

### Notice of Public Meeting

# School Environmental Health and Safety Rule Project Technical Advisory Committee

Wednesday, March 5, 2025, 9:30 a.m. – 12:30 p.m.
Public observation location:
Department of Health
111 Israel Road SE,
Tumwater, WA 98501
Town Center 2 Room: 166
Virtual meeting: ZOOM Webinar
(hyperlink provided on next page)
Language interpretation available

# Agenda

Time	Agenda Item	Speaker
	Call to Order	Patty Hayes, Committee Chair
9:30 a.m.	1. Introduction	Patty Hayes, Committee Chair
9:35 a.m.	2. Reminders	Patty Hayes, Committee Chair
9:40 a.m.	3. Objectives and Meeting Agreement	Karen Langehough, Facilitator
9:45 a.m.	<ol> <li>Revisiting Language/ Review of Public Comments</li> </ol>	Karen Langehough, Facilitator
12:20 p.m.	5. Recap/Next Steps	Andrew Kamali, Project Manager
12:30 p.m.	Adjournment	

To access the meeting online and to register: <a href="https://us02web.zoom.us/webinar/register/WN\_OZMVR3n8QBOHsrWiofuzPQ">https://us02web.zoom.us/webinar/register/WN\_OZMVR3n8QBOHsrWiofuzPQ</a>

You can also dial-in using your phone for listen-only mode:

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+1 301 715 8592
                    +1 305 224 1968
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+1 312 626 6799
                    +1 360 209 5623
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                    +1 564 217 2000
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Webinar ID: 878 7884 5934

Passcode: 462699

### **Important Meeting Information:**

- 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), or Communication Access Real-time Transcription (CART) services. Should you need confirmation of these services, please email <a href="wsboh@sboh.wa.gov">wsboh@sboh.wa.gov</a> 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 <u>reasonable modification</u>, please contact the State
  Board of Health at (360) 236-4110 or by email <u>wsboh@sboh.wa.gov</u>. 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.

**Public comments and recommendations.** You can comment on the draft rule by February 9, 2025 during focus groups, or you can submit comments online by going to <a href="School Environmental Health">School Environmental Health</a> and Safety Rule comment form.



# Aviso de reunión pública Proyecto de normas de salud y seguridad ambiental escolar Comité de Asesoramiento Técnico

Miércoles, 5 de marzo de 2025, de 9:30 a.m. a 12:30 p.m. Lugar de observación pública: Department of Health 111 Israel Road SE, Tumwater, WA 98501 Town Center 2, habitación: 166 Reunión virtual: seminario web por Zoom (hipervínculo en la página siguiente) Hay servicios de interpretación a otros idiomas disponibles.

### Orden del día

Hora	Punto del orden del día	Orador
	Apertura	Patty Hayes, presidenta del comité
9:30 a.m.	1. Introducción	Patty Hayes, presidenta del comité
9:35 a.m.	2. Recordatorios	Patty Hayes, presidenta del comité
9:40 a.m.	3. Objetivos y acuerdo de la reunión	Karen Langehough, facilitadora
9:45 a.m.	<ol> <li>Revisión del lenguaje/ Revisión de comentarios públicos</li> </ol>	Karen Langehough, facilitadora
12:20 p.m.	5. Repaso y pasos a seguir	Andrew Kamali, gerente de proyectos
12:30 p.m.	Levantamiento de la sesión	

Para acceder a la reunión en línea y registrarse: <a href="https://us02web.zoom.us/webinar/register/WN\_OZMVR3n8QBOHsrWiofuzPQ">https://us02web.zoom.us/webinar/register/WN\_OZMVR3n8QBOHsrWiofuzPQ</a>

También puede participar por teléfono, mediante la modalidad de solo escucha:

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+1 507 473 4847
                    +1 564 217 2000
                                        +1 646 558 8656
+1 646 931 3860
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Contraseña: 462699

### Información importante sobre la reunión:

- Los horarios son estimativos. Nos reservamos el derecho de modificar el orden de los puntos que se tratarán en la reunión.
- Se hará todo lo posible para proporcionar interpretación en español, ASL (por su sigla en inglés, lenguaje de señas americano) o servicios de CART (por su sigla en inglés, transcripción en tiempo real). Si necesita confirmación sobre estos servicios, envíe un correo electrónico a wsboh@sboh.wa.gov antes de la fecha de la reunión.
- Si desea acceder a los materiales de la reunión en un formato alternativo o en otro idioma, o si
  tiene una discapacidad y necesita una modificación razonable, comuníquese con la Mesa
  Directiva de Salud llamando al (360) 236-4110 o enviando un correo electrónico a
  wsboh@sboh.wa.gov. Le pedimos que presente su solicitud lo antes posible para ayudarnos a
  satisfacer sus necesidades. Es posible que algunas solicitudes tarden más de dos semanas
  en atenderse.
- Marque 711 para el servicio de TTY.

**Recomendaciones y comentarios públicos:** Puede hacer comentarios sobre las normas preliminares hasta el 9 de febrero de 2025 durante los grupos de discusión, o puede presentarlos en línea en el <u>formulario de comentarios del Proyecto de normas de salud y seguridad ambiental</u> escolar.



# **TAC Membership**

MEMBER	ALTERNATE	REPRESENTING
Patty Hayes WSBOH Chair		Washington State Board of Health
Tyler Muench Director of Advocacy & External Affairs	Randy Newman Director of School Facilities & Organization	Washington State Office of Superintendent of Public Instruction
Steve Main Division Director, School Safety Lead	Sandy Phillips School Health and Safety Program Technical Advisor	Spokane Regional Health District
Gina Yonts Associate Director	Roz Thompson Director of Government Relations	Association of Washington School Principals
Geoff Lawson Operations Coordinator	Jeff Rogers Manager or Environmental Health & Safety	Washington Association of Maintenance and Operation Administrators & Tacoma School District
Tammy Allison Board Director – Region 121	Nicole Roel WASBO Board of Directors, Olympia ESD 114	Washington Association of School Business Officials
David Hammond School Construction Committee Chair	Dan Steele Assistant Executive Director, Government Relations	Washington Association of School Administrators
Suzie Hanson Executive Director	Sharon Ricci Community Relations	Washington Federation of Independent Schools
Kate Espy Board Member and Legislative Representative		South Kitsap School District
Erin Hockaday Senior Manager, Surveillance & Investigation	Bailey Stanger	Benton-Franklin Health District



# **TAC Membership**

MEMBER	ALTERNATE	REPRESENTING
Laurette Rasmussen School EH Specialist	Jamie Bodden WSALPHO Managing Director	Whatcom County Health & Community Services
Lauren Jenks Assistant Secretary, Environmental Public Health	Kelly Cooper Director, Policy and Legislative Relations	Washington State Department of Health
Kevin Jacka Executive Director	Richard Conley Consultant	The Rural Alliance
Samantha Fogg Co-President Seattle Council PTSA		Seattle Council PTSA
Devon Kellogg Volunteer WSPTA, Advocacy Committee	Susan Baird-Joshi Volunteer WSPTA	Washington State PTA
Laura Peterson Volunteer/Appointed Role WSPTA		Washington State PTA
Brook Wilkerson Director of Operational Supports	Anders Lindgren President	School Ops
Preet Singh Director of Health Services	Jessica Sankey Chief Operations Officer	Bellingham Public Schools
Brian Buck Executive Director of Support Services	Kenny Johnson Director of Maintenance & Operations	Lake Washington School District
Kellie Lacey Assistant Director of Human Resource	Kelsey Greenough Records Specialist	Richland School District
Nicole Daltoso Senior Director of Capital Facilities	Theodore (Ted) Dehnke Assistant Director of Maintenance	Evergreen Public Schools



# **TAC Membership**

MEMBER	ALTERNATE	REPRESENTING
Brian Freeman Superintendent		Inchelium School District
Becky Doughty Executive Director of School Support Services (Operations)	Sandra Jarrad Chief Communications Officer	Spokane Public Schools
Jared Mason-Gere Government Relations Staff	Julie Salvi Lobbyist/Government Relations	Washington Education Association
Pam Schwartz Assistant Superintendent	Doug Rich Superintendent	Washington State Catholic Conference
Jake Cook Public Advocate		Public

# **School Rule Project Staff**

### **Andrew Kamali**

School Rule Project Manager

# Nina Helpling

Policy Advisor

# **Mary Baechler**

Community Engagement Coordinator

### Marcus DeHart

Communications Consultant

### **Crystal Ogle**

Administrative Assistant

### **GUIDANCE FOR SPEAKING WITH LANGUAGE INTERPRETATION**

The Washington State Board of Health (Board) offers American Sign Language and Spanish interpretation during our regular public meetings. We do this as a part of our work towards increasing language access.

We ask all speakers at Board meetings to follow this guidance to create an accessible meeting environment. If you have any questions or need guidance for presenting, please contact Board staff for support.

### WHAT TO EXPECT DURING A BOARD MEETING

- You will receive a simplified version of this document at your seat on the day of the Board meeting.
- Board staff or interpreters may give you cues to slow down your pace. The cues may include:
  - o Raising a paddle sign to signal you to slow down.
  - Making a brief verbal interruption asking you to slow down.

### TIPS FOR SPEAKING AND PRESENTING DURING THE MEETING

We ask that you help us mitigate the need for interruptions by speaking at a comfortable pace. Our ASL and Spanish interpreters cannot deliver your message accurately if you speak too quickly.

- Take a breath after each sentence to give the interpreter time to deliver your message.
- If you are reading from a script, please be aware that you may read faster than you speak.
- To help the interpreters and audience identify you, state your name each time you begin talking.
- Wait until someone else finishes speaking before you speak. Interpreters can only choose one person to interpret at a time.
- Pause after introducing technical terms, proper nouns, dates, numbers, or figures to allow for interpretation.

### TIPS FOR TECHNICAL TERMS

- We recommend including a pause after introducing technical terms, proper nouns, dates, numbers, or figures.
  - Example: "This briefing will discuss rulemaking around newborn screening for Ornithine Transcarbamylase Deficiency (OTCD) [pause for interpretation, wait for cue from interpreter to continue], Chapter 246-650 WAC [pause for interpretation, wait for cue from interpreter to continue]."
- After you introduce technical terms or proper nouns use their acronyms for the remainder of the introduction.
  - o Example: "For the remainder of this discussion, I will refer to this condition as OTCD."
- If you are using visual materials (e.g., tables), incorporate descriptive language of the visual material.
  - Example: "This is a table showing XXXX. And now, we'll look at this part of the table..."



**Technical Advisory Committee (TAC) Charter** 

Start Date: August 1, 2024 End Date: June 30, 2025

**Members**: See TAC Membership Addendum A

### Objective

To review and update the rule for school environmental health and safety. The State Board of Health (Board) and the Department of Health (Department) shall conduct the review with a multi-disciplinary technical advisory committee (TAC). The proposed new rule shall establish the minimum statewide health and safety standards for schools. The TAC will help the Board consider the size of school districts, regional cost differences, the age of the schools, the feasibility of implementing the proposed rule by section or subject area, and any other variables that may affect the implementation of the rule.

### **Team Expectations**

### We will:

- Be respectful of all perspectives and opinions.
- Communicate openly and respectfully, disagree without being disagreeable.
- Assume positive intent and ask for clarification.
- Share the air—allow everyone to share insights, one person speaking at a time.
- Ask questions and seek to understand.
- Be on time for meetings and calls.
- Be present and actively participate (no multitasking during meetings).
- Be efficient with our meeting time.
- · Meet deadlines and commitments.
- Support the final decisions of the TAC.
- Stay focused on the goals and objectives of the committee.

### **Decision Making**

- The committee will use Fist to Five and Ranked Choice Voting to make decisions.
- Primary or Alternate member voting: Both may attend, but the Primary speaks and votes. The alternate only speaks and votes when Primary is not in attendance.

# **Information Sharing**

### Board Project Team will:

- Email meeting materials 72 hours before the scheduled meeting
- Email updates and notices to TAC members and designated alternates
- Post information on <u>2024-2025 School Rule Review Project | SBOH (wa.gov)[1]</u> to keep the public informed.



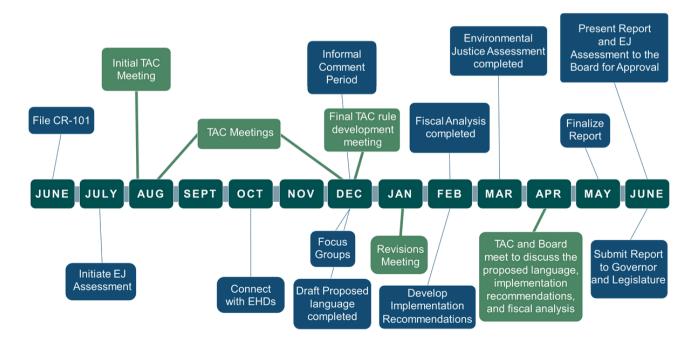
### **Reference Materials**

- Chapter 246-366 WAC[2] Primary and Secondary Schools
- Chapter 246-366A WAC[3] Environmental Health and Safety Standards for Primary and Secondary Schools
- Chapter 296-800 WAC[4] Safety and Health Core Rules
- Title 110 WAC[5] Children, Youth, and Families, Department of

### **TAC Timeline**

Date & Location	Location
Thursday, August 1, 2024	Wenatchee
Thursday, August 22, 2024	Olympia
Tuesday, September 17, 2024	Arlington
Friday, October 4, 2024	Leavenworth
Thursday, October 17, 2024	Olympia
Thursday, October 31, 2024	Olympia
Wednesday, November 20, 2024 Spokan	
Wednesday, December 4, 2024	Olympia

### **Project Timeline**



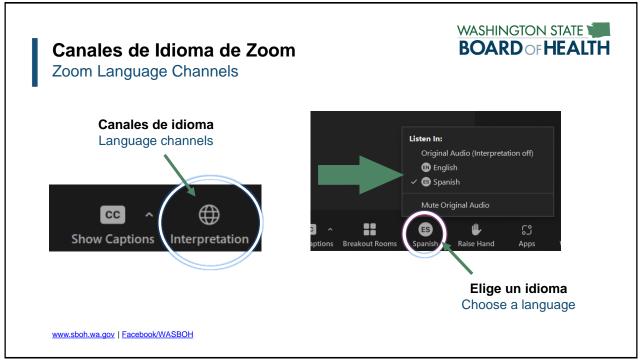
<sup>[2]</sup> https://app.leg.wa.gov/WAC/default.aspx?cite=246-366&full=true&pdf=true

<sup>[3]</sup> https://app.leg.wa.gov/WAC/default.aspx?cite=246-366A&full=true&pdf=true

<sup>[4]</sup> https://apps.leg.wa.gov/WAC/default.aspx?cite=296-800&full=true&pdf=true

<sup>[5]</sup> https://apps.leg.wa.gov/wac/default.aspx?cite=110&pdf=true







# Minutes Review



# Reminders



# Today's Objectives

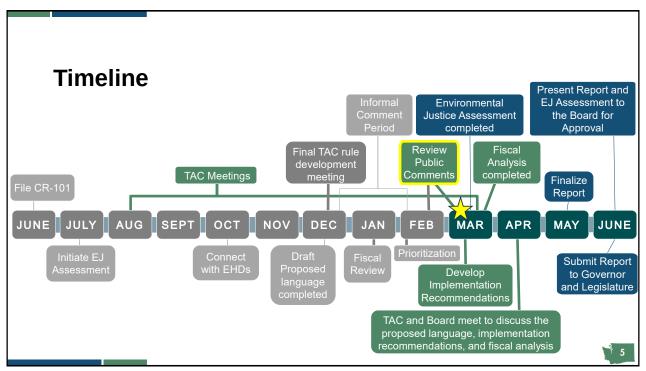
- Review of Public Comments & Language Survey
- · Refine language



**Meeting Packet** 

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# **TAC Agreements**

- Be respectful of all perspectives and opinions
- Communicate openly and respectfully, disagree without being disagreeable
- Assume positive intent and ask for clarification
- Share the air; allow everyone to share insights, one person speaking at a time
- Ask questions and seek to understand
- Be on time for meetings/calls
- Be present and actively participate (no multitasking during meetings)
- Be efficient with our meeting time
- Meet deadlines and commitments
- Support the final decisions of the TAC
- Stay focused on the goals and objectives of the committee



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### WAC 246-370-060 Showers and Restrooms



### **Shower temperature**

• Pair with the aquatic code of 90-120F

### **Shower location**

• Pair with the aquatic code: should be within 100 feet of a pool

### **Toilets**

- Recommend following the UPC for the number of toilets 1:35 Male/1:25 Female
- Most facilities do not have the space to add more toilets and would have to do a major remodel to accommodate.
- Could change septic capacity that would lead to septic upgrades or an additional wastewater capacity charge.
- Why are there two sections for toilet requirements?

### **Showers**

- Recommends removing a required shower number but stating that a shower should be available for use.
- UPC does not have a shower number required for educational spaces.
- How do you know how many students would need the showers after sports at the same time? What calculation is used?
- Can we require gender neutral options?
- Requirement address PE and sports, but not special education rooms.
- Use thermal mixing valves at point of use so the water in the pipe stays hot enough to prevent Legionella growth.



### WAC 246-370-080 Indoor Air Quality and Ventilation Comment Summary



### Agrees with language

### Disagrees with language

• One commentor believes that there should be no IAQ language

### Control air contaminants 080(2)(b)

• Does "Providing a space with appropriately used and maintained ventilation to minimize student exposure to potential air contaminants" include local exhaust ventilation?

### Compliance

· Add timelines beyond five years for an IAQ plan.

### Radon

- · Don't require testing in areas that have historically not had radon detections like shown on EPA's radon map of Washington
- · Support for radon testing

### Specialized rooms

- · Add this language from 246-366A-095:
  - (3) Use and maintain mechanical exhaust ventilation installed for equipment or activities that produce air contaminants of public health importance or moisture.
  - (4) Limit student exposure to air contaminants of public health importance produced by heat laminators, laser printers, photocopiers, and other office equipment by placing such equipment in appropriately ventilated spaces and providing instruction to users on how to operate and maintain equipment as recommended by the manufacturer.
  - (5) Take preventive or corrective action when pesticides, herbicides, or air contaminants of public health importance are likely to be drawn or are drawn into the building or ventilation system.



### WAC 246-370-080 Indoor Air Quality and Ventilation Comment Summary

### Mold 080(6)

- Add "identify": "Promptly identify and control sources of moisture and remediate"
- · Add list of mold remediation requirements from 246-366A-070

### VOC 080(3)

· Prohibit the use of supplies that contain VOCs

### Education

· Require school officials to attend ongoing education for IAQ including the importance of portable HEPA filters.

### Wildfire smoke

- Refer to ASHRAE Guideline 44-2024:Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events.
- Include in a readiness plan

### Indoor air contaminants 080(1)(b)

· "Minimize exposure" is vague, require testing by certified contractors to determine the amount of indoor contaminants.

### **Outdoor air monitoring**

 Require OAQ monitoring for items like PM 2.5, PM 10 and CO2 so that schools can ensure that outdoor air quality is not compromised.

### WAC 246-370-050 General Building Requirements



### Self-metering faucets

 Add "If hand operated self-closing faucets are used, they must be of a metering type capable of providing at least ten seconds of running water."

### Pest mitigation 050(2)

 Staff and teachers propagate pest issues. The language could be stronger to include the "human factor."

### Handwashing temperature

- Eliminate the minimum temperature but keeping the 120-degree maximum to prevent scalding
- Keep warm water requirements to ensure adequate had washing.
- If minimum temperature is kept then add some flexibility to (6)(a)(ii) "Fixtures that maintain water temperatures between 85- and 120-degrees Fahrenheit;"
- Consider saying "fixtures that are capable of maintaining." Some schools may not be able to get warm water to a faucet in less than 10 minutes. Just saying fixtures that "maintain water" implies instant warm water.

### Hand drying blowers

 These are unsanitary and loud. They should not be included in the new rule.

### Ceiling height

 Add requirement like 246-366-050 (2): "Instructional areas shall have a minimum average ceiling height of 8 feet. Ceiling height shall be the clear vertical distance from the finished floor to the finished ceiling. No projections from the finished ceiling shall be less than 7 feet vertical distance from the finished floor, e.g., beams, lighting fixtures, sprinklers, pipe work"

### **Deep Cleaning**

• Add requirements for cleaning things like blinds, windows, and ceiling fans.



# WAC 246-370-050 General Building Requirements



### Vacuum breakers or backflow devices 050(4)

 "Housekeeping sink" is too general should be faucets that are serrated, threaded, or have quick coupling nozzles.

### Menstrual hygiene products

 Add requirements for products to be available in female and gender-neutral restrooms or reference RCW 28A.210.420

### Add language like 246-366A-020 (1)(a)-(c)

- (1) Responsibilities of school officials. School officials shall:
- (a) Maintain conditions within the school environment that will not endanger health and safety.
- (b) Identify, assess, and mitigate or correct environmental health and safety hazards in their school facilities, establish necessary protective procedures, use appropriate controls, and take action to protect or separate those at risk from identified hazards, consistent with the level of risk presented by the specific hazard, until mitigation or correction is complete.
- (c) When conditions are identified that pose an imminent health hazard:

# Drinking fountain add requirements similar to WAC 110-300

(2) Drinking fountains at an early learning program must:

(a) Not be attached to handwashing sinks or disabled;

(b) Not be located in bathrooms;

(c) Not be a "bubble type" fountain (the water flow must form an

(d) Be cleaned and sanitized daily, or more often as needed; and

(e) Be located above water impervious flooring

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### **WAC 246-370-090 Temperature**



### **Comment Summary**

### **Specialized rooms**

- Should not be excluded from the temperature requirements.
  - o Some of the rooms will not have equipment in them that would alter the temperature of the room.
  - o Some could radically change the room temperature and could lead to unsafe conditions.
- Should have specific instructions for each type of specialized room in the extreme temperature readiness plan.

### Min/max temperature levels

- Include min/max temperatures where a school should no longer operate.
- Include language like 110-300-0480: "Maintain the vehicle temperature at a comfortable level to children;"
- Include language like 110-301-0165 (4)(c) "Indoor temperatures for the premises. For any program that does not operate on public or private school premises, the temperature of indoor school-age licensed space must be between 68- and 82-degrees Fahrenheit. If indoor licensed space is colder than 68 or hotter than 82 degrees Fahrenheit, a school-age provider must use climate control devices that are inaccessible to children to bring the temperature within the required range;"

### Gyms 090(1)(a)(i)

• Should be included in the list of items that have a 60 – 79 F temperature range.



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### **WAC 246-370-110 Lighting**



### **Comment Summary**

### Inconsistent

• Does not match 246-366A or the building code.

### Kitchens

· Food code states 50 foot candles for preparation areas and 10 foot candles for food storage areas

### Windows 110(5)

• It is unclear if all standard classrooms will have windows to allow students to have access to natural light at least 50 percent of the day. Suggests adding the following from 246-366-050(8): "No student shall occupy an instructional area without windows more than 50 percent of the school day."

### WAC 246-370-120 Injury Prevention



### **Comment Summary**

### Low-Hazard 120(3)

Define "low hazard" or replace with EPA's Safer Choice products

### Animals

- · Suggests that an approved type of animal should be based on the age of students and available hygiene facilities.
- Suggests that there should be an exception for animals like mice or frogs that would be used in scientific classes.
- Suggests that there be a requirement for an official review and approval process of a plan.



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# WAC 246-370-130 Imminent Health Hazard Procedure Comment Summary

### Mitigation

• Require mitigation first then consultation with LHO

### Notification

• Require notification of students and parents.

### Risk manager

• Require state funded risk manager for schools.

### Reporting IHH in the school

• "School official" needs clarification. Anyone at the school should be able to report an IHH.

### Hazards

- · Have readiness plans for earthquakes, sewage leaks, and emergency evacuations.
- Include standard procedures for heat, smoke, toxic spills, extreme weather similar to WAC 110-300 / 110-301-0147(1):
- (1) A school-age provider must observe weather conditions and other possible hazards to take appropriate action for child health and safety. Conditions that pose a health or safety risk may include, but are not limited to:
  - (a) Heat in excess of 100 degrees Fahrenheit or pursuant to advice of the local authority;
  - (b) Cold less than 20 degrees Fahrenheit, or pursuant to advice of the local authority;
  - (c) Lightning storm, tornado, hurricane, or flooding if there is immediate or likely danger;
  - (d) Earthquake;
  - (e) Air quality emergency ordered by a local or state authority on air quality or public health;
  - (f) Lockdown notification ordered by a public safety authority; and (g) Other similar incidents.
- (2) A school-age provider must ensure children are dressed for weather conditions during outdoor play time.



