developed various degrees of respiratory syndromes, and some with gastrointestinal conditions. It had been reported that blood coagulation disorders, vasculature issues, electrolytes imbalances, renal disorders, metabolic disorders, etc. were major clinical complications with COVID-19^{16,17}. The manner in which vaccination would mimic an infection has not been fully evaluated. In this study, we enrolled healthy volunteers who were to be vaccinated with an inactivated SARS-CoV-2 vaccine (Vero Cell)³, to participate in antibody and neutralizing antibody testings, as well as detailed clinical laboratory measurements before and at different times after vaccination (two-dose regimens with slightly different schedules were applied). To our surprise, we observed quite consistent pathophysiological changes regarding electrolyte contents, coagulation profiles, renal function as well as cholesterol and glucose metabolic-related features, as if these people had experienced an infection with SARS-CoV-2. In addition, PBMCs scRNA-seq results also indicated consistent reductions in CD8⁺ T cells and increases in monocyte contents, as well as enhanced NF- κ B inflammatory signaling, which also mimicked responses after infection. Surprisingly, type I interferon responses, which had been linked to reduced damages after SARS-CoV-2 infection and milder symptoms, appeared to be reduced after vaccination, at least by 28 days post the 1st inoculation. This might suggest that in the short-term (1 month) after vaccination, a person's immune system is in a non-privileged state, and may require more protection.

Results

Longitudinal follow-up of anti-SARS-CoV-2 antibody and neutralizing antibody productions after inoculation of inactivated SARS-CoV-2 vaccine

A total of 11 healthy adult volunteers of both sexes, aged 24–47 years, with a BMI of 21.5–30.0 kg/m², were

enrolled in this study (Fig. 1a and Supplementary Tables S1 and S2). SARS-CoV-2 vaccine (Vero Cell), inactivated (Beijing Institute of Biological Products Co. Ltd), was administered intramuscularly into the deltoid. Volunteers were divided into two cohorts; five participants (cohort A) were vaccinated with a full dose (4 μ g) of inactivated SARS-CoV-2 Vaccine (Vero Cell) on days 1 and 14, and six participants (cohort B) received a full dose of the vaccine on days 1 and 28 (Fig. 1a). One of the volunteers in group B was tested positive for anti-SARS-CoV-2 IgM and IgG right before vaccination, suggestive of potential prior infections. However, there was no record of previous positivity by nucleic acid (NA) diagnosis for COVID-19 (marked green in Fig. 1a). For all follow-up examinations, data from this individual was marked green to track any possible influences from potential prior infections.

Adverse events were monitored daily during the first 7 days after each inoculation and then self-recorded by the participants on diary cards in the following weeks. Overall, adverse reactions were mild (grades 1 or 2) and transient (Supplementary Table S3). Blood samples were collected on days 0, 7, 14, 28, 42, 56, and 90, and urine samples were collected on days 0, 14, 28, 42, and 90. Plasma samples were subjected to anti-SARS-CoV-2 IgM/IgG testing using multiple diagnostic kits, results from the most sensitive kit were used for quantification (Fig. 1b, c). Testing results from cohort A demonstrated that prior to the 2nd inoculation 0% of the participants developed anti-SARS-CoV-2 IgG, but by day 28, which was 2 weeks post the 2nd inoculation, 100% of the participants were tested positive (Fig. 1b). Overall, IgM showed up earlier than IgG, which was expected. IgG and IgM positivity decreased by day 42 and remained at relatively low levels by day 90 in cohort A. For cohort B, no one developed IgG until after 2nd inoculation. Yet by day 42, IgG positivity reached 100% (Fig. 1c) and sustained until day 56, suggesting that the vaccination protocol for cohort B was more efficacious. By day 90, IgG positivity also reduced to 50%, indicating antibody production did not sustain for a long time. We further carried out tests for SARS-CoV-2 neutralizing antibodies¹⁸ (Fig. 1d), and results also indicated that two inoculations 28 days apart (cohort B) resulted in higher protective antibody titers as compared to two inoculations with 14 days apart (cohort A). On the other hand, it appeared that anti-SARS-CoV-2 neutralizing antibody titers were overall lower than those in COVID-19 convalescent individuals as reported before³ (Fig. 1d). By 90 days, neutralizing antibody titers dramatically decreased in all volunteers (Fig. 1d). Interestingly, the individual who was antibody positive prior to vaccination was not more prone to generating neutralizing antibodies as compared to the rest of the participants, suggesting that prior potential infection might not have occurred or may not generate long-lasting protection in the perspective of neutralizing antibody production.

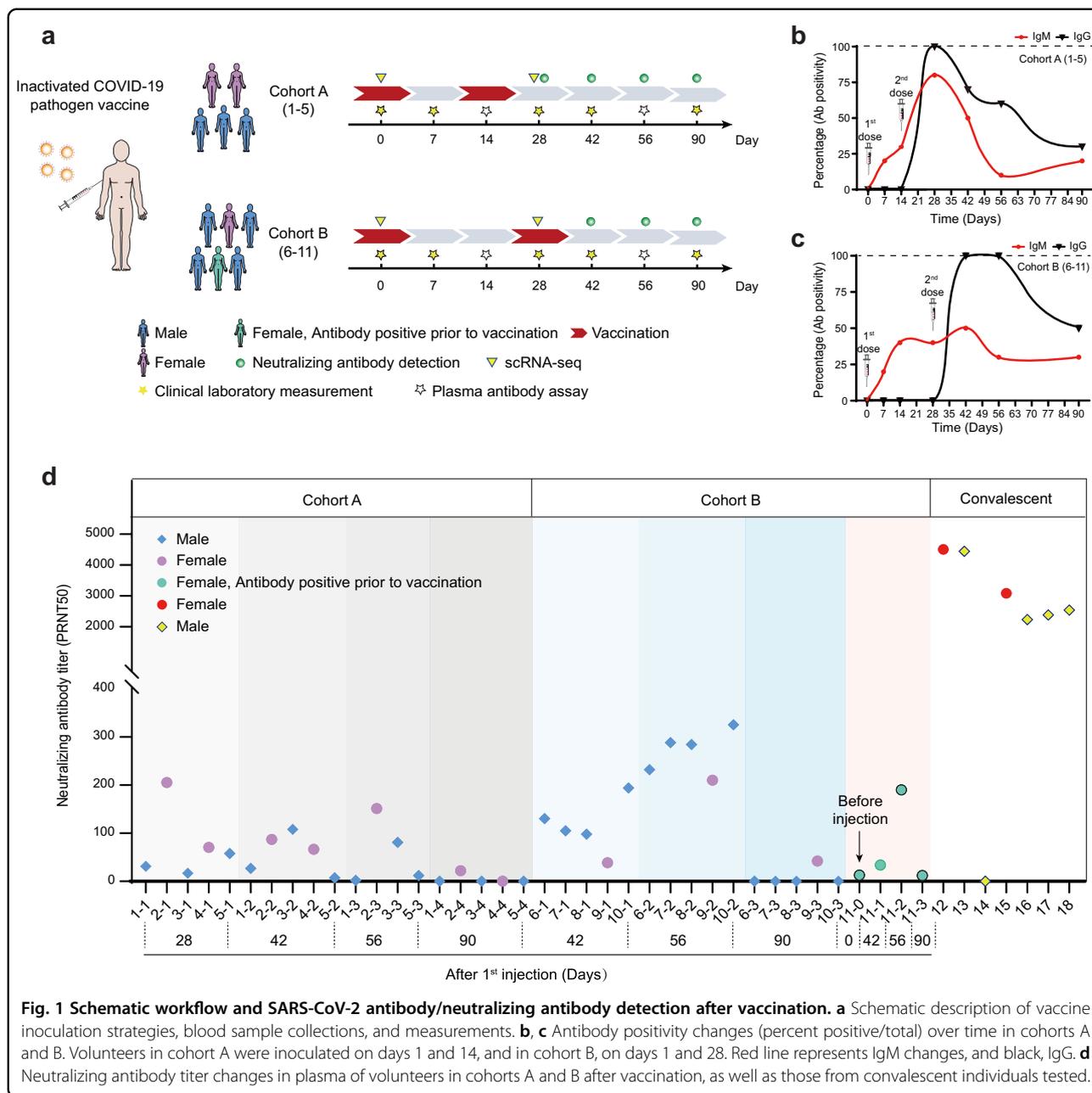


Fig. 1 Schematic workflow and SARS-CoV-2 antibody/neutralizing antibody detection after vaccination. **a** Schematic description of vaccine inoculation strategies, blood sample collections, and measurements. **b, c** Antibody positivity changes (percent positive/total) over time in cohorts A and B. Volunteers in cohort A were inoculated on days 1 and 14, and in cohort B, on days 1 and 28. Red line represents IgM changes, and black, IgG. **d** Neutralizing antibody titer changes in plasma of volunteers in cohorts A and B after vaccination, as well as those from convalescent individuals tested.

Alterations in clinical laboratory measurements after vaccination

Clinical laboratory routine tests including infection-related indices, hematologic parameters, coagulation function, blood glucose, serum lipids, cardiac function-related enzymes, electrolytes, liver, and renal function-related biomarkers, were measured to reveal safety features of the vaccine (Fig. 2a and Supplementary Tables S4 and S5). White blood cell count was significantly, yet only slightly, increased after vaccination on day 7. No differences were detectable at the following time points (Fig.

2b). To our surprise, quite consistent increases in HbA1c levels were observed in healthy volunteers, regardless of whether they belonged to cohort A or B. By day 28 post the 1st inoculation, three out of 11 individuals reached the prediabetic range (Fig. 2c). By days 42 and 90, medium HbA1c levels appeared to revert back, yet were still significantly higher than those before vaccination. Previous work has demonstrated that diabetic patients with uncontrolled blood glucose levels are more prone to develop severe forms of COVID-19¹⁹. High blood glucose levels/glycolysis had been shown to promote SARS-CoV-

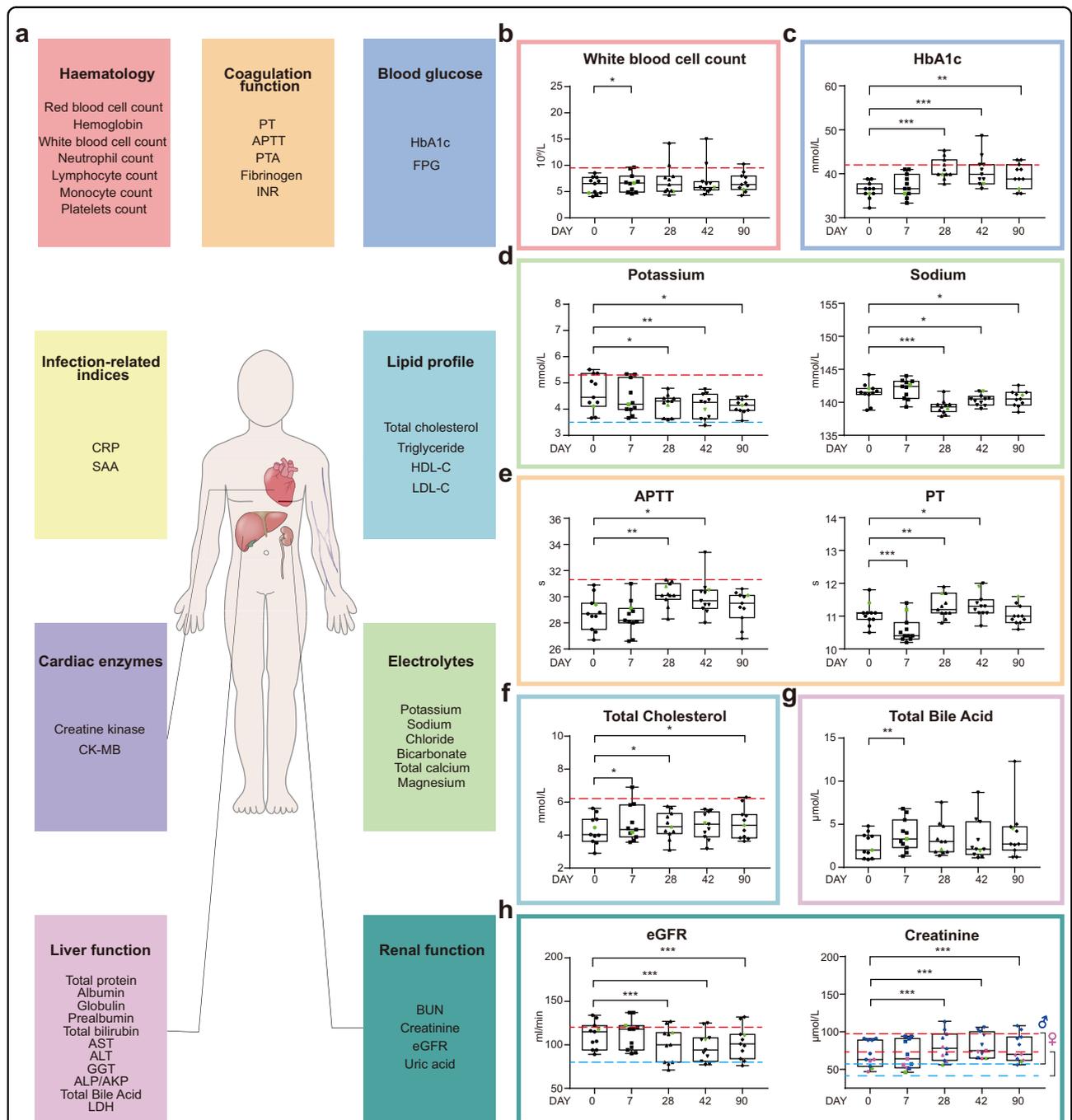


Fig. 2 Temporal changes of clinical laboratory measurements after vaccination. **a** Clinical laboratory routine tests include hematologic and coagulation parameters, blood glucose-related and infection-related indices, lipid profile, cardiac enzymes, electrolytes, liver- and renal function-related biomarkers. More information could be found in Supplementary Tables S4 and S5. Laboratory test values of white blood cell count (**b**), HbA1c (**c**), potassium (**d**, left panel), sodium (**d**, right panel), APTT (**e**, left panel), PT (**e**, right panel), total cholesterol (**f**), total bile acid (**g**), eGFR (**h**, left panel), creatinine (**h**, right panel). Data points represent the values of each individual. Box plots showed the 25th, 50th (median), and 75th percentiles. Horizontal dashed lines showed upper normal limits (red) in **b**, **c**, **d** (left panels), **e** (left panel), **f**, **h** and the lower normal limits (blue) in **d** (left panel) and **h**. The *P* values were calculated by the Wilcoxon sign-rank test by comparing the laboratory measurements at each time with the baseline measurements. **P* ≤ 0.05, ***P* ≤ 0.01, ****P* ≤ 0.001.

2 replication in human monocytes via the production of mitochondrial reactive oxygen species and activation of HIF1A²⁰, therefore presenting a disadvantageous feature.

Serum potassium levels decreased significantly by days 28, 42, and 90 post the 1st inoculation, with one sample below the lower normal limit at day 42 (Fig. 2d, left panel). Similarly, serum sodium levels also decreased following vaccination (Fig. 2d, right panel), indicative of vaccine influences on electrolyte balance. Again, electrolyte imbalance has also been linked to COVID-19²¹. Coagulopathy is another COVID-19-induced clinical condition²². We found that coagulation profiles changed significantly after vaccination, in the short-term (7 days) after the 1st inoculation, coagulation profiles were leaning toward shorter Prothrombin Time (PT), whereas the long-term (28 and 42 days) effect was toward activated partial thromboplastin time (APTT) and PT prolongation (Fig. 2e). By day 90, the profiles returned back to those before vaccination (Fig. 2e). Moreover, we found elevated blood cholesterol levels at days 7, 28 after the 1st inoculation, and elevated total bile acid levels were also detected at day 7 (Fig. 2f, g). Renal dysfunction is another clinical condition linked to COVID-19, and by 28, 42, and 90 days after the first inoculation, serum creatinine levels were significantly higher than those before vaccination, resulting in reduced eGFR (Fig. 2h). Most of these clinical features have been reported to be associated with the development of severe symptoms in COVID-19 patients (Supplementary Table S6). Overall, there were no statistically significant differences between cohorts A and B, except for only a few indices (Supplementary Table S7), therefore data from two cohorts were pooled for clinical data presentation and subsequent analyses.

scRNA-seq revealed dramatic alterations in gene expression of almost all immune cells after vaccination

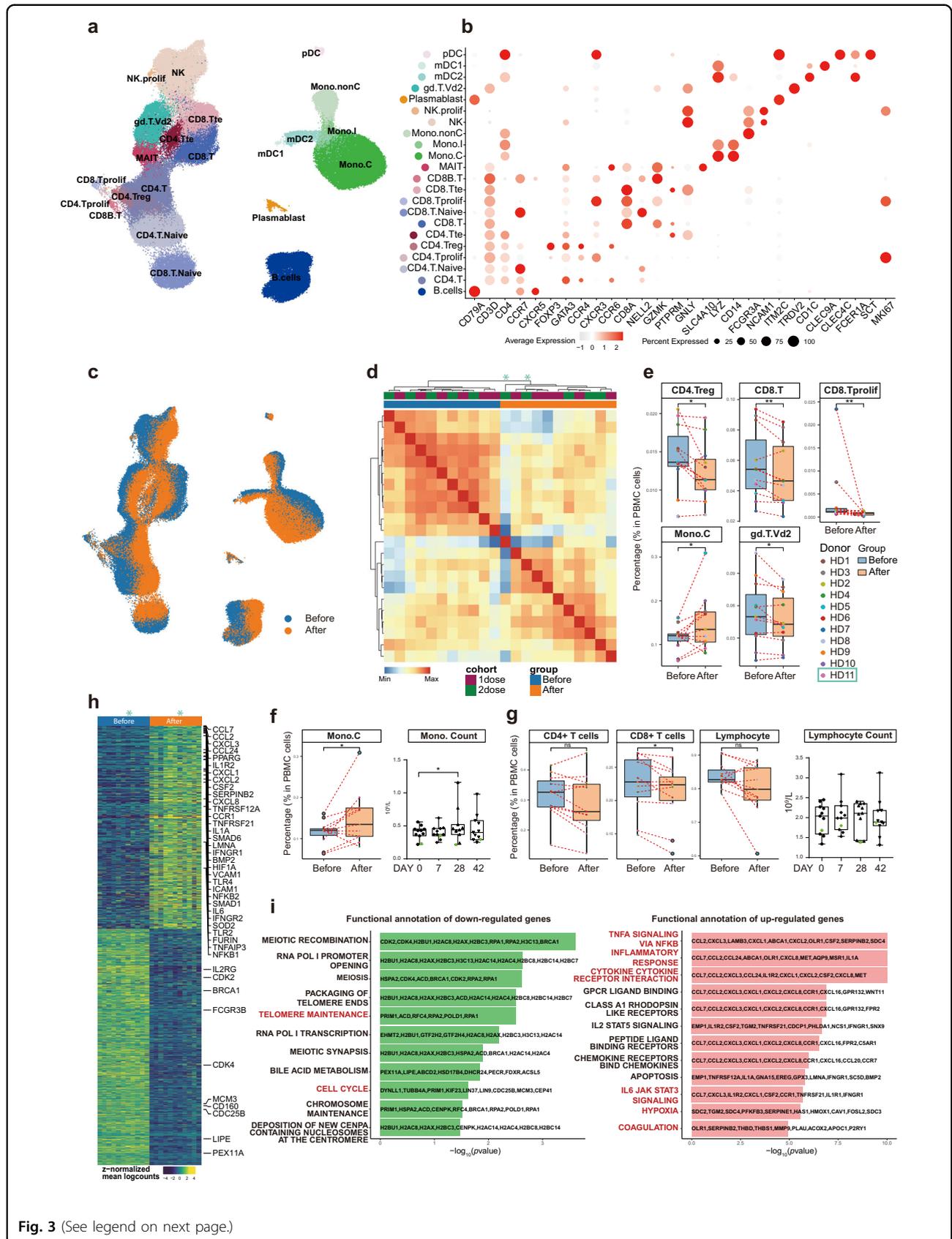
To explore the immunological features of healthy volunteers following vaccination, we performed droplet-based scRNA-seq (10× Genomics) to study transcriptomic profiles of PBMCs from volunteers belonging to either cohort A or B, before and 28 days after vaccination (Fig. 3a and Supplementary Fig. S1a). After preprocessing and low-quality cell elimination (see “Materials and methods”), we obtained 188,886 cells from all PBMC samples, among which 86,685 cells were from cohort A and 102,201 cells from cohort B. All qualified cells were integrated into the unified dataset and subjected to downstream analyses.

Using graph-based clustering of uniform manifold approximation and projection (UMAP)²³, Single-cell Recognition of cell types (SingleR) algorithm²⁴, and manual annotation based on canonical gene markers, we identified 22 cell types or subtypes and performed differential expression analysis amongst all cell types (Fig. 3b

and Supplementary Table S8). Cells (cell transcriptomes) from samples before (blue) and after (orange) vaccination were distinctly separated in the UMAP representation for both cohorts, which meant immunological features had changed quite drastically in almost all immune cell types detected, and consistently in all volunteers (Fig. 3c). Among the 11 pairs (before and after) of PBMC samples, 10 pairs were sequenced together and one pair was sequenced separately in a different batch. UMAP distributions were drastically similar regardless of the different batches, suggesting minimal sequencing batch effects (Supplementary Fig. S1b). Two independent batches of sequencing revealed similar changes before and after vaccination, suggesting the changes are real, whereas using the batch effect correction method (Harmony²⁵) (Supplementary Fig. S1c–e) would result in over filtration and elimination of the real changes caused by vaccination. Moreover, sample clustering based on the Pearson Correlation coefficient of the transcriptomes indicated that samples from the two cohorts (A and B) intermingled well with each other both before and after vaccination, whereas vaccination-induced changes could clearly be observed (Fig. 3d). Therefore, to increase the statistical power, we combined the two cohorts for subsequent analyses.

To reveal differences in cell-type compositions before and after vaccination, we calculated relative percentages of all cell types in PBMCs of each individual on the basis of scRNA-seq data (Fig. 3e). We observed decreases in contents of CD4⁺ regulatory T cells (CD4.Treg), CD8⁺ T cells (CD8.T), and proliferating CD8⁺ cells (CD8.Tprolif) after vaccination (Fig. 3e). Decreases in $\gamma\delta$ -T cell (gd.T.Vd2) contents were also significant (Fig. 3e). In contrast, vaccination increased CD14⁺ classical monocyte (Mono.C) contents (Fig. 3e), consistent with clinical laboratory measurements (Fig. 3f). The overall lymphocyte contents, which included all CD4⁺ T cells, all CD8⁺ T cells, B cells, and NK cells, did not change significantly before and after vaccination, which was also confirmed by clinical laboratory measurements (Fig. 3g). We collected a published dataset from 196 COVID-19-infected patients and controls⁷, and analyzed our data together with that dataset. The result indicated that vaccination-induced changes in cell contents of all five different immune cell subtypes also changed in the same directions in COVID-19 patients as compared to controls, except for proliferating CD8⁺ T cells (Supplementary Fig. S2).

To study detailed gene expression changes induced by vaccination, we merged individual samples into pseudo-bulk samples and used paired sample test to identify differentially expressed genes (DEGs) (Fig. 3h and Supplementary Table S9). Significantly upregulated genes were involved in “TNF α signaling via NF- κ B”, “inflammatory responses”, and “cytokine-cytokine receptor interaction”,



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Fig. 3 Changes in peripheral immune cell type and subtype compositions as well as gene expression before and 28 days after the 1st inoculation. **a** Cell-type UMAP representation of all merged samples. In total, 22 cell types were identified by cell-type-specific gene expression signatures. In total, 188,886 cells were depicted. **b** Dot plot for cell-type-specific signature genes. Color scale indicated expression levels and point size represented the percentage of cells per cluster/subtype expressing the corresponding gene. **c** UMAP representation representing cells before (blue) and after (orange) vaccination. **d** Heatmap of correlation amongst pseudo-bulk samples. **e** Percentages of specific immune cell subtypes in total PBMCs from each individual before and after vaccination. Box plot depicted sample distribution. Blue boxes represented samples before, and orange, after vaccination. *P* values were based on the Wilcoxon test for comparisons between groups before and after vaccination. **f** Box plots showed changes before and after vaccination in monocyte content from scRNA-seq data (left panel) and clinical laboratory measures (right panel). **g** Box plots showed changes in CD4⁺, CD8⁺ T-cell contents as well as lymphocyte (T + B + NK) contents before and after vaccination from scRNA-seq data (left 3 panels) and laboratory tests (right panel). **h** DEGs identified by pseudo-bulk samples before and after vaccination. **i** Overrepresentation analysis of HALLMARK gene sets from MSigDB demonstrating different immunological features before and after vaccination.

