Washington State Department of HEALTH

DOH UPDATES AND RESOURCES

School Environmental Health and Safety and Indoor Air Quality Program

YOUR DOH TEAM

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DOH School Environmental Health & Safety and Indoor Air Quality Program

Our Mission

To protect and improve Environmental Health and Safety of schools in Washington state.

DOH Role

DOH School Environmental Health and Safety and Indoor Air Quality Program

Our roles

- Ensure healthy and safe learning environments in school.
- Provide technical assistance to help prevent environmental hazards that can affect students and staff.
- Advocate for IAQ, safe chemical use, proper pest management, and effective ventilation.

Key partners

- LHJs, tribal partners, schools, and school districts
- State organizations like SBOH, OSPI, and SBE
- Other organizations like ESDs, school nurses, and WAMOA
- General public

School EH&S page
doh.wa.gov/schoolenvironment

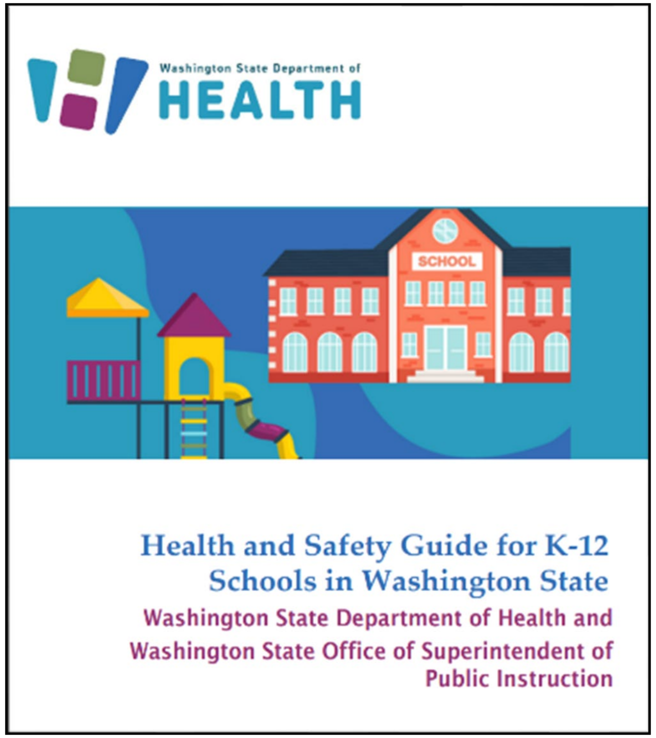
DOH School Environmental Health and Safety and Indoor Air Quality Program

What we provide

- Published guidance
- Technical assistance and research for technical questions
- Plan review assistance for new schools, remodels, and playgrounds
- Assistance with safety concerns including:
    - Playground safety
    - Chemistry labs
    - Spaces like auto shops, wood shops, art classes, and similar
- Provide support for WAC 246-366

DOH Updates

Updates to Our Resources: The K-12 Health & Safety Guide



Sign up for our GovDelivery

Rules and recommendations based on established best practices and research

Updated after 21 years! (2024, 2025)

Now annual updates

- Collect feedback by spring each year
- Review by LHJs, ESDs, DOH, OSPI; SMEs as needed
- Post revisions for start of school year

Highlighted 2025 Updates

Do you have suggestions for the K-12 guide?
Let us know for next year!
schoolehs@doh.wa.gov

- Recommendation to not connect **extension cords** together.
- Allowance for schools to stock **epinephrine** auto injectors in accordance with new law.
- Encouraging separate hand sinks and **drinking fountains** in future remodels or new construction.
- Alignment of **service animal** wording with current RCW.
- Change of term “sparker rest” to correct term **spark arrestor**.
- Recommendation of prompt removal of **animal waste** from school grounds.
- Recommendation that **landscaping** not increase hazardous features.

Updates to Our Resources:

New School IPM Webpages

In this section

- **School Integrated Pest Management**
- Basic Principles
- Hiring a Professional
- Pest Press Handouts
- Resources