### **WAC 246-370-140 Playgrounds**



### **Comment Summary**

### Referenced standards

- The Consumer Product Safety Commission Handbook for Public Playground Safey is not stringent enough. Reference National Playground Safety Institute.
- Support including ASTM and CPSC standards and guides.
- Reference "latest version" of referenced standards.
- Refer to Ecology's Dangerous Waste Regulations or add pentachlorophenol.

### **Shade**

• Require shade outside on the playground as in 110-301-0145 (3) "A school-age program must have shaded areas in outdoor play space provided by trees, buildings, or shade structures."

### Turf

· Consider turf restrictions based on health effects.

### Plan Approval

Make both playgrounds and new construction plan review approval within 60 days.

### **Pre-use inspection**

• Require an inspection before use like a preoccupancy inspection in construction review.



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# WAC 246-370-150 Specialized Rooms



### **Comment Summary**

### Handwashing sinks

• All sinks have soap and towels—not necessary.

### Emergency washing facilities 150 (2)

- · Reflect rate and distance requirements set by LNI.
- Reference ISEA Z358.1-2014. Rule is too limiting.
- Include water temperature ranges.
- Include: "there should be no obstacles in the pathway to stations, including doors, unless there is panic hardware on the exposure side."
- (d) Include: "or latest version" of the ANSI standard.
- · Add to the following subsections:
  - (a) An emergency shower must be provided in or adjacent to any instruction room:
  - (b) An emergency eyewash fountain must be provided in or adjacent to any instruction room:

### Prohibiting storage or use of compounds 150(3)(b)

 Epi-pens are a prohibited item on the "P-List" under WAC 173-303-9903. Are schools not allowed to store or use those?

### Health room

Supports the health room requirements.

### PPE 150 (5) & (6)

· What constitutes appropriate PPE?

### **Applicability**

- Section opens with "A school official shall ensure specialized rooms that are part of a school facility include, if applicable:" When would sub sections (4)-(7) be required?
  - (4) Safety procedures and process for instructing students regarding the proper use of hazardous materials or equipment.
  - (5) Appropriate personal protective equipment when exposure to potential hazards might occur.
  - (6) Appropriate situation-specific emergency equipment is available when exposure to potential hazards might occur.
  - (7) Appropriate ventilation, source capture system, or other equipment approved by the local health officer to prevent the recirculation of air into the room or transfer of airflow into other parts of the school facility and to prevent contaminants from entering the students breathing zone.

### Ventilation (7)

- Change: "Appropriate Appropriately used and maintained ventilation, source capture system, or other equipment approved..."
- Add examples like language from 246-366A-160(8): These activities and equipment include, but are not limited to, spray painting, welding, pottery kilns, chemistry experiments, and wood-working.
- Add list of air contaminants from combustible cooktops as examples of equipment that would need this ventilation requirement.

# WAC 246-370-160 Variances and Emergency Waivers Comment Summary



### **Exemption language**

 Add something like this language from 246-366-150 to ease burden of applying for and renewing variance:

The board of health may, at its discretion, exempt a school from complying with parts of these regulations when it has been found after thorough investigation and consideration that such exemption may be made in an individual case without placing the health or safety of the students or staff of the school in danger and that strict enforcement of the regulation would create an undue hardship upon the school.

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# WAC 246-370-180 Appeals



### **Comment Summary**

### **Local Health Jurisdiction Processes**

- · Include specifications or make a template in guidance for departments that do not have a written
- Consider ways to make this process consistent between departments.

### Other



### **Comment Summary**

### **Funding**

• General concerns about how much this rule will cost and who will pay for it.

### Accountability

 General concerns about holding schools, LHJs, and state/local government accountable for student health and safety.

### Redundancy

• Multiple agencies with overlapping or conflicting requirements need to be aligned.

### **Kudos**

 Compliments for organization of documentation and application of scientific studies to support decisions.

### **Missing**

• Emergency plans, routes, training, seismic upgrades/hazard mitigation, evacuation accommodation for special-needs students.

### **Charter Schools**

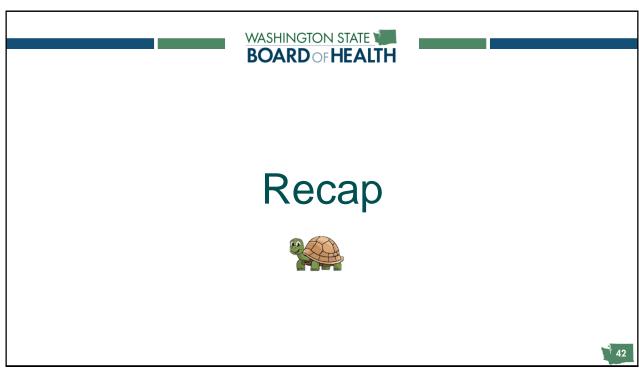
· Limited access to capital funding and facility resources. Limited control over leased facilities.

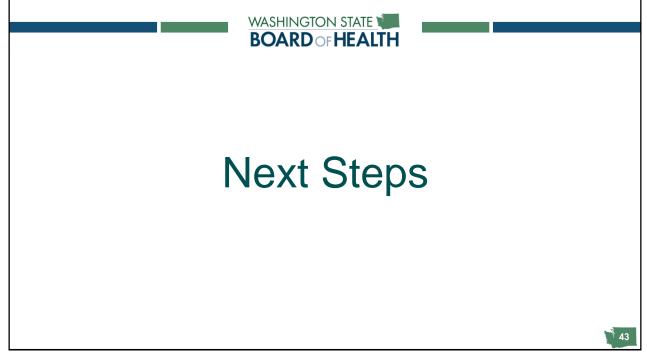


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# Afternoon Break Return at 2:55 p.m.







# **THANK YOU**

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

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# Language Refinement and Informal Comments



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### WAC 246-370-080(7) IAQ Ventilation Language Revisions

### **Section Language**

**NOTE:** (1)(d) and (7) are new language that the subcommittee agreed on February 10, 2025, to include in WAC Language that combined indoor air quality and ventilation.

### A school official shall:

- (1) Ensure the implementation of a written indoor air quality plan within five years of the effective date of this section that includes:
  - (a) Identified areas of indoor air quality concerns and develop preventative measures to address the concerns;
  - (b) A schedule to perform routine inspections of heating, ventilation, and cooling systems;
  - (c) An integrated pest management plan; and
  - (d) A plan for monitoring carbon dioxide levels if required by subsection (7)(b) of this section.
- (2) Control sources of air contaminants by:
  - (a) Excluding sources of potential air contaminants from a school facility; or
  - (b) Providing a space with appropriately used and maintained ventilation to minimize student exposure to potential air contaminants.
- (3) Develop and implement a plan to test for radon every five years in regularly occupied areas on or below ground level.
- (4) Prohibit the use of air fresheners, candles, or other products that contain fragrances.
- (5) Physically contain construction activities that generate emissions or conduct construction at times that minimize student exposure.
- (6) Promptly control sources of moisture and remediate mold using measures to minimize occupant exposure to mold and chemicals used during the remediation process.
- (7) Provide adequate ventilation by:
  - (a) Ensuring direct mechanical exhaust for specialized rooms as set forth in WAC 246-370-150.
  - (b) Providing ongoing carbon dioxide concentration monitoring if the school facility does not have a mechanical outdoor air ventilation system or the outdoor air flow rate cannot be determined.
  - (c) Ensuring all student-occupied instruction and gathering spaces during hours of occupation provide outdoor air ventilation flow rates as set forth in chapter 51-52 WAC at the time the ventilation system was permitted.
    - (i) If outdoor air ventilation flow rates were not established at the time of the original building construction, ventilation airflow rates must be operated to meet chapter 51-52 WAC or maximum outdoor air ventilation flow rates achievable within existing system capacity.
    - (ii) Compliance is determined based on variables including but not limited to:
      - (A) The type and area of the space;
      - (B) The planned number of occupants; and
      - (C) The type of ventilation system;



- (d) Ensuring particulate matter filtration as set forth in chapter 51-52 WAC at the time the heating, ventilation, and air conditioning systems were permitted, including in facilities that have small, ducted air handlers and ventilation systems.
  - (i) If particulate matter filtration requirements were not established at the time of the original installation of the system, the system must meet chapter 51-52 WAC or the maximum particulate matter filtration achievable within existing system capacity.
- (e) Ensuring new ventilation systems that are permitted after the effective date of this section shall be designed and constructed to be capable of the maximum outdoor air ventilation rates as set forth in chapter 51-11C WAC to be used as needed for periods of increased health risk.
- (f) Performing routine maintenance of the mechanical ventilation system that includes:
  - (i) Testing and balancing for heating, ventilation, and air conditioning systems every ten years;
  - (ii) Performing routine inspections of heating, ventilation, and cooling systems to ensure systems are operating within intended parameters of this rule;
  - (iii) Replacing filters as needed to achieve required filtration and air flow rates; and
  - (iv) Maintaining records of these activities for review on site.

### **Comment Summary**

### **LHO** routine Inspecting

- Feels like it might be hard to assess ventilation rates during an inspection
- Routine inspections are already required by OSPI through APP. Why requiring one in this rule too?

### "Air flow rates" (080)(7)(f)(iii)

Define what that means

### **Portables**

 Does ventilation refer to portables? Language says "new construction" which by rule definition might exclude them.

### **Existing schools**

- Will have no ventilation requirements. This section really only applies to new systems
- 070(1) saying that "new construction" would have to meet the ventilation requirements would (per the definition of new construction) exclude reconstructed of updated ventilations systems in existing buildings. Suggest changing that.
- 070(2) "if feasible" allows a large loophole and should be removed

### Public reporting

 open transparency of the current ventilation system in a given school and how a school plans to make improvements

### **Filters**

- Recommends language that states changing filter per manufacture recommendation
- Should be MERV 13 or higher in every school

### **Ventilation rates**

Recommends aligning with ASHRAE 241 of 20lps or 40 CFM

### Portable air cleaners



- Recommend the use of HEPA units with clear guidance
- Allow for units to be donated to schools
- If ventilation requirements cannot be met, require the use of potable HEPA air cleaners
- Allow Corsi Rosenthal Boxes to be used in classrooms but HEPA filters are preferred

### **Bathrooms**

• Is there a reason we are not requiring an exhaust fan in each bathroom area? With the advent of universal bathroom access, can we have one overall fan with passive ventilation for each walled stall?

### $CO_2$

- Recommends monitoring and reporting of CO<sub>2</sub> and other IAQ parameters
- Does not agree with current CO<sub>2</sub> standards
- Should require schools to be between 400 1000 ppm
- Suggests graphing CO<sub>2</sub> meter that can graph several rooms so the meter can be moved between rooms like what Boston schools do.

### Lunchrooms

• need more air exchanges and ventilation

### **Informal Comments**

Name	Comment
Lindsey Doolittle	WAC 246-366-080: useful to have pithy summary of goal. New sections 070 & 080 seem to outline HOW to achieve this, but challenging to assess ventilation rates during a routine inspection.
Mike Benzien	WAC 246-370-070 Ventilation
	(3) Operates and maintains the ventilation system by, at minimum, performing routine ventilation system inspections, and replacing filters as needed to achieve required ventilation flow rates; (4) Limits air cleaning technologies to mechanical air cleaners that only use physical filtration, such as HEPA and carbon filters, unless the local health officer approves an alternative air cleaning technology. (5) Provides adequate ventilation for specialized rooms as set forth in WAC 246-370-150.
	Comment
	There is a wide variety of filter manufactures and they do not perform the same over a specific time span. Language stating inspections and filter changes such as, "per manufactures recommendations" should be added. Older HVAC system can not withstand the physical demands of HEPA filters or high MERV rated filters. They are not recommended for older equipment.
Anonymous 5	I strongly urge the committee to consider the following recommendations to ensure that Washington State schools adopt indoor air quality (IAQ) standards that prioritize student and staff health:
	1. Increase Ventilation Standards: The proposed ventilation rate of 21 CFM per person (10 lps) does not adequately address airborne transmission risks. I ask the committee to align with the ASHRAE 241 standard, which recommends 20 lps (about 40 CFM) per person to



reduce infectious disease spread in shared indoor spaces. Meeting this higher standard will help ensure that schools provide safe, healthy environments for students and staff.

2. Support for HEPA Filtration in Classrooms: I recommend that clear guidance be provided for schools to allow families and PTAs to donate portable air cleaners with HEPA filters for classroom use. HEPA filtration meets the committee's air quality goals, provides cost-effective air cleaning, and, crucially, does not interfere with existing ventilation systems. Allowing such donations is a practical way to enhance IAQ without requiring additional energy expenditure.

- 3. Provide Clearer Guidance on IAQ for School Administrators: Clear guidelines are needed so that school administrators understand that using portable HEPA filters and enhancing ventilation can support—not conflict with—energy efficiency and clean building goals. Studies consistently show that improved indoor air quality reduces absenteeism and supports academic performance, essential outcomes for student success.
- 4. Encourage Monitoring and Reporting of Indoor Air Quality Metrics: To ensure compliance and transparency, schools should be encouraged to monitor and publicly report IAQ metrics, such as CO2 levels. Regular reporting would support accountability and reassure families that schools are meeting health standards.
- 5. Apply Pandemic Lessons to IAQ Standards: I urge the committee to incorporate lessons learned during the pandemic, especially regarding the importance of mitigating airborne transmission in schools. Standards should focus on preventing viral spread, rather than merely minimizing it, to better protect the school community.

These steps represent a proactive approach to maintaining healthy indoor air quality in schools, with clear benefits to student learning, attendance, and overall well-being.

### Layne Erdman

The new standard for co2 is not achievable and conflicts with the states energy policy for schools. We recently ran into an outdoor rate at 617ppm and to have a standard that low with 30 kids is impossible unless hvac is on max all day. That conflicts with penalties we can receive for doing so.

The old standard is consistent with national levels and is appropriate for classroom use still well below hazard levels

### Laura Breymann

### WA DOH.

Thank you for discussing the very urgent matter of Indoor Air Quality in schools. I am a Family Physician and a concerned parent in Kirkland, and I have been very frustrated by the slow response in our district (LWSD) to parental concerns about IAQ. Specifically, there are a handful of very concerned parents who are trying to advocate for improvements in IAQ including simple things like donating HEPA filters to schools who are not meeting CDC/ WA DOH guidelines, and we have met roadblocks for the past two years. I believe this is largely due to a combination of lack of funding and lack of education. The leaders don't seem to understand the need for improvements in IAQ for both short and long-term health and safety of both students and staff. My 6-year-old's school Principal told me that when the Covid-19 Emergency funding went away, nobody cared about IAQ anymore, AND that I was the only person asking him about it. This is so disheartening. We can and should do better.

Specifically, as a physician, I am very concerned about the long-term health effects of repeated Covid-19 infections for kids and adults. The incoming data is overwhelmingly showing us that Covid is definitely not 'a cold', the risk of long Covid is likely cumulative with each infection (including for otherwise healthy individuals), and vulnerable individuals are still dying. Most concerning are the neurological symptoms which are actually areas of brain damage on imaging. Covid is a vascular and neurological disease, and most school



administrators (and even many healthcare workers) are unaware of this. We need to take this health threat seriously. Postacute Sequelae of SARS-CoV-2 in Children | Pediatrics | American Academy of Pediatrics (aap.org)

This is one example of more recent research: Symptoms of long Covid present differently in children and teens, study finds (nbcnews.com)

"Long Covid overall seems to be less common in children than in adults, but a February review in the journal Pediatrics estimated that 10% to 20% of children who got Covid developed post-viral symptoms within six months". We already knew that long Covid wasn't rare in adults, and it can be disabling, so protecting teachers and staff is obviously also very important. Mounting research also demonstrates that Covid-19 harms the immune system, making everyone more susceptible to other infections. Since Covid-19 is airborne (meaning it spreads like smoke and lingers in the air for hours), improving ventilation and filtration in schools can go a long way to reducing infections, which multiple studies have also shown. We also need to be thinking about other viruses like Measles and H5N1, and proactively do everything we can right now.

It has also been shown that improvements in CO2 (implying better IAQ) helps with cognition and reduces absenteeism, so this should be a priority for everyone.

I have been in close contact with the LWSD, and the administrators there told me they're balancing cleaning the air with energy conservation due to the "Clean Buildings Law", which is in direct conflict with clean air. It is imperative that we prioritize IAQ over energy conservation at this point while we have the above specific health threats currently affecting our students and teachers.

After numerous conversations with WA DOH, KCPH and our local school district, the following are things that I think could really help:

- 1. Outgoing mandatory IAQ education from WA DOH to WA school districts, which would be then passed on to principals and teachers, specifically on why IAQ is important as well as what we can all do. I have spoken with so many teachers and administrators who don't understand the basics, and they also don't think it is a priority. Simple things such as opening windows and doors when able can go a long way, but administrators and teachers need to understand why first.
- Note: I have personally volunteered to present this information to the district leaders and school board, and there is no interest. Other parents have had similar issues in other districts. A concerned teacher at my daughter's school confirmed that there hasn't been education, and she is similarly frustrated. This is why I think this will need to come from WA DOH.
- 2. We need to educate school districts about the benefits of adding stand-alone HEPA filters to classrooms, especially those with poorer air quality. LWSD has put up barriers to this even though many schools still have MERV-10 filters in place. I had to fight for months to be allowed to donate one to my daughter's classrooms (her school is one with MERV-10 central filters), even though I was very aware of what was needed: appropriate CADR for the space, absent of ionization or UV, etc. It should not be a battle! Another parent had to have a physician-signed form of "medical need" for his daughter in order to be able to donate one. The "medical need" is present for ALL children and teachers: to not get repeated infections that can harm us all long-term.
- All schools that do not have MERV-13 filters or better in place should be actively trying to change to MERV-13, but in the meantime, add stand-alone HEPA filters (for both viruses and wildfire smoke). I specifically recommend defining this and changing the language in the document: Ventilation and Air Quality for Reducing Transmission of Airborne Illnesses to reflect this:



From: "• Portable HEPA filter air cleaners remove particles, including respiratory aerosols, and can supplement ventilation. They are most critical in rooms with poorer ventilation or in isolation areas. ..."

- ..to "poorer ventilation and/ or filtration (i.e. ACH <6 and/ or the central HVAC system does not have MERV-13 or higher filters in place)".
- 3. We need to have WA DOH guidelines that provide adequate ventilation targets to reduce viral transmission. ASHRAE 241 should be the standard. The current total ventilation rate of 21 CFM per person, as proposed for the "Language for Ventilation," is inadequate. This recommendation is equivalent to the 10 lps per person suggested by WHO, which falls well short of the 20 lps (~40 CFM) per person recommended by ASHRAE 241 to combat the spread of infectious disease.
- 4. Encourage visible CO2 monitors in each classroom that track and record in real-time, instead of "zoned" monitors which some schools (such as ours) currently have. The data should be accessible to teachers and parents. It currently is not.
- 5. Encourage schools to have IAQ teams which could help with both implementation but also education of staff. This is a big job, and it should not be just one person. (Our district has one person, and it is clear he is overwhelmed). In our district, I suggested that the school partner with the PTA to help with funding, as parents would definitely be interested in helping IF they understood the need. The PTA is currently not involved nor aware.

I am personally more than happy to donate my time in any of the above matters on a professional level as well.

Thank you again for your time.

Sincerely, Laura Breymann, MD

### Angela Bartholomaus

Kids are being repeatedly infected with airborne infections. With the still ongoing pandemic (per WHO 2024), children like mine are unable to attend school and schools are not inclusive of them or families with high risk individuals. My child was disabled by long covid to the point of not walking and cant get repeat infections. Indoor air quality can boost attendence, prevent long term disability that will eventually effect everyone with repeat covid infection cumulative damage and improve test scores with lower co2 in rooms. In the long run, it saves on the cost of substitutes as well.

Schools need to have a layered air quality. This means they need far uvc 222nm lights to zap viruses in the air. ASHRAE 241 ventilation and covid air sensors (technology exists for this from several places) need to be layered in to alert of exposure. One sick child can infect an entire room as aerosols traverse a room like cigarette smoke from covid. Sick kids must remain home to preserve the rest of the classes health. This is typically 10 days and 2 negative tests at least 48 hrs apart. far UVC, ASHRAE 241 will also reduce cold, flu and anything else that students come in contact with airborne or on surfaces. please consider these technologies for buses as well. Schools and medical facilities are the most likely places to get sick.

A total ventilation rate of 21 CFM per person, as proposed for the "Language for Ventilation," is inadequate in current proposals. This recommendation is equivalent to the 10 lps per person suggested by WHO, which exceeds the bare minimum building code (ASHRAE 62.1), but falls well short of the 20 lps (~40 CFM) per person recommended by ASHRAE 241 to combat the spread of infectious disease. See the table at https://itsairborne.com/ashrae-241-control-of-infectious-aerosols-part-2-equivalent-clean-airflow-rates-76a511769d4d and talking points on why 241 "always applies" at https://itsairborne.com/ashrae-241-always-applies-part-



10-16548e85b17c and read Joey Fox's other articles on classroom air quality for talking points.

Installing this technology will also help with future pandemics like bird flu and reduce wildfire smoke. All families deserve to be able to send their kids safely to school. Millions of children and families are now disabled from the cumulative damage of covid. As an Engineer, I highly encourage a layered approach as nothing is 100%, so you need everything layered. Please be inclusive and strive for higher test scores and reduced absences.

### Anonymous 6

A ventilation rate of 21 CFM per person, as proposed for in the "Language for Ventilation," is inadequate, this falls well short of the ~40 CFM per person recommended by ASHRAE 241 to combat the spread of infectious disease.

The ventilation systems should provide 40 cfm/person and be outfitted with MERV 13 filters to tackle outdoor particulates like allergens and those from wildfire smoke, as well as viruses that cause absenteesim and academic performance issues. Absences due to illness rates has skyrocketed. We now understand most of these, unfortunately common, viruses have an airborne spread component. This requires action on our parts to safeguard our schools and improve attendance alongside academic performance.

We also need clear guidance to facilitate donation and operation of in room portable air purifiers (HEPA/MERV-13) by families and PTSAs, so long as they comply with the committee recommendation to "limit air cleaning technologies to mechanical air cleaners that only use physical filtration."

Portable units do not interfere with the operation of any "well-mixed" system, including those with diffusers in the ceiling (ASHRAE 241 6.5.1.2). These in room filters are a good way to balance IAQ, thermal regulation, and energy efficiency. They clean the air for pennies per day to help achieve higher CFM per person without needing to heat or cool more outdoor air.

### Elizabeth Suffern

Dear State Board of Health Subcommittee, My name is Elizabeth Suffern and I live in Olympia, WA with my husband and 7 year old daughter. I'm writing this comment because I believe strongly in the health benefits of clean indoor air. Research has shown that indoor air that is poorly ventilated and filtered can contain indoor pollutants and allergens in concentrations that trigger asthma and allergies. It's also shown that high concentrations of CO2 that build up in poorly ventilated indoor spaces worsen cognition and concentration, which are so important for learners and school staff. But to me, the most important aspect of indoor air health is the spread of airborne diseases.

Indoor spaces with well ventilated and filtered air have significantly reduced risk of airborne disease spread. Schools are the perfect mixing ground for disease spread, because hundreds of people from different families come together for hours per day to congregate and share the air. They are even riskier spaces than health care settings because the air ventilation and filtration is usually much worse in schools than doctor's offices and hospitals. We have seen how high the rates of illness related absences in schools have grown since 2020 and unfortunately, the policy response has been to encourage attendance of sick children, which just increases the rate of disease spread. If we institute strong clean indoor air standards in schools and then implement them, we can reduce the spread of illness in schools and increase pupil attendance rates.