“IL6-JAK STAT3 signaling”, “coagulation”, “hypoxia”, which had been reported for COVID-19, while cell cycle-related pathways were downregulated (Fig. 3i). These results supported the notion that vaccination mimicked an infection^{6–12}.

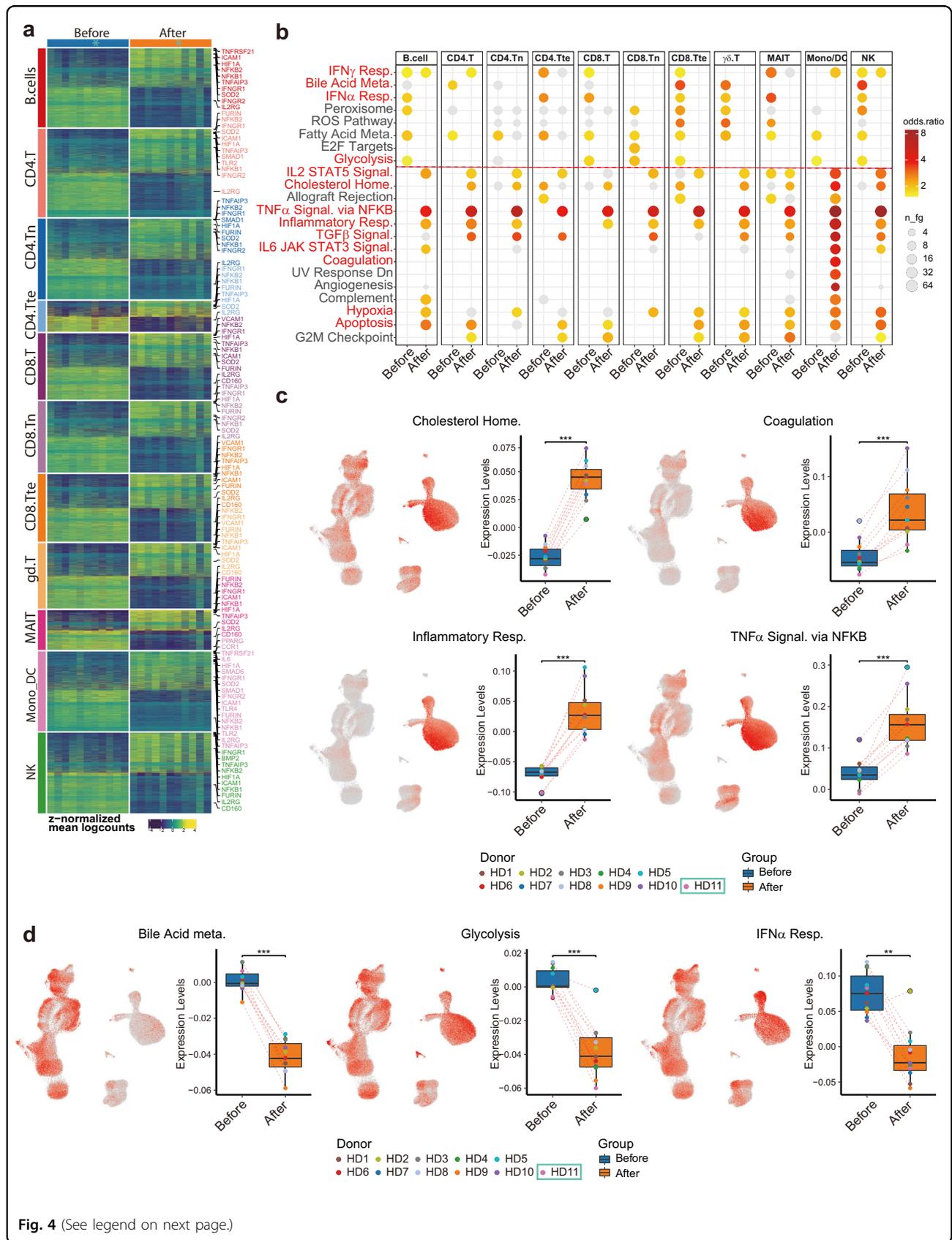
Featured immune cell subtype-specific gene expression changes mirrored clinical laboratory alterations

Prior to the elucidation of the functional heterogeneity and cell-type-specific gene expression changes between samples before and after vaccination, we grouped cells into 11 major types: (1) naive-state CD4⁺ T cells, (2) naive-state CD8⁺ T cells, (3) CD4⁺ helper T cells (including CD4.T, CD4.Treg, and CD4.Tprolif), (4) CD8⁺ cytotoxic T cells (including CD8.T, CD8B.T, and CD8.Tprolif), (5) MAIT, (6) $\gamma\delta$ -T cells, (7) NK cells (including NK, NK proliferative), (8) B/plasmablast cells (including B cells and plasmablasts), (9) monocytes/dendritic cells (including classical mono, intermediate mono, non-classical mono, myeloid DC1, myeloid DC2, and plasmacytoid DC), (10) CD4⁺ terminal effector T cells, and (11) CD8⁺ terminal effector T cells. Following eleven major cell-type categorizations, we performed sample-level comparisons by aggregating gene expression across major cell types within each donor and then performed differential expression analysis using muscat²⁶. We identified differentially expressed genes (DEGs) among all major cell types (Fig. 4a and Supplementary Table S10) and conducted gene functional analysis (Fig. 4b). Echoing the clinical measurement results, genes related to “cholesterol homeostasis”, “coagulation”, and “inflammatory response” (CXCL8, CD14, IL6, and TNFRSF1B), “TNF α signaling via NF- κ B” (NFKB1, NFKB2, NFKBIE, TNFAIP3, and TNFSF9) and “hypoxia” (HIF1A) were upregulated. In addition, “TGF β signaling”, “IL2-STAT5 signaling” (IFNGR1, MAPKAPK2, and CASP3), and “IL6-JAK-STAT3 signaling”-related genes were also upregulated (Fig. 4c). To visualize which cell types were enriched for those signatures, we performed gene module scoring and displayed the scores on UMAP coordinates as

well as grouped box plots (Fig. 4c and Supplementary Table S11). Interestingly, “inflammatory response” genes were highly expressed in monocytes and after vaccination further increased (Fig. 4c), suggesting monocytes were one of the major cell types participating in inflammatory responses after vaccination. In contrast, genes related to “glycolysis”, “bile acid metabolism”, and “type I interferon (IFN- α/β) response” were downregulated, consistent with our clinical data and the pathophysiology of COVID-19¹³ (Fig. 4d).

Most common changes in multiple immune cell subtypes revealed increases in NF- κ B signaling and decreases in IFN- α/β responses

Given that clusters of genes changed their expression dramatically among all major cell types, we hypothesized that there might be some transcription factors serving as master regulators leading to immunological alterations. To solve the computational challenges associated with such a big dataset, we used the MetaCell algorithm²⁷ to aggregate homogeneous groups of cells into metacells, and finally produced 1857 metacells (893 before and 964 after vaccination) to represent the whole structure of the scRNA-seq data (Fig. 5a). Those metacells were then applied to “single-cell regulatory network inference and clustering (SCENIC)”^{28,29} to construct the gene regulatory networks. The workflow produced a list of 157 “regulons”, which included transcription factors and their direct targets. Regulon activities were scored using AUCell to access averaged enrichment of all genes belonging to each regulon in each metacell, as well as averaged regulon gene enrichment in all 893 metacells before vaccination, and 964 metacells after vaccination. Top-ranked (most active) eight regulons upregulated and eight regulons downregulated after vaccination were identified (Fig. 5b). We selected 3 + 3 typical regulons to construct a regulatory network as presented in Fig. 5c (Supplementary Table S12). The network showed two distinct groups, one is consisted of IRF2, STAT1 and STAT2, which were downregulated after vaccination, and the other, contained



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Fig. 4 Subtype-specific differential gene expression and gene set overrepresentation analyses depicting common gene expression changes amongst different types of immune cells after vaccination. **a** 11 major immune cell-type-specific DEGs identified by pseudo-bulk data produced by combinations of samples before and after vaccination. Genes with $\log_{2}FC > 0.5$ and adjusted $P < 0.05$ were included. **b** Overrepresentation analysis of HALLMARK gene sets from MSigDB amongst 11 major cell types demonstrated common changes in gene sets representing altered immunological states before and after vaccination. **c, d** UMAP visualization colored by average expression scores (levels) based on differential enrichment pathway. Box plot depicting the expression score distribution before and after vaccination.

RELB, NFKB2, and HIF1A, which were upregulated after inoculation. The GO terms of the upregulated network are predominantly related to lymphocyte differentiation, activation, and “Germinal Center Formation”, which suggested that T cells and B cells were activated after vaccination. In addition, NF- κ B signaling was also elevated after vaccination. The downregulated network was enriched for many interferons-related pathways and Cytokine Secretion (Fig. 5d and Supplementary Table S13). This suggested that vaccination might inhibit interferon responses in the peripheral immune system, by reducing the activities of regulons STAT1, STAT2, and IRF2, which were thought to be master transcription factors driving type I and III interferon signaling^{30,31}.

To confirm vaccination-induced inhibition of interferon responses revealed by scRNA-seq, we stimulated PBMCs from vaccinated individuals before and 28 days after vaccination with IFN- α/β . After 16 h of culturing and 12 h of stimulation, we used RT-qPCR to measure the relative expression of master regulators IRF2, IRF7, and STAT2. STAT2 and IRF7 were significantly downregulated after vaccination, yet IRF2 showed a trend of downregulation (Fig. 5e, f). The regulon analyses indicated that the states of the peripheral immune system after vaccination had reduced type I interferon responses, indicative of attenuated general antiviral abilities at least 28 days after the first inoculation.

Vaccination-induced inflammatory responses in monocytes

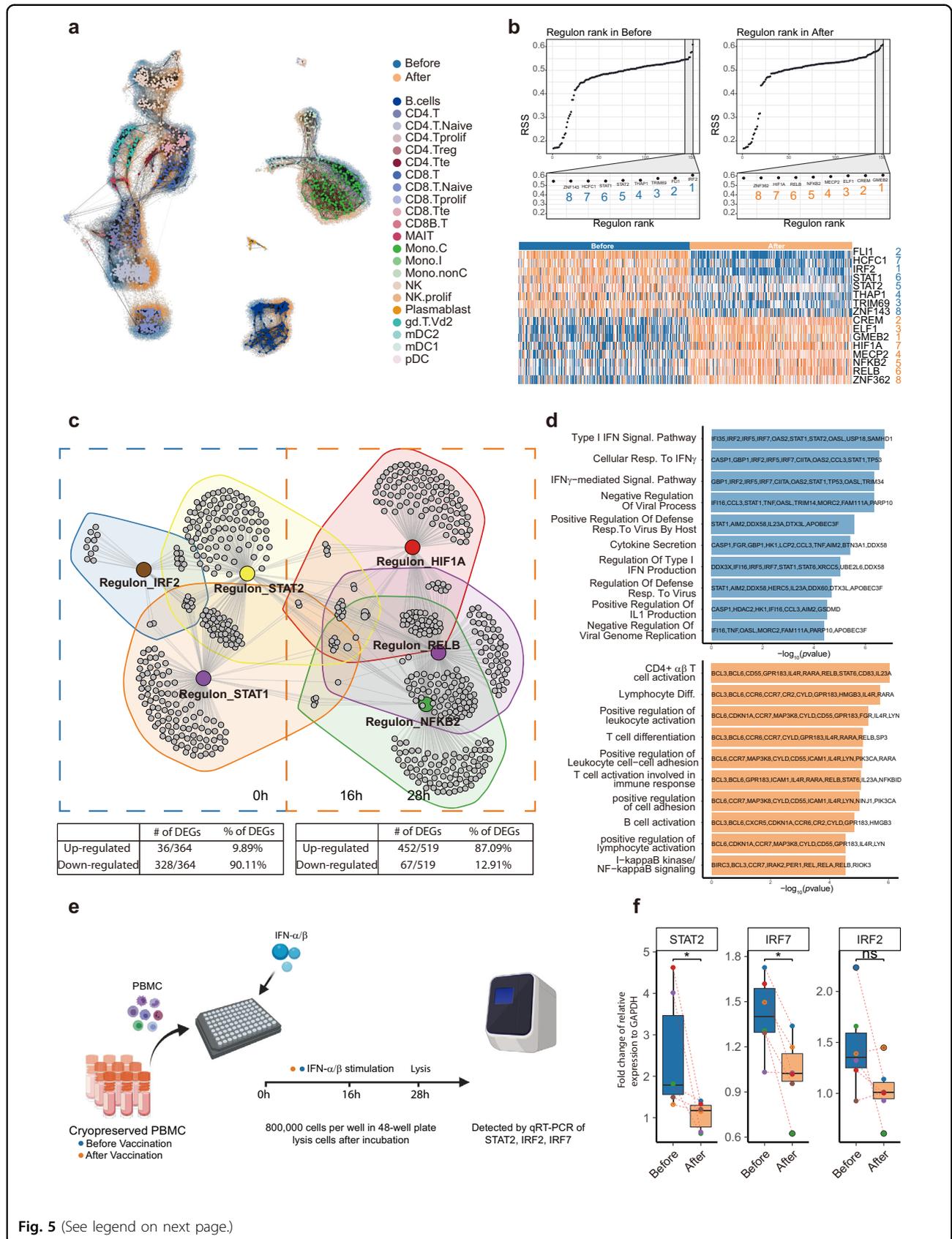
Recent reports have described conserved host immune response signatures to respiratory viral infections, namely the Meta-Virus Signature (MVS), which is also conserved in SARS-CoV-2 infection^{32,33}. Higher MVS scores are associated with infection^{32,33}. In all, 380 (158 positively- and 222 negatively contributed to MVS scores) out of 396 (161 positively- and 235 negatively contributed) genes selected for MVS measurement were detected in our dataset. To investigate host immune responses after vaccination with inactivated SARS-CoV-2, we separated the positive and negative gene sets and calculated MVS scores (Fig. 6a). The MVS scores were substantially higher after vaccination (Fig. 6b, c), suggesting that vaccination mimicked an infection. Interestingly, the positive MVS gene set was predominantly expressed in monocytes,

while the negative set in lymphocytes, indicating different cell-type-specific immune responses would take place after vaccination (Supplementary Fig. S3a, b).

To investigate which pathways were associated with MVS-positive gene set and MVS-negative gene set, we calculated Spearman correlation among MVS gene sets scores and previously identified differentially enriched pathways using our scRNA-seq data (Fig. 6d). The most highly correlated pathway with MVS score and MVS-positive set was “Inflammatory response signaling”, which was strikingly upregulated in monocyte after vaccination, together with CD14, FPR1, C5AR1, NAMPT, NLRP3, CDKN1A, and IFNGR2. Whereas, MVS-negative set correlated well with “Cytotoxicity signature”, represented by NKG7, CCL4, CST7, PRF1, GZMA, GZMB, IFNG, and CCL3 expression, significantly decreased in many T-cell subtypes but not NK cells after vaccination (Supplementary Fig. S3c).

Discussion

This is a comprehensive investigation of the pathophysiological changes, including detailed immunological alterations in people after COVID-19 vaccination. Results indicated that vaccination, in addition to stimulating the generation of neutralizing antibodies, also influenced various health indicators including those related to diabetes, renal dysfunction, cholesterol metabolism, coagulation problems, electrolyte imbalance, in a way as if the volunteers experienced an infection. scRNA-seq of PBMCs from volunteers before and after vaccination revealed dramatic changes in immune cell gene expression, not only echoing some of the clinical laboratory measures but also suggestive of increased NF- κ B-related inflammatory responses, which turned out to be mainly taking place in classical monocytes. Vaccination also increased classical monocyte contents. Moreover, the gene set positively contributing to MVS scores, also known to be associated with severe symptom development, was highly expressed in monocytes. Type I interferon (IFN- α/β) responses, supposedly beneficial against COVID-19, were downregulated after vaccination. In addition, the negative MVS genes were highly expressed in lymphocytes (T, B, and NK cells), yet showed reduced expression after vaccination. Together, these data suggested that after vaccination, at least by day 28, other than



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Fig. 5 Identification of master regulons and their regulatory networks before and after vaccination. **a** Visualization for the “similarity-structure-associating” metacells on the original scRNA-seq data. Metacells were color-coded according to their cell-type annotations. The original scRNA-seq data were color-coded “blue” and “orange” to represent samples “before” and “after” vaccination, respectively. **b** Top panels: rank of regulons in samples before (left) and after (right) vaccination, based on Regulon Specificity Score (RSS). Bottom panels: heatmap of top-ranked regulon activities before (blue) and after (orange) vaccination based on AUCell scores. Names of the regulons are color (blue/orange) and number coded (1–8). **c** Network of regulons and their target genes. The table below indicated the proportion of genes within the regulons which were up- or downregulated after vaccination. **d** Gene functional annotation and related genes before (blue) and after (orange) vaccination. **e** Schematic overview of the experiment. **f** After treatment with IFN- α/β , PBMCs from volunteers after vaccination had reduced expression of genes associated with type I interferon responses as compared to those before vaccination. Paired Wilcoxon test was used. $*P \leq 0.05$, $n = 6$.

generation of neutralizing antibodies, people’s immune systems, including those of lymphocytes and monocytes, were perhaps in a more vulnerable state.

Interestingly, our preliminary data demonstrated that if we pre-incubated RBD of SARS-CoV-2 with the PBMCs (from volunteers before and after vaccination) and then treated the cells with IFN- α/β , type I interferon responses were actually enhanced in PBMCs after vaccination, suggesting that perhaps vaccination, while reduced a person’s general antiviral ability, enhanced adaptive immune function specifically towards SARS-CoV-2 (Supplementary Fig. S4a). On the other hand, comparing PBMCs before vaccination, pre-treatment of SARS-CoV-2 S-RBD appeared to reduce type I interferon responses ($P < 0.05$, IRF2, IRF7, STAT2) (Supplementary Fig. S4b), suggesting 1st time exposure of the viral peptide would actually cause a reduction in type I interferon responses in PBMC. These in vitro data nicely supported the scRNA-seq results.

It is worth mentioning that one individual in cohort A who was on antibiotics, happened to not having reduced gene expression linked to type I interferon responses, and this individual also had the highest neutralizing antibody titer within the cohort. We further calculated Pearson’s Correlation Coefficient between neutralizing antibody titers and inflammatory responses measured by averaged gene expression of genes associated with TNF α Signaling via NF- κ B and interferon- α (type I interferon) responses. The results were 0.32 and 0.39 with $P > 0.05$ (Supplementary Fig. S4c), respectively, suggesting immune response changes and adaptive immune protection of the vaccine do not appear to be highly correlated. Whether antibiotics may influence vaccine efficacy remains to be determined. It is also rather interesting that while cohorts A and B had different anti-SARS-CoV-2 antibody production profiles, their PBMCs scRNA-seq results were drastically similar, including their B-cell scRNA-seq data (Supplementary Fig. S5a–c). It should be noted that after vaccination, the majority of responsive B cells, particularly those producing mature anti-COVID-19 antibodies (IgG) including memory B cells, should be primarily located in

peripheral lymphatic tissues such as lymph nodes and the spleen, while only a few mature B cells would exist in the circulation. Therefore, the B-cell population in PBMCs preparations may not reflect the whole spectrum of humoral immunity.

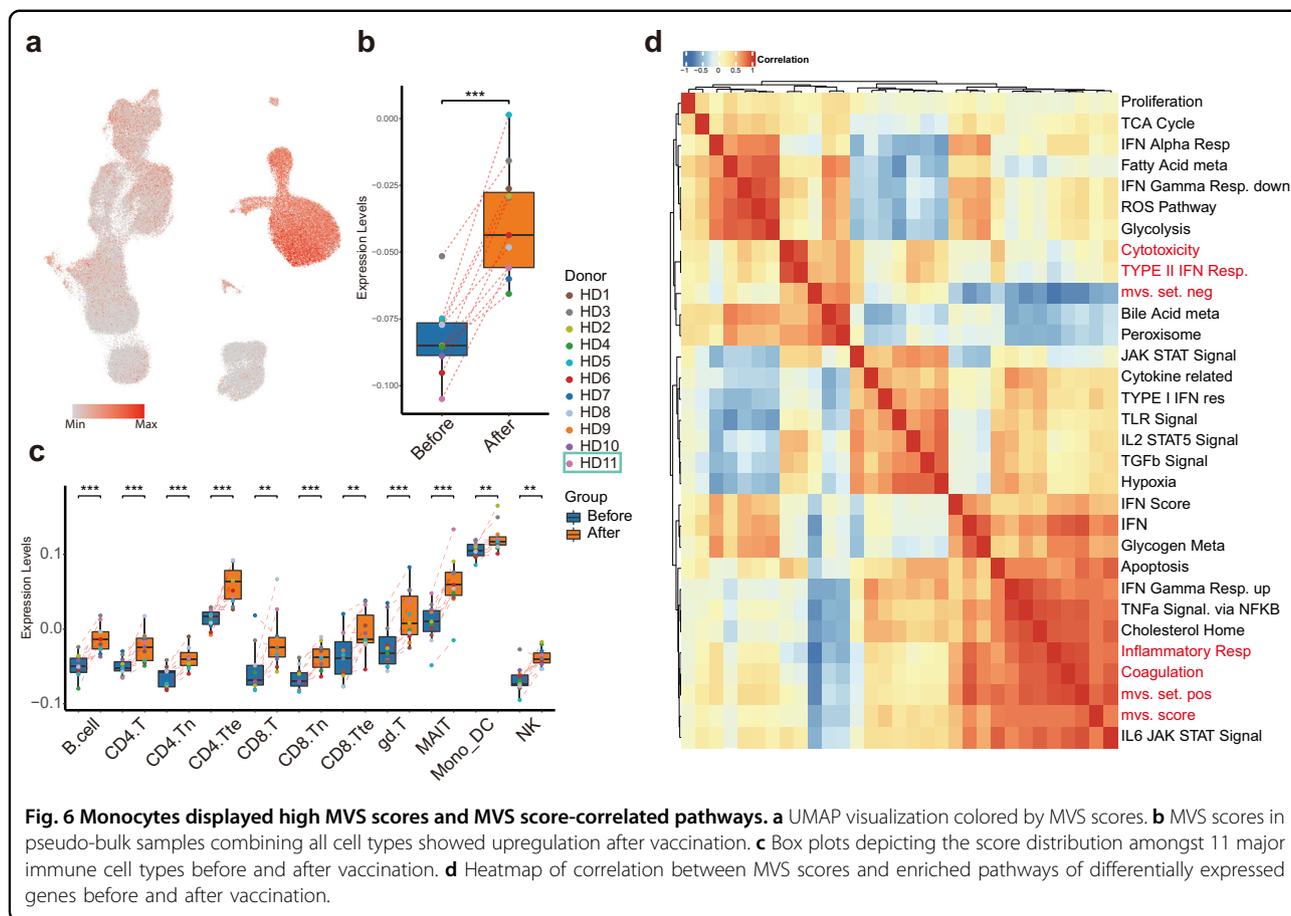
The analyses presented in this study, particularly, scRNA-seq of PBMCs had not been performed for previous vaccine evaluations, whether the changes in immune system function-related genes were COVID-19-specific or could be generally applied to other vaccines or other types of COVID-19 vaccines remained to be determined. However, these types of detailed analyses should be overall beneficial to vaccine development and applications. Our study postulates that it is imperative to consider the potential long-term impact of vaccination to certain medical conditions³⁴ or to general human health.

Materials and methods

Participants, clinical data collection, and procedures

Healthy adult volunteers were recruited to the program. All subjects underwent a physical examination and completed a questionnaire by trained doctors. Healthy adult aged 18–60 years, with axillary temperature ≤ 37.0 °C, negative for SARS-CoV-2 nucleic acid test, and willing to complete all scheduled study processes were enrolled in the study. People with epilepsy, brain or mental diseases, history of allergies, uncontrolled major chronic illnesses, and clinically significant abnormal findings on biochemistry, hematology tests were excluded. Pregnant or breastfeeding women were also excluded. This study was approved by the Ethics Committee of Shanghai East Hospital in accordance with the principles of the Helsinki Declaration (No.2020 (096)). Written informed consents were obtained from all participants before enrollment.

