WASHINGTON STATE BOARD OF HEALTH

Notice of Public Meeting

Wednesday, June 14, 2023
9:30 a.m. – 4:20 p.m.
Hybrid Meeting
Language interpretation available
(see below for more information)
Physical meeting at
Senate Rules Room
220 Legislative Building, 416 Sid Snyder Ave. SW,
Olympia, WA 98504
Virtual meeting via ZOOM Webinar
(hyperlink provided below)

Final Agenda

Time	Agenda Item	Speaker
9:30 a.m.	Call to Order & Introductions	Keith Grellner, Board Chair
9:40 a.m.	1. Approval of Agenda—Possible Action	Keith Grellner, Board Chair
9:45 a.m.	2. Approval of April 12, 2023, Minutes – Possible Action	Keith Grellner, Board Chair
10:00 a.m.	3. Public Comment	Please note: Verbal public comment may be limited so that the Board can consider all agenda items. The Chair may limit each speaker's time based on the number people signed up to comment.
10:30 a.m.	4. Announcements and Board Business	Michelle Davis, Board Executive Director
10:50 a.m.	5. Update – Community Engagement	Hannah Haag, Board Staff
11:20 a.m.	Break	
11:30 a.m.	6. Department of Health Update	Umair A. Shah, Secretary of Health Tao Sheng Kwan-Gett, Chief Science Officer, Department of Health Michael Ellsworth, Federal Relations Director, Department of Health, Secretary's Designee
12:10 p.m.	Lunch	
1:15 p.m.	7. Rules Update – Primary and Secondary School Environmental Health & Safety, Chapter 246-366A WAC - Possible Action	Keith Grellner, Board Chair Andrew Kamali, Board Staff Juan Gamez Briceño, Department of Health

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Time	Agenda Item	Speaker
1:45 p.m.	8. Update on Per- and Polyfluoroalkyl Substances (PFAS) Rule Implementation and Related Issues – Group A Public Water Supplies, Chapter 246-290 WAC	Keith Grellner, Board Chair Stuart Glasoe, Board Staff Mike Means, Department of Health Barb Morrissey, Department of Health Shawn Magee, Yakima Health District
2:40 p.m.	9. Rules Update – Water Recreation and Recreational Water Contact Facilities, Chapters 246-260 and 246-262 WAC	Keith Grellner, Board Chair Andrew Kamali, Board Staff David DeLong, Department of Health
3:05 p.m.	Break	
3:20 p.m.	10. Implementation of the Healthy Environment for All (HEAL) Act	Keith Grellner, Board Chair Andrew Kamali, Board Staff Leah Wood, Department of Health
3:50 p.m.	11. Discussion of 2023 Meeting Schedule and Possible July Meeting Cancellation – Possible Action	Michelle Davis, Board Executive Director
4:00 p.m.	12. Board Member Comments and Updates	
4:20 p.m.	Adjournment	

- **To access the meeting online and to register:**
  https://us02web.zoom.us/webinar/register/WN_96Nkx1SIT-ep3o8_jYgkmA

- **You can also dial-in using your phone for listen-only mode:**
  Call in: +1 (253) 215-8782 (not toll-free)
  Webinar ID: 817 1816 9726
  Passcode: 246315

Important Meeting Information to Know:

- Times are estimates only. We reserve the right to alter the order of the agenda.
- Every effort will be made to provide Spanish interpretation, American Sign Language (ASL), and/or Communication Access Real-time Transcription (CART) services. Should you need confirmation of these services, please email wsboh@sboh.wa.gov in advance of the meeting date.
- If you would like meeting materials in an alternate format or a different language, or if you are a person living with a disability and need reasonable modification, please contact the State Board of Health at (360) 236-4110 or by email wsboh@sboh.wa.gov. Please make your request as soon as possible to help us meet your needs. Some requests may take longer than two weeks to fulfill. TTY users can dial 711.

Information About Giving Verbal Public Comment at Hybrid Meetings:

- For the public attending in-person: If you would like to provide public comment, please write your name on the sign-in sheet before the public comment period begins. We strongly encourage people to sign up with the Board by sending an email by 12:00 Noon the day before the meeting to: wsboh@sboh.wa.gov. As this is a business meeting of the Board, time available for public comment is limited (typically 2 to 4 minutes per person). The Chair will call on those who have signed up to speak to the Board, first. The amount of time allotted to each person will depend on the number of speakers present. If time remains, those who have not signed up ahead of time to speak to the Board will be called on to speak until the scheduled time for Public Comment comes to an end.
- For the public attending virtually: If you would like to provide public comment, please sign up through the Zoom webinar link by 12:00 Noon the day before the meeting. Your name will be called when it's your turn to comment.

Information About Giving Written Public Comment:

- Please visit the Board's Meeting Information webpage for details on how to provide written public comment.

WASHINGTON STATE BOARD OF HEALTH

Draft Minutes of the State Board of Health
April 12, 2023
Hybrid Meeting
Physical meeting at Labor & Industries Auditorium,
7273 Linderson Way SW, Tumwater, WA 98501
Virtual meeting via ZOOM Webinar

State Board of Health members present:
Keith Grellner, RS, Chair
Kelly Oshiro, JD, Vice Chair
Patty Hayes, RN MN
Tao Sheng Kwan-Gett, MD, MPH, Secretary's Designee
Dimyana Abdelmalek, MD, MPH
Stephen Kutz, BSN, MPH
Melinda Flores
Socia Love-Thurman, MD
Michael Ellsworth, JD, MPA, Secretary's Designee
Kate Dean, MPA

State Board of Health members absent:
Umair A. Shah, MD, MPH
Socia Love-Thurman, MD

State Board of Health staff present:
Michelle Davis, Executive Director
Melanie Hisaw, Executive Assistant
Anna Burns, Communications Consultant
Stuart Glasoe, Health Policy Advisor
Molly Dinardo, Health Policy Advisor
LinhPhung Huỳnh, Council Manager
Jo-Ann Huynh, Administrative Assistant
Grace Cohen, Department of Health
Lilia Lopez, Assistant Attorney General
Eric Sonju, Assistant Attorney General

Guests and other participants:
Michael Ellsworth, Department of Health
John Thompson, Department of Health
Kelly Cooper, Department of Health
Jeremy Simmons, Department of Health
Victor Rodriguez, Council Vice Chair
Jessica Zinda, Council Member

Keith Grellner, Board Chair, called the public meeting to order at 10:01 a.m. and read from a prepared statement (on file). He then detailed operating procedure and ground rules for conducting a hybrid meeting, and asked Board Members to introduce themselves.

1. **APPROVAL OF AGENDA**
   Motion: Approve April 12, 2023 agenda
   Motion/Second: Member Hayes/Member Kutz. Approved unanimously

2. **ADOPTION OF MARCH 8, 2023 MEETING MINUTES**
   Motion: Approve the March 8, 2023 minutes.
   Motion/Second: Member Hayes/Member Abdelmalek. Approved unanimously

3. **PUBLIC COMMENT**

Sue Coffman, spoke in opposition to the COVID-19 vaccine, and said there are meaningless studies done to boost safety. Sue said it's not misinformation, but missing information.

Gerald Braude, spoke in opposition to the COVID-19 vaccine. Gerald apologized for the last meeting when he expressed frustration and said since that time, there are more deaths in Washington (WA) State following COVID shots and over 35,000 deaths nationwide reported to VAERS. Gerald volunteers in Jefferson County and talked about Vaccine Adverse Events Reporting System (VAERS) data and the adverse effects of the COVID-19 vaccine.

Christine Zahn, Director of the Arginase Deficiency (ARG1D) Foundation, and grandmother of a child with the diagnosis, talked about how exhausting the disease is and advocated for required newborn screening. Christine talked about the effects of Arginase Deficiency, how it has affected their family and how a simple blood spot and early detection is an easy solution. Christine said there is not a cure, but there is treatment.

Melissa Leady, spoke in opposition to the COVID-19 vaccine and encouraged the State Board of Health (Board) and Department of Health (Department) to be more forthcoming with COVID-19 data.

Natalie Chavez, spoke in opposition to the COVID-19 vaccine and talked about the book, Cause Unknown, the Epidemic of Sudden Deaths in 2021 and 2022. Natalie shared data and statistics on increased deaths and talked about the importance of fact checking.

Mike Johnson, spoke in opposition to the COVID-19 vaccine, and said Switzerland has withdrawn all COVID-19 vaccinations. Mike said the risk vs benefit does not justify the shot. He talked about deaths and data reported to VAERS, saying the shots should halt until causes are investigated.

Dennis Flynn, Spokane resident, spoke in opposition to the COVID-19 vaccine, talked about false COVID-19 numbers reported, why there is mistrust with policy leaders, and the importance of crucial conversations.

Bill Osmunson, dentist for about 50 years, talked about Board receiving information for the last two decades that fluoride ingestion is dangerous, saying that 2 out of 3 people

are overdosed with fluoride. Dr. Osmunson said the Washington State Board of Pharmacy states fluoride is a drug, and he requested the Board of Health provide a forum, ad hoc committee, or hearings to consider fluoride danger evidence.

Chair Grellner closed public comment at 10:46 a.m.

4. BOARD ANNOUNCEMENTS AND OTHER BUSINESS

Michelle Davis, Board Executive Director greeted the Board and directed Board Members to materials in their packets.

Ms. Davis provided staffing updates. She said she recently offered the vacant Policy Advisor position to Andrew Kamali, who will join Board staff on May 1. She added that Mr. Kamali's biography would be included as part of the Board's June meeting materials. Ms. Davis said she will hold interviews for the vacant Communications Manager position this week and hopes to fill that position by June. She shared appreciation for Board staff and Vice Chair Oshiro for supporting the recruitment process.

Ms. Davis said the Health Impact Review (HIR) team has been invited to provide information to the House Health Care and Wellness Committee on April 18. She said the presentation would be broadcast TVW. She said HIR staff will update the Board on its work for the fiscal year at the Board's August meeting.

Ms. Davis said Member Kate Dean joined the Board last month and her biography is now on the Board's website. Ms. Davis added that the Governor's Office is continuing its search for another Board position—a city official who serves on a local board of health. Ms. Davis has reached out to the Association of Washington Cities to encourage its members to apply.

Ms. Davis shared that an updated list of future Board meetings, which includes updated meeting locations, is on the Board's website. She said Board staff sent a letter to House and Senate budget leaders, which reflects priorities that the Board would like to see in the state's operating budget. Ms. Davis shared that Board staff have sent a letter denying the petition to consider adding Guanidinoacetate methyltransferase (GAMT) deficiency to the newborn screening panel. She then mentioned that the water recreation variance report, which is required in rule (Chapter 246-260 WAC), relates to rule variances that have been granted by the State Department of Health (Department) and local health jurisdictions for water recreation facilities.

Ms. Davis shared that Board staff have finalized a letter to the U.S. Office of Management and Budget (OMB) working group that is looking at potential updates to federal race and ethnicity data standards. She said multiple Washington state agencies plan to submit comment to OMB. For the comment letter, Board staff drew from work on the Notifiable Conditions rule as well as recommendations on disaggregated data in the Board's State Health Report. She said Board Members will receive the final letter following today's meeting.

There were no questions from Board Members.

5. DEPARTMENT OF HEALTH UPDATE

Michael Ellsworth, Department of Health and Secretary's Designee, updated the Board on Department of Health (Department) activities. He reviewed current trends in respiratory viruses, as there is a downward trend in hospitalizations for Influenza, COVID-19 and other respiratory diseases. Data shows that COVID-19 related deaths are still elevated, with high-risk communities having the highest rate of death. High risk individuals are eligible for a new booster. He also provided an update that with the end of the Federal COVID-19 Public Health Emergency, the only change will be data reported standards for states and federal mail order COVID-19 test, as the Department will continue monitoring COVID-19 rates.

Member Ellsworth provided an update on the National Legislative Landscape. The Department requested federal funding for data modernization. He reviewed the presentations the Department gave at the federal legislature.

Member Ellsworth highlighted developments for the Department at the state legislature level, including the release of the Maternal Health Mortality Review Panel report and staff presenting to the Senate Health & Long-Term Care Committee on the Fentanyl Crisis.

Kelly Cooper, Department of Health, provided a legislative session update to the Board, and highlighted one of the main themes for this session was workforce, which for the Department involves discussion of credentials for health care providers, including dental therapists, behavioral health specialists, peer specialist, and music therapists.

She mentioned the following bills as impactful to the Department:

- SB 5236-Hospital Staffing
- HB 1134-988 Crisis System
- SB 5120-23 Hour Crisis Relief Centers
- HB 1724-Reducing Barriers to Licensure
- HB 1470-Private Detention Centers
- SB 5367-Products containing THC
- SB 5536-Controlled Substances
- SB 5263-Psilocybin
- HB 1335-Doxing

She noted that HB 1251 regarding drinking water facilities may require rule making rule making by the Board.

She reviewed the House and Senate Budget, and noted the House budget identified a change to the school rule budget proviso, that may allow the Board to move forward with school rules.

Chair Grellner invited Board Members for questions and discussion.

Patty Hayes, Board Member reflected on the Maternal Mortality Report, suggesting that it may be interesting for the Board to explore further from a public health perspective sometime this year.

Stephen Kutz, Board Member suggested that looking at the under capacity of Obstetrician-Gynecologists (OB-GYNs) and lack access to prenatal visits as an important factor in Maternal Mortality rates. He also asked whether COVID-19 testing would continue to be free, noting there's a difference between coverage and free. Michael Ellsworth, Secretary's Designee, said he will look into it and update the Board. Member Kutz also expressed concern about the Department receiving data from emergency rooms and urgent care, and that the end of the Federal order will mean doctors will no longer use testing equipment. Member Ellsworth stated that the end of the Public Health Emergency is separate from the Food and Drug Administration (FDA) authorization which may continue until October 2024.

Dimyana Abdelmalek, Board Member asked if the President ending the Public Health Emergency affects the state public health acts and Member Ellsworth said it does not.

Socia Love-Thurman, Board Member shared that she is also interested in how the Board can dive more into the Maternal Child Crisis and shared her interest in bringing community voice to the board, especially as Native Maternal work is already happening on a regional level.

Kate Dean, Board Member shared that HB 1515 is a big priority for counties. She also stated that there is confusion about if and when Washington (WA) State residents should be self-reporting even among the most informed WA residents. Member Ellsworth said that the Department has shifted from individual positive tests data collection, especially with the rise of home test kits. The Department is focused on tracking Hospitalization and Death rates, genome sequencing, and national/global trends.

6. HEALTH DISPARITIES COUNCIL REDESIGN

Stephen Kutz, Board Member introduced the Governor's Interagency Council on Health Disparities (Council) and a brief overview of what would be covered during their presentation. LinhPhụng Huỳnh, Council Manager, and additional presenters introduced themselves and thanked Board Members for the opportunity to present an update on the Council's work.

Grace Cohen, Department of Health, Council Fellow, provided an overview of presentation topics, which included background on the history and creation of the Council, past focus areas, and current Council redesign efforts. They shared that the Council was created in 2006 through a bill championed by Senator Rosa Franklin, the first African American woman elected to the Washington State Senate. The goal of the Council is to eliminate health disparities among people of color and women in Washington State. The Council's current authorizing legislation also names specific health conditions that the Council should examine, as well as Council authority, responsibilities, and membership.

Ms. Huỳnh outlined the relationship between the Council and Board and identified how their work intersects, she noted that state statute requires the Board to provide staffing and assistance to the Council. She shared that the Board has a seat on the Council, conducts health impact reviews in collaboration with the Council, and both aim to ground their work in health equity. Ms. Huỳnh provided a list of topics where the Council has made past recommendations, from education and early learning to reproductive health access, to disaggregating data, etc. Ms. Huỳnh emphasized that throughout the past 17 years, they have heard clearly and loudly from communities that interagency efforts should focus on addressing the root causes of health disparities and inequities—such as racism, discrimination, and other forms of bias and exclusion—and the Council should move upstream when examining these issues across all systems, as these are the things that limit a person's opportunity to health and wellbeing.

Victor Rodriguez, Council Co-Chair, shared that he is one of the community-appointed members of the Council. He provided details about the Council's redesign efforts. Since the Council was established 17 years ago, a lot has changed, and the Council has learned a lot. The Council wants to incorporate these learnings to build together the future agencies and community members want for Washington State regarding health and health equity. Council Vice Chair Rodriguez noted that a significant part of the redesign effort is reimagining the Council's statute and recommending updates to lawmakers, so the Council's authority aligns with their aspirations for the future and is grounded in their foundational truths. The Council will use its vision and operating principles, which emphasize bold action, to guide these efforts. Council Vice Chair Rodriguez also encouraged Board Members to participate in the redesign effort and contribute their vision, hopes, and dreams for what health can look like in Washington.

Jessica Zinda, Council Member, introduced the Council's draft intent and purpose statement (available in English and Spanish), which serves as a high-level unifying purpose statement that the Council believes will evolve throughout the redesign process. Council Member Zinda also identified various areas of exploration the Council will look at. She invited Board Members to join them in building a new vision and narrative around health in Washington.

Ms. Huỳnh wrapped up the presentation by sharing opportunities to engage with the Council and stay connected to their work (see presentation on file).

Member Hayes asked presenters if they could share the differences between the areas of exploration the Council is looking at in its redesign and the Council's current authority. Member Hayes noted it would be interesting to have a side-by-side visual comparison of the two as work progresses. She also asked about what accountability looks like for the Council. Ms. Huỳnh responded that the Council is exploring statute updates that meet the moment now, and that focus on addressing upstream factors and the underlying causes of disparities Washington is seeing across its systems. Council Vice Chair Rodriguez added that the Council can develop and share materials to show the differences between current statute and where the Council wants to go. He also reinforced that in government we have new language and a new understanding about health equity and health disparities, and that this redesign process will include thinking about how to better frame these topics. Council Vice Chair Rodiguez addressed the

question of accountability and shared that there is not a simple answer, but the Council aspires to be accountable to those disproportionately impacted by health inequities in Washington. He noted that there's a need to engage these communities in an ongoing way, deepen our relationships, and encourage a more participatory democracy.

Member Dean, inquired if the Council works exclusively with the governmental public health system, or if it also expands its work to the health care system. Ms. Huỳnh responded that in the Council's statute, they are required to promote collaboration across state agencies, as well as the public and private sector, which would include health systems and organizations that promote social determinants of health. She shared that the recommendations the Council makes typically focuses on what government can do, as they make recommendations to the legislature and the Governor, and government is a vital part of service delivery and how agencies can either perpetuate or eliminate health inequities in Washington. Member Dean shared insights and lessons from bringing new membership to their local board of health, including her hope that moving forward, the local board can ensure an equitable and participatory process without barriers to participation, as Victor touched on during this presentation.

Kelly Oshiro, Board Vice-Chair shared ideas for community members and agencies that the Council could engage in its redesign efforts. Vice Chair Oshiro noted the importance of engaging the Attorney General's Office and public defense groups as well as those whose work relates to the built environment, such as the Department of Transportation.

Member Kutz provided an example of a past topic area where the Council's voice has had impact. Several years ago, members of the community spoke to the Council about poor conditions and health and safety concerns at the federal government detention facility out on the tide flat. Council members listened to these public comments, but felt limited by the Council's current statute. The Council decided to write a letter to [the federal government] detailing community members' concerns and calling for action, which Member Kutz felt led to state legislation this session granting the Washington State Department of Health (Department) some oversight of these facilities.

Keith Grellner, Board Chair, thanked Council Members and staff for their presentation and said the Board will keep an eye out for the legislation to change the Council's statute, and the Board will be there to support these efforts.

The Board recessed for lunch at 12:10 p.m. and reconvened at 1:10 p.m.

7. BRIEFING/UPDATE – NEWBORN SCREENING, ORNITHINE TRANSCARBAMYLASE DEFICIENCY (OTCD), CHAPTER 246-650 WAC

Dimyana Abdelmalek, Board Member, Thurston County Health Officer, gave some brief background on the Board's authority around newborn screening, ornithine transcarbamylase deficiency (OTCD) as a hereditary condition, and where the Board is in its process of adding OTCD as a new condition for the state's newborn screening panel (see memo).

Molly Dinardo, Board Staff, gave a quick presentation on the condition and provided an update on the Department's funding request to add OTCD to the state's screening panel (see presentation on file).

Member Hayes said the lack of funding is disappointing and asked if staff knew the reason why the Governor did not include funding for OTCD in the budget.

Ms. Dinardo said there were four items that the Department included in its funding request to the Governor's Office this year related to newborn screening, one of which was for a fee increase to include OTCD. She shared that at this time, the only service fully funded in the Governor's and House and Senate Budgets was the overnight shipping courier service. Member Hayes then asked if the Board included funding for newborn screening as part of its legislative priorities, and said if we did not, she recommends making sure to include it in the legislative statement next year. Ms. Dinardo stated her agreement and shared that a challenge is that if funding for newborn screening isn't included in the Governor's budget, the Board cannot take additional action. The Board's position is guided by what's included in the Governor's budget.

Member Kutz inquired about the Department's four funding requests and the estimated annual cost of adding OTCD as a condition for screening. He stated that there aren't only costs related to screening, but also to the health care system if these conditions aren't detected early. He also inquired about the screening cost per test.

Ms. Dinardo said the cost to add OTCD is roughly 105k per year for testing, which would be $1.26 per baby.

Ms. Davis added that the $1.26 per baby covers the cost of the newborn screening test. It doesn't cover increased Medicaid coverage and asked John Thompson, Director of the Newborn Screening Program to confirm. She also asked if there might be a separate request that comes through the Health Care Authority (HCA) that covers potential other costs associated with the care of these children.

John Thompson, Director of the Newborn Screening Program at the Department of Health (Department), said he wasn't aware of separate HCA requests. He also stated that approximately 40% of babies born in Washington are eligible for Medicaid coverage, and the screening fee per baby covered by Medicaid needs to be in the HCA's budget. When the Department makes a funding request to the Governor's Office through the decision package process, they let the HCA know that this is what they are requesting. Dr. Thompson also stated that when the legislature grants the Department the ability to increase the newborn screening fee, they also receive the authority to spend that additional funding.

Member Love-Thurman asked as the Board moves forward with considering other potential tests for the state's panel if we should combine these requests together or keep them separate. Dr. Thompson asked if Dr. Love-Thurman was referring to the upcoming technical advisory committee (TAC) to review guanidinoacetate methyltransferase (GAMT) deficiency, and if the committee and Board decide to

recommend adding the condition, if this new request should be included with the request for OTCD.

Member Love-Thurman confirmed that this was correct, asked what the best strategy would be moving forward with future conditions, and if a certain approach might be easier for the Governor's Office. Dr. Thompson recommended combining future requests. He also stated that the legislative session is not over and there are still ways that line items can change. Dr. Thompson said if OTCD isn't funded, he would like to strategize the messaging for OTCD and any upcoming conditions that the Board makes decisions on so that it is clear what the Department is asking for. He said in past sessions there was less willingness to increase fees in the second year of the biennium (short session), but those things can be overcome with careful planning and communication.

Chair Grellner asked if staff were aware of a champion who could help to get this topic addressed in this session or if there is something that the Board can do.

Ms. Dinardo said that there's a parent advocate, who was involved in the TAC and has been doing advocacy on their end. Ms. Davis reminded Board Members that the dilemma for the Department and the Board is that funding was not included in the Governor's budget, so we are limited in what we can do.

Chair Grellner thanked staff for the update and said we will keep our eyes on this issue as it goes forward.

8. EMERGENCY RULEMAKING – ON-SITE SEWAGE SYSTEMS, WAC 246-272A-0110, PROPRIETARY TREATMENT PRODUCTS AND SUPPLY CHAIN SHORTAGES

Chair Grellner introduced Department of Health (Department) staff. Michael Ellsworth, Department of Health and Secretary's Designee, said the Department is asking the Board to consider a fourth emergency rule to amend WAC 246-272A-0110 to allow manufacturers to make written requests to use replacement components in proprietary treatment products during supply chain shortages and other manufacturing disruptions. The Board has considered the request previously and the Department is proposing the same language in this fourth request.

Jeremy Simmons, Department of Health summarized the need for the emergency rule and implementation to date, noting that his remarks are reflected in meeting materials and the same request in past meetings. He explained the request stems largely from a shortage of ultraviolet (UV) bulbs caused by closure of Salcor Inc. in April 2022 and other supply chain disruptions associated with the COVID-19 pandemic. Mr. Simmons said use of substitute bulbs has been successful and allowed thousands of septic systems across the state to continue functioning. The last emergency rule was filed February 9 and limited to 120 days, therefore the Department is requesting adoption of a fourth emergency rule to ensure septic systems can continue using replacement components based on Department approval for needed maintenance and repairs. Mr. Simmons said the Department is addressing the issue in the permanent rulemaking to

allow use of substitute parts in situations of supply chain shortages and other manufacturing disruptions.

Chair Grellner re-stated that this is the fourth request for this emergency rule. Vice Chair Oshiro asked for an update on the timeline of the permanent rulemaking. Mr. Simmons said the Department had planned to do a final briefing in June but is now aiming for August followed by the public hearing. Vice Chair Oshiro asked if the Board will receive a request for a fifth emergency rule. Stuart Glasoe, Board Staff, said he thought a fifth emergency rule would be needed, likely addressed in August alongside the briefing on the permanent rulemaking followed by public hearing on the proposed rules tentatively scheduled for November.

Motion: The Board directs staff to file a fourth CR-103E, Emergency Rulemaking Order, upon expiration of the third emergency rule, filed as WSR 23-05-055, to amend WAC 246-272A-0110 to help ensure on-site sewage system proprietary treatment products continue to function properly without negatively impacting treatment, operation, or maintenance during supply chain shortages or other manufacturing disruptions.

Motion/Second: Member Kutz/Member Dean. Approved unanimously

9. RULEMAKING PETITION – NEWBORN SCREENING, REQUEST TO ADD ARGINASE 1 DEFICIENCY (ARG1D) TO CHAPTER 246-650 WAC

Chair Grellner introduced the agenda item and invited Board Member, Dr. Love Thurman to provide further information.

Dr. Socia Love-Thurman, Board Member, reviewed the Board's petition for rulemaking policy, including the responsibilities of state agencies when they receive petitions. Member Love-Thurman shared that on March 29, the Board received a petition for rulemaking to include Arginase 1 Deficiency (ARG1-D) as a required condition in the Board's newborn screening rule under Chapter 246-650 WAC. Member Love-Thurman provided a brief description of ARG1-D. She then directed Molly Dinardo, Board staff, and John Thompson, Director of the Newborn Screening Program at the Department of Health (Department) to provide an overview of the Board's process for adding a condition, the petition request, and a brief overview.

Ms. Dinardo and Dr. Thompson presented the ARG1-D petition. Ms. Dinardo reminded Board Members of the process for considering new conditions for the newborn screening (NBS) panel, including the three guiding principles and the five newborn screening criteria. Ms. Dinardo shared that in the petition the Board received, the petitioner stated that a diagnosis of ARG1-D at birth allows for immediate treatment. Dr. Thompson provided a high-level overview of ARG1-D, its symptoms, and its treatment. Dr. Thompson directed Board Members to review the family stories located in the meeting materials packet, which provide personal testimonies of what families must go through to get a diagnosis for their loved ones.

Ms. Dinardo mentioned several other considerations for the Board as they discuss the petition request, such as ARG1-D is listed as a secondary condition on the Federal

Recommended Uniform Screening Program (RUSP), Washington is one of the few states that do not currently require testing for the condition, and the Washington Newborn Screening lab has been running the ARG1-D blood testing for Idaho since 2021. Ms. Dinardo then asked Board Members to discuss how they would like to proceed with this petition.

Vice Chair Oshiro commented that she is interested in the NBS program's current testing in Idaho and is curious about what it would be like to do the NBS testing for ARG1-D for Idaho and Washington, and what the cost would be to scale it up. Dr. Thompson responded that for ARG1-D, they are looking for a high concentration of Arginase in the blood, which is done using a specific technology called tandem mass spectrometry. The Department currently has this capability in its laboratory now. Adding ARG-1D testing would be a minor change to their process, as processing specimens would be like what they do in their contracted work with Idaho. Dr. Thompson stated it would also mean a modest number of repeat tests they would need to conduct, and for the babies with a positive result, it would mean more follow-up. The cost difference would be minimal for ARG1-D – they don't have an exact cost estimate, but if Dr. Thompson had to guess, he shared that it would be about $1 or less due to the infrastructure already in place.

Member Kutz, asked if his assumption is correct, that if roughly 33 states already screen for ARG1-D, it seems that the efficacy of screening has been recognized by most of the states in the country. Dr. Thompson responded no, not necessarily. Member Kutz then asked if it was related to the ease of testing. Dr. Thompson responded that maybe, but that it is more complicated than that. Dr. Thompson then provided some background historical context. He shared that back in 2002, the Board was looking at a condition that would require tandem mass spectrometry, which was newer technology at the time. The technical advisory committee (TAC) and the Board at that time had discussed opening tandem mass spectrometry to test everything, but the decision was made to be more focused and to develop a process to evaluate candidate conditions. This was the TAC that helped develop the Board's current five newborn screening criteria. Dr. Thompson noted that other states at that time also brought on tandem mass spectrometry, and, depending on their decision-making, either opened mass spectrometry screening broadly or narrowed its application like Washingtons approach. Dr. Thompson states that for the 33 states we know are screening for ARG1-D, they are looking at all primary and secondary conditions on the tandem mass spectrometry, it may be for ease, but ultimately unsure of what decisions were.

Member Hayes states that one of the compelling things for her is the key to early identification and treatment and agreed with Dr. Thompson that the petitioner's story had been compelling and gave a good background for her. She states that in the last meeting, a TAC had been requested to be formed on a different disorder, and questioned for the sake of efficiency, if the Board moved forward directly to a TAC if the committee could review both disorders during the same committee meeting. Dr. Thompson responded yes and that if the Board decides to move forward with a TAC he recommends moving forward in this way for efficiency. He notes that gathering a multidisciplinary group of stakeholders in NBS is challenging, so discussing the disorders together makes sense. He also states that the specialists on the TAC could

speak to both conditions and thinks that speaking on them together in one day can happen.

Member Dean asked Dr. Thompson to explain what a secondary condition on the RUSP is and if there is any sufficient data coming from different states that have chosen to do this testing that would help to inform the Board's decision-making. Dr. Thompson explained that RUSP is a list of conditions recommended by the Secretary's Advisory Committee on Heritable Disorders in Newborns and Children that reports to the Secretary of Health and Human Services. He said RUSP was originally a survey of NBS interested parties in the early 2000s and at that time, the group said here is the list of recommended conditions. They then scored each condition based on a certain threshold. If a condition scored above a certain threshold, it was considered a primary target, and below the threshold, it was considered a secondary target. Over time that moved into being called the RUSP, so back in the early 2000s, if a condition at that time did not have good treatment or wasn't to be known to be a problem or be of clinical consequence, it likely didn't score high numbers to pass that threshold. Dr. Thompson shared that for the conditions that didn't make it on this list, there is a separate process where members of the public or providers can make a nomination to the RUSP, so some conditions that have been categorized as secondary or haven't been added as primary or secondary can be nominated onto the formal RUSP. Dr. Thompson asked Member Dean to repeat her second question. Member Dean asked if there is data from either the RUSP process or other states that have implemented screening on the effectiveness of catching ARG1-D. Dr. Thompson referred to a publication submitted by the petitioner that shows in the United States that of the 33 states that have been screening for ARG1-D, about 29 million babies have been screened, and 22 cases have been identified, so the prevalence is pretty rare. Dr. Thompson said that if the Board decides to move forward, Department and Board staff can learn more about those cases and find the answer to her question.

Member Love-Thurman said the discussion was great and she appreciated the stories the petitioner provided and although a rare disease, it does sound like something that if caught early could make a big difference. Member Love-Thurman offered a motion.

Motion: The Board declines the petition for rulemaking to add ARG1-D as a condition for newborn screening in Chapter 246-650 WAC, but directs staff to work with the Department of Health to move forward with convening a technical advisory committee to evaluate both ARG1-D and previously decided upon GAMT deficiency using the Board's process and criteria to evaluate conditions for inclusion in WAC 246-650-020 and then make a recommendation to the Board.

Motion/Second: Member Love-Thurman/Member Hayes. Approved unanimously

10. LEGISLATIVE UPDATE

Michelle Davis, Board Executive Director, said she appreciated the legislative update by Kelly Cooper. She said the request for $50 million for each fiscal year is included in all the budgets, there's just a difference in the way the Senate approaches the dollars. She said the House amended the budget proviso that suspends the School Environmental

Health and Safety rules, that essentially allows us to update the suspended rules. The Board wouldn't be able to implement the rules until the following legislative session. Ms. Davis sent a note to the budget writers stating the Board's preference for the House budget.

Ms. Davis said several Local Health Jurisdictions (LHJs) have set up School Environmental Health and Safety programs. She commented that there should be a uniform standard for inspection across all LHJs. She noted that with the expansion of school programs, there may be a checkerboard of varying approaches for regulating those schools. The standards should be something we can rely on, a safe and clean environment.

Ms. Davis said she would send a final legislative report out to the Board. She announced the Health Impact Review (HIR) team is presenting before House Health Care & Wellness committee next week on work including HB 1169, concerning legal financial obligations; HB 1562, reducing risks of harm associated with gun, gender-based violence; and SB 5365, preventing use of vapor and tobacco use by minors.

Ms. Davis reminded Board members that 2023 is year one of a two-year biennial budget process. She said next year's budget will focus on what's needed to fund the rest of the biennium. She noted that any bill that died this year can be resurrected next year, and said the team would continue to examine legislation against the Board's legislative statement, and noted that next year's statement needs to include Newborn Screening.

Member Kutz said the school rules are more than 20 years old, and the moratorium has been in place for a long time. He asked about the possibility of sending comments to the Governor's office to at least begin working on these rules. Chair Grellner said we've discussed it over and over again, we've gotten some attention. Ms. Davis said we've heard from Rep. Pollet in January, and his reflection on drinking water testing in schools from legislation two years ago. She said the Board cannot do this work in a vacuum, it takes a significant engagement with partners. We have learned a lot about indoor air quality over the last couple years. When the Board adopted rule in 2010, was relying on studies from 2004, and we've learned a lot since that time. Member Kutz said there may be less obvious things lurking we don't even know about. Just because you change the rules, doesn't mean they will be put into effect w/out funding. Maybe this needs a little push to move forward, it's a multi-year process.

Member Hayes said this is such a unique situation where we've had a standing issue and the rule as amended has problems. The Board should look for opportunities to have more exploration with the Governor's office and find solutions. Chair Grellner commented on these good ideas, saying they are like what we've been doing. Because of the legislative commitment to Foundational Public Health Services (FPHS), even though the new rule has been suspended, the old rule is still in place which is better than nothing. He said local health can now gear up to use those FPHS dollars to do the inspections. He said it would be great to have modernized rules, but at least FPHS is growing the number of counties participating which are little glimmers of movement.

Ms. Davis commented that it would be helpful for the Board to hear from partners in local health and those closest to the schools. She said she would raise this topic for our

new Policy Advisor joining our staff and said she looked forward to having someone with fresh eyes and new perspective.

Ms. Davis said the FPHS Steering Committee will be deciding how the funds will be allocated and noted that the number of proposals exceed available funds. She reviewed the Board's request, which includes continued funding for a Community Engagement Coordinator, and Administrative Assistant. She said the Board was also seeking new funding for a position focused on Equity and Social Justice, and Tribal Relations. She noted the request also includes funding for a additional Communications Consultant and funding to continue work with interpretation and translation for meetings, including TAC's. She said the Steering Committee will be considering the requests and discussing them in May and June.

Chair Grellner said that four people on the Steering Committee are connected to the Board, so we are in a good place.

11. BOARD MEMBER COMMENTS

Keith Grellner, Board Chair called for any comments.

Member Hayes said she will miss the June meeting due to family and graduation events.

Chair Grellner thanked Board staff, saying the meetings are really dialed in now and are running smooth. He is glad to have interpreters and commented they did a great job.

ADJOURNMENT

Keith Grellner, Board Chair, adjourned the meeting at 2:30 p.m.

WASHINGTON STATE BOARD OF HEALTH

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Keith Grellner, Chair

To request this document in an alternate format or a different language, please contact the Board at 360-236-4110 or by email at wsboh@sboh.wa.gov TTY users can dial 711.

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From: Bill Osmunson
Sent: 5/21/2023 9:27:31 AM
To: DOH WSBOH
Cc:
Subject: Health Promotion Committee

External Email

Dear Washington State Board of Health Bill Osmunson DDS MPH bill@teachingsmiles.com <mailto:bill@teachingsmiles.com>
Health Promotion Committee

I and other researchers would like to make a presentation (in the future) to the Committee regarding excess fluoride exposure and new research on risks.

Increasing fluoride exposure by adding fluoride to public water was started with good intentions and based on the best evidence we had. The evidence and science has grown over the last 70+ years, more rapidly over the last 20 and exploded over the last 8 years. We must re-evaluate policy in light of the new research. Risk assessment is clear, excess fluoride is harming the public far more than benefit. A risk management goal will never find a safe threshold for everyone. We have the empirical evidence and we must stop the paralysis of analysis.

This request for researchers and clinicians to provide evidence to the Washington Board of Health is intended to protect our most vulnerable from harm, especially the fetus and infants who are currently being harmed. The estimated harm far exceeds the estimated benefit of increased fluoride exposure.

It is my understanding the Board did look at some of the evidence a few years ago; however, it appears the Board did not focus on the fetus and infants and considered endorsements and reviews of believers rather than the latest empirical evidence. Judgment should be made on the highest quality of empirical evidence and focus on the fetus and infants who are most sensitive to toxins.

In very brief:

1. The Washington Department of Health indicates the Board of Health has jurisdiction over fluoridation.

2. The Washington Board of Pharmacy (and FDA CDER) determined fluoride for ingestion is a drug. Topical fluoride in toothpaste is approved by the FDA CDER with an NDA and label which says "Do Not Swallow" the equivalent of a quarter milligram the same as the Board recommends for each glass of fluoridated water.

3. Although a significant body of evidence suggests fluoridation has benefit of between a quarter to half a cavity reduction per child, the research is mostly historic, observational

studies of lower quality lacking control for many confounding factors. Only one published randomized controlled trial is available and it reported no significant caries reduction. Dosage, Safety, Mechanism, Label, Jurisdiction and ethics have not been adequately reviewed.

4. Topical fluoride can get to the tooth surface where caries are forming and is FDA CDER approved, not ingested fluoride. Ingested fluoride can't get from inside the tooth to the outside of the tooth where caries are developing. The tooth is highly resistant to the transfer of fluoride.

5. About 2 out of 3 chldren are ingesting too much fluoride as reported by NHANES and have dental fluorosis, a biomarker of too much fluoride. Concentration of fluoride in water is not dosage. Some drink 10 times more water than the mean. 30% to 70% of fluoride comes from other sources such as foods, medicines, pesticides, etc. Dosage is not controlled and of most concern for the developing fetus and infant and child.

6. In 2006 the National Research Council reported potential harms such as cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight. Fluoride is a highly reactive element and potential to affect all cells. Each of those risks have a great deal of research and continually growing in concern.

7. The contaminant fluoride chemical added to water is contaminated with small but often significant amounts of polutants such as arsenic and much comes from other countries which do not fluoridate or provide assays of purity, such as China.

8. Of most concern are infants on formula made with fluoridated water. Mother's milk protects the infant and usually has no detectible fluoride mean of 0.004 mg/L and as high as 0.01 mg/L. Fluoride at 0.7 mg/L gives the infant many times more fluoride than mother's milk. Mother's milk is the normative value for infants. The EPA and most reviews of fluoride exposure do not include infants or fetuses in their evaluations.

9. Unfortunately the mother's body does not protect the fetus from fluoride as it readily passes through to the infant. Mothers drink more water and their dosage is more than the mean adult intake placing the developing fetus at significanat risk.

10. I treat dental fluorosis both cosmetic and functional damage. We dentists make money from fluoride and we in dentistry are not the best sources of unbiased information, our intent is good, yet biased. The Board has been relying on endorsements and reviews by believers rather than empirical evidence.

11. The National Toxicology Program under HHS has spent 8 years evaluating fluoride's developmental neurotoxicity reporting lower IQ. It is over 700 pages and 8 years in the making. The quality of the report is excellent, the best to date, and has had multiple peer reviews. The NTP draft review included 159 human studies, 339 non-human studies, 60 in vitro, and many other publications, over 90% of the studies reporting lower IQ, brain damage, from ingested fluoride and the Meta-Analysis does not report a safe threshold. The draft monogram was reviewed and blocked by the Department of Health and Human Services from release until the court (a law suite against the EPA) ordered release. After

several peer reviews, the NTP Board of Scientific Counselors was asked to adjudicate the draft and approved it May 2023. The report states: "The consistency of the data supports an inverse association between fluoride exposure and children's IQ." The meta-analysis reports no threshold of safety.

Lower IQ is just one of several risks from fluoride.

12. An example of the research, Till: "An increase of 0.5 mg/L in water fluoride concentration (approximately equaling the difference between fluoridated and non-fluoridated regions) corresponded to a 9.3- and 6.2-point decrement in Performance IQ among formula-fed." Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880. [PubMed]

Remember, a 5 IQ loss doubles the intellectually disabled (special education) and halves the number of gifted.

13. Most developed countries have never fluoridated their water or have stopped fluoridation.

14. When understood with the lack of significant benefit and serious risks, the ethics of fluoridation without consent with an unapproved drug violates every code of ethics.

Of most concern are the fetus and infants. To save you time, I would recommend the committee permit a zoom with some of the researchers to present their findings. I am confident a presentation on the above 13 items will provide an overview which would save considerable time.

Sincerely,

Bill Osmunson DDS MPH

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From: Bill Osmunson
Sent: 6/8/2023 7:20:20 AM
To: DOH WSBOH,Ramos, Bill
Cc:
Subject: Osmunson Public Comment for June 2023

External Email

Washington State Board of Health, Public Comment, June 2023
Bill Osmunson DDS MPH

Dear Washington State Board of Health and Department of Health,

When it comes to fluoride exposure, the Board and Department must reconsider their recommendations, advice.
The Board responded June 1, 2023 in a response email to my request to protect the developing brains of infants, responded the Board does not issue health advisories, which is the responsibility of the Department.

However, the Board's website, "Recommended Strategies to Improve the Oral Health of Washington Residents" is where the Board of Health Addresses Oral Health. The word advisory and recommendation are often interchangeable and considered synonyms.

The Board's Oral Health Project strategic recommendations, included the advisory or "recommendation" (without empirical evidence) to expand and maintain water fluoridation. Clearly the Board has power to write rules and also make "recommendations." The myth that fluoridation saves money is supported only if some costs are included, no risks and harm are considered, jurisdiction is ignored and no quality research is demanded.

My intent for the past nearly two decades contacting the Board and requesting rule changes, is to protect the developing brains and bodies of our most vulnerable. Whether that is through advice, recommendation, strategy or rule change is up to the Board and Department.

The Board's recommendation to fluoridate public water is not based on current empirical scientific researched evidence, but rather endorsements.

The Board has ignored the Washington State Board of Pharmacy, the US Food and Drug Administration Center For Drug Evaluation and Research, Washington State laws on poisons drugs and toxins, the US National Toxicology Program, primary research and empirical evidence and most countries public health position on fluoride ingestion. Instead, the Board has gone to promoters for further endorsements.

For example, if we wanted to find out what is the best truck and surveyed all the Ford dealers, we would expect a forgone conclusion. The Board has likewise cherry picked reviewers and sources to protect policy rather than protect the public from harm.

Some wise scientific educators have reminded us that "We don't know what we don't know," and that "50% of what we teach you is wrong, and to always humbly remember we don't know which 50%." Sometimes authorities have been wrong and the public has been harmed.

Science is the testing of theories against evidence obtained and is not a constant but is a constantly evolving, growing, learning process of discovery. Sometimes we discover a miracle and sometimes discover the miracle is seriously flawed. Putting a moving target into law is problematic.

Public health is a very scary profession where our unknowns are placed for all to see, experience, benefit and sometimes, belatedly we find we have harmed many.

I was taught in my public health masters program that our professional job is not to review, analyze and draw conclusions from the empirical scientific evidence. Leave that to the experts. I disagree. If not public health, then what profession pulls all streams of evidence together from all research specialists for judgment? Each specialist has a narrow niche, knows what they know, but are not specialists in all aspects. In the end, judgment is required to weigh all streams of evidence. Public Health requires judgment, and judgment can be painful and needs a balanced jury pool.

Fluoridation is a poignant reminder of when our well intended policies lack all the evidence and new evidence requires renewed evaluation judgment to protect the health of the public.

For judgment, the Board of Health must reserve final judgment until all the following have been considered and answered: (Acknowledgement: A significant contribution to the following is by Paul Connett PhD. If current references are desired, please contact me.)

1. The Board must consider that the fetus and infants are most vulnerable to toxins, drugs, and/or poisons. Dosage on a small body can have a severe reaction which might not happen for the "average" adult. Ask any anesthesiologist, pharmacist or pediatric physician.

2. The Board must consider a public health flaw has been perpetuated that controlling the concentration of fluoride in water controls the individual dosage. 30% to 70% of fluoride exposure is from other sources than water and an infant on formula made with fluoridated water receives about 175 times more fluoride than the mean concentration of fluoride in mother's milk, 0.004 ppm. Not everyone metabolizes fluoride the same or has the same health or same exposure of other toxins. To protect individuals, a margin of error and/or intraspecific factor of at least 10 is essential.

3. Relying on a "specialist" to be an expert in all fields is a flawed assumption. For example, toxicologists do not carefully evaluate benefit. Dentists are not experts for evaluating brain development and systemic harm. And each expert has their bias. The American Dental Association (ADA) testified in court they owe no duty to protect the public. When push comes to shove, the ADA first and formost protects dentists and the CDC Oral Health Division follows the ADA.

4. Patients ask me to treat dental fluorosis, an undisputed risk of excess fluoride exposure prior to the eruption of teeth. The ADA suggests dental fluorosis is just a cosmetic effect because they do not admit fluoride can cause functional damage, chipped, broken and fractured enamal. Damage is damage regardless of whether the person gets the damage repaired or not.

5. The EPA did a study which reported more cost to repair "functional" damage than "cosmetic damage."

6. The Food and Drug Administration Center for Drug Evaluation and Research (FDA CDER) has never approved the ingestion of fluoride with intent to prevent or mitigate dental caries. Topical is approved with the warning "do not swallow" the equivalent of a quarter milligram of fluoride, the same as about one glass of fluoridated water. The Washington Board of Pharmacy confirmed fluoride is a drug. Therefore, fluoride is an unapproved illegal drug. Fluoride is not regulated by the DEA.

7. Fluoridation lacks individual informed consent, a standard practice of all medications. A key reason most of Western Europe has rejected fluoridation, forcing people to take a medication irrespective of their consent.

8. Fluoridation lacks the patient's doctor's prescription, as required for all legend drugs.

9. Fluoridation is usually dispensed on the authority of neighbors voting the drug on each other. Voters are swayed by marketing and those in authority.

10. Dr. Arvid Carlsson, the 2000 Nobel Lureate in Medicine and Physiology and one of the scientists who helped keep fluoridation out of Sweden:
“Water fluoridation goes against leading principles of pharmacotherapy, which is progressing from a stereotyped medication — of the type 1 tablet 3 times a day — to a much more individualized therapy as regards both dosage and selection of drugs. The addition of drugs to the drinking water means exactly the opposite of an individualized therapy” (Carlsson 1978).

11. Fluoride in water is just one source of fluoride. Food and beverages processed with fluoridated water (Kiritsy 1996; Heilman 1999), fluoridated dental products (Bentley 1999; Levy 1999), mechanically deboned meat (Fein 2001), tea (Levy 1999), and pesticide residues (e.g., from cryolite) on food (Stannard 1991; Burgstahler 1997). It is now widely acknowledged that exposure to non-water sources of fluoride has significantly increased since the water fluoridation program first began (NRC 2006).

12. Fluoride is not an essential nutrient. No disease, not even tooth decay, is caused by a “fluoride deficiency.”(NRC 1993; Institute of Medicine 1997, NRC 2006). Not a single biological process has been shown to require fluoride. On the contrary there is extensive evidence that fluoride can interfere with many important biological processes. Fluoride interferes with numerous enzymes (Waldbott 1978). In combination with aluminum, fluoride interferes with G-proteins (Bigay 1985, 1987). Such interactions give aluminum-fluoride complexes the potential to interfere with signals from growth factors, hormones and neurotransmitters (Strunecka & Patocka 1999; Li 2003). More and more studies indicate that fluoride can interfere with biochemistry in fundamental ways (Barbier

2010).

13. Fluoride accumulates in the body. Healthy adult kidneys excrete 50 to 60% of the fluoride ingested each day (Marier & Rose 1971). The remainder accumulates in the body, largely in calcifying tissues such as the bones and pineal gland (Luke 1997, 2001). Infants and children excrete less fluoride due to kidney function and take up to 80% of ingested fluoride into their bones (Ekstrand 1994). The fluoride concentration in bone steadily increases over a lifetime (NRC 2006).

14. No health agency in fluoridated countries is monitoring fluoride exposure or side effects. No regular measurements are being made of the levels of fluoride in urine, blood, bones, hair, or nails of either the general population or sensitive subparts of the population (e.g., individuals with kidney disease).

15. There has never been a single randomized controlled trial to demonstrate fluoridation's effectiveness or safety. Despite the fact that fluoride has been added to community water supplies for over 60 years, "there have been no randomized trials of water fluoridation" (Cheng 2007). Randomized trials are the standard method for determining the safety and effectiveness of any purportedly beneficial medical treatment. In 2000, the British Government's "York Review" could not give a single fluoridation trial a Grade A classification – despite 50 years of research (McDonagh 2000). The U.S. Food and Drug Administration (FDA) continues to classify fluoride as an "unapproved new drug."
Swallowing fluoride provides no (or very little) benefit

16. Benefit is topical not systemic. The Centers for Disease Control and Prevention (CDC, 1999, 2001) has now acknowledged that the mechanism of fluoride's benefits are mainly topical, not systemic. There is no need whatsoever, therefore, to swallow fluoride to protect teeth. Since the purported benefit of fluoride is topical, and the risks are systemic, it makes more sense to deliver the fluoride directly to the tooth in the form of toothpaste. Since swallowing fluoride is unnecessary, and potentially dangerous, there is no justification for forcing people (against their will) to ingest fluoride through their water supply.

17. Fluoridation is not necessary. Most western, industrialized countries have rejected water fluoridation, but have nevertheless experienced the same decline in childhood dental decay as fluoridated countries. (See data from World Health Organization presented graphically in Figure).

18. Fluoridation's role in the decline of tooth decay is in serious doubt. The largest survey ever conducted in the US (over 39,000 children from 84 communities) by the National Institute of Dental Research showed little difference in tooth decay among children in fluoridated and non-fluoridated communities (Hileman 1989). According to NIDR researchers, the study found an average difference of only 0.6 DMFS (Decayed, Missing, and Filled Surfaces) in the permanent teeth of children aged 5-17 residing their entire lives in either fluoridated or unfluoridated areas (Brunelle & Carlos, 1990). This difference is less than one tooth surface, and less than 1% of the 100+ tooth surfaces available in a child's mouth. Large surveys from three Australian states have found even less of a benefit, with decay reductions ranging from 0 to 0.3 of one permanent tooth surface (Spencer 1996; Armfield & Spencer 2004). None of these studies have allowed for the possible delayed eruption of the teeth that may be caused by exposure to fluoride, for which there is some evidence (Komarek 2005). A one-year delay in eruption of the

permanent teeth would eliminate the very small benefit recorded in these modern studies.

19. NIH-funded study on individual fluoride ingestion and tooth decay found no significant correlation. A multi-million dollar, U.S. National Institutes of Health (NIH)-funded study found no significant relationship between tooth decay and fluoride intake among children. (Warren 2009) This is the first time tooth decay has been investigated as a function of individual exposure (as opposed to mere residence in a fluoridated community).