On November 1, 2024, the EPA updated their information on improving indoor air in schools [https://www.epa.gov/indoor-air-quality-iaq/ventilation-and-respiratory-viruses#buildings]. They recommend using ASHRAE Standard 241 (Control of Infectious Aerosols) as a guide for improving indoor air in schools. They also state that portable air cleaners can be used to reduce viral transmission inside schools. Improving indoor air standards to meet ASHRAE



	241 will not only reduce viral transmission, but it will reduce the indoor air pollutants and allergens, and reduce CO2 levels so that they do not reach the levels to interfere with human cognition.
	There are other states working to improve indoor air in schools. We want Washington state to be at the forefront of indoor air health, particularly in schools. We should, at the very least, expect schools to maintain CO2 levels below 800 in all indoor spaces (as recommended by the CDC), and have portable air cleaners in all spaces, if school HVAC systems cannot meet ASHRAE 241 standards on their own. Portable air cleaners do not need to meet the level of HEPA filters to be incredibly effective. Filters at MERV 13 rating and above can make a huge difference in indoor air health if they have the high flow rate required.
	This is not a time for hesitation, it's a time for bold action to make a big impact on pupil health. When our students are healthier, our communities are healthier.
Nicole Eichsteadt- Meyer	Every student in WA state deserves to have clean air to breathe! A lack of clean air leads to missed work days from teachers, missing class from students, or everyone coming in sick and not being able to participate at their best! Long covid is on the rise among children and can have devastating affects to their entire body. Covid damages the entire body, and the damage has been shown yo be cumulative. Mask wearing is effective, but no child can be expected to wear it correctly all of the time. This is why we need clean air, just as we need clean water.
	The ASHRAE 241 recommendations require 40 CFM per person to fight infectious disease spread, so this is the standard that needs to be implemented.
	As a kid with asthma, I would get sick with anything my classmates had, and be sick for much longer. I wish someone had stepped up to clean the air for me so I didn't have to suffer like that. This is a long term investment that will save lives, protect children, and enhance their education.
Alice Turtles	To protect children from air-borne diseases (like Covid19, but not only C19) to protect students, teachers, and their families in the classroom to keep everyone in the classroom healthy enough to focus and engage there is no single more effective thing we can do than to prioritize indoor air quality and filtration.
	PLEASE do this. Not only for at-risk kids, but for everyone who cares for them, and the teachers who put themselves on the front line daily.
Erika Bilyard	I'm writing from Kent. Multiple students in my second grader's class have contagious pneumonia currently, and one is hospitalized. Respiratory illnesses spread like wildfire in our 1969 school annually. Most of the HVAC systems in the school cannot take a robust HEPA filter that helps clean the air, and during warm wildfire smoke days, the school it's left with a choice of letting classroom occupants, roast or breathe. Many of our area families can't afford to miss work to keep their children home when ill or suffering from the effects poor air quality. Like many districts, our district is low on subs and runs on a skeleton crew, so it is a real problem when staff members get ill as well.
	We need air quality improvements, and we need them sooner rather than later. Our district is not willing to make the improvements on its own. Even with portable HEPA units purchased with covid funds on hand, the district will not update the filters and put them in the spaces that need them most. They need strong state guidance.
	Please implement regulations that will improve the air quality for our kids and staff. My main priority is ensuring portable HEPA units are available and encouraged because that's something we can do now at a minimal cost, and many districts already have these units.



### M. Dennis Knight

ASHRAE recommends including ASHRAE's consensus based indoor air quality and water system safety standards in the proposed update to the Washington State Board of Health's School Environmental Health and Safety regulation. Specifically, we recommend the School Board of Health adopt by reference:

- ANSI/ASHRAE Standard 62.1-2022, Ventilation and Acceptable Indoor Air Quality;
- ANSI/ASHRAE Standard 188-2021, Legionellosis: Risk Management for Building Water Systems;
- ASHRAE Standard 241-2023, Control of Infectious Aerosols; and
- ASHRAE Guideline 44-2024, Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events.

Indoor air quality (IAQ) can significantly affect student learning and development, and the COVID-19 pandemic increased awareness of the impacts of IAQ on student health. Adhering to the most up-to-date consensus-based ASHRAE standards will help meet the objectives of good indoor air quality. ASHRAE Standard 62.1-2022, Ventilation and Acceptable Indoor Air Quality, establishes minimum ventilation rates and other measures intended to provide indoor air quality that is acceptable to human occupants and minimizes adverse health effects due to poor indoor air quality. It defines the requirements for ventilation and air-cleaning system design, installation, commissioning, and operations and maintenance. The latest edition (published in 2022) includes updates to the procedures and methods for meeting minimum ventilation and indoor air quality requirements, and improvements to the Indoor Air Quality Procedure.

ASHRAE has also developed Standard 241-2023, Control of Infectious Aerosols, a standard for buildings that is focused on airborne infection risk mitigation. ASHRAE Standard 241 is meant to be applied in periods of elevated risk, for example the risk of transmission of pathogens like COVID-19. It establishes minimum requirements for control of infectious aerosols to reduce the risk of disease transmission in buildings. Its requirements for ventilation are given in terms of equivalent clean air per person rather than outdoor air, which facilitates flexible use of alternatives to outdoor air to meet risk reduction goals. The equivalent clean air requirements are based on a rigorous risk assessment.

ANSI/ASHRAE Standard 188-2021, Legionellosis: Risk Management for Building Water Systems establishes minimum risk management requirements It contains extensive input from industry, academia, and healthcare and from city, state, and national public health departments and regulatory authorities.

ASHRAE Guideline 44-2024, Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events, includes tailored recommendations for spaces occupied by at-risk groups, such as children and the elderly; best practices for new buildings and retrofits; and guidance for the installation, commissioning, operation and maintenance of building envelopes, ventilation systems and air-cleaning technologies to mitigate smoke infiltration and improve IAQ.

Thank you for your consideration of incorporating by reference these ASHARE standards and guideline.

If you have any questions or need additional information, please do not hesitate to contact me or have your staff email GovAffairs@ashrae.org. Thank you for the work you are doing to protect the health and well-being of building occupants

### **Drew Frank**

I would like to strongly urge that all school spaces be required to meet the standard of ASHRAE 241. Policy is lagging the science in this area. We now know that insufficient



	ventilation has large, negative impacts on health and learning outcomes, and we know how to use currently available tools to mitigate this harm. Now we just need to take action.
	ASHRAE 241 recommends 40 CFM per person in a classroom environment. This is achievable – a lower target would be both unjustified and unnecessary.
	Large HVAC retrofits will take time and money. Meanwhile, students are still required to spend many hours per day in these facilities, and we need to improve their conditions now. Fortunately, this is cheap and easy to do — CR boxes that use PC fans, such as those from CleanAirKits, provide great filtration with much less noise and lower cost than traditional HEPA filters. These should be deployed widely and immediately to bring all our schools into compliance. I am hard pressed to think of another intervention that could yield the same "bang for the buck" in terms of education outcomes.
	I would also like to call for active monitoring and facility-level transparency into both the current ventilation quality and plans for improvement. I've had very limited success getting details about my child's school environment in Seattle Public Schools. Everyone I've contacted has been as helpful as they can, but realistically these are not broadly understood topics. It would help if the state could define a "report card" of sorts — standardizing this would help district employees know which details to make available (and which to focus on in their efforts to improve).
	On a similar note, as a parent I would like some assurance that the systems & tools in place are being used effectively. For example, it would be easy for an HVAC system to be configured to optimize efficiency at the expense of ventilation, for timer-based systems to result in poor ventilation for after-hours events, or for windows to remain shut and in-room filters turned off. This requires both education of facility operators and some accountability.
	Thank you for pushing forward on this important issue. As a parent of two young children, the actions here will impact my family directly for years to come.
1. Jennifer Martin MSPH 2. Maura L 3. Valerie Tung	WAC 246-370-070 Ventilation —  (1) New schools are being held to a Washington state standard that was thankfully put into place in 2021, as it was substantial in its improvements but is now out of date, thanks to the careful work of ASHRAE engineers and McArthur genius grant award winners over the past 5 years. We know that the ventilation rate that is best suited for the twin aims of climate and reducing illness is 40cfm ppm. (40 cubic feet per minute per person). Currently, you are recommending 15cfmpp. This is insufficient. Note that this number can vary depending on building or even room usage. ASHRAE 62 is around 20-25cfm pp.
1. Jennifer Martin MSPH 2. Maura L 3. Valerie Tung	WAC 246-370-070 (2) Schools that are already built can effectively maintain subpar air handling systems in perpetuity. There is no mechanism for remodels to improve the air handling systems to handle better filtration or improved airflow (whether outdoor air or recirculated) to my reading. When and where can we parents expect this plan for slow upgrades over time in our state that prioritizes education as a constitutional right?
1. Jennifer Martin MSPH 2. Maura L	WAC 246-370-070 (4) This policy looks to be inadvertently overly restrictive in this policy, to my eye. Please allow me to explain. In this one, Corsi-Rosenthal boxes (what the EPA has termed "DIY filters") might be interpreted as being banned. Assuming that this does not receive an explicit carve-out, here are my concerns:
3. Valerie Tung	In schools with limited budgets, these boxes ought to be allowed, at a minimum for major smoke, health, or environmental events. With the increased availability of 4" thick filters



(instead of the large, box-like 1" filters on the four sides), these can be made in much more space-friendly ways for a classroom environment. Many people also do not realize that there are additionally 10" smaller, quiet box fans that can be utilized for this purpose, as well as things like the Luggable Clean Air Stars computer fan kits that put out huge amounts of clean air extraordinarily quietly. Additionally, all of the above are the only sub-\$400 units that can be run on a \$25 programmable timer for M-F, X-am-Y-pm. I am happy to provide photo examples and dimensions, if requested.

CRBoxes/DIY Filters should be allowed because they are:

- · Most economical One full-sized CR Box/DIY filter equals 3+ of the best Levoit filters we parents can find at Target. Those filters are \$25-30 apiece for a total of \$75-90 every 3 months if used daily. A 4-piece CR box filter replacement runs approximately \$40 every three months if used daily.
- · Flexible in Sizing CR Boxes can be sized to fit nearly anywhere (10x10 small enough to fit on a bookshelf!), standard 20x20; Filters can be in the usual standard box style, or in 4" thick units to allow for maximum clean air flow, nearly exactly matching the standard box style.
- · Rapidly deployable, space-saving can be made to be only 8" wide, down from early pandemic 20"W models.
- · Able to supplement HVAC when needed Can be used for brief outbreaks of illness, highrisk winter respiratory illness season, dirty outdoor air from smoke events, environmental events, etc.
- · Often Compatible with Programmable Timers Only filter unit that I know of under \$400 that would automatically turn on with a programmable timer with a mechanical set for fan speed.
- · Compatible with Carbon Filter Sheeting additions This would make them equivalent to \$250\_ Best Practice filters recommended by our state and local public health groups for schools in 2021-2022. Schools with PM2.5, microplastic, tire dust issues could add carbon filter covers by covering with cut carbon sheeting, in order to further increase their health benefits to students.
- $\cdot$  Reduces Heat Risks Can also help reduce the impact of heat events in classrooms without A/C due to the moving air.
- · Reduces Dirty Air Pockets in Indoor Spaces Have a corner of the classroom where the air mixing is tricky? A small filter in this area could go a long way.

Safety concerns could be allayed with the addition of:

- · Screen door-style netting across the top to reduce the chance of anything being inserted.
- · Smaller units that could fit out of reach of children's fingers and eyes.
- · Programmable timers to reduce inadvertent unsupervised electrical use.

### 1. Jennifer Martin MSPH

Bathrooms -

2. Maura L

3. Valerie

Tung<sup>1</sup>

This document does not address the very real problem of too many bathrooms having subpar ventilation. We already know in the medical literature that the SARS-1 epidemic had spread in bathrooms up entire high-rise hospitals. Is there a reason we are not requiring an exhaust fan in each bathroom area? With the advent of universal bathroom access, can we have one overall fan with passive ventilation for each walled stall?

<sup>&</sup>lt;sup>1</sup> We have grouped these three people's comments together since their submissions were identical



	Parents want support staff protected every bit as much as the students. We best protected when we are ALL protected. Further, it meets any equity goals, and also allows folks to work without need for any explicit or expensive ADA accommodations – because they will already be increasingly in place to maintain the health and productivity of everyone there, including our students.
	Lunchrooms –
	Well-run districts will recognize that enhanced ventilation needs to be in place specifically in lunchrooms, MPRs, and gathering spaces like PACs. Again, using the actual best practice ASHRAE 241 standard model instead of 62, we can see that having adequate ventilation on a per-person basis (with room capacity as the max) is what would address this issue. Without that, only full-size or equivalent CR boxes or industrial HEPAs could begin to bridge this gap.
	CO2 effects for cognition, productivity, and health -
	For the best visual representation of all indoor air research that I have found from the past five years, please visit the link and click on Figure 2: Residential indoor air quality guidelines: Carbon dioxide - Canada.ca
	This Canadian white paper sums up the problems best:
	If we want test scores to improve? We will tackle the issue of clean air and high CO2 in indoor spaces.
	If we want the best in science and mathematics and communication from Washington State students? We will tackle this issue of clean air and high CO2 in indoor spaces.
	If we want students feeling ready to learn? We will tackle the issue of clean air and high CO2 in indoor spaces.
	If we want students present and decreased absenteeism? We will tackle the issue of clean air and high CO2 in indoor spaces.
	If we want to actually make the dollars count? We will do this with actual data monitoring with high quality sensors and data visualization. We need to do this on data, not feelings.
	^^^We need to define quality, clean indoor air as being, in part CO2 between 400-800ppm^^^
	^^^We need to define acceptable clean indoor air as being, in part, CO2 between 800-1000*ppm^^^
	(Our state currently has guidance at 1125. This is likely too high, based on all available research, especially from Al Haddrell, PhD.)
1. Jennifer	Venitalion Additional thoughts: Thoughts on Language
Martin MSPH 2. Maura L 3. Valerie Tung	Ideally, we could have language that says commercial HEPA filters are preferred, but CR Boxes are allowed, as there is no environmental safety concern with their use, which would give all schools far more flexibility to deploy as needed. They are all mechanical, but given that CR Boxes only became common knowledge in the last 8 years or so, it seems wise to explicitly allow them, as most people are still just becoming aware.
	We need this explicitly stated so that parents can begin the process of detailing what the safety requirements would be for each classroom as we seek to keep our children safer from a variety of airborne issues. We need the ability to rapidly deploy, at very least.
1. Jennifer Martin MSPH	WAC 246-370-080 Indoor Air Quality (6) – Needs clarity and minimum timelines. Each school should be required, within 3 years to have:



#### 2. Maura L

#### 3. Valerie Tung

- 1. 1 outdoor (or built-in HVAC-specific, to which I would need to refer to HVAC/building specialists for how best to word this) air quality monitor, with PM 2.5, PM10, and CO2 monitoring. This way, it can rapidly be deployed to determine school recess suitability for outdoor air, no matter the event, and/or determine HVAC outdoor vs. recirculated air mixing. This would provide the cheapest possible solution for the school to monitor indoor versus outdoor air.
- 2. 1 CO2 monitor with graphing for X number of classrooms. I would suggest 10. This way, it can be rotated between them every two weeks for ideal monitoring. We already know that this has been done in every school in Boston. This way parents can have an idea, no matter the season, of the air quality their children are breathing.
- a. This is for equity reasons that I would draft this with numbers this low. Schools cannot afford one in every classroom. I am well aware.
- b. The clean air point person for each district should also have a counterpart at each school. They should be identified and can submit graphs from each classroom \*to actually identify real problem areas\* as opposed to just identifying schools with educated parents on the issue or with better funding.
- c. This should be required in year two or three, in order to develop the clean air plan by year five

#### Valerie Tung

#### To the SBOH School Team:

Thank you so much for reviewing my letter today. I am a parent of two children in public schools, with many friends, colleagues, and family across multiple districts.

To start on the same page: ASHRAE (the professional society that sets standards that most states utilize for indoor air guidelines) now recommends a standard of 40cfm (cubic feet per minute) \*per person\* CADR (Clean Air Delivery Rate.) I had eagerly awaited this scientific guidance for thresholds in order to make my children safer in their schools, as weariness around masking had definitely set in by spring and summer of 2023! My schools were doing an excellent job of running clean air.

Imagine my surprise this year as I discovered my school had not only turned their mix of outdoor air down 50% since spring 2023, even as they finally had intellectual backing from industry leaders. Picture my incredulity as I sat in on this team's public meeting on November 20, 2024, realizing that nearly every district in the state – and even the private schools! – had nearly all rolled back student and employee clean air protections for health. I noted with cynicism that it also was not worth notifying their employees, families, or students that personal precautions (since the air was no longer nearly as clean as before) would be in order. Apparently my family was not alone. No parent I have talked to since that meeting, outside of families with immunocompromised members, seems to have any idea that the reason our kids are sick so often is because school officials rolled back the protections they gave our kids. I remain appalled.

Sitting in that meeting on Zoom, I heard two leaders out of thirty speak up in favor of air quality monitoring. Thank you very much to the WA State PTA Rep who advocated for any and all monitoring. Thank you to our WA DOH reps such as SME Boris, who are tirelessly educating in these meetings.

If I were to advise the SBOH, OSPI, and our Governor on future iterations of school safety, I would say equal representation of interests of taxpayers would put the entire WA PTA voice as equal to the entirety of the public school representatives there. As such – any and all monitoring, is, I believe the stated policy of the WA PTA. Never has the role of the PTA in particular, our labor unions secondary, seemed so important.



Lastly, my feeling is reflected in every parent or educator or staff member I discuss this with. No one knows how to advocate. No one had any idea that the good work done in 2021-22 was ended without notification. We all feel we need \*you all\* to do this work and advocate for clean air in our schools, too!

While I understand that unfunded mandates are a problem that administrators fear, not having clear guidelines to shoot for means we cannot request the funds, either! Having no timeframe for improvements means they will never happen. Between parents being unaware that their children's schools are once again at mediocre to poor ventilation, having no idea what the parameters or clean air measurements are for their schools – of course it's been impossible to make a case for funding! Your voters and parents don't know why or how – they expect school leaders to make that case! They expect the SBOH and school administrators to lead with science-minded, consensus-based advice, to filter the information for them. What I saw was a set of leaders where only a few have engaged with the research and data on how to improve their students' academic and assessment performance, how to prevent health-based absences, and how to keep them engaged in their learning -- despite one of the biggest health and educational shocks to a generation, that showed the unequivocal importance of this in school and workplaces. (See the Canadian CO2 chart link below.)

We should be working towards smart, focused "smart" air mixing and filtration for maximum attendance and stability for our families – not using climate change as our excuse to promote ill-health and minor changes to energy bills.

Your SBOH policies matter. In every way.

My specific concerns with the clean air written guidance are detailed below.

Thank you for the new radon testing and discouraging diffusion of essential oils (because I love them but not everyone can tolerate various ones!) Much appreciated throughout. Only the clean air section has detailed concerns to follow this letter.

Thank you for your work.

Sincerely, Valerie Tung

#### Laura Breymann

Dear SBOH members.

Thank you for taking the topic of Indoor Air Quality in schools seriously. I am a local Family Physician in Seattle, and I am very concerned about the current status of many schools' air quality. The two main air quality concerns I have for our schools in Washington state are viral transmission and wildfire smoke. Luckily, both of these can be addressed by ventilation and filtration. However, we need to make sure that ALL schools (not just remodels) are meeting minimum standards that WA DOH outlined in their 11/2023 update (MERV-13 filters when possible, goal ACH at least 5, CO2 <800, etc.). I strongly support adding stand-alone HEPA filters to classrooms especially if they cannot meet these recommendations, and many schools are refusing to even allow parents to donate them. For example, I had to fight with LWSD to allow me to donate a (very good, district approved) HEPA filter to my daughter's elementary classroom even though they only have MERV-10 filters in place (because the system cannot accommodate MERV-13). I was never given any reason why I couldn't donate it at first, but instead the matter was treated as an annoyance. I was told by the principal that they stopped caring about air quality when the emergency declaration for Covid ended. We need strong language letting school districts know that IAQ is a priority, and we need to take it seriously.

From a medical standpoint, one of my main concerns is the ongoing rampant spread of Covid-19, which is causing long-term harm to otherwise healthy children and adults (even if



vaccinated). From data collected in studies such as the RECOVER trials, we now know that long-term complications (including long Covid) such as fatigue and cognitive issues are actually not rare in kids. A February 2024 review in the journal Pediatrics estimated that 10% to 20% of children who got Covid developed post-viral symptoms within six months. We already knew long Covid is actually relatively common in adults, and it can be disabling, so protecting teachers and staff is obviously also very important. This virus isn't going away, and pretending like it isn't a problem is extremely short-sighted. In addition to Covid, we will continue to see other viruses that spread via the airborne route increase in the coming years, including Measles. Measles is terrifying, and just like Covid, it lingers in the air in poorly ventilated spaces. It is imperative that we use the lessons learned from the Covid pandemic and do our best to protect kids and staff from these known increasing threats in the future, as I anticipate that vaccine hesitancy will only increase, so we'll continue to have MORE outbreaks than we've had in many years. Regarding wildfire smoke, this is also a problem that is clearly not going away. IF existing schools do not have the funds to switch to MERV-13 filters, they should be doing everything they can to add stand-alone HEPA filters to classrooms, as this really can make a big difference in air quality. My suggestion would be to have a few recommended models based on common classroom size, and allow school districts to choose between these and CR boxes. Parents should not have to be fighting with districts to get them to accept HEPA filters when the classrooms don't meet the minimum WA DOH/ CDC/ EPA recommendations. Lastly, the school districts and staff really need education on why this is a priority. I think a big reason for the pushback on this is that many administrators don't truly understand the scope of the issue. Realizing that this is and will continue to be tied to absenteeism as well as test scores (I'm sure you've seen those studies) may be the best motivating factor, but it truly is about the short AND long-term health of kids (and staff) who deserve to be protected. I am happy to expand on any of the above, including my medical concerns. Thank you for all you do! Sincerely. Laura Breymann, MD We need air purifiers or CR boxes in classrooms, along with carbon dioxide monitors. They should at a minimum be allowed. We all know from the COVID-19 pandemic that human waste carries the virus and infects people. This bathrooms need ventilation. Lunchrooms need more air exchanges and ventilation to keep children safe. Please enact healthy standards for our children's sales. What is currently proposed is not enough. Devon Kellogg Indoor Air Quality (WAC 246-370-070 Ventilation) (1) The term "new construction" as defined in the Definitions section does not include reconstruction or HVAC upgrades to existing buildings, so only completely new construction will be covered by this subsection. Also, add in items 246-366A-090 (2-4) (2) The term "if feasible" in this subsection is a huge loophole, which along with the caveat in (1) for reconstruction and HVAC replacements, makes this entire Ventilation section essentially ineffective except when building a new facility.

(3) Please clarify what the "required ventilation flow rates" are. It's unclear.

