How To Clean and Disinfect Schools To Help Slow the Spread of Flu

Cleaning and disinfecting are part of a broad approach to preventing infectious diseases in schools. To help slow the spread of influenza (flu), the first line of defense is getting vaccinated. Other measures include covering coughs and sneezes, washing hands, and keeping sick people away from others. Below are tips on how to slow the spread of flu specifically through cleaning and disinfecting.

1. Know the difference between cleaning, disinfecting, and sanitizing

Cleaning removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces. This process does not necessarily kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.

**Disinfecting kills germs on surfaces or objects.** Disinfecting works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

Sanitizing lowers the number of germs on surfaces or objects to a safe level, as judged by public health standards or requirements. This process works by either cleaning or disinfecting surfaces or objects to lower the risk of spreading infection.

2. Clean and disinfect surfaces and objects that are touched often

Follow your school’s standard procedures for routine cleaning and disinfecting. Typically, this means daily sanitizing surfaces and objects that are touched often, such as desks, countertops, doorknobs, computer keyboards, hands-on learning items, faucet handles, phones, and toys. Some schools may also require daily disinfecting these items. Standard procedures often call for disinfecting specific areas of the school, like bathrooms.

Immediately clean surfaces and objects that are visibly soiled. If surfaces or objects are soiled with body fluids or blood, use gloves and other standard precautions to avoid coming into contact with the fluid. Remove the spill, and then clean and disinfect the surface.
3. Simply do routine cleaning and disinfecting

It's important to match your cleaning and disinfecting activities to the types of germs you want to remove or kill. Most studies have shown that the flu virus can live and potentially infect a person for only 2 to 8 hours after being deposited on a surface. Therefore, it is not necessary to close schools to clean or disinfect every surface in the building to slow the spread of flu. Also, if students and staff are dismissed because the school cannot function normally (e.g., high absenteeism during a flu outbreak), it is not necessary to do extra cleaning and disinfecting.

Flu viruses are relatively fragile, so standard cleaning and disinfecting practices are sufficient to remove or kill them. Special cleaning and disinfecting processes, including wiping down walls and ceilings, frequently using room air deodorizers, and fumigating, are not necessary or recommended. These processes can irritate eyes, noses, throats, and skin; aggravate asthma; and cause other serious side effects.

4. Clean and disinfect correctly

Always follow label directions on cleaning products and disinfectants. **Wash surfaces with a general household cleaner to remove germs. Rinse with water, and follow with an EPA-registered disinfectant to kill germs. Read the label to make sure it states that EPA has approved the product for effectiveness against influenza A virus.**

If an EPA-registered disinfectant is not available, use a fresh chlorine bleach solution. To make and use the solution:

- Add 1 tablespoon of bleach to 1 quart (4 cups) of water. For a larger supply of disinfectant, add ¼ cup of bleach to 1 gallon (16 cups) of water.
- Apply the solution to the surface with a cloth.
- Let it stand for 3 to 5 minutes.
- Rinse the surface with clean water.

**If a surface is not visibly dirty, you can clean it with an EPA-registered product that both cleans (removes germs) and disinfects (kills germs) instead. Be sure to read the label directions carefully, as there may be a separate procedure for using the product as a cleaner or as a disinfectant.** Disinfection usually requires the product to remain on the surface for a certain period of time.

Use disinfecting wipes on electronic items that are touched often, such as phones and computers. Pay close attention to the directions for using disinfecting wipes. It may be necessary to use more than one wipe to keep the surface wet for the stated length of contact time. Make sure that the electronics can withstand the use of liquids for cleaning and disinfecting.
Routinely wash eating utensils in a dishwasher or by hand with soap and water. Wash and dry bed sheets, towels, and other linens as you normally do with household laundry soap, according to the fabric labels. Eating utensils, dishes, and linens used by sick persons do not need to be cleaned separately, but they should not be shared unless they’ve been washed thoroughly. Wash your hands with soap and water after handling soiled dishes and laundry items.

5. **Use products safely**

Pay close attention to hazard warnings and directions on product labels. Cleaning products and disinfectants often call for the use of gloves or eye protection. For example, gloves should always be worn to protect your hands when working with bleach solutions.

Do not mix cleaners and disinfectants unless the labels indicate it is safe to do so. Combining certain products (such as chlorine bleach and ammonia cleaners) can result in serious injury or death.

Ensure that custodial staff, teachers, and others who use cleaners and disinfectants read and understand all instruction labels and understand safe and appropriate use. This might require that instructional materials and training be provided in other languages.

6. **Handle waste properly**

Follow your school’s standard procedures for handling waste, which may include wearing gloves. Place no-touch waste baskets where they are easy to use. Throw disposable items used to clean surfaces and items in the trash immediately after use. Avoid touching used tissues and other waste when emptying waste baskets. Wash your hands with soap and water after emptying waste baskets and touching used tissues and similar waste.