A total of 11 participants were enrolled and vaccinated to evaluate the clinical safety and dynamic changes in the immune system. Among these, five participants (cohort A) were vaccinated with 4 μ g dose of inactivated SARS-CoV-2 Vaccine (Vero Cell) on days 1 and 14, and six participants (cohort B) received a 4 μ g dose of the vaccine on days 1 and 28. Inactivated SARS-CoV-2 Vaccine (Vero



Cell) (China Biotechnology Group Corporation) was administered intramuscularly into the deltoid. All vaccines were approved by the National Institutes for Food and Drug Control of China.

Laboratory safety tests including infection-related indices (C-reactive protein, serum amyloid A protein), hematologic parameters (white blood cell counts, neutrophil counts, lymphocyte counts, monocyte counts, red blood cell counts, hemoglobin, platelet counts), coagulation function-related indices (prothrombin time, activated partial thromboplastin time/APTT, fibrinogen, prothrombin activity/PT, international normalized ratio/INR), blood glucose-related parameters (fasting plasma glucose, HbA1c), serum lipid (total cholesterol, triglyceride, HDL-C, LDL-C), cardiac function-related enzymes (creatinine kinase, CK-MB), electrolytes (potassium, sodium, chloride, bicarbonate, total calcium, magnesium), liver function-related biomarkers (e.g., albumin, alanine aminotransferase/ALT, aspartate aminotransferase/AST, total bilirubin, and etc.), renal function-related markers (creatinine, uric acid, blood urine nitrogen/BUN, estimated glomerular filtration rate/eGFR) were measured.

COVID-19 antibody (IgG/IgM) testing

A number of commercially available COVID-19 antibody (IgG/IgM) rapid testing kits including “Innovita (S protein specific)”, “GenBody (N protein specific)”, “Livzon (S + N proteins)”, and “AbKhan (S + N proteins)” were used to test anti-COVID-19 (IgM/IgG) positivities of plasma from volunteers before and at different times after vaccination. The “AbKhan” kit was most sensitive and data were used in this study.

Neutralizing antibody test by PRNT

Serum samples were each tested using a plaque reduction neutralization test (PRNT) assay for SARS-CoV-2 (2019-nCoV-WIV04) in the BSL-3 laboratory. Briefly, sera were heat-inactivated at 56 °C for 30 min and diluted to 1:50, followed by threefold serial dilutions (1:50, 1:150, 1:450, 1:1350, 1:4050, and 1:12,150). Sera were then mixed with 100 PFU of virus and incubated at 37 °C for 1 h. The virus–serum dilution mixtures and virus control were then inoculated into Vero E6 cell monolayers in 24-well plates for 1 h before adding an overlay medium including 1.5% methylcellulose at 37 °C for 4–5 days to allow plaque

development. Then the plates were fixed and stained with 2% crystal violet in 30% methanol for 30 min at room temperature, and the plaques were manually counted and measured. The PRNT titer was calculated based on a 50% reduction in plaque count (PRNT50).

Preparation of single-cell suspensions, single-cell RNA library preparation, and sequencing

The PBMCs were isolated from heparinized venous blood from healthy volunteers using a Ficoll-Paque™ PLUS Media (GE Healthcare Inc.) according to the standard density-gradient centrifugation method provided by the manufacturer. PBMCs were frozen in freezing media (70% RPMI-1640, 20% FBS, and 10% DMSO), and stored in liquid nitrogen until use. Single-cell capture and library construction were performed using the Chromium Single Cell 5' Library & Gel Bead kit (10× Genomics) according to the manufacturer's instructions. Libraries were sequenced using the Novaseq 6000 platform (Illumina).

scRNA-seq data analysis and statistics

Single-cell sequencing data were aligned and quantified using kallisto/bustools (KB, v0.25.0)³⁵ against the GRCh38 human reference genome downloaded from the 10× Genomics official website. Preliminary counts were then used for downstream analyses. We made a pipeline to process data. Briefly, cells with less than 200 genes were filtered out, the logarithmic normalized counts and top 3000 highly variable genes (HVGs) selection were performed by Scanpy³⁶.

We excluded specific genes from HVGs including mitochondrial genes, immunoglobulin genes, and genes linked to poorly supported transcriptional models (annotated with the prefix "Rp-"). Then principal component analysis (PCA) was performed utilizing the HVGs and Harmony algorithm was used to remove batch effects²⁵. We used the PARC approach to identify clusters³⁷ and selected features by "FeatureSelectionByEnrichment" function from cytoph2 algorithm³⁸, followed by another round of PCA, Harmony, and PARC. Subsequently, we calculated K nearest neighbors in a KNN graph, performed uniform manifold approximation and projection (UMAP) by Pegasus³⁹, and identified clusters by PARC. In addition, we applied Scrublet⁴⁰ to identify potential doublets.

Quality control was applied to clusters based on output of the first round of the pipeline:

1. Clusters with more than 20% cells of which doublet score > 0.4 were defined as doublets clusters.
2. Clusters with more than 20% cells that had > 20% of their transcripts mapped to mitochondrial genes were defined as low-quality clusters.
3. Clusters with more than 20% cells that had < 0.05% of their transcripts mapped to mitochondrial genes

were defined as nuclei.

4. Median expression of PPBP, PF4, HBB, HBA2 > 0, indicating erythrocytes and platelets.
5. Less than 50 cells.
6. Detected gene numbers < 1000.
7. Ratio of mean of total UMIs and mean of detected genes < 2.
8. Scrublet identified doublets.
9. Using DBSCAN⁴¹ to remove outliers.

After removing low-quality cells, we annotated cells by single-cell recognition of cell types (SingleR) algorithm, referring to Monaco immune datasets⁴².

Qualified cells were subjected to downstream analysis. Similarly, we rerun the pipeline to identify main cell types including T cells (CD3D, CD3E, CD3G, CD40LG, CD8A, CD8B), B cells (MS4A1, CD79A, CD79B), NK cells (GNLY, NKG7, TYROBP, NCAM1), and monocytes (CST3, LYZ). In addition, we run the pipeline on each type of cells, respectively, and further identified subtypes based on the SingleR-identified cell types and well-characterized markers (Fig. 3b).

Comparing immune cell proportion

For samples from PBMCs, we calculated immune cell proportions for each major cell type and underlying subtypes. For each sample, the cell-type proportion was calculated by the number of cells in a certain cell type divided by the total number of cells. To identify changes in cell proportions between samples in different groups, we performed a Wilcoxon test on the proportions of each major cell types as well as cell subtypes across different groups (Supplementary Fig. S2). Only those cell types with statistically significant differences ($P < 0.05$) in proportions are shown in Fig. 3e.

Differential expression analysis, gene sets overrepresentation analysis, and score signature modules

To investigate immunological feature alterations, we identified DEGs by muscat algorithm²⁶ with default parameters. Briefly, we first sum-collapsed the data, summing UMIs across cells for each healthy donor, to produce a bulk RNA-seq style UMIs profile for each sample. Afterward, the aggregated counts were loaded onto pbDS function to identify DEGs, and heatmaps were plotted by pbHeatmap function. Gene set overrepresentation analysis of DEGs ($\log_{2}FC > 0.5$ and adjusted $P < 0.05$) were performed using one-sided Fisher's exact test (as implemented in the "gsfisher" R package) with "HALLMARK", "KEGG", and "REACTOME" gene sets derived from MSigDB. Gene sets with $P < 0.05$ were considered to be significant. Signature module scores were calculated via "AddModuleScore" function, with default settings in Seurat. Briefly, for each cell, the score was defined as the average expression of the signature

gene list subtracting the average expression of the corresponding control gene list⁴³. Gene lists used for analysis are provided in Supplementary Table S11.

Metacell analysis

We used the R package “MetaCell”²⁷ to analyze the data. We removed specific mitochondrial genes, immunoglobulin genes, and genes linked to poorly supported transcriptional models (annotated with the prefix “Rp-”). We then filtered cells with less than 500 UMIs. Gene features were selected using the parameter $T_{vm} = 0.08$ and a minimum total UMI count > 100 . We subsequently performed hierarchical clustering of the correlation matrix between those genes (filtering genes with low coverage and computing correlation using a down-sampled UMI matrix) and selected gene clusters containing anchor genes. We used $K = 100$, and 500 bootstrap iterations and otherwise standard parameters. Metacells were annotated by the most abundant cell types composing each metacell.

Gene regulatory network analysis

For identification and scoring of regulon activity, we employed pySCENIC^{28,29} workflow on log-normalized metacells data to determine sets of co-expressed genes. We linked direct targets to their corresponding transcription factors using RcisTarget databases (v1.2.1), and retained putative downstream genes with enriched DNA motifs at 10 kb or 500 bp from the transcription start site (normalized enrichment score > 3). Finally, we used AUCell function to score activity of each regulon across cells in the dataset, which was computed as the sum of genes expressed per regulon and produced binary activity matrices based on cutoffs manually adjusted after inspecting the distributions of AUC scores. Regulon specificity scores (RSS) were calculated by the “regulon_specificity_scores” function from pySCENIC algorithm with default parameters.

Analysis of IFN- α/β response of PBMCs

PBMCs were isolated from heparinized blood by Ficoll-Hypaque at $400\times g$ for 30 min. The PBMCs ($1 \times 10^6 \text{ ml}^{-1}$) of donors before and after vaccination were then seeded in 48-well culture plates with RPMI-1640 containing 5% knockout serum replacement and 0.032% heparin. The next day, medium was exchanged and cells were treated with 100 ng/ml IFN- α and 10 ng/ml IFN- β for 12 h. Some cells were pre-treated with 250 ng/ml RBD for 16 h, followed by IFN- α/β treatment for 12 h. Following washing and extraction of total RNA, real-time quantitative PCR was performed to detect the expression of type I interferon response-associated genes. Fold changes relative to GAPDH were calculated by $2^{-\Delta\Delta C_t}$ and expressed as means \pm SEM. Differences between groups were evaluated using paired Student's *t*-test and considered significant when $P < 0.05$.

Statistical analysis

Clinical data were summarized using mean (standard deviation), median (Q1, Q3), or number (percentage), when appropriate. The Wilcoxon signed-rank test was used to compare paired medians over time for laboratory characteristics. In addition, Wilcoxon sum-rank test was used to compare the median changes from baseline between cohorts A and B. We graded adverse events according to the scale issued by the China National Medical Products Administration (<https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20191231111901460.html>) and the judgment of laboratory test results was based on the reference value range of the local population. All statistical tests were two-sided. Statistical significance was defined as $P \leq 0.05$. Statistical analyses were performed using SAS v9.4 (SAS Institute Inc., Cary, NC, USA).

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Author contributions

Z.L., Y.E.S., C.W., and J.L. conceived and designed the study, had full access to all of the data in the study. H.X., C.Z., W.C., H.Z., Q.L., W.G., L.W., Z.S., W.Z., and Y.E.S. generated COVID-19 neutralizing antibody and performed antibody (IgM/IgG) tests. Y.W., C.W., R.Z., Y.S., and W.Z. supplied either patient samples or testing kits. J.W., Q.L., Z.S., Z.X., L.Z., J.S., X.Y., Y.D., and C.Z. were involved in sample preparations and scRNA-seq. J.X. analyzed clinical data and performed statistical analyses, J.L., L.Z., and J.S. were involved in sequencing data bioinformatics analyses. The manuscript was drafted by Y.E.S., J.L., C.W., W.C., H. Z., L.Z., H.X., and Z.L.; and critically revised by all authors.

Data availability

The accession numbers for the sequencing raw data and processed data in this paper are Genome Sequence Archive in BIG Data Center (GSA, Beijing Institute of Genomics, Chinese Academy of Sciences): HRA001150.

Conflict of interest

The authors declare no competing interests.

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Article

Intracellular Reverse Transcription of Pfizer BioNTech COVID-19 mRNA Vaccine BNT162b2 In Vitro in Human Liver Cell Line

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Abstract: Preclinical studies of COVID-19 mRNA vaccine BNT162b2, developed by Pfizer and BioNTech, showed reversible hepatic effects in animals that received the BNT162b2 injection. Furthermore, a recent study showed that SARS-CoV-2 RNA can be reverse-transcribed and integrated into the genome of human cells. In this study, we investigated the effect of BNT162b2 on the human liver cell line Huh7 in vitro. Huh7 cells were exposed to BNT162b2, and quantitative PCR was performed on RNA extracted from the cells. We detected high levels of BNT162b2 in Huh7 cells and changes in gene expression of long interspersed nuclear element-1 (LINE-1), which is an endogenous reverse transcriptase. Immunohistochemistry using antibody binding to LINE-1 open reading frame-1 RNA-binding protein (ORFp1) on Huh7 cells treated with BNT162b2 indicated increased nucleus distribution of LINE-1. PCR on genomic DNA of Huh7 cells exposed to BNT162b2 amplified the DNA sequence unique to BNT162b2. Our results indicate a fast up-take of BNT162b2 into human liver cell line Huh7, leading to changes in LINE-1 expression and distribution. We also show that BNT162b2 mRNA is reverse transcribed intracellularly into DNA in as fast as 6 h upon BNT162b2 exposure.

Keywords: COVID-19 mRNA vaccine; BNT162b2; liver; reverse transcription; LINE-1; Huh7



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1. Introduction

Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was announced by the World Health Organization (WHO) as a global pandemic on 11 March 2020, and it emerged as a devastating health crisis. As of February 2022, COVID-19 has led to over 430 million reported infection cases and 5.9 million deaths worldwide [1]. Effective and safe vaccines are urgently needed to reduce the morbidity and mortality rates associated with COVID-19.

Several vaccines for COVID-19 have been developed, with particular focus on mRNA vaccines (by Pfizer-BioNTech and Moderna), replication-defective recombinant adenoviral vector vaccines (by Janssen-Johnson and Johnson, Astra-Zeneca, Sputnik-V, and CanSino), and inactivated vaccines (by Sinopharm, Bharat Biotech and Sinovac). The mRNA vaccine has the advantages of being flexible and efficient in immunogen design and manufacturing, and currently, numerous vaccine candidates are in various stages of development and application. Specifically, COVID-19 mRNA vaccine BNT162b2 developed by Pfizer and BioNTech has been evaluated in successful clinical trials [2–4] and administered in national COVID-19 vaccination campaigns in different regions around the world [5–8].

BNT162b2 is a lipid nanoparticle (LNP)-encapsulated, nucleoside-modified RNA vaccine (modRNA) and encodes the full-length of SARS-CoV-2 spike (S) protein, modified

by two proline mutations to ensure antigenically optimal pre-fusion conformation, which mimics the intact virus to elicit virus-neutralizing antibodies [3]. Consistent with randomized clinical trials, BNT162b2 showed high efficiency in a wide range of COVID-19-related outcomes in a real-world setting [5]. Nevertheless, many challenges remain, including monitoring for long-term safety and efficacy of the vaccine. This warrants further evaluation and investigations. The safety profile of BNT162b2 is currently only available from short-term clinical studies. Less common adverse effects of BNT162b2 have been reported, including pericarditis, arrhythmia, deep-vein thrombosis, pulmonary embolism, myocardial infarction, intracranial hemorrhage, and thrombocytopenia [4,9–20]. There are also studies that report adverse effects observed in other types of vaccines [21–24]. To better understand mechanisms underlying vaccine-related adverse effects, clinical investigations as well as cellular and molecular analyses are needed.

A recent study showed that SARS-CoV-2 RNAs can be reverse-transcribed and integrated into the genome of human cells [25]. This gives rise to the question of if this may also occur with BNT162b2, which encodes partial SARS-CoV-2 RNA. In pharmacokinetics data provided by Pfizer to European Medicines Agency (EMA), BNT162b2 biodistribution was studied in mice and rats by intra-muscular injection with radiolabeled LNP and luciferase modRNA. Radioactivity was detected in most tissues from the first time point (0.25 h), and results showed that the injection site and the liver were the major sites of distribution, with maximum concentrations observed at 8–48 h post-dose [26]. Furthermore, in animals that received the BNT162b2 injection, reversible hepatic effects were observed, including enlarged liver, vacuolation, increased gamma glutamyl transferase (γ GT) levels, and increased levels of aspartate transaminase (AST) and alkaline phosphatase (ALP) [26]. Transient hepatic effects induced by LNP delivery systems have been reported previously [27–30], nevertheless, it has also been shown that the empty LNP without modRNA alone does not introduce any significant liver injury [27]. Therefore, in this study, we aim to examine the effect of BNT162b2 on a human liver cell line in vitro and investigate if BNT162b2 can be reverse transcribed into DNA through endogenous mechanisms.

2. Materials and Methods

2.1. Cell Culture

Huh7 cells (JCRB Cell Bank, Osaka, Japan) were cultured in 37 °C at 5% CO₂ with DMEM medium (HyClone, HYCLSH30243.01) supplemented with 10% (*v/v*) fetal bovine serum (Sigma-Aldrich, F7524-500ML, Burlington, MA, USA) and 1% (*v/v*) Penicillin-Streptomycin (HyClone, SV30010, Logan, UT, USA). For BNT162b2 treatment, Huh7 cells were seeded with a density of 200,000 cells/well in 24-well plates. BNT162b2 mRNA vaccine (Pfizer BioNTech, New York, NY, USA) was diluted with sterile 0.9% sodium chloride injection, USP into a final concentration of 100 µg/mL as described in the manufacturer's guideline [31]. BNT162b2 suspension was then added in cell culture media to reach final concentrations of 0.5, 1.0, or 2.0 µg/mL. Huh7 cells were incubated with or without BNT162b2 for 6, 24, and 48 h. Cells were washed thoroughly with PBS and harvested by trypsinization and stored in –80 °C until further use.

2.2. REAL-TIME RT-QPCR

RNA from the cells was extracted with RNeasy Plus Mini Kit (Qiagen, 74134, Hilden, Germany) following the manufacturer's protocol. RT-PCR was performed using RevertAid First Strand cDNA Synthesis kit (Thermo Fisher Scientific, K1622, Waltham, MA, USA) following the manufacturers protocol. Real-time qPCR was performed using Maxima SYBR Green/ROX qPCR Master Mix (Thermo Fisher Scientific, K0222, Waltham, MA, USA) with primers for BNT162b2, *LINE-1* and housekeeping genes *ACTB* and *GAPDH* (Table 1).

Table 1. Primer sequences of RT-qPCR and PCR.

Target	Sequence
<i>ACTB</i> forward	CCTCGCCTTTGCCGATCC
<i>ACTB</i> reverse	GGATCTTCATGAGGTAGTCAGTC
<i>GAPDH</i> forward	CTCTGCTCCTCCTGTTCGAC
<i>GAPDH</i> reverse	TTAAAAGCAGCCCTGGTGAC
<i>LINE-1</i> forward	TAACCAATACAGAGAAGTGC
<i>LINE-1</i> reverse	GATAATATCCTGCAGAGTGT
BNT162b2 forward	CGAGGTGGCCAAGAATCTGA
BNT162b2 reverse	TAGGCTAAGCGTTTTGAGCTG

2.3. Immunofluorescence Staining and Confocal Imaging

Huh7 cells were cultured in eight-chamber slides (LAB-TEK, 154534, Santa Cruz, CA, USA) with a density of 40,000 cells/well, with or without BNT162b2 (0.5, 1 or 2 µg/mL) for 6 h. Immunohistochemistry was performed using primary antibody anti-LINE-1 ORF1p mouse monoclonal antibody (Merck, 3574308, Kenilworth, NJ, USA), secondary antibody Cy3 Donkey anti-mouse (Jackson ImmunoResearch, West Grove, PA, USA), and Hoechst (Life technologies, 34850, Carlsbad, CA, USA), following the protocol from Thermo Fisher (Waltham, MA, USA). Two images per condition were taken using a Zeiss LSM 800 and a 63X oil immersion objective, and the staining intensity was quantified on the individual whole cell area and the nucleus area on 15 cells per image by ImageJ 1.53c. LINE-1 staining intensity for the cytosol was calculated by subtracting the intensity of the nucleus from that of the whole cell. All images of the cells were assigned a random number to prevent bias. To mark the nuclei (determined by the Hoechst staining) and the whole cells (determined by the borders of the LINE-1 fluorescence), the Freehand selection tool was used. These areas were then measured, and the mean intensity was used to compare the groups.

2.4. Genomic DNA Purification, PCR Amplification, Agarose Gel Purification, and Sanger Sequencing

Genomic DNA was extracted from cell pellets with PBDN buffer (10 mM Tris-HCl pH 8.3, 50 mM KCl, 2.5 mM MgCl₂, 0.45% NP-40, 0.45% Tween-20) according to protocol described previously [32]. To remove residual RNA from the DNA preparation, RNase (100 µg/mL, Qiagen, Hilden, Germany) was added to the DNA preparation and incubated at 37 °C for 3 h, followed by 5 min at 95 °C. PCR was then performed using primers targeting BNT162b2 (sequences are shown in Table 1), with the following program: 5 min at 95 °C, 35 cycles of 95 °C for 30 s, 58 °C for 30 s, and 72 °C for 1 min; finally, 72 °C for 5 min and 12 °C for 5 min. PCR products were run on 1.4% (*w/v*) agarose gel. Bands corresponding to the amplicons of the expected size (444 bps) were cut out and DNA was extracted using QIAquick PCR Purification Kit (Qiagen, 28104, Hilden, Germany), following the manufacturer's instructions. The sequence of the DNA amplicon was verified by Sanger sequencing (Eurofins Genomics, Ebersberg, Germany).

Statistics

Statistical comparisons were performed using two-tailed Student's *t*-test and ANOVA. Data are expressed as the mean ± SEM or ± SD. Differences with *p* < 0.05 are considered significant.

2.5. Ethical Statements

The Huh7 cell line was obtained from Japanese Collection of Research Bioresources (JCRB) Cell Bank.

3. Results

3.1. BNT162b2 Enters Human Liver Cell Line Huh7 Cells at High Efficiency

To determine if BNT162b2 enters human liver cells, we exposed human liver cell line Huh7 to BNT162b2. In a previous study on the uptake kinetics of LNP delivery in Huh7 cells, the maximum biological efficacy of LNP was observed between 4–7 h [33]. Therefore, in our study, Huh7 cells were cultured with or without increasing concentrations of BNT162b2 (0.5, 1.0 and 2.0 $\mu\text{g}/\text{mL}$) for 6, 24, and 48 h. RNA was extracted from cells and a real-time quantitative reverse transcription polymerase chain reaction (RT-qPCR) was performed using primers targeting the BNT162b2 sequence, as illustrated in Figure 1. The full sequence of BNT162b2 is publicly available [34] and contains a two-nucleotides cap; 5'-untranslated region (UTR) that incorporates the 5'-UTR of a human α -globin gene; the full-length of SARS-CoV-2 S protein with two proline mutations; 3'-UTR that incorporates the human mitochondrial 12S rRNA (mtRNR1) segment and human AES/TLE5 gene segment with two C→U mutations; poly(A) tail. Detailed analysis of the S protein sequence in BNT162b2 revealed 124 sequences that are 100% identical to human genomic sequences and three sequences with only one nucleotide (nt) mismatch in 19–26 nts (Table S1, see Supplementary Materials). To detect BNT162b2 RNA level, we designed primers with forward primer located in SARS-CoV-2 S protein regions and reverse primer in 3'-UTR, which allows detection of PCR amplicon unique to BNT162b2 without unspecific binding of the primers to human genomic regions.

BNT162b2 sequence (4284 bases)

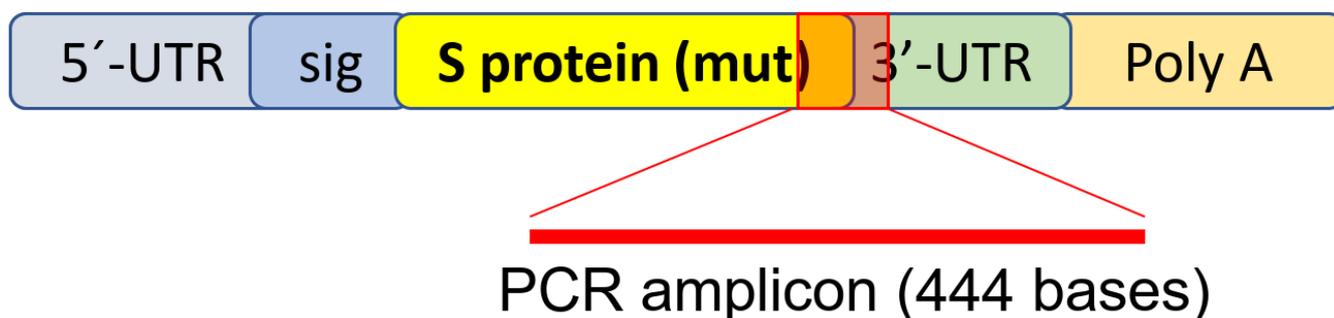


Figure 1. PCR primer set used to detect mRNA level and reverse-transcription of BNT162b2. Illustration of BNT162b2 was adapted from previously described literature [34].