Anonymous

12



	To adequately protect students and staff from the myriads of toxins in indoor air, the rule should either:
	<ul> <li>Ensure adequate ventilation rates and filtration levels are put in place during new construction, remodels, and HVAC upgrades, and are adequately maintained whenever the facility is in use, or</li> </ul>
	b. If an existing HVAC system is inadequate and cannot be replaced or modified as specified in a) without unreasonable additional costs, then require ongoing IAQ testing throughout the facility to identify problem areas. If harmful air contaminants are detected or suspected, then require adequate alternative ventilation and filtration methods in those areas.
	[A new proposal (on page 47) presented to TAC on 1/15/25 attempts to achieve this goal, however it was pointed out during the 1/15/25 TAC meeting that the CO2 monitors suggested in (1.a.i.A) will not adequately alert to any air contaminates present, and that the proposed alternative air filtration solutions in (1.a.i.B&C) are problematic. Hopefully the subcommittee tasked with reviewing this section on 2/10/25 can solve this dilemma.]
Nancy Bernard	WAC 246-370-070 Ventilation: Outdoor ventilation rates as set forth in WAC 51-52-0403 and at least 21 cubic feet per minute per person;
	I believe that the intent is to require a minimum of at least 21 cfm/person outside air which is the WHO standard and strongly supported by research. That is above the building code minimum in WAC 51-52-0403. See the updated K12 H&SG, the WSP IEQ technology, and research (https://iaqscience.lbl.gov/). Any increase in energy from this reasonable increase in outside air for dilution ventilation is offset by energy recovery systems.
	(4) "Limit air cleaning technologies to mechanical air cleaners that only use physical filtration, such as HEPA and carbon filters", is excellent.
	"unless the local health officer approves an alternative air cleaning technology." seems unnecessary and will put a lot of pressure on the LHO by marketers.
Brandon	WAC 246-370-070 Ventilation
Kemperman Sinang Lee	-(1): Does new construction include portables? If so, consider including here.
Omang 200	-(4): Does physical filtration include Corsi-Rosenthal Boxes that use MERV 13 filters?
	-(5): Does this include portables? Portables should have adequate ventilation as well since they are problematic when it comes to air quality and ventilation.
Johanna Wilcox	Upgrading air quality and ventilation in schools is a MUST to protect children and educators from illness and allow students to thrive. Schools with better air quality have fewer absences due to illness and therefore students are able to spend more time in the classroom learning. This is also an equity issue under the ADA as a reasonable accommodation that should be provided to protect disabled students. Even if you are no longer concerned by covid (although we all should be,) it's inevitable that there will be future Airborne illnesses and potentially future pandemics, and this is a proactive step we can take now to mitigate damages and cost down the line when the next pandemic hits. Our students deserve to be protected.
Joshua Leinbach	Who determines maximum rate achievable within existing system capacity?  Is there a formula to be used to calculate compliance (for example the variables mentioned in 7.c.ii)?



And an additional 2 cents, is it would be good to include more on the timing, but I understand if it would be considered too prescriptive. It's just that "routine" doesn't seem any different than "periodic" if there's no clarification on timing.

- (f) Performing routine maintenance of the mechanical ventilation system that includes:
  - (i) Testing and balancing for heating, ventilation, and air conditioning systems <u>at least</u> every ten years;
  - (ii) Performing annual(?) [or at least every 3 years to go along with assessment frequency, and/or as specified by manufacturer's instructions?] routine inspections of heating, ventilation, and cooling systems to ensure systems are operating within intended parameters of this rule;
- (iii) Replacing filters as needed to achieve required filtration and air flow rates; and (iv) Maintaining records of these activities for review on site.



#### WAC 246-370-001 Purpose

#### **Section Language**

(1) The purpose of this chapter is to set minimum environmental health and safety standards for school facilities operated for the primary purpose of providing education.

#### **Comment Summary**

No comments submitted.



#### WAC 246-370-005 Definitions

#### **Section Language**

- (1) "Air cleaning technologies" means technologies used to reduce the levels of air contaminants in indoor air.
- (2) "Air contaminant" means pollutants in the air that could, depending on dose and circumstances, cause adverse health impacts.
- (3) "Carbon Filter" means a type of filter that uses activated carbon or charcoal to absorb air contaminants.
- (4) "Decibel (dB)" means a standard unit of measurement of sound pressure.
- (5) "Decibel, A-weighted (dBA)" means a decibel measure that has been weighted in accordance with the A-weighting scale. The A-weighting adjusts sound level as a function of frequency to correspond approximately to the sensitivity of human hearing.
- (6) "Department" refers to the Washington State Department of Health.
- (7) **"Emergency washing facilities**" means emergency washing facilities such as emergency showers, eyewashes, eye/face washes, hand-held drench hoses, or other similar units.
- (8) **"Emissions**" mean substances released into the air, including gases and particles, from various sources.
- (9) "Equivalent Continuous Sound Level" or "Leq" means the sound pressure level of a noise fluctuating over a period of time, expressed as the amount of average energy.
- (10) **"Foot candle"** means a unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot.
- (11) "**HEPA filter**" means a high-efficiency particulate air filter, a type of pleated mechanical air filter that can theoretically remove 99.97% of particles with a size of 0.3 microns.
- (12) "Imminent health hazard" means a significant threat or significant danger to health or safety that requires immediate action to prevent serious illness, injury, or death.
- (13) "Integrated pest management" means a program that reduces sources of food, water, and shelter for pests by using the least toxic pest controls when necessary.
- (14) "Local board of health" means the county or district board of health as defined in RCW 70.05.010(3).
- (15) "Local health officer" means legally qualified physician who has been appointed as the health officer for the city, town, county, or district public health department as defined in RCW 70.05.010(2) or their authorized representative.
- (16) "**New construction**" means new buildings or structures, including construction of additions to existing school facilities and reconstruction or retrofitting of an existing building not originally



intended for use as a school facility. New construction does not include reconstruction of an existing school facility.

- (17) "Noise abatement" means measures taken to reduce unacceptable sounds or vibrations.
- (18) "Noise criterion" means a single number for rating the sound quality of a room by comparing actual or calculated sound level spectra with a series of established octave band spectra.
- (19) "Noise criterion 35 (NC35)" means the curve for specifying the maximum permissible sound pressure level for each frequency band.
- (20) "**Portable**" means any school building with a prefabricated structure that can be transported and installed on-site to provide additional educational space.
- (21) "**Preschool**" means an educational establishment or learning space offering early childhood education to children not old enough to attend kindergarten.
- (22) "Readiness Plan" means a written guide to ensure the health and safety of the occupants of a school facility in the event of a particular hazard, such as extreme heat or wildfire smoke.
- (23) "School" means any public institution of learning where the primary purpose is educational instruction for children in any grade from kindergarten through grade twelve and related activities by the public school as defined in RCW 28A.150.010 and any private school or private institution regulated by chapter 28A.195 RCW.
- (24) "School facility" means all buildings and land intended primarily for student use including, but not limited to portables, sports fields, playgrounds, classrooms, and common areas.
- (25) "School official" means a member of the district or school staff who has the authority to make decisions on behalf of the district or school to maintain and improve environmental health and safety within the limitations of this rule.
- (26) "Source capture system" means a mechanical exhaust system designed and constructed to capture air contaminants at their source and release air contaminants to the outdoor atmosphere.
- (27) "**Specialized room**" means a space or room that has a specific function that utilizes equipment, furniture, or supplies not found in a standard room. This may include but is not limited to, a career and technical education room, laboratory, art room, or health room.
- (28) "Stationary machinery" means equipment that is designed to be installed in a fixed location and does not require intermittent movement to service different needs.
- (29) "**Total ventilation**" means the portion of air that is supplied to a designated zone from the outdoors, plus any filtered and recirculated air.

### **Comment Summary**

#### Air contaminant 005(2)

- Include bioaerosols like COVID-19?
- Make more inclusive like 246-366A.

Imminent health hazard 005(12)



- How do you know what is an IHH? By a risk assessment based on frequency or severity?
- Be more specific (e.g. food code definition).

#### New construction 005(16)

- Include remodels and HVAC upgrades?
- · Include demolished and rebuilt buildings?
- Include reconstruction/alterations of existing school?

#### Readiness plan 005(22)

- Includes heat and wildfire smoke but only used in temperature section. Should be used in ventilation, IAQ, IHH sections as well and if so should we include those in the definition?
- Change "extreme heat" to "extreme temperature.

#### School facility 005(24)

• What about churches where "primary use" is not for education?

#### School official 005(25)

• Too ambiguous. Who has authority?

#### Specialized room 005(27)

- Define CTE room or add "rooms that use equipment or processes that **pose potential physical** or indoor air quality hazards..."
- Combine this definition with the description in 246-370-110 Table 2: "Specialized rooms where safety is of prime consideration or fine detail work is done, for example, family and consumer science laboratories, science laboratories (including chemical storage areas), shops, drafting rooms, and art and craft rooms."

#### Total ventilation 005(29)

Not used—remove.

#### Add:

- **Kindergarten**: Like "instruction provided to children who will progress to grade 1 the following year." Not all schools call this Kindergarten.
- Site assessment (From 246-370-020)
- Transition services (From 246-370-010(1))
- **Sun control** (From 246-370-110(3))

Name	Comment
Lindsey Doolittle	• 005(16): "New Construction" [] does not include reconstruction of an existing school facility o How does this apply to a structure that is demolished and rebuilt with the same purpose? Gym/lab/etc.
Steve Brown	The term "specialized room" is also kind of defined in Section 246-370-110 Table 2. Perhaps the best definition of a specialized room would be a blend of these two definitions?



	One term that should be defined in this section, but isn't is "site assessment". I think 246-370-020 does a good job of explaining what a site assessment must include, but stops short of explaining what it is.
Anonymous 3	It would be helpful to define what imminent health hazard is with more specificity. The definition could reflect verbiage that is in the state Food Code and also address health threats that are specific to school environments.
Anonymous 4	"School official" definition seems ambiguous as to who this would actually apply to. who has this authority??
Laurette Rasmussen	(16) new construction - why does new construction not include reconstruction of an existing school? Does that mean that reconstruction is not subject to plan review? I don't recall if there was discussion on this. I would require plan review for reconstruction.
Laurette Rasmussen	Definition readiness plan - change "extreme heat" to "extreme temperatures". This aligns with the Temperature section 090.
Lori Karnes	From WAC 246-370-010 Applicability:
	Can "transition services" be a defined term? I see we define preschool which seems a lot clearer to me than transition services.
Kait Wolterstorff	110(3) Define sun control
Devon Kellogg Washington State PTA	(2) "Air contaminant "- The previous rule (246-366A-010 (2.a-e)) gave examples in the definition of "air contaminant", such as "VOCs", "combustion by-products", "vapors and gases", "heavy metal dusts and fumes", and "particulates". These examples should be added back in to allow for more awareness and clarity of what types of contaminants are harmful to health. Additionally, harmful but often overlooked contaminants such as diesel exhaust, smoke, mold, asbestos, sulfur, and sulfur dioxide should be added too.
Devon Kellogg Washington State PTA	(16) "New construction" does not include remodels or HVAC upgrades (please see notes on the impact of this in the Ventilation section). Compare this to 246-366-010 (4), 246-366A-010 (4), and 246-366A-005 (7.c) which does include remodels and HVAC upgrades.
Devon Kellogg Washington State PTA	(22) The "Readiness plan" references heat and wildfires smoke, but is only used in the Temperature subsection, not in the IAQ, Ventilation, or Imminent Health Hazard subsections (please see notes about this in those sections).
Devon Kellogg Washington State PTA	(29) Where is the term "total ventilation" used?
Brandon Kemperman, Sinang Lee	'-246-370-005 (2): Does the "air contaminant" definition include bioaerosols? E.g., COVID-19 or another emergent airborne infectious disease.



Brandon Kemperman, Sinang Lee	-246-370-005 (12): How is an imminent health hazard determined? Should there be a risk assessment component to determine the risk level based on frequency and severity? Or another tool used to determine what an imminent health hazard is?
Steve Main	WAC 246-370-005
	(27) Specialized Room - a space or room that has a specific function that utilizes equipment, furniture, or supplies not found in a standard room. This may include but is not limited to, a career and technical education room, laboratory, art room or health room.
	> Include a definition for CTE such as "rooms that utilize equipment or processes that pose potential physical or indoor air quality hazards such as auto shop, wood shop, scene shops, maker spaces, chemical photography, or family & consumer science."
	Other recommended definitions:
	> Need definition for kindergarten such as "instruction provided to children who will progress to grade 1 the following year." Some schools do not use the term kindergarten to describe this grade level but if the children will be in first grade the following year, they should be included in this rule.
Steve Main	WAC 246-370-005(24) School Facility - means all buildings and land intended primarily for student use including, but not limited to portables, sports fields, playgrounds, classrooms, and common areas.
	- Churches are not intended primarily for the use of students but are often used as schools. The concern is that this definition may be used to exempt these facilities from site assessment and/or plan review requirements.



### WAC 246-370-010 Applicability

#### **Section Language**

- (1) Chapter 246-370 WAC applies to all facilities operated for the primary purpose of providing education, including those primary and secondary school facilities that offer preschool education or transition services except:
  - (a) Any facility or part of a facility that is licensed by the department of children, youth, and families under Title 110 WAC:
  - (b) Private residences used for home-based instruction as defined by RCW 28A.225.010(4);
  - (c) Facilities hosting educational programs where educational instruction is not a primary purpose, including, but not limited to, detention centers, jails, hospitals, mental health units, or long-term care facilities;
  - (d) Private facilities where tutoring is the primary purpose;
  - (e) Public or private postsecondary education facilities providing instruction to students enrolled in secondary school; and
  - (f) State-tribal education compact schools established under chapter 28A.715 RCW.
- (2) Additional environmental health and safety rules that apply to school facilities include, but are not limited to:
  - (a) Facility and equipment sanitation, food preparation, food storage, and food temperature control must follow the requirements of chapter 246-215 WAC;
  - (b) Food service workers, including contracted staff and volunteers, must maintain a current food worker card per chapter 246-217 WAC;
  - (c) Water Recreation Facilities or aquatic venues must follow the requirements of chapters 246-260 and 246-262 WAC, as applicable;
  - (d) Supply sewer and liquid waste disposal supplied to the school facility that:
  - (i) Is connected to a municipal sewage disposal system according to chapter 173-240 WAC, if available; or
  - (e) Is connected to an on-site sewage disposal system designed, constructed, and maintained as required by chapters 246-272A or 246-272B WAC, and local ordinances;
  - (f) The installation and maintenance of carbon monoxide detection and alarms in mechanical rooms and occupied zones as set forth in chapter 51-54A-0915 WAC;
  - (g) Potable water supplied to the school facility that:
    - (i) Meets the provisions of chapters 246-290 or 246-291 WAC:
    - (ii) Meets the requirements of the uniform plumbing code set forth in chapter 51-56 WAC; and
    - (iii) Follow the requirements for lead in drinking water set forth in RCW 43.70.830 through 43.70.845 if the facility was built or the plumbing was replaced before 2016.
- (3) These rules are not intended to replace or supersede the department of labor and industries' authority and jurisdiction under Title 296 WAC over employee safety and health.
- (4) These rules are not intended to replace building code council requirements under Title 51 WAC. In the event this chapter is more stringent to protect health and safety it may supersede Title 51 WAC.



(5) If the local permitting jurisdiction received a complete building permit application for school construction before the effective date of this chapter, the construction-related requirements of chapter 246-366 WAC apply.

#### **Comment Summary**

#### Group B water Supplies 010(2)(g)(i)

- Do not support schools on Group B water systems as they are not adequately tested or regulated.
- If Group B systems are allowed, can they be required to test like Group A (including PFAS)?

#### Home-based instruction 010(1)(b)

• Should this also include "homeschool co-ops" where people are instructing to kids from multiple families. 284A.225.010(4) is only parents providing instructions to their own children.

#### Legacy schools

 Schools that are approved now should not have to conform to new requirements. For example, the number of bathrooms or showers.

Name	Comment
Laurette Rasmussen	Applicability - (2) (g) Potable water supplied to the school facility that: (i) Meets the provisions of chapters 246-290 or 246-291 WAC;
	Why was Group B water systems added to the new rule? 246-366 only states that schools must meet the Group A rule. I do not support adding Group B water systems as an option for schools. DOH oversees Group A and Group B is under LHJ jurisdiction. Many LHJs do not have a Group B water program, so there is little oversight. Water Testing is done at the initial approval stage, but no requirement for regular ongoing testing. This is a concern as water quality can change over time and if there is no testing, there is a risk that students could be exposed to a contaminant such as arsenic or bacteria like E. coli.
Anonymous 10	This rule allows for group B water systems to serve a school. Group B monitoring programs vary greatly across the state. Is it possible to change the language that if the jurisdiction has a Group B water program that requires and monitors water quality testing equal to that of a Group A system then it could be okay but if it is a program that does not have a robust Group B program then we shouldn't allow schools to be using a Group B water system.
Patrick Hull	I would recommend removing the provision allowing schools to obtain water from Group B systems [WAC 246-370-010 Applicability (2)(g)(i)]. Some counties have robust Group B programs where systems are well regulated with substantial oversight. Other counties have very limited Group B capabilities or no program to speak of. Allowing schools to connect to Group B systems not bound to testing/oversight could be problematic.
Devon Kellogg	Water Quality (WAC 246-370-010 Applicability)
	Current rule WAC 246-366-060 (2) requires water in school facilities in accordance with what are called "Group A" water supplies (WAC 245-290). The 246-366A rule adds "Group B" water supplies (in -005(g)), but then also requires rigorous onsite testing (in -130, -135, and -140). The new proposed rule 246-370 would also add the allowable use of "Group B"



	water supplies (-010(2.g.i), and would require lead monitoring (-010(2.g.iil), but does not include other testing, reporting, or remediation requirements (as in 246-366A-130, -135, & -140).
	For example, lead testing in water is covered in this proposed rule (-010.2.g), but not copper testing as in 246-366A-135 or "other contaminants" as in 246-366A-140. There are also no requirements to report results or make repairs/accommodations when lead/copper/other contaminants are found as in above WACs and WAC 110-300/301-0235.
	Was it the TAC's intention to add allowances for "Group B" water supplies without the corresponding additional testing (besides lead), or reporting and/or mediation requirements? Comprehensive testing should be added back in and results reported and addressed as in previous WACs, since this is necessary for basic health and safety.
Lindsey Doolittle	• 010(1)(b): how does this apply to spaces used for "homeschool co-ops" where parents may be providing instruction to kids from multiple households.
	o RCW 284A.225.010(4) exemptions apply only when "Provided by a parent who is instructing his or her child only"
Anonymous 11	I would like to make sure there is a grandfather clause for schools that are already approved.
	I work for a small private school and our school has been approved with the regional health district. According to the things that are in the document we would not have, for example, have the correct number of toilets that are mentioned in the document. We also do not have the building foot print or the financial means to be told by the health district and the state to put more toilets into the building. Please consider all of the schools that the health district advises and allow common sense to rule the day. Most schools, even the public schools, cannot take existing buildings and pay thousands of dollars to upgrade them to the latest and greatest technology, etc.
Ava M	I would like to suggest and advocate for adding robust water quality assessments in all public schools (or schools
	covered by this rulemaking) that check for lead, pesticides, harmful bacteria, contaminants and PFAS. In my community, we have had issues with PFAS leaking out into the environment from military testing sites, and the drinking water was never tested. My high school lost their grant for bottled drinking water after COVID, and the drinking water available to the students and staff has tested over the legal limit of copper, and one source in the elementary school has tested over the legal limit of lead. People began to buy gallons of water from the supermarket that they could take to practice, and they were never reimbursed by the school or through state means. Safe drinking water should be available on each Washington school property.
	In addition to the proposed provisions of 246-370 WAC, please add more through Water quality assessment considerations within public schools for the School Environmental Health and Safety Rule project.



#### WAC 246-370-015 Guidance

#### **Section Language**

- (1) The department, in cooperation with the state superintendent of public instruction, shall review potentially hazardous conditions in schools which are in violation of good safety practices and jointly prepare a guide for use during routine school inspections that:
  - (a) Recommends corrective action to remediate violations of good safety practices;
  - (b) Includes recommendations for safe facilities and safety practices; and
  - (c) Is reviewed and updated every five years.

#### **Comment Summary**

#### **Guide 015(1)**

• Is this just for good safety recommendations or will the guide help with routine inspections, preoccupancy inspections, and/or plan review?

#### Violations 015(1)(a)

Good safety practices are not required and should not be called a violation.

#### **Update frequency 015(1)(c)**

• Should be "at least" every five years or "no longer than every five years" to allow for more frequent updates.

Name	Comment
Steve Main	WAC 246-370-015 - Guidance (1) The departmentshall review potentially hazardous conditions in schools which are in violation of good safety practices and jointly prepare a guide for use during school inspections that: (c) Is reviewed and updated every 5 years > The K-12 Guide is currently used for inspections and plan review. It is commonly referenced by architects, school officials, and local health as planning and plan review of projects begins, including construction, renovation, and upgrades to existing structures. May want to consider changing the language to "Is reviewed and updated at least every five years"
Brandon Kemperman, Sinang Lee	WAC 246-370-015 Guidance -(1): Are findings for best practices a violation? Is this referring to guidance, which would not be a requirement? Will the guide include school plan review and preoccupancy inspections in addition to routine school inspection information? -(1)(a): Clarify which codes would lead to violations. Does not complying with any of the WAC 246-370 requirements lead to a violation. "Good safety practices" sound like guidelines, not requirements(1)(c): Or sooner if significant health and safety rules are established pertaining to K-12 schools. "Updated a maximum of every five years" may be a good addition to (c).



#### WAC 246-370-020 Site Assessment

#### **Section Language**

- (1) A local health officer shall conduct or require a site assessment when a school district is planning:
  - (a) To construct a new school facility on a site that was previously undeveloped or developed for other purposes; or
  - (b) To convert an existing structure for primary use as a school facility.
- (2) A local health officer may conduct or require a site assessment when a school district is planning to construct:
  - (a) A new school facility on an existing school site; or
  - (b) An addition to an existing school facility.
- (3) A site assessment must include:
  - (a) A Phase 1 Environmental Site Assessment (ESA) that meets the requirements of the American Society for Testing and Materials (ASTM) Standard #1527-21 (published December 2021);
  - (b) Sampling and analysis of potential contaminants if the Phase 1 ESA indicates that hazardous materials may be present. Sampling and analysis must comply with the applicable rules of the Washington state department of ecology, chapter 173-303-110 WAC; and
  - (c) A noise assessment that measures noise from all sources during the hours that school is normally in session.
    - (i) The noise must not exceed:
      - (A) An hourly average of 55 dBA or the mean sound energy level for a specified time in Leq 60 minutes; and
      - (B) A maximum sound level, recorded during a specified time measured as Lmax, of 75 dBA during the time of day the school is in session.
- (4) A school official shall:
  - (a) Notify the local health officer within 90 days of starting:
    - (i) The preliminary planning for school construction that requires a review and approval of a site assessment by a local health officer under subsection (1) of this section, or
    - (ii) The preliminary planning for school construction under subsection (2) of this section to determine if a site assessment is required.
  - (b) Consult with the local health officer throughout the plan development phase regarding the scope of the site assessment and the timeline for completion of the site assessment.
  - (c) Submit the written report to the local health officer assessing the potential impact of health and safety risks presented by the proposed site, including, but not limited to the following:
    - (i) The findings and results obtained under subsection (3) of this section;
    - (ii) An analysis of the findings:
    - (iii) If a site exceeds sound levels under subsection (3)(c)(i), the school official must include a plan for noise reduction in the new construction proposal;



- (iv) A description of any mitigation proposed to address identified health and safety risks present at the site; and
- (v) Any site assessment-related information requested by the local health officer to complete the site assessment review and approval process.
- (d) Obtain the site review and written site approval from the local health officer when required under subsection (1) or (2) of this section.
- (5) The local health officer shall:
  - (a) When notified by a school official, conduct an inspection of the proposed site;
  - (b) Review the site assessment for environmental health and safety risk;
  - (c) For site assessments according to subsection (1) of this section, provide written approval, describe site deficiencies needing mitigation to obtain approval, or deny use of the proposed school facility site within 60 days of receiving a complete request unless a school official and the local health officer agree to a different timeline; and
  - (d) For site assessments according to subsection (2) of this section, provide written approval or describe site deficiencies needing mitigation to obtain approval of the proposed school facility site within 60 days of receiving a complete request unless the school officials and the local health officer agree to a different timeline.
- (6) If a written site assessment request from a school official is received by the local health officer before the effective date of this section, the site assessment requirements of chapter 246-366 WAC apply unless otherwise specified in this chapter.

#### **Comment Summary**

#### **LHO Flexibility**

Allow LHO to exclude any part of this section.

#### School District 020 (1)

• "District" applies to public schools when the language should include private schools.

#### Noise assessment 020 (3)(c)(i)(B)

Specify time weighting for Lmax<sup>2</sup>.

#### Site Assessment 020(5)(a)

Is "Inspection" intended to be a physical inspection? If not, then change to "review."

#### **Physical hazards**

• If the Phase 1 ASTM standard does not include nearby air pollutants, geological risks, explosives, earthquake damage prevention then add to rule.

#### **Standards**

Can the rule include wording like "latest version"?

<sup>&</sup>lt;sup>2</sup> Slow time weighting takes 1 second for a meter to get a constant tone therefore ignoring short of fast sounds like doors slamming. Fast time weighting responds to changes in sound in 0.125 seconds registering the short fast sounds. Fast time weighting produces a detailed picture.