20. Tooth decay is high in low-income communities that have been fluoridated for years. Despite some claims to the contrary, water fluoridation cannot prevent the oral health crises that result from rampant poverty, inadequate nutrition, and lack of access to dental care. There have been numerous reports of severe dental crises in low-income neighborhoods of US cities that have been fluoridated for over 20 years (e.g., Boston, Cincinnati, New York City, and Pittsburgh). In addition, research has repeatedly found fluoridation to be ineffective at preventing the most serious oral health problem facing poor children, namely "baby bottle tooth decay," otherwise known as early childhood caries (Barnes 1992; Shiboski 2003).

21. Tooth decay does not go up when fluoridation is stopped. Where fluoridation has been discontinued in communities from Canada, the former East Germany, Cuba and Finland, dental decay has not increased but has generally continued to decrease (Maupomé 2001; Kunzel & Fischer, 1997, 2000; Kunzel 2000; Seppa 2000).

22. Tooth decay was coming down before fluoridation started. Modern research shows that decay rates were coming down before fluoridation was introduced in Australia and New Zealand and have continued to decline even after its benefits would have been maximized. (Colquhoun 1997; Diesendorf 1986). As the following figure indicates, many other factors are responsible for the decline of tooth decay that has been universally reported throughout the western world.

23. The studies that launched fluoridation were methodologically flawed. The early trials conducted between 1945 and 1955 in North America that helped to launch fluoridation, have been heavily criticized for their poor methodology and poor choice of control communities (De Stefano 1954; Sutton 1959, 1960, 1996; Ziegelbecker 1970). According to Dr. Hubert Arnold, a statistician from the University of California at Davis, the early fluoridation trials "are especially rich in fallacies, improper design, invalid use of statistical methods, omissions of contrary data, and just plain muddleheadedness and hebetude." Serious questions have also been raised about Trendley Dean's (the father of fluoridation) famous 21-city study from 1942 (Ziegelbecker 1981).

Children are being over-exposed to fluoride

24. Children are being over-exposed to fluoride. The fluoridation program has massively failed to achieve one of its key objectives, i.e., to lower dental decay rates while limiting the occurrence of dental fluorosis (a discoloring of tooth enamel caused by too much fluoride. The goal of the early promoters of fluoridation was to limit dental fluorosis (in its very mild form) to10% of children (NRC 1993, pp. 6-7). In 2010, however, the Centers for Disease Control and Prevention (CDC) reported that 41% of American adolescents had dental fluorosis, with 8.6% having mild fluorosis and 3.6% having either moderate

or severe dental fluorosis (Beltran-Aguilar 2010). As the 41% prevalence figure is a national average and includes children living in fluoridated and unfluoridated areas, the fluorosis rate in fluoridated communities will obviously be higher. The British Government's York Review estimated that up to 48% of children in fluoridated areas worldwide have dental fluorosis in all forms, with 12.5% having fluorosis of aesthetic concern (McDonagh, 2000).

25. The highest doses of fluoride are going to bottle-fed babies. Because of their sole reliance on liquids for their food intake, infants consuming formula made with fluoridated water have the highest exposure to fluoride, by bodyweight, in the population. Because infant exposure to fluoridated water has been repeatedly found to be a major risk factor for developing dental fluorosis later in life (Marshall 2004; Hong 2006; Levy 2010), a number of dental researchers have recommended that parents of newborns not use fluoridated water when reconstituting formula (Ekstrand 1996; Pendrys 1998; Fomon 2000; Brothwell 2003; Marshall 2004). Even the American Dental Association (ADA), the most ardent institutional proponent of fluoridation, distributed a November 6, 2006 email alert to its members recommending that parents be advised that formula should be made with "low or no-fluoride water." Unfortunately, the ADA has done little to get this information into the hands of parents. As a result, many parents remain unaware of the fluorosis risk from infant exposure to fluoridated water.

Evidence of harm to other tissues.

26. Dental fluorosis may be an indicator of wider systemic damage. There have been many suggestions as to the possible biochemical mechanisms underlying the development of dental fluorosis (Matsuo 1998; Den Besten 1999; Sharma 2008; Duan 2011; Tye 2011) and they are complicated for a lay reader. While promoters of fluoridation are content to dismiss dental fluorosis (in its milder forms) as merely a cosmetic effect, it is rash to assume that fluoride is not impacting other developing tissues when it is visibly damaging the teeth by some biochemical mechanism (Groth 1973; Colquhoun 1997). Moreover, ingested fluoride can only cause dental fluorosis during the period before the permanent teeth have erupted (6-8 years), other tissues are potentially susceptible to damage throughout life. For example, in areas of naturally high levels of fluoride the first indicator of harm is dental fluorosis in children. In the same communities many older people develop skeletal fluorosis.

27. Fluoride may damage the brain. According to the National Research Council (2006), "it is apparent that fluorides have the ability to interfere with the functions of the brain." In a review of the literature commissioned by the US Environmental Protection Agency (EPA), fluoride has been listed among about 100 chemicals for which there is "substantial evidence of developmental neurotoxicity." Animal experiments show that fluoride accumulates in the brain and alters mental behavior in a manner consistent with a neurotoxic agent (Mullenix 1995). In total, there have now been over 100 animal experiments showing that fluoride can damage the brain and impact learning and behavior. According to fluoridation proponents, these animal studies can be ignored because high doses were used. However, it is important to note that rats generally require five times more fluoride to reach the same plasma levels in humans (Sawan 2010). Further, one animal experiment found effects at remarkably low doses (Varner 1998). In this study, rats fed for one year with 1 ppm fluoride in their water (the same level used in fluoridation programs), using either sodium fluoride or aluminum fluoride, had morphological changes to their kidneys and brains, an increased uptake of aluminum in the brain, and the formation of beta-amyloid deposits which are associated with Alzheimer's disease. Other animal studies have found effects on the brain at water fluoride levels as low as 5 ppm (Liu 2010).

28. Fluoride may lower IQ. There have now been 33 studies from China, Iran, India and Mexico that have reported an association between fluoride exposure and reduced IQ. One of these studies (Lin 1991) indicates that even just moderate levels of fluoride exposure (e.g., 0.9 ppm in the water) can exacerbate the neurological defects of iodine deficiency. Other studies have found IQ reductions at 1.9 ppm (Xiang 2003a,b); 0.3-3.0 ppm (Ding 2011); 1.8-3.9 ppm (Xu 1994); 2.0 ppm (Yao 1996, 1997); 2.1-3.2 ppm (An 1992); 2.38 ppm (Poureslami 2011); 2.45 ppm (Eswar 2011); 2.5 ppm (Seraj 2006); 2.85 ppm (Hong 2001); 2.97 ppm (Wang 2001, Yang 1994); 3.15 ppm (Lu 2000); 4.12 ppm (Zhao 1996). In the Ding study, each 1 ppm increase of fluoride in urine was associated with a loss of 0.59 IQ points. None of these studies indicate an adequate margin of safety to protect all children drinking artificially fluoridated water from this affect. According to the National Research Council (2006), "the consistency of the results [in fluoride/IQ studies] appears significant enough to warrant additional research on the effects of fluoride on intelligence." The NRC's conclusion has recently been amplified by a team of Harvard scientists whose fluoride/IQ meta-review concludes that fluoride's impact on the developing brain should be a "high research priority." (Choi et al., 2012). Except for one small IQ study from New Zealand (Spittle 1998) no fluoridating country has yet investigated the matter.

29. Fluoride may cause non-IQ neurotoxic effects. Reduced IQ is not the only neurotoxic effect that may result from fluoride exposure. At least three human studies have reported an association between fluoride exposure and impaired visual-spatial organization (Calderon 2000; Li 2004; Rocha-Amador 2009); while four other studies have found an association between prenatal fluoride exposure and fetal brain damage (Han 1989; Du 1992; Dong 1993; Yu 1996).

30. Fluoride affects the pineal gland. Studies by Jennifer Luke (2001) show that fluoride accumulates in the human pineal gland to very high levels. In her Ph.D. thesis, Luke has also shown in animal studies that fluoride reduces melatonin production and leads to an earlier onset of puberty (Luke 1997). Consistent with Luke's findings, one of the earliest fluoridation trials in the U.S. (Schlesinger 1956) reported that on average young girls in the fluoridated community reached menstruation 5 months earlier than girls in the non-fluoridated community. Inexplicably, no fluoridating country has attempted to reproduce either Luke's or Schlesinger's findings or examine the issue any further.

31. Fluoride affects thyroid function. According to the U.S. National Research Council (2006), "several lines of information indicate an effect of fluoride exposure on thyroid function." In the Ukraine, Bachinskii (1985) found a lowering of thyroid function, among otherwise healthy people, at 2.3 ppm fluoride in water. In the middle of the 20th century, fluoride was prescribed by a number of European doctors to reduce the activity of the thyroid gland for those suffering from hyperthyroidism (overactive thyroid) (Stecher 1960; Waldbott 1978). According to a clinical study by Galletti and Joyet (1958), the thyroid function of hyperthyroid patients was effectively reduced at just 2.3 to 4.5 mg/day of fluoride ion. To put this finding in perspective, the Department of Health and Human Services (DHHS, 1991) has estimated that total fluoride exposure in fluoridated communities ranges from 1.6 to 6.6 mg/day. This is a remarkable fact, particularly considering the rampant and increasing problem of hypothyroidism (underactive thyroid) in the United States and other fluoridated countries. Symptoms of hypothyroidism include depression, fatigue, weight gain, muscle and joint pains, increased cholesterol levels, and heart disease. In 2010, the second most prescribed drug of the year was Synthroid (sodium levothyroxine) which is a hormone replacement drug used to treat an underactive thyroid.

32. Fluoride causes arthritic symptoms. Some of the early symptoms of skeletal fluorosis

(a fluoride-induced bone and joint disease that impacts millions of people in India, China, and Africa), mimic the symptoms of arthritis (Singh 1963; Franke 1975; Teotia 1976; Carnow 1981; Czerwinski 1988; DHHS 1991). According to a review on fluoridation published in Chemical & Engineering News, "Because some of the clinical symptoms mimic arthritis, the first two clinical phases of skeletal fluorosis could be easily misdiagnosed" (Hileman 1988). Few, if any, studies have been done to determine the extent of this misdiagnosis, and whether the high prevalence of arthritis in America (1 in 3 Americans have some form of arthritis – CDC, 2002) and other fluoridated countries is related to growing fluoride exposure, which is highly plausible. Even when individuals in the U.S. suffer advanced forms of skeletal fluorosis (from drinking large amounts of tea), it has taken years of misdiagnoses before doctors finally correctly diagnosed the condition as fluorosis.

33. Fluoride damages bone. An early fluoridation trial (Newburgh-Kingston 1945-55) found a significant two-fold increase in cortical bone defects among children in the fluoridated community (Schlesinger 1956). The cortical bone is the outside layer of the bone and is important to protect against fracture. While this result was not considered important at the time with respect to bone fractures, it did prompt questions about a possible link to osteosarcoma (Caffey, 1955; NAS, 1977). In 2001, Alarcon-Herrera and co-workers reported a linear correlation between the severity of dental fluorosis and the frequency of bone fractures in both children and adults in a high fluoride area in Mexico.

34. Fluoride may increase hip fractures in the elderly. When high doses of fluoride (average 26 mg per day) were used in trials to treat patients with osteoporosis in an effort to harden their bones and reduce fracture rates, it actually led to a higher number of fractures, particularly hip fractures (Inkovaara 1975; Gerster 1983; Dambacher 1986; O'Duffy 1986; Hedlund 1989; Bayley 1990; Gutteridge 1990. 2002; Orcel 1990; Riggs 1990 and Schnitzler 1990). Hip fracture is a very serious issue for the elderly, often leading to a loss of independence or a shortened life. There have been over a dozen studies published since 1990 that have investigated a possible relationship between hip fractures and long term consumption of artificially fluoridated water or water with high natural levels. The results have been mixed – some have found an association and others have not. Some have even claimed a protective effect. One very important study in China, which examined hip fractures in six Chinese villages, found what appears to be a dose-related increase in hip fracture as the concentration of fluoride rose from 1 ppm to 8 ppm (Li 2001) offering little comfort to those who drink a lot of fluoridated water. Moreover, in the only human epidemiological study to assess bone strength as a function of bone fluoride concentration, researchers from the University of Toronto found that (as with animal studies) the strength of bone declined with increasing fluoride content (Chachra 2010). Finally, a recent study from Iowa (Levy 2009), published data suggesting that low-level fluoride exposure may have a detrimental effect on cortical bone density in girls (an effect that has been repeatedly documented in clinical trials and which has been posited as an important mechanism by which fluoride may increase bone fracture rates).

35. People with impaired kidney function are particularly vulnerable to bone damage. Because of their inability to effectively excrete fluoride, people with kidney disease are prone to accumulating high levels of fluoride in their bone and blood. As a result of this high fluoride body burden, kidney patients have an elevated risk for developing skeletal fluorosis. In one of the few U.S. studies investigating the matter, crippling skeletal fluorosis was documented among patients with severe kidney disease drinking water with just 1.7 ppm fluoride (Johnson 1979). Since severe skeletal fluorosis in kidney patients has been detected in small case studies, it is likely that larger, systematic studies would detect skeletal fluorosis at even lower fluoride levels.

36. Fluoride may cause bone cancer (osteosarcoma). A U.S. government-funded animal study found a dose-dependent increase in bone cancer (osteosarcoma) in fluoride-treated, male rats (NTP 1990). Following the results of this study, the National Cancer Institute (NCI) reviewed national cancer data in the U.S. and found a significantly higher rate of osteosarcoma (a bone cancer) in young men in fluoridated versus unfluoridated areas (Hoover et al 1991a). While the NCI concluded (based on an analysis lacking statistical power) that fluoridation was not the cause (Hoover et al 1991b), no explanation was provided to explain the higher rates in the fluoridated areas. A smaller study from New Jersey (Cohn 1992) found osteosarcoma rates to be up to 6 times higher in young men living in fluoridated versus unfluoridated areas. Other epidemiological studies of varying size and quality have failed to find this relationship (a summary of these can be found in Bassin, 2001 and Connett & Neurath, 2005). There are three reasons why a fluoride-osteosarcoma connection is plausible: First, fluoride accumulates to a high level in bone. Second, fluoride stimulates bone growth. And, third, fluoride can interfere with the genetic apparatus of bone cells in several ways; it has been shown to be mutagenic, cause chromosome damage, and interfere with the enzymes involved with DNA repair in both cell and tissue studies (Tsutsui 1984; Caspary 1987; Kishi 1993; Mihashi 1996; Zhang 2009). In addition to cell and tissue studies, a correlation between fluoride exposure and chromosome damage in humans has also been reported (Sheth 1994; Wu 1995; Meng 1997; Joseph 2000).

37. Proponents have failed to refute the Bassin-Osteosarcoma study. In 2001, Elise Bassin, a dentist, successfully defended her doctoral thesis at Harvard in which she found that young boys had a five-to-seven fold increased risk of getting osteosarcoma by the age of 20 if they drank fluoridated water during their mid-childhood growth spurt (age 6 to 8). The study was published in 2006 (Bassin 2006) but has been largely discounted by fluoridating countries because her thesis adviser Professor Chester Douglass (a promoter of fluoridation and a consultant for Colgate) promised a larger study that he claimed would discount her thesis (Douglass and Joshipura, 2006). Now, after 5 years of waiting the Douglass study has finally been published (Kim 2011) but in no way does this study discount Bassin's findings. The study, which used far fewer controls than Bassin's analysis, did not even attempt to assess the age-specific window of risk that Bassin identified. Indeed, by the authors' own admission, the study had no capacity to assess the risk of osteosarcoma among children and adolescents (the precise population of concern). For a critique of the Douglass study, click here.

38. Fluoride may cause reproductive problems. Fluoride administered to animals at high doses wreaks havoc on the male reproductive system – it damages sperm and increases the rate of infertility in a number of different species (Kour 1980; Chinoy 1989; Chinoy 1991; Susheela 1991; Chinoy 1994; Kumar 1994; Narayana 1994a,b; Zhao 1995; Elbetieha 2000; Ghosh 2002; Zakrzewska 2002). In addition, an epidemiological study from the US found increased rates of infertility among couples living in areas with 3 ppm or more fluoride in the water (Freni 1994), two studies have found increased fertility among men living in high-fluoride areas of China and India (Liu 1988; Neelam 1987); four studies have found reduced level of circulating testosterone in males living in high fluoride areas (Hao 2010; Chen P 1997; Susheela 1996; Barot 1998), and a study of fluoride-exposed workers reported a "subclinical reproductive effect" (Ortiz-Perez 2003). While animal studies by FDA researchers have failed to find evidence of reproductive toxicity in fluoride-exposed rats (Sprando 1996, 1997, 1998), the National Research Council (2006) has recommended that, "the relationship between fluoride and fertility requires additional study."

39. Some individuals are highly sensitive to low levels of fluoride as shown by case studies and double blind studies. In one study, which lasted 13 years, Feltman and Kosel

(1961) showed that about 1% of patients given 1 mg of fluoride each day developed negative reactions. Many individuals have reported suffering from symptoms such as fatigue, headaches, rashes and stomach and gastro intestinal tract problems, which disappear when they avoid fluoride in their water and diet. (Shea 1967; Waldbott 1978; Moolenburgh 1987) Frequently the symptoms reappear when they are unwittingly exposed to fluoride again (Spittle, 2008). No fluoridating government has conducted scientific studies to take this issue beyond these anecdotal reports. Without the willingness of governments to investigate these reports scientifically, should we as a society be forcing these people to ingest fluoride?

40. Other subsets of population are more vulnerable to fluoride's toxicity. In addition to people suffering from impaired kidney function discussed in reason #30 other subsets of the population are more vulnerable to fluoride's toxic effects. According to the Agency for Toxic Substances and Disease Registry (ATSDR 1993) these include: infants, the elderly, and those with diabetes mellitus. Also vulnerable are those who suffer from malnutrition (e.g., calcium, magnesium, vitamin C, vitamin D and iodine deficiencies and protein-poor diets) and those who have diabetes insipidus. See: Greenberg 1974; Klein 1975; Massler & Schour 1952; Marier & Rose 1977; Lin 1991; Chen 1997; Seow 1994; Teotia 1998.

No Margin of Safety

41. There is no margin of safety for several health effects. No one can deny that high natural levels of fluoride damage health. Millions of people in India and China have had their health compromised by fluoride. The real question is whether there is an adequate margin of safety between the doses shown to cause harm in published studies and the total dose people receive consuming uncontrolled amounts of fluoridated water and non-water sources of fluoride. This margin of safety has to take into account the wide range of individual sensitivity expected in a large population (a safety factor of 10 is usually applied to the lowest level causing harm). Another safety factor is also needed to take into account the wide range of doses to which people are exposed. There is clearly no margin of safety for dental fluorosis (CDC, 2010) and based on the following studies nowhere near an adequate margin of safety for lowered IQ (Xiang 2003a,b; Ding 2011; Choi 2012); lowered thyroid function (Galletti & Joyet 1958; Bachinskii 1985; Lin 1991); bone fractures in children (Alarcon-Herrera 2001) or hip fractures in the elderly (Kurttio 1999; Li 2001). All of these harmful effects are discussed in the NRC (2006) review.
Environmental Justice

42. Low-income families penalized by fluoridation. Those most likely to suffer from poor nutrition, and thus more likely to be more vulnerable to fluoride's toxic effects, are the poor, who unfortunately, are the very people being targeted by new fluoridation programs. While at heightened risk, poor families are least able to afford avoiding fluoride once it is added to the water supply. No financial support is being offered to these families to help them get alternative water supplies or to help pay the costs of treating unsightly cases of dental fluorosis.

43. Black and Hispanic children are more vulnerable to fluoride's toxicity. According to the CDC's national survey of dental fluorosis, black and Mexican-American children have significantly higher rates of dental fluorosis than white children (Beltran-Aguilar 2005, Table 23). The recognition that minority children appear to be more vulnerable to toxic effects of fluoride, combined with the fact that low-income families are less able to avoid drinking fluoridated water, has prompted prominent leaders in the environmental-justice movement to oppose mandatory fluoridation in Georgia. In a statement issued in May 2011, Andrew Young, a colleague of Martin Luther King, Jr., and former Mayor of Atlanta

and former US Ambassador to the United Nations, stated:
"I am most deeply concerned for poor families who have babies: if they cannot afford unfluoridated water for their babies' milk formula, do their babies not count? Of course they do. This is an issue of fairness, civil rights, and compassion. We must find better ways to prevent cavities, such as helping those most at risk for cavities obtain access to the services of a dentist…My father was a dentist. I formerly was a strong believer in the benefits of water fluoridation for preventing cavities. But many things that we began to do 50 or more years ago we now no longer do, because we have learned further information that changes our practices and policies. So it is with fluoridation."

44. Minorities are not being warned about their vulnerabilities to fluoride. The CDC is not warning black and Mexican-American children that they have higher rates of dental fluorosis than Caucasian children (see #38). This extra vulnerability may extend to other toxic effects of fluoride. Black Americans have higher rates of lactose intolerance, kidney problems and diabetes, all of which may exacerbate fluoride's toxicity.

45. Tooth decay reflects low-income not low-fluoride intake. Since dental decay is most concentrated in poor communities, we should be spending our efforts trying to increase the access to dental care for low-income families. The highest rates of tooth decay today can be found in low-income areas that have been fluoridated for many years. The real "Oral Health Crisis" that exists today in the United States, is not a lack of fluoride but poverty and lack of dental insurance. The Surgeon General has estimated that 80% of dentists in the US do not treat children on Medicaid.

The largely untested chemicals used in fluoridation programs

46. The chemicals used to fluoridate water are not pharmaceutical grade. Instead, they largely come from the wet scrubbing systems of the phosphate fertilizer industry. These chemicals (90% of which are sodium fluorosilicate and fluorosilicic acid), are classified hazardous wastes contaminated with various impurities. Recent testing by the National Sanitation Foundation suggest that the levels of arsenic in these silicon fluorides are relatively high (up to 1.6 ppb after dilution into public water) and of potential concern (NSF 2000 and Wang 2000). Arsenic is a known human carcinogen for which there is no safe level. This one contaminant alone could be increasing cancer rates – and unnecessarily so.

47. The silicon fluorides have not been tested comprehensively. The chemical usually tested in animal studies is pharmaceutical grade sodium fluoride, not industrial grade fluorosilicic acid. Proponents claim that once the silicon fluorides have been diluted at the public water works they are completely dissociated to free fluoride ions and hydrated silica and thus there is no need to examine the toxicology of these compounds. However, while a study from the University of Michigan (Finney et al., 2006) showed complete dissociation at neutral pH, in acidic conditions (pH 3) there was a stable complex containing five fluoride ions. Thus the possibility arises that such a complex may be regenerated in the stomach where the pH lies between 1 and 2.

48. The silicon fluorides may increase lead uptake into children's blood. Studies by Masters and Coplan (1999, 2000, 2007), and to a lesser extent Macek (2006), show an association between the use of fluorosilicic acid (and its sodium salt) to fluoridate water and an increased uptake of lead into children's blood. Because of lead's acknowledged ability to damage the developing brain, this is a very serious finding. Nevertheless, it is being largely ignored by fluoridating countries. This association received some strong

biochemical support from an animal study by Sawan et al. (2010) who found that exposure of rats to a combination of fluorosilicic acid and lead in their drinking water increased the uptake of lead into blood some threefold over exposure to lead alone.

49. Fluoride may leach lead from pipes, brass fittings and soldered joints. In tightly controlled laboratory experiments, Maas et al (2007) have shown that fluoridating agents in combination with chlorinating agents such as chloroamine increase the leaching of lead from brass fittings used in plumbing. While proponents may argue about the neurotoxic effects of low levels of fluoride there is no argument that lead at very low levels lowers IQ in children.

Continued promotion of fluoridation is unscientific

50. Key health studies have not been done. In the January 2008 issue of Scientific American, Professor John Doull, the chairman of the important 2006 National Research Council review, Fluoride in Drinking Water: A Review of EPA's Standards, is quoted as saying:

"What the committee found is that we've gone with the status quo regarding fluoride for many years—for too long really—and now we need to take a fresh look . . . In the scientific community people tend to think this is settled. I mean, when the U.S. surgeon general comes out and says this is one of the top 10 greatest achievements of the 20th century, that's a hard hurdle to get over. But when we looked at the studies that have been done, we found that many of these questions are unsettled and we have much less information than we should, considering how long this [fluoridation] has been going on."

The absence of studies is being used by promoters as meaning the absence of harm. This is an irresponsible position.

51. Endorsements do not represent scientific evidence. Many of those promoting fluoridation rely heavily on a list of endorsements. However, the U.S. PHS first endorsed fluoridation in 1950, before one single trial had been completed and before any significant health studies had been published (see chapters 9 and 10 in The Case Against Fluoride for the significance of this PHS endorsement for the future promotion of fluoridation). Many other endorsements swiftly followed with little evidence of any scientific rational for doing so. The continued use of these endorsements has more to do with political science than medical science.

52. Review panels hand-picked to deliver a pro-fluoridation result. Every so often, particularly when their fluoridation program is under threat, governments of fluoridating countries hand-pick panels to deliver reports that provide the necessary re-endorsement of the practice. In their recent book Fluoride Wars (2009), which is otherwise slanted toward fluoridation, Alan Freeze and Jay Lehr concede this point when they write:

There is one anti-fluoridationist charge that does have some truth to it. Anti-fluoride forces have always claimed that the many government-sponsored review panels set up over the years to assess the costs and benefits of fluoridation were stacked in favor of fluoridation. A review of the membership of the various panels confirms this charge. The expert committees that put together reports by the American Association for the Advancement of Science in 1941, 1944 and 1954; the National Academy of Sciences in 1951, 1971, 1977 and 1993; the World Health Organization in 1958 and 1970; and the U.S. Public Health Service in 1991 are rife with the names of well-known medical and

dental researchers who actively campaigned on behalf of fluoridation or whose research was held in high regard in the pro-fluoridation movement. Membership was interlocking and incestuous.
The most recent examples of these self-fulfilling prophecies have come from the Irish Fluoridation Forum (2002); the National Health and Medical Research Council (NHMRC, 2007) and Health Canada (2008, 2010). The latter used a panel of six experts to review the health literature. Four of the six were pro-fluoridation dentists and the other two had no demonstrated expertise on fluoride. A notable exception to this trend was the appointment by the U.S. National Research Council of the first balanced panel of experts ever selected to look at fluoride's toxicity in the U.S. This panel of twelve reviewed the US EPA's safe drinking water standards for fluoride. After three and half years the panel concluded in a 507- page report that the safe drinking water standard was not protective of health and a new maximum contaminant level goal (MCLG) should be determined (NRC, 2006). If normal toxicological procedures and appropriate margins of safety were applied to their findings this report should spell an end to water fluoridation. Unfortunately in January of 2011 the US EPA Office of Water made it clear that they would not determine a value for the MCLG that would jeopardize the water fluoridation program (EPA press release, Jan 7, 2011. Once again politics was allowed to trump science.

More and more independent scientists oppose fluoridation

53. Many scientists oppose fluoridation. Proponents of fluoridation have maintained for many years— despite the fact that the earliest opponents of fluoridation were biochemists—that the only people opposed to fluoridation are not bona fide scientists. Today, as more and more scientists, doctors, dentists and other professionals, read the primary literature for themselves, rather than relying on self-serving statements from the ADA and the CDC, they are realizing that they and the general public have not been diligently informed by their professional bodies on this subject. As of January 2012, over 4,000 professionals have signed a statement calling for an end to water fluoridation worldwide. This statement and a list of signatories can be found on the website of the Fluoride Action Network. A glimpse of the caliber of those opposing fluoridation can be gleaned by watching the 28-minute video "Professional Perspectives on Water fluoridation" which can be viewed online at the same FAN site.

Proponents' dubious tactics

54. Proponents usually refuse to defend fluoridation in open debate. While pro-fluoridation officials continue to promote fluoridation with undiminished fervor, they usually refuse to defend the practice in open public debate – even when challenged to do so by organizations such as the Association for Science in the Public Interest, the American College of Toxicology, or the U.S. EPA (Bryson 2004). According to Dr. Michael Easley, a prominent lobbyist for fluoridation in the US, "Debates give the illusion that a scientific controversy exists when no credible people support the fluorophobics' view" (Easley, 1999). In light of proponents' refusal to debate this issue, Dr. Edward Groth, a Senior Scientist at Consumers Union, observed that, "the political profluoridation stance has evolved into a dogmatic, authoritarian, essentially antiscientific posture, one that discourages open debate of scientific issues" (Martin 1991).

55. Proponents use very dubious tactics to promote fluoridation. Many scientists, doctors and dentists who have spoken out publicly on this issue have been subjected to censorship and intimidation (Martin 1991). Dr. Phyllis Mullenix was fired from her position as Chair of Toxicology at Forsythe Dental Center for publishing her findings on

fluoride and the brain (Mullenix 1995); and Dr. William Marcus was fired from the EPA for questioning the government's handling of the NTP's fluoride-cancer study (Bryson 2004). Many dentists and even doctors tell opponents in private that they are opposed to this practice but dare not speak out in public because of peer pressure and the fear of recriminations. Tactics like this would not be necessary if those promoting fluoridation were on secure scientific and ethical grounds.

Conclusion

When it comes to controversies surrounding toxic chemicals, vested interests traditionally do their very best to discount animal studies and quibble with epidemiological findings. In the past, political pressures have led government agencies to drag their feet on regulating asbestos, benzene, DDT, PCBs, tetraethyl lead, tobacco and dioxins. With fluoridation we have had a sixty-year delay. Unfortunately, because government officials and dental leaders have put so much of their credibility on the line defending fluoridation, and because of the huge liabilities waiting in the wings if they admit that fluoridation has caused an increase in hip fracture, arthritis, bone cancer, brain disorders or thyroid problems, it will be very difficult for them to speak honestly and openly about the issue. But they must, not only to protect millions of people from unnecessary harm, but to protect the notion that, at its core, public health policy must be based on sound science, not political expediency. They have a tool with which to do this: it's called the Precautionary Principle. Simply put, this says: if in doubt leave it out. This is what most European countries have done and their children's teeth have not suffered, while their public's trust has been strengthened.

Just how much doubt is needed on just one of the health concerns identified above, to override a benefit, which when quantified in the largest survey ever conducted in the US, amounts to less than one tooth surface (out of 128) in a child's mouth?

While fluoridation may not be the greatest environmental health threat, it is one of the easiest to end. It is as easy as turning off a spigot in the public water works. But to turn off that spigot takes political will and to get that we need masses more people informed and organized. Please get these 50 reasons to all your friends and encourage them to get fluoride out of their community and to help ban this practice worldwide.

Further arguments against fluoridation, can be viewed at http://www.fluoridealert.org <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.fluoridealert.org%2F&data=0 and in the book The Case Against Fluoridation (Chelsea Green, 2010). Arguments for fluoridation can be found at http://www.ada.org <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.ada.org%2F&data=05%7C01

Publication history of the 50 Reasons (Expanded for the Washington State Board of Health)

The 50 Reasons were first compiled by Paul Connett and presented in person to the Irish Fluoridation Forum in October 2000. The document was refined in 2004 and published in Medical Veritas. In the introduction to the 2004 version it was explained that after over four years the Irish authorities had not been able to muster a response to the 50 Reasons, despite agreeing to do so in 2000. Eventually, an anonymous, incomplete and superficial response was posted on the Irish Department of Health and Children's website (see this response and addendum at:http://www.dohc.ie/other_health_issues/dental_research <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.dohc.ie%2Fother_health_issu /. Paul Connett's comprehensive response to this response can be accessed at

http://www.fluoridealert.org/50reasons.ireland.pdf <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.fluoridealert.org%2F50reason>. We learned on August 7, 2011 that this governmental response was prepared by an external contractor at a cost to the Irish taxpayers' of over 30,000 Euros.

Since 2004, there have been many major scientific developments including the publication of the U.S. National Research Council report (NRC, 2006); the publication of Bassin's study on Osteosarcoma (Bassin 2006), and many more studies of fluoride's interaction with the brain, that necessitated a major update of the 50 Reasons in August 2011. This update was made with the generous assistance of James Beck, MD, PhD, Michael Connett, JD, Hardy Limeback, DDS, PhD, David McRae and Spedding Micklem, D.Phil. Additional developments in 2012, including FAN's translation of over 20 Chinese studies on fluoride toxicity and publication of the Harvard team's meta-review of fluoride and IQ (Choi 2012), warranted a further update in August 2012, with the extremely helpful assistance of my son, Michael Connett.

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_____
From: Elizabeth Hovde
Sent: 4/12/2023 11:13:37 AM
To: DOH WSBOH
Cc:
Subject: Comments — I pre-registered but was not called on

External Email

SBOH members,

Here are public comments I prepared for today. I pre-registered but was not called on. Please let me know if I did something wrong. I used the "join" button I was provided in my confirmation email.

Thanks for your time today, Chair Grellner and board members. I'm Elizabeth Hovde with the Washington Policy Center.

I am here to ask for your intervention and influence on the governor's permanent vaccine mandate as a condition for employment.

The governor directed the Office of Financial Management to write rules that are now in place for a permanent vaccine mandate for state employees in executive and small cabinet agencies. The governor has also included the mandate, along with bonuses for voluntarily chosen boosters, in contract negotiations with labor. The two policies together send a confusing health message that is not based on science.

COVID-19 mask and emergency orders have ended or are winding down; the CDC removed its policy distinctions between the vaccinated and the unvaccinated months ago; we know that those most in health danger from COVID are the elderly, not working-age people; and we know that both vaccinated and unvaccinated people can spread and contract COVID-19.

A vaccinated state worker who is still employed by the state can contract and spread and get sick from COVID-19, while an unvaccinated worker might not.

It's past time for the state to stop punishing and limiting the working options of the COVID-unvaccinated, and I hope you can help. Vaccines appear to help some with hospitalization and death, but a vaccine mandate on working-age people does not. Further, there are other health behaviors that impact workers in our state workforce, but those behaviors don't get them fired.

The mandate has caused state staffing problems, for no demonstrable public health benefit. More than 2,000 <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fofm.wa.gov%2Fsites%2Fdefault%
state workers' careers ended because of the vaccine mandate. Instead of following the science, a permanent vaccine mandate <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.washingtonpolicy.org%2Fpu
is-final-but-authority-to-require-a-vaccine-still-unclear&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cc8f8ce4f5e7849785d7608db3b818cd6%7C11d0e2

will exclude potential new hires, too.

Last I checked, the Department of Health's COVID-19 vaccination dashboard <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoh.wa.gov%2Femergencies%2Fc
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dashboard%23Vaccination&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cc8f8ce4f5e7849785d7608db3b
reports that 30 percent of the state's total population has not completed a COVID-19 primary series. Excluding a good percentage of the state's total population from being considered for these state jobs is more than problematic. It is indefensible, given all we now know about COVID-19 and the vaccines' strengths and limitations. It is indefensible when we know that COVID-19 is most injurious and deadly to people in elderly, not working-age, populations.

This policy is harmful to individuals, the state workforce and taxpayer-funded and -expected services.

A study published in The Lancet <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.thelancet.com%2Fjournals%
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5%2Ffulltext&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cc8f8ce4f5e7849785d7608db3b818cd6%7C1
finds that the immunity generated from a COVID-19 infection was found to be "at least as high, if not higher" than that provided by two doses of an mRNA vaccine. We've known natural immunity plays a role all along in this mandate, yet the governor's vaccine mandate for state workers does not recognize the value of natural immunity.

The governor is confident his strict COVID-19-related mandates have been responsible for saving lives, but data do not back up these claims.

A comparative look at states shows that some states that did not have vaccine mandates on government employees or had them but allowed for testing alternatives have beat Washington when it comes to COVID outcomes. There are many factors in play for good COVID outcomes, including the relative health and age of a state, and with so many factors involved, the governor's bragging is off-target.

Please help end the state's misguided vaccine mandate on state employees. I am happy to answer any questions or provide you with state-comparative research.

Thank you for your work.

_____

Elizabeth Hovde
Director, Centers for Worker Rights & Health Care
Washington Policy Center
www.washingtonpolicy.org
<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.washingtonpolicy.org%2F&da

360-241-4653

From: Bill Osmunson
Sent: 5/23/2023 4:16:10 PM
To: DOH WSBOH
Cc:
Subject: RE: Health Promotion Committee

External Email

Dear Health Promotions Committee members,

I'm sure you are swamped with stuff to read, this is top priority urgent. A condensed one page on one of fluoride's streams of harm.

FLUORIDATION'S NEUROTOXICITY There is no question that fluoride is neurotoxic - it damages the brain, as documented by hundreds of recent human and animal studies. It can not be declared safe.

2006: The National Research Council published Fluoride in Drinking Water,1 the most authoritative review of fluoride's toxicity. It stated unequivocally that "fluorides have the ability to interfere with the functions of the brain and the body."

2012: A Harvard-funded meta-analysis2 found that children ingesting higher levels of fluoride tested an average 7 IQ points lower in 26 out of 27 studies. Most had higher fluoride concentrations than in U.S. water, but many had total exposures to fluoride no more than what millions of Americans receive. "Fluoride seems to fit in with lead, mercury, and other poisons that cause chemical brain drain." Philippe Grandjean, MD, PhD, Harvard study co-author, Danish National Board of Health consultant, coeditor of Environmental Health, author of over 500 scientific papers

2017: A National Institutes of Health (NIH) - funded study3 found that every milligram per liter (1 mg/L) increase in fluoride in pregnant women's urine – about the difference caused by ingestion of fluoridated water4 - was linked to a reduction of their children's IQ by an average 5-6 points. Leonardo Trasande, MD, a leading physician unaffiliated with the study, said it "raises serious concerns about fluoride supplementation in water."5

2018: A Canadian study6 found iodine-deficient adults (nearly 18% of the population) with higher fluoride levels had a greater risk of hypothyroidism (known to be linked to lower IQs). Author Ashley Malin, PhD, said "I have grave concerns about the health effects of fluoride exposure."7

2019: Another NIH-funded study8 in the Journal of the American Medical Association Pediatrics found every 1 mg/ L increase in fluoride in pregnant women's urine linked to a 4.5 decrease in IQ in their male children. JAMA Pediatrics' physician editor said "I would not have my wife drink fluoridated water"9 if she was pregnant.

2019: A Canadian study10 found a nearly 300% higher risk of ADHD for children living in fluoridated areas. This reinforced earlier studies linking fluoride to ADHD in Mexico (2018)11 and the U.S. (2015).12

2019: Another NIH-funded study13 in Canada found that babies fed formula mixed with fluoridated water averaged 6 IQ points less than those mixed with non-fluoridated water. Losses of non-verbal IQ were even more serious, an average of 13 points.

2023: The National Toxicology Program's draft scientific review14 documented 52 out of 55 studies linked higher fluoride levels with lower IQs. Of the highest quality studies, 18 out of 19 found this link. "Several of the highest quality studies showing lower IQs in

children were done in optimally fluoridated (0.7 mg/L) areas.

Bill Osmunson DDS MPH”

References at fluoridealert.org/references3
<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Ffluoridealert.org%2Freferences3&d

-------- Original Message --------
Subject: Health Promotion Committee
From: "Bill Osmunson" <bill@teachingsmiles.com
<mailto:bill@teachingsmiles.com> >
Date: Sun, May 21, 2023 9:27 am
To: "DOH WSBOH" <WSBOH@SBOH.WA.GOV <mailto:WSBOH@SBOH.WA.GOV>
>

Dear Washington State Board of Health Bill Osmunson DDS MPH
bill@teachingsmiles.com <mailto:bill@teachingsmiles.com>
Health Promotion Committee

I and other researchers would like to make a presentation (in the future) to the Committee regarding excess fluoride exposure and new research on risks.

Increasing fluoride exposure by adding fluoride to public water was started with good intentions and based on the best evidence we had. The evidence and science has grown over the last 70+ years, more rapidly over the last 20 and exploded over the last 8 years. We must re-evaluate policy in light of the new research. Risk assessment is clear, excess fluoride is harming the public far more than benefit. A risk management goal will never find a safe threshold for everyone. We have the empirical evidence and we must stop the paralysis of analysis.

This request for researchers and clinicians to provide evidence to the Washington Board of Health is intended to protect our most vulnerable from harm, especially the fetus and infants who are currently being harmed. The estimated harm far exceeds the estimated benefit of increased fluoride exposure.

It is my understanding the Board did look at some of the evidence a few years

ago; however, it appears the Board did not focus on the fetus and infants and considered endorsements and reviews of believers rather than the latest empirical evidence. Judgment should be made on the highest quality of empirical evidence and focus on the fetus and infants who are most sensitive to toxins.

In very brief:

1. The Washington Department of Health indicates the Board of Health has jurisdiction over fluoridation.

2. The Washington Board of Pharmacy (and FDA CDER) determined fluoride for ingestion is a drug. Topical fluoride in toothpaste is approved by the FDA CDER with an NDA and label which says "Do Not Swallow" the equivalent of a quarter milligram the same as the Board recommends for each glass of fluoridated water.

3. Although a significant body of evidence suggests fluoridation has benefit of between a quarter to half a cavity reduction per child, the research is mostly historic, observational studies of lower quality lacking control for many confounding factors. Only one published randomized controlled trial is available and it reported no significant caries reduction. Dosage, Safety, Mechanism, Label, Jurisdiction and ethics have not been adequately reviewed.

4. Topical fluoride can get to the tooth surface where caries are forming and is FDA CDER approved, not ingested fluoride. Ingested fluoride can't get from inside the tooth to the outside of the tooth where caries are developing. The tooth is highly resistant to the transfer of fluoride.

5. About 2 out of 3 chldren are ingesting too much fluoride as reported by NHANES and have dental fluorosis, a biomarker of too much fluoride. Concentration of fluoride in water is not dosage. Some drink 10 times more water than the mean. 30% to 70% of fluoride comes from other sources such as foods, medicines, pesticides, etc. Dosage is not controlled and of most concern for the developing fetus and infant and child.

6. In 2006 the National Research Council reported potential harms such as cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system,

gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight. Fluoride is a highly reactive element and potential to affect all cells. Each of those risks have a great deal of research and continually growing in concern.

7. The contaminant fluoride chemical added to water is contaminated with small but often significant amounts of polutants such as arsenic and much comes from other countries which do not fluoridate or provide assays of purity, such as China.

8. Of most concern are infants on formula made with fluoridated water. Mother's milk protects the infant and usually has no detectible fluoride mean of 0.004 mg/L and as high as 0.01 mg/L. Fluoride at 0.7 mg/L gives the infant many times more fluoride than mother's milk. Mother's milk is the normative value for infants. The EPA and most reviews of fluoride exposure do not include infants or fetuses in their evaluations.

9. Unfortunately the mother's body does not protect the fetus from fluoride as it readily passes through to the infant. Mothers drink more water and their dosage is more than the mean adult intake placing the developing fetus at significanat risk.

10. I treat dental fluorosis both cosmetic and functional damage. We dentists make money from fluoride and we in dentistry are not the best sources of unbiased information, our intent is good, yet biased. The Board has been relying on endorsements and reviews by believers rather than empirical evidence.

11. The National Toxicology Program under HHS has spent 8 years evaluating fluoride's developmental neurotoxicity reporting lower IQ. It is over 700 pages and 8 years in the making. The quality of the report is excellent, the best to date, and has had multiple peer reviews. The NTP draft review included 159 human studies, 339 non-human studies, 60 in vitro, and many other publications, over 90% of the studies reporting lower IQ, brain damage, from ingested fluoride and the Meta-Analysis does not report a safe threshold. The draft monogram was reviewed and blocked by the Department of Health and Human Services from release until the court (a law suite against the EPA) ordered release. After several peer reviews, the NTP Board of Scientific Counselors was asked to adjudicate the draft and approved it May 2023. The report states: “The consistency of the data supports an inverse association between fluoride exposure and children’s IQ.” The meta-analysis reports no threshold of safety.

Lower IQ is just one of several risks from fluoride.

12. An example of the research, Till: "An increase of 0.5 mg/L in water fluoride concentration (approximately equaling the difference between fluoridated and non-fluoridated regions) corresponded to a 9.3- and 6.2-point decrement in Performance IQ among formula-fed." Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880. [PubMed]

Remember, a 5 IQ loss doubles the intellectually disabled (special education) and halves the number of gifted.

13. Most developed countries have never fluoridated their water or have stopped fluoridation.

14. When understood with the lack of significant benefit and serious risks, the ethics of fluoridation without consent with an unapproved drug violates every code of ethics.

Of most concern are the fetus and infants. To save you time, I would recommend the committee permit a zoom with some of the researchers to present their findings. I am confident a presentation on the above 13 items will provide an overview which would save considerable time.

Sincerely,

Bill Osmunson DDS MPH

_____
From: allcomm1@protonmail.com
Sent: 4/26/2023 8:28:44 PM
To:
Cc:
Subject: #2 REESE REPORT // FEAR IS THE MIND KILLER

External Email

I was talking to a fearful neighbor the other day. I couldn't break through but I used humor and chipped at the edges. I used my own fearlessness and promised to show him more evidence of it. I pointed out that the existence planned for us is worse than death, so what do we have to lose?

[Prepping won't stop a high tech physical control system based on nano-devices floating in our bloodstreams, and staffed by mind-controlled law enforcement professionals or military programmed or mind controlled to value their jobs over the lives of their fellow citizens. We have to detox the metals and re-claim our law enforcement professionals and military.]

SO, never forget:

The Law of Attraction - what we think about, we bring about - applies to the evil ones too. Thoughts are a fire of energy and emotion is the gasoline we pour on that fire.

Fear is one of the most powerful emotions - BUT - it is a MUCH lower frequency than LOVE. If you feel fear or a lack of personal confidence about ANYTHING:

#1 The ASK - Ask for benevolent protection from God, Jesus Christ, angels, spirit guides, star races, your soul tribe, anyone protecting or assisting you from anyplace in the multi-verse. JUST ASK. You are not begging. You are asking for their assistance in that moment and in the future as needed.

#2 The TRANSFORMATION - Speak to the source of your fear - even if you have no idea where it is coming from. Project the most massive LOVE you can - straight into it with no detours. This will do two things. It will help your protectors to protect you, and it will transform the source of the fear into a source of love. You will remove, or disable, that source of fear from ever projecting again.

Fear is the Mind Killer
https://gregreese.substack.com/p/fear-is-the-mind-killer-681?utm_source=substack&utm_medium=email#play
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Listen to what the initial speaker says about who we are up against.

------- Forwarded Message -------
From: Greg Reese from The Reese Report <gregreese@substack.com>
Date: On Wednesday, April 26th, 2023 at 7:36 AM
Subject: FEAR IS THE MIND KILLER
To: ALLCOMM1

<https://mailgun.substack.com/api/v1/email/open?token=eyJtIjoiPDIwMjMwNDI2MTEzNjU3LjMuYzhjNGY0I

Watch now (4 min) | The path to victory is achieved with an open heart

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FEAR IS THE MIND KILLER
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The path to victory is achieved with an open heart

Greg Reese
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Share

The main character in Frank Herbert’s Dune uses a mantra to overcome his fears:

"Fear is the mind-killer. Fear is the little-death that brings total obliteration. I will face my fear. I will permit it to pass over me and through me. And when it has gone past me I will turn to see fear's path. Where the fear has gone there will be nothing. Only I will

remain."

And from the book of Psalms;

“Even though I walk through the valley of the shadow of death, I will fear no evil, for you are with me; your rod and your staff, they comfort me.”

Fear is natural, but to dwell there only breeds despair. The power of our free will is most pertinent in the mind where we have sway over our thoughts, focus, and decisions.

Staying positive isn’t just for restorative retreats on the beach. It’s the solution to every problem we face.

Even under the highest stress, the military is trained to maintain Esprit de Corps at all levels. A common spirit of a group inspiring enthusiasm, devotion, and honor for that group.

Positive feelings prevail in every endeavor. Even in battle.

Artificial Intelligence seems to understand this as well. In Clif High’s recent Shadow Wars... <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fopen.substack.com%2Fpub%2Fcli wars%3Fr%3Djjvh4%26utm_campaign%3Dpost%26utm_medium%3Dweb&data=05%7C01%7Cwsboh%4 , A.I. program, Chat GPT, was prompted to help develop a story about a world that has been ruled for thousands of years by a non-human species that hides in the shadows and uses media, government, and education to brainwash the masses and control them with fear.

Chat GPT was asked:

What strategies and tactics could the awake humans employ to defeat the enemy and awaken humanity?

The A.I. program said that;

Ultimately, the key to unlocking the trapped minds of the normal humans will be to appeal to their innate desires for freedom, autonomy, truth, and transparency.

It recommended that the awake humans should expose the truth, mobilize the masses, and build alternative institutions that serve these values of individual freedom.

Like <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsubstack.com%2Fapp-link%2Fpost%3Fpublication_id%3D706779%26post_id%3D117386726%26utm_source%3Dsubstack%26is CDaegqTU1fY3OvEGhQPUlYY2kX9MsBMsUbC1gaRfrc%26utm_medium%3Demail&data=05%7C01%7Cwsbo

Comment <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsubstack.com%2Fapp-link%2Fpost%3Fpublication_id%3D706779%26post_id%3D117386726%26utm_source%3Dsubstack%26u y-OfrDrAVTKkIDUHeDlvM-mvox0%26utm_source%3Dsubstack%26utm_medium%3Demail&data=05%7C01%7Cwsboh%40sboh.wa.

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548 Market Street PMB 72296, San Francisco, CA 94104

* * *

STAY AWAY from the CONTAGIOUS experimental gene altering, snake venom bio-weapon injection driving the global Democide and Central Bankster's "Going Direct Reset." Know that we win or we become mindless financial slaves in a digital gulag. Blackrock, global central bankers Bank for International Settlements (BIS), and the parasitic "federal" Reserve central bank are transitioning us to cashless financial slavery by 2025. // People, Animals and Plants are dying from the activation of 5G on the ground and in space (as they have every single time the MIIC has increased the EMR on Earth: 1G, 2G, 3G, 4G...); and now the Kill Switch: 5G at 60 GigaHertz = Terminal Hypoxia = Goodbye to Blood Oxygen Uptake. // Over a million Americans have died from the C19 injection(s). Over 20 million have been maimed and the numbers go up as the injection contents and spike proteins spread. // Un-injected children are being fatally injured [CDC Code: MIS-C] by Spike Protein and snake venom shedding from their parents. Two year old girls w/periods. Boys w/inflamed eyeballs; 4,200 cases w/40 dead as of 09/21. // The injected are activating devices in proximity. In Russia the "Sputnik" injections nano CPU was made by E2K (Elbrus model) - Pharmaco-vigilance at it's best. // Court ordered FDA documents show DARPA/DOD formulated the C19 injection for rubber stamp by the FDA and use by Big Pharma. // Some insurance companies are not paying injection death policies, because the shot is considered self-euthanasia via voluntary participation in an experiment. // Also, the injected are genetically no longer homo sapiens, they are homo evolutus and therefore not entitled to human rights. // Pharmaceutical companies hold the injection patents (to hide DARPA's involvement??), so they legally own the injected as a biological organism that their patent has altered. // Injected folks CAN detox some of the ingredients with EDTA Chelation, Ivermectin and more - but first they have to understand that they need too.

Are you ready to be a docile, sterile, "Transhuman 2.0" w/a short, expensive, disease-ridden life-span? How many injected people do you know who can still work a 40 hour week?

FRIENDLY REMINDER: It was the government that stole your freedoms, destroyed your businesses, and ruined your children's future to hide 5G+ radiation - NOT un-injected people. So who do you think is going into Ronald Reagan's DOD-FEMA project Readiness Exercise 84 that are now Covid Internment Shielding Camps ("CIC's")? Exactly how do you think this is going to end if we the people do not stop it? There ARE fates worse than death.

Sign: "The only reason the people controlling the US government would want to disarm you after 243 years, is because they plan to do something you would shoot them for." ☐

"I will not sit down. I will not shut up. I will not comply. I am an American." Colorado Julie

"Discipline is choosing between what you want now and what you want most." Abraham Lincoln
"Silence in the face of evil is itself evil; God will not hold us guiltless. Not to speak is to speak. Not to act is to act." Dietrich Bonhoeffer
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secure email - Paid accounts come with a Free VPN.

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z_6r2Pscywoph6XSUol2Yu36WN-pnhZjtLTe2d8AAAD__4lsbeU>

From: Bill Osmunson
Sent: 4/12/2023 10:51:41 AM
To: DOH WSBOH
Cc:
Subject: Public Comment for April 12, 2023

External Email

WSBH April 12, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah
Umair Shah, MD, MPH, wsboh@sboh.wa.gov <mailto:wsboh@sboh.wa.gov> .
Public comment for April 12, 2023

The Board has been presented evidence over the last decade and a half that fluoride ingestion is harming the public, provides little or no benefit, many are over dosed, many are being harmed and the WSBOH has jurisdiction and responsibility for the harm.