RT-qPCR results showed that Huh7 cells treated with BNT162b2 had high levels of BNT162b2 mRNA relative to housekeeping genes at 6, 24, and 48 h (Figure 2, presented in logged $2^{-\Delta\Delta\text{CT}}$ due to exceptionally high levels). The three BNT162b2 concentrations led to similar intracellular BNT162b2 mRNA levels at the different time points, except that the significant difference between 1.0 and 2.0 $\mu\text{g}/\text{mL}$ was observed at 48 h. BNT162b2 mRNA levels were significantly decreased at 24 h compared to 6 h, but increased again at 48 h.

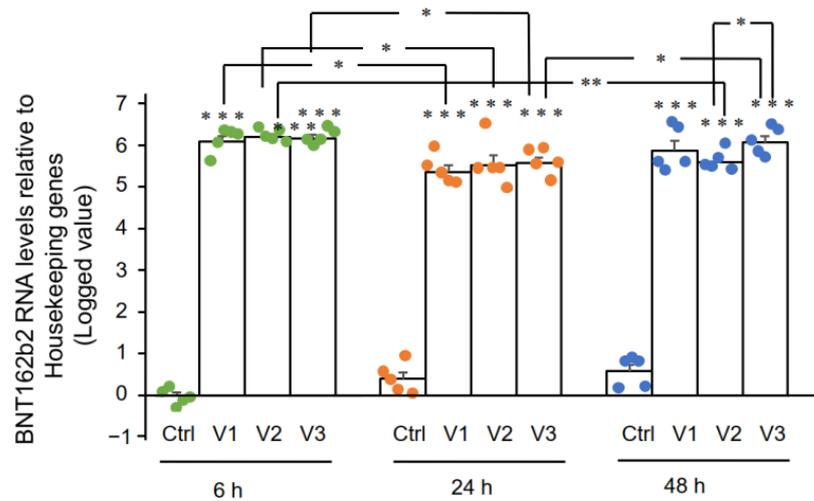


Figure 2. BNT162b2 mRNA levels in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 (V1), 1 (V2), and 2 $\mu\text{g}/\text{mL}$ (V3) of BNT162b2 for 6 (green dots), 24 (orange dots), and 48 h (blue dots). RNA was purified and qPCR was performed using primers targeting BNT162b2. RNA levels of BNT162b2 are presented as logged $2^{-\Delta\Delta\text{CT}}$ values relative to house-keeping genes *GAPDH* and *ACTB*. Results are from five independent experiments ($n = 5$). Differences between respective groups were analyzed using two-tailed Student’s *t*-test. Data are expressed as the mean \pm SEM. (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ vs. respective control at each time point, or as indicated).

3.2. Effect of BNT162b2 on Human Endogenous Reverse Transcriptase Long Interspersed Nuclear Element-1 (*LINE-1*)

Here we examined the effect of BNT162b2 on *LINE-1* gene expression. RT-qPCR was performed on RNA purified from Huh7 cells treated with BNT162b2 (0, 0.5, 1.0, and 2.0 $\mu\text{g}/\text{mL}$) for 6, 24, and 48 h, using primers targeting *LINE-1*. Significantly increased *LINE-1* expression compared to control was observed at 6 h by 2.0 $\mu\text{g}/\text{mL}$ BNT162b2, while lower BNT162b2 concentrations decreased *LINE-1* expression at all time points (Figure 3).

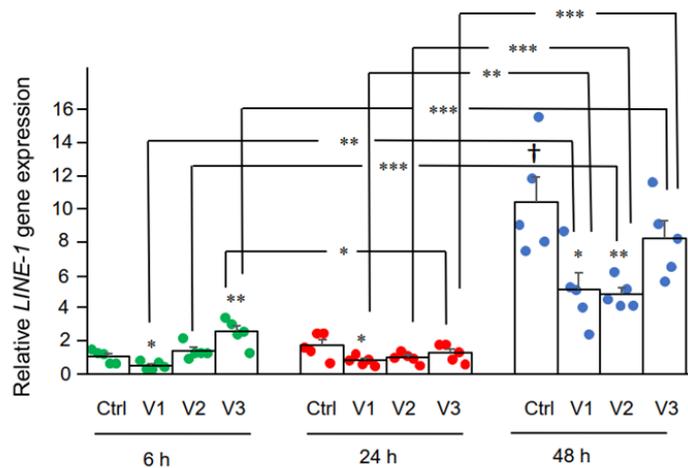


Figure 3. *LINE-1* mRNA levels in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 (V1), 1 (V2), and 2 $\mu\text{g}/\text{mL}$ (V3) of BNT162b2 for 6 (green dots), 24 (red dots), and 48 h (blue dots). RNA was purified and qPCR was performed using primers targeting *LINE-1*. RNA levels of *LINE-1* are presented as $2^{-\Delta\Delta\text{CT}}$ values relative to house-keeping genes *GAPDH* and *ACTB*. Results are from five independent experiments ($n = 5$). Differences between respective groups were analyzed using two-tailed Student’s *t*-test. Data are expressed as the mean \pm SEM. (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ vs. respective control at each time point, or as indicated; † $p < 0.05$ vs. 6 h-Ctrl).

Next, we studied the effect of BNT162b2 on LINE-1 protein level. The full-length LINE-1 consists of a 5' untranslated region (UTR), two open reading frames (ORFs), ORF1 and ORF2, and a 3'UTR, of which ORF1 is an RNA binding protein with chaperone activity. The retrotransposition activity of LINE-1 has been demonstrated to involve ORF1 translocation to the nucleus [35]. Huh7 cells treated with or without BNT162b2 (0.5, 1.0 and 2.0 $\mu\text{g}/\text{mL}$) for 6 h were fixed and stained with antibodies binding to LINE-1 ORF1p, and DNA-specific probe Hoechst for visualization of cell nucleus (Figure 4a). Quantification of immunofluorescence staining intensity showed that BNT162b2 increased LINE-1 ORF1p protein levels in both the whole cell area and nucleus at all concentrations tested (Figure 4b–d).

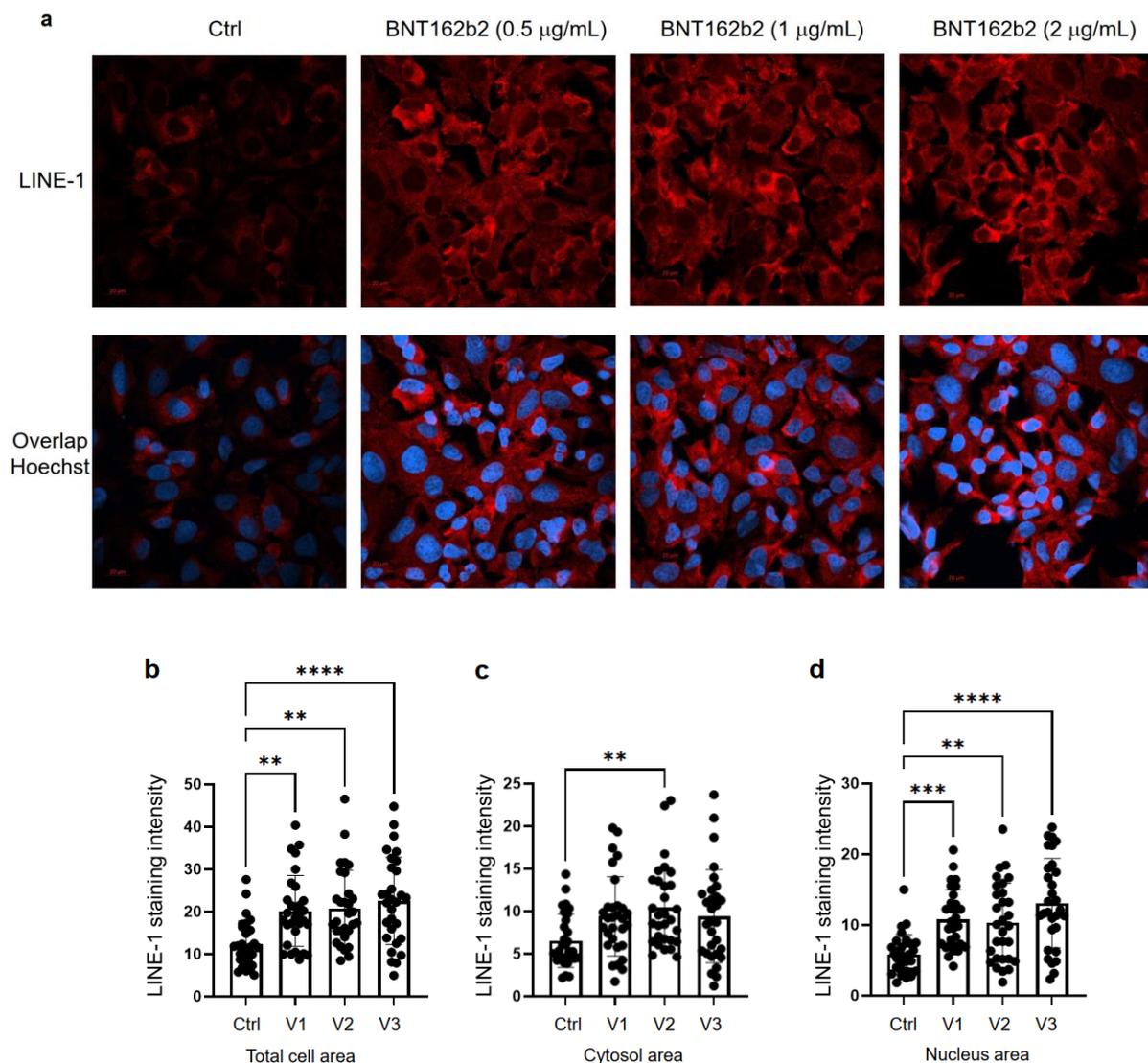


Figure 4. Immunohistochemistry of Huh7 cells treated with BNT162b2 on LINE-1 protein distribution. Huh7 cells were treated without (Ctrl) or with 0.5, 1, and 2 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h. Cells were fixed and stained with antibodies binding to LINE-1 ORF1p (red) and DNA-specific probe Hoechst for visualization of cell nucleus (blue). (a) Representative images of LINE-1 expression in Huh7 cells treated with or without BNT162b2. (b–d) Quantification of LINE-1 protein in whole cell area (b), cytosol (c), and nucleus (d). All data were analyzed using One-Way ANOVA, and graphs were created using GraphPad Prism V 9.2. All data is presented as mean \pm SD (** $p < 0.01$; *** $p < 0.001$; **** $p < 0.0001$ as indicated).

3.3. Detection of Reverse Transcribed BNT162b2 DNA in Huh7 Cells

A previous study has shown that entry of LINE-1 protein into the nucleus is associated with retrotransposition [35]. In the immunofluorescence staining experiment described above, increased levels of LINE-1 in the nucleus were observed already at the lowest concentration of BNT162b2 (0.5 $\mu\text{g}/\text{mL}$). To examine if BNT162b2 is reversely transcribed into DNA when LINE-1 is elevated, we purified genomic DNA from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6, 24, and 48 h. Purified DNA was treated with RNase to remove RNA and subjected to PCR using primers targeting BNT162b2, as illustrated in Figure 1. Amplified DNA fragments were then visualized by electrophoresis and gel-purified (Figure 5). BNT162b2 DNA amplicons were detected in all three time points (6, 24, and 48 h). Sanger sequencing confirmed that the DNA amplicons were identical to the BNT162b2 sequence flanked by the primers (Table 2). To ensure that the DNA amplicons were derived from DNA but not BNT162b2 RNA, we also performed PCR on RNA purified from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ BNT162b2 for 6 h, with or without RNase treatment (Ctrl 5 and 6 in Figure 5), and no amplicon was detected in the RNA samples subjected to PCR.

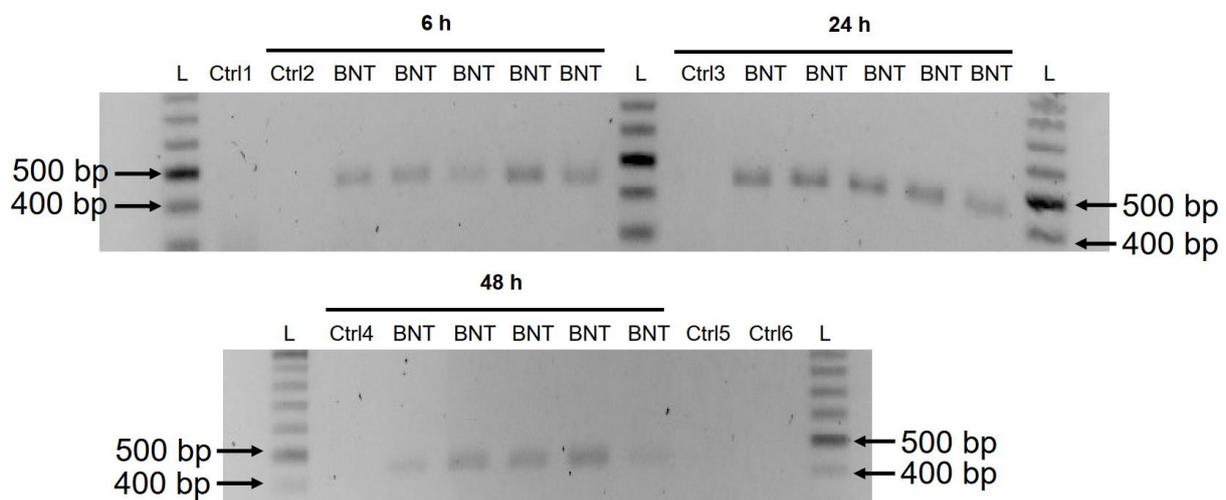


Figure 5. Detection of DNA amplicons of BNT162b2 in Huh7 cells treated with BNT162b2. Huh7 cells were treated without (Ctrl) or with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6, 24, and 48 h. Genomic DNA was purified and digested with 100 $\mu\text{g}/\text{mL}$ RNase. PCR was run on all samples with primers targeting BNT162b2, as shown in Figure 1 and Table 1. DNA amplicons (444 bps) were visualized on agarose gel. BNT: BNT162b2; L: DNA ladder; Ctrl1: cultured Huh7 cells; Ctrl2: Huh7 cells without BNT162b2 treatment collected at 6 h; Ctrl3: Huh7 cells without BNT162b2 treatment collected at 24 h; Ctrl4: Huh7 cells without BNT162b2 treatment collected at 48 h; Ctrl5: RNA from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h; Ctrl6: RNA from Huh7 cells treated with 0.5 $\mu\text{g}/\text{mL}$ of BNT162b2 for 6 h, digested with RNase.

Table 2. Sanger sequencing result of the BNT162b2 amplicon.

```
CGAGGTGGCCAAGAATCTGAACGAGAGCCTGATCGACCTGCAAGAACTGGGGAAGT
ACGAGCAGTACATCAAGTGGCCCTGGTACATCTGGCTGGGCTTTATCGCCGGACTGATTG
CCATCGTGATGGTCACAATCATGCTGTGTTGCATGACCAGCTGCTGTAGCTGCCTGAAGG
GCTGTTGTAGCTGTGGCAGCTGCTGCAAGTTCGACGAGGACGATTCTGAGCCCGTGCTGA
AGGGCGTGAAACTGCACTACACATGATGACTCGAGCTGGTACTGCATGCACGCAATGCTA
GCTGCCCCTTTCCCGTCCTGGGTACCCCGAGTCTCCCCCGACCTCGGGTCCCAGGTATGC
TCCCACCTCCACCTGCCCCACTCACACCTCTGCTAGTTCAGACACCTCCCAAGCACGC
AGCAATGCAGCTCAAAAACGCTTAGCCTA
```

4. Discussion

In this study we present evidence that COVID-19 mRNA vaccine BNT162b2 is able to enter the human liver cell line Huh7 in vitro. BNT162b2 mRNA is reverse transcribed intracellularly into DNA as fast as 6 h after BNT162b2 exposure. A possible mechanism for reverse transcription is through endogenous reverse transcriptase LINE-1, and the nucleus protein distribution of LINE-1 is elevated by BNT162b2.

Intracellular accumulation of LNP in hepatocytes has been demonstrated in vivo [36]. A preclinical study on BNT162b2 showed that BNT162b2 enters the human cell line HEK293T cells and leads to robust expression of BNT162b2 antigen [37]. Therefore, in this study, we first investigated the entry of BNT162b2 in the human liver cell line Huh7 cells. The choice of BNT162b2 concentrations used in this study warrants explanation. BNT162b2 is administered as a series of two doses three weeks apart, and each dose contains 30 µg of BNT162b2 in a volume of 0.3 mL, which makes the local concentration at the injection site at the highest 100 µg/mL [31]. A previous study on mRNA vaccines against H10N8 and H7N9 influenza viruses using a similar LNP delivery system showed that the mRNA vaccine can distribute rather nonspecifically to several organs such as liver, spleen, heart, kidney, lung, and brain, and the concentration in the liver is roughly 100 times lower than that of the intra-muscular injection site [38]. In the assessment report on BNT162b2 provided to EMA by Pfizer, the pharmacokinetic distribution studies in rats demonstrated that a relatively large proportion (up to 18%) of the total dose distributes to the liver [26]. We therefore chose to use 0.5, 1, and 2 µg/mL of vaccine in our experiments on the liver cells. However, the effect of a broader range of lower and higher concentrations of BNT162b2 should also be verified in future studies.

In the current study, we employed a human liver cell line for in vitro investigation. It is worth investigating if the liver cells also present the vaccine-derived SARS-CoV-2 spike protein, which could potentially make the liver cells targets for previously primed spike protein reactive cytotoxic T cells. There has been case reports on individuals who developed autoimmune hepatitis [39] after BNT162b2 vaccination. To obtain better understanding of the potential effects of BNT162b2 on liver function, in vivo models are desired for future studies.

In the BNT162b2 toxicity report, no genotoxicity nor carcinogenicity studies have been provided [26]. Our study shows that BNT162b2 can be reverse transcribed to DNA in liver cell line Huh7, and this may give rise to the concern if BNT162b2-derived DNA may be integrated into the host genome and affect the integrity of genomic DNA, which may potentially mediate genotoxic side effects. At this stage, we do not know if DNA reverse transcribed from BNT162b2 is integrated into the cell genome. Further studies are needed to demonstrate the effect of BNT162b2 on genomic integrity, including whole genome sequencing of cells exposed to BNT162b2, as well as tissues from human subjects who received BNT162b2 vaccination.

Human autonomous retrotransposon LINE-1 is a cellular endogenous reverse transcriptase and the only remaining active transposon in humans, able to retrotranspose itself and other nonautonomous elements [40,41], and ~17% of the human genome are comprised of LINE-1 sequences [42]. The nonautonomous *Alu* elements, short, interspersed nucleotide elements (SINEs), variable-number-of-tandem-repeats (VNTR), as well as cellular mRNA-processed pseudogenes, are retrotransposed by the LINE-1 retrotransposition proteins working in *trans* [43,44]. A recent study showed that endogenous LINE-1 mediates reverse transcription and integration of SARS-CoV-2 sequences in the genomes of infected human cells [25]. Furthermore, expression of endogenous LINE-1 is often increased upon viral infection, including SARS-CoV-2 infection [45–47]. Previous studies showed that LINE-1 retrotransposition activity is regulated by RNA metabolism [48,49], DNA damage response [50], and autophagy [51]. Efficient retrotransposition of LINE-1 is often associated with cell cycle and nuclear envelope breakdown during mitosis [52,53], as well as exogenous retroviruses [54,55], which promotes entrance of LINE-1 into the nucleus. In our study, we observed increased LINE-1 ORF1p distribution as determined by immunohisto-

chemistry in the nucleus by BNT162b2 at all concentrations tested (0.5, 1, and 2 µg/mL), while elevated *LINE-1* gene expression was detected at the highest BNT162b2 concentration (2 µg/mL). It is worth noting that gene transcription is regulated by chromatin modifications, transcription factor regulation, and the rate of RNA degradation, while translational regulation of protein involves ribosome recruitment on the initiation codon, modulation of peptide elongation, termination of protein synthesis, or ribosome biogenesis. These two processes are controlled by different mechanisms, and therefore they may not always show the same change patterns in response to external challenges. The exact regulation of *LINE-1* activity in response to BNT162b2 merits further study.

The cell model that we used in this study is a carcinoma cell line, with active DNA replication which differs from non-dividing somatic cells. It has also been shown that Huh7 cells display significant different gene and protein expression including upregulated proteins involved in RNA metabolism [56]. However, cell proliferation is also active in several human tissues such as the bone marrow or basal layers of epithelia as well as during embryogenesis, and it is therefore necessary to examine the effect of BNT162b2 on genomic integrity under such conditions. Furthermore, effective retrotransposition of *LINE-1* has also been reported in non-dividing and terminally differentiated cells, such as human neurons [57,58].

The Pfizer EMA assessment report also showed that BNT162b2 distributes in the spleen (<1.1%), adrenal glands (<0.1%), as well as low and measurable radioactivity in the ovaries and testes (<0.1%) [26]. Furthermore, no data on placental transfer of BNT162b2 is available from Pfizer EMA assessment report. Our results showed that BNT162b2 mRNA readily enters Huh7 cells at a concentration (0.5 µg/mL) corresponding to 0.5% of the local injection site concentration, induce changes in *LINE-1* gene and protein expression, and within 6 h, reverse transcription of BNT162b2 can be detected. It is therefore important to investigate further the effect of BNT162b2 on other cell types and tissues both in vitro and in vivo.

5. Conclusions

Our study is the first in vitro study on the effect of COVID-19 mRNA vaccine BNT162b2 on human liver cell line. We present evidence on fast entry of BNT162b2 into the cells and subsequent intracellular reverse transcription of BNT162b2 mRNA into DNA.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/cimb44030073/s1>.

Author Contributions: M.A., F.O.F., D.Y., M.B. and C.L. performed in vitro experiments. M.A. and F.O.F. performed data analysis. M.R. and Y.D.M. contributed to the implementation of the research, designed, and supervised the study. Y.D.M. wrote the paper with input from all authors. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: All data supporting the findings of this study are available within the article and supporting information.

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Conflicts of Interest: The authors declare no conflict of interest.

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From: cindy allpress
Sent: 10/20/2022 9:51:31 AM
To: DOH WSBOH
Cc:
Subject: Thank You for Listening to the Citizens of WA State

External Email

I am absolutely against mandating COVID19 vax to our children ! This is
A DECISION FOR PARENTS ONLY!

PLEASE VOTE NO on adding this to their immunization requirements ! Also
thank you for listening to the concerns of us as citizens of Washington
State and for voting to adopt the TAG's recommendation to not add the
COVID-19 vaccine to Washington's list of required immunizations for
child care and school entry at your April 13 virtual public meeting. We
are confident that the emerging scientific data will continue to affirm
your decision. Thank you for your thoughtful consideration in your role
to protect the health of the children in our State.

--

BOB & CINDY ALLPRESS

" If we are to guard against ignorance and remain free, it is the responsibility of every
American to be informed." Thomas Jefferson

From: Julie
Sent: 11/2/2022 10:20:40 PM
To: DOH WSBOH
Cc:
Subject: Stop Covid 19 Vaccinations for school Children.

External Email

Much has been said about anti-vaxers. The real problem is these vaccines were rushed to market and improperly tested and screened without any trials. No one knows what the long range issues will be. We can't inflict these problems

on our Innocents. Covid has nearly run it's course, why mandate vaccines. All the pharmaceutical companies are padding their golden parachutes without any fear of repercussions should these vaccines have adverse side effects like weaken their hearts or lungs or even their ability to conceive. That is not protecting the people. Children are the most immune age group. Despite what they say Vaccinated people do get covid and they can spread covid. Save our Children. Let them make the call when their 18.

Julie Byler

Washington State

From: roberto.garcia321@yahoo.com
Sent: 11/1/2022 5:46:14 PM
To: DOH WSBOH
Cc:
Subject: Immunization Requirements-COVID Vaccine

External Email

WSBOH,

As a parent with a child in the State of Washington who attends public school and as a volunteer for youth athletic programs please do not make the COVID vaccine a requirement. Since we have come out of quarantine I have personally worked with hundreds of children who have not had the vaccine and are perfectly healthy.