#### School official notifying LHO 020(4)(a)(i)

What constitutes "preliminary planning"? Could this be more specific?

#### **Clarify 020 (1)**

• should say "A local health officer shall conduct or require a site assessment when a **school or** school district is planning:"

Name	Comment
Steve Brown	It would be nice to include language that allows LHO the option to exclude any of the requirements of section 3(a)(b)(c) if they are reasonably unnecessary at a particular site.
Lori Karnes	Regarding noise assessments - I recently received this language on a noise study which I thought had valid points:
	WAC 246-366-030 (3) does not specify the time-weighting for assessing Lmax requirements. It should be noted that there are several time-weightings, which include "slow" (LSmax), "fast" (LFmax), and "impulse" (LImax), where "slow" results in the lowest sound level and "impulse" the highest, for short-period events (i.e., dog barking, vehicle passing by, etc.). The only reference to time-weighting is in WAC 173-58-080, which states a slow response shall be used for measuring vehicle exhaust systems, and while not directly related to WAC 246-366-030, it serves as the only available direction regarding what time-weighting to apply. For this reason, we have considered the "slow" time weighting for the purposes of this study. The results of the measurements are shown in the following table and figure. We may want to make this language a little more robust?
Lori Karnes	WAC 246-370-020 (5)(a): The local health officer shall: When notified by a school official, conduct an inspection of the proposed site;
	"Inspection" implies to me a physical inspection. "Review" may be a better term to use.
Devon Kellogg	Site assessments should include nearby hazards (such as air pollutants, geological risks, and explosive or hazardous infrastructure) and/or potential future hazards (such as earthquakes and increasing risks of fires/floods). The ASTM Standards are not publicly available to verify that these considerations are included in such assessments. Please add these additional requirements to the WAC if they are not already in the ASTM Standards.
Brandon Kemperman, Sinang Lee	-(3)(a): When referring to standards, it may be helpful to include "or latest version" to ensure these are not quickly outdated due to mentioning specific versions.
Brandon Kemperman, Sinang Lee	-(4)(a)(i): What exactly would preliminary planning entail? What step along the way would the School District need to reach out to us?
Steve Main	WAC 246-370-020 Site Assessment
	(1) A local health officer shall conduct or require a site assessment when a school district is planning:



> Should state "when a school or school district" to include private and parochial schools
> Should be flexible to allow LHO the ability to determine whether a Phase I ESA is required. For example, if a grocery store is being renovated to become a new school, a Phase I ESA may not be needed.

#### Survey comments not covered above

Name	Comment
Steve Main	(1)(b) and (3)(a)(b)(c) The LHO the authority to exclude schools and school districts from site review sections (1)(b) and (3)(a)(b)(c) if there are no concerns about public health risk.  (5)(a) Change wording to "conduct an inspection and/or review of the proposed site."



# WAC 246-370-030 Construction Plan Review New, Alterations, and Portables

#### **Section Language**

- (1) The following school construction projects must be reviewed and approved by the local health officer:
  - (a) Construction of a new school facility, playground, or specialized room;
  - (b) Establishment of a school in all or part of any existing structure previously used for another purpose;
  - (c) Additions or alterations consisting of more than 5,000 square feet of floor area or more than 20 percent of the total square feet of an existing school facility, whichever is less;
  - (d) Alteration of a playground or specialized room; and
  - (e) Installation or construction of a portable classroom.

#### (2) A school official shall:

- (a) Consult with the local health officer at the 50 percent design development stage for school construction projects plans to determine if the project requires construction review.
  - (i) Provide additional documents requested by the local health officer, which may include, but are not limited to, written statements signed by the project's licensed professional engineer verifying that design elements comply with requirements specified by these rules; and
  - (ii) Consult with the local health officer to determine whether additional construction project review is required to ensure that the project meets the requirements of these rules;
- (b) Obtain written approval from the local health officer for the construction project before starting construction.
  - (i) If the school official meets the requirements of subsection (2)(a) but the local health officer does not meet the requirements of subsection (3), the school official may proceed with their scheduled construction timeline.
- (c) Request a preoccupancy inspection by the local health officer to ensure the correction of any imminent health hazards before allowing occupancy at the school facilities; and
- (d) Notify the local health officer at least five business days before a desired preoccupancy inspection.
- (3) The local health officer shall:
  - (a) Respond to a request to consult with a school official within 15 business days of receipt;
  - (b) Consult with a school official to determine what is required for plan review and approval;
  - (c) Review construction project plans at the 50 percent design development stage to confirm if a construction review and approval is needed to meet the health and safety requirements of this chapter;
  - (d) Consult with a school official when additional reviews are required;
  - (e) Identify and request any additional documents required to determine compliance with requirements outlined in this chapter, if construction review is necessary;



- (f) Provide written approval within 60 days of receiving the 100 percent design development for the construction design plans or provide a written statement describing construction project plan deficiencies that need to change to obtain approval. This timeline may be altered if mutually agreed upon by the school official and the local health officer; and
- (g) Conduct inspections:
  - (i) In a coordinated effort with the on-site project manager or other appropriate person identified by a school official;
  - (ii) At any point during the construction period to verify compliance with the requirements of this chapter:
  - (iii) Before the completed construction project is occupied and not more than five business days after the date requested by a school official or as otherwise agreed to by the school official and the local health officer;
    - (A) If an imminent health hazard is identified, a solution must be identified and agreed to by the school official, the local health officer, and the local building official and implemented by school officials before the affected portion of the building is occupied.
    - (B) If other conditions of noncompliance with this chapter are identified, provide the school official with a written list of items and consult in developing a correction schedule based on the level of risk to health and safety.
  - (iv) To confirm satisfactory correction of the items identified under (iii) of this subsection.

#### **Comment Summary**

#### **Specialized room conversion**

• Include inspection of a regular classroom that is converted to a specialized room.

#### Additions or alterations 030(1)(c)

• The % of school or total square feet is too large and arbitrary. Either lower or leave to the LHO to determine if plan review is necessary.

#### **Plan Approval**

Should playgrounds and new construction plan review have the same amount of approval time?
 New construction is 60 days; a playground 30 days.

#### Preoccupancy inspection 030(3)(g)(iii)

• 5 business days to organize a preoccupancy inspection is not enough time. Suggest 10 days.

#### Additional documents 030(2)(a)(i)

Should read: "Provide additional documents requested by the local health officer, which may
include, but are not limited to, written statements signed by the project's licensed professional
engineer or licensed architect verifying that design elements comply with requirements
specified by these rules"



Name	Comment
Lindsey Doolittle	• 030(1)(a): clarify that plan review applies not only for NEW specialized rooms, but conversion of a space into a lab/shop/other specialized room.
	o Compare language in WAC 246-366A-040(d)
Anonymous2	The draft language states that the health officer must review construction alterations consisting of more than 5,000 sq. ft. or more than 20% of the total square footage of the building. This seems like a large amount of space. There can be complex building alternations that are 4,500 sq. ft. Does this mean that plan review would not be required? I think the threshold for plan review needs to be lowered. Or delineating exceptions to this rule more clearly with examples of construction projects that are smaller in scale but would still require plan review.
Lori Karnes	WAC 246-370-030 (1)
	So hypothetically, a school could add on brand new bathrooms with no review whatsoever from local health? From an LHJ standpoint, we would want to see this.
Lori Karnes	Why do we say 60 days for written approval for construction plan review new, alterations and portables but only 30 days for playgrounds? I would like them to be the same/consistent. If this is based off of complexity, it is much easier sometime to approval a portable over a large complex playground.
Kait Wolterstorff	030(3)(g)(iii): 5 business days is a tight timeline for many small LHJs – our agency would struggle to adjust schedules on a 1-week notice. 10 business days would be more appropriate.
Steve Main	WAC 246-370-030 Construction Plan Review for New, Alterations, and Portables
	(1) The following school construction projects must be reviewed and approved by the local health officer:
	(c) Additions or alterations consisting of more than 5,000 square feet of floor area or more than 20 percent of the total square feet of an existing school facility, whichever is less;
	> This is an arbitrary are to consider for plan review. It is much more important to consider the use and potential health impact of the altered space, for example a closet being turned into a counselor's office without adequate ventilation, or a classroom being turned into a wood shop, or an HVAC upgrade in part of a school building.
Steve Main	(2) A school official shall:
	(a) Consult with the local health officer at the 50 percent design development stage
	(i) Provide additional documents requested by the local health officer, which may include, but are not limited to, written statements signed by the project's licensed professional engineer verifying that design elements comply with requirements specified by these rules;
	>This should be "professional engineer or licensed architect verifying" since this may be provided by either of these design professionals.



Brandon Kemperman, Sinang Lee	'-(1)(c): Where did the 5,000 SF threshold come from? How will hazards such as, but not limited to, sound, lighting, water temps, etc. be verified to meet minimum standards?
Brandon Kemperman, Sinang Lee	-(2)(d): Notification of at least 10 business days would be more realistic for counties with greater quantities of schools.



#### WAC 246-370-040 Routine Inspection

#### **Section Language**

- (1) The local health officer shall:
  - (a) Conduct an environmental health and safety inspection of each school facility within their jurisdiction every three years, prioritizing areas for emphasis based on risk.
  - (b) Notify school officials at the time of discovery, or immediately following the inspection, if conditions that pose an imminent health hazard are identified and follow the imminent health hazard requirements set forth in WAC 246-370-130.
  - (c) Consult with school officials upon completion of the inspection about findings and recommended follow-up actions and, if necessary, collaborate with school officials to develop a remediation schedule.
  - (d) Issue a final inspection report, within 60 days following an inspection. The local health officer may establish an alternate timeline for issuing the final inspection report when agreed upon in consultation with school officials. The report must include inspection findings related to this chapter and any required remediation.
  - (e) Confirm, as needed, that corrections are accomplished.
- (2) The local health officer may:
  - (a) Adjust the inspection interval of the schools within their jurisdiction if:
    - (i) The local health officer develops a written risk-based inspection schedule, that is uniformly applied throughout the jurisdiction based on credible data or local risk factors.
      - (A) The time between routine inspections may not exceed five years.
      - (B) The time between routine inspections may not be more frequent than one year.
  - (b) A school official or qualified designee may conduct the required additional inspections under a program approved by the local health officer, if the program includes provisions for:
    - (i) Assuring that the school official or designee conducting the inspection has attended training in the standards, techniques, and methods used to conduct an environmental health and safety inspection;
    - (ii) Completing a standardized checklist at each inspection; and
    - (iii) Providing a written report to the local health officer detailing the findings of the inspection, within 60 days of completing the inspection.

#### **Comment Summary**

#### **Inspection frequency**

Three years is feasible, but every year would achieve better compliance.

#### **Funding**



LHO program? Inspection fee? Remediation?

#### Private school limitation on rentals

What happens when landlord will not make changes?

#### 040(2)(a)(i)

- Suggestion: include subsection (i) in subsection (a)
- Suggestion: "...uniformly applied throughout the jurisdiction based on credible data or locally determined risk factors.

#### Transition 040(2)(b)

• Suggestion: (2) The local health officer may: (b) Allow a school official or qualified designee may to conduct the required..."

#### **Training**

• Standardize training for all inspectors.

#### Statewide audit

- DOH should partner with OSPI to do a general assessment of schools across the state and not single out schools.
- Identify top health and safety priorities, secure funding, and create plan to help schools implement improvements

Name	Comment					
Lindsey Doolittle	Response timelines generally are reasonable					
	• 040(1)(a): 3 year rotation is definitely feasible. Annual would be more reasonable for actually achieving compliance & maintaining relationships with schools.					
	Funding needed. State? Fee for service? How will schools afford costs of inspection?					
Anonymous1	Seems like we just keep adding more and more bureaucracy. Most of the rules are covered by other departments while getting building permits. Now we have to add another layer of people inspecting. For private schools renting a building, we are limited to what we can ask the landlord to do.					
	I think this can be used later to keep new private schools from opening. We do not have the funds that public schools have access to. I do not think the Health Department needs to be overseeing areas that are covered in building permits and does not need to be involved unless there is a health problem. It's almost impossible for private schools to get something done in a timely manner and now there is another hoop we need to jump through. Have there been lots of Health problems in schools?					
	Bad air?, unsafe playgrounds?, Lighting that is injuring students?					
	Now the health dept. has to hire more people to inspect schools??					
	When we were at the meeting to discuss all the changes, we were told it was just updating the 1950's code.					



	But after reading, it has a lot of new things that will be inspected by the health department that previously has not been done.  Maybe, listen to what President Trump said to California, to get rid of all the permits and inspections in the way and let people build.					
Steve Brown	The transition from 246-370-040 (2) to (b) is clunky and needs rewording. For example (2) to (a) Reads "The local health officer mayadjust the inspection schedule"  But (2) to (b) reads "The local health officer maya school official or qualified designee may conduct"  It needs a better transition. Consider changing (b) to read "Allow a school official or qualified designee to conduct the required"					
Joni Hensley	I hope that there is a standardized training for school-designated inspectors for routine inspections. The school environment is complex and each geographic area in our state will present with a variety of environmental conditions that can impact a facility campus. Training for inspections should be thorough and supported by administrators.					
Anonymous 9	I support promoting and facilitating health and safety in the school environment, but the burden placed on the schools needs to be recognized and planned for. This would need to come with ample funding to support both staff capacity and remediation. Staffing and financial capacity can be better accommodated for in the planning phase, but it becomes a big challenge afterwards. Schools are already trying to do a lot with little and direct classroom education will most always be the funding priority for school leaders. Even if there is grant money available, like with lead remediation, it still takes staff time to apply for the grant, collect the bids, oversee the work, process the funds, and communicate with staff and families. I am also concerned about putting public health in a fee charging and regulatory position with schools. I would think a partnership would be more effective in achieving health and safety goals. The inspection process puts schools in a difficult position. The inspector documents what a superintendent already knows is wrong with their building, posts it for public review, and then leaves inspectors on their own to deal with the fall out. Before jumping in to reenact this law, could DOH partner with OSPI to do a general assessment of schools across the state without singling out schools. Then with that data, identify top health and safety priorities, secure funding and a create plan to help schools implement improvements.					
Kait Wolterstorff	040(2)(a) – formatting: move (i) to be a continuance of (a) rather than a sub-section.					
Jesse Smith	WAC 246-370-040 (2)(a)(i) the phrasing "local risk factors" is a little vague and confusing. If the intent is risk-based inspections a better phrase would be locally determined risk factors, in my opinion. It seems like a local risk factor could be lots of things: location of school near things of concern, or school curriculum based, or school physical structure based, or crime rates in area, or historical flooding of area, etc.					



### WAC 246-370-050 General Building Requirements

#### **Section Language**

A school official shall ensure that school facilities:

- (1) Are clean and in good repair;
- (2) Do not attract, shelter, or promote the propagation of insects, rodents, bats, birds, and other pests of public health significance;
- (3) Have floors that suit the intended use, allow easy cleaning, and dry easily to inhibit mold growth and mitigate fall risks;
- (4) Has vacuum breakers or backflow prevention devices installed on hose bibs and supply nozzles used to connect hoses or tubing to housekeeping sinks;
- (5) Provide proper storage for student jackets or backpacks, play equipment, and instructional equipment to mitigate trip, pest, or other public health hazards; and
- (6) Provide toilet and handwashing facilities accessible for use during school hours and scheduled events that:
  - (a) Provide handwashing facilities with access to:
    - (i) Soap;
    - (ii) Fixtures that maintain water temperatures between 85- and 120-degrees Fahrenheit;
    - (iii) With single-use or disposable towels or blower or equivalent hand-drying device; and
  - (b) Provide toilet paper.

#### **Comment Summary**

#### **Self-metering faucets**

 Add the language from 246-366-060 (3)(d) to faucet requirements: "If hand operated self-closing faucets are used, they must be of a metering type capable of providing at least ten seconds of running water."

#### Pest mitigation 050(2)

 Staff and teachers propagate pest issues. The language could be stronger to include the "human factor"

#### Handwashing temperature

- Eliminate the minimum temperature but keeping the 120-degree maximum to prevent scalding
- Keep warm water requirements to ensure adequate hand washing.
- If minimum temperature is kept then add some flexibility to (6)(a)(ii) "Fixtures that maintain water temperatures between 85- and 120-degrees Fahrenheit;"
- Consider saying "fixtures that are <u>capable of</u> maintaining." Some schools may not be able to get warm water to a faucet in less than 10 minutes. Just saying fixtures that "maintain water" implies instant warm water.



#### Hand drying blowers

• These are unsanitary and loud. They should not be included in the new rule.

#### Ceiling height

• Should add requirement like 246-366-050 (2) into this rule: "Instructional areas shall have a minimum average ceiling height of 8 feet. Ceiling height shall be the clear vertical distance from the finished floor to the finished ceiling. No projections from the finished ceiling shall be less than 7 feet vertical distance from the finished floor, e.g., beams, lighting fixtures, sprinklers, pipe work"

#### **Deep Cleaning**

Add requirements for cleaning things like blinds, windows, and ceiling fans.

#### Vacuum breakers or backflow devices 050(4)

• "Housekeeping sink" is too general should be faucets that are serrated, threaded, or have quick coupling nozzles.

#### Menstrual hygiene products

 Add requirements for products to be available in female and gender-neutral restrooms or reference RCW 28A.210.420

#### Add language like 246-366A-020 (1)(a)-(c)

- (1) Responsibilities of school officials. School officials shall:
- (a) Maintain conditions within the school environment that will not endanger health and safety.
- (b) Identify, assess, and mitigate or correct environmental health and safety hazards in their school facilities, establish necessary protective procedures, use appropriate controls, and take action to protect or separate those at risk from identified hazards, consistent with the level of risk presented by the specific hazard, until mitigation or correction is complete.
- (c) When conditions are identified that pose an imminent health hazard:

#### Drinking fountain Add requirements similar to WAC 110-300

- (1) An early learning program's drinking water must:
- (a) Be offered multiple times throughout the day and be readily available to children at all times;
- (b) Be offered in outdoor play areas, in each classroom for centers, and in the licensed space for family homes;
- (c) Be served in a manner that prevents contamination;
- (d) Not be obtained from a handwashing sink used with toileting or diapering; and
- (e) Be served fresh daily or more often as needed.
- (2) Drinking fountains at an early learning program must:
- (a) Not be attached to handwashing sinks or disabled;
- (b) Not be located in bathrooms;
- (c) Not be a "bubble type" fountain (the water flow must form an arch);
- (d) Be cleaned and sanitized daily, or more often as needed; and
- (e) Be located above water impervious flooring



Name	Comment						
Lindsey Doolittle	• 050(a): why was the run time for hand-operated self-metering faucets removed from the code?						
	o Is there another cross-reference with the full weight of code that specifies a minimum run-time of 10-15 seconds?						
	o Still in use and maintenance still an issue						
Lindsey Doolittle	o Same toilet room standards for general facilities and locker rooms. Why not consolidate?						
Mike Benzien	Language:						
	WAC 246-370-050 General Building Requirements						
	(2) Do not attract, shelter, or promote the propagation of insects, rodents, bats, birds, and other pests of public health significance;						
	Comment:						
	Schools well maintained do not promote pest propagation. Staff/Teachers propagate pest issues by bringing in food and storing food items. The proposed language is ineffective at addressing the issue.						
Mike Benzien	Language:						
	WAC 246-370-060 Showers and Restrooms						
	Provide handwashing facilities with access to: (i) (ii) (iii) Soap; Fixtures that maintain water temperatures between 85- and 120-degrees Fahrenheit; With single-use or disposable towels or blower or equivalent hand-drying device; and (b) Provide toilet paper.						
	Comment:						
	Many schools were built without hot water in student restrooms to prevent injuries and maintenance costs. Older designs have restroom in every classroom. Retrofitting schools to the new requirement would be cost prohibited. In addition, it would significantly increase energy use at schools and be counterproductive to HB1257. I would suggest grandfathering in all buildings not equipped with hot water heaters, and or, eliminating the temperature requirements.						
	Blowers/Hand dryers are notoriously unhealthy and should not be installed in public buildings.						
Steve Brown	Was there a reason that the 8ft floor to ceiling requirement was removed?						
Laurette Rasmussen	I have some concerns about using warm air hand dryers or blowers in schools. There has been evidence to show that hand dryers can disperse or aerosolize pathogens an is certainly a concern for infection prevention. The blowers can also cause slip hazard when water is blown onto the floor. In addition, the blowers are very loud, some specs looked at state the sound level can range from 70-90 dB. This is really loud for						



	developing ears and distracting for nearby classrooms. It is also a concern for sensory-sensitive students. I recommend that it is not included as an option for schools, or at least strongly discouraged.						
Sophia Sam	Perform deep cleaning task such as cleaning up windows,blinds and ceiling fan						
Devon Kellogg Washington State PTA	Many important items from General Requirements 246-366A-020 (1) have been removed in the proposed rule, and should be added back in, especially (1.a-c) which requires a school official to ensure the school environment promotes the ongoing health and safety of the students, and also (d) record retention (unless copies of these records are kept elsewhere).						
Devon Kellogg Washington State PTA	Are water fountains/refill stations part of standard building codes, L&I requirements, and/or uniform plumbing codes? If not, then a section needs to be added requiring the availability of potable water fountains / bottle refill stations for students and staff to have access to hydration throughout the day. (Please see WAC 110-300 / 301-0236 as a reference).						
Devon Kellogg Washington State PTA	(1.d.i) As discussed in the 1/16/25 TAC meeting, CDC guidance says hot water is not necessary for effective handwashing. If the 85 degree lower boundary requirement is removed from this rule as a result of the CDC guidance, perhaps replace the 85 degree lower bound with something that would be considered a tolerable temperature to encourage adequate washing duration and avoid frostbite. Keep the higher temperature boundary at 120 degrees to prevent scalding.						
Nancy Bernard WAC 246-370-050 General Building Requirements							
	Fixtures that maintain water temperatures between 85- and 120-degrees Fahrenheit;						
	The problem with the language as written, is that the premixed water temperature could be as hot as 120oF, much too hot for safe handwashing. The 120oF is for scald protection. If hot and cold water are both provided, the hot water should not exceed 120oF at the tap. If the water is automatically mixed, the temperature should be between 85oF and and 105oF. You need warm water for adequate handwashing to remove feces and chemicals - people/children will not adequately wash their hands if the water is too cold or too hot.						
Steve Main	WAC 246-370-050 General Building Requirements						
	A school official shall ensure that school facilities:						
	(4) Has vacuum breakers or backflow prevention devices installed on hose bibs and supply nozzles used to connect hoses or tubing to housekeeping sinks;						
	> This should not just apply to "housekeeping sinks", but to any sink with a threaded, serrated, or quick coupling nozzles, for example sinks in science rooms, shops, art, etc. Refer to K-12 Guide item #D004 for wording.						
Steve Main	6)(ii) Fixtures that maintain water temperatures between 85 - and 120- degrees Fahrenheit;						
	> Since many older schools do not have recirculation pumps, it often takes at least 10 minutes to achieve warm water in some classrooms. May need to consider wording						



	such as "Fixtures that are capable of maintaining water temperatures between" or something similar. Once some flexibility is added to the sentence it can be addressed through training.
Brandon Kemperman, Sinang Lee	WAC 246-370-050 -What was the reasoning for not including the language in 246-366-050 (2) regarding ceiling height and projections?
Brandon Kemperman, Sinang Lee	-(6) Can requirements from RCW 28A.210.420 be added here? This is in regard to ensuring menstrual hygiene products are available. https://app.leg.wa.gov/RCW/default.aspx?cite=28A.210.420
Brandon Kemperman, Sinang Lee	-What was the purpose of not including "If hand operated self-closing faucets are used, they must be of a metering type capable of providing at least ten seconds of running water."?