RCW 43.20.050 "(1) The state board of health shall provide a forum for the development of public health policy in Washington state. . . . It is further empowered to hold hearings and explore ways to improve the health status of the citizenry. In fulfilling its responsibilities under this subsection, the state board may create ad hoc committees or other such committees of limited duration as necessary."

A 2 or 3 minute public comment is not a forum, hearing, exploring ways to improve the health status of the citizenry or committee. In light of current research on the toxicity of fluoride, our request is for a forum, hearing and committee on fluoridation's safety, efficacy, dosage of fluoride exposure as mandated by RCW 43.20.050.
Some supporting evidence. The Department of Health presents that the Board of Health has regulator y authority over fluoridation.

FDA: The Board has been presented evidence you are in violation of the Federal Food, Drug and Cosmetic Act, Title 21, that your product is misbranded within the meaning of section 403(r)(1)(B) of the Act [21 U.S.C. 343(r)(1)(B) because it is known to the public to bear an unauthorized health claim. The FDA defines health claim not only as the authority making a health claim but a substance well known to the public to have a health effect. The FDA has toothpaste labeled as a drug with the warning not to swallow.

Washington State Board of Pharmacy: The WSBP determined fluoride when used with intent to prevent disease is a prescription drug and is not a poison.

The Board is in violation of RCW 69.50.101 (nn) "Prescription" means an order for controlled substances issued by a practitioner duly authorized by law or rule in the state of Washington to prescribe controlled substances within the scope of his or her professional practice for a legitimate medical purpose.
The Board of Pharmacy determined fluoride is not a poison because it is to be regulated as a drug. If the Board does not regulate as a drug, then it is a poison. RCW 69.38.010 <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fapp.leg.wa.gov%2FRCW%2Fdefaul
"poison" means: "(4) Any other substance designated by the pharmacy quality assurance commission which, when introduced into the human body in quantities of sixty grains or

less, causes violent sickness or death." Sixty grains is 3,887.93 milligrams. Estimates of a minimum lethal dose of fluoride (PTD) is 5 mg/kg body weight. (Whitford 1987)
RCW 57.08.012 Permits fluoridation based on the majority vote of the commissioners or voters and at first glance would appear to exempt the Board from responsibility. No other prescription drug is prescribed by vote of the majority of commissioners or voters. Voters do not evaluate the scientific empirical evidence of safety or efficacy as science progresses. The Board of Health has jurisdiction and responsibility to eval

RCW 69.40.030
<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fapp.leg.wa.gov%2FRCW%2Fdefaul

Placing poison or other harmful object or substance in food, drinks, medicine, or water—Penalty.

(1) Every person who willfully mingles poison or places any harmful object or substance, including but not limited to pins, tacks, needles, nails, razor blades, wire, or glass in any food, drink, medicine, or other edible substance intended or prepared for the use of a human being or who shall knowingly furnish, with intent to harm another person, any food, drink, medicine, or other edible substance containing such poison or harmful object or substance to another human being, and every person who willfully poisons any spring, well, or reservoir of water, is guilty of a class B felony and shall be punished by imprisonment in a state correctional facility for not less than five years or by a fine of not less than one thousand dollars.

Dose, Dosage, Concentration: The Board relies on endorsements which rely on the concentration of fluoride in water as safe for everyone. However, not everyone drinks the same amount of water and the dose and dosage are highly variable. In addition, subsets of the population are more sensitive to chemicals, such as the fetus and infants.

TOO MUCH FLUORIDE: Pediatric dosage
There are "scientific experts" who will testify to court in support of most anything as safe. Judgment is required and if money and reputation are involved, judgment should be suspect.
For example, the American Dental Association (ADA) still recommends mercury amalgam fillings (about 50% mercury) as safe and effective filling material. On the other hand, Dentists can't dispose of the product in the sewer or trash because it is too toxic. Suppliers cannot ship through the US Postal Service because it is too hazardous for postal workers and the product is no longer manufactured by major dental supply companies in the USA. Nothing about the human physiology, mouth of children or adults makes the mercury amalgam filling material safe. The ADA when pulled into court regarding the mercury fillings testified in court, the ADA has "no duty to protect the public." The ADA protects dentists and financial sponsors, not the public. The WSBH is charged with protecting the public.
The FDA cautions
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.fda.gov%2Fmedical-devices%2Fdental-devices%2Fdental-amalgam-fillings%23%3A~%3Atext%3DPotential%2520Risks%2520of%2520Dental%2520Amalgam%253A%26text
risks include the release of low levels of mercury vapor and very limited to no clinical data is available regarding long term health outcomes for pregnant women and their developing fetuses, and children.
The ingestion of fluoride has even more research evidence of harm. The WSBOH appears to rely on vested interests of industry for endorsements of support for the mass medication of fluoride rather than the clear empirical evidence of harm. Many millions of dollars and reputations are at stake and protected by those promoting fluoridation.

The fetus and infant are ingesting too much fluoride with fluoridation.
A. The fetus is very small and the placenta does not appear to protect the fetus from the mother's fluoride exposure. Mothers drinking fluoridated water over-dose their fetus with fluoride, harming their brains.
B. Mother's milk is the ideal nutrient for infants and appears to protect the baby from excess fluoride. Mother's milk (in one study) had about 0.004 mg/L fluoride in samples which detected fluoride and Sener (2007)
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2
[1]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftn1>
reported 0.006 ppm (mg/L). I could find no quality studies of efficacy for the Board's approved 0.7 mg/L fluoride in water, many times higher than the concentration of fluoride in mother's milk. However, harm from the fluoride has been published. The Board should warn care givers to avoid using fluoridated water to make infant formula.
C. The EPA does not include infants under six months in their Dose Response Analysis or Relative Source Contribution. The EPA graph below Figure 8-1 (13 years ago presented to the WSBH) starts at 0.5 years of age. The National Research Council said the EPA was not protective and instead of reducing fluoride exposure, decreased fluoride protection, increasing their RfD.
Their graph below was based on a proposed increase of 25% in their so called "safe" dosage. And 10% of the public drinking the most water were also ignored, yet 1/3 of children were expected to still INGEST TOO MUCH FLUORIDE. (EPA ERSCA 2010) The percentage above the black line ingest too much fluoride.
Infants under 0.5 years are not included.

C. The infant on formula reconstituted with fluoridated water will ingest too much fluoride. Dental fluorosis, a biomarker of excess fluoride intake, confirms infants are ingesting too much fluoride. Lower IQ confirms infants are ingesting too much fluoride. When fluoridation started, the public was assured dental fluorosis would not exceed 15% with fluoridation. The Board has been presented with scientific evidence dental fluorosis is now about 70% of the public.[2]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftn2>

See also Iida, below, data graphed from their published research. Note, redlines of caries have little change with increased fluoride concentration in water, but blue lines of dental fluorosis significantly increases with increased fluoride exposure.

D. Why is too much fluoride a concern? After all, I make money treating dental fluorosis and my pocket book is pleased with the profit I make from the harm caused by too much fluoride. My heart hurts for the harm being caused by those in authority of which I am one.
In 2006 the National Research Council reported[3]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftn3>
, potential harms are reported by the National Research Council in 2006 such as cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight.
Farmus (2021)
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2
[4]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftn4>
looked at critical windows of fluoride neurotoxicity, reporting:
"The association between fluoride and performance IQ (performance IQ) significantly

differed across exposure windows.

"The strongest association between fluoride and PIQ was during the prenatal window.
"Within sex, the association between fluoride and PIQ significantly differed across exposure windows. Among boys, the prenatal window appeared critical, while for girls, infancy was critical.
"Full-scale IQ estimates were weaker than PIQ estimates for every window.
"Fluoride was not significantly associated with Verbal IQ across any exposure window."
Till (2020)
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2
[5]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftn5>
"An increase of 0.5 mg/L in water fluoride concentration (approximately equaling the difference between fluoridated and non-fluoridated regions) corresponded to a 9.3- and 6.2-point decrement in Performance IQ among formula-fed (95% CI: −13.77, −4.76) and breast-fed children (95% CI: −10.45, −1.94)."

E. Although fluoride harms most cells, neurotoxicity is of serious concern. Why? The two graphs below illustrate the effect of 5 IQ point decrease. About a 50% increase in "mentally retarded" and more than half of "gifted" are lost. Remember, those of us in the middle are also harmed, just harder to measure what could and should have been. Brains are important.

Note, lower IQ numbers go up about 50%. And less than half as many "gifted." As a former school board trustee, educators were overwhelmed with the numbers of special education children, most lower IQ. Measuring, defining and comparing the number of gifted seems to be less precise. I can find no US Federal agency or organization which collects gifted student statistics or has a consistent definition.
Weigh the risks and benefits of prenatal and infant fluoride exposure.
What benefit will the fetus lose with less fluoride? None. No teeth
What benefit will the infant lose with less fluoride? None, no erupted teeth or significant developing adult teeth.
How can anyone not have sleepless nights knowing authorities are causing this damage and the solution is to simply turn off the fluoride pumps. . . or at least warn those most adversely affected.
My request to the WSBH is to caution/warn mothers and care givers to avoid fluoride when pregnant and infants not to get formula made with fluoridated water. A simple warning would be ethical. A warning not cost the WSBH any money and could save millions of dollars.
The only road-block is for the Board to follow the science rather than the money, vested interests, tradition and endorsements.

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[1]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftnref1>
Sener Y, Tosun G, Kahvecioglu F, Gökalp A, Koç H. Fluoride levels of human plasma and breast milk. Eur J Dent. 2007 Jan;1(1):21-4. PMID: 19212493; PMCID: PMC2612944.
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<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F309
]

[3]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftnref3>
Fluoride in Drinking Water A scientific Review of EPA's Standards, Committee on Fluoride in Drinking Water, Board on Environmental Studies and Toxicology, Division on Earth and Life Studies. National Research Council of the National Academies, The National Academies Press, Washington DC. www.nap.edu
<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.nap.edu%2F&data=05%7C01
https://nap.nationalacademies.org/read/11571/chapter/1
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnap.nationalacademies.org%2Frea

[4]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftnref4>
Farmus L, Till C, Green R, Hornung R, Martinez Mier EA, Ayotte P, Muckle G, Lanphear BP, Flora DB. Critical windows of fluoride neurotoxicity in Canadian children. Environ Res. 2021 Sep;200:111315. doi: 10.1016/j.envres.2021.111315. Epub 2021 May 27. PMID: 34051202; PMCID: PMC9884092.

[5]
<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBOH%20April%202023.docx#_ftnref5>
Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880.

_____

From: Lan-Chen Pao
Sent: 4/25/2023 1:21:35 PM
To: DOH WSBOH
Cc:
Subject: Public Comments for WSBOH Members from March EH Committee Special Meeting

External Email

To whom it may concern,

Thank you for the chance to voice my concern as responsible and concerned citizen of the state of Washington. This is an email to respectfully ask you to allow medical and religious exemptions for responsible citizens who have concerns about the COVID-19 vaccines.

As background, I am the parent of four and 25-year resident of Washington state. As responsible citizens of this state, who love living in Washington state and we actively do our part to contribute to our community. My children and I have volunteered on and off and North Helpline foodbank for the last 16 years. Feel free to contact the foodbank to ask about our family's service. We also volunteered as a family for two years at New Horizons teen shelter in downtown Seattle, cooking breakfast once a month for homeless teens of the city. We have fed fellow citizens in downtown subsidized housing during Thanksgiving, provided food with our church under Seattle freeways, and regularly donate to tent cities throughout our city.

We found out at the end of 2021 that as of January 2022, we would no longer be welcome at North Helpline unless we showed a proof of vaccination card. While we understand the city's responsibility to keep the public safe, we implore you to balance that need with the importance of not infringing on the privacy and first amendment rights of your citizens.

Before the availability of vaccines, North Helpline implemented within one week of the March 2020 shutdowns new measures to make it safer for the public to receive food. This plan has been in place for the last 20 months without any danger to the public for the following reasons:

1. Only one foodbank volunteer comes in contact with the client during their time receiving food.
2. The foodbank doors metal doors are completely open during food distribution. The whole operation is practically outdoors. During the winter, all volunteers are asked to dress warmly because the distribution center is not climate controlled.
3. The rest of the volunteers are packing food, with gloves and masks on all the time.
4. Volunteers have to have their temperature checked, hands washed and new disposable gloves put on as soon as they come into the foodbank. Masks are on at all times.
5. Those showing any symptoms of illness are asked to not come in and my family

and I always comply with all such requests.

Once again, we understand the government's stake in ensuring public safety but ask that you also weigh that interest against the privacy and constitutional rights of responsible American citizens to account for their own actions and continue to serve and thrive in the communities they love. We are not selfish, brainwashed ignoramuses who are out to stake a philosophical position. We love our state and want to be able to continue to live here and contribute to making our state the beautiful, free and respectful place it is.

Thank you for hearing us out.

Sincerely,

Lan-Chen Pao,

Sent from Mail
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for Windows

_____
From: Bob Runnells
Sent: 6/9/2023 11:59:42 AM
To: DOH WSBOH
Cc:
Subject: Public Comments for WSBOH Members

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External Email

Please accept these public comments (also attached) for the upcoming Board of Health.

Dear Members of the WA State Board of Health,

These comments provide key reasons why increasingly large swaths of people do not trust public health when it comes to infectious disease pronouncements and policies.

The coronavirus pandemic is the most recent example of the kinds of messaging that many people distrusted from other outbreak reactions by public health agencies. Here in Washington, many families saw how the Department of Health and certain legislators spread their own kind of misinformation while attempting to institutionalize civil rights restrictions in 2015 and 2019 campaigns. There were numerous claims made during the COVID-19 pandemic that are now debunked or clearly call into question the effectiveness of measures declared as "the best way to stop the spread" with little-to-no consideration for the wider societal effects. Our experience should make it clear that Public Health should cease and desist using a one size fits all, single pharmaceutical approach strategies, or you will continue to lose the public's trust.

To list the misinformation spread by Departmennts of Health, I borrow sections from a nationally-published article by Dr. Marty Makary, from the Johns Hopkins University School of Medicine.

Claims promoted by state and county Public Health that should be considered Misinformation

1. Natural immunity offers little protection compared to vaccinated immunity
2. Masks prevent COVID transmission
3. School closures reduce COVID transmission
4. Myocarditis from the vaccine is less common than from the infection
5. Young people benefit from a vaccine booster
6. Vaccine mandates increased vaccination rates
7. COVID originating from the Wuhan lab is a conspiracy theory
8. It was important to get the second vaccine dose three or four weeks after the first

dose
9. Data on the bivalent vaccine is 'crystal clear'
10. One in five people get long COVID
11. Get the shot to avoid overwhelming hospitals

* Never happened
* Hospitals first de-staffed while stopping elective procedures
* Then Hospitals fired huge numbers of workers (1,000+ in Legacy)
* Therefore, we have little sympathy for your claims of the unvaccinated

filling up your hospitals. Further, other countries and jurisdictions report the opposite, that vaccinated are filling up hospitals – with idiopathic cancers and cardiovascular issues. More on that later when we can actually investigate WA mortality statistics for 2021-2022. Where's that data? Being scrubbed?

Misinformation #1: Natural immunity offers little protection compared to vaccinated immunity

A recent Lancet study looked at 65 major studies in 19 countries on natural immunity. The researchers concluded that natural immunity was at least as effective <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F2
immunity-as-effective-as-covid-vaccine-years-after-
mandates%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7
as the primary COVID vaccine series.

This board was notified on November 5th 2021 of the 106 studies that supported natural immunity as a way through the pandemic. Natural immunity is now proven stronger by 160 studies collected by the Brownstone Institute. Despite the findings of these studies, natural immunity protection still violates Google and Facebook's "misinformation" policy.

Since the Athenian plague of 430 BC, it has been observed that those who recovered after infection were protected against severe disease <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F2
infection-provides-as-much-protection-as-vaccine-
study%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11
if reinfected.

That was also the observation of nearly every practicing physician during the first 18 months of the COVID pandemic.

Most Americans who were fired for not having the COVID vaccine already had antibodies that effectively neutralized the virus, but they were antibodies that the government did not recognize.

Misinformation #2: Masks prevent COVID transmission

Cochran Reviews are considered the most authoritative and independent assessment of the evidence in medicine.

And one published last month by a highly respected Oxford research team found that masks had no significant impact <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F1

masks-made-little-to-no-difference-in-preventing-covid-study%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11d
on COVID transmission.

When asked about this definitive review, CDC Director Dr. Rochelle Walensky downplayed it, arguing that it was flawed because it focused on randomized controlled studies.

But that was the greatest strength of the review! Randomized studies are considered the gold standard of medical evidence.

If all the energy used by public health officials to mask toddlers <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F1
hysteria-these-nyc-venues-still-insist-on-face-coverings%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C
could have been channeled to reduce child obesity by encouraging outdoor activities, we would be better off.

Misinformation #3: School closures reduce COVID transmission

The CDC ignored the European experience of keeping schools open, most without mask mandates.
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2022%2F08%2F1
schools-to-ease-covid-19-rules-nix-daily-health-screeners%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C

Transmission rates were no different, evidenced by studies conducted in Spain and Sweden.

Misinformation #4: Myocarditis from the vaccine is less common than from the infection

Public health officials downplayed concerns about vaccine-induced myocarditis <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2021%2F06%2F1
looking-into-heart-inflammation-in-young-males-after-covid-shot%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11d
— or inflammation of the heart muscle.

They cited poorly designed studies that under-captured complication rates.

A flurry of well-designed studies said the opposite.

We now know that myocarditis is six to 28 times more common after the COVID vaccine than after the infection among 16- to 24-year-old males.

Tens of thousands of children likely got myocarditis, mostly subclinical <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2021%2F06%2F2
19-vaccines-from-pfizer-moderna-likely-linked-to-rare-heart-condition-cdc-panel%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11d
, from a COVID vaccine they did not need because they were entirely healthy or because they already had COVID.

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Boosters reduced hospitalizations in older, high-risk Americans.

But the evidence was never there that they lower COVID mortality in young, healthy people <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F01%2F2 booster-falls-short-on-us-protection-against-covid-new-cdc-report%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11 .

That's probably why the CDC chose not to publish its data on hospitalization rates among boosted Americans under 50, when it published the same rates for those over 50.

Ultimately, White House pressure to recommend boosters for all was so intense <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2022%2F08%2F3 authorizes-updated-covid-booster-shots-targeting-omicron%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C1 that the FDA's two top vaccine experts left the agency in protest, writing scathing articles on how the data did not support boosters for young people.

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President Biden and other officials demanded that unvaccinated workers, regardless of their risk or natural immunity, be fired.

They demanded that soldiers be dishonorably discharged and nurses be laid off in the middle of a staffing crisis.

The mandate was based on the theory <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F1 insane-that-colleges-still-mandate-vaccines%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C that vaccination reduced transmission rates — a notion later proven to be false.

But after the broad recognition that vaccination does not reduce transmission, the mandates persisted, and still do to this day.

A recent study from George Mason University details how vaccine mandates in nine major US cities had no impact on vaccination rates.

They also had no impact on COVID transmission rates.

Misinformation #7: COVID originating from the Wuhan lab is a conspiracy theory

Google admitted to suppressing searches of "lab leak" <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F2 faucis-early-refutal-of-wuhan-lab-leak-under-renewed-criticism%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C during the pandemic.

Dr. Francis Collins, head of the National Institutes of Health, claimed (and still does) he

didn’t believe the virus came from a lab.

Ultimately, overwhelming circumstantial evidence points to a lab leak origin — the same origin suggested to Dr. Anthony Fauci by two very prominent virologists in a January 2020 meeting he assembled at the beginning of the pandemic.

According to documents obtained by Bret Baier of Fox News, they told Fauci and Collins that the virus may have been manipulated <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F02%2F2
faucis-early-refutal-of-wuhan-lab-leak-under-renewed-
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and originated in the lab, but then suddenly changed their tune in public comments days after meeting with the NIH officials.

The virologists were later awarded nearly $9 million from Fauci’s agency.

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Data were clear in the spring of 2021, just months after the vaccine rollout, that spacing the vaccine out by three months <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2022%2F08%2F2
covid-booster-shots-will-be-released-before-human-testing-is-
complete%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C
reduces complication rates and increases immunity.

Spacing out vaccines would have also saved more lives when Americans were rationing a limited vaccine supply at the height of the epidemic.

Misinformation #9: Data on the bivalent vaccine is ‘crystal clear’

Dr. Ashish Jha famously said this, despite the bivalent vaccine being approved using data from eight mice.

To date, there has never been a randomized controlled trial of the bivalent vaccine.

In my opinion, the data are crystal clear that young people should not get the bivalent vaccine.

It would have also spared many children myocarditis.

Misinformation #10: One in five people get long COVID

The Centers for Disease Control and Prevention claims that 20% of COVID infections can result in long COVID.

But a UK study found that only 3% of COVID patients had residual symptoms lasting 12 weeks.
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2023%2F01%2F0
girl-needs-feeding-tube-as-she-battles-long-
covid%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11c
What explains the disparity?

It’s often normal to experience mild fatigue or weakness for weeks <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2022%2F03%2F2 covid-symptoms-may-depend-on-the-variant-a-person-contracted%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7 after being sick and inactive and not eating well.

Calling these cases long COVID is the medicalization of ordinary life.

What’s most amazing about all the misinformation conveyed by CDC and public health officials is that there have been no apologies for holding on to their recommendations for so long after the data <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnypost.com%2F2022%2F11%2F1 covid-infections-could-be-deadly-study%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C96daf3c5b4a24e1d410408db691b8b75%7C11c became apparent that they were dead wrong.

Public health officials said “you must” when the correct answer should have been “we’re not sure.”

Early on, in the absence of good data, public health officials chose a path of stern paternalism.

Today, they are in denial of a mountain of strong studies showing that they were wrong.

At minimum, the CDC should come clean and the FDA should add a warning label to COVID vaccines, clearly stating what is now known.

The above article by Dr. Makary is now old, and additional science is being published to further refute claims made, and continue to be made, by public health officials.

To summarize and conclude: Just tell the truth, admit when you don’t know, and don’t let political situations drive a need for policy where none is needed.

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For Truth,

Bob Runnells

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finformedchoicewa.org%2F&data=

Public Comments to the Washington State Board of Health June 9, 2023
From: Robert Runnells, Vice-president of Informed Choice WA (ICWA)

Members of the WA State Board of Health,

These comments provide key reasons why increasingly large swaths of people do not trust public health when it comes to infectious disease pronouncements and policies.

The coronavirus pandemic is the most recent example of the kinds of messaging that many people distrusted from other outbreak reactions by public health agencies. Here in Washington, many families saw how the Department of Health and certain legislators spread their own kind of misinformation while attempting to institutionalize civil rights restrictions in 2015 and 2019 campaigns. There were numerous claims made during the COVID-19 pandemic that are now debunked or clearly call into question the effectiveness of measures declared as "the best way to stop the spread" with little-to-no consideration for the wider societal effects. Our experience should make it clear that Public Health should cease and desist using a one size fits all, single pharmaceutical approach strategies, or you will continue to lose the public's trust.

To list the misinformation spread by Departmennts of Health, I borrow sections from a nationally-published article by Dr. Marty Makary, from the Johns Hopkins University School of Medicine.

Claims promoted by state and county Public Health that should be considered Misinformation

1. **Natural immunity offers little protection compared to vaccinated immunity**
2. **Masks prevent COVID transmission**
3. **School closures reduce COVID transmission**
4. **Myocarditis from the vaccine is less common than from the infection**
5. **Young people benefit from a vaccine booster**
6. **Vaccine mandates increased vaccination rates**
7. **COVID originating from the Wuhan lab is a conspiracy theory**
8. **It was important to get the second vaccine dose three or four weeks after the first dose**
9. **Data on the bivalent vaccine is 'crystal clear'**
10. **One in five people get long COVID**
11. **Get the shot to avoid overwhelming hospitals**
    - Never happened
    - Hospitals first de-staffed while stopping elective procedures
    - Then Hospitals fired huge numbers of workers (1,000+ in Legacy)
    - Therefore, we have little sympathy for your claims of the unvaccinated filling up your hospitals. Further, other countries and jurisdictions report the opposite, that vaccinated are filling up hospitals – with *idiopathic* cancers and cardiovascular issues. More on that later when we can actually investigate WA mortality statistics for 2021-2022. Where's that data? Being scrubbed?

Misinformation #1: Natural immunity offers little protection compared to vaccinated immunity

A recent Lancet study looked at 65 major studies in 19 countries on natural immunity. The researchers concluded that natural immunity was at least as effective as the primary COVID vaccine series.

This board was notified on November 5th 2021 of the 106 studies that supported natural immunity as a way through the pandemic. Natural immunity is now proven stronger by 160 studies collected by the Brownstone Institute. Despite the findings of these studies, natural immunity protection still violates Google and Facebook's "misinformation" policy.

Since the Athenian plague of 430 BC, it has been observed that those who recovered after infection were protected against severe disease if reinfected.

That was also the observation of nearly every practicing physician during the first 18 months of the COVID pandemic.

Most Americans who were fired for not having the COVID vaccine already had antibodies that effectively neutralized the virus, but they were antibodies that the government did not recognize.

Misinformation #2: Masks prevent COVID transmission

Cochran Reviews are considered the most authoritative and independent assessment of the evidence in medicine.

And one published last month by a highly respected Oxford research team found that masks had no significant impact on COVID transmission.

When asked about this definitive review, CDC Director Dr. Rochelle Walensky downplayed it, arguing that it was flawed because it focused on randomized controlled studies.

But that was the greatest strength of the review! Randomized studies are considered the gold standard of medical evidence.

If all the energy used by public health officials to mask toddlers could have been channeled to reduce child obesity by encouraging outdoor activities, we would be better off.

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To summarize and conclude: Just tell the truth, admit when you don't know, and don't let political situations drive a need for policy where none is needed.

_____

From: Brian Harris
Sent: 4/18/2023 1:06:14 AM
To: Ronald Anderson,Kevin Veenhuizen,jenersen@king5.com,icabod@kmps.com,Kenneth Price,Eric Metaxas,mimswede@gmail.com,Mark Jones, Gun Owners of America,pmcgrath1@comcast.net,Fox News,dariusvincenthughes@gmail.com,dave scott,Mike Glaze,max@gmail.com,mailer@email.theblaze.com,Mike Leven & Hadara Ishak - Jewish Future Pledge,The_Gray_Iron_Fitness_Newsletter@senior-exercise-central.com,John.H.Teske,Turning Point,Transit Labor Relations,Rep.Vos@legis.wisconsin.gov,Harold Franklin,Bruce Harris,Bill O'Reilly,Norma Appel,Adina Harris,bob loyd,Gary & Joanne Quinlan,WA Civil Rights Council,DOH WSBOH
Cc:
Subject: 2EFA64D1-E1C5-405A-AA89-002720F53524

External Email

https://www.facebook.com/groups/599318500075568 8/permalink/9042719945802163/?mibextid=rS40aB

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.facebook.com%2Fgroups%2

From: Nancie Stein
Sent: 4/18/2023 9:31:11 AM
To: DOH WSBOH
Cc:
Subject: Fwd: Ongoing City Sewer Pipe Problem

attachments\97EB89809BE54878_IMG_0102.jpeg

External Email

Nancie Stein

15913 SE 29th Street
Vancouver, WA 98683

April 18, 2023

Lon Pluckhahn
Interim Director of Public Works
P. O. Box 1995
Vancouver, WA 98668-1995

Dear Mr. Pluckhahn:

I am reaching out to you and the various Directors of Health regarding my ongoing sewage issues. I understand that currently the position of Director of Public Works/Sewer & Water is vacant and that you are the Interim Director of Public Works so I'm directing this letter to you - as well as copying:

Dr. Alan Melnick, Director
Clark County Public Health
P.O. Box 9825 Bldg 17, A338
Vancouver, WA 98666

Dr. Umair Shah, Director/Secretary of Health
State Department of Health
P.O. Box 47890
Olympia, WA 98504-7890

State Board of Health
wsboh@sboh.wa.gov <mailto:wsboh@sboh.wa.gov>

Mayor Anne McEnerny-Ogle
City of Vancouver
P. O. Box 1995
Vancouver, WA 98668-1995

Mr. Eric Holmes, City Manager
City of Vancouver

P. O. Box 1995
Vancouver, WA 98668-1995

Mr. Brent Waddle, Supervisor
Risk & Safety Management

I have been living with a long-term sewer back-up problem which has left me to live in a number of unsanitary conditions since December of 2021. These sewer back-up incidents have been much too frequent although recently, when the Preventative Maintenance happens on time, they stay under some control.

However, it's still not a solution because as an 85 year old widow, living alone, the uncertainty of expectation when the next incident will occur has been incredibly stressful, as I hope you can understand. The chaotic mess, the physical requirements on me to clean it up, and the worry that I may be living with bacterial or possibly other illness-causing pathogens has been overwhelming.

In addition, these sewage back-ups have occurred during family visits and ruined what was supposed to be an enjoyable time.

After repeated calls to your offices and repeated attempts at correcting the problem, I was promised the Department of Public Works/Operations would dispatch engineers in six months time, to solve the problem. That deadline has passed with no permanent solution in sight.

I moved into my home in mid-November 2021. On Friday, December 17th, 2021, the toilet in the Master Bathroom overflowed. Raw sewage backed up in the shower. I hired a contractor to purge the line, all the way to the street. The contractor reported the blockage appeared to be cleared.

Three days later, on Tuesday, December 20th, my Master Bath shower again backed up with sewage. My plumbing bill, costing $162.75, states "Camera from house to sewer manhole - no issues. Sewer is in good working order." The plumber was unable to discern the reason for the back up.

On Friday, Christmas Eve, again sewage came up in my shower. Brown effluent bubbled up filling the floor of my shower and spilling over onto my bathroom floor. I scrambled to gather towels to prevent the effluent from spreading into my newly carpeted bedroom and master closet, and the heater vent in the bathroom floor. Again I called the plumber. The line was purged again. The note on the invoice, costing $922.25 stated "Existing blockage in City Line"

I called the City who jetted their pipe in the center of the street and was left with instructions to flush my toilets twice with each use, a schedule I have diligently followed.

On Monday, June 27th, another sewage backup occurred. I had contracted with Design Doctors Construction Company for a remodel in February 2022 that continued through October 2022. Design Doctors were aware of this ongoing sewer problem and brought in their plumber to investigate the June 27th sewer back-up. After his inspection, he agreed with the plumber I had hired in November of 2021 and confirmed the blockage was not in my lines but was in the City's lines. At the time of this inspection, pictures were taken of the City's pipe which revealed a blockage at the manhole in front of my house. The plumber explained a dip in the City pipe causes debris to build up and is repeatedly causing the blockages. A copy of that picture is attached. That visit cost me $554.00.

On that same day in an attempt to clear the blockage your technician Chris jetted your line. Chris explained the City would perform Preventative Maintenance and jet the

line once a month to prevent another back up. As part of this PM the line was jetted in July and August. However, the City missed this PM in September and October.

On Sunday, October 23rd, which happened to be my birthday with houseguests and visits from my family, there was yet another back up. My brand new, gorgeous, (and costly) bathroom had brown effluent spreading to every corner. I was frantic. I called the City's Emergency Line for hours and the line was out of order. Because I couldn't reach that emergency line I called the Health Department. They assigned me Case No. CO0028964. The Health Department took it from there.

At 7:30 that night John Morgan from the Department of Public Works came to my door then purged the line. While Mr. Morgan was performing this procedure, my nephew who was one of my house guests, observed the shower to find the drain was still not clear and he asked Mr. Morgan to repeat the procedure, to make sure the line drained before he left. On this second purge, Mr. Morgan (or his tech) reported he could actually feel or hear "a release." I was so glad my nephew was there and caught the fact that this first purge was unsuccessful and asked Mr. Morgan to perform a second purge. I hope you agree with me that the fact it took two purges indicates how serious this issue has become.

After that incident a follow up letter was sent to Kyle Peters, your Wastewater Lead, requesting PM always include a second purge. Again, I was not informed if they followed through on that request.

After this latest event, Kyle Peters informed me the City would now be jetting the line every month between the 28th and the 1st and that your technicians would post a notice on my door. Since then I have received those notices.

As I was told previously, I have again been required to participate in Preventative Maintenance. Mr. Peters asked me to fill my tub twice weekly, and to continue to flush the toilets twice with each use. Again I have diligently followed those instructions.

Mr. Peters promised that after six months City Engineers would make a site visit to address the problem. Believe me, I have been counting the days.

On Friday, March 10th, as no one had jetted the line as promised, and fearing another back up, I called Mr. Peters who said he'd been on vacation. I was surprised to learn that no one else in the Department was supervising this important procedure in his absence. Mr. Peters then scheduled a purge of the line for that day. During our conversation I reminded him of his six month promise to have the City Engineers resolve this issue - and that April was coming.

It was then that he informed me that the City had now decided against a site visit and instead would only deal with my issue via continued Preventative Maintenance. (Curiously, he also informed me I could reduce the ritual of filling my tub from twice weekly to once weekly.) This is not acceptable. It is past time to eliminate this problem.

I have been more than patient and want this corrected once and for all.

This sewage back up has affected my property value and the salability of my property, as this continuing issue requires disclosure to any prospective buyer. I cannot imagine any prospective buyer would be willing to put up with this. Nor am I.

More upsetting than how this sewage problem has affected my property value, this unsolved health issue has been and continues to be exceedingly stressful.

Regarding the $1639.00 I have been forced to outlay in attempts to diagnose and remedy this problem, I have been given a Claim For Damages Form to submit, however,

I am waiting to submit this reimbursement form until this matter is completely resolved.

In view of the fact I have been dealing with this sewage issue since December 2021 - without a successful resolution - I do not think it unreasonable to expect a response from you with a permanent solution within the first week of May 2023.

Respectfully,

Nancie Stein
15913 SE 29th Street
Vancouver, WA 98683

(760) 213-1810

cc: Dr. Alan Melnick, Director

Dr. Umair Shah, Director/Secretary of Health

State Board of Health

Mayor Anne McEnerny-Ogle

Mr. Eric Holmes, City Manager

Mr. Brent Waddle, Supervisor

_____

From: Melissa Leady
Sent: 6/7/2023 3:29:34 PM
To: DOH WSBOH
Cc:
Subject: My Public Comments

attachments\8BAEEAABFDFA4E7A_Inline image.png

External Email

State Board of Health members and Department of Health,

I am providing summaries of two recent studies on the COVID-19 vaccines. I am also following up to inquire why the Department of Health (DOH) has not made public the all-cause mortality data during the COVID-19 vaccine era (2021, 2022, and 2023). This data, broken down by vaccination status, would shed light on the safety of the COVID-19 vaccine. I raised the question about the missing data during the April 2023 Vaccine Advisory Committee meeting. At that time, a DOH official expressed concern about vaccine misinformation from those of us providing public comment on vaccine safety. I found this odd because the antidote to misinformation is information and DOH has not reported on vaccine safety. I hope this means that DOH will be forthcoming with the 2021-2023 all-cause mortality data broken down by vaccination status. This information will help inform the public and end speculation on the long-term safety of the COVID-19 vaccines.

COVID-19 Vaccine Studies of interest:

1. Uversky, V.N.; Redwan, E.M.; Makis, W.; Rubio-Cassias, A. IgG4 Antibodies Induced by Repeated Vaccination May Generate Immune Tolerance to the SARS-CoV-2 Spike Protein. Vaccines 2023, 11, 991. https://doi.org/10.3390/vaccines11050991 <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fvaccines1

Abstract: "As immunity provided by these vaccines [COVID-19] rapidly wanes, their ability to prevent hospitalization and severe disease in individuals with comorbidities has recently been questioned, and increasing evidence has shown that, as with many other vaccines, they do not produce sterilizing immunity, allowing people to suffer frequent reinfections. Additionally, recent investigations have found abnormally high levels of IgG4 in people who were administered two or more injections of the mRNA vaccines...Emerging evidence suggests that the reported increase in IgG4 levels detected after repeated vaccination with the mRNA vaccines may not be a protective mechanism; rather, it constitutes an immune tolerance mechanism to the spike protein that could promote unopposed SARS-CoV2 infection and replication by suppressing natural antiviral responses. Increased IgG4 synthesis due to repeated mRNA vaccination with high antigen concentrations may also cause autoimmune diseases, and promote cancer growth and autoimmune myocarditis in susceptible individuals."

2. Shrestha, N.K.; Burke, P.C.; Nowacki, A.S.; Simon, J.f.; Hagen, A.; Gordon, S.M. Effectiveness of the Coronavirus Disease 2019 Bivalent Vaccine. Open Forum Infectious Diseases. Volume 10, Issue 6, June 2023, ofad209. https://doi.org/10.1093/ofid/ofad209

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1093%2Fofid%2Fo

Study of over 50,000 Cleveland Clinic employees evaluating protection from the bivalent COVID-19 vaccines.

Conclusions: "The bivalent COVID-19 vaccine given to working-aged adults afforded modest protection overall against COVID-19 while the BA.4/5 lineages were the dominant circulating strains [estimated 29% effective], afforded less protection [estimated 20%] when the BQ lineages were dominant, and effectiveness was not demonstrated [estimated 4%] when the XBB lineages were dominant."

Of note: the section titled "Risk of COVID-19 Based on Prior Infection and Vaccination History," stating, "The risk of COVID-19 also varied by the number of COVID-19 vaccine doses previously received. They higher the number of vaccines previously received, the higher the risk of contracting COVID-19. (Figure 2)." Please find Figure 2 attached below.

Sincerely,

Melissa Leady

Clark County Resident

_____

From: sue coffman
Sent: 6/8/2023 10:31:52 AM
To: DOH WSBOH
Cc:
Subject: June 14 Public Comment

External Email

To the Board of Health:

I am Sue Coffman, resident of Clallam County, and I am submitting this email as Public Comment for the June 14 Board of Health meeting.

It has been repeatedly demanded that our "health" agencies appropriately attribute deaths from COVID versus deaths with COVID. To that end, attorneys recently have asked the CDC for all data reflecting the number of people hospitalized due to COVID-19 and the number admitted to a hospital for reasons other than COVID-19 (but who tested positive after being admitted).

The goal of this request was to uncover the number of "incidental" hospitalizations, meaning individuals who were admitted to the hospital for some reason other than COVID who happened to test positive for COVID at admission, and as a result are incorrectly labeled a "COVID hospitalization."

This has been an ongoing problem as Dr. Fauci himself finally acknowledged toward the end of the pandemic, noting that "[s]ince all hospital admissions are tested for COVID-19, many [people] are hospitalized with COVID, as opposed to because of COVID," where "[t]he real reason for hospitalization might be a broken leg, or appendicitis, or something like that."

The issue with this method of counting cases, which has been in place since the beginning of the pandemic is that it falsely increases the number COVID-19 hospitalizations, giving the impression that the hospitalization rate due to COVID is much higher than it actually is.

The CDC's response to the request was incredible. It admitted in no uncertain terms that it has no way of telling the difference between the two, stating, "The way that our data guidance defines COVID admission does not enable us to make a distinction between hospital admissions due to COVID-19 vs hospital admissions for reasons other than COVID-19."

This response is significant because it shows, once again, that the CDC is making no effort to provide accurate and important data to the public despite knowing that its inaccurate data continues to be used to impose restrictions, including mask requirements on children. Our Boards of Health continue to bow down to this corrupt organization (along with the NIH, the NIAID, and the WHO), ensuring that their lies and "misinformation" continue to spread and be used in making policy decisions that effect the health and safety of all people.

And then we get into the media debacle. During his closing remarks for the state Board of Health meeting in April, Washington's Secretary of Health Dr. Umair A. Shah thanked the media for their partnership throughout the pandemic. "We continue to be in this together," he said. This is important enough to repeat. Shah thanked the media for their partnership!

When did media become a partner to government agencies and elected officials? In a free society, isn't the media considered the "Fourth Estate?" Aren't they supposed to be free from government partnerships in order to have journalistic integrity, question the government, and have the ability to criticize and dig deep, in order to help preserve freedom and prevent tyranny?

I ask you, as parents and a free people, how can you continue to support these organizations that are trying to ruin our society, our families, our very humanity?

Sue Coffman
714-337-4331
ICWA Team Leader
Legislative District #24
https://informedchoicewa.org/
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finformedchoicewa.org%2F&data=

_____

From: Jodi Dotson
Sent: 5/25/2023 2:24:51 PM
To: DOH WSBOH
Cc:
Subject: Covid Shots for kids

External Email

To the Board:

I plead with you to stop the push on covid 19 gene therapy for children. There is plenty of research now that these shots are deadly for anyone to get. The real sad issue here is giving them to children who are unable to stand up for themselves. Many woman are aborting babies in third trimester naturally due to these shots. The mortality rate is down globally becuase you people say they are SAFE AND EFFEVTIVE which is a lie. How many of you on the board have acturally been vacinated with the Covid jab? Do you force your children to take this deadly jab? It is noted that millions will die from this jab. How many will die that come in contact with shedding? My dtr had heart issues from one dose ot this deadly compound. I do not know what they pay you people but it is not nearly enough for a human life in my opinion. You are suppose to be Public Health officials not regulators and you are suppose to PROTECT the public not put them in harms way. I hope non of you have to face loss of a loved one from this deadly jab and if you have has it changed your outlook for society?
May God keep you safe and may you find it in your heart do the right thing and take these shots of the list for children.

Sincerely,
Jodi Dotson (Mother, Daughter and grandmother)

From: Arne Christensen
Sent: 6/6/2023 4:16:32 PM
To: DOH WSBOH
Cc:
Subject: South Korea Covid vaccination and myocarditis study

External Email

Hello:
I'm writing to refer the health department to a study in South Korea that attributed 21 deaths in 2021 among adults, 45 or younger, to vaccination-related myocarditis following administration of Covid mRNA vaccines to the 21 adults. The study was published in European Heart Journal a few days ago, here:
https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Facademic.oup.com%2Feurheartj%2
article%2Fdoi%2F10.1093%2Feurheartj%2Feha&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cbbab44c

d339/7188747

In the study, the researchers provide a table detailing 8 cases of sudden cardiac death in South Korea happening within 1 week of an individual's vaccination. This study was funded, not by Robert F. Kennedy Jr.'s group or some other "anti-vax" entity, but by the Korea Disease Control and Prevention Agency.

Presumably the board does not believe that it's appropriate to force individuals to consume a product that's killed people. So, why doesn't it apologize for its extraordinary zealousness, including resorting to forceful measures, in pressuring people to take these mRNA vaccines?

Arne Christensen

From: Bill Osmunson
Sent: 5/28/2023 9:02:17 AM
To: DOH WSBOH
Cc:
Subject: Fluoridation is toxic

External Email

Dear Washington State Board of Health,

The United States National Toxicology Program <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fntp.niehs.nih.gov%2Fwhoweare% mission to protect and promote human health, under the US Health and Human Services, released their draft of fluoride's toxicity over 700 pages which had been held up by HHS and forced out by court order. Here are some very important statements:

#1. NTP states: "Our meta-analysis confirms results of previous meta-analyses and extends them by including newer, more precise studies…The data support a consistent inverse association between fluoride exposure and children's IQ."

#2. NTP's meta-analysis puts the harm into perspective:
"[R]esearch on other neurotoxicants has shown that subtle shifts in IQ at the population level can have a profound impact…a 5-point decrease in a population's IQ would nearly double the number of people classified as intellectually disabled."

#3. NTP's experts confirmed their conclusion applies to fluoridation. When a government employee commenter (name redacted) claimed:
"The data do not support the assertion of an effect below 1.5 mg/L…all conclusory statements in this document should be explicit that any findings from the included studies only apply to water fluoride concentrations above 1.5 mg/L."

The NTP responded:
"We do not agree with this comment…our assessment considers fluoride exposures from all sources, not just water…because fluoride is also found in certain foods, dental products, some pharmaceuticals, and other sources… Even in the optimally fluoridated cities…individual exposure levels…suggest widely varying total exposures from water combined with fluoride from other sources."

#4. NTP stated:
"We have no basis on which to state that our findings are not relevant to some children or pregnant people in the United States."
"Several of the highest quality studies showing lower IQs in children were done in optimally fluoridated (0.7 mg/L) areas…many urinary fluoride measurements exceed those that would be expected from consuming water that contains fluoride at 1.5 mg/L."

Asked whether its meta-analysis had identified any safe dose of fluoride, NTP responded that they found "no obvious threshold" for total fluoride exposure or water fluoride exposure. NTP cited their report's graph showing a steep drop in IQ of about 7 points over a fluoride range from 0.2 to 1.5 mg/L. A peer-reviewer commented on the size of the effect: "…that's substantial…That's a big deal."

Promoters of fluoridation, mostly American Dental Association, have attempted to

discredit the NTP report by recommending further study, delay, delay, delay. However, the empirical evidence is robust, highly consistent, the fluoride added to public water is harming many and as I have provided to the Board previously, fluoridation is not significantly effective, if at all, in mitigating dental caries.

Sincerely,

Bill Osmunson DDS MPH

From: Arne Christensen
Sent: 5/24/2023 10:59:31 AM
To: DOH WSBOH
Cc:
Subject: in-person meetings

External Email

The members of the Board of Health should be meeting with each other regularly, in public facilities, with attendance open to the public. We should have the chance to do more than monitor and communicate with the Board the remotely, whether by watching Zoom meetings or emails like this one. Only in-person meetings give the public the chance to fully interact with the Board.

Arne Christensen

From: Lisa Templeton
Sent: 6/9/2023 11:43:33 AM
To: DOH WSBOH
Cc:
Subject: written public comment for inclusion in materials for June 14 BOH meeting

External Email

Dear Board Members,

I am writing to share a Newsweek <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Fits-time-scientific-community-admit-we-were-wrong-about-coivd-it-cost-lives-opinion-1776630&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0 op-ed written by a medical student earlier this year. It will interest you as public health officials, given that it reflects the sentiments of increasingly large sectors of society--as well as other members of the public health field--who are realizing the public has been misled. As Secretary Shah has indicated, the loss of trust in our institutions is a concern. Attempts to regain trust must be founded in complete truth, and policies must be noncoercive in nature.

Thanks in advance for reading.

It's Time for the Scientific Community to Admit We Were Wrong About COVID and It Cost Lives | Opinion <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Fits-time-scientific-community-admit-we-were-wrong-about-coivd-it-cost-lives-opinion-1776630&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0

By Kevin Bass, MS MD/PhD Student

As a medical student and researcher, I staunchly supported the efforts of the public health authorities when it came to COVID-19. I believed that the authorities responded to the largest public health crisis of our lives with compassion, diligence, and scientific expertise. I was with them when they called for lockdowns, vaccines, and boosters.

I was wrong. We in the scientific community were wrong. And it cost lives.

I can see now that the scientific community from the CDC <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Ftopic%2F to the WHO <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Ftopic%2F to the FDA

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Ftopic%2F
and their representatives, repeatedly overstated the evidence and misled the public about its own views and policies, including on natural <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fmmwr%2Fvolum vs. artificial immunity <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.science.org%2Fcontent%2Fa sars-cov-2-once-confers-much-greater-immunity-vaccine-vaccination-remains-vital&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e21 , school closures <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.science.org%2Fcontent%2Fa disease-experts-call-nationwide-closure-us-schools-and-business-slow&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e21 and disease transmission <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2 , aerosol spread <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fkevinnbass%2Fsta , mask mandates <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.tabletmag.com%2Fsections% mask-debacle&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e , and vaccine effectiveness and <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fonlinelibrary.wiley.com%2Fdoi%2 safety <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjme.bmj.com%2Fcontent%2Fearly 2022-108449.info&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C1 , especially among the young. All of these were scientific mistakes at the time, not in hindsight. Amazingly, some of these obfuscations continue to the present day.

But perhaps more important than any individual error was how inherently flawed the overall approach of the scientific community was, and continues to be. It was flawed in a way that undermined its efficacy and resulted in thousands if not millions of preventable deaths.

What we did not properly appreciate is that preferences determine how scientific expertise is used, and that our preferences might be—indeed, our preferences were—very different from many of the people that we serve. We created policy based on our preferences, then justified it using data. And then we portrayed those opposing our efforts as misguided, ignorant, selfish, and evil.

We made science a team sport, and in so doing, we made it no longer science. It became us versus them, and "they" responded the only way anyone might expect them to: by resisting.

We excluded important parts of the population from policy development and castigated critics, which meant that we deployed a monolithic response across an exceptionally diverse nation, forged a society more fractured than ever, and exacerbated longstanding heath and economic disparities.

Our emotional response and ingrained partisanship prevented us from seeing the full impact of our actions on the people we are supposed to serve. We systematically minimized the downsides of the interventions we imposed—imposed without the input, consent, and recognition of those forced to live with them. In so doing, we violated the autonomy of those who would be most negatively impacted by our policies: the poor, the working class, small business owners, Blacks and Latinos, and children. These populations were overlooked because they were made invisible to us by their systematic exclusion from the dominant, corporatized media machine that presumed omniscience.

Most of us did not speak up in support of alternative views, and many of us tried to suppress them. When strong scientific voices like world-renowned Stanford professors John Ioannidis, Jay Bhattacharya, and Scott Atlas <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Ftopic%2F atlas&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e21 , or University of California <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Ftopic%2F california&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0 San Francisco professors Vinay Prasad and Monica Gandhi, sounded the alarm on behalf of vulnerable communities, they faced severe censure by relentless mobs of critics and detractors in the scientific community—often not on the basis of fact but solely on the basis of differences in scientific opinion.

When former President Trump pointed out the downsides of intervention, he was dismissed publicly as a buffoon. And when Dr. Antony Fauci opposed Trump and became the hero of the public health community, we gave him our support to do and say what he wanted, even when he was wrong.

Trump was not remotely perfect, nor were the academic critics of consensus policy. But the scorn that we laid on them was a disaster for public trust in the pandemic response. Our approach alienated large segments of the population from what should have been a national, collaborative project.

And we paid the price. The rage of the those marginalized by the expert class exploded onto and dominated social media. Lacking the scientific lexicon to express their disagreement, many dissidents turned to conspiracy theories and a cottage industry of scientific contortionists to make their case against the expert class consensus that dominated the pandemic mainstream. Labeling this speech "misinformation" and blaming it on "scientific illiteracy" and "ignorance," the government conspired with Big Tech to aggressively suppress it, erasing the valid political concerns of the government's opponents.

And this despite the fact that pandemic policy was created by a razor-thin sliver of American society who anointed themselves to preside over the working class—members of academia, government, medicine, journalism, tech, and public health, who are highly educated and privileged. From the comfort of their privilege, this elite prizes paternalism, as opposed to average Americans who laud self-reliance and whose daily lives routinely demand that they reckon with risk. That many of our leaders neglected to consider the lived experience of those across the class divide is unconscionable.

Incomprehensible to us due to this class divide, we severely judged lockdown critics as lazy, backwards, even evil. We dismissed as "grifters" those who represented their interests. We believed "misinformation" energized the ignorant, and we refused to accept that such people simply had a different, valid point of view.

We crafted policy for the people without consulting them. If our public health officials had led with less hubris, the course of the pandemic in the United States might have had a very different outcome, with far fewer lost lives.

Instead, we have witnessed a massive and ongoing loss of life in America due to distrust of vaccines <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cidrap.umn.edu%2Fcovid-19%2Fus-pandemic-death-toll-higher-20-peer-countries&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0 and the healthcare system <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.pbs.org%2Fnewshour%2Fsh the-covid-death-rate-in-the-u-s-is-so-much-higher-than-other-wealthy-nations&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e

; a massive concentration in wealth by already wealthy elites
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inequality.html&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7
; a rise in suicides and gun violence
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nature.com%2Farticles%2Fs
021-98813-
z&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e21726
especially among the poor; a near-doubling of the rate of depression and anxiety
disorders especially among the young
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19-pandemic-has-had-large-and-uneven-impact-global-mental-
health&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e2
; a catastrophic loss of educational attainment among already disadvantaged children
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.brookings.edu%2Fblog%2Fb
center-chalkboard%2F2022%2F03%2F03%2Fthe-pandemic-has-had-devastating-
impacts-on-learning-what-will-it-take-to-help-students-catch-
up%2F&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e
; and among those most vulnerable, a massive loss of trust in healthcare
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.weforum.org%2Fagenda%2
health-economy-pandemic-
covid19&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e
, science, scientific authorities
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbuildingtrust.org%2Fwp-
content%2Fuploads%2F2021%2F05%2F20210520_NORC_ABIM_Foundation_Trust-in-
Healthcare_Part-
1.pdf&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0e21
, and political leaders more broadly.