Basic Principles – What IPM looks like in practice, four basic steps

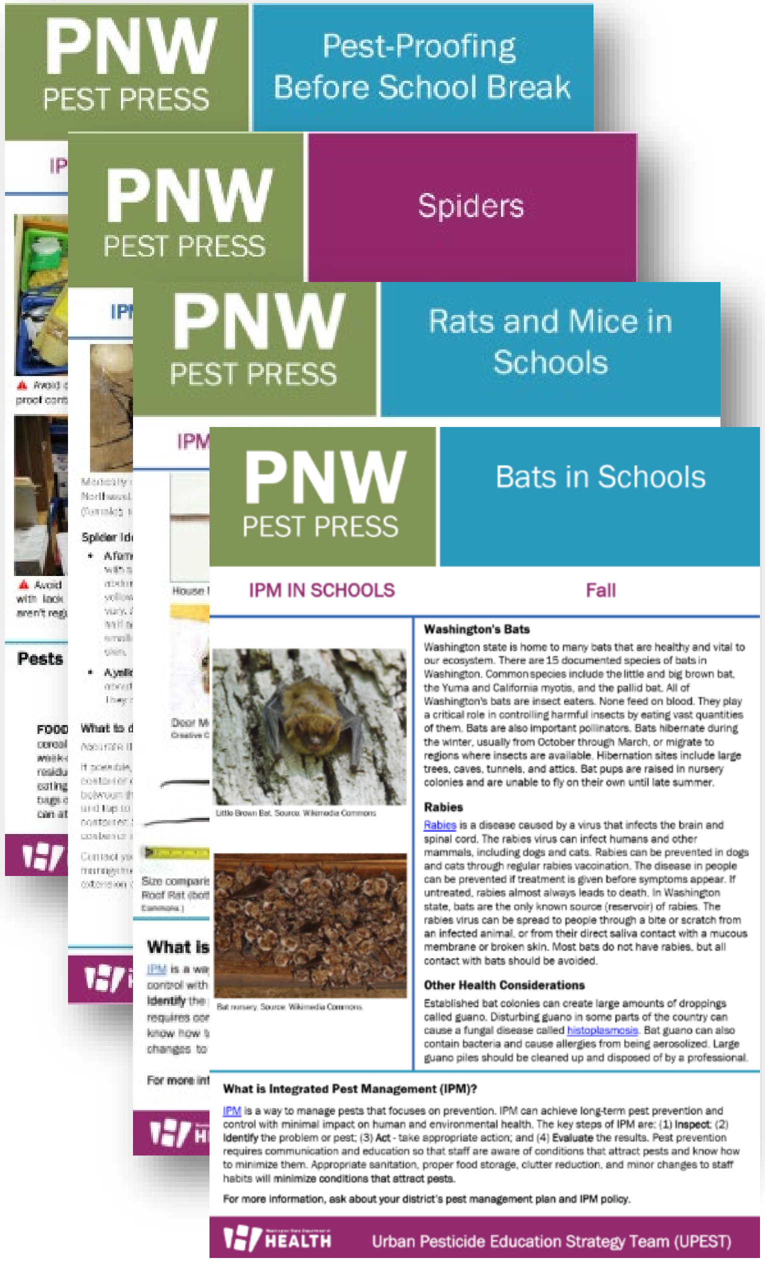
Hiring a Professional – Choose a point of contact, consider qualifications, contracts, examples

Pest Press Handouts – Printable 2-pagers to share with schools

Resources – Model IPM plans, forms and logs, pesticide use guidance, pest info sources, trainings

Pest Presses (2-Page Handouts)

Updated versions creeping up!


PNW PEST PRESS
Pest-Proofing Before School Break

PNW PEST PRESS
Spiders

PNW PEST PRESS
Rats and Mice in Schools

PNW PEST PRESS
Bats in Schools

IPM IN SCHOOLS Fall

Little Brown Bat. Source: Wikimedia Commons

Bat nursery. Source: Wikimedia Commons

Washington's Bats

Washington state is home to many bats that are healthy and vital to our ecosystem. There are 15 documented species of bats in Washington. Common species include the little and big brown bat, the Yuma and California myotis, and the pallid bat. All of Washington's bats are insect eaters. None feed on blood. They play a critical role in controlling harmful insects by eating vast quantities of them. Bats are also important pollinators. Bats hibernate during the winter, usually from October through March, or migrate to regions where insects are available. Hibernation sites include large trees, caves, tunnels, and attics. Bat pups are raised in nursery colonies and are unable to fly on their own until late summer.

Rabies

Rabies is a disease caused by a virus that infects the brain and spinal cord. The rabies virus can infect humans and other mammals, including dogs and cats. Rabies can be prevented in dogs and cats through regular rabies vaccination. The disease in people can be prevented if treatment is given before symptoms appear. If untreated, rabies almost always leads to death. In Washington state, bats are the only known source (reservoir) of rabies. The rabies virus can be spread to people through a bite or scratch from an infected animal, or from their direct saliva contact with a mucous membrane or broken skin. Most bats do not have rabies, but all contact with bats should be avoided.

Other Health Considerations

Established bat colonies can create large amounts of droppings called guano. Disturbing guano in some parts of the country can cause a fungal disease called histoplasmosis. Bat guano can also contain bacteria and cause allergies from being aerosolized. Large guano piles should be cleaned up and disposed of by a professional.

What is Integrated Pest Management (IPM)?

IPM is a way to manage pests that focuses on prevention. IPM can achieve long-term pest prevention and control with minimal impact on human and environmental health. The key steps of IPM are: (1) **Inspect**; (2) **Identify** the problem or pest; (3) **Act** - take appropriate action; and (4) **Evaluate** the results. Pest prevention requires communication and education so that staff are aware of conditions that attract pests and know how to minimize them. Appropriate sanitation, proper food storage, clutter reduction, and minor changes to staff habits will minimize conditions that attract pests.

For more information, ask about your district's pest management plan and IPM policy.

HEALTH Urban Pesticide Education Strategy Team (UPEST)

House Mouse. (Photo by G. Shuklin.)