It would be a drain on resources and precious time to focus on this effort in our schools. I would like to ask that this team turn their attention to more important topics. For example, our school children have suffered from having been quarantined for so long and are in need of school counselors, better teacher support from well trained para-educators, healthy school lunches and more physical fitness time (outdoors). As a parent, this is much more important and unifies our schools, teachers and parents while requiring a COVID vaccine would cause further division.

Please don't let the fear of COVID or politics influence you to make a very costly and unnecessary decision by deciding to make COVID vaccinations a requirement.

Respectfully,

Robert Garcia

From: Jean
Sent: 10/31/2022 12:28:41 PM
To: DOH WSBOH
Cc:
Subject: COVID vaccine

External Email

The vaccine does not stop infection or transmission and there is statistically a zero percent risk to children for serious illness. It should not be mandated to the vaccines needed to attend school.

Thank you for your attention.

Jean

From: Alan Curtis
Sent: 10/31/2022 1:28:30 PM
To: DOH WSBOH
Cc:
Subject: WA State mandates for the Covid MRNA treatment shots

External Email

To those willing to inquire,
I am appealing to you to NOT approve any WA State mandates for the Covid MRNA treatment shots! Informed consent and the freedom of choice with our bodies is paramount.

Much more information is now available proving the " Covid MRNA treatment shots " are not effective at preventing Transmission or infection of the Sars Cov-2 virus. This completely removes any benefit to mandating the shots.

And the risk to benefit ratio for children shows vastly more risks from the shot than any benefit for an extremely low mortality rate. So Please do not mandate the shots for Wa State School systems.

Hopefully you all are already aware of this data and would make your decisions based on this information.

Thank you,
Alan Curtis
514 Q st
Port Townsend, wa 98368

From: 369
Sent: 11/2/2022 9:21:44 AM
To: DOH WSBOH
Cc:
Subject: Stop the vaccine mandates nonsense...

External Email

We as mankind got to stop ACIP (the Advisory Committee on Immunization Practices) recently recommended adding Covid shots to the CDC pediatric schedule. Mandate of any kind is the invasion and colonization of mankind body and enslaving mankind of earth. This is going too far and it must stop!

Tri

From: Eliesha KK
Sent: 11/2/2022 5:20:52 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: NO WAY to the COVID shot mandate in Washington state for kids

External Email

I am a resident of Spokane, Washington. I am opposed to adding COVID shots to the CDC pediatric schedule. I am against any COVID mandates in our state. I am opposed to adding it to the school schedule for students of ANY age.

Eliesha Kent

From: Kari White
Sent: 11/1/2022 10:37:25 AM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: Vaccine Mandate response

External Email

To WA State Health Officials,

I am writing to convey my strong stand against any COVID vaccine mandates in our state, including our schools. Evidence continues to mount that these vaccines are ineffective, while long-term effects continue to present, sometimes fatally. With even the CDC acknowledging the shots do not prevent infection or transmission, and that any protection fades rapidly, the cost does not justify making our children test subjects for drug companies.

Furthermore, it has been proven that the existing COVID vaccines fail to meet your own Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030. This will undoubtedly result in lawsuits at the cost of taxpayer's money, a fiscally irresponsible move during a recession when we need to be utilizing state funds as wisely as ever.

I implore you to vote NO to this mandate.

Thank you,
Kari White

From: Breanna Eneberg
Sent: 10/31/2022 9:09:46 PM
To: DOH WSBOH
Subject: RE: COVID Vaccines for kids

External Email

Board of Health Members,

As a very concerned mother, I am sending this note to strongly implore you: DO NOT make the Covid vaccines a requirement for kids in Washington State to attend school.

I have several reasons for this, as follows:

1. The vaccines don't stop anyone from getting the virus or passing it to other people.
2. Kids are at almost statistically ZERO risk of serious impacts from covid (hospitalization or death)
3. Most kids in this state have already had Covid at least once if not multiple times (my kids included) so have natural immunity.
4. There is significant risk (especially for young men) of myocarditis and lasting damage to the heart (including death).

The bottom line is that the risks of the vaccine for kids DO NOT outweigh the benefits!!! The decision to get these vaccine's MUST be left to individual parents in conjunction with their doctors. Please follow the science! And, if you need examples from other countries, please look at the policies of European countries who have seen the facts I've noted above and have significantly cut back or eliminated recommendations for Covid vaccines for kids. DO THE RIGHT THING - - DO NOT make the Covid vaccines a requirement for kids in WA state to attend school!!!

Sincerely,
Breanna Eneberg,
Lifetime Washington State Resident

From: kathy cushman
Sent: 10/31/2022 9:23:32 PM
To: DOH WSBOH
Cc:
Subject: COVID shot in schools

External Email

To whom it may concern,
The parents in Washington state do NOT want a COVID vaccine requirement in our schools. The reasons for this is 1.) Vaccines have not been tested enough or for a long enough period of time to satisfy the public. 2.) There is a LARGE amount of data to show that these vaccines can actually cause harm to people. MORE HARM THAN WHAT COVID WOULD HAVE DONE TO A YOUNG PERSON. 3.) parents should have the right to choose , along with the advice from their family doctor, what is put into their child.
I know many parents who will pull their kids out of the public school if the shot is mandated .
Please listen to the people of Washington.
Thank you, Kathleen Cushman

Sent from Yahoo Mail on Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.onelink.me%2F107872968%3F>>

From: Gail Molina
Sent: 10/21/2022 4:39:01 PM
To: DOH WSBOH
Cc:
Subject: Covid back requirements children

External Email

The CDC and BOH have ignored, for years now, the hundreds of thousands of adverse effects reported to VAERS, following these shots. Many of the side effects have been life-ruining. It is unfathomable to me why our children are being targeted with a shot requirement when these shots have proven to NOT be effective, nor have they stopped transmission, as we were told they WOULD by the CDC Director. According to the early data from the CDC, children were NEVER in a high category of serious adverse effects from Covid, with close to 100% recovery rate, nor did they ever "transmit the virus to their loved ones" any more than anyone else in society did.

Children's lives have already been ruined due to lockdowns, masking (which is not effective at stopping viruses!), and absence from school. Therefore, it is a very perverse and evil society we live in that forces a very INeffective and potentially very dangerous shot on children.

Has the BOH or CDC EVER sat down and discussed all these concerns with the thousands of doctors all over the world who have tried to sound the alarm of the ineffectiveness and potentially dangerous side effects they are seeing from these shots? The answer is a resounding, "No". I am wholeheartedly against adding the Covid shots to the vaccination schedule for children, and the BOH should be as well.

Gail

Sent from Yahoo Mail on Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.onelink.me%2F107872968%3F>>

From: Jay Johnstone
Sent: 10/31/2022 9:30:31 PM
To: DOH WSBOH
Cc:
Subject: Covid child vaccines

External Email

I am strongly against any mandates for children getting Covid vaccines in any way. I urge you to vote against this.

Sincerely

David Egertson
509-701-9854

From: Patrice
Sent: 11/1/2022 2:13:06 AM
To: DOH WSBOH
Cc:
Subject: Vaccine Mandates

External Email

Hello,
Thank you for making good choices for the citizens of our fine state of Washington. We live in one of the most beautiful places in the world. Please vote to allow freedom to chose the Covid vaccine and refrain from any Covid vaccine mandates.
Thank you
Patrice Tullai

From: Eliesha KK
Sent: 11/2/2022 5:22:37 PM
To: DOH WSBOH
Cc:
Subject: Comment for WA Board of Health (BOH) meets Wednesday, November 9

External Email

I am a resident of Spokane, Washington. I am opposed to adding COVID shots to the CDC pediatric schedule. I am against any COVID mandates in our state. I am opposed to adding it to the school schedule for students of ANY age.

Eliesha Kent

From: Amanda Ewing
Sent: 10/31/2022 9:33:35 PM
To: DOH WSBOH
Cc:
Subject: Concerned WA Parent

External Email

I am a Washington resident located in Spokane. I am GREATLY OPPOSED to ANY mandate for the Covid-19 Vaccine for children and believe it should NEVER be added to the childhood immunization schedule. The vaccine is highly problematic for children as it is an all risk no reward shot with especially pronounced increased side effects in young boys as serious as heart damage. Parents have spoken, the numbers show that they are not vaccinating their kids with this experimental and damaging failure of a medical product. Enforcing the use of it so parents can send their children to school, a right we possess as citizens of the United States, will ensure that protests abound and school rosters dwindle to staggering lows.

Trust that we have done our research, that we are the BEST providers of protection to our children as we are given our children by God himself and tasked with ensuring their well being. The great citizens of this state will not stand for this and there will be massive pushback if an attempt is made to allow this to pass. Please use common sense and actual research. Make the right decision and block the addition of this joke of a product to our already overly inflated vaccine schedule.

In strength,
Amanda Ewing
Spokane, WA

From: rexinebennett60@gmail.com
Sent: 11/1/2022 10:27:22 AM
To: DOH WSBOH
Cc:
Subject: Vaccine Mandate

External Email

WSBOH;

I personally do not have negative feelings about the COVID 19 vaccine.

But I do have very strong feeling as to "who says and determines who should get those vaccines".

PLEASE!

NO,NO,NO,NO,NO, to K-12 mandated COVID 19 vaccine or COVID 19 products. Much too risky.

Enough is enough.

NO more mandates.

Parents are to decide their children's health care...not the government police.

So PLEASE keep out of our personal business!

This sounds rather "rough and tough", but sometime that is the only way for the public to be heard.

Thank you for listening. Rexine Bennett

From: Kathy Egbert
Sent: 11/1/2022 6:54:35 AM
To: DOH WSBOH
Cc:
Subject: Covid shots and our children

External Email

Washington State Board of Health members:

I am STRONGLY OPPOSED TO ADDING THE COVID SHOT to the pediatric schedule. As time and science have shown that the Covid shots have proven not to be effective and, in many cases, harmful/deadly, it seems extremely unwise and dangerous to add the shot to the CDC pediatric schedule here in Washington State, or anywhere for that matter. The public does not want any liability-free Covid-19 products to be mandated for our kids.

Since the TAG group last took comments, even more evidence has become available regarding the lack of safety and effectiveness of the shot. I strongly urge that the TAG group and Washington State BOH reject adding this to the long list of mandated shots that the children of Washington State are already subject to.

Given all that we currently know about this so-called vaccine, it would be totally against common sense to require this be given to our school children. Please make the intelligent decision for the people of the State of Washington.

A copy of this email has also been sent to my State Representatives.

Thank you very much,

Kathy Egbert

301 Sable Drive

Everson, WA 98247

--

Kathy Egbert
KathyEgbert15@gmail.com <mailto:KathyEgbert15@gmail.com>

Abraham Lincoln once said, "America will never be destroyed from outside. If we falter and lose our freedoms, it will be because we destroyed ourselves."

Freedom is never more than one generation away from extinction. We don't pass it on to our children in our blood. It must be fought for, protected and handed to them by our

example or one day we will spend our sunset years telling our children and our children's children what it was once like in the United States when men were free. Ronald Reagan

From: Jessica Stober
Sent: 11/1/2022 7:34:04 AM
To: DOH WSBOH
Cc:
Subject: Nov 9th meeting

External Email

Just wanted to send my comment that I will not ever be injecting my children with the "more harm than benefit" covid vaccine, whether it's mandated or not. We own a house in another state and would move before we would ever consider giving them a shot that could affect their future fertility etc.

Maybe at the meeting discuss how our country is running out of diesel and it will be a health emergency if we can't get food to grocery stores and we all starve to death.

Thanks!

From: Dan and Gloria Clark
Sent: 10/19/2022 2:23:58 PM
To: DOH WSBOH
Cc:
Subject: Thank You for Listening to the Citizens of WA State

External Email

Dear BOH Members: Thank you for listening to the concerns of us as citizens of Washington State and for voting to adopt the TAGs recommendation to not add the COVID-19 vaccine to Washington's list of required immunizations for child care and school entry at your April 13 virtual public meeting. We are confident that the emerging scientific data will continue to affirm your decision. Thank you for your thoughtful consideration in your role to protect the health of the children in our State.

All you need to do is to check out the latest data from the VAERS Covid -19 Vaccine Adverse Events Data, dated through September 30, 2022. VAERS is co managed by the CDC and the FDA. Are you willing to add children to this list? Please respect the fact that the vaccine is neither safe nor effective.

VAERS data shows that the covid vaccine has produced over: (k means thousand)

1. 31 k deaths
2. 179 k Hospitalizations,
3. 136 k urgent care visits
4. 207 K Doctor office visits,
5. 10 K anaphylaxis reactions
6. 16 k Bells Palsy cases
7. 5 k miscarriages
8. 16 k heart attacks
9. 52 K cases of myocarditis/pericarditis
10. 58 K permanent disabilities
11. 9 k low platelets
12. 34 k life threatening cases
13. 44 K Severe allergic reactions
14. 14 k Shingles cases

Vote no to add the covid vaccine to the list of childhood vaccines.

Respectfully Submitted,
Gloria Clark
Retired Registered Dental Hygienist
BA in Dental Hygiene and BS in Natural Science
#####

From: Brad Loosveldt
Sent: 11/1/2022 8:08:05 PM
To: DOH WSBOH
Cc:
Subject: No Covid shots for our kids

External Email

I am completely against the Covid-19 shots for our children. They do NOT need it because the data shows that for the vast majority of children their symptoms will be mild and then they'll have natural immunity, thus becoming part of the solution. The risk of injury to our kids is far greater than the benefits of this mRNA shots. We also don't have many studies on kids and the shot so it makes little sense to have them become Guinea pigs for this experimental treatment. We now know that this shot is NOT safe (+30,000 adverse reactions and counting)

OR effective (it appears the more boosters you have the more likely you are to get Covid) and public health officials have known since December of 2020 that it doesn't stop transmission of the virus.

Please don't approve this shot. Our kids have suffered enough In lost academics and social, psychological and emotional damage they may never recover from. Please pick the safety of our children over the profits of the big pharmaceutical companies that you seem to be protecting. Other countries are protecting their children by limiting the age to over 50 years old who gets this shot.

This is not really a vaccine the definition of vaccine had to be changed I am completely against the Covid-19 vax for our children. They do NOT need it because the data shows that for the vast majority of children their symptoms will be mild and then they'll have natural immunity, thus becoming part of the solution. The risk of injury to our kids is far greater than the benefits of this mRNA vax. We also don't have many studies on kids and the vax so it makes little sense to have them become Guinea pigs for this experimental treatment. We now know that this vax is NOT safe (+30,000 adverse reactions and counting)

OR effective (it appears the more boosters you have the more likely you are to get Covid) and public health officials have known since December of 2020 that it doesn't stop transmission of the virus.

Please don't approve this vax. Our kids have suffered enough In lost academics and social, psychological and emotional damage they may never recover from. Other countries are protecting their children by making the shot available only to people 50 years old and above. Please protect our children's health instead of big pharmaceutical profits by not forcing this shot on our children
Brad Loosveldt

Sent from my iPhone because

Sent from my iPhone

Sent from my iPhone

From: Don Jacobson
Sent: 10/22/2022 8:30:31 AM
To: DOH WSBOH
Cc:
Subject: Do NOT Add Covid "Vaccine" to Required List/Process

External Email

The evidence & science indicate that the "vaccine" (never tested by Pfizer to stop transmission) is killing many more persons than the alleged disease.

I've seen videos of dozens of people dropping dead within days of getting a Covid injection.

The choice of what we inject into our bodies is an absolute indicator of personal freedom.

Stop kneeling to Big Pharma and their shills.

Instead - return to Constitutional government uniformly applied.

Don Jacobson
Network Technician/Engineer
117 NW 101 St
Vancouver, WA 98685

From: rob morrill
Sent: 10/21/2022 9:06:34 AM
To: DOH WSBOH
Cc:
Subject: Concern parent

External Email

Greetings,

It has come to my attention the CDC is now authorizing the new MRNA Covid EUA vaccination for children. No long-term trial studies, no data to support that newborns and older children are at any risk of expiring due to the strain of Covid. Therefore, I reject the imposing of children being required to receive the experimental vaccine to attend school. If mandated, I will be forced to conduct home education for my child. I currently possess two framed documents on my library wall that recognize I have a formal education and I am qualified to teach.

Under no circumstances will you impose any mandate to receive a EUA MRNA vaccination upon our children in order to attend school in Washinton state. Thank you.

Robert E. Morrill

From: quadchick777
Sent: 11/3/2022 9:01:20 AM
To: DOH Secretary's Office
Cc:
Subject: Covid vaccine

External Email

Please let it be heard, we will not return to public school if this vaccine is added to the schedule for public schools. We don't know how this will effect our children and we do know that this vaccine does NOT stop the spread.

Adrienne Mohan

Sent from my U.S.Cellular© Smartphone

From: Farhad Mazandarany
Sent: 10/31/2022 2:05:39 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH), DOH WSBOH
Cc:
Subject: Mandating Covid Vaccines for Washington Children

External Email

I have referenced below a document prepared by Informed Choice Washington, dated April 7, 2022 that outlines in great detail the reasons for recommending against a mandate for vaccinating Washington children for Covid-19. Additional facts, data and science since then have only enhanced the case against such a mandate. In short, the facts unequivocally demonstrate that current Covid vaccines fail to meet any of the State required criteria on effectiveness, immunogenicity, safety, reduction of disease burden, reduction of transmission, acceptance by medical community and the public, reasonable administrative burden, and reasonable burden for parental compliance. Given these realities, mandating Covid vaccines for Washington children would be entirely unnecessary, unethical, and contrary to relevant Washington laws. I strongly urge members of the Washington BOH and members of Washington Covid-19 TAG to vote against such a mandate.

Reference: <https://informedchoicewa.org/news/icwa-review-of-covid-19-shots/>
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finformedchoicewa.org%2Fnews%2Freview-of-covid-19-shots%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C64fe3f83836643298ca708dabb83a8a6%7C11>>

Sincerely,

Farhad Mazandarany

From: Paul Early
Sent: 10/23/2022 12:10:47 PM
To: DOH WSBOH
Cc:
Subject: (Against) Adding CV Shots to the Pediatric Schedule

External Email

I would like it to clearly voice my opposition to adding CV shots to any mandatory list, especially for pediatric patients.

The risks simply do not outweigh the benefits.

In Good Health,

Paul C Early, DC

ph: 206-440-7700

fax: 206-440-8900

www.NorthStarChiropracticCenter.com

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.northstarchiropracticcenter.com>>

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From: learash@yahoo.com
Sent: 11/1/2022 4:40:50 PM
To: DOH WSBOH
Cc:
Subject: COVID shot mandates for children

External Email

To Whom It May Concern:

I do not want COVID shot mandates for children in our state!

Lea Rash

Auburn, WA

With the evidences stated above, it is the sensible decision to remove even the idea of mandating these "vaccines" for children.

Thank you
Tim Simon RN, BSN
balloongrandpa@icloud.com

Sent from my iPhone

From: Erin Zasada
Sent: 10/24/2022 9:57:33 AM
To: DOH WSBOH
Cc:
Subject: Covid vax

External Email

In light of last week's despicable decision made by ICIP committee regarding adding the Covid vaccine to required childhood vaccine schedules', I implore that the WA Board of Health do the right thing and reject the CDC's coming push to have every state add it to their schedules. Data shows that children are at an absolute minimal risk for hospitalization/death due to Covid. The shots are still experimental and should absolutely not be pushed on children. Please look at the research...there are plenty of studies to show that these shots are causing children many more problems than they're solving or preventing, most prevalent being serious heart issues. We all know now that the shots do not stop transmission of the virus either, which was the original push for young, healthy kids and adults to get vaccinated..."for the greater good" and "to protect Grandma and Grandpa." Pfizer's own executive Janine Small said they had not tested the vax on whether it curbed transmissibility.

PLEASE, do the right thing...listen to the citizens of this state and ensure that the children of this state (and their parents) will be able to maintain autonomy over their own bodys', especially in the case of mandating an experimental drug.

Please note, if you do vote to add the vax to the school schedule, you'll be responsible for an incredibly massive exodus from the government-run schools in the state.

Erin Zasada
Liberty Lake, WA

From: Leslie Elliott
Sent: 11/1/2022 9:28:38 AM
To: DOH WSBOH
Cc:
Subject: Vaccine Advisory Committee comment

External Email

Dear VAC,

I hope you will use caution and sense in considering the inclusion of the covid shot to the pediatric vaccine schedule. Clearly, there is no strong medical indication to do so, and very good reasons to avoid giving this shot to children (or anyone, for that matter).

Please stand up for the people of this state and make the right choice, not the one you are being pressured to make by monied interests. Reject the covid shot for kids.

Sincerely,

J Elliott

From: Sam Grant
Sent: 10/31/2022 12:33:50 PM
To: DOH WSBOH
Cc:
Subject: Covid shot

External Email

Good afternoon. In regards to mandating the covid 19 shot for school aged children, I request that you please vote NO to this unsafe requirement for our children.

Thank you,
Samantha Grant

From: "The Vales"
Sent: 10/31/2022 9:32:30 PM
To: DOH WSBOH
Cc:
Subject: childhood vaccine

External Email

I ask you to not add these untested covid vaccines to the childhood vaccine schedule for school entry. This is a liability free experimental product that has been proven over and over to be ineffective at stopping the transmission of the covid-19 virus and does not prevent severe illness with the new strains. The most current bivalent booster does not even contain the current circulating mutation of the virus. Children are at zero risk of any harm from this virus but study after study proves there is risk to this vaccine. I urge you to keep this vaccine off of the childhood vaccine schedule for public school. I can promise you if it is required for school entry you will see two things, first, you will see a mass exodus of public education and second you will see a large increase in vaccine hesitancy for all childhood vaccines. There are so many studies out there that are being done regularly in country after country proving the ineffectiveness of these vaccines especially on our children. Parents are now more informed than ever, and forcing this untested, liability free shot on their children will have dire consequences.

Thank you for taking the time to read.

Sincerely,

A concerned mother of seven.

*

*

*

*

From: Phil and Karen
Sent: 11/2/2022 6:01:51 AM
To: DOH WSBOH
Cc:
Subject: Children Covid mandate

External Email

Only the parents should decide on any vaccine for their children , not the government or health department.
Shame on you wicked people .
God will judge you .
Shalom Karen Simons
Sent from my iPhone

From: Patty Bailey
Sent: 10/25/2022 4:28:30 PM
To: DOH WSBOH
Cc:
Subject: Vote "NO" on childhood covid shot for school

External Email

To the Board of Health:

Please review the V-Safe data from the CDC here. <https://icandecide.org>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ficandecide.org%2F&data=05%7C>

.

This high injury rate is unprecedented. No one should ever be required to take medicine/injections of any kind, especially experimental ones, and especially ones with this kind of injury record. Vote "no" for public school requirement.

The law: "State and federal law require state educational agencies and local school districts to provide all elementary and secondary students with equal access to public education—irrespective of race, color, sex, gender identity, religion, national origin, sexual orientation, disability, or immigration status."

Thank you.

Patricia Bailey
11250 26th Ave. S. W.
Burien, WA 98146
206-242-5156

From: Alisa K
Sent: 10/31/2022 10:32:10 PM
To: DOH Secretary's Office
Cc:
Subject: No Covid Mandates

External Email

Dear WA State agencies and officials,

I do not want COVID shot mandates in our state, in our schools.

This would be an irresponsible decision with the knowledge we have about them. You can still get Covid, spread Covid, they wear off, do not last, still Emergency use formulas, statistically it's a non issue for younger people, and most have had it providing natural immunity.

This should be offered as optional, similar to the flu shot for those who choose to.

Thank you for considering,
Alisa Kruse
Auburn WA

From: Dan Nelson

Sent: 11/1/2022 5:15:08 PM

To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Heather.Drummond@doh.wa.gov.

Subject: Mandatory COVID 19 Vaccination for Children



attachments\1CD1292F7FA044F9_final-ICWA-to-BOH-and-TAG-on-Criteria-.pdf

External Email

We are opposed to requiring the COVID 19 vaccine to any child of school age for the reasons listed in the enclosed document. This is not really a vaccine since it does not stop transmission of COVID 19. There are too many potential downside effects compared to any potential benefits. There are greater risks from the Jab vs the contracting COVID 19.

Dan and Lynette Nelson

*Informed*CHOICEWA.org

Date: January 7, 2021

To: The Washington State Board of Health Members and COVID-19

TAG From: The Board and Members of Informed Choice WA

Dear Board of Health and TAG Members:

You are facing what may prove to be the most important decision you will ever face as a member of the board or a group, or perhaps in your life.