#### WAC 246-370-060 Showers and Restrooms

#### **Section Language**

- (1) When new installation or renovation of an existing shower or restroom facility is planned, school officials shall:
  - (a) Consult with the local health officer to determine if a construction review and plan approval is required.
  - (b) Shower facilities must:
    - (i) Automatically maintain hot water between 100° F and 120° F;
    - (ii) Meet the requirements of the uniform plumbing code set forth in chapter 51-56 WAC;
    - (iii) Contain floor surfaces in shower areas that are water-impervious, slip-resistant, and sloped to floor drains. Walls must be water-impervious up to showerhead height. Upper walls and ceilings must have an easily cleanable surface;
  - (c) Provide shower facilities for grades nine and above for classes in physical education and for team sports that:
    - (i) Meet a ratio of one shower per 15 individuals of each gender participating in physical education classes or team sports;<sup>3</sup>
    - (ii) If provided, have drying areas adjacent to showers and locker or dressing rooms. Walls and ceilings must have an easily cleanable surface and floor surfaces must be water impervious, slip-resistant, and sloped to floor drains;
    - (iii) When drying areas are not provided, locker or dressing room floor surfaces must be waterimpervious, slip-resistant, and sloped to floor drains; and
    - (iv) Provide locker or dressing rooms adjacent to showers or drying rooms. Walls and ceilings must have an easily cleanable surface. When drying areas are provided, floor surfaces in locker or dressing rooms must be appropriate for the intended use, easily cleanable and dryable to effectively inhibit mold growth.
  - (d) Provide restrooms:
    - (i) With handwashing fixtures that automatically maintain water between 85° F and 120° F;
    - (ii) At a ratio of one toilet per 15 individuals with up to 10 percent of the toilet fixtures being substituted with urinals;<sup>4</sup>
    - (iii) Meet the requirements of the uniform plumbing code set forth in chapter 51-56 WAC

<sup>&</sup>lt;sup>3</sup> Per L&I shower requirements for employees <u>WAC 296-800-23065</u> is 10 showers per gender. 1:15 is per the building code of 1 fixture per every 15 people.

<sup>&</sup>lt;sup>4</sup> Per L&I specs for # of toilets in WAC 296-800-23020.



- (iv) That contain water-impervious floor surfaces that are slip-resistant and sloped to floor drains;
- (v) With walls that are water-impervious up to water splash height. Upper walls and ceilings must have an easily cleanable surface; and
- (vi) With soap and single-use or disposable towels or blower or equivalent hand-drying device.
- (2) If a new installation or renovation of an existing shower or restroom facility requires local health officer review and approval, the local health officer shall follow the construction plan review requirements for new construction or alterations set forth in WAC 246-370-030.

#### **Comment Summary**

#### **Shower temperature**

• Pair with the aquatic code of 90-120 F

#### **Shower location**

• Pair with the aquatic code: should be within 100 feet of a pool

#### **Toilets**

- Recommend following the UPC for the number of toilets 1:35 Male/1:25 Female
- Most facilities do not have the space to add more toilets and would have to do a major remodel to accommodate.
- Could change septic capacity that would lead to septic upgrades or an additional wastewater capacity charge.
- Why are there two sections for toilet requirements?

#### **Shower ratio**

- Recommends removing a required shower number but stating that a shower should be available for use.
- UPC does not have a shower number required for educational spaces.
- How do you know how many students would need the showers after sports at the same time?
   What calculation is used?
- Students don't use the showers.

#### **Showers**

- Can we require gender neutral options?
- Requirement address PE and sports, but not special education rooms.
- Use thermal mixing valves at point of use so the water in the pipe stays hot enough to prevent Legionella growth.

Name	Comment
Lori Karnes	WAC 246-370-060 Showers and Restrooms
	(b) Shower facilities must:
	(i) Automatically maintain hot water between 100° F and 120° F;



	I am wondering if it might be nice to pair this with the pool code requirements as lots of shower facilities are dual purpose (so 90 - 120 F rather than 100 - 120 F).					
	(g) Shower facilities must be located convenient to, and no more than one hundred feet away from, the main pool. The facilities must have:					
	(iv) Running water delivered at a temperature between ninety degrees and one hundred twenty degrees Fahrenheit;					
Lori Karnes	Toilet ratio of 1:15? I thought we followed WAC 51-50-2902 for the educational classification. See chart on https://app.leg.wa.gov/wac/default.aspx?cite=51-50-2902 (essentially 1:35 male and 1:25 female)					
	I can see how you could argue 1:15 for teachers, but students aren't employees					
	Listening to the conversation and rereading the language made me think of some scenarios:					
	A school is remodeling a wing of a building that includes classrooms and restrooms. They now must add additional toilets in the same space to meet the toilet ratio? Wouldn't that be space restrictive?					
	A high school with multiple buildings is remodeling one building that contains restroom facilities. Would the total student population be used now to calculate the number of toilets they must add? Or just the building occupancy in that case?					
	I think if we stick with the 1:15 ratio, I would propose in new installation/new construction only.					
Lindsey	• 060(1)(c)(i): 1 shower/15 individuals of each gender participating in PE/sports					
Doolittle	o Gender-neutral facilities for trans/non-binary students who need shower access?					
	o How do we calculate this? We aren't going to necessarily know the max enrollment per PE period or how many athletes will have games/practice at the same time.					
	o Is this already covered in UPC fixture counts?					
	o Showers for SPED classrooms?					
	060(d): why are requirements for toilet facilities duplicated?					
Nancy	WAC 246-370-060 Showers and Restrooms					
Bernard	(b) Shower facilities must:					
	(i) Automatically maintain hot water between 100° F and 120° F;					
	(d) Provide restrooms:					
	(i) With handwashing fixtures that automatically maintain water between 85° F and 120° F;					
	The problem with the language as written, is that the premixed water temperature could be as hot as 120oF, much too hot for safe handwashing. The 120oF is for scald protection. If hot and cold water are both provided, the hot water should not exceed 120oF at the tap. If the water is automatically mixed, the temperature should be between 85oF and and 105oF. You need warm water for adequate handwashing to remove feces and chemicals - people/children will not adequately wash their hands if the water is too cold or too hot. Showers should provide hot and cold water to mix for comfort. Use thermal mixing valves at point of use so the water in the pipe stays hot enough to prevent Legionella growth. The water storage should be at least 140oF.					



Brian Buck Executive Director of Support Services at the Lake Washington School District

#### I. Restrooms:

We believe that the requirements in proposed WAC 246-370 for showers and restrooms should be consistent with requirements in the Uniform Plumbing Code ("UPC").

The UPC has adopted standards that are specific to schools and educational facilities. There is no reason for the State Board of Health to impose new standards that deviate from the widely adopted and implemented UPC provisions. Furthermore, to adopt more burdensome requirements would conflict with the fundamental criteria adopted by the Technical Advisory Committee -- to adopt minimum health and safety standards.

First, the WAC proposes a new and burdensome standard for the number of toilets.

The proposed standards for toilets states that schools must:

- (d) Provide restrooms:
  - (ii) At a ratio of one toilet per 15 individuals with up to 10 percent of the toilet fixtures being substituted with urinals; (Per L&I specs for number of toilets in WAC 296-800-23020.)
  - (iii) Meet the requirements of the uniform plumbing code set forth in chapter 51-56 WAC

For the reasons outlined below, we recommend that (d)(iii) continues to be the standard for the number of restrooms and that (d)(ii) be deleted from the proposed WAC.

The Uniform Plumbing Code establishes the following requirements for water closets and urinals for Educational Use based solely on the number of occupants determined by overall square footage of the building (100 sf/occupant).

## TABLE 2902.1—(continued) MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES<sup>a</sup>

NO. CLASSIFICATIO	CI ACCIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS		LAVATORIES		BATHTUBS/
	CLASSIFICATION			MALE	FEMALE	MALE	FEMALE	SHOWERS
3	Educational	E°	Educational facilities	1 per 35	1 per 25	1 per 85	1 per 50	<u>—</u>
			6:					

Compared to Uniform Plumbing Code, the proposed WAC would increase the existing ratio of toilet/urinals required for schools and educational facilities. Instead of one toilet for every 25 female students and one toilet for every 35 male students, the proposed WAC would require one toilet for every 15 students.

As an example, for a 1,400 student high school (assuming 50% male students and 50% female students), 20 toilets would need to be built for male students and 28 toilets would need to be built for female students under the UPC. This is a total of 48 toilets. Under the proposed WAC, the same new high school would need to build over 93 toilets. This is almost double the number of toilets. There are substantial cost implications associated with this requirement.

For reference, below please find two sample codes in two cities in the Puget Sound region:

- The City of Redmond adopts the Uniform Plumbing Code with Washington State amendments (except Ch. 12 and Ch. 14, which are not relevant to this plumbing fixture issue)
- The City of Sammamish adopts the Uniform Plumbing Code with Washington State and City of Sammamish amendments (except Ch. 1, Ch. 12 and Ch. 14, also not relevant to this plumbing fixture issue)

Note that the proposed WAC cross references WAC 296-800-23020 "Provide bathrooms for your employees" as the authority for the proposed Board of Health WAC. These are



Department of Labor standards for a safe workplace. They are not standards for schools so it is not appropriate to rely on WAC 296-800-23020 as the authority

Since there is a more specific standard in the Uniform Plumbing Code, the educational standards should apply. Note that the draft WAC already refers to the Plumbing Code. The draft WAC should be revised so that schools are simply required to meet the standards of the Uniform Plumbing Code as set forth in chapter 51-56 WAC.

Second, it is unclear why the State Board should require additional toilets and showers for a remodel. From a practical perspective, many remodels do not increase the square footage of a restroom or a locker room. Therefore, the State Board should not impose the requirement to add more toilets and showers when a "renovation of an existing shower or restroom facility is planned." This mandate is impractical and cannot be implemented. Proposed WAC 246-370-060(1).

In both the new and remodel cases, requiring more toilets means that the bathrooms must become larger. As a result, schools would lose square footage that is used for educational purposes.

Third, the State Board should consider the fiscal impacts of the proposed WAC (compared to the requirement in the existing plumbing code). There are significant costs associated with mandating more toilets, including costs for fixtures, the pipes, connections, doors, and the space needed to place the toilets.

Furthermore, none of these discussions take into account the charges imposed by local jurisdictions for connecting toilets to the waste water system. In King County, schools have to pay a capacity charge for every new water fixture that the district connects to the sewer. These sewer treatment capacity charges are paid quarterly over fifteen years. As described by King County, the charge "helps fund the costs of new wastewater infrastructure in our region without charging up-front costs for property development."

Capacity charges vary by water fixture type and are as follows for restrooms:

Toilet: \$4,100 Urinal: \$3,420

General purpose sink: \$1,370

In addition, if enough fixtures must be added, schools may need to increase their water service which can add thousands of dollars to water connection fees.

For the example outlined above, for a 1,400 student high school (assuming 50% male students and 50% female students and all toilets),48 toilets would need to be built. The connection charge would be \$196,800. Under the proposed WAC, the connection charge for the same high school would be \$381,300. This example raises the question of whether the fiscal analysis has taken into account these real world problems.

#### II. Showers:

The proposed standards for showers are also problematic. The proposed WAC for showers states that school must:

- (c) Provide shower facilities for grades nine and above for classes in physical education and for team sports that:
  - (i) Meet a ratio of one shower per 15 individuals of each gender participating in physical education classes or team sports;"



	Currently, WAC 246-366-060 states that for classes in physical education at grades 9 and above, showers with an automatically controlled hot water supply of 100 to 120 degrees Fahrenheit must be provided. Showers with cold water only shall not be permitted.
	Neither the existing Washington Administrative Code (WAC 246-366-060) nor the Uniform Plumbing Code include a quantity requirement for showers. During the discussion of this proposal at a BOH TAC meeting, I expressed strong opposition to the proposed requirement of one shower for every 15 students. Many districts agree that showers should be available and accessible for student use. However, the showers currently in place at schools are seldom used, so we do not view an increase in the shower ratio as necessary for student health and safety.
	Just like restrooms, schools must pay capacity charges for new shower fixtures when showers are connected to the system. The capacity charge paid to King County waste water is \$1,370 per shower. Again, this requirement diverts limited resources from educational function to King County waste water. We believe the additional requirements are a low priority with significant fiscal impacts and should not be included in the Board of Health school rules.  Thank you for your consideration.
M. Dennis Knight	ASHRAE recommends including ASHRAE's consensus based indoor air quality and water system safety standards in the proposed update to the Washington State Board of Health's School Environmental Health and Safety regulation. Specifically, we recommend the School Board of Health adopt by reference:
	ANSI/ASHRAE Standard 188-2021, Legionellosis: Risk Management for Building Water Systems;
	ANSI/ASHRAE Standard 188-2021, Legionellosis: Risk Management for Building Water Systems establishes minimum risk management requirements It contains extensive input from industry, academia, and healthcare and from city, state, and national public health departments and regulatory authorities.

# Survey comments not covered above

Name	Comment
Brooke Wilkerson	Several have attested that most students are not using the showers currently available. I have also witnessed this over the past 17 years working in the traditional public school and charter school sectors. Showers are very costly to have and/or install. They also take up incredible real estate that could be used for classrooms and other educational spaces. I agree that there should be some showers for those who would like to use them, but I think the ratio should be less than the proposed 1:15 if possible.
Laurette Rasmussen	As for counting showers and toilets, can that be left up to the building code? I don't agree with the L&I numbers. Workers often shower after work to prevent taking contaminants home. A very small percentage of teenagers after a game or PE will actually use a shower. I would rather see a shower required in the health room so that there would be a place for clean up if someone were ill.



This will only come up during plan review and if a school would like to reduce the number of showers or toilets, they can always go through the variance process to reduce the required number of fixtures.



# WAC 246-370-080 Indoor Air Quality and Ventilation

# **Section Language**

### A school official shall:

- (1) Ensure the implementation of a written indoor air quality plan within five years of the effective date of this section that includes:
  - (a) Identified areas of indoor air quality concerns and develop preventative measures to address the concerns;
  - (b) A schedule to perform routine inspections of heating, ventilation, and cooling systems;
  - (c) An integrated pest management plan; and
  - (d) A plan for monitoring carbon dioxide levels if required by subsection (7)(b) of this section.
- (2) Control sources of air contaminants by:
  - (a) Excluding sources of potential air contaminants from a school facility; or
  - (b) Providing a space with appropriately used and maintained ventilation to minimize student exposure to potential air contaminants.
- (3) Develop and implement a plan to test for radon every five years in regularly occupied areas on or below ground level.
- (4) Prohibit the use of air fresheners, candles, or other products that contain fragrances.
- (5) Physically contain construction activities that generate emissions or conduct construction at times that minimize student exposure.
- (6) Promptly control sources of moisture and remediate mold using measures to minimize occupant exposure to mold and chemicals used during the remediation process.
- (7) Provide adequate ventilation by:
  - (a) Ensuring direct mechanical exhaust for specialized rooms as set forth in WAC 246-370-150.
  - (b) Providing ongoing carbon dioxide concentration monitoring if the school facility does not have a mechanical outdoor air ventilation system or the outdoor air flow rate cannot be determined.
  - (c) Ensuring all student-occupied instruction and gathering spaces during hours of occupation provide outdoor air ventilation flow rates as set forth in chapter 51-52 WAC at the time the ventilation system was permitted.
    - (i) If outdoor air ventilation flow rates were not established at the time of the original building construction, ventilation airflow rates must be operated to meet chapter 51-52 WAC or maximum outdoor air ventilation flow rates achievable within existing system capacity.
    - (ii) Compliance is determined based on variables including but not limited to:
      - (A) The type and area of the space;
      - (B) The planned number of occupants; and
      - (C) The type of ventilation system;
  - (d) Ensuring particulate matter filtration as set forth in chapter 51-52 WAC at the time the heating, ventilation, and air conditioning systems were permitted, including in facilities that have small, ducted air handlers and ventilation systems.



- (i) If particulate matter filtration requirements were not established at the time of the original installation of the system, the system must meet chapter 51-52 WAC or the maximum particulate matter filtration achievable within existing system capacity.
- (e) Ensuring new ventilation systems that are permitted after the effective date of this section shall be designed and constructed to be capable of the maximum outdoor air ventilation rates as set forth in chapter 51-11C WAC to be used as needed for periods of increased health risk.
- (f) Performing routine maintenance of the mechanical ventilation system that includes:
  - (i) Testing and balancing for heating, ventilation, and air conditioning systems every ten years;
  - (ii) Performing routine inspections of heating, ventilation, and cooling systems to ensure systems are operating within intended parameters of this rule;
  - (iii) Replacing filters as needed to achieve required filtration and air flow rates; and
  - (iv) Maintaining records of these activities for review on site.

# **Comment Summary**

## Agrees with language

## Disagrees with language

One commentor believes that there should be no IAQ language

# Control air contaminants 080(2)(b)

• Does "Providing a space with appropriately used and maintained ventilation to minimize student exposure to potential air contaminants" include local exhaust ventilation?

## Compliance

Add timelines beyond five years for an IAQ plan.

#### Radon

- Don't require testing in areas that have historically not had radon detections like shown on EPA's radon<sup>5 6</sup> map of Washington
- Support for radon testing

#### Specialized rooms

- Add this language from 246-366A-095:
  - (3) Use and maintain mechanical exhaust ventilation installed for equipment or activities that produce air contaminants of public health importance or moisture.
  - (4) Limit student exposure to air contaminants of public health importance produced by heat laminators, laser printers, photocopiers, and other office equipment by placing such equipment in appropriately ventilated spaces and providing instruction to users on how to operate and maintain equipment as recommended by the manufacturer.
  - (5) Take preventive or corrective action when pesticides, herbicides, or air contaminants of public health importance are likely to be drawn or are drawn into the building or ventilation system.

<sup>&</sup>lt;sup>5</sup> https://www.epa.gov/system/files/documents/2024-05/radon-zones-map\_text\_link.pdf

<sup>6</sup> https://www.epa.gov/sites/default/files/2014-08/documents/washington.pdf



### Mold 080(6)

- Add "identify": "Promptly identify and control sources of moisture and remediate"
- Add list of mold remediation requirements from 246-366A-070<sup>7</sup>

## **VOC 080(4)**

Prohibit the use of supplies that contain VOCs

#### **Education**

 Require school officials to attend ongoing education for IAQ including the importance of portable HEPA filters.

#### Wildfire smoke

- Refer to ASHRAE Guideline 44-2024: Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events.
- Include in a readiness plan

# Indoor air contaminants 080(2)(b)

• "Minimize exposure" is vague, require testing by certified contractors to determine the amount of indoor contaminants.

## **Outdoor air monitoring**

 Require IAQ monitoring for items like PM 2.5, PM 10 and CO<sub>2</sub> so that schools can ensure that outdoor air quality is not compromised.

# **Informal Comments**

Name	Comment
Lindsey Doolittle	WAC 246-366-080: useful to have pithy summary of goal. New sections 070 & 080 seem to outline HOW to achieve this, but challenging to assess ventilation rates during a routine inspection
Mike Benzien	WAC 246-370-080 Indoor Air Quality
	(2) Develop and implement a plan to test for radon every five years in regularly occupied areas on or below ground level; (4) Physically contain construction activities that generate emissions or conduct construction at times that minimize student exposure; (6) Ensure the implementation of a written indoor air quality plan within five years of the effective date of this section that includes: (b) A schedule to perform routine inspections of heating, ventilation, and cooling systems to ensure systems are operating within intended parameters of this rule; and
	Comments
	Please see the EPA radon map for Washington State. You will notice that the majority of King County does not have elevated radon levels. Requiring testing every five years is not beneficial to districts that don't have elevated radon levels. It is also another unfunded expense that burdens districts. New schools should be tested and if elevated levels are present it would make sense to test every five years.

<sup>&</sup>lt;sup>7</sup> https://app.leg.wa.gov/WAC/default.aspx?cite=246-366A-070&pdf=true



	School construction has risen to a cost of over \$650.00 per sf. Many times, it is impossible to find temporary housing for students during construction. This proposed update would drive costs up, and reduce the quality of new buildings.
	While all districts should have a written indoor air quality plan, many districts do not have adequate knowledge or support to draft a plan. The county would need to provide such support at not cost to the district.
	Routine inspection of all buildings and mechanical systems are already required by OSPI through the APP. This is redundant and unnecessary. In addition, schools do not have funding for modernizing these systems making improvements public knowledge without a means to address the concerns.
Steve Brown	Consider adding the word identify to 246-370-080 (5) so it reads "Promptly IDENTFIY and control"
Joni Hensley	Thank you so much for the development of this new section requiring radon testing and pest management technologies. As a former inspector, I appreciate the thoughtful approach to indoor air quality. This was a topic of concern and most school complaints were directly related to indoor air quality issues generated by poor source control, mold or inadequate ventilation.
Laura	WA DOH,
Breymann	Thank you for discussing the very urgent matter of Indoor Air Quality in schools. I am a Family Physician and a concerned parent in Kirkland, and I have been very frustrated by the slow response in our district (LWSD) to parental concerns about IAQ. Specifically, there are a handful of very concerned parents who are trying to advocate for improvements in IAQ including simple things like donating HEPA filters to schools who are not meeting CDC/ WA DOH guidelines, and we have met roadblocks for the past two years. I believe this is largely due to a combination of lack of funding and lack of education. The leaders don't seem to understand the need for improvements in IAQ for both short and long-term health and safety of both students and staff. My 6-year-old's school Principal told me that when the Covid-19 Emergency funding went away, nobody cared about IAQ anymore, AND that I was the only person asking him about it. This is so disheartening. We can and should do better.
	Specifically, as a physician, I am very concerned about the long-term health effects of repeated Covid-19 infections for kids and adults. The incoming data is overwhelmingly showing us that Covid is definitely not 'a cold', the risk of long Covid is likely cumulative with each infection (including for otherwise healthy individuals), and vulnerable individuals are still dying. Most concerning are the neurological symptoms which are actually areas of brain damage on imaging. Covid is a vascular and neurological disease, and most school administrators (and even many healthcare workers) are unaware of this. We need to take this health threat seriously. Postacute Sequelae of SARS-CoV-2 in Children   Pediatrics   American Academy of Pediatrics (aap.org)
	This is one example of more recent research: Symptoms of long Covid present differently in children and teens, study finds (nbcnews.com)
	"Long Covid overall seems to be less common in children than in adults, but a February review in the journal Pediatrics estimated that 10% to 20% of children who got Covid developed post-viral symptoms within six months". We already knew that long Covid wasn't rare in adults, and it can be disabling, so protecting teachers and staff is obviously also very important. Mounting research also demonstrates that Covid-19 harms the immune system, making everyone more susceptible to other infections. Since Covid-19 is airborne (meaning it



spreads like smoke and lingers in the air for hours), improving ventilation and filtration in schools can go a long way to reducing infections, which multiple studies have also shown. We also need to be thinking about other viruses like Measles and H5N1, and proactively do everything we can right now.

It has also been shown that improvements in CO2 (implying better IAQ) helps with cognition and reduces absenteeism, so this should be a priority for everyone.

I have been in close contact with the LWSD, and the administrators there told me they're balancing cleaning the air with energy conservation due to the "Clean Buildings Law", which is in direct conflict with clean air. It is imperative that we prioritize IAQ over energy conservation at this point while we have the above specific health threats currently affecting our students and teachers.

After numerous conversations with WA DOH, KCPH and our local school district, the following are things that I think could really help:

- 1. Outgoing mandatory IAQ education from WA DOH to WA school districts, which would be then passed on to principals and teachers, specifically on why IAQ is important as well as what we can all do. I have spoken with so many teachers and administrators who don't understand the basics, and they also don't think it is a priority. Simple things such as opening windows and doors when able can go a long way, but administrators and teachers need to understand why first.
- Note: I have personally volunteered to present this information to the district leaders and school board, and there is no interest. Other parents have had similar issues in other districts. A concerned teacher at my daughter's school confirmed that there hasn't been education, and she is similarly frustrated. This is why I think this will need to come from WA DOH.
- 2. We need to educate school districts about the benefits of adding stand-alone HEPA filters to classrooms, especially those with poorer air quality. LWSD has put up barriers to this even though many schools still have MERV-10 filters in place. I had to fight for months to be allowed to donate one to my daughter's classrooms (her school is one with MERV-10 central filters), even though I was very aware of what was needed: appropriate CADR for the space, absent of ionization or UV, etc. It should not be a battle! Another parent had to have a physician-signed form of "medical need" for his daughter in order to be able to donate one. The "medical need" is present for ALL children and teachers: to not get repeated infections that can harm us all long-term.
- All schools that do not have MERV-13 filters or better in place should be actively trying to change to MERV-13, but in the meantime, add stand-alone HEPA filters (for both viruses and wildfire smoke). I specifically recommend defining this and changing the language in the document: Ventilation and Air Quality for Reducing Transmission of Airborne Illnesses to reflect this:

From: "• Portable HEPA filter air cleaners remove particles, including respiratory aerosols, and can supplement ventilation. They are most critical in rooms with poorer ventilation or in isolation areas. ..."