7. **Learn more**

- How to Clean and Disinfect Schools to Help Slow the Spread of Flu [448 KB, 2 pages]
- CDC Says “Take 3” Actions To Fight The Flu
- Guidance for School Administrators to Help Reduce the Spread of Seasonal Influenza in K-12 Schools
- Questions and Answers for Schools
- Information for Schools & Childcare Providers
- Antimicrobial Products Registered for Use against Influenza A Virus on Hard Surfaces (EPA) [69 KB, 20 pages] (http://www.epa.gov/oppad001/influenza-a-product-list.pdf)
- Green Clean Schools (Healthy Schools Campaign) (http://healthyschoolscampaign.org/programs/green-clean-schools/)
FAQ: Enterovirus D68

WHAT SHOULD PARENTS OF CHILDREN WITH ASTHMA KNOW ABOUT EV-D68?

It is important that asthma is well-treated and controlled. Children with asthma should follow their asthma treatment plan. Healthcare providers should be consulted in the development of asthma treatment plans.

HOW IS EV-D68 TREATED?

There is no vaccine or specific antiviral medication for EV-D68 infections. Treatment is provided to help with symptoms. Medications may be given to help with fever (however, aspirin should not be given to children) or coughing. Those with severe respiratory illness may need to be hospitalized and receive intensive care.

HOW CAN I PROTECT MYSELF FROM BECOMING INFECTED WITH EV-D68?

There is no vaccine to prevent EV-D68 infections. However, you can protect yourself from EV-D68 and other enterovirus infections if you:

- **Wash hands often with soap and water for 20 seconds, especially after changing diapers**
  - Enteroviruses is in stool (feces, or "poop")
  - Good hand hygiene is important for anyone who comes into contact with stool

- Alcohol-based hand sanitizer is are not effective against enteroviruses

- Avoid touching eyes, nose and mouth with unwashed hands

- Use good respiratory hygiene; coughing and sneezing into a tissue or elbow and properly disposing of tissues. For more information about respiratory hygiene see the CDC website at http://www.cdc.gov/flu/protection/covercough.htm

- Avoid kissing, hugging and sharing cups or eating utensils with people who are sick

- **Clean and disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick**

- Stay home when feeling sick and consult your health care provider

- Since people with asthma are at higher risk for respiratory illnesses, they should take their medicine as directed by their health care provider

- Stay up to date with immunizations, especially influenza

FOR MORE INFORMATION, VISIT:

The CDC’s Enterovirus webpage at http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html

The Baltimore City Health Department website at http://health.baltimorecity.gov/Enterovirus

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FAQ Enterovirus D68

WHAT ARE ENTEROVIRUSES?

Enteroviruses are common viruses; there are more than 100 types. It is estimated that 10-15 million enterovirus infections occur in the US each year. Most people infected with enteroviruses have no symptoms or only mild symptoms, but some infections can be serious. People are more likely to get infected with enterovirus infections in the summer and fall.

WHAT IS ENTEROVIRUS-D68 (EV-D68)?

Enterovirus-D68 (EV-D68) is a type of enterovirus first detected in 1962 in California. EV-D68 is thought to occur less often than other types of enteroviruses.

WHAT ARE SYMPTOMS OF EV-D68 INFECTION?

Symptoms may range from mild to severe. Mild symptoms may include runny nose, sneezing, cough, body and muscle aches and sometimes fever. Severe respiratory symptoms include difficulty breathing, wheezing and worsening of asthma. Hospitalization in an intensive care unit may be required for severe symptoms.

HOW IS EV-D68 INFECTION SPREAD?

EV-D68 is spread through close contact with infected people. The virus likely spreads from person to person when an infected person coughs or sneezes. You can also become infected by touching objects or surfaces that have the virus on them and then touching your mouth, nose or eyes. Enteroviruses are also present in stool (feces or “poop”) and can be passed on to others when a person touches stool and does not wash their hands.

WHO IS AT RISK FOR EV-D68?

Infants, children and teenagers are most likely to get infected with enteroviruses and become sick. This is most likely because they do not have protection (immunity) or previous exposure to this virus. Children with asthma seem to have a higher risk for severe respiratory illness. Infants and people with weakened immune systems have a greater chance of complications. Adults can get infected with enteroviruses and are more likely to have no symptoms or mild symptoms.

HOW IS EV-D68 DIAGNOSED?

Respiratory illnesses can be caused by many different viruses and have similar symptoms. Not all respiratory illnesses occurring now are due to EV-D68. EV-D68 can only be diagnosed by doing specific lab tests on specimens from a person’s nose and throat. Currently, testing EV-D68 is only being done on children admitted to the hospital with severe respiratory illness. Anyone with respiratory illness should contact their doctor if they are having difficulty breathing, or if their symptoms are getting worse.

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