The mRNA and DNA COVID-19 shots are unlike any other vaccines given before. The global push for their uptake and the volume of reported adverse reactions and deaths following administration are unprecedented. The hundreds of thousands of medical and scientific professionals globally standing up and speaking out against the response to COVID and to the shots is unprecedented, as is censorship on scientific debate. When this nation's top doctors and scientists are being kicked off of social media platforms and being fired from their jobs for daring to speak on their findings and science critical of current policies, it is clear something has gone terribly wrong.

The CDC acknowledges the shots do not prevent infection or transmission and that any protection afforded fades rapidly, yet they refuse to abandon their push for increased uptake and boosters, and they refuse to promote existing early treatment protocols or acknowledge the mountain of evidence of the superior safety and effectiveness of naturally-acquired immunity. The systemic capture of federal agencies by the drug industry and globalists has never been more obvious.

Public Health in the U.S. is currently suffering from a lack of checks and balances and a dangerous dilution of critical facts. If every citizen were to watch the FDA's Vaccine and Related Biologicals Advisory Committee (VRBAC) meetings and to read the entirety of the clinical trial submissions to the FDA and the injury and death reports filed with Pfizer and VAERS, they would understand the experimental nature of the COVID shots and the known and suspected risks. They would question the clinical trial irregularities, the buried data, the lack of independent evaluation, and the high levels of conflicts of interest. But most do not. Votes for recommendation are made by federal entities

despite the lack of scientific justification and the details of the meetings are not incorporated into the language passed down to citizens. The messaging becomes, “The vaccines are safe and effective and recommended by the CDC.” This simplistic false messaging creates division at all levels of society, undermines fully informed consent, violating federal regulations and human rights declarations.

If after the past two years of witnessing the erratic federal response to COVID you still have faith in federal recommendations, we ask you to consider one clear example that reveals the federal agencies and committees do not deserve your trust. In the absence of a single co-administration safety study, the ACIP approved and the CDC actively promotes this message:

“COVID-19 vaccine and other vaccines may be administered on the same day.”

This is not science. This is not safety. This is not in the best interest of vaccine recipients. This is using Americans, especially our children who are most impacted, as unwitting test subjects. This is human experimentation without informed consent. This is criminal.

We are asking you today to honor the Precautionary Principle and First Do No Harm. We are asking you to dismantle the TAG, to halt rulemaking consideration for adding COVID shots to school requirements, and to adopt our Rulemaking Petition for a new rule that would prohibit mandating Emergency Use Authorized products and licensed products that lack completed Phase 3 trials.

Attached is our preliminary response to the “Criteria for Reviewing Antigens for Potential Inclusion in WAC 246-105-030” that supports our requests. There is far more scientific and medical information available. We hope this is just the beginning of your reviewing the critically important information you have likely been missing until now.

Sincerely,

The ICWA Board

Bernadette Pajer, Yael Kantor, Heidi Hartnell, Angela Dye

*Informed***CHOICE**WA.org

Informed Choice Washington Presents:

**A review of the COVID-19 shots
(Pfizer, Moderna, Janssen)
using the Washington State Board of Health’s “Criteria
for Reviewing Antigens for Potential Inclusion in WAC
246-105-030”**

<https://sboh.wa.gov/Portals/7/Doc/Publications/ImmunizationCriteria-Update2017-Final.pdf>

Before proceeding, it must be noted that the COVID-19 shots currently available do not meet the definition of “immunizing agent” per WAC 246.105.020(13), which states:

"Immunizing agent" means any vaccine or other immunologic drug licensed and approved by the United States Food and Drug Administration (FDA), or meeting World Health Organization (WHO) requirements, for immunization of persons against vaccine-preventable diseases.

None of the currently available COVID-19 shots are licensed and approved by the FDA for school-age children; the shots similarly do not meet WHO requirements and are only authorized by the WHO for emergency use.

WAC: <https://app.leg.wa.gov/WAC/default.aspx?cite=246-105-020>

For clarity, BOH’s criteria language is shown in red, and ICWA language is shown in black.

I. Criteria on the effectiveness of the vaccine

1. A vaccine containing this antigen is recommended by the Advisory Committee on Immunization Practices and included on its Recommended Childhood & Adolescent Immunization Schedule.

The vaccine **must** be recommended by the ACIP. The ACIP reviews **licensed** vaccines. It makes recommendations for newly licensed vaccines and regularly updates its recommendations. Its process includes:

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- (1) a review of the Food and Drug Administration (FDA) labeling/package inserts for each vaccine;
- (2) a thorough review of the scientific literature (both published and unpublished, when available) on the safety, efficacy, acceptability, and effectiveness of the immunizing agent, with consideration of the relevance, quality, and quantity of published and unpublished data; (3) an assessment of cost effectiveness;
- (4) a review of the morbidity and mortality associated with the disease in the population in general and in specific risk groups;

(5) a review of the recommendations of other groups; and
(6) a consideration of the feasibility of vaccine use in existing child and adult immunization programs. Feasibility issues include (but are not limited to) acceptability to the community, parents, and patients; vaccine distribution and storage; access to vaccine and vaccine administration; impact on the various health care delivery systems; population distribution effects; and social, legal, and ethical concerns. [emphasis added]

Do any of the COVID-19 shots fulfill this criterion? No.

The ACIP did NOT recommend a COVID-19 shot licensed by the FDA for use in ages 5-11 or 12-15, nor did it place such a shot on the CDC Recommended Schedule.

There is no FDA COVID-19 shot licensed for ages 5-15 and no COVID-19 shot whatsoever on any CDC Recommended Schedule for any age. CDC Immunization Schedules, <https://www.cdc.gov/vaccines/schedules/index.html>.

The CDC recommended schedule website page for ages 7-18 mentions the ACIP's EUA and BLA recommendations for COVID, but it DOES NOT include the shots on the schedule.

On May 12, 2021, the ACIP adopted the following recommendation: "The Pfizer-BioNTech COVID-19 vaccine is recommended for children 12-15 years of age in the U.S. population under the FDA's Emergency Use Authorization." *May 12, 2021 ACIP Meeting - Discussion and Vote*, CDC YouTube channel, <https://youtu.be/91FCQN1aYqk>.

On November 2, 2021, the ACIP adopted a similar recommendation for 5-11 year olds. *Nov 2, 2021 ACIP Meeting - Clinical considerations for COVID-19 vaccination & Votes*, CDC YouTube channel, <https://youtu.be/Fknv90AxSn8>.

Federal Emergency Use Authorization statutes indirectly prohibit school mandates of EUA products by requiring recipients be informed they have the option to accept or refuse the vaccine:

"The possible side effects of the vaccine are still being studied in clinical trials. . . Under the EUA, there is an option to accept or refuse receiving the vaccine." *Vaccine Information Fact Sheet for Recipients and Caregivers about the Pfizer-BioNTech COVID-19 Vaccine to Prevent Coronavirus Disease 2019*

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(COVID-19) for Use in Individuals 5 through 11 Years of Age, pp. 4-5, <https://www.fda.gov/media/153717/download>.

The option to accept or refuse an EUA product is not conditioned upon written assertion of exemption. Medical, personal, or religious exemptions are not required in order to exercise the right to refuse. Under EUA law, a parent or guardian may simply

decline a shot for their minor child, without providing explanation or paperwork. A state-level daycare or school requirement would introduce the need for filing of exemptions, unlawfully exceeding the parameters set forth by Congress for EUA products.

“FDA believes that the terms and conditions of an EUA issued under section 564 preempt state or local law, both legislative requirements and common-law duties, that impose different or additional requirements on the medical product for which the EUA was issued in the context of the emergency declared under section

564.” *Vaccine EUA Questions and Answers for Stakeholders*, U.S. Food & Drug Administration,

<https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/vaccine-eua-questions-and-answers-stakeholders#61b6059d67093>

Alarming, the CDC and ACIP made this recommendation even though they acknowledged that for both age groups:

Regarding potential harms after vaccination, evidence was type 4 (very low certainty) for serious adverse events and type 1 (high certainty) for reactogenicity. No data were available to assess the other GRADE benefits and harms including prevention of hospitalization due to COVID-19, prevention of multisystem inflammatory syndrome in children (MIS-C), SARS-CoV-2 seroconversion to a non-spike protein, or prevention of asymptomatic SARS-CoV-2 infection.

The Advisory Committee on Immunization Practices’ Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine in Adolescents Aged 12–15 Years — United States, May 2021, CDC MMWR, May 21, 2021,

<https://www.cdc.gov/mmwr/volumes/70/wr/mm7020e1.htm> and *The Advisory Committee on Immunization Practices’ Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine in Children Aged 5–11 Years — United States, November 2021*, CDC MMWR November 12, 2021, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7045e1.htm>.

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Vaccines and Related Biological Products Advisory Committee (VRBPAC) member Dr. Eric Rubin stated “[Just b]ecause we give an EUA to the vaccine, doesn’t mean we have to use it. And I think we would have to think hard about how to use it given all of the concerns that have been raised.” Transcript of *FOOD AND DRUG*

ADMINISTRATION (FDA) Center for Biologics Evaluation and Research (CBER) 166th Vaccines and Related Biological Products Advisory Committee (VRBPAC) Meeting, June 10, 2021, p. 242. <https://www.fda.gov/media/150815/download>.

How can the CDC claim that benefits outweigh risks when they admit they do not know the risks?

Comirnaty is the only COVID-19 product that has ostensibly received FDA licensure for any pediatric populations—namely those 16 and up; however, that licensure is limited to manufacturing and delivery. The FDA has stated that this product is merely “**ready** for approval for **use** in individuals 16 years of age and older . . .” [emphasis added]. *August 23, 2021 Approval Letter - Comirnaty*, from FDA to BioNTech, p. 4, <https://www.fda.gov/media/151710/download>. The Comirnaty vaccine is not available anywhere in the United States, and there is debate about whether the vials of Pfizer’s EUA product are now “licensed” for those 16 and up, or if those are still EUA products. The FDA states that EUA Pfizer-BioNTech COVID-19 Vaccine and the Comirnaty (COVID-19 Vaccine, mRNA) “are legally distinct with certain differences that do not impact safety or effectiveness.” There is much debate over what “legally distinct” means, especially to consumers. If “legally distinct” means that the currently available Pfizer products in the U.S. are under EUA regulations, then there is no licensed product available for 16-18 year olds. Regardless of whether the Pfizer product is licensed for 16-18 year olds, the product lacks completed Phase 3 clinical trials, and the PREP Act still shields manufacturers for liability for injuries and deaths. As far as we can tell, never in history has the FDA licensed a product without completed clinical trials, nor when all the ongoing trials have been unblinded, subverting the ability to compare outcomes.

There are ZERO co-administration safety studies; therefore, it is highly concerning that the CDC states, and the Washington State Department of Health repeats: “COVID-19 vaccine and other vaccines may be administered on the same day.” CDC, Immunization Schedule, COVID-19 Vaccination, <https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html>

Disregarding the absence of any safety studies, the Washington DOH states, “Your child can get a COVID-19 vaccine at the same time they get other vaccines. You do not need to schedule your child’s required school vaccinations or other recommended vaccines separately from COVID-19 vaccination. A COVID-19 vaccine appointment is another opportunity to get your child caught up on all of their recommended vaccines.”

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Washington State Department of Health, Vaccinating Youth, <https://www.doh.wa.gov/Emergencies/COVID19/VaccineInformation/VaccinatingYouth#VaccineTiming>

As noted in our cover letter, this is not science. This is not safety. This is not in the

best interest of vaccine recipients. This is using Americans, especially our children who are most impacted, as unwitting test subjects. This is human experimentation without informed consent. This is criminal.

2. The vaccine containing this antigen is effective as measured by immunogenicity* and population-based prevention data in Washington State, as available.

*Immunogenicity means the ability of an antigen or vaccine to stimulate the body to produce an immune response. Vaccines often include antigens that stimulate an immune response to a particular disease but are not necessarily the same as the organism that would cause the disease.

In the clinical development of a vaccine, the effectiveness of the vaccine is studied using FDA-approved research protocols that evaluate whether a vaccine protects individuals from contracting the disease in population-based studies or generates an immunologic response (immunogenicity) comparable to vaccines that have been shown to be effective in preventing disease. More information about its population-based effectiveness is gained from large trials and community-based analyses after FDA approval. There may or may not be effectiveness data from Washington State, but the disease prevalence and incidence in the state should be sought and reviewed.

Do any of the COVID-19 shots fulfill this criterion? No.

Immunogenicity: While the COVID-19 shots trigger the recipient's cells to create spike proteins, which then trigger an immune response and antibodies to the self-created spike proteins, this immune response has proven incapable of preventing infection or transmission. In short, the COVID shots do not prevent recipients from "contracting the disease."

Some studies show recipients may be afforded a short window—a few weeks or months—during which their risk of infection or risk of severe disease is minimally reduced in comparison to those without natural immunity, but even this protection appears to be dropping with each new variant.

This preprint study shows that PCR-positive tests for Delta variant occurred in a higher percentage of vaccinated individuals than in unvaccinated. From this it could be concluded that, regardless of vaccination status, all individuals are able to spread COVID-19 with similar viral loads. Riemersma et al., *Shedding of Infectious SARS-CoV-2 Despite Vaccination*,

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<https://www.infosperber.ch/wp-content/uploads/2021/10/210731-Wisconsin.Viral-Load.pdf>.

Dr. Rochelle Walensky states that the vaccine does not prevent infection or transmission of the Delta variant, CNN interview with Wolf Blitzer, July 27, 2021, <https://www.youtube.com/watch?v=TKFWGvvlVLI>

Another pre-print study, Acharya et al., *No Significant Difference in Viral Load Between Vaccinated and Unvaccinated, Asymptomatic and Symptomatic Groups Infected with SARS-CoV-2 Delta Variant*, “found no significant difference in cycle threshold values between vaccinated and unvaccinated, asymptomatic and symptomatic groups infected with SARS-CoV-2 Delta.”

<https://www.medrxiv.org/content/10.1101/2021.09.28.21264262v1>.

The CDC reported that among the first U.S. cases of COVID-19 attributed to the Omicron variant, 79% of the 43 cases studied occurred in fully vaccinated individuals, including 14 who had received booster doses. *SARS-CoV-2 B.1.1.529 (Omicron) Variant — United States, December 1–8, 2021*, CDC *MMWR*, December 17, 2021, <https://www.cdc.gov/mmwr/volumes/70/wr/mm7050e1.htm>.

The criterion explicitly requires that “information about population-based effectiveness is gained from large trials,” yet the clinical trial study on which the EUA was based for 5-11 year olds included only 2,268 children total. CDC and ACIP acknowledged that the study was too small to find serious adverse reactions. (See our response above to Criterion #1.) *Evaluation of the BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age*, *N Engl J Med* 2022; 386:35-46, DOI: 10.1056/NEJMoa2116298, <https://www.nejm.org/doi/full/10.1056/oa2116298>.

A pre-print study suggests that vaccine effectiveness wanes to negative effectiveness, therefore increasing chances of contracting COVID, after 90 days. The authors suggest a booster would be necessary in order to attain previous levels of protection. Do parents really want their child to get a booster every 90 days? Would this be practical or manageable? Hansen et al., *Vaccine effectiveness against SARS-CoV-2 infection with the Omicron or Delta variants following a two-dose or booster BNT162b2 or mRNA-1273 vaccination series: A Danish cohort study*, <https://www.medrxiv.org/content/10.1101/2021.12.20.21267966v3#p-5>

In contrast to the inability of the COVID shots to prevent disease, natural immunity has been found to prevent infection. This superior, broad protection will serve children well throughout their lives. “[C]hildren display a characteristically robust and sustained adaptive immune response against SARS-CoV-2 with substantial cross-reactivity against other hCoVs.” Dowel, et al., *Children develop robust and sustained*

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cross-reactive spike-specific immune responses to SARS-CoV-2 infection, <https://www.nature.com/articles/s41590-021-01089-8>

In study after study, it has been shown that natural immunity far exceeds vaccine-induced immunity in length and quality. Please view the following studies here that show the superiority of natural immunity: "144 Research Studies Affirm Naturally Acquired Immunity to Covid-19: Documented, Linked and Quoted," Brownstone Institute, October 17, 2021.

3. The vaccine containing this antigen is cost effective from a societal perspective.

This analysis should consider both the costs of the immunization (e.g. antigen, storage, administration, medical and societal costs of adverse reactions to the immunization, etc.) and the benefits of the immunization (e.g. lives saved, medical and societal benefits of preventing adverse reactions from vaccine-preventable disease, etc.). This process may include consultation with an economist as resources allow. Vaccines may be cost effective without being cost saving. In other words, the direct costs of some vaccines (e.g. antigen, storage, administration) balanced against direct savings (e.g. medical care, disability, death) may not result in net savings. Societal or indirect costs (e.g. lost productivity of care takers of ill children) will also need to be taken into consideration. These costs are much harder to quantify. Not all vaccines recommended by the ACIP are cost saving or equally effective, so some determination of the vaccine's relative cost effectiveness may need to be made for comparison purposes when applying the criteria.

Do any of the COVID-19 shots fulfill this criterion? No.

To parents and members of Informed Choice Washington, the most important consideration in this criterion is the “medical and societal costs of adverse reactions to the immunization” as well as what the criterion overlooks:

- the cost of ignoring or outright censoring lifesaving preventative and early treatment protocols, which lead to superior natural immunity;
- the cost of exposing children to genetic therapies, such as DNA and mRNA injections, in the absence of adequately sized and designed safety studies for either short or long-term outcomes;
- and the cost of interrupting a child's natural immune response to what is now an endemic virus without a complete understanding of how that interruption will impact their immunity to the virus and its mutations in the future.

Please see risk information provided under Criterion #4 below, in particular, the two graphs summarizing data from Pfizer's clinical trials that have already demonstrated that any benefits from the shots are outweighed by the injuries and death they cause. This does not account for long-term and yet unknown harms.

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4. Experience to date with the vaccine containing this antigen demonstrates that it is safe and has an acceptable level of side effects

Vaccinations are not without side effects. The known risks associated with each vaccine (or antigen) must be balanced against the risks of the disease. Vaccine safety will be evaluated using research and reports from: pre-licensure, the Vaccine Adverse Event Reporting System (VAERS) and the Vaccine Safety Datalink (VSD) project, and other reliable sources.

Do any of the COVID-19 shots fulfill this criterion? No.

While Pfizer's own randomized control trial data indicated a decrease in positive cases, they also showed an increase in illnesses and deaths compared to the placebo group. There is no benefit to reducing cases if it comes at the cost of increased illness, hospitalizations, and death.

The graphic below includes Table S3, *Participants Reporting at Least 1 Adverse Event From Dose 1 to 1 Month After Dose 2 During the Blinded Follow-up Period*, on page 11 of [Pfizer's six-month supplementary appendix](#) to its study entitled [Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine through 6 Months](#). Vaccinees experienced worse health outcomes than did placebo recipients.

The following graphic, which includes Table S4, *Causes of Death from Dose 1 to Unblinding*, on page 12 of [Pfizer's six-month supplementary appendix](#) to its study entitled [Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine through 6 Months](#), illustrates the increase in deaths within six months for those who received the injections. Of particular concern are the types of death, including cardiovascular events

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(in red); there are almost twice as many in the test group as in the control group. This is Level One evidence of harm, as the data is derived from a randomized control trial (RCT).

Although FDA press releases proclaim that the benefits of the product would outweigh its risks, this conclusion is based upon modeling, which is the lowest quality of evidence given its reliance on layers of assumptions and subjectivity. FDA already had access to a superior form of data: the RCT results from the manufacturer itself, which it disregarded; “Therefore, the FDA conducted its own benefit-risk assessment using modelling to predict how many symptomatic COVID-19 cases, hospitalizations, intensive care unit (ICU) admissions and deaths from COVID-19 the vaccine in children 5 through 11 years of age would prevent versus the number of potential myocarditis cases, hospitalizations, ICU admissions and deaths that the vaccine might cause. The FDA’s model predicts that overall, the benefits of the vaccine would outweigh its risks in children 5 through 11 years of age.” FDA NEWS RELEASE: “FDA Authorizes Pfizer-BioNTech COVID-19 Vaccine for Emergency Use in Children 5 through 11 Years of Age,” U.S. Food & Drug Administration, <https://www.fda.gov/news-events/press-announcements/fda-authorizes-pfizer-biontech-covid-19-vaccine-emergency-use-children-5-through-11-years-age>

One 12-year-old child, Maddie de Garay, participated in Pfizer’s study. She suffered multiple and severe injuries, requiring 9 ED visits and 3 hospital stays (totaling 64 days by June 1, 2021). She is still in a wheelchair today. The New England Journal of Medicine article in which Pfizer’s RCT results was reported, [Safety and Efficacy of the](#)

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[BNT162b2 mRNA Covid-19 Vaccine through 6 Months](#), failed to disclose any of Maddie’s adverse reactions. Pfizer disingenuously mischaracterized her injuries as “functional abdominal pain” in its *Emergency Use Authorization (EUA) Amendment for an Unapproved Product Review Memorandum*, p. 30.

<https://www.fda.gov/media/148542/download>. Senator Ron Johnson held a

roundtable, in which many individuals who took the COVID-19 vaccine shared their adverse reaction experiences that required medical attention.

<https://thehighwire.com/videos/stephanie-and-maddie-de-garay-testimony/> at 5:13.

This study asks a very pertinent question: Why are we vaccinating children against COVID-19? The abstract in this study explains the following:

A novel best-case scenario cost-benefit analysis showed very conservatively that there are five times the number of deaths attributable to each inoculation vs. those attributable to COVID-19 in the most vulnerable 65+ demographic. The risk of death from COVID-19 decreases drastically as age decreases, and the longer-term effects of the inoculations on lower age groups will increase their risk-benefit ratio, perhaps substantially... (emphasis added.)

This study goes on to say that:

... it will use the term 'inoculated' rather than vaccinated, because the injected material in the present COVID-19 inoculations prevents neither viral infection nor transmission (emphasis added.)

Kostoff, Ronald, et al., "Why Are We Vaccinating Children Against Covid-19?" Toxicology Reports, Vol 8 2021, pages 1665-1684,
<https://www.sciencedirect.com/science/article/pii/S221475002100161X>

Here is a list of websites where medical professionals and/or individuals have documented their experiences with reactions from the COVID-19 vaccine:

<https://openvaers.com/covid-data/adverse-events-by-state>

<https://vaers.hhs.gov/data.html>

<https://www.c19vaxreactions.com>,

<https://www.RealNotRare.com/>

<https://www.medalert.org>

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<https://www.scivisionpub.com/pdfs/us-covid19-vaccines-proven-to-cause-more-harm-than-good-based-on-pivotal-clinical-trial-data-analyzed-using-the-proper-scientific--1811.pdf>

Dr. Cody Meissner, VRBPAC member, stated: "I want to be sure that the risk of the vaccine is less than the risk of hospitalization because four [COVID hospitalizations per

million in children under 18] certainly does not constitute an emergency, and there are significant questions about the safety of this vaccine. . . . [This hospitalization rate is] on the CDC website. That is not an emergency. It is a very low hospitalization rate. And the rates may change as the season changes, but we're starting from a tiny, tiny rate. . . . [T]he rates are also falling pretty dramatically among adults and children. So as more people are immunized and become immune from infection, I think it's very likely that we're going to get this pandemic under pretty good control. Now the issue -- so the issue to me is safety. . . . [W]e can look at the 2,000 or 2,200 adolescents who are enrolled in the Pfizer vaccine between 12 through 15 years of age -- 2,200, so half got the vaccine, half got placebo. Nobody was hospitalized. Nobody died. And there were some who got URIs[upper respiratory infections] So 2,200 is not going to address the issue of safety. I'm worried about myocarditis. . . . [W]e don't know what that means on a longterm basis. Will there be scarring of the myocardium? Will there be a predisposition to arrhythmias later on? Will there be an early onset of heart failure? I think that's unlikely, but we don't know that. And so before we start vaccinating millions of adolescents and children, it is so important to find out what the consequences are because COVID-19 disease is disappearing in adolescents and children. And I think we have to be so clear about what we're dealing with. Let me make one more point. In 2003, there was a publication in JAMA regarding myocarditis following the Dryvax vaccine, the smallpox vaccine which is, of course, a live vaccine. But in that situation, the military -- it was given to young recruits. The rates of myocarditis in the military young men -- because it was mostly men in those days -- was 2 per 100,000. And after the Dryvax vaccine the rates were 7.8 cases of myocarditis in the 30 days afterwards. So there was a three-fold increase. And in fact, Dr. Tony Fauci wrote an editorial in that same issue of JAMA discussing these rates of myocarditis. So I am really concerned that the FDA may by not insisting on a full BLA, which to me means at least 12 months, maybe even 18 or 24 months of follow up in children and adolescents, before they are recommended to receive this vaccine. I do not feel we can justify a EUA including children under an Emergency Use Authorization. The burden of disease is so small, and the risks are just not clear. We don't know." June 10, 2021, VRBPAC meeting transcript, p. 62, p. 225- 228. <https://www.fda.gov/media/150815/download>

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From the front lines in medical care

Many medical professionals are speaking up and sharing their experiences of working in hospitals right now as they care for patients who are coming in with what they can associate to vaccine reactions. "More VC Nurses Blow Whistle on 'Overwhelming' Numbers of Heart Attacks, Clotting, Strokes," *The Conejo Guardian*, December 14, 2021. <https://conejoguardian.org/2021/12/14/more-vc-nurses-blow-whistle-on-overwhelming-numbers-of-heart-attacks-clotting-strokes/>

Individuals are sharing their own experiences with their health while taking the COVID shots. U.S. Senator Ron Johnson hosted a round table on November 2, 2021, to allow these individuals to tell their stories.

