



# Help Control the Spread of Infectious Diseases in Schools

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## Seasonal and H1N1 Influenza, MRSA and Noroviruses

This document outlines steps that can be taken to help stop the spread of seasonal and H1N1 influenza (swine flu), methicillin-resistant *Staphylococcus aureus* (MRSA), and Noroviruses, as well as other infectious diseases such as colds.

### General Information

**Influenza** is spread from person to person when an infected person coughs, sneezes, or touches things that others use. Droplets from a cough or sneeze can travel up to six feet and spray directly on another person or settle on surfaces (floors, tables, countertops and equipment). An infected person who coughs or sneezes into their hands can contaminate surfaces (phones, keyboards, door handles, and toys) when touching them. Influenza germs can survive on surfaces for 2 – 8 hours—possibly longer—and can infect people who touch these contaminated surfaces.

**MRSA** is a type of staph bacteria that is resistant to certain antibiotics and can cause skin and other infections. MRSA spreads through direct skin-to-skin contact or through contact with shared items or surfaces. MRSA germs can survive on surfaces for many weeks.

**Noroviruses** cause vomiting and diarrhea and are highly contagious. They are mainly found in the stool or vomit of infected people. They are spread by consuming fecally contaminated food or water, by direct contact with a person who is infected, or by touching surfaces or objects that have been contaminated. Vomiting can widely spread noroviruses by contaminating surfaces or causing infection in a near-by person who swallows the infected airborne particles. Noroviruses persist on surfaces for several days.

### Prevent the Spread of Germs

#### Personal steps

- Use proper hand washing.
- Cover your coughs and sneezes.
- Use proper cleaning and disinfecting methods.
- Cover open wounds.
- Stay home if you are ill.
- Get both seasonal flu and H1N1 vaccines.

#### Provide time needed for all students and staff to wash hands frequently.

To remove germs from hands, 20 seconds of rubbing with warm water and soap is required. Alcohol-based hand sanitizers (at least 60% alcohol) and wipes are acceptable if soap and water is not available, but washing with soap and water is best.

#### When hand washing is necessary:

- After recess, P.E. class, or returning from a field trip (hands are likely to be dirty).
- After using the bathroom.
- Before preparing food or eating.

- After touching an infected wound.
- After sneezing into hands (*teach kids to cough and sneeze into tissue or elbow—see below*).

**When hand sanitizer and hand wipes are acceptable:**

- After blowing nose.
- Coughing into hands as long as there is no visible nasal discharge or saliva.
- Touching something that might be contaminated, a keyboard, door knob, railing, etc.

**Alcohol-based hand sanitizers**

- Must be 60-95% alcohol to be effective.
- Unscented is preferred for public areas.
- Use by young children must be supervised.
- Are not to be used on children under one year old.
- Some children will be sensitive to them and not able to use.
- Must be stored safely – alcohol poisoning can result from ingestion and they are flammable.

**Teach students to:**

- Cover their mouth and nose with a tissue when they cough or sneeze.
- Cough or sneeze into their elbow rather than hands when without a tissue.
- Put used tissues in a waste basket.
- Wash their hands frequently.
- Avoid touching their eyes, nose, and mouth with their hands.

**Cover open wounds**

Cover skin trauma such as abrasions or cuts with a clean dry bandage until healed. Covering infections will greatly reduce the risks of surfaces becoming contaminated with MRSA.

**Stay home if you are ill and separate ill students and staff**

- Students and staff with flu-like illness should stay home for at least 24 hours after they no longer have a fever, or signs of a fever, without the use of fever-reducing medicines.
- Students and staff who appear to have flu-like illness should be sent to a room separate from others until they can be sent home.

**Get both the seasonal flu and the H1N1 (swine flu) vaccine. (Note the two vaccines are different.)**

- Vaccination is the most effective way to decrease the spread of influenza, decrease illness and death among high-risk groups, and protect the community.

**Cleaning and Disinfecting Surfaces**

*(Disinfectants need time to kill germs. Follow the time requirements on the product label.)*

MRSA and influenza viruses, including the new H1N1 virus, are inactivated by many types of disinfectants (bleach, quaternary ammonium compounds (quats), alcohols, and stabilized hydrogen peroxides). Noroviruses are much harder to kill and these products are not generally effective against them (*see cleaning vomit below for cleaning and disinfecting noroviruses*).

Choose a product that is effective against most bacteria and viruses, and lists schools as a recommended site. Read and follow the instructions on the label. Pay close attention to the hazard warnings and instructions for using personal protective items such as gloves and eye protection. Use disinfectants in

well-ventilated areas. Spraying disinfectants into the air is not recommended or effective and may cause respiratory irritation.