School Integrated Pest Management: Pest Press Handouts

The Pacific Northwest Pess Press handouts are printable and shareable. These factsheets aim to help teachers and staff keep pests out of schools.

- Pest-Proofing Before School Break (PDF)
- Food in Classrooms Pest Press, WSU (PDF)
- "Sugar" Ants, WSU (PDF)
- Bats in Schools (PDF)
- Bed Bugs, WSU (PDF)
- The ABCs of Bees, WSU (PDF)
- Bees, Wasps, and Yellowjackets, WSU (PDF)
- Common Wasps, WSU (PDF)
- Nuisance Birds, WSU (PDF)
- Free-roaming Cats, WSU (PDF)
- Drain Flies, WSU (PDF)
- Head Lice, WSU (PDF)
- Mosquitoes, WSU (PDF)
- House Mouse (PDF)
- Rats and Mice in Schools (PDF)
- Spiders (PDF)

Playground resources, CPSI credential, and plan review assistance

Resources Include

DOH Assistance to LHJs with School Plan Review and Inspection:

- Checklists
- Plan Review Comments
- Consultation
- Promote networking with LHJs

Plan Review Checklist for New Construction or Remodels of Washington K-12 schools

Outdoor Areas	Reference: WAC, OSPI/DOH K-12 Guide or other	Comments
Safe at open areas and landscaping features: walls, boulders, trees, etc. Safe at sites of playgrounds or athletic fields	246-366-140(1)	
Safe from vehicle traffic: vehicle drop-off and pick-up locations, bus loading, school walk routes	392-145 (transportation rules-school buses); 392-151 (traffic safety- school patrol); K-12 C 002	
Safety at entrances: walk-off mats placed at entrances	K-12 F 10	
General Indoor Areas		
Safety glass at doors, display cases, other areas of concern	RCW 19.27 UBC 2406.3 &4 K-12 C 001	
Safety at school health room: student must be visible to office or other staff at all times Draft Guidelines for School Health Rooms.docx	K-12 C 020	
Safe lighting: minimum light intensity of 10-foot candles at non-instructional areas- includes hallways and corridors, cafeteria dining areas, auditoriums, stairways	246-366-120(1) K-12 I 001	

Item	I. REVIEW PLAYGROUND PLANS FOR GENERAL COMPLETENESS- A designer's plans should consist of:	Comments
1.	Narrative description of playground project includes description of: • Inspections required following installation of playground equipment and surfacing material. • Inspection required for ongoing playground operation. • Inspector qualifications and frequency of inspections.	
2.	Plans show suitable scale and geographic orientation.	
3.	Plans show adequate top-down aerial view of equipment layout.	
4.	Plans show accessible routes to and from playground.	
5.	Plans show protective surfacing area and any containment border or any transition area to and from surfacing area.	
6.	Plans show adequate views of playground equipment, to include any cross-sectional views necessary to show essential equipment dimensions, specific features, and area intended for ingress and egress to and from equipment.	
7.	Includes written documentation of proper equipment certification.	
8.	Includes written documentation of proper certification of surfacing material.	
9.	Specifications provided for all playground equipment.	
10.	Specifications provided for all playground surface materials.	
Item	**II. REVIEW PLAN DETAILS- Plan reviewer should verify plans fully conform to all applicable codes and standards, prior to plan approval. Key items to confirm may include:**	**Comments**

Resources Include

DOH Playground Safety Guidance

- Frozen playgrounds
- Other topics- heat in playgrounds, playground design and safety, meeting ADA standards

[FROZEN PLAYGROUND SURFACES](#)

Frost, snow and ice on playgrounds or equipment increase the risk of serious injury.

Falls are the most common source of playground injury to children and may result in serious injury or death, according to the U.S. Consumer Product Safety Commission's (CPSC) Public Playground Safety Handbook, (July 2025).

Playground surface materials that become frozen, icy or snow covered do not provide adequate protection from falls, especially from an elevated surface.

Schools should not allow use of playground equipment during freezing weather, or when snow or ice is on the ground below playground equipment.

IMPORTANT TIPS:

- Thoroughly inspect the playground surfacing material before allowing playground use. The surfacing under and around playground equipment is one of the most important factors in reducing the likelihood of life-threatening head injuries.
- During freezing weather, playground surfacing materials may not provide adequate shock absorption to prevent serious injuries from falls.
- Icy handrails, grips, and stairs may become very slippery, increasing the risk of slips and falls.
- Snow is not an acceptable protective surfacing material to mitigate a fall. It can ice over and compact surprisingly fast.
- Follow the surfacing manufacturer's recommendations for testing playground surfacing materials. The CPSC Playground Safety Handbook recommends playgrounds meet the surfacing requirements of ASTM F1292
- Keep maintenance records including repairs, inspections, checklists used, and testing of surfacing materials.
- Place appropriate signs at school playgrounds to alert the playground monitor of hazards and closures.
- Consult the CPSC Playground Safety Handbook Section 2.4, Surfacing, for more information.