- ..to "poorer ventilation and/ or filtration (i.e. ACH <6 and/ or the central HVAC system does not have MERV-13 or higher filters in place)".
- 3. We need to have WA DOH guidelines that provide adequate ventilation targets to reduce viral transmission. ASHRAE 241 should be the standard. The current total ventilation rate of 21 CFM per person, as proposed for the "Language for Ventilation," is inadequate. This recommendation is equivalent to the 10 lps per person suggested by WHO, which falls well short of the 20 lps (~40 CFM) per person recommended by ASHRAE 241 to combat the spread of infectious disease.



	4. Encourage visible CO2 monitors in each classroom that track and record in real-time, instead of "zoned" monitors which some schools (such as ours) currently have. The data should be accessible to teachers and parents. It currently is not	
	should be accessible to teachers and parents. It currently is not.  5. Encourage schools to have IAQ teams which could help with both implementation but also education of staff. This is a big job, and it should not be just one person. (Our district has one person, and it is clear he is overwhelmed). In our district, I suggested that the school partner with the PTA to help with funding, as parents would definitely be interested in helping IF they understood the need. The PTA is currently not involved nor aware.	
	I am personally more than happy to donate my time in any of the above matters on a professional level as well.	
	Thank you again for your time.	
	Sincerely, Laura Breymann, MD	
Alice Turtles	To protect children from air-borne diseases (like Covid19, but not only C19) to protect students, teachers, and their families in the classroom to keep everyone in the classroom healthy enough to focus and engage there is no single more effective thing we can do than to prioritize indoor air quality and filtration.	
	PLEASE do this. Not only for at-risk kids, but for everyone who cares for them, and the teachers who put themselves on the front line daily.	
Anonymous 7	Please prioritize healthy indoor air in schools	
Anonymous 8	Air quality if fine. Show evidence of how many kids and people are dying because of the quality of air in school. Since there is none, why don't we put the money to help kids learn. Oh, I forgot. There is no money following these new rules.	
1. Jennifer	Compliance –	
Martin MSPH 2. Maura L	There is no timeline for compliance beyond 5 years of waiting for a plan. Who can parents call if they believe their child's classroom is getting above 1000/1125ppm or not meeting CADR	
3. Valerie Tung <sup>8</sup>	standards? Public vs Private school differences for who to call? What can we do in the meantime?	
Valerie Tung	Thank you for the new radon testing and discouraging diffusion of essential oils (because I love them but not everyone can tolerate various ones!)	
Devon Kellogg	Indoor Air Quality (WAC 246-370-080 Indoor Air Quality)	
	(1)(b) The term "minimize exposure" is vague. Please include requirements to perform tests with EPA approved or certified contractors to determine the precise levels of indoor air contaminants in all educational facilities.	
	(3) Prohibits fragrance, but not VOCs from staff or student supplied items. Please also include a prohibition on VOCs.	

 $<sup>^{\</sup>rm 8}$  We have grouped these three people's comments together since their submissions were identical



	Add language to address VOCs, asbestos, office equipment, pesticides, exhaust, moisture, and other known sources of contaminants not covered in the "specialized rooms" subsection as in 246-366A-095 (3, 4, & 5).
	Include a wildfire smoke and/or other outdoor air containment "readiness plan" here and/or in the Ventilation or Imminent Health Hazard sections.
	(5) Add back in Moisture Control and Mold Remediation details and timelines as in WAC 246-366A-070
Brandon Kemperman Sinang Lee	'-(1)(b): Does this include local exhaust ventilation? Local exhaust ventilation is a key component in removing contaminants at the source for specialized areas.

# Survey comments not covered above

Name	Comment		
Brian Freeman	This is the most complex part of the WAC. 7(c)i Ensuring maximum outdoor air ventilation rates is problematic. With maximum outdoor air flow rates the building I am in would not be able to maintain air temperature of 65 degrees. 7(f) max outdoor air as needed for period increased health risks. This health risk could occur when the building is approaching the minimum temperature design. For example, this week we had temperatures between 0 are degrees with high absenteeism due to "flu like symptoms." The building was able to mainta 60 degrees in open areas (halls, gyms, etc) and maintain 65 degrees in classrooms. We have to limit doors opening to the outside to maintain the temperature. There also needs to be the ability to meet both the Clean Building and IAQ requirements.		
	I do not believe that there is a shared understanding of how many school building HVAC systems are beyond the useful lifespan of these systems."		
Laurette Rasmussen	With the emphasis on outdoor ventilation, add what to do if outdoor air is unhealthy, like from wildfire. Ensure the ventilation system has the capacity to shut outdoor intakes and/or have the level of filter needed for smoke.		
	No idle zone where kids are present, and especially by air intake locations.		
	Did we miss the restrictions on room air purifiers? Filter only, no ozone, no ionization.		
Nicole Daltoso	7(f)(iv) These records will more than likely be kept in a work order system and not on site at each individual school; recommend revising to generalizing the record's location.		



# **WAC 246-370-090 Temperature**

# **Section Language**

- (1) A school official shall ensure the development and implementation of an extreme temperature readiness plan for non-specialized rooms when:
  - (a) A school facility is occupied by students and:
    - (i) Classroom temperatures are outside of the range of 65 degrees 79 degrees Fahrenheit; or
    - (ii) Hallways and common area temperatures are outside of the range of 60 degrees 79 degrees Fahrenheit.
- (2) A school official may consult with a local health officer to develop an extreme temperature readiness plan.

# **Comment Summary**

## **Specialized rooms**

- Should not be excluded from the temperature requirements
  - Some of the rooms will not have equipment in them that would alter the temperature of the room.
  - o Some could radically change the room temperature and could lead to unsafe conditions
- Should have specific instructions for each type of specialized room in the extreme temperature readiness plan

### Min/max temperature levels

- Include min/max temperatures where a school should no longer operate.
- Include language like 110-300-0480: "Maintain the vehicle temperature at a comfortable level to children:"
- Include language like 110-301-0165 (4)(c) "Indoor temperatures for the premises. For any program that does not operate on public or private school premises, the temperature of indoor school-age licensed space must be between 68- and 82-degrees Fahrenheit. If indoor licensed space is colder than 68 or hotter than 82 degrees Fahrenheit, a school-age provider must use climate control devices that are inaccessible to children to bring the temperature within the required range;"

### Gyms 090(1)(a)(i)

• Should be included in the list of items that have a 60 – 79 F temperature range.

#### **Informal Comments**

Name	Comment
Lori Karnes	WAC 246-370-090 Temperature
	I have concerns over allowing specialized rooms to become excessively hot or excessively cold. High heat temperatures can lead to passing out when working with equipment and cold temperatures can decrease finger/hand dexterity that could result in injuries. In most cases, schools should be able to control temperatures. If a special circumstance exists (like an



	outside construction classroom or a hot shop), I think that's when the school should include these spaces in their extreme temperature readiness plan. They shouldn't just be given a free pass for these rooms to have them be whatever temperatures they want.	
Devon Kellogg	- Other Comments (WAC 246-370-090 Temperature)	
	(1) Add a min/max indoor temp range under which it is no longer safe to operate the facility, as in existing WAC 246-366-090 (min temp), WAC 110-300 / 301-0165 (4.a/c) and proposed bill HB 1031 relating to max allowed temps. (Perhaps this can be addressed in the Imminent Health Hazards section?)	
	Include requirements for "comfortable" vehicle temps as in WAC 110-300-0480 (3.d)	
Steve Main	WAC 246-370-090 Temperature	
	(1)(a)(ii) Hallways and common area temperatures are outside the range of 60 -79 degrees Fahrenheit.	
	> Gymnasiums should be included in (ii) along with hallways and common areas.	
Bailey Stanger	This comment also goes with Temperature (246-370-090). The language on (1) states that "A school official shall ensure extreme temperature readiness plan for non-specialized rooms when:"	
	I strongly disagree with the choice of including 'non-specialized rooms' in this criterion. The great majority of specialized rooms will not have any equipment that will cause the temperature to be very different than the rest of the school. Even a room with a kiln does not fluctuate in temperature very much when the kiln is being used (unless you are standing directly next to the kiln). If a specialized room does have any equipment that will change the temperature of the room, then it is even more important that there is some sort of safe-guard in place regarding temperature to ensure teachers are protecting students if temperatures go above or below a safe range. Specialized rooms are common in our schools, and can encompass a wide variety of classroom types. I think having this language here leaves a large and unacceptable gap in protection for students that are in these classrooms.	
Ava M	I would also suggest adding elements of max temperatures controls, as well as minimum temperatures, for indoor facilities to the Environmental Health and Safety Rule project for our schools. Because of climate change, Western Washington is getting hotter and schools are not built with the infrastructure to withstand extreme heat events or hot days. My college dorm has gotten to be 84 degrees, and my university does not have air conditioning in any of its on campus buildings. I recognize these are not institutions covered by this process, but I am sharing it as an example of what I anticipate many other educators, staff, and learners are facing in schools across our state.	



## WAC 246-370-100 Noise

# **Section Language**

A school official shall ensure:

- (1) In new construction:
  - (a) Construction plans that include designs for ventilation equipment or other equipment that will contribute to mechanical noise sources in a classroom must include designs that ensures that the background sounds conform to a noise criterion curve or equivalent not to exceed NC-35. The school official shall certify equipment and features are installed according to the approved plans.
  - (b) The actual background noise at any student location within a newly constructed classroom does not exceed 45 dBA (Leqx) and 70 dB(Leqx) (unweighted scale) where x is thirty seconds or more. The health officer shall determine compliance with this section when the ventilation system and the ventilation system's noise generating components, e.g., condenser, heat pump, etc., are in operation.
  - (c) The maximum ambient noise level in specialized rooms shall not exceed 65 dBA when all fume and dust exhaust systems are operating.
- (2) Portable classrooms constructed before January 1, 1990, moved within the same school property or the same school district, are exempt from the requirements of this section if the portable classrooms:
  - (a) Do not alter the noise abatement features;
  - (b) Do not increase noise-generating features;
  - (c) Were previously used for classroom instruction;
  - (d) Do not change ownership; and
  - (e) Are located on a site that meets the noise assessment requirements set forth in WAC 246-370-020(3)(c).
- (3) The maximum noise exposure for students in classroom shall not exceed the levels specified in Table 1.
- (4) That activities that expose students to sound levels equal to or greater than 115 dBA are prohibited.
- (5) That students are provided and required to use personal protective equipment where noise levels exceed those specified in Table 1. Personal protective equipment must reduce student noise exposure to comply with the levels specified in Table 1.



Table 1  Maximum noise exposures permissible		
Duration per day (hours)	Sound Level (dBA)	
8	85	
6	87	
4	90	
3	92	
2	95	
1-1/2	97	
1	100	
1/2	105	
1/4	110	

# **Comment Summary**

We moved one comment submitted under Noise to Other.



# WAC 246-370-110 Lighting

# **Section Language**

A school official shall:

- (1) Provide light intensities that meet or exceed those specified in Table 2.
  - (a) Natural lighting, energy-efficient lighting systems, lighting fixtures, or bulbs may be used to maintain the minimum lighting intensities.

Table 2	
Lighting intensities measured 30 inches above the floor or on working or teaching surfaces. Some lighting fixtures may require a start-up period before reaching maximum light output.	
Task	Min. Foot Candle Intensity
Specialized rooms where safety is of prime consideration or fine detail work is done, for example, family and consumer science laboratories, science laboratories (including chemical storage areas), shops, drafting rooms, and art and craft rooms.	50
Kitchen areas including food storage and preparation areas.	50
General instructional areas, for example, study halls, lecture rooms, and libraries.	30
Gymnasiums: main and auxiliary spaces, shower rooms and locker rooms.	20
Noninstructional areas including auditoriums, lunchrooms, assembly rooms, corridors, stairs, storerooms, and restrooms.	10

- (2) Control excessive brightness and glare in all instructional areas. Surface contrasts and direct or indirect glare must not cause excessive eye accommodation or eye strain problems.
- (3) Provide sun control to exclude direct sunlight from window areas and skylights of instructional areas, assembly rooms, and meeting rooms during at least 80 percent of the normal school hours. Sun control is not required for sun angles less than 42 degrees up from the horizontal. Sun control is not required if air conditioning is provided, or special glass is installed having a total solar energy transmission factor less than 60 percent.
- (4) Provide lighting in a manner that minimizes shadows and other lighting deficiencies on work and teaching surfaces.
- (5) Provide windows in sufficient number, size, and location to enable students to see outside at least 50 percent of the school day. Windows are optional in specialized rooms.

# **Comment Summary**

#### Inconsistent

Does not match 246-366A or the building code.



#### **Kitchens**

 Food code states 50 Foot candles for preparation areas and 10 foot candles for food storage areas

## **Windows 110(5)**

It is unclear if all standard classrooms will have windows to allow students to have access to
natural light at least 50 percent of the day. Suggests adding the following from 246-366-050(8):
"No student shall occupy an instructional area without windows more than 50 percent of the
school day."

## **Informal Comments**

Name	Comment
Mike Benzien	WAC 246-370-110 Lighting
	A school official shall: (1) Provide light intensities that meet or exceed those specified in Table 2. (a) Natural lighting, energy-efficient lighting systems, lighting fixtures, or bulbs may be used to maintain the minimum lighting intensities. Table 2 Lighting intensities measured 30 inches above the floor or on working or
	Comments
	Building code dictates lighting requirements for classrooms. The update needs to be aligned with building code. WAC 246-366A-115. Already cover the requirements and they do not match the proposed update.
Lori Karnes	WAC 246-370-110 Lighting
	For the table: Kitchen areas including food storage and preparation areas. Minimum Foot Candle Intensity 50
	I think the food code (WAC 246-215) only requires 10 foot candles of light in food storage areas. I agree 50 foot candles for preparation but this seems excessive in storage areas.
Devon Kellogg	Lighting (WAC 246-370-110 Lighting)
	(5) The way this subsection is worded, it's not clear that all standard classrooms will have windows, and that all students will have access to natural lighting at least 50 percent of the day. Please see language from 246-366-050 (8) which addresses this.



# WAC 246-370-120 Injury Prevention

# **Section Language**

### A school official shall:

- (1) Mitigate potential slip and fall hazards by, but not limited to:
  - (a) Providing stairwells and ramps with handrails and stairs with surfaces that reduce the risk of injury;
  - (b) Providing protection or barriers for areas that have fall risks such as balconies and orchestra pits;
  - (c) Storing unsecured equipment in a manner that prevents unauthorized use or injury;
- (2) Ensure chemical and cleaning supply storage that includes:
  - (a) Manufacturer use instructions, warning labels, and Safety Data Sheets for proper storage of the supplies;
  - (b) Labels on supplies that are diluted from bulk chemical or cleaning agents with the accurate agent name and dilution rates;
  - (c) The original bulk or concentrated containers of cleaning and disinfectant agents for reference to labels and instructions until diluted contents are exhausted;
  - (d) Separation of incompatible substances; and
  - (e) Access that is limited to authorized users.
- (3) Provide fragrance-free and low-hazard cleaning and sanitation supplies when available or ensure cleaning at a time and manner that would limit exposure to students; and
- (4) Provide a written policy to mitigate injury and the spread of diseases if the school allows animals other than service animals in a school facility.

## **Comment Summary**

### Low-Hazard 120(3)

Define "low hazard" or replace with EPA's Safer Choice products

#### **Animals**

- Suggests that an approved type of animal should be based on the age of students and available hygiene facilities.
- Suggests that there should be an exception for animals like mice or frogs that would be used in scientific classes.
- Suggests that there be a requirement for an official review and approval process of a plan.



# **Informal Comments**

Name	Comment
Steve Brown	246-370-120 (3) doesn't really define what low-hazard means. Nor is it included in the definitions section. But since this is essentially referencing the EPA's Safer Choice products list, you might consider just referencing it.
Joni Hensley	I applaud the addition of language that deals with animals in the school settings. Decisions for inclusion of animals should be based on the age of the students and availability of handwashing and hygiene measures. Communicable diseases are an issue, especially with enteric pathogens.
Kait Wolterstorff	120(4) Injury prevention – animals – what counts? Suggestion: add language for an exception for animals used for science education purposes (ie mice, brine shrimp, fruit flies, etc).
Lindsey Doolittle	120: well-summarized. Especially like consolidation of (4) re: animals.     o Consider requirement for review and approval of written animal plan and/or conformance/cross-refence with WAC 246-100-192 for animal venue operators

# Survey comments not covered above

Name	Comment
Brian Freeman	1(b) at time of major remodel or new construction
Nicole Daltoso	1(b) Is the intent to have protection or barriers for orchestra pits during a performance or rehearsal?



## WAC 246-370-130 Imminent Health Hazard Procedure

# **Section Language**

- (1) If a school official identifies a condition that could pose an imminent health hazard, a school official shall:
  - (a) Immediately consult with the local health officer to investigate the suspected hazard;
  - (b) Take immediate action to mitigate hazards and prevent exposure if an imminent health hazard is confirmed; and
  - (c) A school may consult with the local health officer in developing appropriate health and safety messages for school staff, students, and parents.
- (2) If a local health officer identifies a condition that is an imminent health hazard at a school, the local health officer shall:
  - (a) Immediately inform school officials of the imminent health hazard;
  - (b) Consult with school officials to mitigate hazards and prevent exposure; and
  - (c) If requested, assist school officials in developing health and safety messages for school staff, students, and parents.

# **Comment Summary**

#### Mitigation

require mitigation first then consultation with LHO

#### **Notification**

Require that students and parents are notified if an IHH occurred in the school.

#### Risk manager

Require a state funded risk manager for schools.

#### Reporting IHH in the school

"School official" needs clarification. Anyone at the school should be able to report an IHH.

#### **Hazards**

- Include standard procedures for heat, smoke, toxic spills, extreme weather similar to WAC 110-300 / 110-301-0147(1):
  - (1) A school-age provider must observe weather conditions and other possible hazards to take appropriate action for child health and safety. Conditions that pose a health or safety risk may include, but are not limited to:
    - (a) Heat in excess of 100 degrees Fahrenheit or pursuant to advice of the local authority;
    - (b) Cold less than 20 degrees Fahrenheit, or pursuant to advice of the local authority;
    - (c) Lightning storm, tornado, hurricane, or flooding if there is immediate or likely danger;
    - (d) Earthquake;
    - (e) Air quality emergency ordered by a local or state authority on air quality or public health;



- (f) Lockdown notification ordered by a public safety authority; and
- (g) Other similar incidents.
- (2) A school-age provider must ensure children are dressed for weather conditions during outdoor play time.
- Have readiness plans for earthquakes, sewage leaks, and emergency evacuations

## **Informal Comments**

Name	Comment
Kait Wolterstorff	130: IHH procedure – recommend mitigation first then consult LHJ (first address conditions that pose a direct and imminent hazard to health, then consult LHJ, then take additional action as recommended by LHJ)
Devon Kellogg	(WAC 246-370-130 Imminent Health Hazard Procedure)
	This section no longer includes requirements to inform students and parents or to keep records for imminent health hazard exposure as in 246-366A-020 (1.c.iii). Parents want to know if their student(s) have been exposed to imminent health hazard(s), especially if it requires monitoring, testing, and/or treatment for harmful effects (such as from exposure to lead, mold, E.coli, or other such hazards). Please add these requirements back in.
	Please include procedures for outdoor hazards such as heat, smoke, toxic spill, extreme weather, and/or other hazards as in WAC 110-300 / 301-0147 (1).
	Add a reference/requirement to have and use "Readiness plan(s)" and include earthquake preparation, sewage leak cleanup as in WAC 246-366A-065 (9&10), and emergency evacuation procedures.
Mike Benzien	WAC 246-370-130 Imminent Health Hazard Procedure
	School officials must consult with local health officers to investigate and mitigate imminent health hazards, while local health officers must inform and assist school officials in addressing such hazards.
	Comments
	Schools can't do it alone. A more direct approach would be to fund a Risk manager at the school level. A Risk manager can oversee and make a direct impact on districts while simultaneously lowering insurance premiums. Consulting with a local health officer will only address the obvious with limited real impact. We already have enough agencies that have perfected the trait of "Capitan of the Obvious".
Anonymous 4	WAC 246-370-130 Imminent Health Hazard Procedure (1) If a school official identifies a condition that could pose an imminent health hazard, a school official shall:
	So, in the interest of promoting a good safety culture, the definition of school staff needs clarification. In addition, there should be language that anyone reporting a serious concern should have input regarding imminent hazards.



# **WAC 246-370-140 Playgrounds**

# **Section Language**

- (1) A school official shall:
  - (a) Consult with the local health officer regarding playground review and approval requirements prior to:
    - (i) Installing new playground equipment or fall protection surfaces;
    - (ii) Adding new playground features or equipment to an existing playground; or
    - (iii) Modifying existing playground equipment, features, or fall protection surfaces;
  - (b) Install, maintain, and operate playground equipment, including used equipment, and fall protection surfaces:
    - (i) In a manner consistent with the ASTM F 1487-21: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use; and
    - (ii) In a manner consistent with the manufacturer's instructions and Consumer Product Safety Commission Handbook for Public Playground Safety, 2010;
  - (c) Provide playground plans and equipment specifications and any additional information the local health officer requests;
  - (d) Obtain plan review and written approval from the local health officer before installing, adding, or modifying playground equipment or fall protection surfaces; and
- (2) The local health officer shall:
  - (a) Consult with a school official to determine requirements for playground plan review and approval consistent with the scope of the project;
  - (b) Review playground plans and equipment specifications to confirm that the requirements of these rules are addressed;
  - (c) Identify and request any additional documents required to complete the review;
  - (d) Provide written approval or denial of the playground plans and equipment specifications within 30 days of receiving all documents needed to complete the review unless the school officials and the local health officer agree to a different timeline;
  - (e) Verify that playground installation complies with the requirements of this section; and
  - (f) Coordinate all playground-related inspections with the school official.
- (3) The use of chromated copper arsenate or creosote-treated wood to construct or install playground equipment, landscape structures, or other structures on which students may play is prohibited.

## **Comment Summary**

#### Referenced standards



- The Consumer Product Safety Commission Handbook for Public Playground Safey is not stringent enough. Reference National Playground Safety Institute.
- Support including ASTM and CPSC standards and guides.
- Reference "latest version" of referenced standards.
- Refer to Ecology's Dangerous Waste Regulations or add pentachlorophenol.

#### **Shade**

 Require shade outside on the playground as in 110-301-0145 (3) "A school-age program must have shaded areas in outdoor play space provided by trees, buildings, or shade structures."

#### Turf

• Consider turf restrictions based on health effects.

## **Plan Approval**

• Make both playgrounds and new construction plan review approval within 60 days.

### **Pre-use inspection**

Require an inspection before use like a preoccupancy inspection in construction review.

### **Informal Comments**

Name	Comment
Mike Benzien	WAC 246-370-140 Playgrounds
	The section outlines new installation and maintenance requirements for playgrounds, including consultation, compliance, and prohibited materials.
	Comments
	This entire section is incorrect and needs a complete review by County and City Building Officials. Consumer Product Safety Commissioning Handbook is not intended to regulate Public Schools, and does not meet the same high standards as the National Playground Safety Institute. The correct organization should be the National Playground Safety Institute. If you purchase a playground toy from Walmart it falls under Consumer Product Safety. Public play structures and equipment need higher standards.
Devon	(WAC 246-370-140 Playgrounds)
Kellogg	The standards referred to in (1.b.iⅈ) recommend but do not require shade on playgrounds. As temperatures above 90 degrees are becoming more frequent across our state during the school year, it's important for students to have access to shaded areas when playing outside as in WAC 110-300 / 301-0145 (3).
	Also consider the health effects on children from using artificial turf. (https://pmc.ncbi.nlm.nih.gov/articles/PMC10262297/#:~:text=Recent%20chemical%20analyse s%20of%20crumb,2022).)
Brandon Kemperman, Sinang Lee	WAC 246-370-140 Playgrounds
	-(1)(b)(i): When referring to standards, it may be helpful to include "or latest version" to ensure these are not quickly outdated due to mentioning specific versions.
	-We support reference and inclusion of the ASTM standard and CPSC guidelines.