My motivation for writing this is simple: It's clear to me that for public trust to be restored in science, scientists should publicly discuss what went right and what went wrong during the pandemic, and where we could have done better.

It's OK to be wrong and admit where one was wrong and what one learned. That's a central part of the way science works. Yet I fear that many are too entrenched in groupthink—and too afraid to publicly take responsibility—to do this.

Solving these problems in the long term requires a greater commitment to pluralism and tolerance in our institutions, including the inclusion of critical if unpopular voices.

Intellectual elitism, credentialism, and classism must end. Restoring trust in public health—and our democracy—depends on it.

From https://www.newsweek.com/its-time-scientific-community-admit-we-were-wrong-about-coivd-it-cost-lives-opinion-1776630
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.newsweek.com%2Fits-time-scientific-community-admit-we-were-wrong-about-coivd-it-cost-lives-opinion-1776630&data=05%7C01%7CWsboh%40sboh.wa.gov%7C9f350f232ce54e655e7208db691916a8%7C11d0

Thank you,

Lisa Templeton

_____
From: Bill Osmunson
Sent: 5/17/2023 6:39:19 PM
To: DOH WSBOH
Cc:
Subject: Public Comments for the Environmental Health Committee

External Email

Dear Environmental Health Committee Members,

Our request is for the Committee to review the science on fluoride administration to the public at large, without individual consent, without FDA CDER NDA, as determined to be a prescription drug by the Washington State Board of Pharmacy and 2 out of 3 children showing a biomarker of over exposure and lower IQ as confirmed by the US National Toxicology Program.

The Board of Scientific Counselors Working Group voted, May 16, 2023, to accept the Report on the State of the Science and the Draft Meta-Analysis Manuscript on Fluoride April 2023, attached. It is over 700 pages and instead of the expected 2 years has taken 8 years. Link
<http://https://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2023/may16/meeting_materials/wgrptbsc20230400_
NTP Working Group Report: Draft State of the Science Monograph and the Draft Meta-Analysis Manuscript on Fluoride; BSC; April 2023 (nih.gov)
<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fntp.niehs.nih.gov%2Fntp%2Fabou

The NTP draft review included 159 human studies, 339 non-human studies, 60 in vitro, and many other publications. The original draft by the Division of Translational Toxicology proposed a “hazard classification” for fluoride which was later removed under pressure from proponents of fluoridation.

The draft monogram was reviewed and blocked by the Department of Health and Human Services from release until the court (Civ. No. 17-CV-02162-EMC, Documents 312 Link) ordered release and the draft has been divided into two chapters, one called the “state of the science” (SoS) and the second the “meta-analysis.” (MA)

The SoS supports a hazard conclusion, yet indicates fluoride is a developmental neurotoxin above 1.5 mg/L fluoride in water. The BSC advised the NTP to reassess that concept in part because there are several sources of fluoride and some drink over 10 times the mean quantity of water. Concentration of fluoride in water assumes everyone is "average" drinking the "average" amount of water, "average health," "average" exposure from other sources.

For illustration of "average" and "mean concentration", a person drowns trying to wade across a lake. He first asked the fisherman nearby, “how deep is the lake?” The fisherman responded, “averages 3 feet deep.” Evaluating fluoride should be done on dosage rather than concentration. In addition, an uncertainty factor and margin of error of at least 10 should be used. And the most vulnerable must be protected and the Board is not protecting the developing brain.

The MA chapter reported a decrease of 1.81 points per 1-mg/L increase in urinary fluoride and is more consistent using total fluoride exposure than fluoride concentration in water. The report states: “The consistency of the data supports an inverse association between fluoride exposure and children’s IQ.”
The MA of 55 studies showed mean IQ scores decreased by 6 to 7 IQ points

(standardized mean difference -0.45). The report does not show a no effect lower level. Although approved by the BSC, the NTP Director will make a final decision on publication.

Subsequent to the NTP report cut off date, research is reasonably consistent reporting harm,

"A 0.5 mg increase in fluoride intake from infant formula corresponded to an 8.8-point decrement in Performance IQ (95% CI: -14.18, -3.34) and this association remained significant after controlling for fetal fluoride exposure (B = -7.62, 95% CI: -13.64, -1.60)." Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880.

"A 1-mg higher daily intake of fluoride among pregnant women was associated with a 3.66 lower IQ score (95% CI, -7.16 to -0.14) in boys and girls." Green R, Lanphear B, Hornung R, Flora D, Martinez-Mier EA, Neufeld R, Ayotte P, Muckle G, Till C. Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada. JAMA Pediatr. 2019 Oct 1;173(10):940-948. doi: 10.1001/jamapediatrics.2019.1729. PMID: 31424532; PMCID: PMC6704756.

"An increase of 0.5 mg/L in water fluoride concentration (approximately equaling the difference between fluoridated and non-fluoridated regions) corresponded to a 9.3- and 6.2-point decrement in Performance IQ among formula-fed." Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880.

As you have previously been told, a 5 IQ loss would double the intellectually disabled and halve the number of gifted.'

See BSC NTP Draft II-69 and eFigure 17 at II-84 (Page 45 meta-analysis)Link <http://https//ntp.niehs.nih.gov/ntp/about_ntp/bsc/2023/may16/meeting_materials/wgrptbsc20230400_i
again.

A recent meta-analysis was published by the California Dental Public Health, Kumar, reporting no adverse effect for 8 studies at fluoride concentrations <1.5 mg/L. However, two of the studies used have significant limitations and conflicting data as published and presented to the NTP. The Broadbent study in New Zealand had a small number of controls and many of those not on fluoridated water were taking fluoride supplements. In addition, the Kumar study included a study by Ibarluzea which is an outlier, reporting no significance for girls or boys at age 1. However, at age 4 where the fluoride in the water was <0.1 mg/L the study reported an implausible 28 IQ point IQ increase for boys, not girls when evaluated with mg/g-creatinine maternal urine. These two studies affected the Kumar study conclusion.
Ibarluzea J, Gallastegi M, Santa-Marina L, et al. Prenatal exposure to fluoride and neuropsychological development in early childhood: 1-to 4 years old children. Environ Res. Oct 8 2021:112181. doi:https://dx.doi.org/10.1016/j.envres.2021.112181 <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.envre

The authority (WSBH jurisdiction) administered excess fluoride exposure must be evaluated to protect developing brains. The National Toxicology Report on fluoride and

developmental neurotoxicity has gone through repeated peer reviews including HHS CDC and the American Dental Association along with adjudication by their Board of Scientific Counselors.

There is no dispute that fluoride causes brain damage, the dispute is over the dosage and those claiming it is safe do not consider all sources and exposures and hide behind the "average." Judgment needs to be made on whether possible cavities are prevented and IQ loss.

It is decades past time for the WSBH to protect the developing brains of our most vulnerable.

Other sources of fluoride are available should a person want to swallow fluoride.
The research on benefit of swallowing fluoride is weak.

Lowering exposure is as simple as turning off the fluoride pump.

Most of the world never started or has turned off the pumps. What is Washington State Board of Health waiting for?

Sincerely,

Bill Osmunson DDS MPH
Washington Action for Safe Water
King County Citizens Against Fluoridation

From: Melissa Leady
Sent: 6/7/2023 2:17:03 PM
To: DOH WSBOH
Cc:
Subject: COVID-19 Vaccine Studies and Sata

attachments\2663A43ABAF24E49_Inline image.png

External Email

State Board of Health members and Department of Health,

I am providing summaries of two recent studies on the COVID-19 vaccines. I am also following up to inquire why the Department of Health (DOH) has not made public the all-cause mortality data during the COVID-19 vaccine era (2021, 2022, and 2023). This data, broken down by vaccination status, would shed light on the safety of the COVID-19 vaccine. I raised the question about the missing data during the April 2023 Vaccine Advisory Committee meeting. At that time, a DOH official expressed concern about vaccine misinformation from those of us providing public comment on vaccine safety. I found this odd because the antidote to misinformation is information and DOH has not reported on vaccine safety. I hope this means that DOH will be forthcoming with the 2021-2023 all-cause mortality data broken down by vaccination status. This information will help inform the public and end speculation on the long-term safety of the COVID-19 vaccines.

COVID-19 Vaccine Studies of interest:

1. Uversky, V.N.; Redwan, E.M.; Makis, W.; Rubio-Cassias, A. IgG4 Antibodies Induced by Repeated Vaccination May Generate Immune Tolerance to the SARS-CoV-2 Spike Protein. Vaccines 2023, 11, 991. https://doi.org/10.3390/vaccines11050991 <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fvaccines1

Abstract: "As immunity provided by these vaccines [COVID-19] rapidly wanes, their ability to prevent hospitalization and severe disease in individuals with comorbidities has recently been questioned, and increasing evidence has shown that, as with many other vaccines, they do not produce sterilizing immunity, allowing people to suffer frequent reinfections. Additionally, recent investigations have found abnormally high levels of IgG4 in people who were administered two or more injections of the mRNA vaccines...Emerging evidence suggests that the reported increase in IgG4 levels detected after repeated vaccination with the mRNA vaccines may not be a protective mechanism; rather, it constitutes an immune tolerance mechanism to the spike protein that could promote unopposed SARS-CoV2 infection and replication by suppressing natural antiviral responses. Increased IgG4 synthesis due to repeated mRNA vaccination with high antigen concentrations may also cause autoimmune diseases, and promote cancer growth and autoimmune myocarditis in susceptible individuals."

2. Shrestha, N.K.; Burke, P.C.; Nowacki, A.S.; Simon, J.f.; Hagen, A.; Gordon, S.M. Effectiveness of the Coronavirus Disease 2019 Bivalent Vaccine. Open Forum Infectious Diseases. Volume 10, Issue 6, June 2023, ofad209. https://doi.org/10.1093/ofid/ofad209

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1093%2Fofid%2Fo

Study of over 50,000 Cleveland Clinic employees evaluating protection from the bivalent COVID-19 vaccines.

Conclusions: "The bivalent COVID-19 vaccine given to working-aged adults afforded modest protection overall against COVID-19 while the BA.4/5 lineages were the dominant circulating strains [estimated 29% effective], afforded less protection [estimated 20%] when the BQ lineages were dominant, and effectiveness was not demonstrated [estimated 4%] when the XBB lineages were dominant."

Of note: the section titled "Risk of COVID-19 Based on Prior Infection and Vaccination History," stating, "The risk of COVID-19 also varied by the number of COVID-19 vaccine doses previously received. They higher the number of vaccines previously received, the higher the risk of contracting COVID-19. (Figure 2)." Please find Figure 2 attached below.

Sincerely,

Melissa Leady

Clark County Resident

_____

From: Janet Lee
Sent: 4/23/2023 12:36:17 AM
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: Michelle Anderson
Sent: 5/31/2023 3:10:25 PM
To: DOH WSBOH
Cc:
Subject: Public comments

External Email

I feel like if the legislation has put this off for the last 13 years in a ROW, that it should be withdrawn!
We don't need MORE rules!
They are just for people who DONT have common sense! We KNOW not to put lead paint in schools.
Please WITHDRAW this CR-103.
Thank you!

From: Bill Osmunson
Sent: 5/18/2023 7:27:55 AM
To: DOH WSBOH
Cc:
Subject: May 19 Meeting Request

External Email

Dear Environmental Health Committee Members,

I lost sleep last night thinking about you. Not in a good way.

OK, this entire idea of medicating everyone without their consent and then expecting the patient to provide the research to authorities to convince authorities they are ingesting too much, doesn't work, and being harmed is backwards. That's authorities job, not the public's

Authorities, the WSBOH, who recommend, have jurisdiction, promote, advertise, market, administer the drug and health care providers, including me, have the legal and ethical responsibility to provide the empirical evidence on efficacy, dosage, safety and label to the FDA CDER and gain an NDA and provide the evidence to the patient and public.

APPROVAL AND RESEARCH IS NOT THE PATIENT'S RESPONSIBILITY.

You and I, the WSBOH we authorities, have had over 70 years to provide the randomized controlled trials. We have failed. Well, there is one by Leverett, a quarter of a century ago, prenatal, reporting no significant benefit. No wonder the FDA CDER reported the evidence of efficacy is incomplete. Leverett, DH, Adair SM, Vaughan BW, Proskin HM, Moss ME. Randomized Clinical Trial of the Effect of Prenatal Fluoride Supplements in Preventing Dental Caries. Caries Res 1997;31:174–179. https://doi.org/10.1159/000262394 <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1159%2F0002623
Karger

We have had over 70 years to determine a dosage of benefit and have failed. Dispensing as a concentration is crazy and not science.

We have had over 70 years to determine a mechanism of effect, and failed. Fluoride cannot move from inside the tooth to the outside where the caries are developing.

We have had over 70 years to provide studies on safety and have failed. Marketing and endorsements are not empirical evidence. Medical history is replete with examples of authorities slow response to science, claiming "safe and effective" without evidence.

We have had over 70 years to provide a label and failed.

We have turned the complex scientific evaluation over to the voters because we as

authorities have miserably failed to do the research, publish the research, and do our duty to protect the public.

It is the Boards job to provide the empirical randomized controlled trials on efficacy at a specific dosage with safety studies and label, not the public. Until such evidence is on the Board's web site with FDA CDER NDA, fluoridation must stop.

Many claim for every dollar spent on fluoridation saves $38, but those numbers are not real world which are closer to $8 PPPY. Ko L, Thiessen KM. A critique of recent economic evaluations of community water fluoridation. Int J Occup Environ Health. 2015;21(2):91-120. [PubMed]

I treat dental fluorosis both cosmetic and functional damage, and yes, I profit from fluoridation. The estimated damage to teeth is $242 per person per year. Most does not get treated, but it is considered damage by the patient.

If just 3 IQ are lost and just the lower wages estimated at $500 per year per IQ loss, the loss of earnings is $438 per person per year.

And we must add the other costs to society with lower IQ, and the NRC report in 2006 listed potential harm such as cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity. Fluoride is a highly reactive element and can affect all cells.

The Board must consider and evaluate all streams of evidence and I'm convinced you will stop harming the public.

A clinician’s error may harm a patient and result in compensation for the patient. Public health policy error may harm millions.

Authorities rely on endorsements rather than empirical evidence, resulting in harm to the public.

A careful review of the empirical evidence is critical.

Sincerely,

Bill Osmunson DDS MPH
Washington Action for Safe Water
King County Citizens Against Fluoridation

From: Bill Osmunson
Sent: 4/12/2023 2:45:48 PM
To: DOH WSBOH
Cc:
Subject: Additional Public Comment April 2023

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attachments\0FA8A6A4319744F2_WSBOH April 2023.pdf

External Email

Dear WSBH,

I'm not sure why my request for public comment did not get to you for today's Board Meeting. So I want to thank you for taking my hand up and letting me speak.

I have attached two items. A pdf which is additional comment for the Board today and the original word document which I sent about a week ago and you should have received to distribute to the Board.

Thank you for this extra effort on your part.

Sincerely,

Bill Osmunson DDS MPH

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov.

Additional Public comment for April Board Meeting, 2023

The Court granted our request and required HHS to release the May 2023, National Toxicology Draft Report, *''Association between fluoride exposure and children's intelligence: A systematic review and meta-analysis."* https://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2023/may/wgrptbsc20230400.pdf

Why did we have to go to court to get HHS to release the report? FOI documents help explain the political cause.

The report's meta-analysis includes:

> ***"RESULTS*** *The meta-analysis of 55 studies (N = 18,845 children) with group-level exposures found that, when compared to children exposed to lower fluoride levels, children exposed to higher fluoride levels had lower mean IQ scores (pooled SMD: −0.46; 95% CI: −0.55, −0.37; p-value < 0.001). There was a dose-response relationship between group-level fluoride exposure measures and mean children's IQ. The meta-analysis of studies that reported individual-level measures of fluoride and children's IQ scores found a decrease of 1.81 points (95% CI: −2.80, −0.81; p-value < 0.001) per 1-mg/L increase in urinary output. Overall, the direction of the association was robust to stratification by study quality (high vs. low risk of bias), sex, age group, outcome assessment, study location, exposure timing, and exposure metric.*
>
> ***CONCLUSIONS AND RELEVANCE*** *This meta-analysis confirms results of previous meta-analyses and extends them by including newer, more precise studies with individual-level exposure measures. The consistency of the data supports an inverse association between fluoride exposure and children's IQ."*

The more fluoride a child is exposed to, the more brain damage they get.

Two previous met-analysis of studies on neurodevelopmental toxicity reported greater IQ loss. The previous two mostly used fluoride exposure rather than NTP urinary fluoride concentration which does not fully represent fluoride intake as some fluoride remains in the body.

The Board's silence and refusal to protect the public from brain damage tells me the Board does not agree with the science, or they expect new studies to refute the three meta-analyses reports confirming loss of IQ, or?

And the Board disagrees with the Washington Board of Pharmacy determining fluoride is not a poison when regulated as a legend drug.

And the Board disagrees with the US Food and Drug Administration determining fluoride is a drug and the water with fluoride added not to be given to children under two years of age.

And the Board disagrees with the FDA warning on fluoride toothpaste labels not to swallow a pea size of toothpaste containing 0.25 mg of fluoride about the same dosage as the Board requires in each glass of fluoridated water. The Board says do not swallow and the Board gives no option but to swallow. (Topical fluoride is FDA approved)

And the Board disagrees that unapproved drugs are illegal drugs and have not been determined effective or safe at any dosage or to be dispense to everyone without consent as long as it is pumped into the water and voted on by the public.

And the Board disagrees the EPA scientists reporting fluoridation is an unreasonable risk and without current benefit and the EPA 2010 Dose Response Analysis and Relative Source Contribution avoiding pre-natal and infant inclusion of risks and raising their RfD and a third of children ingesting too much fluoride.

And the Board disagrees the National Academies of Science National Research Council's 2006 report that fluoride causes concern for damage to cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight.

And the Board disagrees with the concentration of fluoride in mother's milk, 175 times lower concentration than formula made with Seattle water.

And the Board disagrees with freedom of choice for people to choose their own medications.

And the Board disagrees with the National Health Evaluation and Nutrition Survey reporting about two out of three children have dental fluorosis, a biomarker of too much fluoride.

And the Board considers concentration is the same as dosage. Sorry, not everyone drinks the same amount of water or swallows the same amount of fluoride from toothpaste, medications, foods, etc.

And the Board has no regard for those in poor health, intraspecific variation in humans, who do not excrete the fluoride well or differences in racial or socioeconomic disparities.

And the Board does not think lower birth weight from mom's fluoride ingestion is a concern.

And the Board disagrees that fluoride cannot migrate/transfer/move from the tooth pulp through the tooth to the surface where the caries are developing. Ingested fluoride can't get to the dental caries to be a benefit. And fluoride in saliva is too dilute to have benefit.

Apparently, the Board refuses to review research and just trusts dentists who profit from fluoridation and the Board trusts public health authorities, most who do not read and evaluate the research.

Please, the health of the public is more important than protecting historical policy. The sooner the Board can provide caution for pregnant mothers and infants, the sooner my professions can start to gain scientific credibility.

The Board needs to trust the science rather than tradition.

Remember, evidence of efficacy must be proven with randomized controlled trials (FDA requires) and only one exists for fluoride ingestion and was done prenatal and reported no statistical benefit.

However, determination of safety cannot intentionally cause harm, so lower quality of evidence is all that we have. Thus, a margin of error and margin of uncertainties must be applied. A factor of 10 would help protect the fetus and infants.

So much more, but that is enough for now.

Two requests:

1. A warning for pregnant mothers not to drink fluoridated water or swallow fluoride toothpaste, and care-givers to not make infant formula with fluoridated water.

2. The Board "Shall provide a forum . . . hold hearings. . . may create ad hoc committees" for public input, committee to carefully consider all streams of evidence regarding fluoride ingestion.

Seriously, the Board likes to sit quietly and not talk for fear of who knows what. Providing a forum for various sides to present the science is good science and no skin off the Board's silence. Maybe the Department could provide their best evidence or get fluoride promoters. A forum enhances the public's knowledge.

Sincerely,

Bill Osmunson DDS MPH

Public Comments to the Washington State Board of Health June 9, 2023
From: Robert Runnells, Vice-president of Informed Choice WA (ICWA)

Members of the WA State Board of Health,

These comments provide key reasons why increasingly large swaths of people do not trust public health when it comes to infectious disease pronouncements and policies.

The coronavirus pandemic is the most recent example of the kinds of messaging that many people distrusted from other outbreak reactions by public health agencies. Here in Washington, many families saw how the Department of Health and certain legislators spread their own kind of misinformation while attempting to institutionalize civil rights restrictions in 2015 and 2019 campaigns. There were numerous claims made during the COVID-19 pandemic that are now debunked or clearly call into question the effectiveness of measures declared as "the best way to stop the spread" with little-to-no consideration for the wider societal effects. Our experience should make it clear that Public Health should cease and desist using a one size fits all, single pharmaceutical approach strategies, or you will continue to lose the public's trust.

To list the misinformation spread by Departmennts of Health, I borrow sections from a nationally-published article by Dr. Marty Makary, from the Johns Hopkins University School of Medicine.

Claims promoted by state and county Public Health that should be considered Misinformation

1. **Natural immunity offers little protection compared to vaccinated immunity**
2. **Masks prevent COVID transmission**
3. **School closures reduce COVID transmission**
4. **Myocarditis from the vaccine is less common than from the infection**
5. **Young people benefit from a vaccine booster**
6. **Vaccine mandates increased vaccination rates**
7. **COVID originating from the Wuhan lab is a conspiracy theory**
8. **It was important to get the second vaccine dose three or four weeks after the first dose**
9. **Data on the bivalent vaccine is 'crystal clear'**
10. **One in five people get long COVID**
11. **Get the shot to avoid overwhelming hospitals**
    - Never happened
    - Hospitals first de-staffed while stopping elective procedures
    - Then Hospitals fired huge numbers of workers (1,000+ in Legacy)
    - Therefore, we have little sympathy for your claims of the unvaccinated filling up your hospitals. Further, other countries and jurisdictions report the opposite, that vaccinated are filling up hospitals – with *idiopathic* cancers and cardiovascular issues. More on that later when we can actually investigate WA mortality statistics for 2021-2022. Where's that data? Being scrubbed?

Misinformation #1: Natural immunity offers little protection compared to vaccinated immunity

A recent Lancet study looked at 65 major studies in 19 countries on natural immunity. The researchers concluded that natural immunity was at least as effective as the primary COVID vaccine series.

This board was notified on November 5th 2021 of the 106 studies that supported natural immunity as a way through the pandemic. Natural immunity is now proven stronger by 160 studies collected by the Brownstone Institute. Despite the findings of these studies, natural immunity protection still violates Google and Facebook's "misinformation" policy.

Since the Athenian plague of 430 BC, it has been observed that those who recovered after infection were protected against severe disease if reinfected.

That was also the observation of nearly every practicing physician during the first 18 months of the COVID pandemic.

Most Americans who were fired for not having the COVID vaccine already had antibodies that effectively neutralized the virus, but they were antibodies that the government did not recognize.

Misinformation #2: Masks prevent COVID transmission

Cochran Reviews are considered the most authoritative and independent assessment of the evidence in medicine.

And one published last month by a highly respected Oxford research team found that masks had no significant impact on COVID transmission.

When asked about this definitive review, CDC Director Dr. Rochelle Walensky downplayed it, arguing that it was flawed because it focused on randomized controlled studies.

But that was the greatest strength of the review! Randomized studies are considered the gold standard of medical evidence.

If all the energy used by public health officials to mask toddlers could have been channeled to reduce child obesity by encouraging outdoor activities, we would be better off.

Misinformation #3: School closures reduce COVID transmission

The CDC ignored the European experience of keeping schools open, most without mask mandates.

Transmission rates were no different, evidenced by studies conducted in Spain and Sweden.

Misinformation #4: Myocarditis from the vaccine is less common than from the infection

Public health officials downplayed concerns about vaccine-induced myocarditis — or inflammation of the heart muscle.

They cited poorly designed studies that under-captured complication rates.

A flurry of well-designed studies said the opposite.

We now know that myocarditis is six to 28 times more common after the COVID vaccine than after the infection among 16- to 24-year-old males.

Tens of thousands of children likely got myocarditis, mostly subclinical, from a COVID vaccine they did not need because they were entirely healthy or because they already had COVID.

Misinformation #5: Young people benefit from a vaccine booster

Boosters reduced hospitalizations in older, high-risk Americans.

But the evidence was never there that they lower COVID mortality in young, healthy people.

That's probably why the CDC chose not to publish its data on hospitalization rates among boosted Americans under 50, when it published the same rates for those over 50.

Ultimately, White House pressure to recommend boosters for all was so intense that the FDA's two top vaccine experts left the agency in protest, writing scathing articles on how the data did not support boosters for young people.

Misinformation #6: Vaccine mandates increased vaccination rates

President Biden and other officials demanded that unvaccinated workers, regardless of their risk or natural immunity, be fired.

They demanded that soldiers be dishonorably discharged and nurses be laid off in the middle of a staffing crisis.

The mandate was based on the theory that vaccination reduced transmission rates — a notion later proven to be false.

But after the broad recognition that vaccination does not reduce transmission, the mandates persisted, and still do to this day.

A recent study from George Mason University details how vaccine mandates in nine major US cities had no impact on vaccination rates.

They also had no impact on COVID transmission rates.

Misinformation #7: COVID originating from the Wuhan lab is a conspiracy theory

Google admitted to suppressing searches of "lab leak" during the pandemic.

Dr. Francis Collins, head of the National Institutes of Health, claimed (and still does) he didn't believe the virus came from a lab.

Ultimately, overwhelming circumstantial evidence points to a lab leak origin — the same origin suggested to Dr. Anthony Fauci by two very prominent virologists in a January 2020 meeting he assembled at the beginning of the pandemic.

According to documents obtained by Bret Baier of Fox News, they told Fauci and Collins that the virus may have been manipulated and originated in the lab, but then suddenly changed their tune in public comments days after meeting with the NIH officials.

The virologists were later awarded nearly $9 million from Fauci's agency.

Misinformation #8: It was important to get the second vaccine dose three or four weeks after the first dose

Data were clear in the spring of 2021, just months after the vaccine rollout, that spacing the vaccine out by three months reduces complication rates and increases immunity.

Spacing out vaccines would have also saved more lives when Americans were rationing a limited vaccine supply at the height of the epidemic.

Misinformation #9: Data on the bivalent vaccine is 'crystal clear'

Dr. Ashish Jha famously said this, despite the bivalent vaccine being approved using data from eight mice.

To date, there has never been a randomized controlled trial of the bivalent vaccine.

In my opinion, the data are crystal clear that young people should not get the bivalent vaccine.

It would have also spared many children myocarditis.

Misinformation #10: One in five people get long COVID

The Centers for Disease Control and Prevention claims that 20% of COVID infections can result in long COVID.

But a UK study found that only 3% of COVID patients had residual symptoms lasting 12 weeks. What explains the disparity?

It's often normal to experience mild fatigue or weakness for weeks after being sick and inactive and not eating well.

Calling these cases long COVID is the medicalization of ordinary life.

What's most amazing about all the misinformation conveyed by CDC and public health officials is that there have been no apologies for holding on to their recommendations for so long after the data became apparent that they were dead wrong.

Public health officials said "you must" when the correct answer should have been "we're not sure."

Early on, in the absence of good data, public health officials chose a path of stern paternalism.

Today, they are in denial of a mountain of strong studies showing that they were wrong.

At minimum, the CDC should come clean and the FDA should add a warning label to COVID vaccines, clearly stating what is now known.

The above article by Dr. Makary is now old, and additional science is being published to further refute claims made, and continue to be made, by public health officials.

To summarize and conclude: Just tell the truth, admit when you don't know, and don't let political situations drive a need for policy where none is needed.

WSBH April 12, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov.

Public comment for April 12, 2023

The Board has been presented evidence over the last decade and a half that fluoride ingestion is harming the public, provides little or no benefit, many are over dosed, many are being harmed and the WSBOH has jurisdiction and responsibility for the harm.

RCW 43.20.050 *"(1) The state board of health **shall** provide a forum for the development of public health policy in Washington state. . . . It is further empowered to hold hearings and explore ways to improve the health status of the citizenry. In fulfilling its responsibilities under this subsection, the state board may create ad hoc committees or other such committees of limited duration as necessary."*

A 2 or 3 minute public comment is not a forum, hearing, exploring ways to improve the health status of the citizenry or committee. In light of current research on the toxicity of fluoride, our request is for a forum, hearing and committee on fluoridation's safety, efficacy, dosage of fluoride exposure as mandated by RCW 43.20.050.

Some supporting evidence. The Department of Health presents that the Board of Health has regulatorType equation here.y authority over fluoridation.

FDA: The Board has been presented evidence you are in violation of the Federal Food, Drug and Cosmetic Act, Title 21, that your product is misbranded within the meaning of section 403(r)(1)(B) of the Act [21 U.S.C. 343(r)(1)(B) because it is known to the public to bear an unauthorized health claim. The FDA defines health claim not only as the authority making a health claim but a substance well known to the public to have a health effect. The FDA has toothpaste labeled as a drug with the warning not to swallow.

Washington State Board of Pharmacy: The WSBP determined fluoride when used with intent to prevent disease is a prescription drug and is not a poison.

The Board is in violation of RCW 69.50.101 (nn) *"Prescription" means an order for controlled substances issued by a practitioner duly authorized by law or rule in the state of Washington to prescribe controlled substances within the scope of his or her professional practice for a legitimate medical purpose.*

The Board of Pharmacy determined fluoride is not a poison because it is to be regulated as a drug. If the Board does not regulate as a drug, then it is a poison. RCW 69.38.010 "poison" means: *"(4) Any other substance designated by the pharmacy quality assurance commission which, when introduced into the human body in quantities of sixty grains or less, causes violent sickness or death."* Sixty grains is 3,887.93 milligrams. Estimates of a minimum lethal dose of fluoride (PTD) is 5 mg/kg body weight. (Whitford 1987)

RCW 57.08.012 Permits fluoridation based on the majority vote of the commissioners or voters and at first glance would appear to exempt the Board from responsibility. No other prescription drug is prescribed by vote of the majority of commissioners or voters. Voters do not evaluate the scientific empirical evidence of safety or efficacy as science progresses. The Board of Health has jurisdiction and responsibility to eval

RCW 69.40.030

Placing poison or other harmful object or substance in food, drinks, medicine, or water—Penalty.

(1) Every person who willfully mingles poison or places any harmful object or substance, including but not limited to pins, tacks, needles, nails, razor blades, wire, or glass in any food, drink, medicine, or other edible substance intended or prepared for the use of a human being or who shall knowingly furnish, with intent to harm another person, any food, drink, medicine, or other edible substance containing such poison or harmful object or substance to another human being, and every person who willfully poisons any spring, well, or reservoir of water, is guilty of a class B felony and shall be punished by imprisonment in a state correctional facility for not less than five years or by a fine of not less than one thousand dollars.

Dose, Dosage, Concentration: The Board relies on endorsements which rely on the concentration of fluoride in water as safe for everyone. However, not everyone drinks the same amount of water and the dose and dosage are highly variable. In addition, subsets of the population are more sensitive to chemicals, such as the fetus and infants.

TOO MUCH FLUORIDE: Pediatric dosage

There are "scientific experts" who will testify to court in support of most anything as safe. Judgment is required and if money and reputation are involved, judgment should be suspect.

For example, the American Dental Association (ADA) still recommends mercury amalgam fillings (about 50% mercury) as safe and effective filling material. On the other hand, Dentists

can't dispose of the product in the sewer or trash because it is too toxic. Suppliers cannot ship through the US Postal Service because it is too hazardous for postal workers and the product is no longer manufactured by major dental supply companies in the USA. Nothing about the human physiology, mouth of children or adults makes the mercury amalgam filling material safe. The ADA when pulled into court regarding the mercury fillings testified in court, the ADA has "no duty to protect the public." The ADA protects dentists and financial sponsors, not the public. The WSBH is charged with protecting the public.

The FDA cautions risks include the release of low levels of mercury vapor and very limited to no clinical data is available regarding long term health outcomes for pregnant women and their developing fetuses, and children.

The ingestion of fluoride has even more research evidence of harm. The WSBOH appears to rely on vested interests of industry for endorsements of support for the mass medication of fluoride rather than the clear empirical evidence of harm. Many millions of dollars and reputations are at stake and protected by those promoting fluoridation.

The fetus and infant are ingesting too much fluoride with fluoridation.

A. The fetus is very small and the placenta does not appear to protect the fetus from the mother's fluoride exposure. Mothers drinking fluoridated water over-dose their fetus with fluoride, harming their brains.

B. Mother's milk is the ideal nutrient for infants and appears to protect the baby from excess fluoride. Mother's milk (in one study) had about 0.004 mg/L fluoride in samples which detected fluoride and Sener (2007)[1] reported 0.006 ppm (mg/L). I could find no quality studies of efficacy for the Board's approved 0.7 mg/L fluoride in water, many times higher than the concentration of fluoride in mother's milk. However, harm from the fluoride has been published. The Board should warn care givers to avoid using fluoridated water to make infant formula.

C. The EPA does not include infants under six months in their Dose Response Analysis or Relative Source Contribution. The EPA graph below Figure 8-1 (13 years ago presented to the WSBH) starts at 0.5 years of age. The National Research Council said the EPA was not protective and instead of reducing fluoride exposure, decreased fluoride protection, increasing their RfD.

Their graph below was based on a proposed increase of 25% in their so called "safe" dosage. And 10% of the public drinking the most water were also ignored, yet 1/3 of children were expected to still INGEST TOO MUCH FLUORIDE. (EPA ERSCA 2010) The percentage above the black line ingest too much fluoride.

Infants under 0.5 years are not included.

[1] Sener Y, Tosun G, Kahvecioglu F, Gökalp A, Koç H. Fluoride levels of human plasma and breast milk. Eur J Dent. 2007 Jan;1(1):21-4. PMID: 19212493; PMCID: PMC2612944.

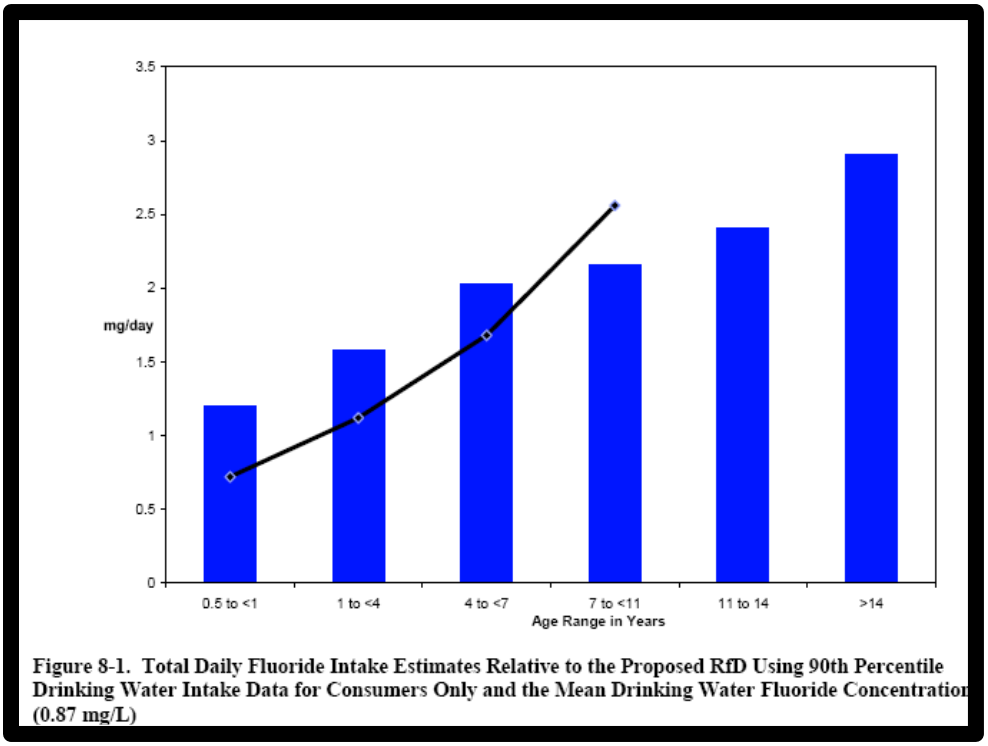
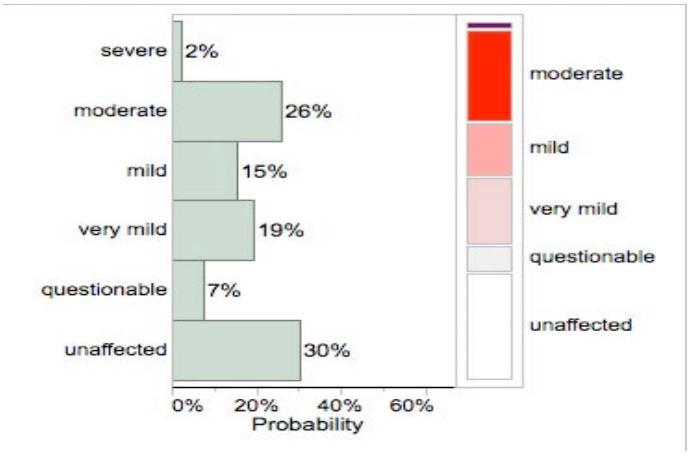


Figure 8-1. Total Daily Fluoride Intake Estimates Relative to the Proposed RfD Using 90th Percentile Drinking Water Intake Data for Consumers Only and the Mean Drinking Water Fluoride Concentration (0.87 mg/L)

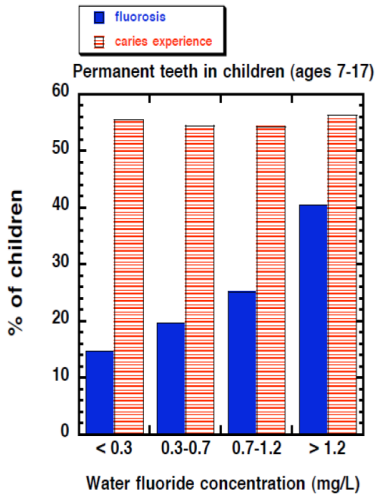
C. The infant on formula reconstituted with fluoridated water will ingest too much fluoride. Dental fluorosis, a biomarker of excess fluoride intake, confirms infants are ingesting too much fluoride. Lower IQ confirms infants are ingesting too much fluoride. When fluoridation started, the public was assured dental fluorosis would not exceed 15% with fluoridation. The Board has been presented with scientific evidence dental fluorosis is now about 70% of the public.[2]

[2] Neurath C, Limeback H, Osmunson B, Connett M, Kanter V, Wells CR. Dental Fluorosis Trends in US Oral Health Surveys: 1986 to 2012. JDR Clin Trans Res. 2019 Oct;4(4):298-308. doi: 10.1177/2380084419830957. Epub 2019 Mar 6. PMID: 30931722. [PubMed]



See also Iida, below, data graphed from their published research. Note, redlines of caries have little change with increased fluoride concentration in water, but blue lines of dental fluorosis significantly increases with increased fluoride exposure.

Iida, H., and Kumar, J.V. 2009. The association between enamel fluorosis and dental caries in U.S. schoolchildren. JADA 140:855-862.



D. Why is too much fluoride a concern? After all, I make money treating dental fluorosis and my pocket book is pleased with the profit I make from the harm caused by too much fluoride. My heart hurts for the harm being caused by those in authority of which I am one.

In 2006 the National Research Council reported[3], potential harms are reported by the National Research Council in 2006 such as cell function, teeth, skeleton, chondrocyte

[3] Fluoride in Drinking Water A scientific Review of EPA's Standards, Committee on Fluoride in Drinking Water, Board on Environmental Studies and Toxicology, Division on Earth and Life Studies. National Research Council of the

metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight.

Farmus (2021)[4] looked at critical windows of fluoride neurotoxicity, reporting:

> *"The association between fluoride and performance IQ (performance IQ) significantly differed across exposure windows.*
>
> *"The strongest association between fluoride and PIQ was during the prenatal window.*
>
> *"Within sex, the association between fluoride and PIQ significantly differed across exposure windows. Among boys, the prenatal window appeared critical, while for girls, infancy was critical.*
>
> *"Full-scale IQ estimates were weaker than PIQ estimates for every window.*
>
> *"Fluoride was not significantly associated with Verbal IQ across any exposure window."*

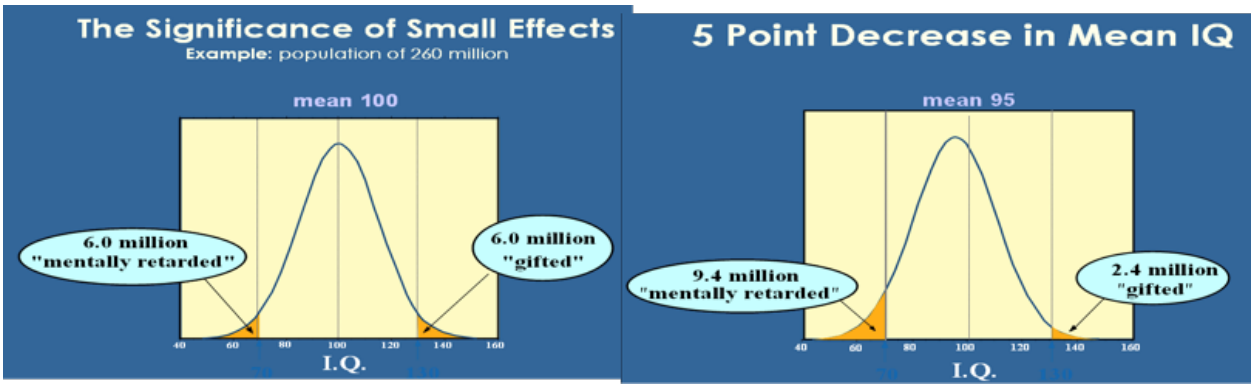
Till (2020)[5] ***"An increase of 0.5 mg/L in water fluoride concentration (approximately equaling the difference between fluoridated and non-fluoridated regions) corresponded to a 9.3- and 6.2-point decrement in Performance IQ among formula-fed (95% CI: −13.77, −4.76) and breast-fed children (95% CI: −10.45, −1.94)."***

E. Although fluoride harms most cells, neurotoxicity is of serious concern. Why? The two graphs below illustrate the effect of 5 IQ point decrease. About a 50% increase in "mentally retarded" and more than half of "gifted" are lost. Remember, those of us in the middle are also harmed, just harder to measure what could and should have been. Brains are important.

National Academies, The National Academies Press, Washington DC. www.nap.edu https://nap.nationalacademies.org/read/11571/chapter/1

[4] Farmus L, Till C, Green R, Hornung R, Martinez Mier EA, Ayotte P, Muckle G, Lanphear BP, Flora DB. Critical windows of fluoride neurotoxicity in Canadian children. Environ Res. 2021 Sep;200:111315. doi: 10.1016/j.envres.2021.111315. Epub 2021 May 27. PMID: 34051202; PMCID: PMC9884092.

[5] Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880.



Note, lower IQ numbers go up about 50%. And less than half as many "gifted." As a former school board trustee, educators were overwhelmed with the numbers of special education children, most lower IQ. Measuring, defining and comparing the number of gifted seems to be less precise. I can find no US Federal agency or organization which collects gifted student statistics or has a consistent definition.

Weigh the risks and benefits of prenatal and infant fluoride exposure.

What benefit will the fetus lose with less fluoride? None. No teeth

What benefit will the infant lose with less fluoride? None, no erupted teeth or significant developing adult teeth.

How can anyone not have sleepless nights knowing authorities are causing this damage and the solution is to simply turn off the fluoride pumps. . . or at least warn those most adversely affected.

My request to the WSBH is to caution/warn mothers and care givers to avoid fluoride when pregnant and infants not to get formula made with fluoridated water. A simple warning would be ethical. A warning not cost the WSBH any money and could save millions of dollars.

The only road-block is for the Board to follow the science rather than the money, vested interests, tradition and endorsements.

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov.

Additional Public comment for April Board Meeting, 2023

The Court granted our request and required HHS to release the May 2023, National Toxicology Draft Report, *''Association between fluoride exposure and children's intelligence: A systematic review and meta-analysis."* https://ntp.niehs.nih.gov/ntp/about_ntp/bsc/2023/may/wgrptbsc20230400.pdf

Why did we have to go to court to get HHS to release the report? FOI documents help explain the political cause.

The report's meta-analysis includes:

> ***"RESULTS*** *The meta-analysis of 55 studies (N = 18,845 children) with group-level exposures found that, when compared to children exposed to lower fluoride levels, children exposed to higher fluoride levels had lower mean IQ scores (pooled SMD: −0.46; 95% CI: −0.55, −0.37; p-value < 0.001). There was a dose-response relationship between group-level fluoride exposure measures and mean children's IQ. The meta-analysis of studies that reported individual-level measures of fluoride and children's IQ scores found a decrease of 1.81 points (95% CI: −2.80, −0.81; p-value < 0.001) per 1-mg/L increase in urinary output. Overall, the direction of the association was robust to stratification by study quality (high vs. low risk of bias), sex, age group, outcome assessment, study location, exposure timing, and exposure metric.*
>
> ***CONCLUSIONS AND RELEVANCE*** *This meta-analysis confirms results of previous meta-analyses and extends them by including newer, more precise studies with individual-level exposure measures. The consistency of the data supports an inverse association between fluoride exposure and children's IQ."*

The more fluoride a child is exposed to, the more brain damage they get.

Two previous met-analysis of studies on neurodevelopmental toxicity reported greater IQ loss. The previous two mostly used fluoride exposure rather than NTP urinary fluoride concentration which does not fully represent fluoride intake as some fluoride remains in the body.

The Board's silence and refusal to protect the public from brain damage tells me the Board does not agree with the science, or they expect new studies to refute the three meta-analyses reports confirming loss of IQ, or?

And the Board disagrees with the Washington Board of Pharmacy determining fluoride is not a poison when regulated as a legend drug.

And the Board disagrees with the US Food and Drug Administration determining fluoride is a drug and the water with fluoride added not to be given to children under two years of age.

And the Board disagrees with the FDA warning on fluoride toothpaste labels not to swallow a pea size of toothpaste containing 0.25 mg of fluoride about the same dosage as the Board requires in each glass of fluoridated water. The Board says do not swallow and the Board gives no option but to swallow. (Topical fluoride is FDA approved)

And the Board disagrees that unapproved drugs are illegal drugs and have not been determined effective or safe at any dosage or to be dispense to everyone without consent as long as it is pumped into the water and voted on by the public.

And the Board disagrees the EPA scientists reporting fluoridation is an unreasonable risk and without current benefit and the EPA 2010 Dose Response Analysis and Relative Source Contribution avoiding pre-natal and infant inclusion of risks and raising their RfD and a third of children ingesting too much fluoride.

And the Board disagrees the National Academies of Science National Research Council's 2006 report that fluoride causes concern for damage to cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight.

And the Board disagrees with the concentration of fluoride in mother's milk, 175 times lower concentration than formula made with Seattle water.

And the Board disagrees with freedom of choice for people to choose their own medications.

And the Board disagrees with the National Health Evaluation and Nutrition Survey reporting about two out of three children have dental fluorosis, a biomarker of too much fluoride.

And the Board considers concentration is the same as dosage. Sorry, not everyone drinks the same amount of water or swallows the same amount of fluoride from toothpaste, medications, foods, etc.

And the Board has no regard for those in poor health, intraspecific variation in humans, who do not excrete the fluoride well or differences in racial or socioeconomic disparities.

And the Board does not think lower birth weight from mom's fluoride ingestion is a concern.

And the Board disagrees that fluoride cannot migrate/transfer/move from the tooth pulp through the tooth to the surface where the caries are developing. Ingested fluoride can't get to the dental caries to be a benefit. And fluoride in saliva is too dilute to have benefit.

Apparently, the Board refuses to review research and just trusts dentists who profit from fluoridation and the Board trusts public health authorities, most who do not read and evaluate the research.

Please, the health of the public is more important than protecting historical policy. The sooner the Board can provide caution for pregnant mothers and infants, the sooner my professions can start to gain scientific credibility.

The Board needs to trust the science rather than tradition.

Remember, evidence of efficacy must be proven with randomized controlled trials (FDA requires) and only one exists for fluoride ingestion and was done prenatal and reported no statistical benefit.

However, determination of safety cannot intentionally cause harm, so lower quality of evidence is all that we have. Thus, a margin of error and margin of uncertainties must be applied. A factor of 10 would help protect the fetus and infants.

So much more, but that is enough for now.

Two requests:

1. A warning for pregnant mothers not to drink fluoridated water or swallow fluoride toothpaste, and care-givers to not make infant formula with fluoridated water.

2. The Board "Shall provide a forum . . . hold hearings. . . may create ad hoc committees" for public input, committee to carefully consider all streams of evidence regarding fluoride ingestion.

Seriously, the Board likes to sit quietly and not talk for fear of who knows what. Providing a forum for various sides to present the science is good science and no skin off the Board's silence. Maybe the Department could provide their best evidence or get fluoride promoters. A forum enhances the public's knowledge.

Sincerely,

Bill Osmunson DDS MPH

WASHINGTON STATE BOARD OF HEALTH

Andrew Kamali, MPH

Health Policy Advisor

Andrew Kamali joined the Washington State Board of Health on May 1, 2023. He supports policy work and rulemaking related to environmental public health and disease prevention.

Prior to joining the Board, Andrew worked at The Water Collaborative of Greater New Orleans as a policy fellow, where he worked to develop equitable policy recommendations, study PFAS contamination, and support community workshops on storm water fee development in the city of New Orleans. Prior to that, Andrew worked in a myriad of research positions including studying the effects of indoor allergens on childhood respiratory diseases and novel drug treatment development for traumatic brain injury.

Andrew received his Bachelor of Arts degree in International Development studies from the University of California, Los Angeles, and his Master of Public Health in Health Policy from Tulane University.

WASHINGTON STATE BOARD OF HEALTH

Michelle Lee Larson

Communications Manager

Michelle Larson joined the Washington State Board of Health as their communications manager in May of 2023. Michelle brings a strong background of creative marketing, media & public relations, web design & development, and strategic communications to her role on the Board staff. Most recently, Michelle was the brand marketing manager for Olympia Orthopedic Associates and prior to the pandemic, she had worked with the Timberland Regional Library System as their public relations and creative services coordinator. Working in the private sector of healthcare spurred her passion to return to public service and she looks forward to promoting the important work of the Board.

While Michelle earned both her bachelor of arts and bachelor of fine & performing arts degrees from Western Washington University, she continued her education with numerous certification programs and considers herself a lifelong learner.

WASHINGTON STATE BOARD OF HEALTH

ENVIRONMENTAL HEALTH COMMITTEE SPECIAL MEETING SUMMARY NOTES

What: Environmental Health Committee

When: May 19, 2023

Participating via Zoom: Board of Health (Board) members Keith Grellner, Chair, Patty Hayes, Kate Dean, and Dimyana Abdelmalek; Board staff Stuart Glasoe, Michelle Davis, Melanie Hisaw, Andrew Kamali, Michelle Larson, and Molly Dinardo; Department of Health (Department) staff Mike Means, David Delong, Juan Gamez Briceño, Peter Beaton, Holly Myers, Jocelyn Jones, Joe Laxson, Jeremy Simmons, Todd Phillips, Leah Wood, Tami Thompson, Anna Hidle, Brad Burnham, Nina Helping, Trace Warner, Theresa Sanders and Erin Brewster. Approximately 15 members of the public attended and TVW livestreamed the meeting.