<https://childrenshealthdefense.org/defender/nov-2-sen-ron-johnson-cdh-covid-vaccine-injuries-federal-mandates/>

Colette Martin, an RN of 17 years, testified in front of the Louisiana House about the harms of vaccine reactions that she has witnessed. She also stated that more children have died from the vaccine than from covid itself. Louisiana House of Representatives Health and Welfare Committee Hearing, December 6, 2021, https://www.house.louisiana.gov/H_Video/VideoArchivePlayer?v=house/2021/dec/1206_21_HW (begin at 6:54:00)

In the first two and a half months after EUA was granted, 1,223 deaths were reported to Pfizer. This is a huge red flag that requires deep investigation. See Table 1, Page 7, showing fatal case outcomes in Pfizer's "5.3.6 Cumulative Analysis of Post-Authorization Adverse Event Reports of PF-07302048 (BNT162B2) Received Through 28-Feb-2021"

<https://phmpt.org/wp-content/uploads/2021/11/5.3.6-postmarketing-experience.pdf>,

While critics commonly question the veracity of VAERS data, as reported on the U.S. government's Healthy People 2020 site, 83% of the reporters to the Vaccine Adverse Events Reports System were health care workers or pharmaceutical and government-based sources during the years 1990-2010. "The majority of VAERS reports are submitted by vaccine manufacturers (37%) and health care providers (36%). The remaining reports are obtained from state immunization programs (10%), vaccine recipients (or their parents/guardians, 7%) [sic], and other sources (10%)." Office of Disease Prevention and Health Promotion, Vaccine Adverse Reporting System,

<https://www.healthypeople.gov/2020/data-source/vaccine-adverse-event-reporting-system>.

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Further, 72% of a sampling of 250 of the 1,644 VAERS reports of early death received in the first three months of 2021 were filed either by health service employees or pharmaceutical employees. "We identified health service employees as the reporter in at least 67% of the reports, while pharmaceutical employees were identified as the reporter in a further 5%." Even though the sample contained only people vaccinated early in the rollout, *i.e.*, those who were elderly or with significant health conditions, an adverse vaccine reaction could be ruled out in only 14% of the cases. Mclachlan, et al., *Analysis of COVID-19 vaccine death reports from the Vaccine Adverse Events*

“While it seems that the incidence of pericarditis during the vaccination campaign period is increased, a more comprehensive data collection on a wider scale should be done. We hope this report will raise awareness to the subject and will serve as a reminder to report events as part of the post-marketing investigations and allow for a thorough adverse events following immunization analysis.” *Transient Cardiac Injury in Adolescents Receiving the BNT162b2 mRNA COVID-19 Vaccine*, https://journals.lww.com/pidj/Fulltext/2021/10000/Transient_Cardiac_Injury_in_Adolescents_Receiving.1.aspx

II. Disease Burden Criteria

5. The vaccine containing this antigen prevents disease(s) that has significant morbidity and/or mortality in at least some sub-set of the population. Vaccines have the potential to reduce, or in some cases even eliminate, diseases that can result in serious illness, long-term disability, or death. For example, before measles vaccine was available, nearly everyone in the United States contracted measles and an average of 450 measles-associated deaths were reported each year between 1953 and 1963. The morbidity/mortality burden of measles was not equal for all members of the population. Examples of significant morbidity measures include rates of hospitalizations, long-term disability, disease incidence, and disproportionate impact.

Do any of the COVID-19 shots fulfill this criterion? No.

First, we must emphatically state that it is unethical to use children as shields for adults.

Peter Doshi, Ph.D: “I want to address this idea of vaccinating children to protect adults. I encourage the Advisory Committee to read Dr. Lavine et al.’s editorial to explain why, “Vaccinating children is likely to be of marginal benefit in reducing the risk to others.” And even if you think a small benefit is better than nothing, let’s not forget that it’s an unproven hypothetical benefit. We need confirmatory evidence, not just assumptions. And then there’s the ethics and the law. **FDA can only indicate a product for use in a**

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given population if benefits outweigh risks in that same population. So if benefits don’t outweigh risks in children themselves, it can’t be indicated for children, full stop. Whether vaccinating children might help adults is a moot point.” Comments before the Vaccines and Related Biological Products Advisory Committee, June 10, 2021 <https://www.fda.gov/media/150815/download>, pp. 171-172. (emphasis added)

Children and young adults are at an extremely low risk of mortality from COVID-19. When one subset of the population (children) carries a high risk for injury from an antigen but low risk for injury from the disease, we must consider the mandate of such an antigen to be unethical. Bhopal, "Children & Young People Remain at a Low Risk of

Covid-19 Mortality," *The Lancet Children & Adolescent Health*, Correspondence, Vol 5, Issue 5, E12-E13, May 1, 2021.

[https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(21\)00066-3/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(21)00066-3/fulltext)

The *Forbes* article "The Hideous Truths of Testing Vaccines on Humans" examined the testing of hepatitis vaccines on the residents of Willowbrook, a home for severely disabled children. The author states: "In 1966, renowned medical ethicist Henry K. Beecher published an article titled, "Ethics and Clinical Research," which listed Willowbrook as an example of an unethical clinical experiment and concluded that "there is no right to risk an injury to one person for the benefit of others." *Forbes*, June 12, 2020,

<https://www.forbes.com/sites/leahrosenbaum/2020/06/12/willowbrook-scandal-hepatitis-experiments-hideous-truths-of-testing-vaccines-on-humans/>

Second, the measles example given in this criterion reveals that historically the BOH and DOH have never stepped back to consider the long term or unintended consequences of mass-vaccination campaigns. We agree that nearly everyone in the United States used to be exposed to measles, mostly in childhood when it's safest to experience, and they developed lifetime immunity. Merck's on-trial-for-fraud MMR vaccine does not confer lifetime immunity for a significant portion of the population, pushing susceptibility into the very young and into adult populations. We are nearing a time when more people in the U.S. will be susceptible to measles than before the vaccines were released. And studies show a third dose doesn't help. Was there perhaps a better way to reduce those 450 annual deaths and the cases of very severe illness, without sacrificing superior natural immunity for the vast majority (99.99%) of the population—and without exposing millions of children annually to the risks of the MMR? What about the failure of the mumps portion of the shot? More information can be found here: <https://informedchoicewa.org/measles/> To learn about the politics surrounding the loss of the personal exemption to the MMR, see this post:

<https://informedchoicewa.org/education/were-wa-lawmakers-deceived-about-measles-1-a-st-session-part-1/>

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Is there perhaps a better way to protect those susceptible to severe disease and fatal COVID-19 outcomes, without sacrificing superior natural immunity for the >99.9% of the population who fully recover and develop natural immunity? Optimal nutritional support, early treatment protocols, and the benefits of natural immunity are tragically not part of public health's approach with any vaccine-targeted infection. With COVID, the neglect of these public health tools has cost many lives.

Third: as shown in our response to Criterion #1, the shots do not prevent transmission; any unethical attempt to use children as shields will fail.

The screenshot shows a web browser window displaying the Washington State COVID-19 Data Dashboard. The main content is a table titled "Cases, Hospitalizations and Testing by Age". The table has five columns: "Age Group", "7-Day Case Rate", "7-Day Hospitalization Rate", "7-Day Testing Rate", and "7-Day Percent Positivity". The data is as of January 6, 2022. Below the table, there are links to other dashboard sections: "Cases, Hospitalizations and Deaths by Sex", "Cases, Hospitalizations and Testing by Race and Ethnicity", and "Cases by Race and Ethnicity". The browser's taskbar at the bottom shows the date and time as 1:08 AM on 1/7/2022, and the weather as 45°F, Mostly cloudy.

Age Group	7-Day Case Rate	7-Day Hospitalization Rate	7-Day Testing Rate	7-Day Percent Positivity
Ages 4-10	504.8	1.2	--	--
Ages 11-13	558.1	0.7	--	--
Ages 14-19	731.8	1.8	--	--
Ages 0-11	480.7	2.3	--	--
Ages 12-19	692.4	1.5	--	--
Ages 20-34	869.9	10.7	--	--
Ages 35-49	724.5	12.0	--	--
Ages 50-64	444.2	20.0	--	--
Ages 65-79	227.3	30.9	--	--
Ages 80+	211.2	56.2	--	--

As of January 6, 2022, the seven-day case rate in Washington State for ages 4-11 was 504.8 per 100,000. The seven-day hospitalization rate was 1.2 in 100,000. Compare this with the risk of myocarditis in vaccinated adolescents, which is 18.52 in 100,000 as seen in <https://pubmed.ncbi.nlm.nih.gov/34849657/>

Graph from <https://www.doh.wa.gov/Emergencies/COVID19/DataDashboard>

Between January 4, 2020, and January 6, 2022, 573 children between the ages of 5-18 have died with COVID in the entire United States. CDC Deaths by Sex, Ages 0-18

years, <https://data.cdc.gov/NCHS/Deaths-by-Sex-Ages-0-18-years/xa4b-4pzv>

On December 31, 2021, Anthony Fauci stated, “. . . [I]f a child goes into the hospital, they automatically get tested for COVID, and they get counted as a COVID-hospitalized individual, when in fact they may go in for a broken leg or appendicitis of something like that, so it’s *overcounting the number of children who are . . . hospitalized **with** COVID as opposed to **because** of COVID.*” MSNBC interview, <https://twitter.com/TheEliKlein/status/1476917049435856925>

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Vaccines and Related Biological Products Advisory Committee member Dr. Cody Meissner stated “[F]our per million [pediatric hospitalizations] certainly does not constitute an emergency, and there are significant questions about the safety of this product.” June 10, 2021, VRBPAC meeting transcript, p. 62.

<https://www.fda.gov/media/150815/download>

6. Vaccinating against this disease reduces the risk of person-to-person transmission, with transmission in a school or child care setting or activity being given the highest priority.

Having a large proportion of the population vaccinated with the antigen helps to stem person to person transmission of the disease (i.e., herd immunity). Even community members who are not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the high immunization rate results in the disease having less opportunity to spread within the community. Vaccinating children in school and/or child care can increase the percentage of children in these groups who are immune and thus reduce the risk of outbreaks of the disease in these groups and in the community at large. Special consideration of disease transmission in a school or child care setting or activity should be given the highest priority. For the purpose of this criterion, “activity” refers to school or child care extracurricular activities including, but not limited to, field trips, sports events, or other activities held on or off campus.

Do any of the COVID-19 shots fulfill this criterion? No.

The Pfizer, Moderna, and Janssen products do not prevent transmission, serious disease, or death.

The CDC director says that vaccines do not prevent transmission. “Fully vaccinated people who get a Covid-19 breakthrough infection can transmit the virus, CDC chief says,” *CNN Health*,

<https://www.cnn.com/2021/08/05/health/us-coronavirus-thursday/index.html>

“COVID-19 infections are increasing in Gibraltar, with 128 new infections reported on average each day. That’s 97% of the peak — the highest daily average reported on January 5. There have been 9,600 infections and 100 coronavirus-related deaths reported in the country since the pandemic began. . . Gibraltar has administered at least 108,323 doses of COVID vaccines so far. Assuming every person needs 2 doses,

that's enough to have vaccinated about 160.7% of the country's population." Reuters COVID-19 Tracker, accessed January 7, 2022, <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/gibraltar/>

Vaccinated people can still spread the Delta variant. Vaccination does not stop the transmission of COVID. "Testing a subset of low-Ct samples revealed infectious

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SARS-CoV-2 in 15 of 17 specimens (88%) from unvaccinated individuals and 37 of 39 (95%) from vaccinated people." Riemersma, "Shedding of Infectious SARS-CoV-2 Despite Vaccination," <https://www.medrxiv.org/content/10.1101/2021.07.31.21261387v4>

Individuals who have been previously infected do not show a need to be vaccinated. This is consistent with Chapter 246-105-020 WAC: "fully immunized" means an immunization status where a child has proof of acquired immunity . . . ' It is unreasonable to mandate that those with natural immunity be "boosted" with a vaccine when there is not scientific evidence that this practice is safe or effective in the long term. Boosting an individual's levels of antibodies to the vaccine-induced spike protein—which no longer matches the dominant strain now circulating—is experimental. Also see Shrestha, "Necessity of COVID-19 vaccination in previously infected individuals," <https://doi.org/10.1101/2021.06.01.21258176>.

Children have sustained and robust natural immunity after contracting COVID. Dowel, "Children develop robust and sustained cross-reactive spike-specific immune responses to SARS-CoV-2 infection," *Nat Immunol* 23, 40–49 (2022). <https://doi.org/10.1038/s41590-021-01089-8>.

Long-term effects of the vaccine trials in children are unknown. Deaths in children are a fraction of the percentage of deaths in all other age categories. Kostoff, "Why are we vaccinating children against COVID-19?" *Toxicology Reports*, Vol 8, 2021, Pages 1665-1684, <https://doi.org/10.1016/j.toxrep.2021.08.010>.

Barnstable County, Massachusetts, had an outbreak amongst a population of tourists that was approximately 74% vaccinated, which indicates that vaccination does not prevent contracting or transmitting COVID. Brown, "Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings - Barnstable County, Massachusetts, July 2021," *MMWR Morb Mortal Wkly Rep*, 2021 Aug 6;70(31):1059-1062. <https://pubmed.ncbi.nlm.nih.gov/34351882/>.

Despite 100% vaccination rate, consistent testing, and quarantining, a research station

in Antarctica still had an outbreak of COVID cases. "COVID-19 Outbreak Hits Research Station in Antarctica," WebMD News Brief, <https://www.webmd.com/lung/news/20220103/covid-19-outbreak-hits-research-station-in-antarctica>

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III. Implementation of the Criteria

7. The vaccine containing this antigen is acceptable to the medical community and the public.

It is possible to gauge the level of provider acceptance of a vaccine by querying state professional societies such as the Washington Academy of Family Physicians and the Washington State Chapter of the American Academy of Pediatrics. Vaccine uptake data are also available from the Department of Health to determine provider use of the vaccine. While there is generally a good correlation between the levels of physicians' and the general public's acceptance of particular vaccines, the TAG should consider additional ways of accurately gauging public acceptance of the particular vaccine. Adding an antigen to WAC 246- 105-030 related to a vaccine with poor provider or public acceptance would likely be resisted. Postponing the regulation until there is greater approval of the vaccine would assure more effective policy.

Do any of the COVID-19 shots fulfill this criterion? No.

There has never been more opposition from the medical and scientific community or the public to any type of vaccine or vaccine policy than there is to the COVID-19 products and policies.

EXAMPLES OF MEDICAL AND SCIENTIFIC OPPOSITION

- Over 15,000 members of the [International Alliance of Physicians and Medical Scientists](#) published a declaration resolving that healthy children shall not be subject to forced vaccination. They state:
 - Negligible clinical risks from SARS-CoV-2 infection exist for healthy children under eighteen.
 - Long term safety of the current COVID vaccines in children cannot be determined prior to instituting such policies. Without high-powered, reproducible, long term safety data, risks to the long-term health status of children remain too high to support use in healthy children.
 - Children risk severe, adverse events from receiving the vaccine. Permanent physical damage to the brain, heart, immune and reproductive system associated with SARS-CoV-2 spike protein-based genetic vaccines has been demonstrated in children.

- Healthy, unvaccinated children are critical to achieving herd immunity. Natural immunity is proven to tolerate infection, benefiting community protection while there is insufficient data to assess whether COVID vaccines assist herd immunity.

Supporting Evidence:

<https://doctorsandscientistsdeclaration.org/home/supporting-evidence/#children>

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- More than 500 scientists, medical doctors and health care and other professionals united as the [Canadian Covid Care Alliance](#). Their presentation *More Harm Than Good* reviews Pfizer's six-month data and reveals that Pfizer's COVID-19 inoculations cause more illness than they prevent. See the *More Harm than Good* video and PDF slides here: <https://www.canadiancovidcarealliance.org>

"It's clear that Pfizer - and the agencies overseeing their trials - failed to follow established, high quality safety and efficacy protocols right from the beginning. . . Any government that approved this medical intervention for its citizens should have ensured that the trial had used the appropriate clinical endpoints and high quality safety science. . . Any government official who possesses this evidence and continues to allow its citizens to be inoculated with a toxic agent is, at the very least, negligent."

1. The [Association of American Physicians and Surgeons](#), established in 1943, opposes COVID-19 vaccination mandates. In regards to children, AAPS states:
 - a. In the testing, only 1,518 children received the shots, and 750 received a placebo. This is far too few to see uncommon side effects, such as myocarditis/pericarditis, as Pfizer admits.
 - b. Follow-up was for two months in one group and only 2.5 weeks in another. The Pfizer application states that long-term sequelae of post-vaccination myocarditis/pericarditis in participants 5 to 12 years of age will be studied after the vaccine is authorized for children.
 - c. The children were not examined for mild, asymptomatic myocarditis, which might cause long-term damage, as by checking troponin levels or echocardiograms, or for blood clotting problems, as by checking platelet counts and D-dimers.
 - d. The only FDA-approved product, BioNTech's Comirnaty (not yet available in the U.S.) is required to do studies on myocarditis lasting 5 years.
 - e. Monthly safety report cards on the three available vaccines, which have different dosages, are supposedly required, but none have been produced or released.
 - f. The claim of 91% relative effectiveness against symptomatic COVID in children is based on 16 cases of COVID in the placebo group and

three cases in the vaccinated group over the brief follow-up period.

This is an absolute risk reduction of about 2%.

g. We do not and cannot know the long-term effects on cancer, fertility, or autoimmune diseases. “But we’re never going to learn about how safe this vaccine is unless we start giving it. That’s just the way it goes,” stated committee member Dr. Eric Rubin, physician at Boston’s Brigham and

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Women’s Hospital, immunology professor at the Harvard T.H. Chan School of Public Health, and current editor-in-chief of the New England Journal of Medicine. The alternative to giving a product to most of an entire generation is animal studies or restricting use to a defined group most likely to benefit, with close follow-up.

- h. The dosage for children is one-third the adult dose. Dosage in pediatrics is generally determined by weight. Not all children weigh the same, and their weight does not triple between age 11.9 and 12.0 years.
- i. The COVID products are not shown to interrupt infection and transmission. Masking and distancing are still being recommended or required for adults. Thus, hopes for a return to normalcy once vaccinated are misplaced.
- j. To give truly informed consent, parents need complete information about possible side effects, such as the outcome for Maddie de Garay, a 12-year-old whose public-spirited parents enrolled her in a trial. Post-shot, she experienced excruciating pain and a 2-month hospitalization, and is now in a wheelchair. Pfizer has not acknowledged a connection to the shot, nor did it fully disclose her injuries in it. The reaction may be “extremely rare,” but many would decline to take even a 1-in-1 million chance of this outcome.
- k. The government has already ordered 68 million doses, so authorization is anticipated, and likely will be followed by mandates.
- l. Several Nordic countries have paused the use of COVID vaccines in persons under the age of 30. Persons at low risk for COVID complications are more likely to die from the shot than from COVID.
- m. Dr. Harvey Risch, Yale epidemiologist, stated that he would home-school his children if public schools mandated this vaccine.
- n. No one should administer a COVID shot to a child unless parents have given fully informed, completely voluntary consent, without threats or inducements.
- o. SOURCE:

<https://aapsonline.org/aaps-statement-on-covid-shots-for-children/>

2. The [Physicians for Informed Consent](#) have compiled a Pfizer Vaccine Risk Statement for children that highlights FDA, CDC, and Pfizer clinical trial data finding:

- a. The clinical trial found there were zero cases of severe COVID-19 in children of any age who did not receive the vaccine. In contrast, the trial found that the vaccine causes severe (grade 3) and grade 4 systemic reactions in children.

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- b. The clinical trial indicates that vaccine efficacy declines significantly in less than six months. Although a booster dose of the vaccine is authorized for individuals 16 years of age or older, the clinical trial states that efficacy was not evaluated for Phase 3 BNT162b2 booster group participants. Instead, vaccine efficacy was inferred based on antibody levels observed in only about 300 vaccinated subjects over a one-month time period.
- c. The clinical trial provided no evidence that the vaccine prevents asymptomatic infection or transmission of SARS-CoV-2 or COVID-19. In addition, recent studies have observed that a significant proportion of severe, critical, and fatal cases of COVID-19 occurred in vaccinated individuals.

SOURCE:

<https://physiciansforinformedconsent.org/physicians-for-informed-consent-updates-its-pfizer-covid-19-vaccine-risk-statement-analyzes-new-safety-data-for-children/>

3. The [World Council for Health](#), whose leadership includes Dr. Tess Lawrie (PhD, MD, Founder, Evidence-Based Medicine Consultancy LTD, Bath, United Kingdom, 10-year Senior consultant to the WHO supporting health policy recommendations for countries globally), issued a statement in December 2021:
 - a. There is now more than enough evidence to declare the novel Covid-19 vaccines unsafe for use in humans. Victim testimonies and adverse reaction reporting systems have revealed millions of adverse reactions to the experimental vaccines, including life-changing injury and death.
 - b. The inoculations are capable of causing immeasurable harm to those who received them, with children being more likely to die from the Covid-19 vaccines than from actual SARS-CoV-2 infection.
 - c. World Council for Health anticipates that unprecedented humanitarian efforts will be essential to assist the people harmed by this global vaccination experiment, due to the known and unknown harms.
 - d. The World Council for Health demands an end to this crisis and hereby declares it illegal and unlawful for anyone to participate, directly or indirectly, in this harmful experimental vaccination programme. The World Council for Health declares individuals, governments, and other corporations will be held liable for their involvement.
 - e. World Council for Health Calls for an Immediate Stop to the Covid-19 Experimental “Vaccines” DECLARATION:

SOURCE:

<https://worldcouncilforhealth.org/news/2021/12/covid-19-vaccines/14001/> page 21

4. Paul E Alexander MSc PhD, Howard C. Tenenbaum DDS, Dip. Perio., PhD, Dr. Parvez Dara, MD, MBA: “We must not expose our children to ‘unnecessary’ harm.

We must not expose them to a substance that has not been tested on children (or plan to be) in the way it should be and for as long as necessary. We must not expose children to a vaccine that based on their risk, is absolutely not needed. Moreover, they can become infected naturally, if their immunity is needed.”