- Keep hard surfaces such as desks, tables, and countertops clean and disinfected at least once a day. *(Clean surface prior to disinfecting unless using a product that combines the two functions.)*
- Keep surfaces touched by more than one person such as door handles, faucets, keyboards, and railings, clean and disinfected at least once a day. *(Clean surface prior to disinfecting unless using a product that combines the two functions.)*
- Use disposable sanitizer cloths to wipe electronic items that are touched often, such as phones, computers, remote controls, and hand-held games at least once a day. *(If there are visible contaminants, clean with one cloth and then use a second to disinfect.)*
- If a child is visibly ill and coughing or sneezing on a surface, clean and disinfect the surface immediately.

#### **When surfaces are not visibly dirty**

- Clean the surface with a commercial product that is both a detergent (cleans) and a disinfectant (kills germs). These products can be used when surfaces are not visibly dirty.

#### **When surfaces are visibly dirty**

- Wash the surface with a general household cleaner (soap or detergent), rinse with water, and follow with a disinfectant. This method should be used for visibly dirty surfaces.

#### **Using bleach as a disinfectant**

Use a chlorine bleach solution made by adding 1 tablespoon of bleach to a quart (4 cups) of water; use a cloth to apply to surfaces and let stand for 3-5 minutes before rinsing with clean water.

- Do not mix bleach or chlorine products with ammonia or quaternary ammonia cleaners or acids such as vinegar. Fumes produced can cause serious respiratory damage.
- Date bottles when opened and use within the manufacturers recommended shelf life.
- Prepare a fresh bleach solution daily.

#### **Bathrooms**

- Clean and disinfect bathroom surfaces at least once a day.
- Keep soap and paper towel dispensers full.
- Make sure that hand-operated, self-closing faucets deliver at least ten seconds of water at a time; and fifteen seconds minimum in food service areas.

#### **Cleaning vomit** *(Cleaning and disinfecting is required to kill any possible noroviruses.)*

- Clear all individuals from the area. Vomit should be immediately covered with a disposable cloth and the affected area drenched with a disinfectant to reduce potential airborne contamination.
- Use face masks with eye protection or a face shield, gloves, and aprons when cleaning up vomit. Paper towels or other towels used to clean-up vomit should be immediately placed in a sealed trash bag and disposed of properly. Follow the *Guidelines for Handling Body Fluids in Schools*, Appendix VIII, *DOH/OSPI Infectious Disease Control Guide for School Staff*.
- Discard any uncovered food in the vicinity.
- Clean contaminated surfaces with soap and water. Then disinfect using a ten percent bleach solution (1 part bleach to 9 parts water or 1½ cup bleach per gallon of water). Any food contact surfaces need a clear-water rinse and a final wipe down with a regular sanitizing bleach solution to remove residual high levels of bleach. This is an extremely concentrated bleach solution. Protect eyes, skin, and clothing. Keep the area well ventilated.

## For More Information

Washington State Department of Health

- H1N1 (swine flu): <http://www.doh.wa.gov/h1n1/default.htm>
- Seasonal flu: <http://www.doh.wa.gov/FluNews/>
- MRSA: <http://www.doh.wa.gov/Topics/Antibiotics/MRSA.htm>

Centers for Disease Control and Prevention

- Norovirus Fact Sheet: <http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus-factsheet.htm>
- MRSA in Schools: [http://www.cdc.gov/ncidod/dhqp/ar\\_mrsa\\_in\\_schools.html](http://www.cdc.gov/ncidod/dhqp/ar_mrsa_in_schools.html)

Office of the Superintendent of Public Instruction

- *Infectious Disease Control Guide for School Staff (2004)*:  
<http://www.k12.wa.us/healthservices/pubdocs/InfectiousDiseaseControlGuide3-11-04.pdf>
- Preparing Schools for Swine Flu: <http://www.k12.wa.us/HealthServices/H1N1Flu.aspx>

Tacoma-Pierce County Health Department

- MRSA toolkit for Middle and High Schools: <http://www.tpchd.org/page.php?id=364>
- MRSA Toolkit for Elementary Schools: <http://www.tpchd.org/page.php?id=399>

Antimicrobial Products Registered for Use against the H1N1 Flu and other Influenza A Viruses on Hard Surfaces: <http://www.epa.gov/oppad001/influenza-disinfectants.html>

*Technical Report for State and Local Public Health Officials and School Administrators on CDC Guidance for School (K-12) Responses to Influenza during the 2009-2010 School Year:*  
<http://www.flu.gov/plan/school/k12techreport.html>

Local Health Jurisdictions: <http://www.doh.wa.gov/LHJMap/LHJMap.htm>