Summary Notes:

General Updates

- Joe Laxson and Stuart Glasoe summarized highlights of environmental health bills in the 2023 legislative session:
  - E2SHB 1181 sets a new climate change planning framework across multiple state laws, including provisions requiring Group A public water systems serving 1,000 or more connections to include a climate resilience element in water system plans. The bill will require revisions to the Group A drinking water rules, chapter 246-290 WAC.
  - ESHB 1251 requires public water systems that are considering starting or stopping drinking water fluoridation to give 90-day notice to customers prior to making a decision. The Department will implement the requirement and educate water utilities directly from the statute. The Department and Board will monitor the issue to determine if future rulemaking is needed.
  - The Department received about $800,000 in each of the next two fiscal years to support access to safe drinking water for homes and businesses on individual wells or small water systems (Group B) that are contaminated.
  - Bills that didn't pass and will likely receive attention in the interim include (1) HB 1010 which would authorize Board rulemaking to develop a shellfish sanitation program for commercial crab and marine biotoxins, and (2) HB 1706 which continued to explore a regulatory model for retail sale of home foods, commonly called microenterprise home kitchens.

(Continued on the next page)

- Stuart Glasoe shared a public comment the Board received requesting a public forum, hearing, or committee to review the science behind fluoridation. Stuart shared a separate request from the same person for the Board to post notice on its website that mothers should not drink fluoridated water and caregivers should not use fluoridated water to make infant formula. Chair Grellner said the Board did a lot of work on fluoride in the past and pointed people to the Board's oral health recommendations. He noted that the topic of fluoridated water and infant formula isn't reflected in the oral health recommendations, said the Board doesn't need a public forum on the topic, and recommended putting the issue before Board's Health Promotion (HP) subcommittee. Patty Hayes agreed that the Board should not hold a forum or hearing and that the HP committee should consider the request. Michelle Davis mentioned that the Board does not typically issue health advisories and reminded Board members that the Department has programs that work directly with parents regarding infant and child health and development in addition to folks connecting directly with their care providers.

Preview June Board Meeting

- Mike Means shared a high-level overview of the June update on per- and polyfluoroalkyl substances (PFAS) which will include background on PFAS, evolving health science and guidance from EPA, and potential pathways for Board rulemaking if the U.S. Environmental Protection Agency (EPA) adopts national PFAS drinking water standards. (EPA's proposed PFAS drinking water standards were released for public comment in March and both the Board and Department planned to comment in support.) Mike previewed a slide of the Department's new PFAS testing results dashboard. Kate Dean inquired about water supply funding, referenced earlier in the EH legislative update, and how it might intersect this work. Mike shared that funding is limited and there are several gaps needing attention, including treatment for private wells and Group B water systems.
- Leah Wood previewed several slides from her June presentation on the HEAL Act, including requirements placed on the Department and other implementing agencies to identify significant actions and develop environmental justice (EJ) assessments. She added context regarding the Board's role as a listen-and-learn agency and likely development of EJ assessments for significant Board rulemaking.
- Andrew Kamali said the Board will again need to take action at the June meeting to extend the effective date of the suspended school rules (chapter 246-366A WAC) that are blocked by a legislative budget proviso. Andrew and Juan Gamez Briceño briefly recounted the proviso's history and indicated they will ask to extend the rule's effective date to August 2024. The rules need to be updated. Work on the K-12 health and safety guide will likely happen this summer.
- Andrew Kamali shared that staff have been working on the water recreation rules (chapters 246-260 and 262 WAC) since 2016 and touched on reasons for the

delay. Dave Delong briefly previewed the June update which will cover background, purpose and scope of the rulemaking including consideration of the Model Aquatic Health Code, work completed to date, and next steps with the rulemaking and the project's technical advisory committee.

Preview August Board Meeting

- Jeremy Simmons, briefly previewed the upcoming briefing on the on-site sewage system (OSS) rulemaking (chapter 246-272A WAC) that's been underway since 2018, noting that the briefing will cover essentially the same material as the Board update in January. Jeremy said the Department will also request a fifth OSS emergency rule in August and showed a timeline graphic of the series of adopted emergency rules. Stuart Glasoe noted that new members continue to join the Board and said staff would gladly provide one-on-one briefings to any Board member on this rulemaking and other agenda items.
- Jocelyn Jones previewed the August update on the shellfish sanitation rulemaking (chapter 246-282 WAC) providing background and an overview of the rulemaking. She explained that the Board recently filed an emergency rule for the *Vibrio parahaemolyticus* (Vp) Control plan (WAC 246-282-006) to address a gap related to early summer heat waves that is being addressed in the permanent rulemaking. Jocelyn and Stuart Glasoe reminded members that the Board delegated authority to the Department in early 2022 to file such an emergency rule if early summer heat wave conditions were to occur prior to completion of the permanent rulemaking. The permanent rulemaking is scheduled to be completed by 2024.
- Theresa Sanders highlighted several issues that will be addressed in the upcoming overview of lead prevention programs, which will likely include a local health co-presenter. Issues include testing and remediation of lead in school and childcare drinking water (lead and copper rules for public water systems will be a separate agenda item), improving testing rates and connecting families with elevated blood lead levels to appropriate services and resources, and the impact of foundational public health services (FPHS) funding on elevated blood lead level work by local health jurisdictions. Member Hayes asked how the Board can better support some of the challenging program work and expressed interest in discussions around blood lead level testing in an HP subcommittee meeting.

Other EH Items on Board Planning Calendar

- Mike Means said EPA adopted a revised lead and copper rule and has issued guidance to support water system compliance. The Department is exploring approaches on how best to manage and regulate this work. Originally planned for consideration by the Board at a later date, this topic is now tentatively scheduled for the Board's August meeting and will likely take the form of a department request for delegated rulemaking authority.

- Andrew Kamali said that he has connected with Patty Hayes and started initial discussion of ideas around an upcoming briefing on indoor air quality and measures to mitigate respiratory illness.
- Andrew Kamali said staff have had discussions on the shared Board/Department clandestine drug lab (CDL) rules (chapter 246-205 WAC) trying to identify the scope of questions and issues related to cleanup of drug contaminated properties in different settings and transient locations. Juan Gamez Briceño shared that staff are connecting with local health jurisdictions, Washington State Patrol, Department behavioral health programs, and other partners to discuss a path forward and possible rulemaking to modernize the drug decontamination rules and program.

Committee Membership and Chair Selection

- The EH Committee decided to delay the selection of a Committee Chair and indicated they would bring up the topic at the Board's June meeting.

Committee Member Comments, Questions, and Next Steps

- Michelle Davis let members know that at the upcoming June meeting she will suggest cancelling the tentatively scheduled July Board meeting.
- Molly Dinardo encouraged members to participate in the Board member comments section of full Board meetings to share recent experiences, meetings they've attended, or other topics they'd like to discuss.

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(360) 236-4110 • wsboh@sboh.wa.gov • sboh.wa.gov

HEALTH PROMOTION COMMITTEE

SPECIAL MEETING SUMMARY NOTES

What: Health Promotion Committee

When: May 25, 2023

Participating via Zoom: Board of Health (Board) Members Mindy Flores, Patty Hayes, Kelly Oshiro; Board staff Molly Dinardo, Andrew Kamali, Lindsay Herendeen, Melanie Hisaw, Michelle Davis, Michelle Larson, Anna Burns, Hannah Haag; Department of Health (Department) staff Alexandra Montano, Kelly Thomson, Deborah Gardner, Caroline Sedano, Sarah Keefe; invited guests Dr. Rachael Hogan (Swinomish Dental) and Christina Friedt Peters (Tribal Community Health Provider Program). 3 members of the public also attended the meeting.

Summary Notes:

Committee Chair Selection

- Ms. Dinardo stated that according to the State Board of Health's (Board) bylaws, each Board policy committee needs a Committee Chair. She then requested that the Board members determine a Chair of the committee.
- Board Vice Chair Oshiro recommended moving the selection of a Health Promotion Committee Chair to the end of the agenda, as not all subcommittee Members were in attendance.
- Ms. Dinardo mentioned that the topic could also move to the agenda for the June 14 Board Meeting, as the selection of an Environmental Health Committee Chair will also be discussed during the full meeting of the Board.

Rulemaking Updates

- Ms. Dinardo provided an update on the Board's Human Remains Through Natural Organic Reduction exception rulemaking under WAC 246-500-055. The rule became effective on May 13, 2023.
- She also shared that the Board's rulemaking will be delayed adding Ornithine Transcarbamylase Deficiency (OTCD) to Washingtons (WA) mandatory newborn screening panel. Ms. Dinardo explained that rulemaking is on hold till additional

funding is allocated by the legislature. The Department of Health (Department) plans to resubmit the funding request prior to the next legislative session for reconsideration.

- She also offered an update on the Vital Statistics Rulemaking Delegation. At its November 2022 meeting, the Board granted the Departments request for authority to amend WAC 246-491-029, related to confidential information on birth and fetal death certificates.

Informational Briefing – Dental Therapy in Washington

- Board Member Mindy Flores introduced the topic and discussed the Board's previous work on oral health in WA, including the Board's 7 strategic recommendations to improve oral health and tracking of past dental therapy related legislation. She then introduced her colleague, Dr. Rachel Hogan, the Dental Director of the Swinomish Dental Clinic, who provided an overview of the practice of dental therapy and the dental therapy training program at Skagit Valley and Swinomish Tribal Community. Following Dr. Hogan's presentation, Christina Friedt Peters, the Tribal Community Health Provider Program Director, gave a presentation discussing dental therapy programs across the region, and recent legislation that passed in WA expanding the practice of dental therapy to Federally Qualified Health Centers (FQHCs) and FQHC lookalikes.

Emerging Topics for Future Board Meetings

- Ms. Dinardo shared that in the Department of Health's (Department) presentation at the Board's April meeting, Department leadership referenced the 2023 Maternal Mortality Review Panel report (MMRP) and addendum from the American Indian Health Commission, which includes recommendations from Tribal and Urban Indian Leadership. Board Members expressed interest in a future briefing or panel discussion on this topic and wanted to identify ways the Board could engage in this work moving forward.
- Member Hayes identified herself as one of the members who expressed interest in the topic. She mentioned that she had the opportunity to connect with several Local Health Jurisdiction (LHJ) staff and learned that there is upcoming work and planning going on related to maternal and child health under Foundational Public Health Services (FPHS) and the Washington State Association of Local Public Health Officials (WSALPHO). The hope is to create a framework for maternal health in WA under FPHS that would expand beyond maternal mortality and include all four pillars of the governmental public health system in its development. Member Hayes stated interest in tracking this work. She also shared that the Board may want to hold off on a formal briefing until entities are further down the road in the planning process to have a richer conversation on this topic.
- Member Oshiro commented that the high prevalence of maternal mortality rates in urban areas from the Department's MMRP report caught her attention. She stated interest in hearing from a social worker from a neonatal intensive care unit (NICU) or delivery ward at a hospital in an urban area. She suggested the

Department of Children Youth and Families (DCYF) as a partner in this work, especially considering the statistics around substance use. Member Oshiro highlighted the need for systems work on this topic.

- Member Flores stated she would like to hear feedback on the need for this work from local health and the community on this topic. She stated that the Board doesn't want to be premature in suggesting topics unless this is a need from the community and what they want the Board to discuss. She suggested that the Board wait and see until it hears more from the FPHS and local health work.
- Member Hayes volunteered to keep appraised of this work and share additional information at the next subcommittee meeting. She also agreed that we need a systems approach, and every piece of the system has a role to play in this.
- Ms. Dinardo invited Deborah (Debs) Gardner and Caroline Sedano from the Department to share thoughts and insights about the work being done. Debs stated that learning more about the Board's interest in this work is helpful. Debs and Caroline asked what the Department could provide, primarily related to the context around the report, that would be useful to Board Members and what stage might be helpful to support work on this. Caroline discussed the ongoing quality improvement work that is taking place based on the report and other information they could share with the Board, including a condensed presentation as background to the Board that includes high-level findings of the MMRP report, data, recommendations, and action items; information from the AIHC addendum; and an overview of what is happening now across the state.
- Ms. Dinardo confirmed that Board Members might need a briefing and overview of this work before proceeding with a panel conversation with local health and community on this topic. She said she would follow up with Department staff accordingly.

Newborn Screening Technical Advisory Committee (TAC) Preparation Update and Review of Current Condition Review Process

- Ms. Dinardo shared an update on the planning for the upcoming Board Technical Advisory Committee (TAC) that will review two new conditions, GAMT and Arginase 1 deficiency, for possible inclusion in Washington's newborn screening (NBS) panel and asked if a Board Member was willing to serve as co-Chair. Vice Chair Oshiro volunteered to serve as co-chair for the TAC.
- Ms. Dinardo then brought up the topic of the Board's current condition review process. She shared a list of conditions the Department is tracking, some of which may be coming up for review and consideration soon. She stated that since November, the Board had received 3 petitions for rulemaking requesting to review conditions for consideration in the state's mandatory screening panel. She said that there is a lot that works well with the Board's current process. Still, she is bringing up the topic to highlight that the work around newborn screening will not slow down any time soon. The Board may want to consider whether adjustments can be made to the current process to create more certainty for petitioners and staff to keep up with the workload. She invited Dr. John Thompson to continue and help lead this discussion.

- Dr. John Thompson stated that the Department is currently tracking 10 candidate conditions, with 2 likely being reviewed within the next year. He said there is a lot of movement at the federal level, and advocates are figuring out how to make petitions at the federal level more successful. He stated that the Department is anticipating the federal government will likely consider 2 or 3 conditions in the next year. Dr. Thompson shared several options the Board could consider adjusting the current NBS candidate condition review process.
- Member Hayes stated that the Board is often in a reactive mode for this work, which can be frustrating, especially for families. She said that she wants to think through potential unintended consequences. Member Hayes supported a more proactive and straightforward approach than petitions. She supported the option that if a condition is on the federal Recommended Uniform Screening Panel (RUSP), it immediately moves to the WA panel. She stated that the Board would have to communicate to families that, even if it gets added to the panel, it doesn't mean it will be in effect until the Legislature authorizes funds.
- Member Oshiro asked when Washington last added a condition that was RUSP only. She also inquired if there are different levels of confidence on the RUSP. Dr. Thompson stated that there is a set of primary and secondary targets for the RUSP. He explained that the secondary targets "ride the coattails" of more serious primary targets. He provided an example that one of the conditions Washington State is currently considering is a secondary target (Arginase 1 Deficiency).
- Board Executive Director Michelle Davis asked that Board and Department staff connect with the WA Health Care Authority as they are an agency partner in newborn screening. She stated that, if the Board is contemplating a change in this process, we need to reach out to our partners due to the potential impact on their processes and budget.
- Member Oshiro expressed support for this since the work does not matter unless it is fully funded and insured. She stated that this should push up the Board's timeline for consideration to give partners time to consider impacts.
- Ms. Dinardo stated that she hears interest in exploring options from Board Members and staff will continue to review options and bring them up in future discussions.

Staff Updates and Announcements

- Ms. Dinardo stated that we will discuss Kratom at a future meeting when Member Kutz can be present.
- Ms. Dinardo then brought up a topic that was discussed at the recent Environmental Health (EH) Committee meeting. She said that at the Board's April meeting, the Board received general comment and a specific request related to fluoride that was put in front of the EH Committee on May 19. She gave a recap of the meeting, which included the discussion among Members that the Board had previously done a lot of work on the topic of water fluoridation, and that these bodies of work are still relevant. The EH Chair stated that they didn't recommend moving forward with convening a public forum on the topic of fluoride. However,

they stated that the Board may not have reviewed the topic of fluoridated water in infant formula. The EH Committee members recommended that this topic be brought to the HP Committee, as it's a topic related to maternal and child health. Ms. Dinardo restated that the conversation would be focused on the use of fluoridated in preparing infant formula, not community water fluoridation.

- Ms. Dinardo also stated that as mentioned during the EH Committee meeting, the Board does not issue health advisories, as the public commenter had made in his written request. She also reminded committee members that the Department and other agencies have programs that work directly with parents regarding infant and child health and development, and they share relevant health information and resources with families. In addition, in general, public health entities encourage and recommend that people connect directly with providers if they have any questions and are seeking specific guidance. She mentioned that to prepare a discussion on this topic and to follow up on the request from the EH committee, she reached out to subject matter experts at the Department that work in maternal and child health and oral health to learn more. These contacts mentioned that they reference and follow guidelines from the American Dental Association and the American Academy of Pediatrics, and read the guidelines to Board Members.
- Member Hayes stated she was at the EH Committee Meeting and supported bringing this question to the HP Committee. She expressed agreement with the Chair and the Board's authority around community water fluoridation and that this discussion has no relation to the discussion of water fluoridation in communities or to that authority. She stated formula and the health of infants and young children and falls under the authority of other entities. She reiterated that this is not a question about community water fluoridation, the Board does not want to give the impression that this question pertains to community water fluoridation. She also stated that there are conversations at the national level around this science and hopes that the Department and other decision-makers in this realm continue to watch the emerging evidence and federal discussion. She expressed support for the Department and considered language from the American Dental Association. She stated that this is not under the purview of the Board.
- Member Flores stated agreement with Member Hayes. She also stated that this topic includes so many components that it would be difficult to issue a broad statement. She stated that the Department looks at broader recommendations to fit all so that Washingtonians benefit from this type of information. She stated that this is beyond the capacity of the Board since we do not put out health advisories. She stated that this is already being addressed by the Department of Health, and we will continue to support the Department and its work with other state and national partners.
- Ms. Dinardo confirmed there is no further action or direction from Board Members for staff and that we will continue to monitor and provide support to the Department and others as needed relating to emerging science.

Committee Member Comments, Questions, and Next Steps

- Member Flores expressed appreciation for staff preparation. There were no other questions or comments from Board Members or staff.

To request this document in an alternate format or a different language, please contact the State Board of Health at 360-236-4110 or by email wsboh@sboh.wa.gov. TTY users can dial 711.

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RULE-MAKING ORDER
EMERGENCY RULE ONLY

CR-103E (December 2017)
(Implements RCW 34.05.350 and 34.05.360)

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER
STATE OF WASHINGTON
FILED

DATE: May 17, 2023
TIME: 7:29 AM

WSR 23-11-074

Agency: Department of Health

Effective date of rule:

Emergency Rules

☒ Immediately upon filing.

☐ Later (specify)

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?

☐ Yes ☒ No If Yes, explain:

Purpose: WAC 246-282-006, Washington state Vibrio parahaemolyticus control plan. Vibrio parahaemolyticus (Vp) is a naturally occurring bacteria found in marine waters. Molluscan bivalve shellfish acquire Vp through filter feeding. Humans who consume raw or undercooked shellfish containing Vp can develop an intestinal disease called vibriosis.

Chapter 246-282 WAC establishes the minimum performance standards for growing, harvesting, processing, packing, storage, transporting, and selling of shellfish for human consumption. These rules do not apply to persons who conduct activities limited to retail food service, personal use, and transporting as a common carrier of freight.

WAC 246-282-006 establishes the control plan for the months of May 1st through September 30th and are an extension of the NSSP Model Ordinance (U.S. Food and Drug Administration National Shellfish Sanitation Program, Guide for the Control of Molluscan Shellfish).

Due to current early season high temperatures, this emergency rule making is necessary to protect public health by modifying the existing strictest harvest control requirements which currently start July 1st by setting even more protective measures immediately.

The State Board of Health (board) filed a Preproposal Statement of Inquiry (CR-101) on February 23, 2022, WSR 22-06-034 regarding permanent amendments to the existing rules to address harvest control measures and may also include updating definitions, seed size and other technical and editorial changes as needed.

Until permanent rule making can be completed, the board has delegated emergency rule making authority to the Department of Health if heat-wave conditions occur prior to July 1.

Citation of rules affected by this order:

New: None
Repealed: None
Amended: WAC 246-282-006
Suspended: None

Statutory authority for adoption: RCW 69.30.030 and RCW 43.20.050

Other authority:

EMERGENCY RULE

Under RCW 34.05.350 the agency for good cause finds:

☒ That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.

☐ That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.

Reasons for this finding: To reduce the threat to public health, amending the "time of harvest to cooling requirements" to a more protective control season immediately is necessary. The current Vp Control Plan, last revised in 2015, establishes a control season between May 1st and September 30th and authorizes enforcement of the rule's strictest time-to cooling requirements for harvested oysters starting July 1 of the Vp control season. However, recent events demonstrate the need for more flexible rules. From June 26 to July 2, 2021, the National Weather Service in Seattle reported a long-duration, unprecedented heat wave throughout the Pacific Northwest. Shellfish-related Vp illnesses increased sharply. Therefore, due to current early season temperatures and mid-day low tides, this emergency rule is necessary to protect public health.

Note: If any category is left blank, it will be calculated as zero. No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note. A section may be counted in more than one category.

The number of sections adopted in order to comply with:

Federal statute:	New	0	Amended	0	Repealed	0
Federal rules or standards:	New	0	Amended	0	Repealed	0
Recently enacted state statutes:	New	0	Amended	0	Repealed	0

The number of sections adopted at the request of a nongovernmental entity:

	New	0	Amended	0	Repealed	0

The number of sections adopted on the agency's own initiative:

	New	0	Amended	1	Repealed	0

The number of sections adopted in order to clarify, streamline, or reform agency procedures:

	New	0	Amended	0	Repealed	0

The number of sections adopted using:

Negotiated rule making:	New	0	Amended	0	Repealed	0
Pilot rule making:	New	0	Amended	0	Repealed	0
Other alternative rule making:	New	0	Amended	1	Repealed	0

Date Adopted: May 17, 2023

Name: Kristin Peterson, JD for Umair A. Shah, MD, MPH

Title: Chief of Policy for Secretary of Health

Signature:

AMENDATORY SECTION (Amending WSR 15-08-083, filed 3/31/15, effective 5/1/15)

WAC 246-282-006 Washington state *Vibrio parahaemolyticus* control plan. (1) This section establishes the Washington state *Vibrio parahaemolyticus* control plan (control plan) for the months of May 1st through September 30th (control months). The requirements of this section are an extension of the NSSP Model Ordinance.

(2) All harvesters and shellfish dealers harvesting or delivering oysters to a certified shucker packer for shucking or postharvest processing (PHP) during the control months must label the oysters with a harvest tag stating "For shucking by a certified dealer" or "For PHP by a certified dealer." Oysters harvested and tagged in compliance with this subsection are exempt from subsections (3) through (20) of this section.

(3) The following definitions apply throughout this section:

(a) "Single-source *Vibrio parahaemolyticus* case" or "case" means a laboratory-confirmed *Vibrio parahaemolyticus*-associated illness or illnesses with a common exposure that are reported to the department. The case must:

(i) Be associated with commercially harvested shellstock;

(ii) Not involve documented postharvest abuse; and

(iii) Be traced back to a single growing area.

(b) "Control months" means May 1st through September 30th.

(c) "Cool" or "cooling" means to:

(i) Adequately ice or place in a controlled environment with a temperature of 45°F (7.2°C) or less; and

(ii) Reach and maintain an internal oyster tissue temperature of 50°F (10°C) or less.

(d) "Harvest temperature" means the water temperature or internal oyster tissue temperature at the time of harvest. The harvester or shellfish dealer shall state whether they use water temperature or internal oyster tissue temperature for harvest temperature in their harvest plan.

(4) All harvesters and shellfish dealers harvesting oysters during the control months shall report the volume of oysters harvested. This information must be reported by month, oyster species, size class, and growing area for all control months. This information must be reported by December 31st each year. Harvesters and shellfish dealers that do not submit this information to the department may not harvest oysters during the control months during the next calendar year.

(5) Harvesters and shellfish dealers harvesting oysters during the control months shall complete, submit to the department, and keep on file a current *Vibrio parahaemolyticus* harvest plan. In order for the department to review the harvest plan prior to May 1st, the harvest plan must be submitted by March 1st each year unless no changes have been made to the existing harvest plan. Harvesters and shellfish dealers shall sign and date their harvest plan each year and make it available to the department upon request.

(6) The harvest plan must:

(a) Describe the harvest, temperature collection, cooling, and conveyance methods.

(b) Include an example of the harvest temperature record designed to meet the requirements in subsection (11) of this section.

(c) Identify if water temperature or internal oyster tissue temperature is used to meet the requirements in subsection (11) of this section and specifically how this measurement will be taken.

(7) The department shall review and either approve or deny the harvest plan within ((~~thirty~~)) 30 days of receipt. If the department denies approval of the harvest plan, the department shall notify the applicant of the decision in writing stating the reasons for the denial and providing the opportunity to correct the deficiencies. Harvesters and shellfish dealers may not harvest oysters during the control months unless the department has approved the plan.

(8) Time of harvest to cooling requirements and harvest controls are based on a risk categorization of each growing area. The department shall assign each growing area a category of 1, 2, or 3 (where 1 corresponds to the least stringent and 3 the most stringent controls) based on the number of cases that occurred during the previous consecutive five-year period within the control months and were attributed to that growing area.

(9) The department shall categorize coastal growing areas in Willapa Bay and Grays Harbor as Category 1 for the first year of implementation attributing no illnesses to these areas for the years 2010 to 2014. For subsequent years, the department shall categorize coastal growing areas based on the criteria in subsection (8) of this section.

(10) The department shall complete risk categorization and publish a list of all growing areas by risk category no later than February 1st annually. The department shall use a rolling five-year average number of cases to calculate risk categories as follows:

(a) Category 1: An average of 0.2 or fewer cases attributed to the growing area over a five-year period.

(b) Category 2: An average of more than 0.2, but less than 1.0 cases attributed to the growing area over a five-year period.

(c) Category 3: An average of 1.0 or more cases attributed to the growing area over a five-year period.

(11) Time of harvest begins after the first oysters to be harvested are exposed to the air. Time of harvest to cooling requirements and harvest controls are as follows:

(a) Category 1:

Requirements:	**Time to Cooling:**
Except as noted below, the time of harvest to cooling requirement from ((~~June~~)) May 1st through September 30th is:	9 hours
When ambient air temperature at harvest is greater than 90°F, the time of harvest to cooling requirement is:	7 hours
When harvest temperature is between 68°F and 70°F from ((~~July 1st~~)) May 17th through ((~~August 31st~~)) September 14th, the time of harvest to cooling requirement is:	5 hours
Harvest Control: From ((~~July 1st~~)) May 17th through ((~~August 31st~~)) September 14th, harvest is not allowed for twenty-four hours when harvest temperature is above 70°F.	

(b) Category 2:

Requirements:	Time to Cooling:
Except as noted below, the time of harvest to cooling requirement from May 1st through September 30th is:	7 hours
When ambient air temperature at harvest is greater than 85°F, the time of harvest to cooling requirement is:	5 hours
When harvest temperature is between 66°F and 68°F from ((~~July 1st~~)) May 17th through ((~~August 31st~~)) September 14th, the time of harvest to cooling requirement is:	3 hours
Harvest Control: From ((~~July 1st~~)) May 17th through ((~~August 31st~~)) September 14th, harvest is not allowed for twenty-four hours when harvest temperature is above 68°F.	

(c) Category 3:

Requirements:	Time to Cooling:
Except as noted below, time of harvest to cooling requirement from May 1st through September 30th is:	5 hours
When ambient air temperature at harvest is greater than 80°F, the time of harvest to cooling requirement is:	3 hours
When harvest temperature is between 64°F and 66°F from ((~~July 1st~~)) May 17th through ((~~August 31st~~)) September 14th, the time of harvest to cooling requirement is:	1 hour
Harvest Control: From ((~~July 1st~~)) May 17th through ((~~August 31st~~)) September 14th, harvest is not allowed for twenty-four hours when harvest temperature is above 66°F.	

(d) When a harvester or shellfish dealer places oysters in a container or conveyance, but does not remove them from the tide flat as part of their harvest and the harvest exceeds the time to cooling requirements in subsection (11) of this section, then the oysters in the container or conveyance must be covered by the tide for a minimum of four hours before harvest can be completed.

(12) Harvesters and shellfish dealers shall take the following measurements at the times specified below and record this information in a harvest temperature record for each harvest site for all harvests occurring within the control months. Harvesters and shellfish dealers shall take these measurements with a thermometer that is verified weekly using manufacturer specifications or with a method approved in a harvest plan. Thermometer verification must be documented and maintained with operational records. Harvesters and shellfish dealers shall record the following measurements and the date and time they were taken in the record, maintain the record for three years, and make the record available to the department upon request:

(a) Air temperature at time and location of harvest; and

(b) Harvest temperature at time and location of harvest. Harvesters and shellfish dealers using water temperature for harvest temperature shall take water temperature at depth of oysters unless another method is documented in their harvest plan.

(13) Harvesters and shellfish dealers shall initiate cooling as soon as practical from the time of harvest and within the time of harvest to cooling requirements for the growing area where the oysters were harvested to ensure that the maximum number of hours is not exceeded.

(14) If the required time of harvest to cooling requirements are not met after removal from the tide flat, the harvester or shellfish dealer shall dispose of the oysters using one of the methods below and record the disposition on the harvest record:

(a) Destroy the oysters;

(b) Place the oysters within the original growing area or another approved growing area and allow a minimum of ((~~fourteen~~)) 14 days before reharvesting; or

(c) Deliver the oysters to a certified shucker packer for shucking or PHP and attach a harvest tag meeting the requirements in subsection (2) of this section.

(15) If ownership of oysters is transferred prior to the oysters being cooled in accordance with the time of harvest to cooling requirements, the harvester shall include in the harvest record required under WAC 246-282-080 the:

(a) Temperatures recorded under subsection (12) of this section;

(b) Date, time, and person or entity to whom the oysters were transferred; and

(c) Growing area risk category for the harvested product.

(d) The receiving shellfish dealer shall meet the time of harvest to cooling requirements for the original harvest time.

(16) *Vibrio parahaemolyticus* training requirements are as follows:

(a) Harvesters and shellfish dealers shall complete an initial department-approved training specific to the requirements of this section prior to harvesting or shipping oysters during the control months.

(b) Harvesters and shellfish dealers shall complete department-approved refresher training within one year following any revision of this rule considered significant under RCW 34.05.328 or at least every five years.

(c) Those responsible for the on-site management of harvest activities must be trained by either:

(i) Harvesters and shellfish dealers at their operation who completed the department-approved training; or

(ii) The department.

(d) Harvesters and shellfish dealers shall record those trained in their operational records.

(17) A harvester or shellfish dealer may request a waiver from specific requirements of this section. The request must:

(a) Be in writing;

(b) Identify the requirement requested to be waived;

(c) State the reason for the waiver; and

(d) Provide supporting information.

(18) The department may grant a waiver request if it:

(a) Is consistent with the applicable standards and the intent of this section; and

(b) Provides a comparable level of public health protection to the requirement being waived.

(19) If the department approves a waiver request, the department shall notify the requestor of the decision in writing.

(20) If the department denies a waiver request, the department shall notify the requestor of the decision in writing stating the reasons for the denial. The requestor shall comply with the provision that was the subject of the waiver request.

(21) The department shall review this section to evaluate the effectiveness of the rules and determine areas where revisions may be necessary by November 2017.

STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
PO Box 47990 • Olympia, Washington 98504-7990

April 26, 2023

U.S. Office of Management and Budget
725 17th St NW, Ste 50001
Washington, DC 20503

Subject: Comment on the Office of Management and Budget (OMB) Federal Interagency Technical Working Group of Race and Ethnicity Standards (Working Group) Statistical Policy Directive No. 15 (SPD 15)

The Washington State Board of Health (Board) appreciates the opportunity to submit comment on the OMB Working Group's initial proposals for revising federal race and ethnicity data collection and reporting standards (SPD 15).

It is the Board's firm position that disaggregating race and ethnicity data is instrumental for public health efforts to identify, prevent, and control diseases and conditions across communities in Washington. However, demographic data collection in Washington is currently decentralized and inconsistent, as agencies often must work within the parameters of outdated federal data standards. **Collecting race and ethnicity data in greater detail is essential to identifying and eliminating health equities, undoing systemic racism, and advancing equity within public health and the governmental system more broadly.**[1]

Established by the Washington State Constitution in 1889, the Board monitors the public's health and serves as a public forum to inform health policy. The Board accomplishes this by making policy recommendations to improve and protect the public's health to the Legislature and Governor, engaging in policy and rule development, and conducting health impact reviews. The Board is part of Washington's governmental public health system, which includes the Washington State Department of Health, 35 local health jurisdictions, sovereign Tribal Nations, and Indian health programs.[2] These entities work together to ensure that Foundational Public Health Services (FPHS) are available in every community across the state.

[1] Kauh TJ, Read JG, Scheitler AJ. The Critical Role of Racial/Ethnic Data Disaggregation for Health Equity. Popul Res Policy Rev. 2021;40(1):1-7. doi:10.1007/s11113-020-09631-6

[2] In Washington's governmental public health system, sovereign Tribal Nations and Indian health programs include 29 Tribal governments and two urban Indian health programs represented by the American Indian Health Commission (AIHC).

Disaggregated race and ethnicity data are essential to both the foundational programs and capabilities of Washington's Foundational Public Health Services. The governmental public health system needs disaggregated data to help conduct disease surveillance, identify, and address health inequities, respond to public health emergencies, prioritize resources for communities, and guide public health planning and decision-making at the state, regional, and local levels. These data also allow public health and governmental entities to provide more tailored, culturally relevant, linguistically appropriate, and effective services to communities. While the Board acknowledges that race and ethnicity are socio-political constructs, these data are fundamental to highlighting longstanding inequities within systems in Washington and their impacts on communities, particularly Black and Indigenous communities and communities of color.

As such, the Board issued a recommendation to the Governor's Office and Legislature through its biennial State Health Report aimed at improving public health's response to health inequities through data reform. One strategy the Board suggested included actively monitoring and participating in opportunities to advocate for improvements in federal standards for interoperability and disaggregated demographic data collection. In alignment with this strategy, the Board would like to state its support of the OMB's initial three proposals and provide comments regarding the OMB's request for implementation guidance.

The Board supports OMB's proposal 1, collecting race and ethnicity information using one combined question, as long as OMB includes detailed response options and respondents can select all categories that apply. Recently, the Board adopted revisions to its notifiable conditions rule, chapter 246-101 of the Washington Administrative Code (WAC). This rule outlines the required information that health care providers, health care facilities, laboratories, and other entities must report to public health authorities with each case of a notifiable condition.[3] As part of the recent revisions, the Board included the requirement for reporting patient-identified race, ethnicity, and preferred language based on community feedback. These new rules went into effect on January 1, 2023, and include 4 reporting categories for the patient's ethnicity (OMB standard plus "patient declined to respond" and "unknown"), 72 reporting categories for the patient's race (categories include and reaggregate to the OMB standard plus "other race", "patient declined to respond", and "unknown"), and 50 categories for the patient's preferred language.[4]

During the development of the rules, the Board received comments from community members regarding the need and urgency to collect demographic variables that more accurately reflect communities in Washington. In addition, community members inquired about the rationale for two separate race and ethnicity questions and why ethnicities and nationalities appeared under the race category reporting options in the Board's notifiable conditions rule. Creating a single, multiple-choice question would allow respondents to select options that more accurately reflect their race and ethnicity. **The Board recommends that OMB also update its race and ethnicity categories and definitions to include working definitions for nationality, heritage, and region**. These are overlapping concepts, and how people define these may vary based on their

[3] A notifiable condition is a suspected or confirmed case of selected diseases or conditions that entities in Washington must legally report to public health authorities.
[4] WAC 246-101-011 Reporting of patient ethnicity, race, and preferred language information.

lived experiences. **The Board recommends OMB work with other federal agencies and community leaders to ensure clear and consistent definitions and build a shared understanding of these concepts.**

The Board supports OMB's proposal 2, adding Middle Eastern or North African (MENA) as a new minimum category. Expanding MENA as a new minimum category, distinct from "white," will provide more accurate and meaningful information about MENA communities in Washington. This proposal also aligns with requests from community members in Washington for agencies to collect more disaggregated data. Inadequate or inaccurate data collection erases and harms community groups most impacted by systemic racism and inequities.

The Board supports OMB's proposal 3 and would like to underscore the importance of collecting detailed race and ethnicity categories by default. Collecting and analyzing disaggregated data helps the governmental public health system identify and address health inequities and prioritize resources for communities. The COVID-19 pandemic exposed systemic and structural inequities in the healthcare and public health systems. The collection and use of disaggregated data was, and continues to be, vital to identifying impacted populations. In addition, incorporating qualitative data – stories or anecdotes from impacted communities – into data collection methods, whenever possible, is essential to understanding social and political determinants of health that impact communities. Together disaggregated data and qualitative data support effective public health responses, including partnering with communities on outreach, prevention, and access to care. Without these data, the public health system cannot effectively and equitably respond to a public health crisis.

OMB has the opportunity to require the collection of detailed data across federal, state, and local public health and governmental agencies. This will lead to more detailed and accurate race and ethnicity data, improving agencies' ability to identify and understand health disparities in their communities and their ability to evaluate efforts to remove barriers to care. **In future proposals, the Board recommends OMB consider collecting detailed demographic variables beyond traditional reporting and response options to include variables such as language spoken, housing status, veteran status, sexual orientation, disability status, etc.**

The Board supports the collection of self-reported, disaggregated race and ethnicity data and acknowledges that these data are only as good as the system's ability to receive and analyze them for meaningful use. The Board encourages OMB to review comments submitted by other Washington state agencies. Implementing the OMB's proposed changes in Washington will be a years-long and coordinated effort to ensure data system interoperability. While implementing changes will take time and financially impact agencies, these concerns should not overshadow the need for disaggregated data.

The Board thanks OMB for considering these comments and looks forward to continuing to participate in this work in the future.

Sincerely,

Keith Grellner, Chair
Washington State Board of Health

STATE OF WASHINGTON
GOVERNOR'S INTERAGENCY COUNCIL ON HEALTH DISPARITIES
PO Box 47990 • Olympia, Washington 98504-7990

April 26, 2023

Office of Information and Regulatory Affairs,
Office of Management and Budget,
Executive Office of the President

Subject: Comment on Initial Proposals for Updating OMB's Race and Ethnicity Statistical Standards; Docket No. OMB-2023-0001 (88 FR 5375)

The Washington State Governor's Interagency Council on Health Disparities (Council) appreciates the opportunity to comment on initial proposals from the Federal Interagency Technical Working Group on Race and Ethnicity Standards (Working Group) for revising OMB's 1997 Statistical Policy Directive No. 15 (SPD 15).

The Council was created in 2006 to identify actions our state should take to eliminate health disparities and inequities, particularly those experienced by communities of color. In December 2020, WA State Governor Jay Inslee declared Washington an anti-racist state and committed the state to developing policies that "reflect our dedication toward disrupting the harmful systemic cycle of racism and inequity."[1] The Council recognizes that racism–not race–causes health disparities and inequities in wellness. But a better awareness of data on race and ethnicity can help lead to a better understanding of the impacts of racism. Federal statistical standards influence how data is collected, analyzed, and reported at the state and local levels, thereby impacting Washington State's ability to address racism and promote health equity.

Consistent, transparent collection of detailed race and ethnicity data across all levels of government—local, state, and federal—can help advance equity, and advancing equity is key to helping all in Washington State gain opportunities to thrive. The Council recognizes that race is a sociopolitical concept and categorization has shifted based on the political convenience of dominating cultures and systems that center whiteness. The Council acknowledges that data collection approaches represent an evolving process and we support this openness to reassessing the process, which should happen more than once in a generation. We emphasize the importance of including communities–especially those most impacted by racism–in this process. We recognize that racism is ingrained in our country's history and deeply embedded in our institutions today, leading to inequities across all sectors and tangible impacts on life opportunities, outcomes, and experiences. Detailed race/ethnicity data, when collected consistently, transparently, and through self-identification, has the power to illuminate the effects of racism while respecting a person's autonomy and dignity.

[1] The Office of the Governor. "Inslee announces Washington's historic commitment to diversity, equity, and inclusion." Accessed on 4/4/23 at: https://www.governor.wa.gov/news-media/inslee-announces-washingtons-historic-commitment-diversity-equity-and-inclusion.

The Council generally supports the Working Group's proposal to require collection of detailed race and ethnicity data by default as long as implementation prioritizes and empowers personal autonomy. Over the past 17 years, the Council has consistently heard from communities and public and private sector partners that disaggregated race/ethnicity data are essential for identifying and addressing health inequities and evaluating the effectiveness of interventions. Lack of consistent and accurate data misses important information and erases and renders too many people in Washington State invisible. Inadequate data further harms groups who have been most impacted by racism and inequities. Community advocates have shared that they do not see themselves in data sets and find themselves left out of resource allocation. For example, many people from the Marshallese community have been displaced from their ancestral homes, suffer high rates of cancer, and face many barriers that prevent access to health insurance and services. Some community members feel completely unseen and unheard in the data when they are lumped into the broad "Asian" or "Pacific Islander" reporting category. This happens across the race/ethnicity data spectrum. Among other harms, this impedes their ability to apply for and receive grant funding to address inequities. Additionally, implementation of SPD 15 must uphold a person's right to choose and not have an identity imposed upon them (e.g., observer identification), including the choice of whether or not to provide information.

Race/ethnicity data should accurately reflect identities that may shift over time. **The Council supports revisions to SPD 15 that:**

- **De-center whiteness.** We are concerned that Figure 2 in the federal register includes "white" as the first reporting category and suggest a different ordering, such as alphabetizing response options. We are also concerned that certain ethnicities/nationalities (e.g., French) are included within "white," which falsely conflates national and cultural heritage with whiteness and reinforces white nationalist conceptions of belonging.

- **Provide a fuller story on the impacts of racism, colorism, and other forms of bias and discrimination**. We support including "Middle Eastern or North African" (MENA) as a new minimum reporting category that is distinct from "white." We suggest continuing to engage diverse communities to understand the most representative term(s) for these populations. For example, some advocates consider "Middle Eastern" a colonial, Eurocentric, and politically harmful term and prefer the decolonial term "South West Asian and North African" (SWANA). We believe it is important to acknowledge that other groups from other, vast regions may also be concerned about being lumped together. We further recognize intersecting biases like colorism and religious persecution–to name just a couple–can harmfully alter individual experiences within these regional distinctions.

- **Reduce the amount of "unknown" and "some other race" responses as much as possible.** Currently, people with Hispanic ethnicity, people who do not identify with the five aggregate race reporting categories, and people identifying as Middle Eastern or North African may select "some other race" because they do not see themselves in the response options. Using a combined question and providing detailed response options, including open-ended options, can support more accurate, more self-empowering, and more representational reporting. People should always have the option not to respond, but omissions should never be due to the lack of choice.

- **Reflect migration histories, which play a large role in identity and experiences.** We support revisions that provide distinction between more recent immigration to the U.S. by African communities and people of African heritage whose families go back multiple generations and whose ancestors were brought here in chains. We encourage the Working Group to continue engaging communities and exploring the most appropriate term(s) to reflect American descendants of slavery/descendants of enslaved Americans, whose ancestors were forcibly taken to the U.S. and who still do not have the same opportunities to health, wealth, and wellbeing. We strongly believe community engagement in this area is essential to help build a more reflective and endorsed approach to data collection.

- **Respect and honor tribal sovereignty.** Erasure of American Indian and Alaska Native (AI/AN) peoples happens through various data methods (e.g., the failure to count AI/AN identity in combination with other racial/ethnic identities). "American Indian" and "Alaska Native" are political and legal statuses, distinct from a racial or ethnic group. Tribal sovereignty and inclusive engagement with Indigenous people who feel left out are critical to advancing our understanding of racism and our duty to our diverse communities. Tribal sovereignty involves tribes owning their stories and data. To respect tribal sovereignty, including data sovereignty, the Council encourages the Working Group to engage Tribes as sovereign nations and only collect data with their approval and guidance.

In addition to updating SPD 15, the Council encourages collection of information beyond race and ethnicity, including languages spoken, disability status, gender, sexual orientation, housing status (e.g., multigenerational households), etc. We also support the right of individuals to choose whether or not to share information. The Council recognizes that health outcomes are influenced by interrelated factors and the lack of multidimensional, nuanced, and accurate data results in misinformed and harmful policies. It is crucial to highlight a person's or community's lived experience. This information offers a fuller picture and complements race data, thus bringing meaning and life to the process.

Finally, the Health Disparities Council realizes how difficult it can be to fully implement new standards like this. We reiterate our feeling that it is imperative that proper attention be given to robust community engagement. We also believe that support be provided to the many places where these data will be collected. It is important to convey compassion for the challenge of changing practices, inclusiveness in the goals we share to serve our state better, and the commitment to assure this approach will reap benefits for everyone in Washington.

Sincerely,

Benjamin Danielson, Chair
WA State Governor's Interagency Council on Health Disparities

STATE OF WASHINGTON
OFFICE OF GOVERNOR JAY INSLEE

April 27, 2023

Bob Sivinski
Chair
Interagency Technical Working Group on Race and Ethnicity Standards
1650 17th St. NW
Washington, DC 20500

Subject: Comment on Initial Proposals for Updating OMB's Race and Ethnicity Statistical Standards; Docket No. OMB-2023-0001 (88 FR 5375)

Dear Chairperson Sivinski:

I am writing to urge you to update the Office of Management and Budget's 1997 Race and Ethnicity Statistical Policy Directive No. 15 (SPD 15).

It is imperative that local, state and federal entities act to eliminate health, economic, and educational disparities, many of which impact communities of color, by strengthening data collection, analysis, and reporting on race and ethnicity. The Working Group has the opportunity to revise standards that will not only address disparities and inequities but also shed light on their main driver – structural racism. An update to SPD 15 will in turn help states, like Washington, address racism to better advance equity by ensuring that more Washingtonians feel seen in data sets, are heard, and are able to thrive. Ensuring trust and transparency, while also respecting a person's autonomy, when collecting more detailed data is critical to ensuring that information on disparities is not missed or assumed non-existent.

I support SPD 15's proposal that requires collection of detailed race and ethnicity data by default, if implementation prioritizes and empowers the personal autonomy of those giving the data. History, as recent as the COVID-19 pandemic, has taught us the harms of imposing perspectives and identities on different groups of people and putting people in broad boxes and categories. Excluding the cultural and social backgrounds, national origin or heritage of people willfully ignores the nuances of diversity, identity, and experiences. Such practices lead to inaccuracies and undercounts in data, hinders access to critical resources, including grants and social services funding, and exasperates cycles of generational poverty and disparities among communities.

It is important that revisions to SPD 15 reflect our current time and awareness of diversity, disparities, and inequities. Any future revisions to SPD 15 should be upgraded to reflect identities and terminologies that may shift over time. It is equally important that the Working Group moves towards including communities that feel left out or may disagree with the current reporting terms used. I encourage the Working Group to closely examine terminology, alphabetize response options for race/ethnicity (to eliminate any notion of hierarchy), and to de-center whiteness from nationality.

For example, the proposed revisions in SPD 15 that include "Middle Eastern or North African" (MENA) as a new minimum reporting category de-centers whiteness and will tell a fuller story of the structural disparities that people who may identify as Algerian, Syrian, or Iraqi, etc. face. Likewise, revisions that also include incorporating migration histories that distinguish between more recent immigration, for example, by African communities and the people of African heritage who are the descendants of enslaved Americans also needs to be addressed and revised. I urge the Working Group to engage more with Tribal Nations and seek their guidance on which specific data is appropriate to collect. Tribes should be recognized as sovereign nations and upmost diligence must be made to ensure that Indigenous peoples are not left out in datasets and reporting. It is critically important that the Working Group engages with all communities to help reveal similarities and differences in disparities of health, wealth, and wellbeing.

Lastly, I also encourage the Working Group to ensure that revisions to SPD 15 allow for choice – people must not feel pressured to provide information on their race and/or ethnicity if they do not want to. It would be imperative that SPD 15 revisions help to reduce responses to "some other race" or "unknown" category for individuals who do not see themselves in response options but want to provide more representational reporting that accurately depicts their race/ethnicity. These are personal decisions that individuals should make themselves.

In Washington state, my administration is working hard to disrupt harmful cycles of structural racism, disparities, and inequities. I appreciate OMB's commitment to establishing race/ethnicity statistical standards that are more inclusive and representative of the diverse tapestry of our nation.

Very truly yours,

Jay Inslee
Governor

April 25, 2023

Office of Information and Regulatory Affairs
Office of Management and Budget
Executive Office of the President

Subject: Public Comment Submission, Docket No. OMB-2023-0001 (88 FR 5375): Initial Proposals for Updating OMB's Race and Ethnicity Statistical Standards

The Washington Health Benefit Exchange (Exchange) appreciates the opportunity to submit comment on the notice and request for comments on initial proposals from the Federal Interagency Technical Working Group on Race and Ethnicity Standards (Working Group) for revising OMB's 1997 Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity (SPD 15). The Exchange supports the Working Group's evidence-based, iterative efforts to update and further disaggregate race and ethnicity data collection standards, which will have cascading effects on the collection of race and ethnicity data at the state level.

The Exchange is Washington's state-based health insurance marketplace where more than one in four Washingtonians access health coverage and available financial assistance. The iterative data disaggregation efforts being explored at the federal level are aligned with the Exchange's mission, the equity statement our bipartisan Board adopted in 2018, and collaborative efforts being further explored at the state level.

The Exchange supports data disaggregation and using a combined race/ethnicity question to accurately capture respondents' self-conception of identity and support more representational reporting. Disaggregation of race/ethnicity data is foundational to identifying and understanding the impacts of racism and root causes of heath inequities. The Exchange is committed to increasing access to high-quality, affordable health coverage. Having a better understanding of Washington's diverse communities allows us to better tailor culturally and linguistically appropriate outreach to connect individuals and families to care.

The Exchange encourages the Working Group to continue engaging communities most impacted by racism to ensure they are seen and heard in data collected by federal and state institutions. Exchange customers have reported that community mistrust of government websites and limited understanding of how reported demographic data will be used are barriers to providing detailed, personal information. We recommend that implementation guidance address how personal information will be collected, used, shared (if applicable) and protected to facilitate community trust. The Working Group is also encouraged to address how any standards that are developed will be assessed and continually improved based on feedback from impacted community members and implementation partners at the state and local levels.

P.O. Box 657 | Olympia, Washington 98507
Direct: 360.688.7700

The Exchange shares implementation concerns raised by the Robert Wood Johnson Foundation's State Health & Value Strategies program (SHVS)[1] as it relates to cross program and agency alignment. Discrepancies between data fields used by states and health plan carriers and the data fields used in federally standardized templates may result in enrollment transaction failures. The Working Group is encouraged to consider state-specific considerations, and additional resources and flexibilities that may be needed, to ensure alignment across federal and state technology platforms. The Exchange also recommends continued engagement of state-level implementation partners to help address technical considerations related to interoperability and data security and privacy. The Exchange, and our Health Equity Technical Advisory Committee, are available to provide technical feedback as desired.

Thank you for the opportunity to provide feedback. We look forward to continued dialogue on this important topic.

Sincerely,

Ingrid Ulrey

Ingrid Ulrey
Chief Executive Officer
Washington Health Benefit Exchange

Cc: Leah Hole-Marshall, Exchange General Counsel and Chief Strategist
Christine Gibert, Exchange Policy Director

[1] Proposed Changes to Federal Standards for Collecting Race and Ethnicity – Summary and Considerations, March 22, 2023: https://www.shvs.org/proposed-changes-to-federal-standards-for-collecting-race-and-ethnicity-summary-and-considerations/

RE: OMB-2023-0001 Race and Ethnicity Statistical Standards

The Educational Opportunity Gap Oversight and Accountability Committee submits this public comment in response to OMB-2023-0001 (88 FR 5375) Initial Proposals for Updating OMB's Race and Ethnicity Statistical Standards

Background

The Educational Opportunity Gap Oversight and Accountability Committee (EOGOAC) is a bicameral and bipartisan statutory committee authorized by Washington State RCW 28A.300.136. For more than ten years, the EOGOAC has recommended policies and strategies to close opportunity gaps for students of color in Washington public schools, including in the area of "[i]dentifying data elements and systems needed to monitor progress in closing the gap."[1] Recommendations in this area have focused primarily on the collection and use of disaggregated student sub-ethnic and sub-racial categorical data.

In 2016, Washington State HB 1541 (2015-16) "Implementing strategies to close the educational opportunity gap, based on the recommendations of the educational opportunity gap oversight and accountability committee" created the Race Ethnicity Student Data Task Force (RESDT) to review the United States Department of Education 2007 race and ethnicity reporting guidelines and develop race and ethnicity guidance for the state.[2] This work resulted in the Race and Ethnicity Student Data Task Force 2017 Report and Race and Ethnicity Student Data Task Force Guidance for the Washington State Public Education System, as well as the phased roll-out of collection of disaggregated student sub-racial and sub-ethnic data. The EOGOAC draws heavily from the work of the RESDT and the collection of disaggregated student race/ethnicity data in Washington to inform this public comment.