Resources:
CPSC public-playground-safety-checklist

Washington State Department of HEALTH

DOH 333-379 CS May 2025

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email doh.information@doh.wa.gov.

Resources Include

Requested by Tacoma- Pierce County Health Department

- Supplement to CPSC Handbook and ASTM
- Easy to carry cards with key standards and illustrations to help inspectors verify compliance

Resources Include

Playground Safety Cards for LHJ Inspections

Entanglement Hazards

Entanglement hazards exist when a drawstring, loose cord, or so on could become entangled and cause strangulation.

- To be considered an entanglement hazard, the object must:
  - Fit inside one of the three projection test gauges, described in Consumer Product Safety Commission (CPSC) Playground Safety Handbook.
  - Project above the horizontal.
  - Have sides perpendicular to the initial surface that extend more than 0.12 inch (3 mm) from the initial surface. Use the 0.12 inch (3 mm) gauge.

This picture is an example of an entanglement hazard that meets the criteria above. Even if the bolt did not have threads, it would be considered an entanglement hazard because it meets all three criteria.

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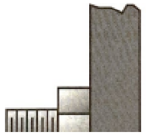
Examples of other Entanglement Hazards:

1. An object extends more than 0.12 inches (3 mm) within the 21 inch slide non-entanglement zone. It must fit inside the large projection test gauge. It can be in any orientation.



Resources Include

Playground Safety Cards for LHJ Inspections

Head Entrapment

Example of a head entrapment shown here, as torso probe goes through opening, but head probe does not.
Openings that allow passage of a child's torso but not head, present a head entrapment.
Use head and torso probes to check for entrapment.
Openings 3.5 inches to 9 inches may present an entrapment hazard.

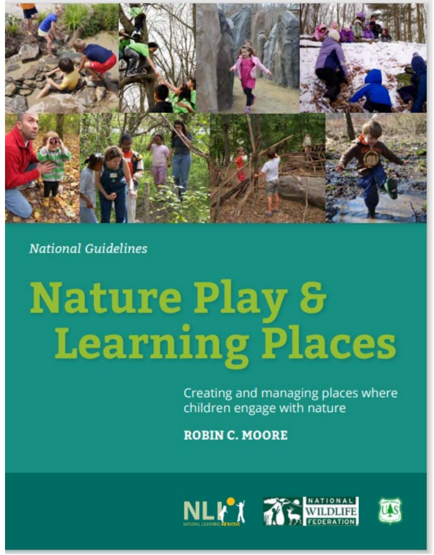
To test:

1. Insert the torso probe into the opening. If it does not pass through, the opening is not an entrapment.
   If it passes through, continue to step 2.
2. Insert the head probe into the opening. If it does not pass through, the opening is a head entrapment.

Playground Safety Presentations and Trainings 2025

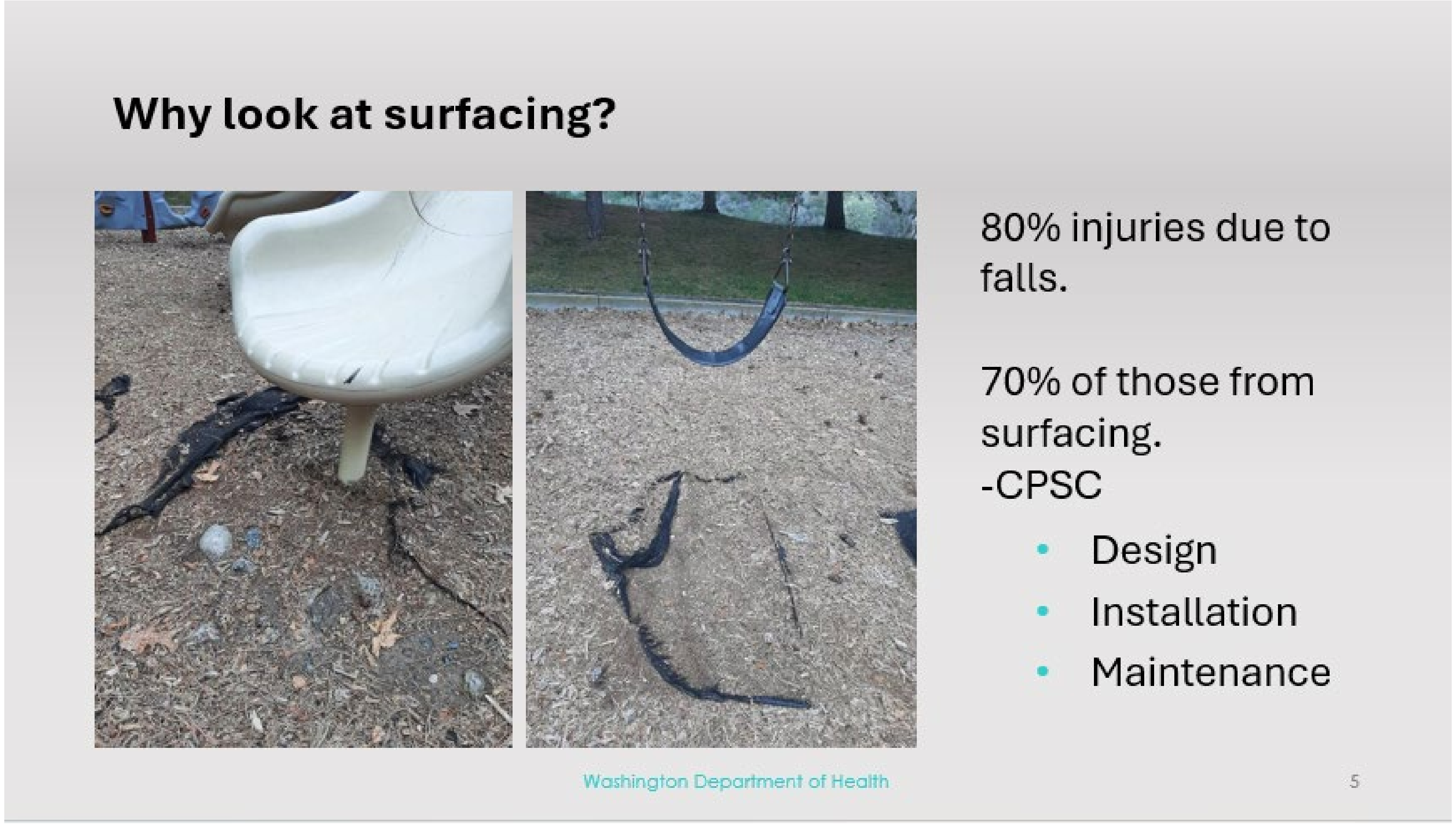
Natural play areas at LHJ partnership meeting