	-(2)(d): Could the turnaround time be consistent with plan review turnaround time of 60 days, instead of 30 days?
Jesse Smith	WAC 246-370-140 references ASTM F 1487-21 and CPSC handbook for playground safety, 2010. These are specific versions of the standards. Would it be appropriate to include a statement about as otherwise amended to automatically adopt updated versions?
Laurette Rasmussen	Playground Plan Review - add requirement for a pre opening inspection prior to student use. Such as - school requests a pre opening inspection (or construction inspection) at least 5 days prior to desired playground opening/use by students. Align with the plan review requirement for a pre occupancy inspection.
Kait Wolterstorff	Playgrounds 140(3) – change to refer to the ECY Dangerous Waste Regulations, or add pentachlorophenol



# WAC 246-370-150 Specialized Rooms

# **Section Language**

A school official shall ensure specialized rooms that are part of a school facility include, if applicable:

- (1) Single-use soap and single-use towels at handwashing sinks.
- (2) Emergency washing facilities:
  - (a) An emergency shower must be provided:
    - (i) When there is potential for major portions of a person's body to contact corrosives, strong irritants, or toxic chemicals; and
    - (ii) That delivers water to cascade over the user's entire body at a minimum rate of 20 gallons (75 liters) per minute for fifteen minutes or more.
  - (b) An emergency eyewash fountain must be provided:
    - (i) When there is potential for a person's eyes to be exposed to corrosives, strong irritants, or toxic chemicals;
    - (ii) That irrigates and flushes both eyes simultaneously while the user holds their eyes open;
    - (iii) With an on-off valve that activates in one second or less and remains on without user assistance until intentionally turned off; and
    - (iv) That delivers at least 0.4 gallons (1.5 liters) of water per minute for fifteen minutes or more.
  - (c) Emergency washing facilities must:
    - (i) Be located so that it takes no more than 10 seconds to reach and no more than 50 feet;
    - (ii) Be kept free of obstacles blocking their use;
    - (iii) Function correctly; and
    - (iv) Provide the quality and quantity of water that is satisfactory for the emergency washing purposes.
  - (d) The design, installation, and maintenance of emergency washing facilities must meet the American National Standards Institute (ANSI) publication Z358.1 - 2014, American National Standard for Emergency Eyewash and Shower Equipment.
- (3) A prohibition of use and storage of compounds that are:
  - (a) Considered shock-sensitive explosives, for example, picric acid, dinitro-organics, isopropyl ether, ethyl ether, tetrahydrofuran, dioxane; or
  - (b) Lethal at low concentrations when inhaled or in contact with skin, for example, pure cyanides, hydrofluoric acid, toxic compressed gases, mercury liquid and mercury compounds, and chemicals identified as the P-list under WAC 173-303-9903.



- (4) Safety procedures and process for instructing students regarding the proper use of hazardous materials or equipment.
- (5) Appropriate personal protective equipment when exposure to potential hazards might occur.
- (6) Appropriate situation-specific emergency equipment is available when exposure to potential hazards might occur.
- (7) Appropriate ventilation, source capture system, or other equipment approved by the local health officer to prevent the recirculation of air into the room or transfer of airflow into other parts of the school facility and to prevent contaminant from entering the students breathing zone.
- (8) If a school facility includes a designated health room, a school official shall ensure that the health room includes:
  - (a) The means to visually supervise and provide privacy for room occupants;
  - (b) Surfaces that staff can easily clean and sanitize;
  - (c) A handwashing sink in the room;
  - (d) An adjoining restroom; and
  - (e) Mechanical exhaust ventilation that ensures that air does not flow from the health room to other parts of the school facility.
- (9) Emergency shut-off valves or switches for gas and electricity connected to stationary machinery are installed during **new construction**. Valves or switches must:
  - (a) Be located close to the room exit door;
  - (b) Have unobstructed access; and
  - (c) Have signage posted adjacent to the valve that room occupants can easily read and understand from the opposite side of the room during an emergency.

## **Comment Summary**

### Handwashing sinks

All sinks have soap and towels—not necessary to add to rule.

### **Emergency washing facilities 150 (2)**

- Reflect flow rate and distance requirements set by LNI.
- Reference ISEA Z358.1-2014. Rule is too limiting.
- Include water temperature ranges.
- Include: "there should be no obstacles in the pathway to stations, including doors, unless there is panic hardware on the exposure side."
- (d) Include: "or latest version" of the ANSI standard.
- Add to the following subsections:
  - (a) An emergency shower must be provided in or adjacent to any instruction room:
  - (b) An emergency eyewash fountain must be provided in or adjacent to any instruction room:



# Prohibiting storage or use of compounds 150(3)(b)

• Epi-pens are a prohibited item on the "P-List" under WAC 173-303-9903. Are schools not allowed to store or use those?

#### **Health room**

Supports the health room requirements.

# PPE 150 (5) & (6)

What constitutes appropriate PPE?

## **Applicability**

- Section opens with "A school official shall ensure specialized rooms that are part of a school facility include, if applicable:" When would sub sections (4)-(7) be required?
  - (4) Safety procedures and process for instructing students regarding the proper use of hazardous materials or equipment.
  - (5) Appropriate personal protective equipment when exposure to potential hazards might occur.
  - (6) Appropriate situation-specific emergency equipment is available when exposure to potential hazards might occur.
  - (7) Appropriate ventilation, source capture system, or other equipment approved by the local health officer to prevent the recirculation of air into the room or transfer of airflow into other parts of the school facility and to prevent contaminants from entering the students breathing zone.

#### Ventilation (7)

- Change: "Appropriate Appropriately used and maintained ventilation, source capture system, or other equipment approved...."
- Add examples like language from 246-366A-160(8): These activities and equipment include, but are not limited to, spray painting, welding, pottery kilns, chemistry experiments, and woodworking.
- Add list of air contaminants from combustible cooktops as examples of equipment that would need this ventilation requirement.

#### Informal Comments

Name	Comment
Mike Benzien	WAC 246-370-150 Specialized Rooms
	The section outlines safety requirements for specialized rooms in school facilities, including emergency washing facilities, hazardous material handling, and health room specifications.
	School facilities must have single-use soap and towels at handwashing sinks and emergency washing facilities for potential exposure to corrosives, irritants, or toxic chemicals.
	• Emergency showers must deliver water at a minimum rate of 20 gallons per minute for fifteen minutes, and eyewash fountains must deliver at least 0.4 gallons per minute for fifteen minutes.



	• Emergency washing facilities must be reachable within 10 seconds, free of obstacles, and
	meet ANSI Z358.1 - 2014 standards.
	<ul> <li>The use and storage of shock-sensitive explosives and lethal compounds at low concentrations are prohibited.</li> </ul>
	• Schools must provide safety procedures, personal protective equipment, and appropriate ventilation to prevent contamination and ensure student safety.
	• Health rooms must have visual supervision, easy-to-clean surfaces, a handwashing sink, an adjoining restroom, and mechanical exhaust ventilation to prevent air contamination.
	Comments
	Schools already have soap and towels at handwash sinks. The only time they don't is when they are vandalized. That verbiage is repetitive and unnecessary. Many emergency showers and eyewash stations are not built with a drain and create secondary hazards when the water floods the area. The rate and distance requirements are already set by LNI and OSHA. The language should reflect that.
Anonymous 4	(2) Emergency washing facilities:
·	Please reference ISEA Z358.1-2014 instead of listing something incomplete. Or reference the UPC which references ISEA Z358.1-2014. As written this rule is too limiting and needs to be expanded or use the proper reference.
	(3) A prohibition of use and storage of compounds that are:
	(a) Considered shock-sensitive explosives, for example, picric acid, dinitro-organics, isopropyl ether, ethyl ether, tetrahydrofuran, dioxane; or
	(b) Lethal at low concentrations when inhaled or in contact with skin, for example, pure cyanides, hydrofluoric acid, toxic compressed gases, mercury liquid and mercury compounds, and chemicals identified as the P-list under WAC 173-303-9903.
	This would prohibit the storage or use of epinephrine as it is on the P-list? No epi-pens?
Joni Hensley	I hope that each school will have a designated health room and support the rules for ventilation (negative air flow), supervision, sanitation and hygiene provisions. Isolating ill students in a safe and clean environment that restricts spreading diseases may become more important if vaccination rates decline.
Lori Karnes	I thought we were going to call out emergency washing facility water temperature ranges?
Kait Wolterstorff	150: Specialized Rooms – states "if applicable" but does not define applicability criteria for (4)-(7)
	150(2)(a)(i) "potential for major portions of a person's body to contact" – how is this assessed? Suggestion: change to "in or adjacent to any instructional room where corrosives, irritants, or toxic chemicals are stored, used, or disposed of" (or similar language)
	150(2)(b)(i) same as above
	150(5-6) How is "appropriate" PPE & emergency equipment assessed?
Devon Kellogg	Specialized Rooms (WAC 246-370-150 Specialized Rooms)



	(7) Add "Appropriately used and maintained ventilation, source capture system, or other equipment approved by the local health officer at all sources of air contaminants" so it's clear when this subsection is applicable as in WAC 246-366-080, WAC 246-366A-090, 246-366A-160 (7-9) and 246-366A-165 (6). It would also be helpful to add examples such as those in 246-366A-160 (8) plus also list air contaminants from combustion cooktops.
Brandon Kemperman, Sinang Lee	'-(2)(d): Suggest including "or latest version" so that the included ANSI standard does not become quickly outdated.
Steve Main	WAC 246-370-150 Specialized Rooms  (2)(b) An eyewash fountain must be provided: (i)When there is potential for a person's eyes to be exposed to corrosives, strong irritants, or toxic chemicals  > Consider adding dust to the list, for example dust generated in a wood shop or art room.  (2)(c) Emergency eye wash facilities must (ii) be free of obstacles blocking their use  > It should be included that "there should be no obstacles in the pathway to stations, including doors, unless there is panic hardware on the exposure side" See K-12 Guide item #K003 and DOSH Directive 13.00

# Survey comments not covered above

Name	Comment
Brian Freeman	What is in code currently?
	2 – If this is in OSPI/DOH Guidance keep it there
	4 – This is curriculum this should be in Guidance for School Boards to adopt
	6 – Place in Guidance
	7 – Is this in Guidance? Is it Code? If either, keep it there.
Laurette Rasmussen	Add that emergency washing facilities be inspected annually to ensure adequate flow and document, and eyewashes activated weekly to ensure they are working correctly and document.



# WAC 246-370-160 Variances and Emergency Waivers

# **Section Language**

- (1) School officials may:
  - (a) Submit a written variance request to the local health officer if there is an alternative that meets the intent of chapter 246-370 WAC. The variance request must include:
    - (i) The specific rule section or sections that the variance would replace;
    - (ii) The alternative that is proposed to replace the required rule;
    - (iii) A description of how the variance will provide a comparable level of protection as the rule that it will replace;
    - (iv) Any clarifying documentation needed to support the request including but not limited to engineering reports, scientific data, or photos.
  - (b) Implement a variance only after obtaining approval from the local health officer.
- (2) The local health officer shall:
  - (a) Provide written approval or denial of a request for a variance to the school applicant and the department within 60 days of receiving a complete written variance request, unless the school official and the local health officer agree to a different timeline.
- (3) The local health officer may grant a school official an emergency waiver from some or all of the requirements in these rules:
  - (a) For the use of a temporary facility if the facility normally used by the school is not safe to be occupied; or
  - (b) If a school can safely remain in operation during an imminent health hazard.

## **Comment Summary**

### **Exemption language**

 Add something like this language from 246-366-150 to ease burden of applying for and renewing variance:

The board of health may, at its discretion, exempt a school from complying with parts of these regulations when it has been found after thorough investigation and consideration that such exemption may be made in an individual case without placing the health or safety of the students or staff of the school in danger and that strict enforcement of the regulation would create an undue hardship upon the school.



### **Informal Comments**

## Name Comment Tammy Allison -Compared to an exemption, a variance process is fundamentally more burdensome for Franklin Pierce school districts. It is unclear whether a variance would be in place for one year or some School Distict and other time period. If the variance is in place for one year, then the district would need to puget Sound repeatedly submit a variance request each year for each subsection of the School Rules. If School Coalition the variance is needed due to a problem with how the school was built or some other aspect of the physical infrastructure, then the district cannot solve the problem before it passes a bond issue. Under these conditions, the district will need to prepare and repeatedly submit the same variance applications. Please note that the language in the current Washington Administrative Code addresses this problem. Instead of a variance process, the current code authorizes exemptions. Based on the existing code, once exemption from a particular rule is granted, the exemption remains in place going forward. The exemption would not expire in year two. This process would provide more predictability for school districts. The current code is found in WAC 246-366-150: Exemption. "The board of health may, at its discretion, exempt a school from complying with parts of these regulations when it has been found after thorough investigation and consideration that such exemption may be made in an individual case without placing the health or safety of the students or staff of the school in danger and that strict enforcement of the regulation would create an undue hardship upon the school." The language requires officials to balance the health and safety of the students or staff with the undue hardship that the rule would create for the school. The proposed process requires more paperwork and potentially increases the cost for the variance application. The district will incur more costs since the draft WAC may require districts to hire consultants to prepare require engineering reports or scientific data. Furthermore, the requirement to provide "comparable level of protection" is difficult to achieve. The goal is to ensure health and safety if the students and staff, but there could be a range of options to meet this goal. The proposed criteria for variances is too restrictive. Since the existing code (WAC 246-366-150) has been in place for many years and since local health officers know how to implement the exemption process, we urge the State Board to retain the existing exemption standard. Do not adopt a brand new variance process.

# Survey comments not covered above

Name	Comment
Laurette Rasmussen	(b) Implement a variance only after obtaining approval from the local health officer
	Add "written" approval.



# **WAC 246-370-170 Severability**

# **Section Language**

If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.

# **Comment Summary**

We moved one comment submitted under Severability to Other.



# WAC 246-370-180 Appeals

# **Section Language**

- (1) Environmental health and safety decisions or actions of the local health officer may be appealed to the local board of health.
- (2) Environmental health and safety appeals will be conducted in a manner consistent with the written procedure within each office.

# **Comment Summary**

## **Local Health Jurisdiction Processes**

- Include specifications or make a template in guidance for departments that do not have a written process.
- Consider ways to make this process consistent between departments.

## **Informal Comments**

Name	Comment
Lindsey Doolittle	180: templates/minimum specifications for departments that don't have a written procedure/code specific to appeals by schools?     o Ours are all specific to the program/local code & we don't have one yet for schools
Joni Hensley	Local boards of health in Washington State consist of many different models. Some have only elected representatives on their board whereas others have community members with varying degrees of expertise in many fields. Public health (specifically Environmental Health) is not always represented on these boards. If board members did not have access to environmental health expertise, the appeals process could lead to inconsistencies and politicizing student health and safety. The potential result is a confusing landscape between different health jurisdictions in how they apply these rules.

# Survey comments not covered above

Name	Comment
Laurette Rasmusse n	EH appeals in our county would go to the Hearing Examiner, not the local board of health.  Something like: Environmental health and safety decisions or actions of the local health officer may be appealed and will be conducted in a manner consistent with the written procedure within each office.



# **Other**

# **Comment Summary**

## **Funding**

General concerns about how much this rule will cost and who will pay for it.

## **Accountability**

 General concerns about holding schools, LHJs, and state/local government accountable for student health and safety.

## Redundancy

Multiple agencies with overlapping or conflicting requirements need to be aligned.

#### **Kudos**

 Compliments for organization of documentation and application of scientific studies to support decisions.

#### Missing

• Emergency plans, routes, training, seismic upgrades/hazard mitigation, evacuation accommodation for special-needs students.

#### **Charter Schools**

• Limited access to capital funding and facility resources. Limited control over leased facilities.

### **Informal Comments**

Name	Comment	Source Topic
Tamara	Drink the water might as well be drinking poison!	WAC 246-370- 010 Applicability
Tamara	It's up to me to use my experience and and history to at least try to understand the context behind the movement of ecology	WAC 246-370- 030 Construction Plan Review New, Alterations, and Portables
Tamara	When was the last inspection of anything in Tacoma I would have to say never!	WAC 246-370- 040 Routine Inspection
Tamara	We need to start understanding what we are dealing with now!	WAC 246-370- 050 General Building Requirements
Anonymous 8	This is all unnecessary. If we have to have over 70 pages regulating air, noise, lighting etc we need to review the waste of time and resources in	WAC 246-370- 050 General



	government. I have worked in education for over 30 years and NEVER had a problem with air, lighting, water etc. There are rules in place that seem to be just fine. I also think this process is unjust and manipulative. No one is going to read all 70 pages. Furthermore, there is no money to support these rules. They are not only not needed, there is no money. And if there money, it is tax payers money and which no one wants to pay for it except politicians so they can feel good about themselves. What they are really doing is trying to fix a problem that doesn't exist and getting others to pay for it. I will support these kinds of bills if those writing them pay for it out of their own pocket. Mmmm. I bet these laws would not be written if the writers had to pay for it. That tells you what is really happening.	Building Requirements
Anonymous 8	Really?	WAC 246-370- 100 Noise
Tamara	Interesting racks that have never been discovered until now !	WAC 246-370- 120 Injury Prevention
Tamara	I would like to know who is responsible for allowing Willard to reopen , whom approved the school to be used in direct contact with vulnerable children, susceptible to all kinds of health concerns for future health	WAC 246-370- 170 Severability
Mike Benzien	Please note that we already have 37 governing agencies that have requirements. In general, it would be more productive to align the agencies instead of creating another level of requirements that are mostly unfunded by the state. Schools can't do it alone.  The State and County need to consult building professionals before making recommendations that are not obtainable or practical. Many of the recommendations will drive up the cost of school construction which is already around \$650.00 per sf.	Other
Joni Hensley	Please give your technical advisory group a big shout-out for a job well done. I really appreciate how easy it was to locate the proposed rules and recommended changes for each section. The new document is well grounded in current scientific principles and should be easy to defend in the event that sections are contested as school districts face funding challenges. There shouldn't be a price tag on student health and safety.	Other
Devon Kellogg	There is nothing in this rule about having emergency plans, routes, training, seismic upgrades/hazard mitigation, and/or specific evacuation accommodation for special needs students, all of which are critical to ensuring the health and safety of all students.	Other
Tamara	Whom holds the responsibility of keeping Washington family protected from corruption and greed , I'm really ready for it all to come out !	Other
Nancy Bernard	Overall, I'm very impressed. I'm happy to provide further review/input.	Other



### Brook Wilkerson

Dear Washington State Board of Health,

On behalf of Washington's charter school sector, I am writing regarding the proposed School Environmental Health and Safety Rules (WAC 246-370). While we strongly support modernizing these critical health and safety standards that have remained largely unchanged for 50 years, we must emphasize that without dedicated funding, these requirements could create insurmountable challenges for charter schools.

The proposed rules include several important updates that will benefit all students, including:

Enhanced indoor air quality requirements

Modern ventilation standards

Comprehensive emergency preparedness measures

Updated safety protocols for specialized rooms

Improved injury prevention requirements

However, the financial impact of implementing these changes presents a significant concern for charter schools. Unlike traditional public schools, charter schools operate with more limited access to capital funding and facility resources. Many charter schools lease their facilities, adding complexity to implementing significant facility modifications. Without dedicated funding, these new requirements could force schools to choose between costly facility improvements and essential educational programs.

We anticipate substantial costs associated with:

Ventilation system upgrades to meet the new 21 cubic feet per minute per person standard

Installation of emergency washing facilities in specialized rooms

Development and implementation of various required written plans

Regular testing and monitoring requirements

Facility modifications to meet new standards

Potential increased operational costs to maintain new systems

To ensure successful implementation, we urgently request:

**Dedicated Legislative Funding:** 

Capital improvement grants specifically for charter schools

Funding for required testing and monitoring

Resources for plan development and implementation

Support for facility modifications and improvements

Assistance with increased operational costs

Implementation Support:

Standardized templates and guidance documents for required written plansTechnical assistance for facility assessments

Other



	Resources for assessing facility needs and estimating costs	
	Clear guidelines for meeting compliance requirements	
	A phased implementation approach that:	
	Aligns funding availability with implementation requirements	
	Prioritizes critical health and safety measures	
	Allows schools to spread capital improvements over multiple years	
	Provides adequate time for planning and execution	
	Recognizes the unique challenges of charter school facilities	
	Without adequate funding, these well-intentioned regulations could create an unfunded mandate that disproportionately impacts charter schools and the students we serve. Many of our schools operate in historically underserved communities, making it crucial that implementation of these standards doesn't inadvertently create additional barriers to providing quality education in these areas.	
	We are committed to providing safe, healthy learning environments for our students and support the intent of these updated standards. However, we strongly urge the Board to advocate for dedicated funding streams that will enable charter schools to successfully implement these important changes.	
	Sincerely, Brook Wilkerson	
Ava M	How can we make sure that low income public schools will get the funding they need to maintain their buildings and systems up to the safety standards of the Environmental Health and Safety Rule Project? School districts that are in low income areas or smaller school districts in general are suffering to stay open, and they cannot afford to make the necessary provisions stated in the Environmental Health and Safety Rule Project. I do not want to see an exemption, but rather a solution to ensure all schools are assessed and tested equally. These results should be publicly shared twice a year or more frequently to staff, students and their families for transparency.	Email
Marissa Rathbone, WSSDA	My name is Marissa Rathbone, and I am the Director of Advocacy for the Washington State School Directors' Association, representing the 1,477 locally elected school directors from across the state. Thank you for inviting us to share remarks at the Technical Advisory Committee meeting in Spokane last fall. We appreciated having the opportunity (and invitation) to share ways to make learning environments safer, healthier, and more effective for learning and teaching.	
	Earlier in my career, I studied to be a Health Education Teacher and I come from a line of public educators. This background motivates me to uplift the importance of healthy school environments as the <b>foundation for learning</b> . Our school directors across the state also understand that the health and safety of students and staff is paramount to secure successful academic outcomes.	



At the local level, boards approve district budgets that align with state laws while working to fulfill a moral and ethical responsibility to keep students and staff safe and well. In fact, school districts have determined on their own and without state funding to make many of the proactive or responsive environmental changes without new rules or laws. Additionally, school board governance requires that state and federal laws be followed. Often, however, the resources to implement those requirements are not allocated by policymakers. Therefore, difficult decisions must be made that impact students, families, staff, and communities. When there are not enough dollars allocated to implement requirements, the board is put in the most difficult position to make cuts, such as closing schools. And no one wants to be in that position.

In local elections this year, voters rejected most of the bonds and many of the levies on their local ballots. When bonds consistently fail in a district, new buildings cannot replace those in disrepair, and an effort to simply replace heating/cooling systems, failing roofs, and windows are prioritized through levies. This puts the financial responsibility on the districts to ensure the **literal foundation for learning** is in place before **learning can occur**. Although the state courts recently decided that school facilities are not part of basic education, we should all consider roofs and windows pretty basic

As you continue to hear about the important health and safety considerations for the K-12 environment, we ask that the cost implications be considered, and their funding ensured, before codifying. We simply cannot support any good idea that isn't sufficiently funded - because any more unfunded requirements could ultimately shutter our schools.

As the legislature considers your recommendations, please emphasize the importance of local flexibility, proactive funding, simple majority for school bonds, and a flexible timeline. If any policy is important, the right timeline and resources to implement them should be too. A locally developed plan with state funding and flexibility to implement is our overall recommendation.

Please let us know as you have questions and opportunities to partner, learn, and advocate together.

# Survey comments not covered above

Name	Comment
Brian Freeman	The fees the LHJ charges to school districts need to have boundaries for site assessment and plan review with a maximum per ft cost. The fees for Inspections also need a maximum cost, or better yet, be allocated to LHJ based on total school square footage in their jurisdiction with private schools not being charged more than the allocation per sq ft from the legislature. Since there is a cost that requires an allocation, this would be the simplest method.