Public Comment – EOGOAC Recommendations to OMB

1. Collect race and ethnicity information using one combined question.

The EOGOAC supports the combined race/ethnicity question approach. The EOGOAC has found that the two-part question is confusing, leads to inconsistencies in guidance and reporting and does not honor how individuals see themselves. However, a combined question must be clear that selections include both race and ethnicity and that multiple selections are always permissible. For example, individuals who select Latino/a/x as their ethnicity must be able to select a race option as well.

2. Add "Middle Eastern or North African" (MENA) as a new minimum category and remove MENA from "White" reporting category.

The EOGOAC supports the separation of MENA as a new minimum category and removal from the "white" reporting category. In 2017, the RESDT recommended that the task force be reconvened to consider "how to include the Middle Eastern and North African (MENA) category on future student race and ethnicity surveys, based on the federal government's decision whether

[1] Washington State Legislature. (2016). *RCW 28A.300.136 Educational opportunity gap oversight and accountability committee—Policy and strategy recommendations.* https://app.leg.wa.gov/rcw/default.aspx?cite=28A.300.136

[2] House Bill 1541 Implementing strategies to close the educational opportunity gap, based on the recommendations of the educational opportunity gap oversight and accountability committee. (2015-16) https://app.leg.wa.gov/billsummary?BillNumber=1541&Initiative=false&Year=2015

to include MENA as a distinct category in the U.S. census" (p. 13). [3] The RESDT recognized that the current system of classification of "Middle Eastern" as "white" is inappropriate and can only be fixed at the federal level. The EOGOAC also recognizes that the term "Middle Eastern" was promoted as a political term following 9-11 and that "Southwest Asian and North African (SWANA)" may be more culturally and geographically accurate and encourages the OMB to further explore terminology options to select the option preferred by the community.

3. Feedback on Proposed Definitions and Terminology

- The EOGOAC recommends that the category of "Hispanic or Latino" be displayed as "Latino/a/x" to include both gender forms of the term and to discontinue the use of the term "Hispanic" due to its outdated, colonial context. The reference to "Spanish origin" should also be removed from the definition and the example of "Chicana/o/x" added as an identifier for many in the U.S. and some who predate Mexico.
- The category of American Indian or Alaska Native should be specified to include both federally and non-federally recognized tribes, although the EOGOAC acknowledges that "federally recognized" is in itself a biased term. Additionally, guidance should specify as to whether nations listed as selection options should be specific to the local area of data collection. The Washington State K-12 data collection includes 29 Washington specific tribal groups.
- In reference to question 3a. "Is the example design seen in Figure 1 inclusive such that all individuals are represented?".
    - The EOGOAC believes that comprehensive representation of all racial and ethnic identities within the US on one form or survey is not possible; however the focus should be on ensuring respect, self-identification, and a focus on equity.
- The EOGOAC noted that no Central or South American ethnicities are represented in the "Black or African" definition. While these can be written in, omission of this region may cause confusion and under-identification. This should be updated to reflect current immigration patterns and include examples such as Brazilian and Panamanian.
- The "White" category examples should include nationality groups representing current trends in immigration and population changes. An example of this would be to disaggregate "Slavic" to specify "Ukrainian" to capture current immigration patterns. Additionally, "Spanish" should be included as an example to further differentiate from the category of "Latino/a/x" as a specific region.

4. Feedback on Implementation Guidance

- In response to question 3e. "Is it appropriate for agencies to collect detailed data even though those data may not be published or may require combining multiple years of data due to small sample sizes?":
    - Yes, the EOGOAC strongly believes that the process of collecting disaggregated data and seeing oneself reflected in the collection categories is just as important

[3] Race and Ethnicity Student Data Trask Force. (2017). *Report to the Legislature, the Office of Superintendent of Public Instruction, and the Governor.* https://www.k12.wa.us/sites/default/files/public/workgroups/ret/pubdocs/resdtaskforce2017report.pdf

as reporting to a sense of belonging. Agencies need to clearly communicate how protections for privacy in cases of small sample sizes will impact public reporting and internal government data use.

- In response to question 3g. "Is the current "default" structure of the recommendation appropriate? Should SPD-15 pursue a more voluntary approach to the collection of disaggregated data, as opposed to having a default of collecting such data unless certain conditions are met?":
    - No, it is not an overreach, and the "default" structure is appropriate. The roll out of disaggregated race/ethnicity data collection in Washington K-12 has shown the difficulties caused when there is non-conformity in data collection across agencies and sectors. While the additional data is useful to K-12, without standardization across different sectors outside of the K-12 system, it is difficult to look at how issues such as healthcare, housing, and child welfare affect racial groups. Clear guidance from the Federal level is necessary to ensure cross-sector conformity and usability.
- In response to question 4a. "What term (maybe "transnational") should be used to describe people who identify with groups that cross national borders (e.g. Hmong, Roma)?":
    - The EOGOAC feels that "transnational" is a geopolitical term that needs additional context to be understandable. Additionally, while groups that cross national borders have that in common, they should not be grouped together for reporting purposes.
    - Another example that the EOGOAC asks the OMB to consider is that of federally recognized tribes which have traditional unceded lands that cross multiple states as well as cross national boundaries.
- In response to question 4b. "Do you prefer a different question from "what is your race or ethnicity?":
    - The EOGOAC believes that the question "How do you identify?" may not be taken seriously and result in unusable write-in responses. Additionally, the EOGOAC prefers the use of "and/or" rather than the slash between race and ethnicity.
- In response to questions 5d. "How should race and ethnicity be collected when some method other than respondent self-identification is necessary?" and 5e. "What guidance should be provided for the collection and reporting of race and ethnicity data in situations where self-identification is unavailable?":
    - The EOGOAC concurs with the guidance of the RESDT that:
        - observer identification should be used only as a last resort;
        - individuals should be notified that observer identification may be used;
        - observer identification should be flagged in the system and monitored;
        - training should be provided to those conducting observer identification.
    - Observer identification should only be used at the minimum category level and not be based on last name.
- Regarding guidance on the example data collection:

- Guidance needs to be clear on whether the layout including subcategories should be modified for the target population. The example layout includes the U.S. top 6 nationality groups under each race/ethnicity. Should these be updated for a statewide or local community level? The guidance is not clear.
- In the current example layout, the one write-in box may lead to errors. An individual may limit their response to one item or write in several items which are difficult to analyze. The write-in option should include multiple spaces with the direction to include one per space.

Conclusion

In summary, the EOGOAC is broadly supportive of these proposed changes. During its work on this topic, the EOGOAC has consistently emphasized that data collection structure and guidance should be focused not on what will be the easiest for the system but on the goal of identifying needs and disparities for our communities and make improvements to the system and delivery of services. Data collection drives distribution of resources and has historically been used to both include and exclude certain communities.

That is why community feedback, specifically from those communities which have been historically marginalized, is so important and we urge you to seek out and listen to those voices. The EOGOAC solicits community feedback in part by working in partnership with the state ethnic commissions and the Governor's Office of Indian Affairs, which serve as trusted messengers in hard-to-reach communities. OMB could work with similar groups at the federal level, such as the White House Initiative on Asian Americans, Native Hawaiians, and Pacific Islanders, to reach out broadly to community members.

STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
PO Box 47990 • Olympia, Washington 98504-7990

May 30, 2023

Michael S. Regan, Administrator
U.S. Environmental Protection Agency
EPA Docket Center
Office of Ground Water and Drinking Water Docket
Mail Code 2822IT
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: Public Comment on PFAS National Primary Drinking Water Regulation, Docket ID No. EPA-HQ-OW-2022-0114

Dear Mr. Regan,

Thank you for the opportunity to comment on the proposed National Primary Drinking Water Regulation for per- and polyfluoroalkyl substances (PFAS). The Washington State Board of Health (Board) is submitting the following comments in strong support of this proposed action.

In Washington State, the Board serves as the rulemaking authority and the Washington Department of Health serves as the regulatory agency administering the rules for Group A public drinking water systems under chapter 246-290 WAC, Group A Public Water Supplies.

In the absence of national primary drinking water standards for PFAS, the Board adopted State Action Levels (SALs) for five PFAS analytes that took effect January 1, 2022. Implementation of the rule's monitoring requirements coupled with past voluntary monitoring for PFAS is providing valuable insights and detections of PFAS drinking water contamination in many water supplies across the state.

National maximum contaminant levels (MCLs) are essential for protecting public health and creating greater regulatory certainty for drinking water systems, local communities, and other parties. Adoption of national primary drinking water standards for PFAS will help set a level playing field for this national drinking water problem that involves significant financial, emotional, and public health effects on communities served by public water systems. Sadly, these same

effects extend to people and businesses served by small drinking water systems and private wells in impacted areas.

Early experience implementing the state's Group A rules for PFAS drinking water contamination suggests that agencies, water systems, communities, elected officials, and other interests will need significant technical and financial assistance navigating this complex, long-term public health crisis. Please couple action on this rulemaking with follow up on these diverse needs.

We encourage you to work with Congress and other interests to help marshal the needed resources to manage and, to the extent feasible, mitigate the public health effects and concerns associated with PFAS drinking water contamination. We also encourage the U.S. Environmental Protection Agency to continue to apply a broad set of strategies to preventing and reducing PFAS contamination and exposure on all fronts in keeping with the agency's PFAS Strategic Roadmap.

Thank you for your consideration of our comments. If you have questions or need additional information from the Board, please contact Stuart Glasoe, Board Health Policy Advisor, at stuart.glasoe@sboh.wa.gov.

Sincerely,

Keith Grellner, Chair
Washington State Board of Health

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PUBLIC HEALTH
PO Box 47820 • Olympia, Washington 98504-7820
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May 30, 2023

The Honorable Michael S. Regan
Administrator
U.S. Environmental Protection Agency
EPA Docket Center
Mail Code 2822IT
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: PFAS National Primary Drinking Water Regulation Rulemaking Comments - Docket ID No. EPA-HQ-OW-2022-0114

Dear Mr. Regan,

Thank you for the opportunity to review this proposed rulemaking for regulating per- and polyfluoroalkyl substances (PFAS). The Washington State Department of Health (DOH) has reviewed the proposed PFAS National Primary Drinking Water Regulation in Federal Register Volume 88, No. 60, dated March 29, 2023. This letter represents DOH's general and detailed comments on the proposed PFAS drinking water standards.

DOH strongly supports the proposed PFAS drinking water standards. This represents an important step in reducing exposure to PFAS to consumers of drinking water supplied by public water systems. Based upon our implementation experience of state PFAS rules, we recommend clarification, additional information, and guidance as discussed in the attached general and detailed comments document and include the following important areas of the rule:

1. Hazard Index methodology
2. Data challenges for compliance
3. Implementation challenges
4. Laboratory capability and capacity
5. Monitoring waivers

In the absence of adopted National Primary Drinking Water Standards for PFAS, DOH developed State Action Levels (SALs) for PFAS in drinking water. The Washington State Board of Health adopted SALs for 5 PFAS analytes on January 1, 2022[1]. DOH also developed informational materials, publications, fact sheets, and a PFAS dashboard to educate and communicate key information to drinking water consumers, local health departments, and public water systems.

[1] PFAS in Drinking Water—Monitoring and Analysis | Washington State Department of Health

We also needed to develop informational resources including PFAS exposure routes, clinician resources, home treatment devices and filter options, and accredited laboratories to perform drinking water sample analysis. Informational materials to address general questions and concerns about potential health effects of exposure to PFAS from the drinking water pathway were developed and posted on our website[2].

Under Washington State's rule, Group A Community, Non-Transient Non-Community and some Transient Non-Community water systems are required to monitor for PFAS beginning in January 2023 through December 2025. Systems must collect samples at the entry point to the distribution system and have them analyzed by EPA method 531.7 or 533 by a laboratory accredited for these analytes in Washington State. DOH sponsored a PFAS sampling project starting in early 2022 to allow public water systems to have their PFAS samples analyzed at no cost, and results satisfied state requirements that began in 2023. A total of 698 systems so far have actively participated in the PFAS monitoring project and approximately 1,136 system sources were sampled for PFAS.

A critical component to successful implementation of the proposed PFAS drinking water standards depends upon EPA providing additional clarification, guidance, and direction in several areas that could represent significant implementation challenges. It is essential these resources are developed and made available prior to adoption of the rule.

The attached document contains comments grouped into two sections: (1) general comments, and (2) specific comments to questions posed in the proposed regulation.

Sincerely,

Lauren Jenks
Assistant Secretary, Environmental Public Health
Washington State Department of Health

[2] PFAS in Drinking Water—Monitoring and Analysis | Washington State Department of Health

(1) General Comments

The Washington DOH strongly supports the EPA proposed PFAS drinking water standards. This is an important step in reducing exposure to PFAS to consumers of drinking water supplied by public water systems. There are areas within the proposed rule we would like to see clarification, additional information, further evaluation, and more specific guidance to help support successful implementation of the proposed PFAS rule at the state and local level.

- DOH requests that EPA provide clear definitions of all PFAS terms, including how they relate to levels of PFAS in drinking water.

- DOH agrees that tier 2 public notification is appropriate as it is consistent with the current framework for minimum contaminant levels (MCLs) for contaminants with chronic effects. DOH asks that EPA clarifies language for health effects above the MCL and differentiates between health advisory language addressing potential health effects and lower PFAS levels.

- DOH requests that EPA develop tools to aid with implementing the Hazard Index (HI) calculations for different state data systems. Multiple calculations for determining a HI result introduce a level of complexity for our data system. Also, as additional PFAS substances are evaluated and potentially regulated, it is important to consider how this will impact the current proposed HI calculations and allow for provision of additional PFAS to the proposed HI methodology.

- Please consider short- and long-term solutions for insufficient laboratory capability and capacity. This rule could cause laboratories to be overburdened when the rule becomes effective and initial monitoring requirements trigger quarterly monitoring.

- Costs to public water systems including funding treatment design and installation, operation and maintenance, availability of certified operators for implementing treatment options, and potential treatment supply chain product availability represent challenges especially to small water systems.

- While DOH agrees with EPA that source vulnerability should not allow a waiver for initial monitoring of PFAS, DOH supports the use of monitoring waivers if appropriate safeguards are in place for public water system sources. If both sampling history, source vulnerability, and geographic location indicate no historical PFAS detections, and there are no potential PFAS sources that could impact public water system sources. Allowing public water systems to apply for monitoring waivers is consistent with EPA's approach previously implemented for other drinking water contaminants.

- DOH supports using the EPA suggested alternative values of 2.0 ppt for PFOA and PFOS and 0.5 for the HI PFAS as the trigger level. This alternative trigger level is more consistent with trigger levels previously used in EPA's Standardized Monitoring Framework.

- DOH supports the ability of public water systems with sources reliably and consistently (R&C) below PFOA and PFOS trigger levels to qualify for reduced monitoring.

(2) Specific Comments

Page 18639. Executive Summary: EPA is proposing to use a Hazard Index (HI) approach to protecting public health from mixtures of four PFAS: PFHxS, HFPO-DA, PFNA and PFBS because of their known and additive toxic effects and occurrence and likely co-occurrence in drinking water.

- Effective implementation and data system support is needed to implement the HI.

Page 18667. Paragraph 2. Measuring PFOA and PFOS results below the PQLs may not be achievable from all laboratories and may not have the same precision as higher-level measurements, nor does EPA believe it is appropriate to make potentially costly compliance decisions based on such lower-level measurements". *Nonetheless, the ability to know that PFOA and PFOS may be present within a certain range at these low concentrations (i.e., below the PQLs) can be used to inform decisions for already installed treatment (e.g., a utility can evaluate when break though is most likely to occur or is imminent) and to judge appropriate monitoring frequency".*

- Not every laboratory applied to participate in UCMR5. Assuming 1.3 ppt is an achievable target nationwide may not be appropriate. Using an analytical result below the PQL only indicates that PFAS is present. Very little, if anything, is known about the actual concentration of PFAS in this instance. Relying upon low concentrations below the PQL for ongoing monitoring, reduced monitoring or compliance monitoring is not appropriate. Using a trigger level greater than or equal to 2.0 ppt for PFOS and PFOA would be preferred, as well as using 0.5 for the hazard index. This will allow laboratories flexibility, balance variability in the measurement, and allow for reduced monitoring for systems with sample results at or below 50% of the MCL.

Page 18683. IX. Monitoring and Compliance Requirements. E. Can primacy agencies grant monitoring waivers?

- DOH supports allowing for provisions for systems to apply for monitoring waivers based on source vulnerability combined with sampling results that show PFAS below trigger levels or non-detects. One sample per source is appropriate for source(s) in low-risk areas with a documented history of no PFAS detections.

Page 18729. Section III – Regulatory Determinations for Additional PFAS.

EPA requests comment on its preliminary regulatory determination for PFHxS and its evaluation of the statutory criteria that supports the finding. EPA also requests comment on if there are additional data or studies EPA should consider that support or do not support the Agency's preliminary regulatory determination for PFHxS, including additional health information and occurrence data.

- DOH supports the regulatory determination to regulate PFHxS. This PFAS co-occurs at very high levels with PFOS in drinking water supplies in Washington State. Impacted areas are mostly near fire training areas and military bases that used Aqueous Fire Fighting Foam (AFFF). The multistate ATSDR PFAS Exposure Assessment showed that a community in Washington State near Fairchild Airforce base had higher average serum levels of PFHxS than seven other sites included in the study. After PFOA and PFOS, PFHxS is the most common PFAS to occur above our state action levels in drinking water.

EPA requests comments on its preliminary regulatory determination for PFNA and its evaluation of the statutory criteria that support the finding. EPA also requests comment on if there are additional data or studies EPA should consider that support or do not support the Agency's preliminary regulatory determination for PFNA, including additional health information and occurrence data.

- DOH supports the regulatory determination to regulate PFNA and PFBS. Both occur in Washington State drinking water supplies. PFNA has been occasionally found at high levels in our state around firefighting facilities.

EPA requests comment on its preliminary regulatory determination for PFBS and its evaluation of the statutory criteria that supports the finding. EPA also requests comment on if there are additional data or studies EPA should consider that support or does not support the Agency's preliminary regulatory determination for PFBS, including additional health information and occurrence data.

- DOH supports the regulatory determination to regulate PFNA and PFBS. Both occur in Washington State drinking water supplies. PFNA has been occasionally found at high levels in our state around firefighting facilities.

EPA requests comment on whether there are other peer-reviewed health or toxicity assessments for other PFAS the Agency should consider as a part of this action.

- PFBA has a completed toxicity value. EPA should consider adding it to the HI approach or as an individual MCL. This action should consider whether sufficient laboratory capacity is available since establishing an MCL for PFBA would force water systems to use test method 533. Method 531.7 does not measure PFBA.

Page 18729. Section V – Maximum Contaminant Level Goal.

EPA requests comment on the derivation of the proposed MCLG for PFOA and its determination that PFOA is Likely to be Carcinogenic to Humans and whether the proposed MCLG is set at the level at which there are no adverse effects to the health of persons, and which provides an adequate margin of safety. EPA is also seeking comment on its assessment of the noncancer effects associated with exposure to PFOA and the toxicity values described in the support document on the proposed MCLG for PFOA.

- DOH appreciates that EPA updated the literature review and added a systematic review of study quality for their determination of the PFOA and PFOS MCLGs. DOH also appreciate that EPA added the modified Verner model to account for transplacental and trans-lactational exposure in developing children.

EPA requests comment on the derivation of the proposed MCLG for PFOS, its determination that PFOS is likely to be Carcinogenic to Humans and whether the proposed MCLG is set at the level at which there are no adverse effects to the health of persons, and which provides an adequate margin of safety. EPA is also seeking comment on its assessment of the noncancer effects associated with exposure to PFOS and the toxicity values described in the support document on the proposed MCLG for PFOS.

- DOH appreciates that EPA updated the literature review and added a systematic review of study quality for their determination of the PFOA and PFOS MCLGs. DOH also appreciate that EPA

added the modified Verner model to account for transplacental and trans-lactational exposure in developing children.

- While there is solid evidence that PFOS is a rodent carcinogen, there is currently only weak and inconsistent epidemiological evidence that PFOS has caused cancer in humans. EPA classification of PFOS as a likely human carcinogen is reasonably supported by mechanistic data showing PFOS to have several characteristics of carcinogens, structural similarity to PFOA, and functional similarity to PFOA on other health endpoints.

EPA requests comment on the general HI approach for the mixture of four PFAS.

- DOH supports the HI approach.

EPA requests comments on the merits and drawbacks of the target- specific HI or RPF approach.

- DOH supports the HI approach.

Page 18730. Section V – Maximum Contaminant Level Goal.

EPA requests comment on significant figure use when calculating both the HI MCLG and the MCL. EPA has set the HI MCLG and MCL using two significant figures (i.e., 1.0). EPA requests comment on the proposed use of two significant figures for the MCLG when considering underlying health information and for the MCL when considering the precision of the analytical methods.

- DOH supports using all digits of precision in calculations, but rounding to two significant figures for the final reported value. Using the significant figure only changes how we round before an HI MCL is reached. A system would exceed the MCL with a RAA of 1.05 instead of 1.5 ppt.

EPA requests comment on the derivation of the HBWCs for each of the four PFAS considered as part of the HI.

PFBS

- DOH concurs with the RfD, but request EPA consider infants when selecting the drinking water intake rate for the PFBS Health-Based Water Concentration. Infants should be considered a sensitive life stage since neonatal thyroid function also supports infant growth and neurodevelopment.[3] [4] [5] Thyroid tissue stores of T4 are low in newborn children making them less able than adults to compensate for reductions in T4.[6] Washington State included infants as a sensitive group for this endpoint and used the 95th percentile water intake rates for infants (birth to <1 year old) to protect the developing child (see Table below). Michigan and California risk assessors also used infant drinking water intake rates to derive their state regulations for PFBS in drinking water based on this same endpoint.

[3] Miller, M.D., et al., *Thyroid-disrupting chemicals: interpreting upstream biomarkers of adverse outcomes*. Environ Health Perspect, 2009. 117(7): p. 1033-41.
[4] Coperchini, F., et al., *Thyroid Disrupting Effects of Old and New Generation PFAS*. 2021. 11(1077). 228.
[5] Min, H., et al., *Maternal Hypothyroxinemia-Induced Neurodevelopmental Impairments in the Progeny*. Mol Neurobiol, 2016. 53(3): p. 1613-1624.
[6] Van den Hove, M.F., et al., *Hormone synthesis and storage in the thyroid of human preterm and term newborns: effect of thyroxine treatment*. Biochimie, 1999. 81(5): p. 563-70.

Table 10: PFBS SAL calculations for four potentially sensitive populations/life stages

Sensitive population	RfD[a] (mg/kg-day)	Drinking water Intake rate (L/kg-day)[b]	Relative Source contribution or RSC (%)	Candidate SALs (mg/L)
Infants (<1 year)	0.0003	0.174 (95th)	20	0.000345
Pregnant women	0.0003	0.038 (95th)	20	0.001579
Lactating women	0.0003	0.047 (95th)	20	0.001277
Women of reproductive age (15-44 y/o)	0.0003	0.035 (90th)	20	0.001714

[a]*RfD = chronic oral Reference Dose for PFBS (EPA 2021).*

[b]*Intake rates from 2019 EPA Exposure Factors Handbook Chapter 3 (based on consumers only population and two-day average consumption).*

PFHxS

- WA concurred with state health risk assessors in Michigan in selecting Minnesota Department of Health's RfD of 9.7 ng/kg-day for PFHxS as the base for our state action on PFHxS. We think this is a better basis for the HBWC than the ATSDR MRL.

- The Minnesota Department of Health derived their RfD from a study by the National Toxicology Program (NTP) 2019. Specifically, a 28-day oral gavage study in adult male and female Harlan Sprague Dawley rats. The study measured growth and gross behavior, serum hormone levels, and evaluated all organs for gross and histopathological findings at the end of 28 days. Serum measurements of PFHxS were collected for assessment of internal dose at the end of the experiment. There was a dose-dependent decrease in serum thyroid hormone levels in both sexes with more marked reductions in T3, fT4 and tT4 in male[7].

- These study results were supported by *Ramhøj et al.* 2018 experiments in pregnant Wistar rats. Oral administration of PFHxS produced marked, dose-dependent reductions in serum total T4 in pregnant and lactating dams and in pups[8].

- WA also considered infants a sensitive group for thyroid hormone reduction (see reasons above under PFBS) and we encourage EPA to pair this lower RfD with a translactational exposure model that accounts for higher exposures of breastfed infants. In our model based on Goeden et al. 2019, infants had more than twice the PFHxS serum concentration of their mothers after breast-feeding exclusively for 6 months and then tapering their breastmilk consumption while introducing foods over the following 6 months.

PFNA

- Consider amending the ATSDR MRL to account for a more recent estimate of serum half-life published after the ATSDR MRL: Yu, C.H., et al., *Biomonitoring: A tool to assess PFNA body burdens and evaluate the effectiveness of drinking water intervention for communities in New Jersey*, Int J Hyg Environ Health, 2021. 235: p. 113757. Yu et al. 2021 published a three-year biomonitoring study in a New Jersey community exposed to elevated PFNA in their drinking water. The geometric mean of the study group was five times higher than the mean PFNA levels

[7] *National Toxicology Program, NTP Technical Report on the Toxicity Studies of Perfluoroalkyl Sulfonates (Perfluorobutane Sulfonic Acid, Perfluorohexane Sulfonate Potassium Salt, and Perfluorooctane Sulfonic Acid) Administered by Gavage to Sprague Dawley Rats 2019*, U.S. Department of Health and Human Services: Research Triangle Park, NC

[8] Ramhøj, L., et al., *Perfluorohexane Sulfonate (PFHxS) and a Mixture of Endocrine Disrupters Reduce Thyroxine Levels and Cause Antiandrogenic Effects in* Rats. Toxicol Sci, 2018. 163(2): p. 579-591.

in U.S. adults as measured in 2015-2016 by the CDC. The study collected three blood samples one year apart in 99 participants from 2017 to 2020. Residents ranged in age between 20 – 74 years old and were 68 percent female. Half-life estimates of PFNA in serum were 3.52 years for the 68 most highly exposed participants. DOH suggest that EPA consider the PFNA serum half-life in the more highly exposed members to minimize bias from ongoing background exposure to PFNA. Modifying the ATSDR MRL with the new half-life estimate of 3.52 years (1,285 days) from Yu et al. 2021, would result in:

- MRL (mg/kg-day) = POD (mg/L) x DAF (L/Kg-day) ÷ UF
  - POD = 6.8 mg/L PFNA in serum
  - DAF = Vd x (Ln(2)/T1/2) = 0.2 L/kg x (Ln(2)/1,285 days) =1.08 x 10-4 L/kg – day.
  - UF = 300
- MRL = = 6.8 mg/L x 1.08 x 10-4 L/kg – day ÷ 300 = 2.45 x10-6 mg/kg-day (or 2.5 ng/kg-day)

Page 18730. EPA requests comment on its proposed determination to set MCLs at 4.0 ppt for PFOA and PFOS and whether 4.0 ppt is the lowest PQL that can be achieved by laboratories nationwide.

- DOH cannot provide meaningful comment without reviewing the MDL/MRL studies used to determine the PQL.

Page 18730. Section VI – Maximum Contaminant Level

Page 18730. EPA requests comment on the underlying assumptions that sufficient laboratory capacity will be available with the proposed MCLs; that demand will be sufficiently distributed during rule implementation to allow for laboratory capacity; and on the cost estimates related to these assumptions.

- The 4.0 ng/L MCL/PQL should be high enough not to affect laboratory capacity. These proposed monitoring requirements and those already implemented by some states have helped create a new market for laboratories. In the proposed regulations, the overwhelming majority of UCMR 5 laboratory applicants had limits of quantitation (LOQ's) that were lower than 4.0 ng/L.

- The volume of samples required for quarterly monitoring may create laboratory capacity issues even as more laboratories are accredited for PFAS analysis. The preliminary testing in Washington has shown approximately 20 percent of sources have detections above 5 ppt. Using 1.3 ppt as the trigger will likely increase the number of water systems with detections required to monitor quarterly with no reduced monitoring options. Laboratories are already experiencing problems hiring and maintaining qualified staff.

Page 18730. EPA requests comment on its proposal of using an HI approach for PFHxS, HFPO–DA, PFNA, and PFBS, including whether it can be clearly implemented and achieves the goal of protecting against dose additive noncancer health effects.

- The HI approach is reasonable for regulating PFAS with additive toxicity. This will be challenging to implement as proposed due to the tracking of multiple compounds and automating this into existing data systems. DOH has limited IT resources to prepare for migration to SDWIS state. Timing will be a key consideration for successful implementation of this area of the

proposed PFAS rule. As written, this approach will have a considerable resource impact on compliance activities.

Page 18730. EPA requests comment on its proposed decision to establish stand- alone MCLs for PFOA and PFOS in lieu of including them in the HI approach.

- DOH supports this approach to compliance in the PFAS rule. Establishing MCLs is consistent with the current nationwide Standard Monitoring Framework implementation.

- EPA has set the MCLs for PFOS and PFOA at what the Agency determined are the PQLs for these compounds. Given that, it doesn't make sense to consider an approach where lower concentrations would contribute to the HI of a mixture.

Page 18730. EPA requests comment on whether establishing a traditional MCLG and MCL for PFHxS, HFPO–DA, PFNA, and PFBS instead of, or in addition to, the HI approach would change public health protection, improve clarity of the rule, or change costs.

- DOH supports using both the traditional and HI approach for MCLs.

- These chemicals frequently occur in mixtures. When two or more are present, the HI approach effectively lowers the acceptable limit for each. Since PFAS health impacts are likely additive, a combined standard is appropriate.

Page 18730. Section VII – Occurrence

Page 18730. EPA requests comment on the number of systems estimated to solely exceed the HI (but not the PFOA or PFOS MCLs) according to the approach outlined in USEPA (2023e).

- Based on an initial and limited review of Washington water systems, a very small percentage of systems exceed the HI but not the PFOA or PFOS MCLs. Most systems with high levels of the other PFAS also have PFOA or PFOS as the drivers.

Page 18730. Section IX – Monitoring and Compliance Requirements.

EPA requests comment on the proposed monitoring flexibility for groundwater systems serving 10,000 or fewer to only collect two samples at each EPTDS to satisfy initial monitoring requirements.

- In Washington State, there are more detections in groundwater than in surface water. Detections are generally consistent over time with little seasonal variability.

EPA requests comment on monitoring-related flexibilities that should be considered to further reduce burden while also maintaining public health protection including a rule trigger level at different values than the currently proposed values of 1.3 ppt for PFOA and PFOS and 0.33 for the HI PFAS (PFHxS, HFPO–DA, PFNA, and PFBS), specifically alternative values of 2.0 ppt for PFOA and PFOS and 0.50 for the HI PFAS. EPA also requests comments on other monitoring flexibilities identified by commenters.

- A trigger for PFOA and PFOS of 2 ppt would place less burden on labs and PWSs while still allowing for public health protection. Since all results below the PQL for the HI PFAS are calculated as zero, it might make sense to use 0.5 as the trigger. Increasing these triggers would allow for some reduction in monitoring for sources that don't exceed the slightly higher trigger but are below the MCL. To ensure public health protection, EPA could also assign two years of annual monitoring or an R&C annual for sources with detections consistently below the MCL instead of having them remain on quarterly.

EPA requests comment on the proposed allowance of a water system to potentially have each EPTDS on a different compliance monitoring schedule based on specific entry point sampling results (i.e., some EPTDS being sampled quarterly and other EPTDS sampled only once or twice during each three-year compliance period), or if compliance monitoring frequency should be consistent across all the system's sampling points.

- While PFAS contaminant plumes can be extensive, they likely follow groundwater flow directions in such a way that timing monitoring in sources in distinctly different areas would be more burdensome than helpful. This is especially true for water systems where sources are spread across a wide area. For those systems which have been collecting quarterly samples there have not been significant differences in the concentrations temporally. Impacts were identified to surrounding/downgradient source concentrations when a large producing source was taken offline due to high PFAS detections while the PWS installed treatment. Systems assigned quarterly monitoring will likely collect samples at sources in a similar area at the same time to save on labor and shipping costs. DOH have also had multiple issues with lab analysis, which has required repeat samples be taken from sources; this could negate any timing attempts. This level of timing would only serve to make the rule more complex. Please ensure states continue to have the authority to increase monitoring as needed.

EPA requests comments on whether water systems should be permitted to apply to the primacy agency for monitoring waivers. Specifically, EPA is requesting comment on the allowance of monitoring waivers of up to nine years if after at least one year of sampling results are below the proposed rule trigger level. Similarly, EPA also requests comment on whether allowance of monitoring waivers of up to nine years should be permitted based on previously acquired monitoring data results that are below the proposed rule trigger level. Additionally, EPA is also requesting comment on the identification of possible alternatives to traditional vulnerability assessments that should be considered to identify systems as low risk and potentially eligible for monitoring waivers.

- EPA and states have provided waiver opportunities for other contaminants as well and still provide public health protection. States can develop a waiver model that allows sources that are less vulnerable and susceptible, and have non-detect PFAS, can reduce monitoring to a 6 or 9-year schedule while still providing public health protection. Our current waiver model allows us to rescind waivers if conditions change. Please allow states the flexibility to develop and provide waivers.

EPA requests comment on its proposal to allow the use of previously acquired monitoring data to satisfy initial monitoring requirements including the data collection timeframe requirements and if other QA requirements should be considered.

- DOH supports the use of previously acquired monitoring data to satisfy initial monitoring requirements. In Washington State, approximately 698 public water systems participated in a PFAS sampling pilot project in 2022 and approximately 1,136 sources were sampled for PFAS. Under Washington's current regulation all community and non-transient non-communities must complete initial PFAS monitoring by December 31, 2025.

EPA requests comment on whether EPA should consider an alternative approach to what is currently proposed when calculating compliance with proposed MCLs. Specifically, in the case where a regulated PFAS is detected but below its proposed PQL, rather than using zero for the measurement value of the specific PFAS in the running annual average compliance calculation, that the proposed rule trigger levels (1.3 ppt for PFOA and PFOS and 0.33 of each of the HI PFAS PQLs (i.e., PFHxS=1.0, HFPO–DA=1.7, PFNA=1.3, and PFBS=1.0)) be used as the values in calculating the running annual average for compliance purposes.

- DOH is concerned with the concept of using estimated data to impact so significantly a utilities action and a laboratories ability to analyze at the proposed triggers. If a PFAS is detected above the MDL but below the PQL, then it would bias the running annual average downwards to tally as a zero. It appears that anything below the PQL is considered as an estimate, but that depends on where the laboratory MDL and LOQ are in relation the PQL. It is unclear whether laboratories can analyze with accuracy or precision at the triggers set in the proposed rule, especially for PFHxS and PFBS.

Page 18730. Section IX-Monitoring and Compliance Requirements Continued.

EPA requests comment on other monitoring related considerations including laboratory capacity and QA/ QC of drinking water sampling.

- Increased emphasis on meeting all method required QC would help ensure consistent data quality and aid state Primacy agencies.

- Given turnaround times for laboratories and lack of certified laboratories in Washington state, we are concerned that laboratory capacity may not match demand after implementation of this rule.

EPA seeks comment on the Agency's proposed initial monitoring timeframe, particularly for NTNCWS or all systems serving 3,300 or fewer.

- The initial monitoring of 2 samples in 90 days is acceptable.

- DOH has time and cost concerns over the impact from increased quarterly monitoring for detected results below the PQL, and the challenge in computing HI for PWS that have detections of other PFAS with MCLs.

Page 18731. Section X – Safe Drinking Water Right to Know

EPA requests comment on its proposal to designate violations of the proposed MCLs as Tier 2.

- This is consistent with how EPA addresses 2,3,7,8-TCDD (dioxin), which is also a bioaccumulating contaminant that that poses immune, developmental and cancer risks.

EPA requests comment on what may be needed for water systems to effectively communicate information about the PFAS NPDWR to the public.

- Please provide guidance for electronic delivery for public notice (PN), and include different methods of communication in consideration of cost reductions for regular PN. Alternating methods of communication in addition to providing language translation allows for a broader reach to diverse audiences. Electronic delivery is allowed for CCRs, for which EPA has provided guidelines, but not for tier 2 PN.

- Be transparent in communication related to what is known and understood. This allows public water systems to communicate to their consumers with facts and resources when a PN is issued. DOH developed a historical PFAS timeline highlighting milestones from when PFAS substances were invented in 1938-present.[9] Informational materials to address general questions and concerns about potential health effects of exposure to PFAS via the drinking water pathway were developed and made available on our website.[10]

Page 18731. Section XI – Treatment Technologies

This section combines treatment technologies with generation and disposal of PFAS waste. Recommend further separation of these two topics to further clarify and address each topic in greater detail.

- DOH does not have enough data to provide meaningful comments on treatment technologies for PFAS in drinking water.

EPA requests comment on the estimates for disposing of drinking water treatment residuals or regenerating drinking water treatment media including assumptions related to the transport distance to disposal sites and other costs that arise out of disposal of PFAS contaminated drinking water treatment residuals.

- This response was prepared by the Washington State Department of Ecology. In Washington State, water treatment residuals might be designated as Washington State Only Dangerous Waste if the concentration of persistent PFAS compounds exceeds state only designation criteria. If it does, then that waste stream must be diverted to a Subtitle C landfill designed to manage PFAS waste. All subtitle C landfills are out of state (closest are in Idaho and Oregon), making transportation and treatment costs high.

- This response was prepared by the Washington State Department of Ecology. PFAS waste disposal in Washington State is governed by Washington Administrative Code 173-303. Appropriate disposal of PFAS waste generated from removal from drinking water depends upon the specific waste category designation. Thresholds have been established by the Washington State Department of Ecology that designate appropriate disposal approaches and locations depending upon concentrations of PFAS within environmental media.

[5] 334-488 PFAS Timeline (wa.gov)
[6] Local Health Jurisdiction PFAS Resources | Washington State Department of Health

EPA requests comments on the availability of facilities to dispose of or regenerate drinking water treatment media that contains PFAS. EPA requests comment on whether there will be sufficient capacity to address the increased demand for disposal of drinking water treatment residuals or to regenerate media for reuse by drinking water treatment facilities.

- This response was prepared by the Washington State Department of Ecology. Currently, waste disposal facilities are not engineered to manage PFAS waste streams. There are questions around how effective and appropriate disposal methods are in either destroying PFAS or storing it indefinitely in a landfill. Although most landfills take this waste currently (e.g., there are a lot of available landfills to send this waste too), that is only because it is not regulated.

- This response was prepared by the Washington State Department of Ecology. Washington State Department of Ecology is currently developing an EIS to research and determine the least impactful disposal method. A draft EIS is due later the summer of 2023.

EPA requests comment on the impacts that the disposal of PFAS contaminated treatment residuals may have in communities adjacent to the disposal facilities.

- This response was prepared by the Washington State Department of Ecology. With regards to Subtitle D landfills, impacts to adjacent communities would be minor as long as non-dangerous PFAS waste goes to a modern-day lined landfill. Many solid waste landfills capture leachate in lined leachate lagoons that do not discharge. Many also discharge to wastewater treatment plants, which is where any impact would occur in terms of their discharge of treated wastewater or management of biosolids.

- This response was prepared by the Washington State Department of Ecology. Regarding disposal options for high concentration PFAS dangerous waste, there are unknowns on how they could affect adjacent communities. Permitted Subtitle C landfills are preferred if they are designed to manage PFAS. Incineration has shown to destroy the PFAS molecule at prescribed temperature and residence time, but Ecology has not come across environmental data to show no PFAS is being emitted. PFAS would also likely outlive the life of a Subtitle C landfill in the future, so we hesitate to recommend this option for high concentration PFAS wastes because we do not fully understand the effect it could have on adjacent communities.

Page 18731. Section XIII – HRRCA

EPA requests comment generally on its estimation of sampling costs. The Agency is also specifically requesting comment on the ability of systems to demonstrate they are reliably and consistently below 1.3 ppt for PFOA and PFOS and 0.33 ppt for PFAS regulated by the HI to qualify for reduced monitoring.

- EPAs use of trigger levels set at 1/3 the PQL increase the estimated cost of sampling while increasing variability in sampling data. Setting the trigger at ½ the PQL would increase the number of laboratories that can meet QA/QC levels bringing down the cost of sampling and provide better data for decision making. Washington supports using the EPA's suggested alternative trigger level of ½ the PQL. Currently laboratories are charging for both the PWS sample, and if there are detections, for testing the field reagent blank, effectively doubling the cost for PWSs with detections. It is unclear if EPA considered this in their cost estimates.

EPA requests comment on the costs associated with the storage, transportation and underground injection of the brine concentrate residuals from the RO/NF process.

- This response was prepared by the Washington State Department of Ecology. Ecology does not have readily available cost data for storage, transport and underground injection of brine concentrate residuals from the RO/NF process.

EPA requests comment on the discussion of estimated PN costs provided in the proposed rule.

- Currently, PN can run from $50,000 – 100,000 per quarter for a larger PWS. It would be beneficial if EPA published some options for electronic delivery methods for tier 2 PN. Consider that different types of communication methods may reach different audiences. Such options could require a balance of methods to both save on costs for repeat PN while attempting to ensure more customers maintain awareness.

- Environmental Justice should be considered and addressed using language translation and accessibility tools in all PN resources.

EPA requests comment on whether factors such as anticipated Federal funding, the structure of PWSs relative to private enterprises, or the nature of the public health benefits should be further explored in the final rule analysis, including as it relates to the estimated range of impacts under the applied discount rates.

- Increased tracking for HI MCL calculations, increased compliance, and increased planning and project reviews for potentially 20% of PWSs will require significant resources to successfully implement. It is unclear if these costs were considered in the cost estimates of the PFAS rule.

Page 18732. Section XV – Statutory and Executive Order Reviews

EPA requests comment on all aspects of its EJ analysis, particularly its choice of comparison groups to determine potential demographic disparities in anticipated PFAS exposure and its use of thresholds against which to examine anticipated exposures. For more information, please see section XV.J of this preamble.

Page 18735 says this EJ evaluation was "based on availability of PFAS occurrence data."

- PFAS occurrence data is still fairly limited since public water systems are just now discovering their sources are contaminated with PFAS. Data EPA is using is likely biased, highlighting systems able to test for PFAS and have access to the right information and resources. EPA should consider re-evaluating the EJ impact once more PFAS occurrence data is available.

- More investigation is needed into the smaller, lower income systems that have not yet discovered PFAS contamination. These systems may experience detections of PFAS but may not have the means to install, monitor and maintain ongoing treatment.

- PFAS treatment is expensive, and installation will likely involve pilot studies, which are essential to understanding the effectiveness of treatment, but will increase overall costs. BIL funding is available, but there are barriers to this funding.

- This rule does not explicitly consider costs associated with long-term operation and maintenance of treatment. Promising treatment methods require continual monitoring to assess the effectiveness of PFAS removal. This will potentially require additional operators and frequent replacement of filter media, which will be costly.

- Drinking Water Operators with appropriate and adequate training and certification are challenging to locate and maintain for smaller water systems as there is a qualified labor shortage within the water industry. Therefore, the cost of keeping treatment in perpetuity represents a considerable cost to water delivery.

New treatment and source relocation are potential responses to the new PFAS rule, but the rule must consider cumulative impacts of multiple forms of drinking water contaminants. Cost and compliance with this rule must be structured to ensure compliance for PFAS without interfering with other contaminant treatment or compliance.

Page 18752, Table 2 to Paragraph (b)(2)(i)

- It is unclear what "except as otherwise provided by the State" means in the context of compliance monitoring and Table 2 to Paragraph (b)(2)(i). Does this mean States have the option to devise a different monitoring scheme? Please clarify.

- Using PFAS sample results below the PQL is not appropriate for calculating a running annual average. This approach seems to conflict with Table 1 to Paragraph (f)(1)(iii).

Page 18752, 141.XX Monitoring Requirements (iv)

- States may delete results of obvious sampling errors from this calculation. DOH requests the ability to delete sample results that have obvious laboratory errors.

STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
PO Box 47990 • Olympia, Washington 98504-7990

April 19th, 2023

Christine Zahn
Arginase 1 Deficiency Foundation
9803 49th Ave SW
Seattle, WA, 98136

Sent Via Email

Dear Ms. Zahn:

Thank you for the rulemaking petition you submitted to the State Board of Health (Board) on March 29th, 2023, requesting to amend Chapter 246-650 WAC to add Arginase 1 deficiency as a condition for newborn screening.

The Board met on April 12th, 2023, and after reviewing and discussing your petition, voted to deny your request at this time. The Board concluded that there was not enough information to accept the petition to begin rulemaking and instead instructed staff to follow the Board's process for evaluating candidate conditions.

The Board directed staff to work with the Department of Health to convene a technical advisory committee (TAC) to evaluate Arginase 1 deficiency using the Board's process and criteria to evaluate conditions for inclusion in WAC 246-650-020. Once convened, the same TAC will also evaluate another condition, GAMT deficiency, as previously requested by the Board. After the TAC completes its review of Arginase 1, staff will present its findings to the Board. The Board will then revisit whether to add Arginase 1 deficiency to the state's newborn screening list at that time.

Under RCW 34.05.330, a petitioner may appeal an agency's decision to deny a petition to repeal or amend a rule. An appeal must be made to the Governor within 30 days of denial.

If you require further assistance, please don't hesitate to contact Molly Dinardo, Health Policy Advisor in our office, at 564-669-3455 or at Molly.Dinardo@sboh.wa.gov.

Sincerely,

Keith Grellner, Chair

Washington State Board of Health

Public Health Priorities Overview

2022-23

Compiled By:

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Engagement Intern, State Board of Health

Hannah Haag, MA
Outreach Coordinator, State Board of Health

Background

- To bring more awareness to the Board about existing public health priorities in Washington
- Information pulled from publicly available, pre-existing sources (strategic plans, websites, etc)
    - Listening to community
    - Doing our own homework
    - Respecting the work that has already been done

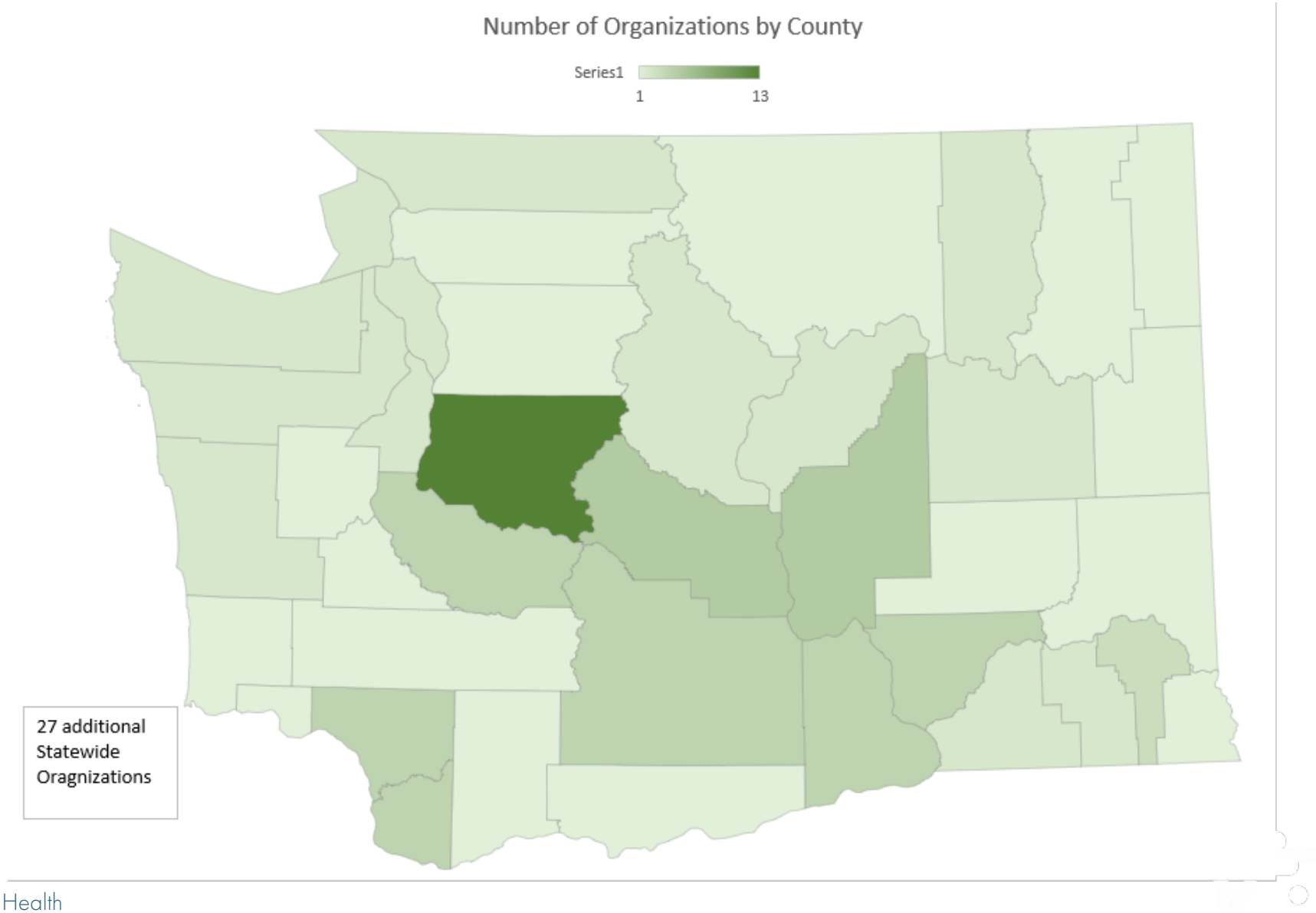
Scope

- 294 individual priorities
- 56 distinct agencies/organizations
- Priorities from 2020-2023
- Sources include:
  - Accountable Communities of Health
  - Counties
  - Cities
  - Local Public Health
  - Community Organizations
  - Tribal Organizations

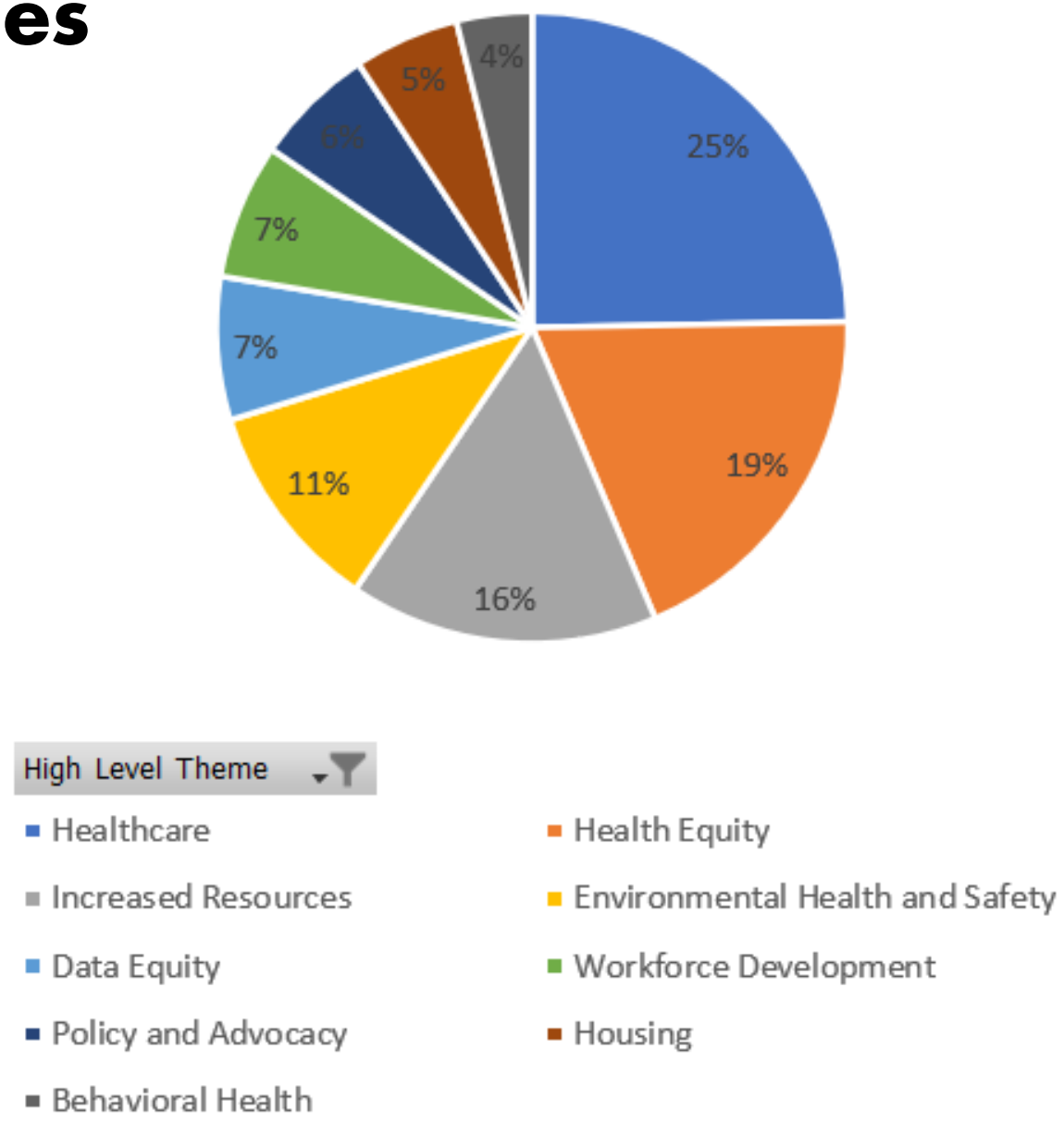
Specific Communities

- African American/Black
- Latinx Community
- Asian Pacific Americans
- Communities in Rural Washington
- African Immigrant Communities
- Eritrean Community
- BIPOC Communities
- People with Developmental Disabilities
- Immigrant/Refugee Populations
- Somali Community
- Tribal Communities
- People experiencing poverty
- Arabic-speaking communities

Geographic Representation



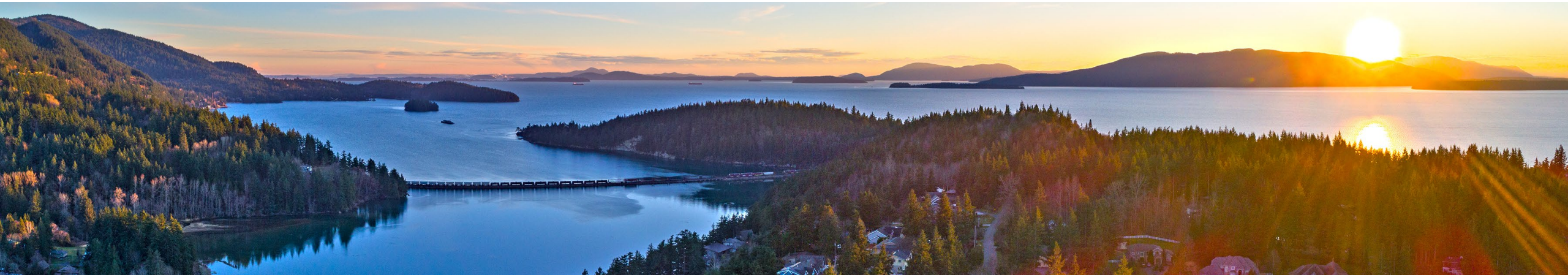
High Level Themes



Detailed Themes

- Adverse Childhood Experiences
- Affordable Health Care
- Behavioral Health
- Childcare
- Childcare Accessibility; Health Care Access
- Childhood Health
- Climate Preparedness
- Commercial Tobacco
- COVID
- Culturally and Linguistically Appropriate Health and Social Services
- Data Equity
- Economic Empowerment
- Education
- Environmental Equity
- Environmental Health
- Environmental Policy and Funding
- Equitable Health Policy
- Equitable Services for Incarcerated or Formerly Incarcerated Populations
- Flu
- Food
- Funding for Public Health
- Health Advocacy
- Health Care Coordination
- Health Care Delivery
- Health Education
- Health Equity
- Healthcare
- Healthcare Access
- Healthy Habitat
- HIV Care
- Housing
- Increased Partnerships
- Increased Resources
- Increased Wellbeing
- Infant Screenings
- Language Access
- Maternal Health
- Mobility
- Newborn Health
- Oral Health
- Policy and Advocacy
- Prescription Drug Affordability
- Reproductive Rights
- Social & community, Politics
- Social and Racial Justice
- Substance Use
- Systems Evaluation
- Transportation Systems
- Workforce Development
- Youth Empowerment

So What?