- Presentation by designer of natural play spaces and contributor to [Nature Play & Learning Places]



Playground Safety Presentations and Trainings 2025

Playground Surfacing presentation – WSEHA conference



Certified Playground Safety Inspector (CPSI)

Benefit:

- Confidence in playground inspections
- Credibility in profession
- Access to CPSI community and online resource

How to become a CPSI:

- Certified Playground Safety Inspector (CPSI) | Certification | National Recreation and Park Association
  - Attend a 2-day training, in person or online
  - Successfully pass a 100-question exam

Cold and Flu Season

Cold and Flu Season Ventilation

- **Outdoor air:** ≥15 to 20 CFM/person
- **Filter** to reduce dust, other particles
  - Change seasonally, check monthly
- **Air purifiers:** filter only - may help, but not a “silver bullet”
- **Humidity:** maintain 40-60%

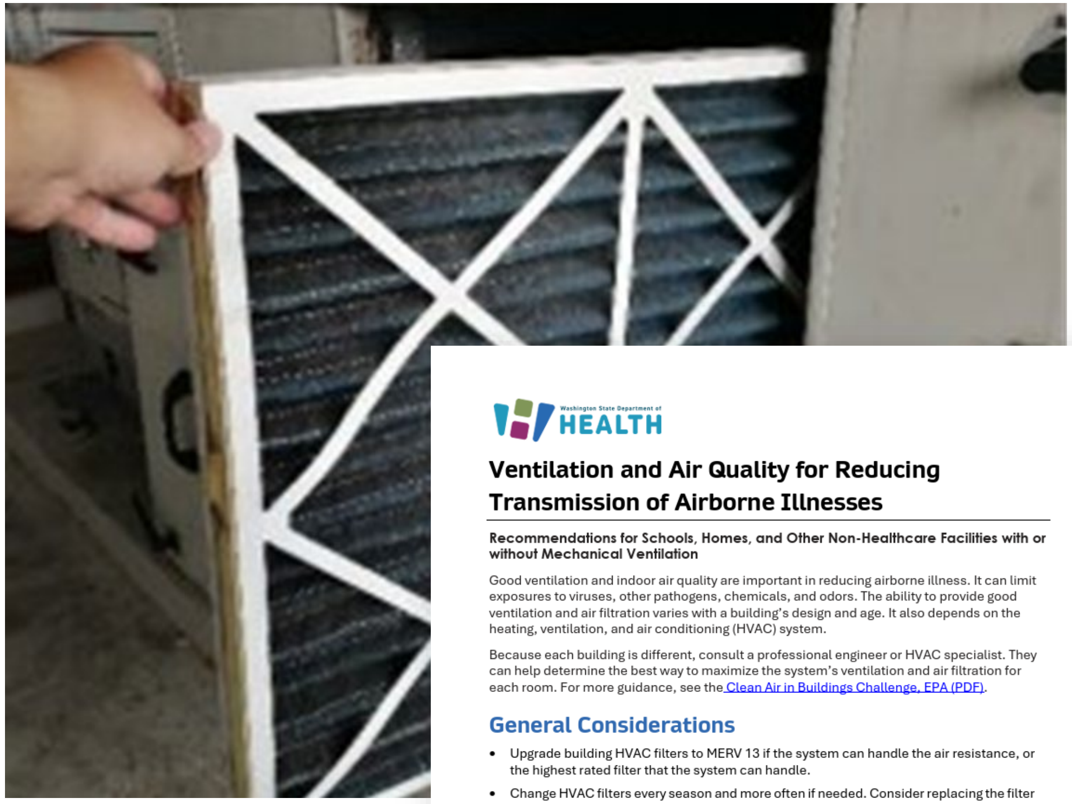
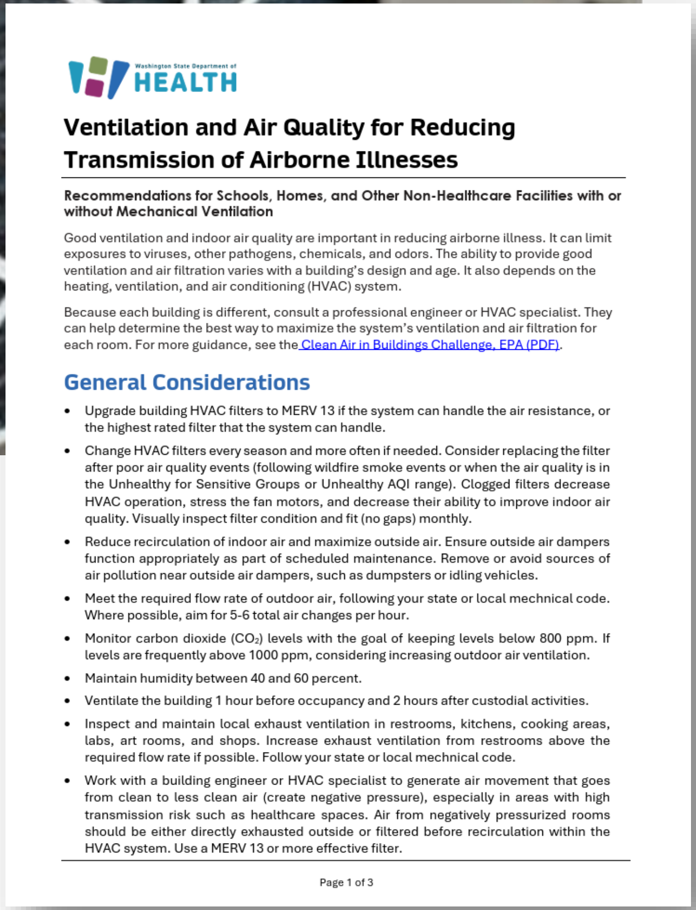