<https://www.aier.org/article/why-we-must-not-be-forced-into-vaccinating-our-children-from-covid-beware/>

5. Dr. Robert Malone (MD, Northwestern School of Medicine, MS, UC San Diego and Salk Institute Molecular Biology and Virology Laboratories, Giannini Postdoctoral Research Fellow, UC Davis, Harvard Medical School fellow -- Global Clinical Research Scholar (2016), original inventor of the mRNA vaccine platform used in the Pfizer and Moderna COVID-19 vaccines as well as the DNA vaccine platform used by Inovio): Interview in which Dr. Malone voices his grave medical and scientific concerns for the use of any of the COVID shots, especially in children:

<https://unityprojectonline.com/news/dr-robert-malone-md-on-the-joe-rogan-experience/>

6. Dr. Peter McCullough (MD, FACC, FAHA, FASN, FNKF, FNLA, FCRSA, Chief Medical Advisor, Truth for Health Foundation; President, Cardiorenal Society of America; Editor-in-Chief, Reviews in Cardiovascular Medicine; one of the most highly published medical specialists in practice today and an authoritative commentator for major media on COVID-19). Dr. McCullough has been interviewed hundreds of times and testified to numerous legislatures and to Congress. He is a tireless proponent for early treatment to save lives, and although he at first administered the EUA shots to his patients, as information began to emerge, he stayed informed and up-to-date. He no longer supports use of any of the existing COVID-19 shots. His interview by Joe Rogan is extensive and can be found here:

<https://unityprojectonline.com/news/dr-peter-a-mccullough-on-the-joe-rogan-experience/>

In an [interview in August 2021](#), Dr. McCullough reviewed his five main points of education:

- a. COVID-19 is NOT spread asymptotically
- b. Asymptomatic people should not get tested

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- c. Natural immunity is robust complete and durable
- d. COVID-19, no matter what variant, is easily treatable at home
- e. Current COVID-19 vaccines are obsolete and should be considered unfit for human use. “They [the vaccines] do not cover the new variants; patients are failing on these vaccines. They’re being hospitalized and getting sick despite having had the vaccines . . .the vaccines at this point in time have amounted to record mortality and injury and should be considered unsafe and unfit for human use.”

“Dr. Peter McCullough’s 5 most important truths about COVID-19,”
LifeSiteNews, August 4, 2021,

<https://www.lifesitenews.com/news/dr-peter-mcculloughs-5-most-important-truths-about-covid-19/>.

EXAMPLES OF ETHICAL, LEGAL, AND SOCIAL ISSUES LISTED BY THE UNITY PROJECT:

- [Why the CDC Ignores Natural Immunity](#), by Aaron Kheriaty
- [Judicial Precedents and Vaccine Mandates](#), by Aaron Kheriaty
- [Why I am Challenging in Court the University of California’s Vaccine Mandate](#), by Aaron Kheriaty
- [University Vaccine Mandates Violate Medical Ethics](#), by Aaron Kheriaty, *The Wall Street Journal*
- [Dear Pfizer: Leave the Children Alone](#), by Paul Alexander
- [Covid-19: Researcher blows the whistle on data integrity issues in Pfizer’s vaccine trial](#), by Paul Thacker
- [How College COVID Vaccine Mandates Put Students In Danger](#), by Boston, McCullough, Kheriaty, Rietsch, Cretella, and Bradley
- [Scientists Sue the FDA for Data it Relied Upon to License Pfizer’s Covid-19 Vaccine](#), by Aaron Siri
- [Covid-19 Vaccine Manufacturers Can Harm You With Near Complete Impunity](#), by Aaron Siri
- [FDA Buries Data on Seriously Injured Child in Pfizer’s Covid-19 Clinical Trial](#), by Aaron Siri
- [Whistleblower: FDA and CDC Ignore Damning Report that over 90% of a Hospital’s Admissions were Vaccinated for Covid-19 and No One Was Reporting This to VAERS](#), by Aaron Siri
- [Vaccine Mandates: The Next Prohibition?](#), by Justin Hart
- [Jab Mandates Are Both Unethical and Fail the Cost/Benefit Test](#), by Michael Tomlinson

DATA DISASTER: A Call for an Investigation Into the CDC's Conduct During COVID-19. <https://standforhealthfreedom.com/cdc-investigation/>

EXAMPLES OF PUBLIC OPPOSITION - GLOBAL

- Paris, France:
<https://rumble.com/vr0wcf-france-yellow-vests-stage-rally-in-paris-against-covid-measures-18.12.2021.html>
- Austria: <https://rumble.com/vridjv-rising-up-in-austria.html>
- London, England:
<https://rumble.com/vrcp2h-britain-sees-massive-protest-against-vaccine-passports.html>
- Australia:
<https://rumble.com/vpld09-australia-nov20th-nationwide-massive-vaccine-protests-from-perth-melbourne-.html>
- New Zealand
<https://rumble.com/vqve38-thousands-protest-covid-19-rules-in-new-zealand.htm>

| EXAMPLES OF U.S. PUBLIC OPPOSITION

Evidence that half the country refusing; people willing to lose jobs rather than comply; large organizations of professionals publishing position papers; example of LA Unified School district; Enumclaw example?

<https://www.cityofenumclaw.net/DocumentCenter/View/6670/Res-1734---Covid-19-Vaccine-Verification-Discrimination>

Less than half of parents support a requirement for middle and high school students to be vaccinated for COVID. "About One in Five Americans Remain

Vaccine-Resistant," Gallup, August 6, 2021,

<https://news.gallup.com/poll/353081/one-five-americans-remain-vaccine-resistant.aspx>

Healthcare workers are willing to lose their job rather than take the COVID vaccine. "Roughly 3,000 hospital workers lost jobs over Washington's COVID-19 vaccine mandate," KING 5 News, November 17, 2021,

<https://www.king5.com/article/news/local/washington-hospitals-lose-roughly-3000-workers-over-covid-19-vaccine-mandate/281-b0ff14de-27b6-4b0a-bcca-ed924c314ca0>

As of October 19, 2021, nearly 2,000 state workers chose to be fired rather than take the vaccine. "Nearly 1,900 Washington state workers quit or are fired over COVID vaccine mandate," *The Seattle Times*, October 19, 2021,

<https://www.seattletimes.com/seattle-news/politics/nearly-1900-washington-state-workers-quit-or-are-fired-over-covid-vaccine-mandate/>

There have also been many stories in the news describing our service members who are being discharged secondary to their declination of the shots.

8. The administrative burdens of delivery and tracking of vaccine containing this antigen are reasonable.

Many institutions and individuals are involved in implementation of the rule when the Board adds a new vaccine to WAC 246-105-030. These include: the Department of Health, the Department of Social and Health Services, the Office of Superintendent of Public Instruction (OSPI), local health

jurisdictions, schools, child care, health plans, health care providers, and families. For each of these key players, there are issues that affect the feasibility of implementing an immunization recommendation. For example, introduction of a new vaccine can result in schools conducting

more parental follow-up and making changes to record and information systems—this in turn can impact school staff workload. Assuring that a reasonable burden of work is present will enhance the effectiveness of the policy. The TAG includes representatives from affected parties such as OSPI, schools, and child care when assessing an antigen against this criterion.

Do any of the COVID-19 shots fulfill this criterion? No.

The burden on school nurses for tracking COVID cases and for managing all the COVID measures is already unreasonable. ICWA board member Heidi Hartnell is a teacher in Washington State and can speak to the amount of time schools already spend tracking COVID cases and close contacts. If the requirement of vaccination is added to the existing required measures, this would create an extensive amount of maintenance and updating of immunization records. She says, “With the demonstrated waning efficacy of the COVID vaccination in adults, it would seem that this would also be true with children. If children are required to be “up to date” with a booster every six months, this will be a huge burden on schools as vaccination records will constantly need to be checked and updated. Currently, a majority of the required vaccinations are completed by the time a child enters kindergarten and these forms do not require frequent updating. However, if the COVID shot and subsequent boosters were to be added, this would place a hardship on already wearied teachers and school personnel. Ultimately these shots do not prevent contracting or transmitting the virus, and so this work achieves nothing in the public health sense.”

The only thing that makes sense, given that >99.9% of children are at zero risk from COVID, is to simply enforce the “stay at home if symptomatic” rules that have served public health well for decades. We can never achieve, nor would we want to achieve, zero exposure schools. Children’s immune systems need exposure to the microbial world, including to viruses, to properly develop and protect them as adults. This is just as true for COVID, which has become endemic, so children will be encountering the virus and mutations for the rest of their lives. More than 140 studies demonstrate that natural immunity will serve them well and far longer than the shots, and it is their

parents who should make the risk-benefit decision, not the State of Washington. "144 Research Studies Affirm Naturally Acquired Immunity to Covid-19: Documented, Linked and Quoted," Brownstone Institute, October 17, 2021.

<https://brownstone.org/articles/79-research-studies-affirm-naturally-acquired-immunity-to-covid-19-documented-linked-and-quoted/>

Public health would be even better served if the BOH would acknowledge natural immunity, and support and promote early treatment protocols, so that everyone of all ages and of any vaccination status could see better outcomes.

<https://www.cdc.gov/media/releases/2021/s1227-isolation-quarantine-guidance.html> -

9. The burden of compliance for the vaccine containing this antigen is reasonable for the parent/caregiver.

Parents and caregivers are often involved in obtaining vaccines for children. This can include: transporting children to medical appointments, taking time off of work for medical appointments, maintaining the child's immunization records, etc. When a vaccine is required for child care and/or school entry it affects the health decisions that parents make on their child's behalf because parents must, at the very least, take the required vaccine into account.

Do any of the COVID-19 shots fulfill this criterion? No.

Considering the risks discussed in Criterion #4 above, the burden of compliance on parents is unacceptable.

Considering that any injury sustained by a child is borne completely by the parents because the manufacturers are shielded under the Public Readiness and Emergency Preparedness (PREP) Act, the burden of compliance is unacceptable.

<https://aspr.hhs.gov/legal/PREPact/Pages/default.aspx>

The shots are available everywhere, even grocery stores often without an appointment, so it is easy for most parents to find an opportunity to get their child a shot if they so choose, but for those parents who choose to opt out of a school vaccine requirement, the burden is out of balance.

Parents can't go to Safeway or Rite Aid for an appointment with a practitioner to get the required risk-benefit consultation and signature. They must make an appointment with a practitioner, take time off work, arrange transportation, etc. That first step is now the most burdensome. For the past several years, it has been increasingly difficult for parents to find any practitioner willing to give them the required risk-benefit consultation. Many doctors and clinics are kicking families out of their practices who do not vaccinate, or who do not fully vaccinate according to the CDC schedule. This has nothing to do with health or protection and everything to do with the financial incentives built into the

insurance and public health systems that reward high vaccination uptake. This practice is supported by the American Academy of Pediatrics, which has critical conflicts of interest associations with the pharmaceutical and medical industries. “The AAP recently issued a clinical report that stated it is an “acceptable option for pediatric care clinicians to dismiss families who refuse vaccines”

<https://www.infectiousdiseaseadvisor.com/home/topics/prevention/new-aap-policy-on-patient-dismissal-for-vaccine-refusal-may-erode-solidarity-among-pediatricians/>

The BOH’s criterion is based on the assumption that “a process exists to opt out of immunization requirements by children attending either child care or school.” If parents are unable to find a practitioner willing to provide the required risk-benefit consultation and sign an exemption form or letter stating that they have done so, then that opt-out does not exist.

And finally, a tremendous burden exists in the coercive aspect of any vaccine requirement. Parents who opt their children out of one or more vaccinations experience emotional and psychological stress because they know they face scrutiny by school staff, by health care providers, by surveillance systems, as well as cultural pressure. Children who lack one or more vaccinations are singled out at various times, excluded from school and extracurricular activities. If a vaccine is NOT on the schedule, a parent is able to choose what is best for their child without the added stress. It is an unreasonable burden to stress entire families with a requirement that should be a personal medical decision. It is incomprehensible that the Board would even consider such a requirement with products that cannot prevent infection or transmission.

BOARD CRITERIA FRAMEWORK:

The only purpose for which power can rightfully be exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant.” Harm to others cannot be prevented by requiring children attending school to take this vaccine.

From: Aline Bright
Sent: 11/2/2022 5:46:19 PM
To: DOH WSBOH
Cc:
Subject: covid-19 mandate comment

External Email

Public comment: As a former homeschool teacher/mother and medical technician I want to express to you that I am completely against the Covid-19 product mandates for children. The children are also at low risk for acquiring, being harmed by Covid-19, nor do the products prevent the transmission. There has not been enough time to safely test these products and there is growing concern that they are harmful. Thank you for your time and consideration for our children and our future.

Aline Bright

From: DOH Secretary's Office
Sent: 11/4/2022 11:05:38 AM
To: DOH COVID Vaccine
Subject: FW: No on Covid-19 vaccine for children



attachments\365ADBA4FD674B63_image001.png

Thank you,

Office of the Secretary

Washington State Department of Health

DOHSecretary@doh.wa.gov <mailto:DOHSecretary@doh.wa.gov>

www.doh.wa.gov

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.doh.wa.gov%2F&data=05%7>

360-236-4030

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.doh.wa.gov%2FNewsroom%7>

From: Kat Espinda <katloveslife@protonmail.com>
Sent: Friday, November 4, 2022 10:26 AM
To: DOH Secretary's Office <DOH.Secretary@DOH.WA.GOV>
Subject: No on Covid-19 vaccine for children

External Email

Hello there,

I am putting out my voice to you that 0% chance of children are dying from Covid-19. With the many people and children right now getting new auto-immune diseases, myocarditis and dying of this so called "vaccine", not to mention Pfizer releasing documents showing over a thousand different reactions to which is provable on the VAER's website, it would be considered CRIMINAL to add this in order for children to attend school.

From: Jennifer Vanderholm
Sent: 10/28/2022 7:54:20 AM
To: DOH WSBOH
Cc:
Subject: Covid vaccines in school

External Email

To whom it may concern,

It was reported that the CDC unanimously voted to recommend the covid vaccine in public schools and other places.

I am writing to ensure WA state does not blindly follow the CDC recommendation and require them in public school as well.

My children will be removed from the public school setting if WA state takes this course of action and I will fight to defend the freedoms of parents to make their own medical choices for their children.

Data has proven that children are not as risk for covid and the side effects of the vaccine are more dangerous to them then contracting the illness.

Thank you for your time.

Jennifer Stoneman

Sent from Yahoo Mail on Android

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.onelink.me%2F107872968%3F>>

From: Patricia Rody
Sent: 10/31/2022 6:34:20 PM
To: DOH WSBOH
Cc:
Subject: Meeting input regarding: Forced vaccines for school children

External Email

In anticipation of your upcoming meeting, this email is to declare that the public does not want liability-free COVID-19 products to be mandated for our kids. Period! Not now....not ever!

Thank you for your attention to our plea!
Patricia Rody

From: BWilkinson
Sent: 10/31/2022 10:49:38 AM
To: DOH WSBOH
Cc:
Subject: Covid jab for school

External Email

In spite of what ACIP has recommended, please leave the decision as to whether or not parents/guardians want their children to be the recipients of the still experimental Covid jab up to the parent.

Thank you

Rebecca Wilkinson, Chelan County resident

Sent from my iPhone

Sent from my iPhone

From: Tifani Hoornstra
Sent: 10/31/2022 10:06:12 PM
To: DOH WSBOH
Cc:
Subject: No Covid shot mandates

External Email

Hello,

As a Washingtonian and a mother, I am expressing extreme concern at the thought of mandated Covid shots for our children. Please DO NOT pass any legislation mandating these unproven vaccines. There are no long-term studies to justify mandating Covid shots for our youngest citizens. Covid vaccines have neither proven safe nor effective in young people, in fact, the data has shown quite the opposite.

Sincerely,
Tifani Hoornstra
Snohomish, WA

Sent from my iPhone

From: Kate Howerton
Sent: 11/1/2022 12:52:54 PM
To: DOH WSBOH
Cc:
Subject: RE: Proposal for adding Covid 19 shots to the CDC Pediatric schedule

External Email

Good afternoon,

I am writing with regard to the proposal for adding Covid 19 shots to the CDC pediatric schedule. As the CDC continues to constantly change their stance on things, I think it's wise to maintain an open mind when it comes to changing our State's policy.

The Covid vaccine is no longer a requirement of employment in Washington; why would we make it a requirement for our children? The recent data available shows and proves the adverse effects of the Covid vaccination, like myocarditis, especially in young and healthy children. Over the last two years children have shown that they are able to fight the Covid virus naturally and effectively, and natural immunity has shown itself to be more effective across the board against the virus and its variants.

The efficacy of the vaccination is questionable at best. There is not enough data to justify adding this shot to our children's required list of vaccinations. The public does not want ANY liability-free Covid 19 products to be mandated to our kids.

Thank you,

Mary Kate Link

From: Trishia Huck
Sent: 11/1/2022 12:37:30 PM
To: DOH Secretary's Office
Cc:
Subject: Covid vaccine for kids

External Email

We do not want the vaccines for our children- they are not at risk as well as the vaccine does not prevent covid or hospitalizations. Forcing this on society and our children is wrong. It's all about profit and is not beneficial for their health. This is a draconian measure and violating our freedoms.

Trishia Huck

Sent from my iPhone

From: Connie Davis
Sent: 11/2/2022 9:08:54 AM
To: DOH WSBOH
Cc:
Subject: Concerns About COVID 19 Vaccines for Nov. 9 Meeting

External Email

Dear Washington State Board of Health,

I am against putting the COVID-19 vaccinations onto the child vaccine schedule or requirements for anything because of several reasons. Two of which are: that children, even without being vaccinated, are of low risk of serious complication from COVID-19 and because of the masses of VEARS reports having to do with the COVID-19 vaccines. I am not convinced that the COVID-19 vaccinations are safe and effective. I would challenge you to do research on this matter and to check out research that is independent of possible conflicts of interest.

For a start check out this paper:

<http://www.kathydopp.info/COVIDinfo/Vaccines/RisksCovidVsRisksCovVaccines>

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.kathydopp.info%2FCOVIDinfo>

COVID-19 and All-Cause Mortality Data by Age Group Reveals Risk of COVID

Vaccine-Induced Fatality is Equal to or Greater than the Risk of a COVID death

for all Age Groups Under 80 Years Old as of 6 February 2022.

Kathy Dopp, MS Mathematics and Stephanie Seneff, PhD

13 February 2022.

Thank you for your time.

Sincerely,

Connie

From: Jacquie Hackett
Sent: 10/31/2022 12:37:59 PM
To: DOH WSBOH
Cc:
Subject: Covid-19 Vaccine

External Email

It is imperative that you understand the public does not want any liability-free COVID-19 products to be mandated for our kids. Children are not at risk of serious illness or death from Covid-19. They are at a far greater risk of adverse events, including death, from the covid=19 vaccines.

The CDC acknowledges the shots do not prevent infection or transmission and that any protection afforded fades rapidly, yet they refuse to abandon their push for increased uptake and boosters, and they refuse to promote existing early treatment protocols or acknowledge the mountain of evidence of the superior safety and effectiveness of naturally-acquired immunity. The systemic capture of federal agencies by the drug industry and globalists has never been more obvious.

Thank you for your time.

Jacquelyn Hackett
Tacoma, WA

Grandmother of 4 in the Franklin Pierce School District

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<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.jhyourhealth.com%2F&data=>

From: Dr. Rachel Giordano
Sent: 11/2/2022 12:10:09 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilia J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: VAC regarding adding the COVID 19 shot to the K-12 school schedule.

External Email

Dear Members of the DOH,

I would like to oppose the addition of this shot to the school schedule. Immunizations that have been required to attend school and/or day care have historically been based on the ability to reduce/eliminate transmission of a virus.

The COVID 19 shot does not reduce transmission of the virus, therefore it is an unreasonable recommendation for families and children in WA state.

Obtaining a COVID 19 shot to attend K-12 and/or daycare should be left up to the individual families since this modality has proven to act more like a treatment than an immunization and cannot reduce transmission.

Improving the quality of air circulation within our facilities shows to be more effective in reducing transmission of COVID 19 compared to the shot. There are alternatives to mandating this shot.

I also oppose this shot because it is still in emergency use and has not been approved by the FDA. If the VAC recommends this shot they are telling families in WA state that they are OK experimenting on our children. The industry is still collecting long term information about effects of this modality. It would be irresponsible to mandate this for a child to obtain an education and would drive more families out of the public school system.

In Health,

Dr Rachel Giordano

Sent from Mail for Windows

From: Jeanie Polehn
Sent: 11/1/2022 12:24:30 AM
To: DOH WSBOH
Cc:
Subject: Comments on WA State mandating vaccines---Absolutely NO!

External Email

Dear WA State BOH:

I'll make this short regarding Washington State mandating vaccines:

My comments:

A: We (your employer in WA State), including our children, do NOT give our consent to mandated vaccines.

1) Covid has a 99% recovery rate for those without co-morbidities so injecting people with an experimental chemical does NOT make a case for a health benefit for taking the vaccine & its boosters.

2) No human trials have been performed on the Pfizer vaccine so it's inappropriate to demand folks take an experimental drug.

3) Mandating folks/kids take an experimental drug against their will violates the Nuremberg Code.

4) There's a high excess mortality rate from the vaccines & boosters. There are indications this is caused by the vaccines & boosters attacking the patient's immune system & organs, including the heart. See article below as one example of such data.

5) Such mandates violate the U.S. Constitution Amendment IV. "The right of the people to be secure in their persons...shall not be violated..." You took an oath to protect & defend the U.S. Constitution. Mandates to take an experimental drug violate that oath.

I look forward to you recommending AGAINST mandatory vaccination in Washington State.

J. Polehn
jpolehn@yahoo.com

Official Mortality Data for Europe proves Covid-19 Vaccination is causing Mass Depopulation with 2022 being a record-breaking year for Deaths among all age groups including Children

By The Exposé

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fexpose-news.com%2Fauthor%2Fthe-expose%2F&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7Cf272aeb844ca4407487e08dabbda1aa9%7>

>

From: j
Sent: 10/26/2022 10:01:57 PM
To: j
Cc:
Subject: IF YOU MISSED THIS . . . WATCH NOW~

External Email

This is vital information, please watch and share.

Breaking News: SHOCKING - Here is What Really is in the Vaccines

<https://odysee.com/@sStopTheCrime:d/Breaking-News-SHOCKING---Here-is-What-Really-is-in-the-Vaccines:d>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fodysee.com%2F%40StopTheCrime:d/Breaking-News-SHOCKING---Here-is-What-Really-is-in-the-Vaccines%3Ad&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cd680044c7f0e47505e6708dab7d7e87e%7>>

SOLUTION to REMOVE the GRAPHENE:

Humic acid acts as a natural antidote of graphene by regulating nanomaterial translocation and metabolic fluxes in vivo - PubMed (nih.gov)

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F248>>

From: birthsupport@aol.com
Sent: 11/2/2022 1:38:17 PM
To: DOH Secretary's Office, Kwan-Gett, Tao (DOH), Sherls-Jones, Jamilya J (DOH), Drummond, Heather M (DOH)
Cc:
Subject: Meeting Nov 3rd

External Email
WA Dept of Health Vaccine Advisory Committee,

DO NOT follow the CDC recommendation for adding the Covid shot to the childhood vaccine schedule!!! Your recommendation should be to REJECT the CDCs recommendation. It is your job to get the facts and make the correct decision. The facts are clear!! The Covid shots DO NOT prevent illness, transmission OR death period! The risk of serious permanent injury or death from Covid is 0% in children!!! Those are the FACTS!! Yet the risk of serious permanent injury or death from a Covid shot is MUCH higher!!! Have you looked at the released documents from Pfizer regarding the clinical trials and adverse events that Pfizer and the FDA tried to hide for 75years??? Have you looked at VAERS data??!! The Vsafe data??!! More and more evidence is available proving that Covid shots are DANGEROUS!!! It is your job to PROTECT our children NOT bow down to superiors and government bureaucracy. If you fail to make the right decision based on the actual facts, and instead put our children in danger, there WILL be MULTIPLE lawsuits and criminal charges filed!!!

<https://phmpt.org/pfizers-documents/>

<https://icandecide.org/get-informed/?c=6>

<https://www.openvaers.com/covid-data>

<https://icandecide.org/article/v-safe/>

<https://icandecide.org/v-safe-data/>

From: Karla O'Rourke
Sent: 10/24/2022 9:27:49 AM
To: DOH WSBOH
Cc:
Subject: Attestation

External Email

Hi!

We at Yakima Valley Memorial Hospital would like to know if it is still necessary for employees to fill out an attestation on their health every morning. I've tried calling and have not gotten a response.

Please reply to this email.

Thanks,

Karla O'Rourke, RN MT(ASCP)

Infection Prevention

Quality and Safety Department

KarlaORourke@yvmh.org <<mailto:KarlaORourke@yvmh.org>>

Main 509 249 5117

Fax 509 249 5156

Yakima Valley Memorial Hospital

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If you need emergency attention, call 911.

From: Anita Millee
Sent: 10/25/2022 5:16:58 PM
To: DOH WSBOH
Cc:
Subject: Commit to no COVID vaccine mandates on children

External Email

Dear Washington State Board of Health,

I urge you to accept the TAGs recommendation and choose to NOT mandate covid vaccines on our children. Our state government should NOT be mandating Covid vaccines on our children. They are at extremely low risk for Covid and these medical decisions should be left in the hands of parents and their family doctors.

Sincerely,

The Citizens of Washington State