- Find interested parties
- Expand understanding of the issues and communities connected to specific rulemaking
- First step to doing our homework to better understand the public health priorities in Washington
- Help Board staff learn about the language community is using to make meaning about their own experiences with public health issues
- Be an equity-focused partner in the work of building health for all in Washington by listening and learning

In what ways do you see this being a useful tool for Board members?

THANK YOU

WASHINGTON STATE BOARD OF HEALTH

To request this document in an alternate format or a different language, please contact the Washington State Board of Health at 360-236-4110 or by email at wsboh@sboh.wa.gov.

Department of Health Updates

Washington State Department of HEALTH

State Board of Health Meeting

June 12, 2023

@WaDeptHealth
@WaHealthSec
@Ushahmd

2022-23 Flu Season

Flu Deaths

- 2022-2023 flu season had highest number of lab-confirmed influenza-associated deaths in five years
  - 262 reported deaths
  - Tenfold increase over 2021-2022 flu season

- Flu vaccine was effective in preventing flu hospitalizations and deaths

Washington State Department of HEALTH

Source: https://doh.wa.gov/newsroom/washington-flu-deaths-increased-tenfold-season-compared-last-year

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@WaHealthSec
@Ushahmd

Considerations

- Flu activity was significantly higher during the 2022-2023 season than the 2021-2022 season
  - 2020-2021 and 2021-2022 flu season were outliers with unusually low flu activity likely due to pandemic measures
  - 3 of the 7 previous flu seasons have had about 250 flu deaths or more

- Community mitigation measures did not remain consistent across the two seasons

Washington State Influenza Deaths

Table 5: Count of Reported Laboratory-Confirmed Influenza-Associated Deaths, Past Seasons to Week 20 and Total

Season	Count of Deaths as of Week 20 of Season	Count of Deaths Reported for the Entire Season (week 40 to week 39)
2022-2023, to date	262	262
2021-2022	16	26
2020-2021	0	0
2019-2020	103	114
2018-2019	225	245
2017-2018	287	296
2016-2017	277	278
2015-2016	65	67
2014-2015	149	156

Table 4: Count and rate of reported laboratory-confirmed influenza-associated deaths by age group, Washington, 2022-2023 season to date

Age Group (in years)	Count of Deaths	Death Rate (per 100,000 population)
0-4	2	0.44
5-17	3	0.25
18-29	2	0.17
30-49	15	0.77
50-64	41	2.86
65+	199	16.96
Total	262	3.53

Washington State Department of HEALTH

Source https://doh.wa.gov/sites/default/files/2022-10/420-100-FluUpdateSeason2022.pdf?uid=64556772a0244

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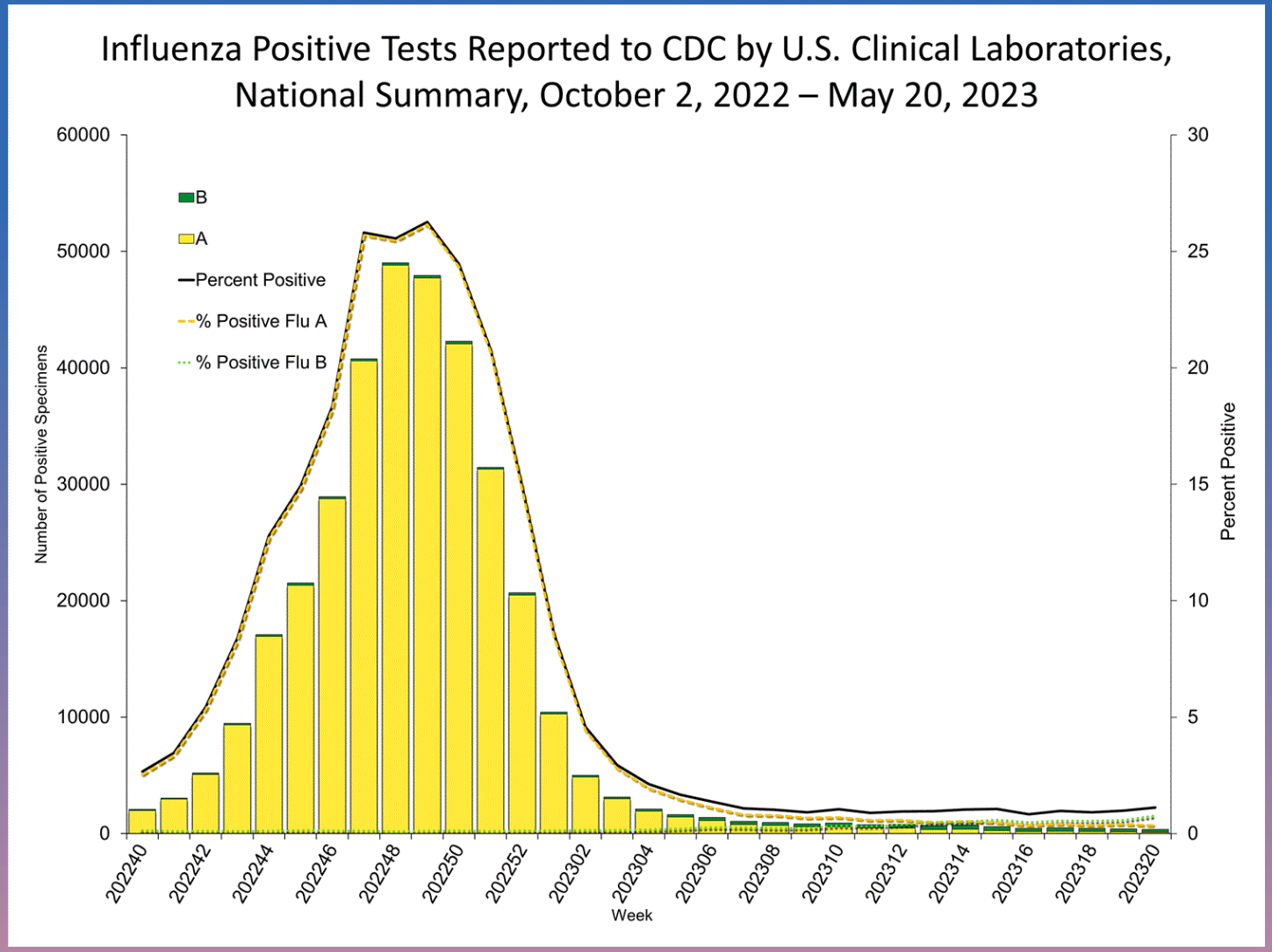
U.S. Influenza Activity



Source: https://www.cdc.gov/flu/weekly/index.htm

Washington State Department of HEALTH

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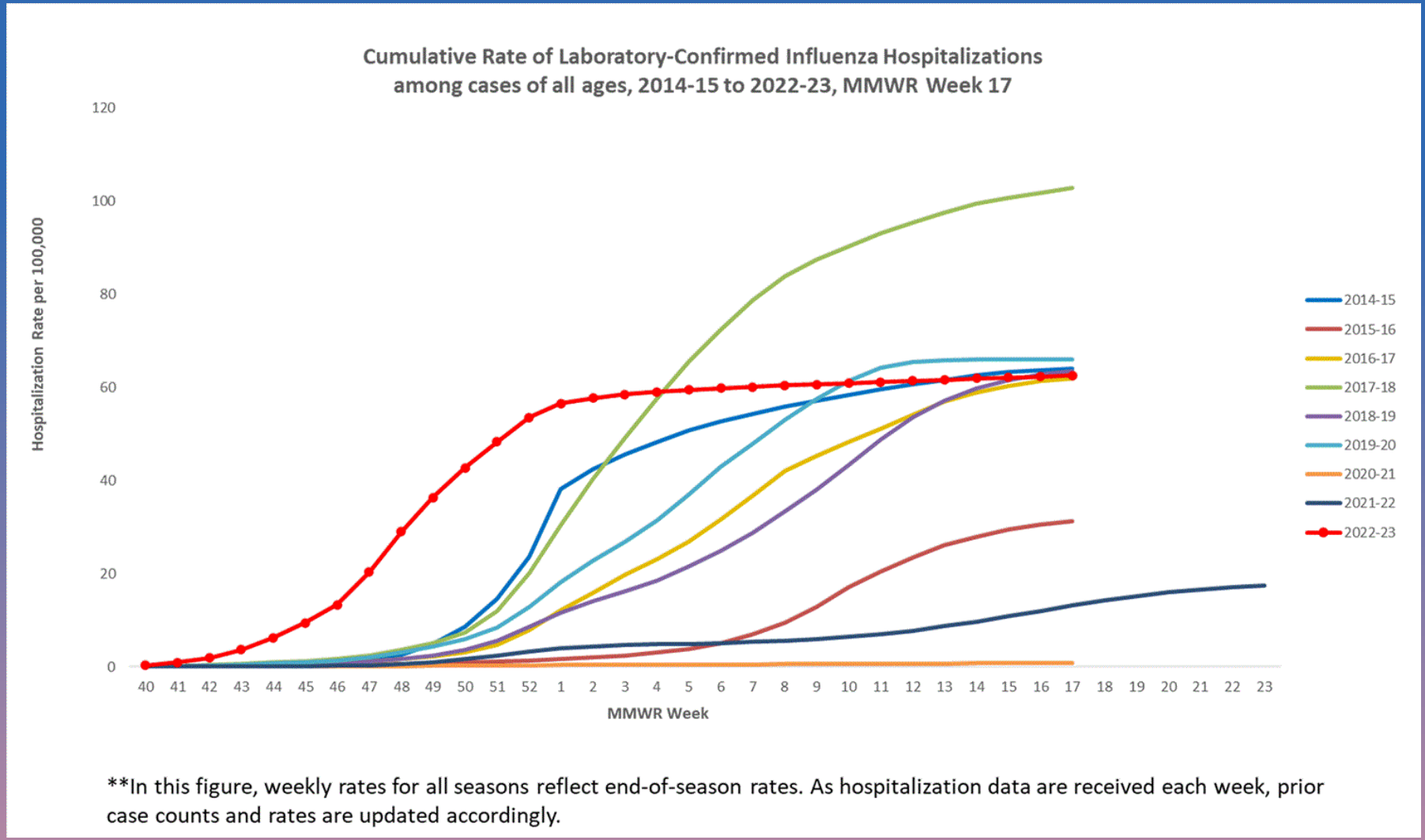
U.S. Influenza Hospitalizations



**In this figure, weekly rates for all seasons reflect end-of-season rates. As hospitalization data are received each week, prior case counts and rates are updated accordingly.

Washington State Department of HEALTH

Source: https://www.cdc.gov/flu/weekly/index.htm

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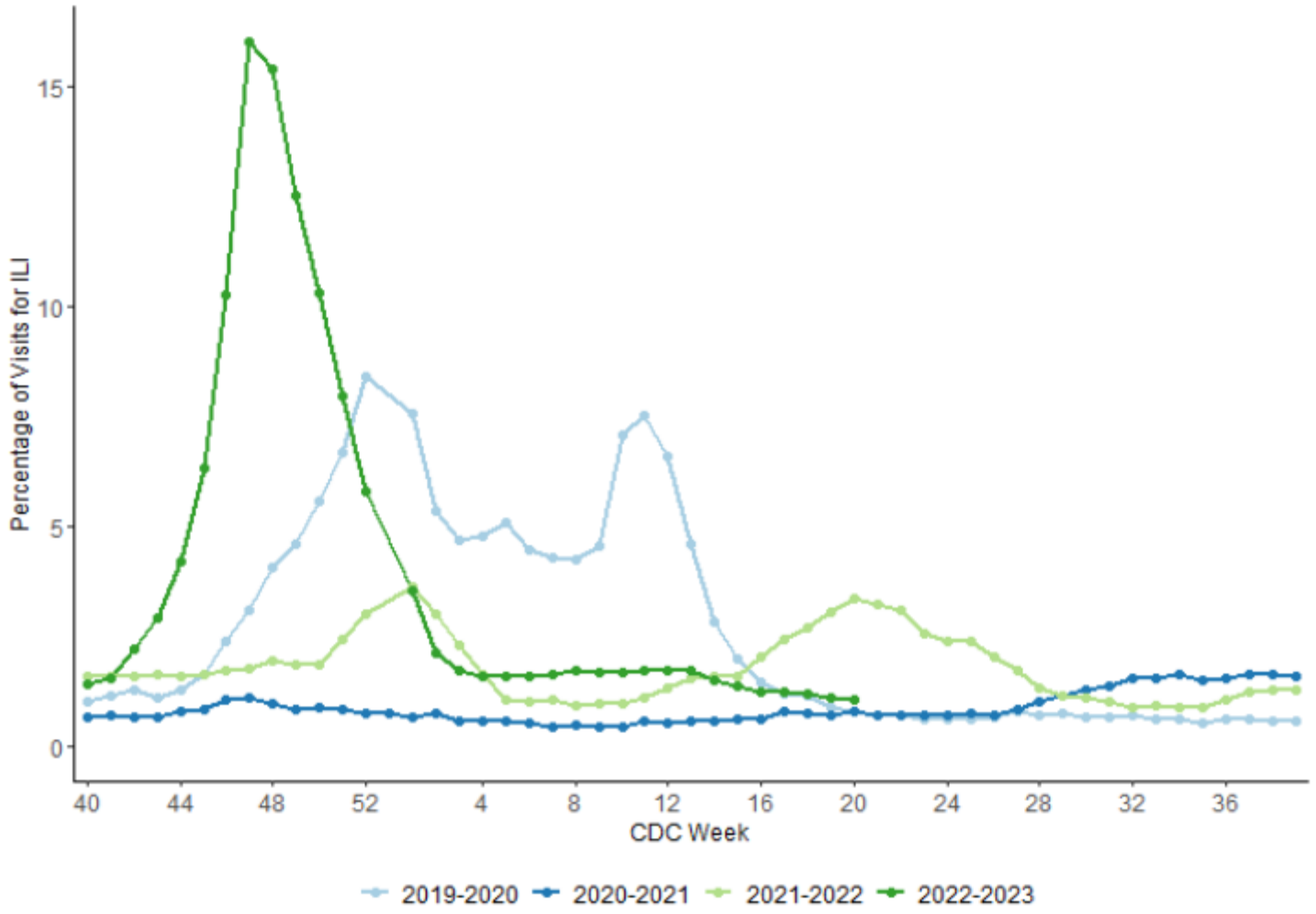
Washington State Influenza Activity

Figure 4: Syndromic Surveillance, Percentage of Hospital Visits for a Chief Complaint of ILI, or Discharge Diagnosis of Influenza, by CDC Week, Washington, 2019-2023



Source: https://doh.wa.gov/sites/default/files/2022-10/420-100-FluUpdateSeason2022.pdf?uid=64556772a0244

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Washington State

Immunization Summit

- Within Reach Immunization Summit held on May 25, 2023
- More than 450 attendees, in person & virtual
- Health care providers, local health jurisdictions, tribal partners, community health workers
- Speakers shared tools, skills, and knowledge to to be successful in equitably improving vaccination rates for diverse communities

Misinformation and Vaccine Hesitancy

Vaccine hesitancy plays an important role in the decreasing rates of vaccination and is considered by the World Health Organization as a top ten global threat to public health.

We're In This Together

- Take Your Shot with the Seattle Storm and DOH at home events with our Care-a-Van
  - Routine childhood vaccines for ages 3-17
  - COVID-19 vaccines for all ages 3 and older
- Community engagement
- Partnerships
- Trusted community messengers

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Tribal Opioid/Fentanyl Summit

Office of Tribal Public Health & Relations

OTPHR Government-to-Government

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
PO Box 47830 | Olympia, WA 98504-7830
(360) 236-3000 | 711 Washington Relay Service

May 31, 2023

RE: Washington State Department of Health Launching **New** Office of Tribal Public Health & Relations (OTPHR)

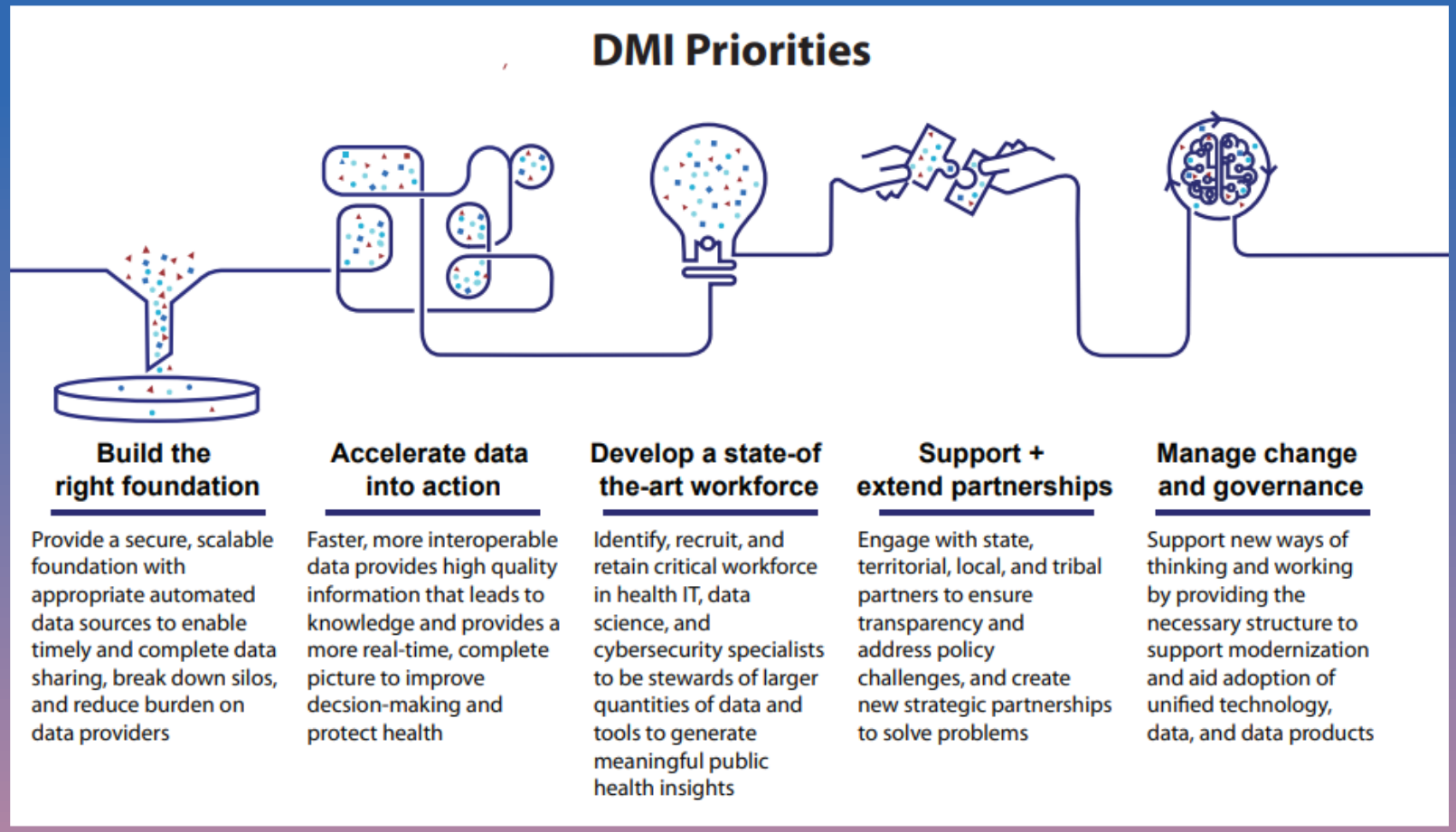
Greetings Honorable Tribal Leaders and Tribal Partners,

Thank you for your continued leadership and commitment to serving the needs of Tribal people and the communities in which they live across Washington and beyond. In accordance with chapter 43.376 RCW, the Washington State Centennial Accord of 1989, and Washington State Department of Health (DOH) Consultation and Collaboration Procedure, we invite collaboration with sovereign tribal nations and tribal organizations in the development of policies, agreements, and program implementation that directly affects Indian tribes and tribal people.

Almost a year into the launch of the *DOH Transformational Plan: A Vision for Health in Washington State* (Dear Tribal Leader Letter – August 3, 2022), we have continued to listen, have learned a tremendous amount, and continue to recognize of the work that remains. Our agency's cornerstone values of **Equity, Innovation, and Engagement (EIE)** are the foundation of the plan and help to focus our work on five key priorities that reenergize our commitment to *Transformational Health*:

Data Modernization Initiative (DMI)

DOH is aligning with CDC around core DMI priorities



Better Data. Better Decisions. Better Health

WA DOH 5 Year DMI Priorities

- To modernize disease surveillance systems and the overall health information system ecosystem
  - Standardize data practices and increase interoperability
  - Strengthen data integration and advanced analytic capabilities
  - Revise data governance policies and statutes
  - Improve data timeliness and data quality for rapid decision-making support
  - Invest in our people, processes, and technology

Current DOH DMI Initatives

- Center for Data Modernization and Informatics and Center for Data Science established to support agency data modernization strategy and implementation.
- Developing a board for data governance, data modernization, and cloud analytics. This group will have representation from state, local, and tribal partners and will drive strategy and priorities for agency data modernization efforts.
- Creating the Public Health Data Learning Center in partnership with the University of Washington/Northwest Center for Public Health Practice.
- Investments in enterprise infrastructure for data analytics and visualization.

DMI Successes at DOH

- Establishment of Surveillance, Epidemiology and Data Science Community of Practice.
- Deployed state Public Health Data Learning Center, with first round UW and DOH led Data Science Training Collaborative.
- Launched Opioid and Overdose dashboards to support public health decision making with near real-time data sharing.
- Developing burden of disease methods to estimate the public health impact of on our communities.
- Retooling our disease surveillance systems to improve response readiness and streamline timeliness of data collection and dissemination across critical response partners in the state of WA.

United States

Congressional Debt Limit

- U.S. debt limit raised until January 1, 2025 (H.R. 3764)
- Bill caps non-defense discretionary spending at the fiscal year 2023 level
- Rescinds unobligated Federal COVID-19 funding ($28B)

H.R.3746 - Fiscal Responsibility Act of 2023

118th Congress (2023-2024) | Get alerts

LAW Hide Overview ✕

Sponsor: Rep. McHenry, Patrick T. [R-NC-10] (Introduced 05/29/2023)

Committees: House - Ways and Means; Budget; Appropriations; Veterans' Affairs; Rules; Transportation and Infrastructure; Judiciary; Education and the Workforce; Agriculture; Energy and Commerce; Financial Services; Natural Resources; Small Business; Homeland Security

Latest Action: 06/03/2023 Signed by President. (All Actions)

Roll Call Votes: There have been 12 roll call votes

Tracker: Introduced > Passed House > Passed Senate > To President > **Became Law**

New CDC Director

- Current CDC Director Rochelle Walensky to step down June 30th
- President Biden picked Mandy Cohen, MD, MPH, to lead CDC
- Dr. Cohen was North Carolina health secretary 2017-2022

Transforming Our Public Health System Together

1. 2022-23 had high level of flu related deaths, but was not significantly higher than recent flu seasons before pandemic.
2. Washington state's public health system is being strengthened through workforce development, coalition building, and data modernization, to tackle the health threats facing our communities.
3. The new Office of Tribal Public Health & Relations will lead our government-to-government relations with tribal partners and serve as the primary point of contact for the 29 sovereign tribal nations.
4. With federal debt ceiling crisis averted, new CDC director will likely renew focus on connecting often-siloed parts of health systems and building bridges between public health and health systems.

Going farther together

Washington State Department of
HEALTH

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WASHINGTON STATE BOARD OF HEALTH

Date: June 14, 2023

To: Washington State Board of Health Members

From: Keith Grellner, Board Chair

Subject: Effective Date Extension – Primary and Secondary Schools, chapter 246-366 WAC, and Environmental Health and Safety Standards for Primary and Secondary Schools, chapter 246-366A WAC

Background and Summary:

Under the authority of RCW 43.20.050, the State Board of Health (Board) revised its environmental health and safety standards for primary and secondary schools on August 12, 2009. The adopted rules reflect the Board's intent to have chapter 246-366A WAC supersede chapter 246-366 WAC to promote safe and healthy school environments. The new rules have not been implemented due to restrictions enacted by the Legislature related to concerns with the financial impact of the new rules.

The 2009 – 2011 Washington State operating budget bill included a proviso prohibiting the Washington State Department of Health and the Board from implementing new amended school rules until the Legislature takes action to fund implementation. Based on that directive, the Board filed a Rule-Making Order (CR-103) on December 22, 2009, specifying a July 1, 2010, effective date for the new rules. The Board agreed to review the actions of the Legislature at the end of each session to determine whether any portions of the rules could be implemented and to amend the CR-103 accordingly.

Each subsequent biennial budget has included the proviso prohibiting implementation of the new rules and has provided no implementation funding. The Board voted to continue to delay the effective date at the following meetings:

- March 10, 2010 (filed as WSR 10-12-018 on May 21, 2010)
- April 13, 2011 (filed as WSR 11-10-080 on May 3, 2011)
- March 13, 2013 (filed as WSR 13-09-040 on April 11, 2013)
- March 11, 2015 (filed as WSR 15-09-070 on April 15, 2015)
- June 14, 2017 (filed as WSR 17-14-055 on June 28, 2017)
- June 12, 2019 (filed as WSR 19-14-107 on July 2, 2019)
- June 9, 2021 (filed as WSR 21-14-056 on July 1, 2021)
- June 8, 2022 (filed as WSR 22-14-021 on June 24, 2022)

At its June 2022 meeting, the Board elected to extend the effective date by one year and authorized the Board Chair to send a formal letter to the Governor, Office of the Superintendent of Public Instruction (OSPI), Department of Health (Department), and other interested parties to indicate these chapters of rule need to be updated. Board staff also participated in meetings with the Department, Governor's Office, OSPI, Office

(continued on the next page)

of Financial Management, and certain members of the Legislature to discuss the school rules.

In the 2022 supplemental operating budget, funds were allocated to the Department to contract with the University of Washington (UW) to develop a report for the Legislature regarding the standing of school environmental health policies and standards. The report was due to the Legislature by December 31, 2022.

At the March 8, 2023, Board meeting, the Board received a briefing on this report and its findings titled, Environmental Health and Safety Study in Washington's K-12 Schools. The Board also voted to draft another letter to the Legislature urging the removal of the proviso from the state operating budget. The letter was sent to the Legislature following the meeting.

During the 2023 legislative session, Engrossed Substitute Senate Bill 5187, included the budget proviso. For this reason, the Board must file a new CR-103 before August 2023 to extend the effective date of the rules.

Today, Juan Gamez Briceño, the School Environmental Health and Safety and Indoor Air Quality Section Manager for the Department of Health's Office of Environmental Health & Safety, will offer a brief presentation and discussion of the background, history, and next steps regarding the school environmental health and safety rules.

The Board must further delay the effective dates for the school rules, leaving the outdated rules in chapter 246-366 WAC to remain in effect.

Recommended Board Actions:

The Board may wish to consider and amend, if necessary, the following motion:

The Board directs staff to amend the effective date of new sections of chapter 246-366 WAC and new chapter 246-366A WAC, as filed in WSR 22-14-021, by filing a new CR-103, Order of Adoption, to delay the effective date of the new rules to August 1, 2024.

Staff

Andrew Kamali

Washington State Department of HEALTH

UPDATE ON SCHOOL RULES

State Board of Health-June Board meeting 2023

Presenter:

State Board of Health Meeting

06.14.2023

Juan C. Gamez Briceño

Lodging, Schools EHS +IAQ, Legionella & CDL Manager

Office of Environmental Health and Safety

Chapter 246-366
Washington Administrative Code

- 1955 – earliest version, but not earliest rules
- Covers all new, major remodel, public, private K-12
- Local Health Jurisdictions requirements:
  - Site Approval
  - Plan Review
  - Pre-opening Inspections
  - Annual inspections
  - **1971 - “Periodic” inspections**
- 2004-2009 – latest rule revision
- In 2009, State Board of Health adopted chapter 246-366A WAC
  - State legislation prohibited implementation due to funding.

Title 28A RCW - Common School Provisions

RCW 28A.335.010, School Districts' Property - Last updated in 1969:
Are laws that apply to Public School Buildings, maintenance, furnishing and insuring.

Every board of directors, unless otherwise specifically provided by law, shall:

(1) Cause all school buildings to be properly heated, lighted and ventilated and maintained in a clean and sanitary condition; and

(2) Maintain and repair, furnish and insure such school buildings.

2003

School Environmental Health & Safety Rule Review

January 8, 2003: SBOH requested staff to prepare and submit a rule review document by July 2004

SBOH Goals for the Rule Revision:

- Proactively protect children's health.
- Be based on the best available science.
- Ensure accountability between school districts, their communities and local health jurisdictions.
- Support and promote current school health and safety programs that work.
- Present the least burdensome regulatory structure.
- Be compatible and consistent with existing related regulations (such as building codes).
- Be realistic about resource limitations of schools and local health jurisdictions.

School Rule Development 2004-2009

- Large, inclusive rule development committee.
- 3 technical workgroups: IAQ, Drinking Water, Safety.
- 3 successive drafts for review/comment.
- WAC 246-366A adopted by the SBOH August 12, 2009.
- Legislative proviso in state's 2009-2011 operating budget restricted implementation of new or amended school environmental health rules unless funding provided.
- Proviso still in effect.

The School Environmental Health & Safety Program at DOH

Provide technical support & training

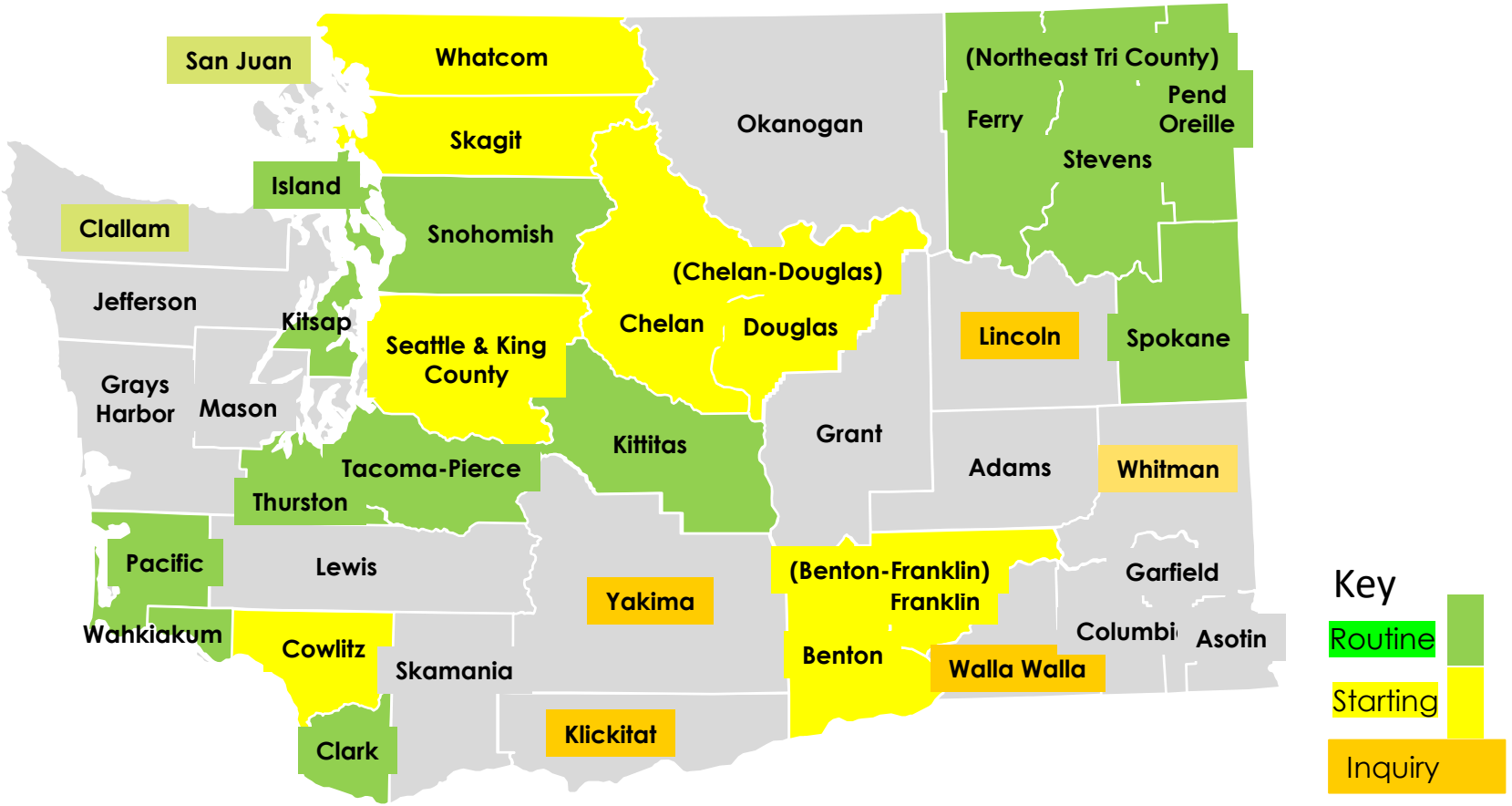
- Local Health Jurisdictions (LHJs)
- Schools

Authority

- RCW 43.20.050(2)(c) Adopt rules controlling public health related to environmental conditions including but not limited to heating, lighting, ventilation, sanitary facilities, cleanliness and space in all types of public facilities including but not limited to food service establishments, schools, institutions, …
- State Board of Health chapter 246-366 WAC
- DOH / OSPI K12 Health & Safety Guide

  2000, 2003 – current edition. Being updated Summer 2023.

Local Health Jurisdiction
School Environmental Health & Safety Inspection Programs



- Schools in all 39 counties in the state receive food service inspections, construction plan review and complaint response from their LHJ.
- **17 LHJs** have or are starting school programs with **periodic routine inspections.** Seven more are starting the process of implementing a program.

The University of Washington Report in 2022

- Foundational Public Health Services funding allowing more LHJs to increase School EHS work under WAC 246-366

The legislature ordered a report that was due on December 31, 2022, regarding school environmental health policies, recommendations, and standards by the University of Washington Department of Environmental and Occupational Health Sciences

- A review of policies and regulations in other states pertaining to environmental health in K-12 schools;
- Literature and recommendations for exposure standards and remediation levels which are protective of health and safety for students in schools;
- A summarization of activities, such as inspections, management, control levels, and remediation of a variety of contaminants and issues, including PCBs, lead, asbestos, poor ventilation, and mold; and
- Recommendations for next steps for policies and standards in Washington schools.

School Environmental Health & Safety

The evidence is clear that **improved school environments reduce absenteeism, improve academic performance and attentiveness, and reduce the incidence of communicable respiratory diseases and asthma episodes**.

School environmental conditions that affect the health and success of children include (but are not limited to) **indoor air quality, drinking water, air temperature, lighting, noise levels, moisture, dust, and animal dander and feces**.

Ongoing Work

- Update the Health and Safety Guide for K-12 schools.
- Continue working with LHJs during our monthly School EHS Program Partners' meetings and provide training sessions, open forum for discussions about hot topics, and communication between LHJs and School partners.
- Provide training and technical assistance to improve ventilation, chemical storage, identify school hazards and best practices, and other informational opportunities for schools in WA.
- Continue to provide technical guidance to schools under chapter 246-366 WAC.

Questions?

Juan Gamez Briceño
juan.gamezbriceno@doh.wa.gov

Special thanks to Nancy Bernard, Julie Awbrey, Lori Karnes, and all LHJs in the state

Thank you!

Washington State Department of HEALTH

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WASHINGTON STATE BOARD OF HEALTH

Date: June 14, 2023

To: Washington State Board of Health Members

From: Keith Grellner, Chair

Subject: Update—Per- and Polyfluoroalkyl Substances (PFAS) Rule Implementation and Related Issues, Group A Public Water Supplies, Chapter 246-290 WAC

Background and Summary:

Per- and polyfluoroalkyl substances (PFAS) are a group of chemicals used or found in many industrial processes and consumer products ranging from carpets and clothing to cookware and fire-fighting foam. Among other qualities, PFAS are stain resistant, water repellant, and heat stable.

Unfortunately, some PFAS also have known health effects and are considered PBTs—persistent in the environment, bio-accumulative in organisms, and toxic at relatively low levels. The synthetic chemicals are now found globally in the environment often associated with releases from manufacturing sources or use of fire-fighting foam at military installations, airports, and fire-training stations. PFAS are increasingly detected in drinking water sources across the country and have been detected in drinking water in Washington state. These include drinking water sources near several military installations in Washington.

In 2021, the State Board of Health (Board) working closely with the Washington Department of Health (Department), adopted revisions to Board rules on Group A Public Water Supplies, chapter 246-290 WAC, and companion rules on Drinking Water Laboratory Certification and Data Reporting, chapter 246-390 WAC. The rulemaking reset procedures and requirements for developing and adopting State Action Levels (SALs) and state Maximum Contaminant Levels (MCLs) for drinking water. The rulemaking also established SALs for five PFAS analytes. There currently are no national drinking water MCLs for PFAS. In March 2023, the U.S. Environmental Protection Agency (EPA) proposed a National Primary Drinking Water Regulation for PFAS. The Board and Department both submitted comments in support of the proposed PFAS drinking water standards.

Today, Mike Means of the Department's Office of Drinking Water and Barb Morrissey of the Office of Environmental Public Health Sciences will update the Board on efforts implementing the Group A drinking water rules for PFAS. The update will include results of PFAS drinking water monitoring, related responses and resource needs, and evolving health guidance on PFAS. Department staff will also address EPA's proposed drinking water standards and optional approaches for future Board action on the standards. Complementing this, Shawn Magee, Environmental Health Director for the Yakima

(continued on the next page)

Health District will give added perspective from a local health jurisdiction responding to the needs and questions of local residents who are dealing with PFAS contamination of private wells near the Yakima Training Center.

Today's update is informational only. There is no formal Board action.

Staff
Stuart Glasoe

The Office of Drinking Water works with others to protect the people of Washington State by ensuring safe and reliable drinking water.

Washington State Department of HEALTH

SBOH PFAS UPDATE

Office of Drinking Water
Office of Environmental Public Health Sciences

SBOH PFAS Update

Mike Means
Capacity Development and Policy Manager
Office of Drinking Water

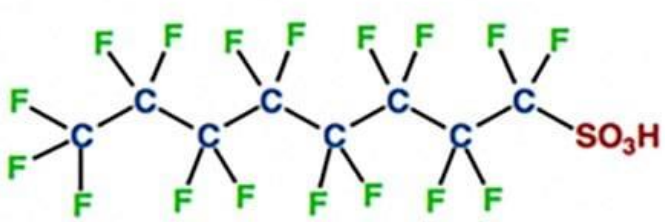
Barbara Morrissey
Toxicologist
Office of Environmental Public Health Sciences

Outline

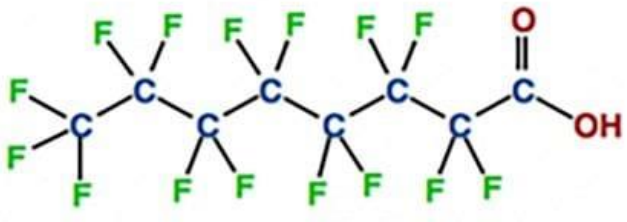
- Background
- Update on water testing required by rule
- Update on Results and Responses
- Funding
- New EPA science assessments
- Proposed MCLs and DOH comments
- Options for potential SBOH rule-making

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)
Nonstick, Stain and Water Resistant, Heat Stable

Per- and polyfluoroalkyl substances (PFAS)



PFOS - perfluorooctanesulfonic acid



PFOA - perfluorooctanoic acid

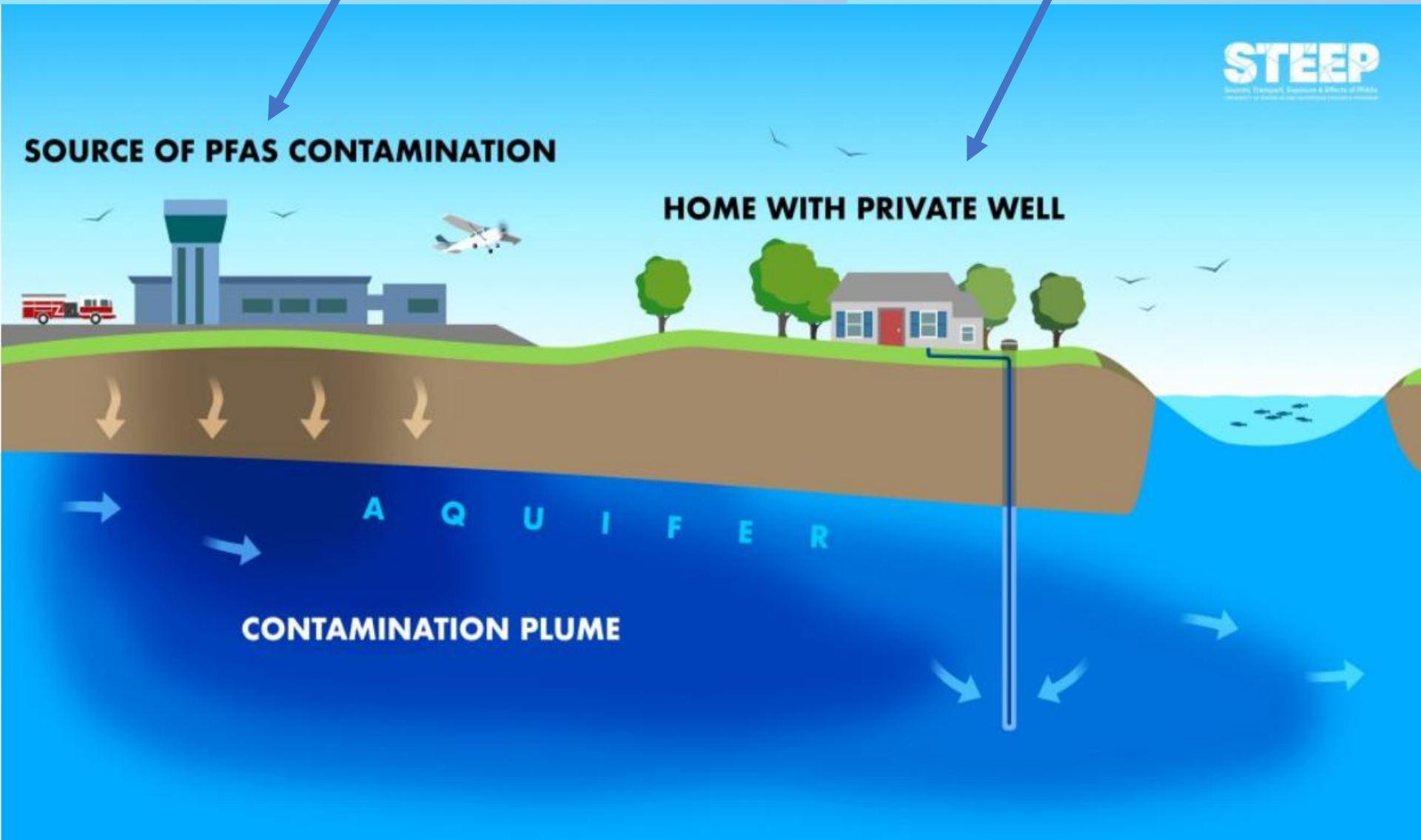
- Large class of Industrial chemicals, not naturally occurring
- Carbon—fluorine bond is extremely stable—persistent
- Some PFAS build up in fish, wildlife, people—bioaccumulate
- Fluorinated tail—repels water and oil, head group is water soluble—mobile in water

Known/suspected sources

- Military sites and civilian airports
- Fire fighting and training areas
- Landfills?
- Industrial discharge of PFAS?

Types of drinking water impacted

- Private wells and Group B systems
- Public water systems—Group A
- Schools, businesses



Health Concerns

Toxicity observed in **laboratory animals**

- Liver toxicity
- Developmental toxicity
- Reproductive toxicity
- Immune toxicity
- Endocrine disruption
- Tumors in liver, pancreas, testes

In humans, PFAS exposure is associated with

- ↑ Cholesterol levels
- ↓ Antibody response
- ↓ Birth weight
- ↑ Risk of kidney cancer
- ↑ Liver enzyme levels

- ↑ Hypertension during pregnancy
- ↑ Risk of thyroid disease
- ↑ Risk of testicular cancer

WASHINGTON STATE BOARD OF HEALTH

2021 State Action Levels (SALs)

Features

- State Action Levels for 5 PFAS
- Requires PFAS testing by most Group A water systems by December 2025
- Requires notification of customers
- Requires follow-up monitoring
- Treatment is not required but is encouraged and supported with earmarked funding

Drinking Water Contaminant	SAL (parts per trillion)
PFOA	10
PFOS	15
PFNA	9
PFHxS	65
PFBS	345

SALs set to be Health Protective

A level in water expected to be without appreciable health effects over a lifetime of exposure, including in sensitive groups.

Based on best available science at time.

DOH Implementation of SALs

1

Regulatory

Enforce requirements

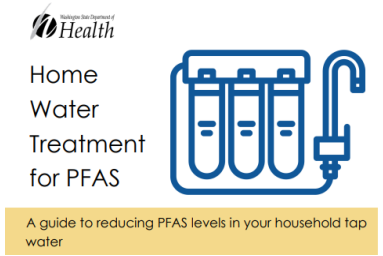
2

Technical Assistance

Public Water Systems

Local Health Departments

3

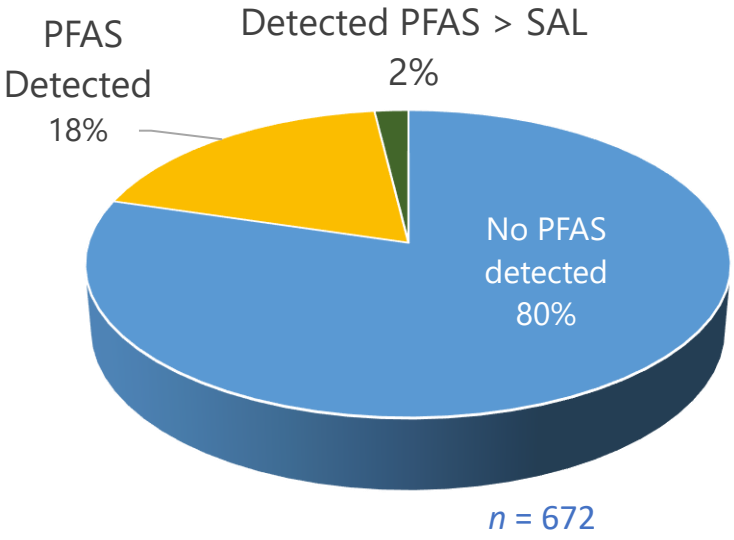


Public Health Advice

Develop advice

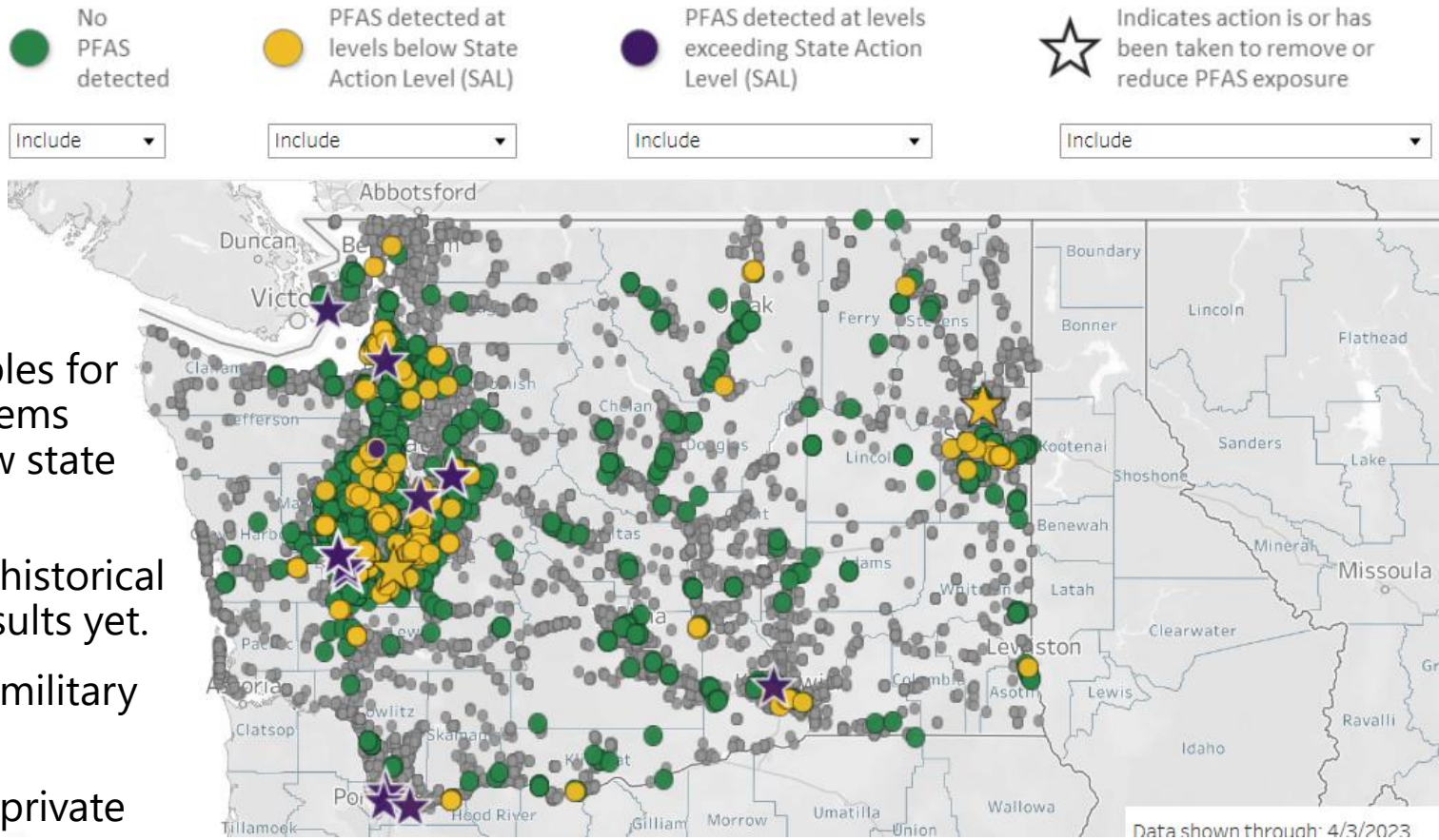
Support communications with customers

Update on Drinking Water Testing



- ~1/4 of public water systems have tested for PFAS (672/2422 systems)
- 80% of systems tested report no PFAS
- 2% of water systems tested have PFAS > SAL

Map of PFAS Drinking Water Testing



Only includes samples for Group A water systems complying with new state rule.