Image source: U.S. EPA



Washington State Department of HEALTH

Ventilation and Air Quality for Reducing Transmission of Airborne Illnesses

Recommendations for Schools, Homes, and Other Non-Healthcare Facilities with or without Mechanical Ventilation

Good ventilation and indoor air quality are important in reducing airborne illness. It can limit exposures to viruses, other pathogens, chemicals, and odors. The ability to provide good ventilation and air filtration varies with a building’s design and age. It also depends on the heating, ventilation, and air conditioning (HVAC) system.

Because each building is different, consult a professional engineer or HVAC specialist. They can help determine the best way to maximize the system’s ventilation and air filtration for each room. For more guidance, see the Clean Air in Buildings Challenge, EPA (PDF).

General Considerations

- Upgrade building HVAC filters to MERV 13 if the system can handle the air resistance, or the highest rated filter that the system can handle.
- Change HVAC filters every season and more often if needed. Consider replacing the filter after poor air quality events (following wildfire smoke events or when the air quality is in the Unhealthy for Sensitive Groups or Unhealthy AQI range). Clogged filters decrease HVAC operation, stress the fan motors, and decrease their ability to improve indoor air quality. Visually inspect filter condition and fit (no gaps) monthly.
- Reduce recirculation of indoor air and maximize outside air. Ensure outside air dampers function appropriately as part of scheduled maintenance. Remove or avoid sources of air pollution near outside air dampers, such as dumpsters or idling vehicles.
- Meet the required flow rate of outdoor air, following your state or local mechnical code. Where possible, aim for 5-6 total air changes per hour.
- Monitor carbon dioxide (CO_2) levels with the goal of keeping levels below 800 ppm. If levels are frequently above 1000 ppm, considering increasing outdoor air ventilation.
- Maintain humidity between 40 and 60 percent.
- Ventilate the building 1 hour before occupancy and 2 hours after custodial activities.
- Inspect and maintain local exhaust ventilation in restrooms, kitchens, cooking areas, labs, art rooms, and shops. Increase exhaust ventilation from restrooms above the required flow rate if possible. Follow your state or local mechnical code.
- Work with a building engineer or HVAC specialist to generate air movement that goes from clean to less clean air (create negative pressure), especially in areas with high transmission risk such as healthcare spaces. Air from negatively pressurized rooms should be either directly exhausted outside or filtered before recirculation within the HVAC system. Use a MERV 13 or more effective filter.

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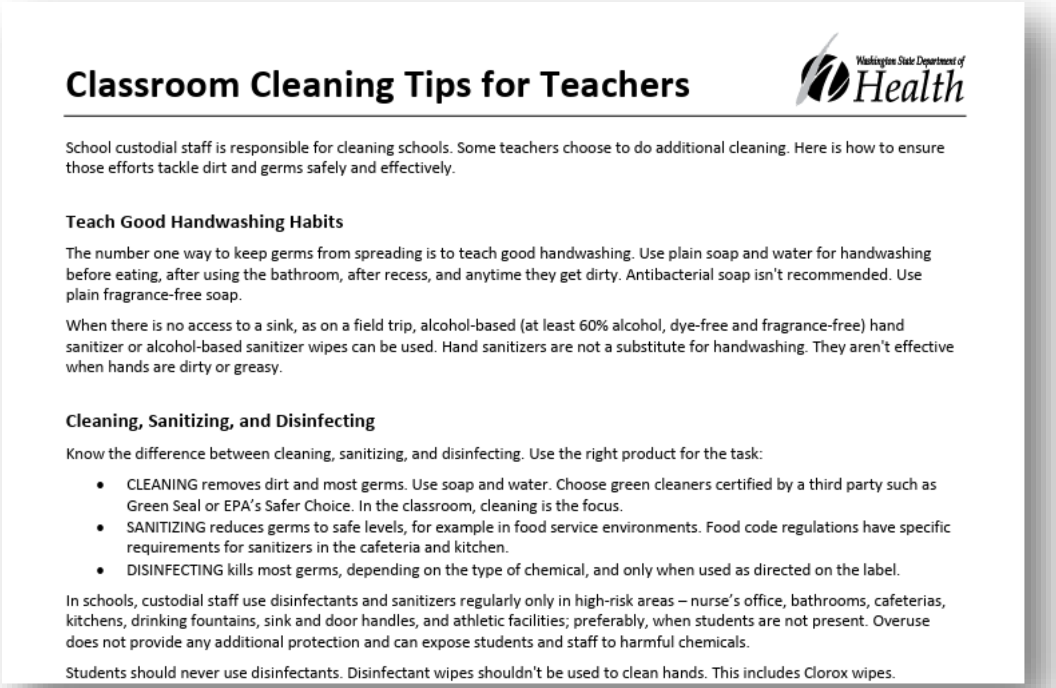
[Ventilation and Air Quality for Reducing Transmission of Airborne Illnesses](#)

Clean then Disinfect Safely

Teachers

- Classroom Cleaning Tips for Teachers
- Teach Good Handwashing Habits



Classroom Cleaning Tips for Teachers

Washington State Department of Health

School custodial staff is responsible for cleaning schools. Some teachers choose to do additional cleaning. Here is how to ensure those efforts tackle dirt and germs safely and effectively.

Teach Good Handwashing Habits

The number one way to keep germs from spreading is to teach good handwashing. Use plain soap and water for handwashing before eating, after using the bathroom, after recess, and anytime they get dirty. Antibacterial soap isn't recommended. Use plain fragrance-free soap.

When there is no access to a sink, as on a field trip, alcohol-based (at least 60% alcohol, dye-free and fragrance-free) hand sanitizer or alcohol-based sanitizer wipes can be used. Hand sanitizers are not a substitute for handwashing. They aren't effective when hands are dirty or greasy.

Cleaning, Sanitizing, and Disinfecting

Know the difference between cleaning, sanitizing, and disinfecting. Use the right product for the task:

- CLEANING removes dirt and most germs. Use soap and water. Choose green cleaners certified by a third party such as Green Seal or EPA's Safer Choice. In the classroom, cleaning is the focus.
- SANITIZING reduces germs to safe levels, for example in food service environments. Food code regulations have specific requirements for sanitizers in the cafeteria and kitchen.
- DISINFECTING kills most germs, depending on the type of chemical, and only when used as directed on the label.

In schools, custodial staff use disinfectants and sanitizers regularly only in high-risk areas – nurse's office, bathrooms, cafeterias, kitchens, drinking fountains, sink and door handles, and athletic facilities; preferably, when students are not present. Overuse does not provide any additional protection and can expose students and staff to harmful chemicals.

Students should never use disinfectants. Disinfectant wipes shouldn't be used to clean hands. This includes Clorox wipes.

Clean then Disinfect Safely

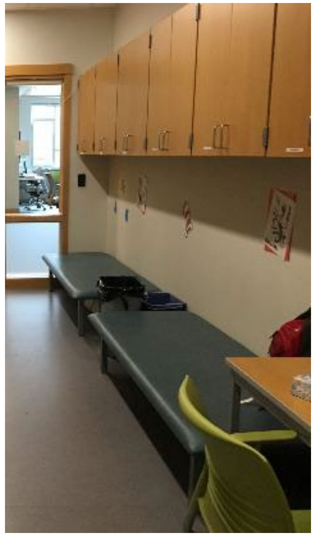
Teachers

- Clean to remove dirt, most germs
- Use soap & water
- Students - soap & water only - no chemicals