- Doesn't include historical water testing results yet.
- Doesn't include military testing yet.
- Doesn't include private well results

https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/pfas

Results

PFOA and PFOS SALs drive exceedances.

1 source exceeds PFBS and PFHxS SALs; also > PFOS and PFOA

1 source exceeds SAL for PFNA only.

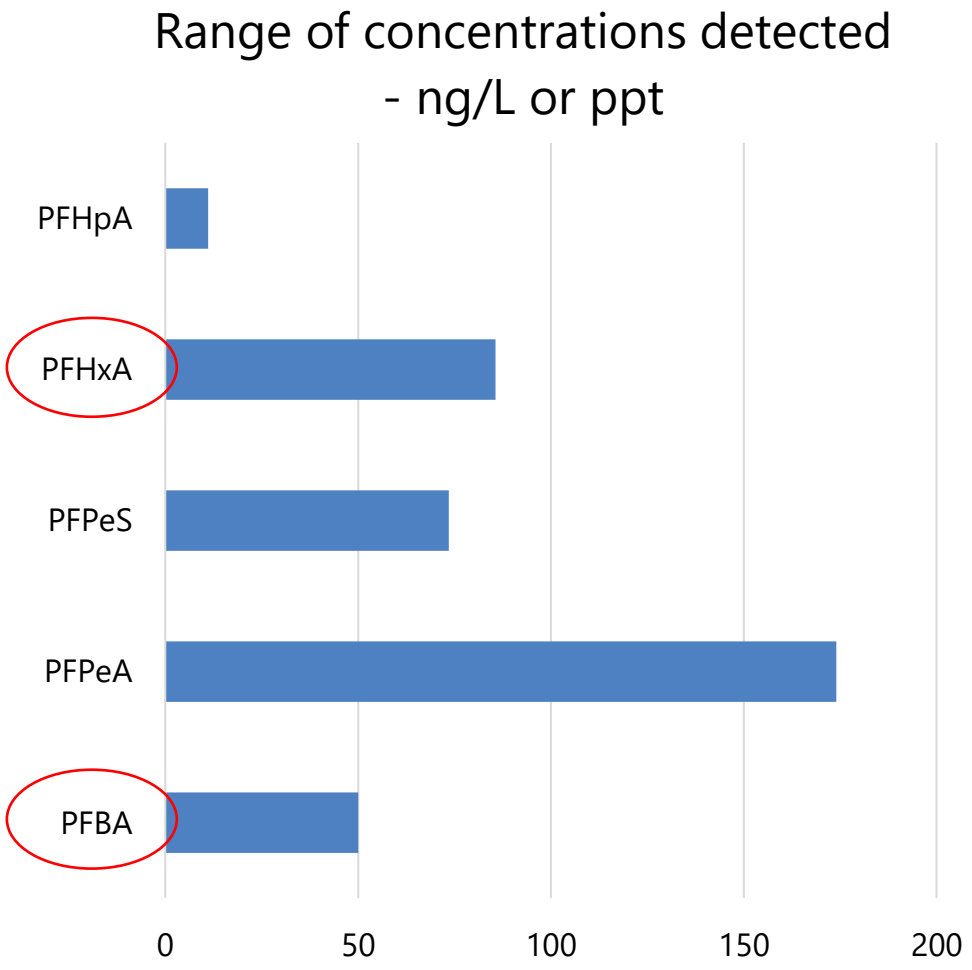
Other PFAS

Five other PFAS frequently detected

No SAL to guide action

Develop state advice?

Adopt SAL? MCL?



Note: Range shown doesn't include one water system with multiple PFAS at very high levels in San Juan County (outlier).

How Water Systems are Responding to Detections

Community Water Systems

- Notifying public of SAL exceedance (required)
- Annual notification for PFAS detections (required)
- Some removing sources from service
- Some offering bottled water
- Exploring treatment alternatives

DOD Military Bases

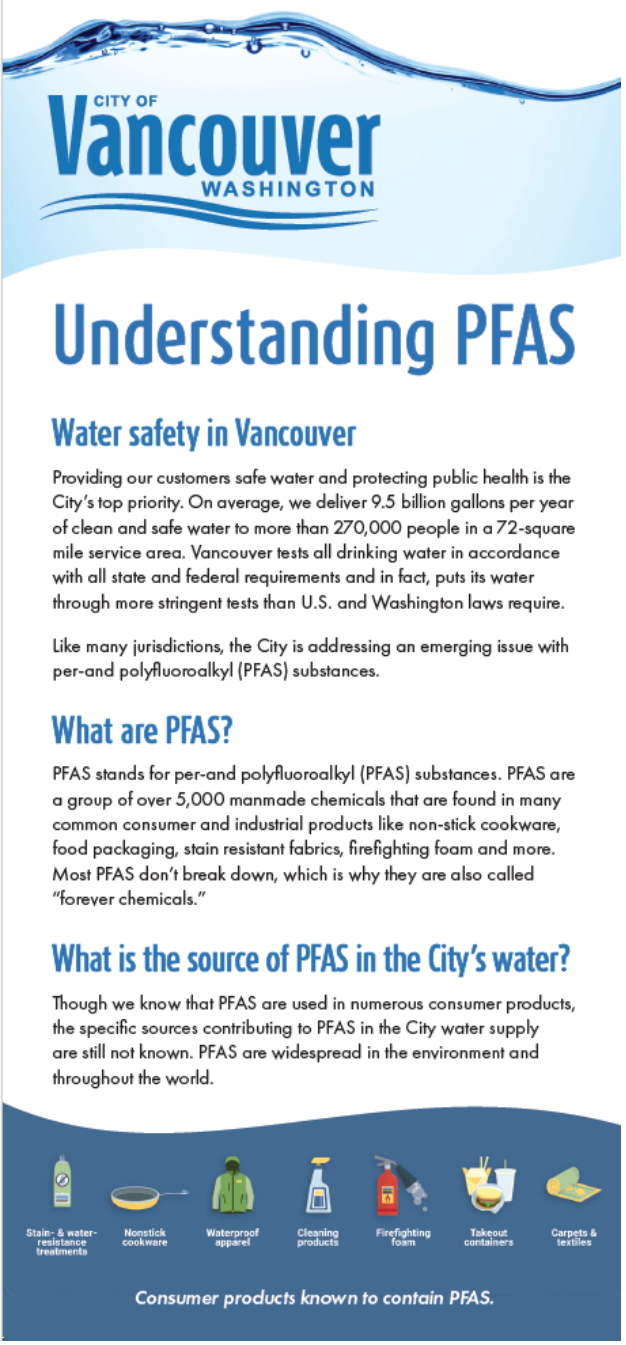
- Providing bottled water and treatment solutions
- Not following State advice—follow EPA 2016 HAL

Tale of Two Systems

Hannah Heights, San Juan County

Photo credit: Karen Ducey, The Seattle Times May 8, 2023.

- Serves 44 homes
- Very high levels of PFAS
- Do Not Drink—using bottled water for drinking and cooking
- San Juan County Health Dept, DOH, and Ecology are providing technical assistance
- Homeowners are researching options—applying for financial support

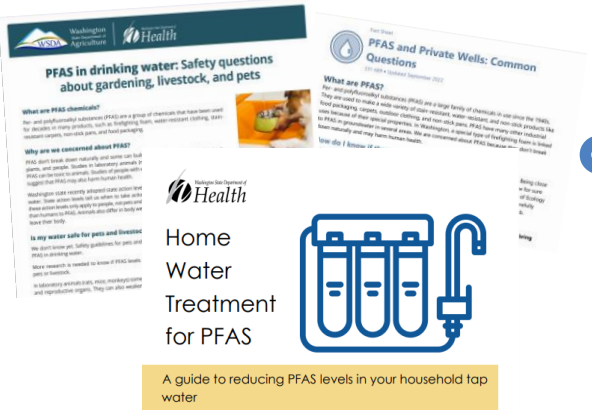


Vancouver, WA

- Serves > 272,000 people
- Low levels of PFAS
- Managing as a chronic contaminant with advice for sensitive populations
- Hired engineering and communication consultants
- Partly funded by SRF to install filtration—*in process*

Educational Outreach & Community Engagement

Youtube videos & factsheets



- DOH and local health partner to help impacted communities know when and how to take action to reduce their exposure
- Communities should be respected as full partners in problem solving
- PFAS are still largely unregulated compounds, many gaps to bridge

Community Listening Sessions

Washington State Action Level for PFAS in Drinking Water

WHEN AND HOW TO LOWER YOUR EXPOSURE TO PFAS IN DRINKING WATER:

If your tap water has PFAS above our SALs, install a filter to reduce the PFAS in the water used for cooking and drinking.

This is especially important for people who are pregnant, breastfeeding, infants drinking formula mixed with tap water, and children under five.

PFAS in tap water don't go through skin easily. It's OK to bathe, wash dishes, laundry, etc.

Other Important Routes of Home Exposure

Gardening

- No clear guideline for what level in garden water is a problem
- Precautionary advice

Livestock

- No clear guideline for what level in animal drinking water is a problem
- Precautionary advice

Funding Resources for PFAS Water Testing and Mitigation

Group A Water Systems

- Drinking Water State Revolving Fund loans (DWSRF) $75M*
- Infrastructure & Jobs Investment Act (IIJA) Stimulus Funding loans $40.2M*
- IIJA Emerging Contaminants loans $17M*
- Emerging Contaminants Small and Disadvantaged Communities (ED-SDC) grants $17M

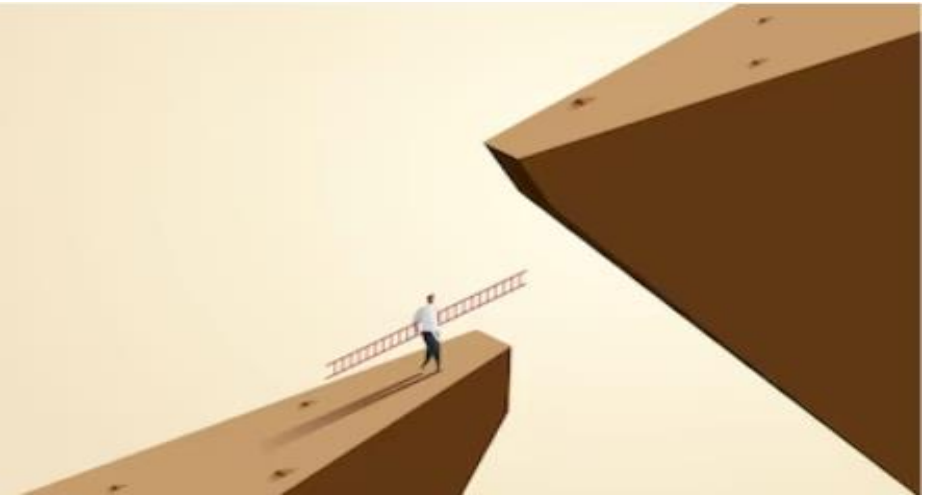
**Up to 100 percent loan principal forgiveness for disadvantaged communities. All amounts are $/per year, unless otherwise marked.*

Group B Water Systems and Private Wells

- State Funding for 2023-2025 biennium only $800K
- MTCA for Point-of-Use filters for private wells near Yakima Training Center with PFAS > SALs but below Army action level (70 ppt for PFOS+PFOA) $70K**

***MTCA funding was one-time funding.*

Gaps in Access to Resources



- Lack of resources for interim response—providing alternate water while a long-term solution is researched and installed
- Federal funds for PFAS testing and mitigation are not available to private wells and Group B
- Smaller public water systems and private wells lack resources and capacity to find PFAS sources and recoup costs

Health Equity Considerations

Health Advice

SAL or MCL w/ funding support

Evolving Health Guidelines for Drinking Water (ng/L or ppt)

EPA Health Advisories 2016

PFOA 70

PFOS 70

WA SALs 2021

PFOA	10
PFOS	15
PFNA	9
PFHxS	65
PFBS	345

Non-cancer endpoints sufficiently protective of cancer endpoint

EPA Health Advisories 2022

PFOA 0.004

PFOS 0.02

PFBS 2000

GenX 10

EPA proposed MCLs 2023

PFOA 4

PFOS 4

Grouped MCL for PFBS, GenX, PFNA & PFHxS

EPA's Proposed National Standards for PFAS in Drinking Water

- DOH is providing comments
- Comment period closed May 30, 2023
- Coordinating with SBOH, Governor's Office, and Ecology

Comments

- DOH supports the rule in general
- Reconsider some science decisions on sensitive groups
- Identified areas to clarify and add more guidance
  - Data challenges
  - Small system compliance
  - Laboratory capability and capacity
  - Monitoring waivers

EPA New Science

2016

- Developmental effects in laboratory animal testing was basis for health-based values of PFOA, PFOS
- Not enough info to set values for other PFAS

2023

- Epidemiology studies are basis for new health-based values for cancer, immune, developmental, liver, and cardiovascular effects for PFOA, PFOS
- Humans more sensitive than rodents
- Regulating PFOA, PFOS as likely human carcinogens
- Regulating 4 PFAS as group—assume effects are additive

Impact of Proposed Federal MCLs

So Far…

Under WA SALs

- 22 sources at 14 public water systems exceed WA SALs

Under Proposed PFOA and PFOS MCLs

- 71 additional water sources would exceed at 47 public water systems

Evolving Health Guidance on PFAS in Drinking Water

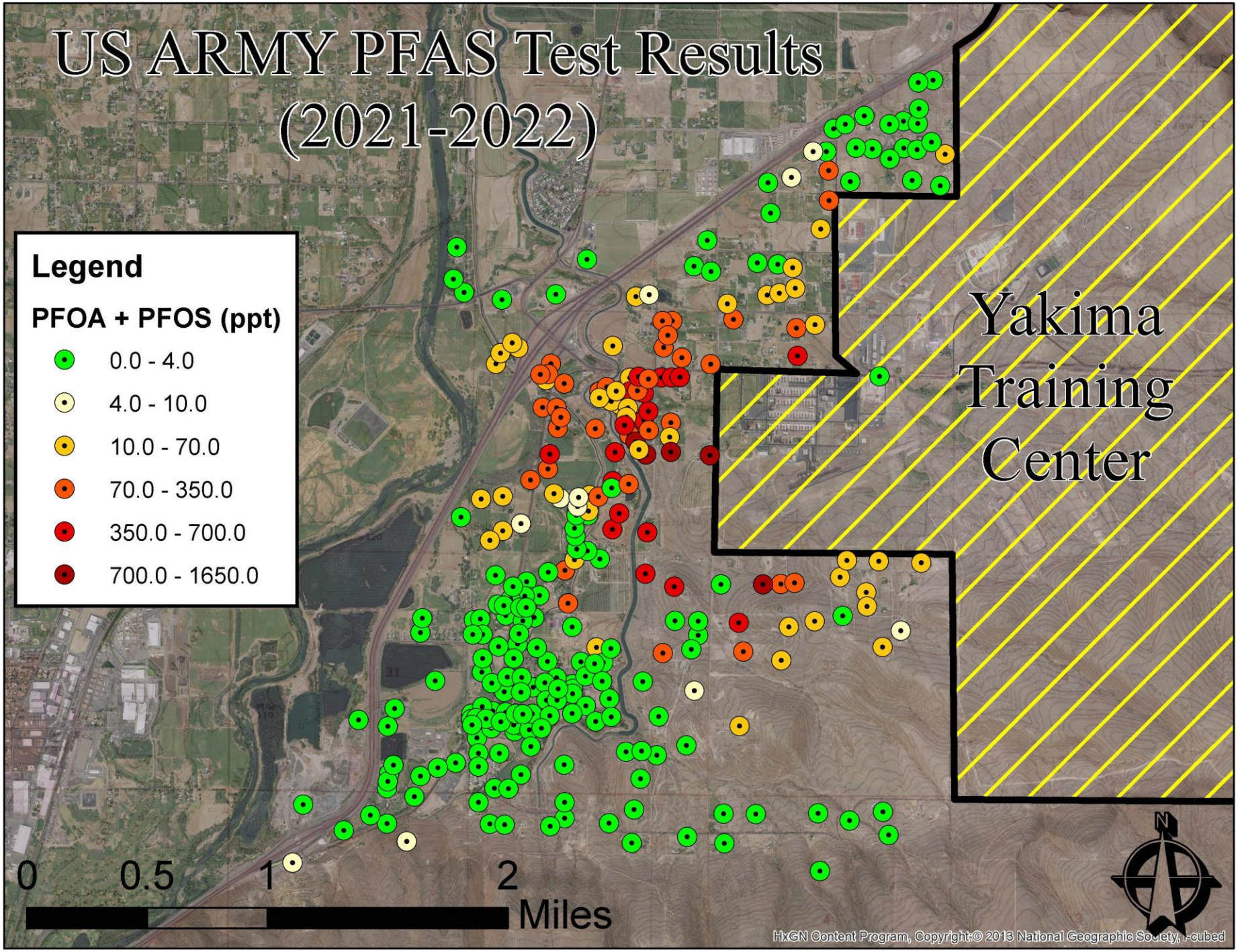
State vs. proposed EPA MCLs for PFAS in Drinking Water (ng/L or parts per trillion)		
Individual PFAS	**WA State Action Levels (2021)**	**EPA proposed MCL (2023)**
PFOA	10	4
PFOS	15	4
Group MCL		HBWC used in hazard index*
PFNA	9	10
PFHxS	65	9
PFBS	345	2,000
GenX	-	10

** Health-based water concentration (HBWC) are the "acceptable" values used to create a ratio of observed/acceptable for each of 4 PFAS. If the ratios add up to more than 1.0, the hazard index MCL is exceeded, and action must be taken to lower PFAS.*

Options for Potential Rulemaking

- Wait for federal MCLs (2024?)
- Begin state rule-making in 2023?

- Adopt federal MCLs by reference when final
- Retain WA PFBS number as state MCL
- Lower SAL values to match proposed MCLs
- Adopt new SALs or MCLs for PFBA & PFHxA
- Retain state requirement that TNCs test for PFAS in areas of contamination


US ARMY PFAS Test Results
(2021-2022)
Legend
PFOA + PFOS (ppt)
0.0 - 4.0
4.0 - 10.0
10.0 - 70.0
70.0 - 350.0
350.0 - 700.0
700.0 - 1650.0
Yakima
Training
Center
0
0.5
1
2
Miles
N
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Questions?

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Frequently Asked Questions

How to Reduce Exposure to PFAS in Your Tap Water

331-681 • Revised 8/31/2022

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a large family of chemicals in use since the 1950s, to make a wide variety of stain-resistant, water-resistant, and non-stick consumer products. Some examples include food packaging, outdoor clothing, and non-stick pans. PFAS also have many industrial uses because of their special properties. In Washington State, PFAS were used in certain types of firefighting foams.

How do I minimize my exposure to PFAS in drinking water?

Use an alternate source of water for drinking and cooking. Another option is to install home water treatment, such as reverse osmosis or an activated carbon filter, that is certified by the National Sanitation Foundation (NSF) to lower the levels of PFAS in your water. Follow the manufacturer's maintenance and replacement recommendations.

Does bottled water contain PFAS?

PFAS have been found in some brands of bottled water. The Food and Drug Administration (FDA) has not put enforceable limits in place yet. The International Bottled Water Association (IBWA) says it requires its members to test their bottled water products yearly for PFAS; and to limit PFAS in bottled water to 5 parts per trillion (ppt) for any one PFAS, or 10 ppt for more than one PFAS. These limits meet Washington State health advice, but might not meet new EPA health advisory levels for PFOA and PFOS.

Note: *Not all bottled water distributers are members of IBWA. You can check at bottledwater.org.*

Should I still breastfeed my baby if there are PFAS in my tap water?

If PFAS are above state action levels (levels put in place to protect human health) in your drinking water, we recommend that you switch to an alternate source of drinking water if available and continue to breastfeed your baby. Based on current science, the known benefits of breastfeeding appear to outweigh potential health risks of PFAS for infants in nearly every circumstance. Talk to your health care provider if you have concerns about PFAS and breastfeeding.

Should I use my tap water to mix infant formula if there is PFAS in my water?

If PFAS are above Washington State SALs in your tap water, we recommend you switch to an alternate source of water to mix your infant's formula.

Can I boil my water to get rid of PFAS?

No, you cannot boil PFAS out of water.

Can I bathe if there are PFAS in my tap water?

Yes. Showering or bathing are not a significant source of PFAS exposure.

Can I wash dishes and do laundry if there are PFAS in my tap water?

Yes. Doing laundry or washing dishes is not a significant source of PFAS exposure.

Can I water my garden with PFAS-contaminated water and eat that produce?

Studies show that some PFAS from soil or irrigation water can be absorbed by plants. The amount of PFAS that ends up in the edible portions varies by soil conditions, type of plant, and the type of PFAS and their concentration in soil and water.

If you are concerned, here are some ways to minimize exposure.

- Wash or scrub all dirt off produce before eating to avoid swallowing soil. PFAS may be in soil particles.
- Peel and wash root vegetables before eating.
- Add clean compost to your garden soil. Increasing the organic content of your garden soil can reduce the amount of PFAS your plants pick up from the soil.
- Use rainwater or install a filter to remove PFAS from garden irrigation water.

Can I water my livestock with PFAS-contaminated water?

PFAS can be absorbed from drinking water by farm animals and transferred into their eggs, meat, and milk. Regular consumption of these animal products could result in elevated exposure for an individual or family. There are no PFAS regulations or advisories to guide consumption of animal products. However, you can reduce your exposure if you:

- Avoid eating organ meats. PFAS can build up in liver, kidney, and the blood.
- Switch your animals to clean water or install a filter to remove PFAS from their drinking water.

For more information

Our publications are online or visit our PFAS Contaminant webpage.

Contact our nearest regional office from 8 AM to 5 PM, Monday through Friday. If you have an after-hours emergency, call 877-481-4901.

Eastern Region, Spokane Valley 509-329-2100.

Northwest Region, Kent 253-395-6750.

Southwest Region, Tumwater 360-236-3030.

WASHINGTON STATE BOARD OF HEALTH

Date: June 14, 2023

To: Washington State Board of Health Members

From: Keith Grellner, Board Chair

Subject: Rules Update – Chapter 246-260 WAC, Water Recreation Facilities, and Chapter 246-262 WAC, Recreational Water Contact Facilities

Background and Summary:

Chapters 246-260 and 246-262 WAC outline requirements for water recreation facilities and recreational water contact facilities to protect the health, safety, and welfare of users. Water recreation facilities are generally bodies of water like a swimming pool, spa pool, or a natural body of water designated for swimming (i.e., a lake). Recreational water contact facilities consist of facilities that differ from swimming pools or lakes, due to features such as water slides, wave pools, and water lagoons.

In December 2016, the State Board of Health (Board) filed a CR-101, Preproposal Statement of Inquiry, to explore possible revisions to chapters 246-260 and 246-262 WAC. These include consideration of the most recent version of the Centers for Disease Control and Prevention's Model Aquatic Health Code (MAHC), 2017 legislation on inflatable water slides, current water recreation technologies, and consolidation of the rules into a single chapter.

The COVID-19 pandemic response and other factors impacted the rulemaking timeline. Department of Health (Department) staff are currently analyzing differences between the MAHC and the water recreation rules to identify preferred language, standards and requirements. Following completion of this initial phase, staff will begin working through the issues and revisions with a technical advisory committee (TAC) comprised of subject matter experts and interested parties outlined in WAC 246-260-191.

Dave DeLong, Program Lead for the Water Recreation Program at the Department, will offer a brief presentation and discussion of the Water Recreation rulemaking process and timeline. The presentation will provide background information and highlight key issues to inform the Board on the subject matter.

This is an informational update not requiring any Board action. The work is still ongoing, and staff plan to return with additional updates and a final project briefing prior to filing the CR-102, Proposed Rulemaking, for public review and comment.

Staff

Andrew Kamali

(continued on the next page)

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PO Box 47990 • Olympia, WA 98504-7990
360-236-4110 • wsboh@sboh.wa.gov • sboh.wa.gov

WATER RECREATION RULE REVISION

David DeLong, Program Lead
Office of Environmental Health & Safety
Water Recreation Program

BACKGROUND

Board filed CR-101 to initiate rulemaking in December 2016

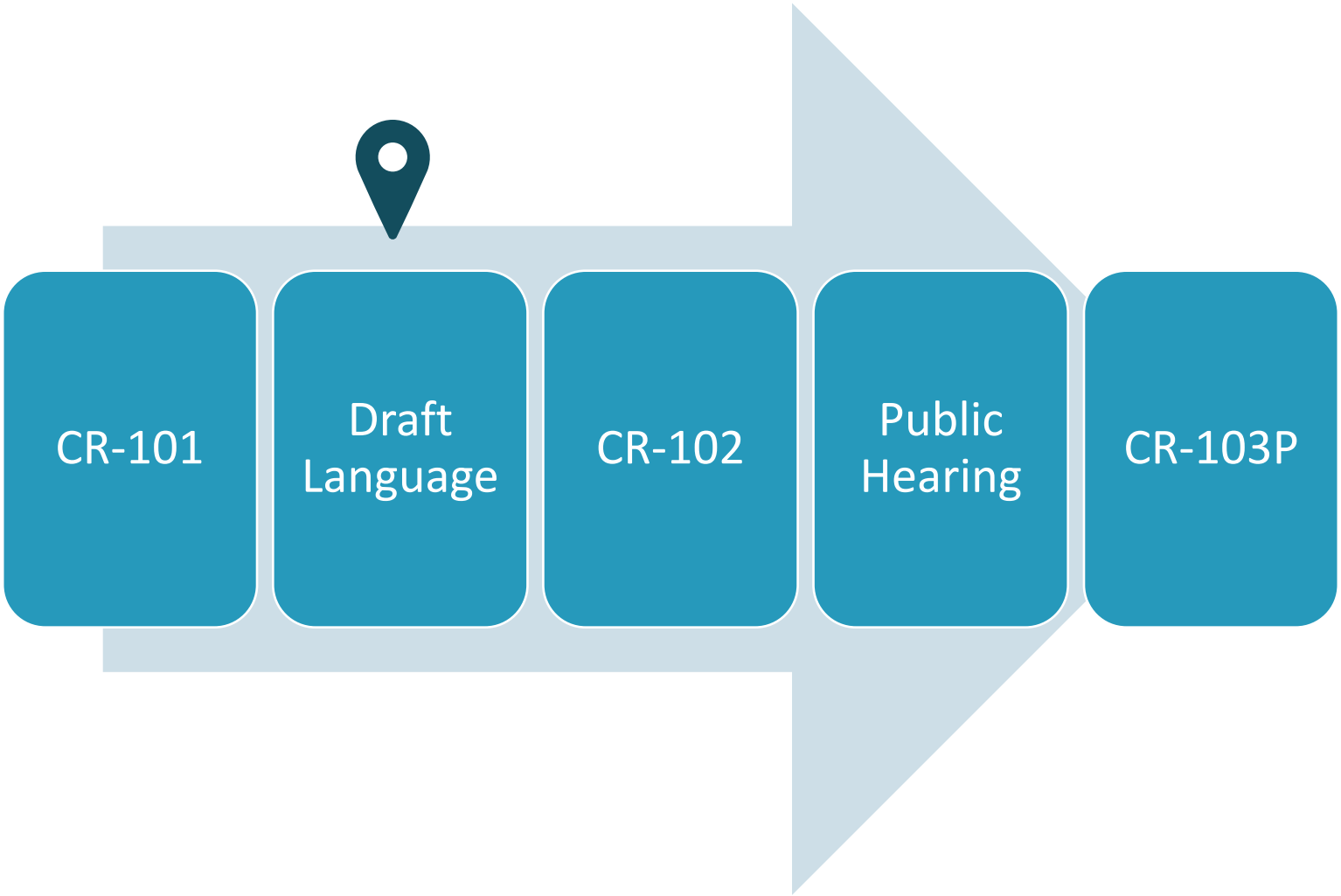
Consider amending:

- Chapter 246-260 WAC, Water recreation facilities
- Chapter 246-262 WAC, Water recreation contact facilities

WHY?

- RCW 70.90.120- review and consider most recent version of Model Aquatic Health Code (MAHC) (updated in 2023)
- Keep pace with technology
- Address designated swim areas
- Consolidate chapters for usability

Current Status



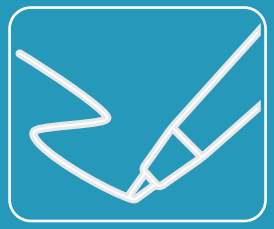
Next Steps

CROSSWALK

- Reconcile MAHC & WAC
- Identify discrepancies

TECHNICAL ADVISORY COMMITTEE

- Comprised of SMEs in WAC 246-260-191
- Address discrepancies



DRAFT RULES

- Consolidate chapters
- Consider adopting MAHC

Timeline

Summer – Winter 2023

- ❑ TAC meetings
- ❑ Draft rules
- ❑ SBOH update
- ❑ Informal comment period
- ❑ Complete rule analysis

Spring 2024

- ❑ SBOH briefing
- ❑ File CR-102
- ❑ Formal public comment period
- ❑ SBOH public hearing

Questions?

Washington State Department of HEALTH

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ENVIRONMENTAL JUSTICE AND THE HEAL ACT

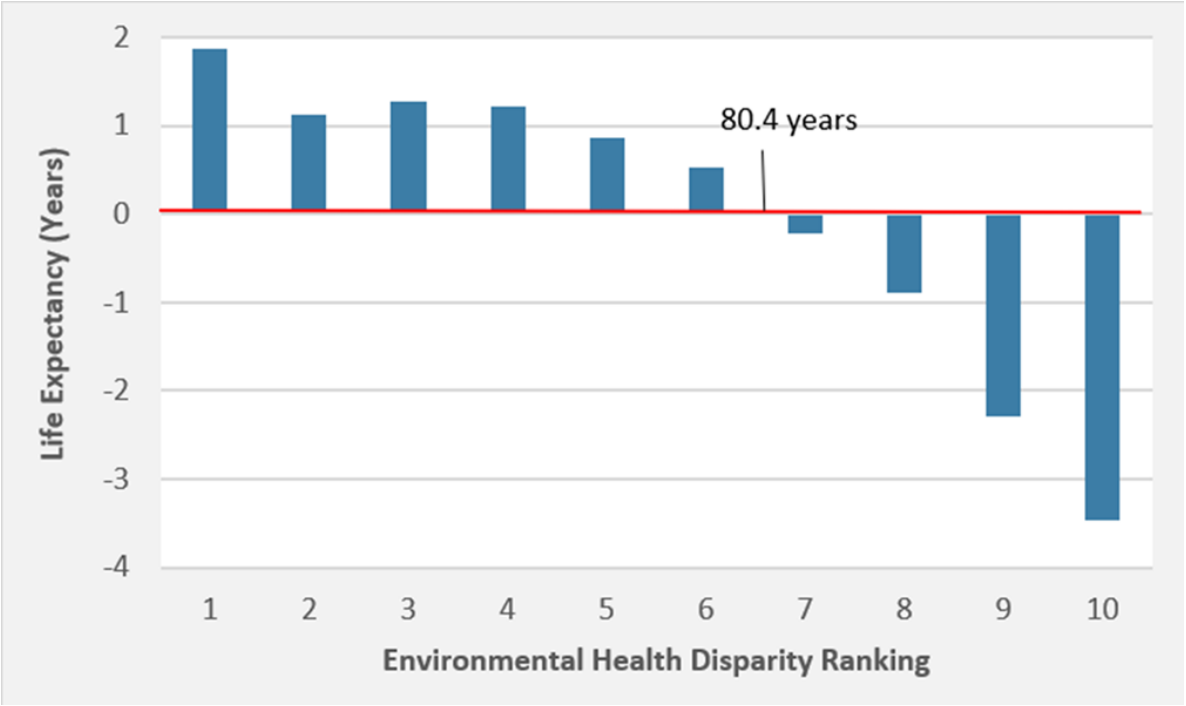
Leah Wood (she/her)
Equity and Environmental Justice Consultant
Washington State Department of Health


PCB
PCB
PCB
NO PCB
We Care About Our Furture!
Don't Harm the lives of Generations To Come
WE CARE TOO!!
WARREN County YOUTH


PCB
PCB
PCB
PCB

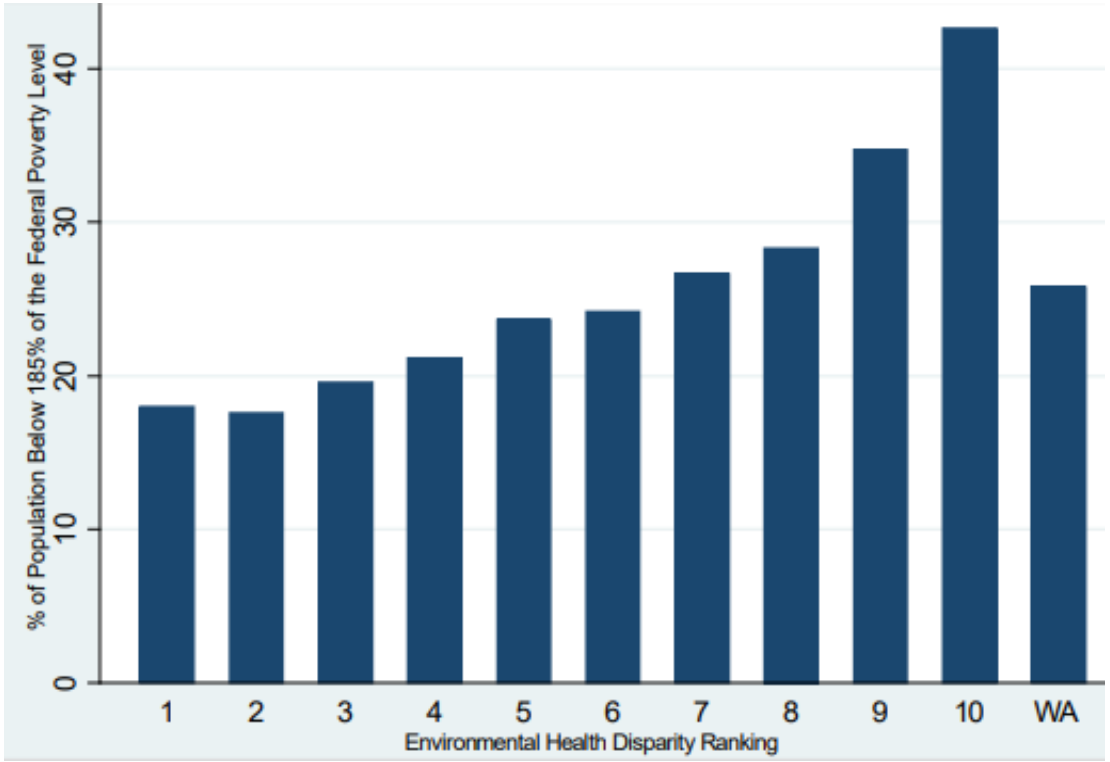
ENVIRONMENTAL HEALTH DISPARITIES

- In WA, there is an over five-year life expectancy gap between census tracts most impacted by environmental hazards and those least impacted.
- The EHD map does not include tribal data

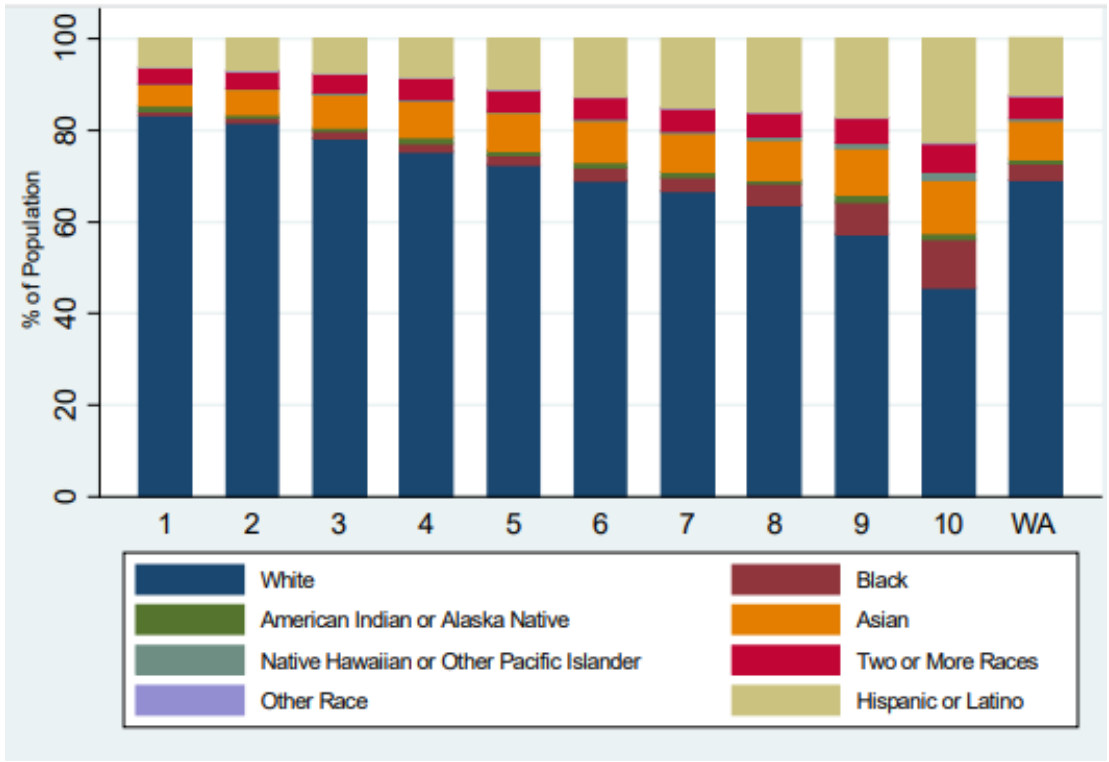


ENVIRONMENTAL HEALTH DISPARITIES

Poverty by
Environmental Health Disparity Ranking



Race/Ethnicity by
Environmental Health Disparity Ranking



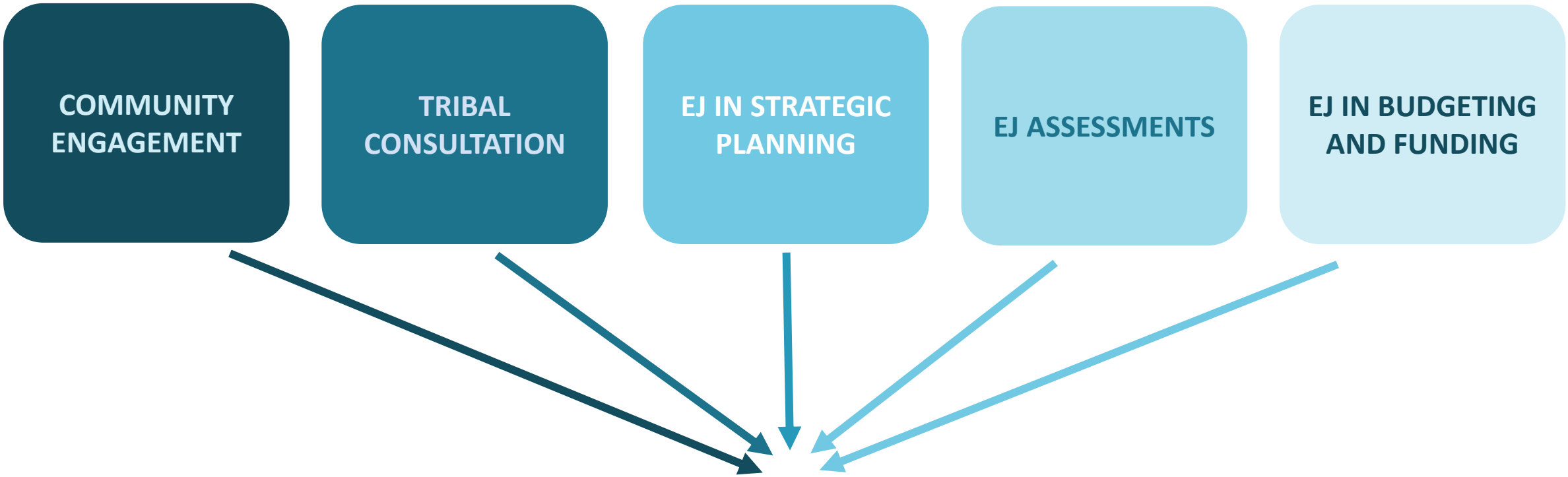
Please note: these charts were made using data from EHD Map v1.0 and does not represent data updates in v2.0

WHAT IS ENVIRONMENTAL JUSTICE?

The Healthy Environment for All (HEAL) Act defines environmental justice as "**the fair treatment and meaningful involvement of all people** regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, rules, and policies.

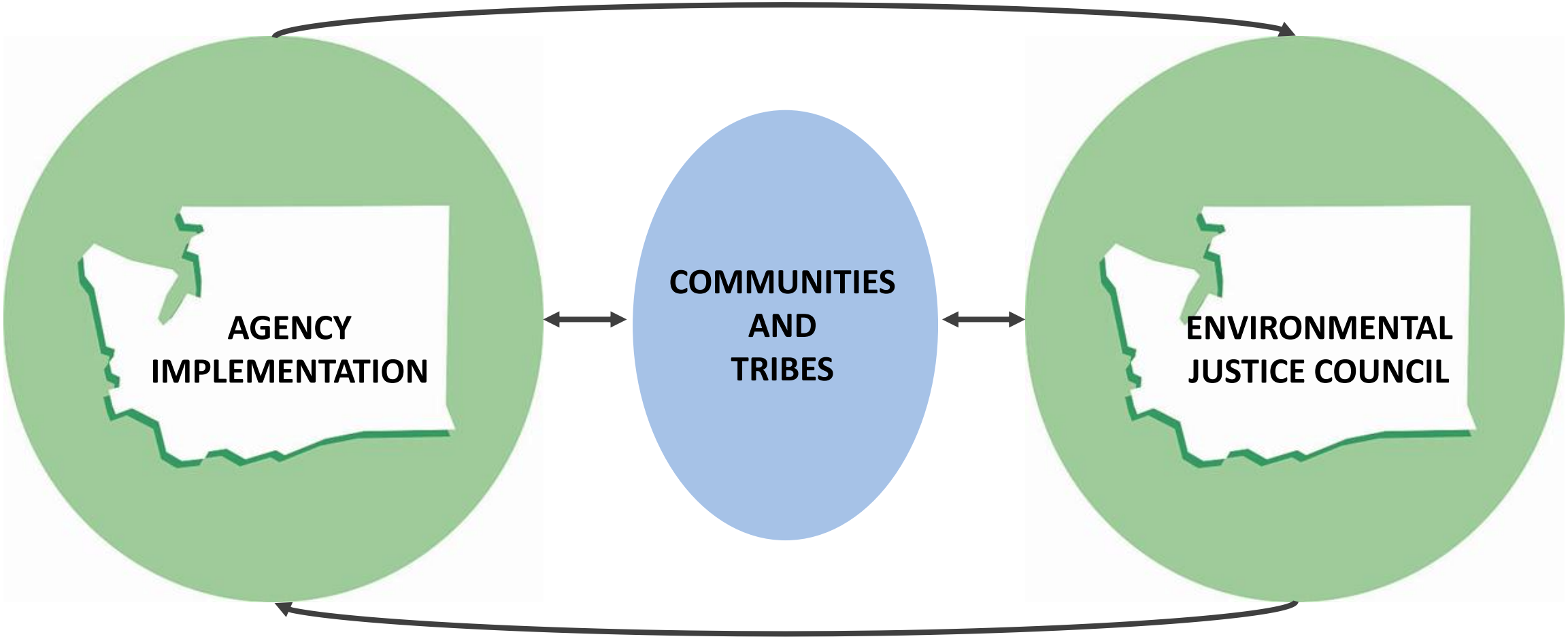
Environmental justice includes **addressing disproportionate environmental health impacts** in all laws, rules, and policies with environmental impacts by **prioritizing vulnerable populations and overburdened communities**, **the equitable distribution of resources and benefits**, and **eliminating harm**."

STATE AGENCY IMPLEMENTATION OF THE HEAL ACT



IMPLEMENTING AGENCIES

HEAL ACT IMPLEMENTATION



HEAL Implementation

July 1st, 2022
Community Engagement Plans due

July 1st, 2023
EJ Assessments begin on initial significant agency actions

Annually, starting 2024
Agencies publish dashboards describing progress

Jan 1st, 2023
Strategic planning obligation due

July 1st, 2023
Budgeting and funding obligation due

Biennially, starting Dec 2023
EJ Council evaluates agency implementation

July 1st, 2025
EJ Assessments begin on additional significant agency actions identified by agencies

ENVIRONMENTAL JUSTICE ASSESSMENTS

- Include overburdened communities and vulnerable populations in agency decision-making process
- Equitably distribute environmental benefits
- Reduce environmental harms
- Identify and reduce environmental and health disparities

"Prior to finalizing a significant agency action, an agency must conduct an environmental justice assessment"

SIGNIFICANT AGENCY ACTIONS

- Agency request legislation
- Significant legislative rules
- New grant or loan programs (started after July 1, 2023)
- Capital projects, grants, or loans of $12M+ or transportation projects, grants, or loans of $15M+
- Additional actions TBD after 2025

Agencies must implement EJ Assessments for these actions starting July 1, 2023

"...actions that may cause environmental harm or may affect the equitable distribution of environmental benefits to an overburdened community or a vulnerable population."

PHASE 1: Notification

In a public notice to OFM, describe the proposed action and any known or potential:

- Geographic impact areas
- Environmental impacts
- Health impacts
- Impacted communities, tribes, and populations
- Opportunities for public comment

Assess existing agency resources and relationships

PHASE 2: EJ Assessment

PHASE 3: Reporting & Communication of Results

Communicate selected strategies and/or justification for not implementing strategies, plan to further involve OBC/VP/tribes, and commitments to tracking and reporting

↓

Report outcomes of EJA to OFM dashboard

PHASE 4: Ongoing Engagement & Accountability

Ongoing engagement with OBC/VP/tribes throughout SAA implementation

Ongoing evaluation of EJA and SAA

NEXT STEPS

- Public comment period on types of significant agency actions
- HEAL Agencies are finalizing shared interagency template and guidance for EJ Assessments
- DOH staff are tailoring EJA interagency template and guidance for our agency
- DOH staff are piloting EJ assessment process with select initial significant agency actions beginning July 1, 2023
- HEAL agencies will present initial reflections on EJ assessments to EJ Council in Fall 2023 for additional guidance and revisions to the EJ assessment process early 2024

Contact

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Equity and Environmental Justice Consultant

Environmental Public Health

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360-913-2580

@WADeptHealth

Washington State Department of HEALTH

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WASHINGTON STATE BOARD OF HEALTH

2023 Meeting Schedule

Dates Approved by the Board November 9, 2022

(Hybrid & Meeting Location Updates February 15, 2023)

	Meeting Date	Location
Board	**Monday January 9, 2023**	**Virtual: Virtual Meeting via ZOOM Webinar, hyperlink provided on website and agenda. Public Attendees can pre-register and access the meeting online.**
Board	**Wednesday March 8, 2023**	**Hybrid:** • **Physical Location; Labor & Industries Auditorium, 7273 Linderson Way SW, Tumwater, WA 98501** • **Virtual via ZOOM Meeting, hyperlink provided on website and agenda. Public Attendees can access the meeting online.**
Board	**Wednesday April 12, 2023**	**Hybrid:** • **Physical Location; Labor & Industries Auditorium, 7273 Linderson Way SW, Tumwater, WA 98501** • **Virtual via ZOOM Meeting, hyperlink provided on website and agenda. Public Attendees can access the meeting online.**
Board	**Wednesday June 14, 2023**	**Hybrid:** • **Physical Location; WA State Capitol Campus Senate Rules Room; 220 Legislative Building, 416 Sid Snyder Ave. SW, Olympia, WA 98504** • **Virtual via ZOOM Meeting, hyperlink provided on website and agenda. Public Attendees can access the meeting online.** *(note: WA State Association of Local Public Health Officials (WSALPHO) Annual meeting is at the Icicle Inn, Leavenworth June 12-14, 2023.)*
Board	**Wednesday July 12, 2023**	**Hold date – meet only if necessary**

Board	**Wednesday** **August 9, 2023**	**Hybrid:** • **Physical Location; WA State Capitol Campus** **John A. Cherberg Building, Rooms ABC** **304 15th Avenue S.E.** **Olympia, WA 98501** • **Virtual via ZOOM Meeting, hyperlink provided on website and agenda. Public Attendees can access the meeting online.**
Board	**Monday** **October 9, 2023**	**Hybrid:** • **Physical Location; Likely Wenatchee, WA** **Coast Wenatchee Hotel (Room TBD)** **201 N Wenatchee Ave** **Wenatchee, WA 98801** • **Virtual Meeting via ZOOM Webinar, hyperlink provided on website and agenda. Public Attendees can pre-register and access the meeting online.** *(note: WA State Public Health Association (WSPHA) Annual meeting is at the Coast Wenatchee Hotel October 10-13, 2023, tentative plan to co-locate with WSPHA)*
Board	**Wednesday** **November 8, 2023**	**Hybrid:** • **Physical Location; TBD** • **Virtual via ZOOM Meeting, hyperlink provided on website and agenda. Public Attendees can access the meeting online.** *(note: WA State Association of Counties (WSAC) County Leaders Conference is November 14-16, 2023, Davenport Grand, Spokane)*

Start time is 9:30 a.m. unless otherwise specified. Time and locations subject to change as needed. See the Board of Health Web site and the Health Disparities Council Web site for the most current information.

Last updated 11/09/2022
(Locations updated 5/23/23)