Use fragrance-free baby wipes

No disinfecting wipes

- Contain hazardous chemicals
- Fragrances can trigger asthma and allergies


Clean then Disinfect Safely

Custodial Staff

- [Safe Cleaning and Disinfecting Guidance for Schools]
- **Clean first, THEN disinfect**
  - High-risk areas
  - When students not present

Clean then Disinfect Safely

Use greener and safer products

- Soap and water in a spray bottle
- Safer Choice, Design for the Environment
  - Keep SDS for each chemical
  - Store chemicals safely

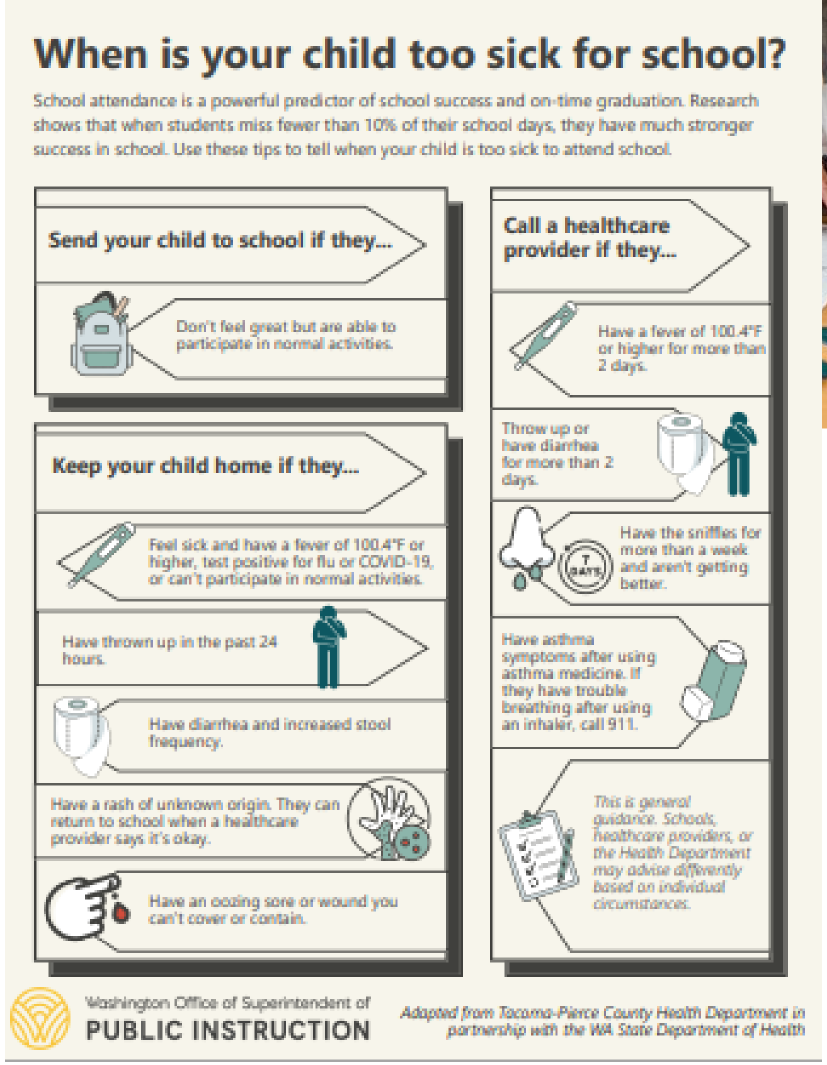
SAFER CHOICE
Meets U.S. EPA Safer Product Standards™
epa.gov/saferchoice

DESIGN for the ENVIRONMENT
Meets U.S. EPA DfE Product Criteria™
epa.gov/dfe

Other Cold and Flu Season Steps

- Sick children stay home!
- Wash hands often
- Clean and disinfect thoughtfully

[When is your child too sick for school, OSPI]



When is your child too sick for school?

School attendance is a powerful predictor of school success and on-time graduation. Research shows that when students miss fewer than 10% of their school days, they have much stronger success in school. Use these tips to tell when your child is too sick to attend school.

Send your child to school if they...

- Don't feel great but are able to participate in normal activities.

Keep your child home if they...

- Feel sick and have a fever of 100.4°F or higher, test positive for flu or COVID-19, or can't participate in normal activities.
- Have thrown up in the past 24 hours.
- Have diarrhea and increased stool frequency.
- Have a rash of unknown origin. They can return to school when a healthcare provider says it's okay.
- Have an oozing sore or wound you can't cover or contain.

Call a healthcare provider if they...

- Have a fever of 100.4°F or higher for more than 2 days.
- Throw up or have diarrhea for more than 2 days.
- Have the sniffles for more than a week and aren't getting better.
- Have asthma symptoms after using asthma medicine. If they have trouble breathing after using an inhaler, call 911.

This is general guidance. Schools, healthcare providers, or the Health Department may advise differently based on individual circumstances.

Washington Office of Superintendent of
PUBLIC INSTRUCTION

Adapted from Tacoma-Pierce County Health Department in partnership with the WA State Department of Health

Image source: U.S. EPA

Questions?

DOH School EH&S and IAQ Program

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Washington State Department of HEALTH

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