

Respiratory Viruses



Pathways Community
HUB Institute
LEARNING MODULE

Viral Respiratory Diseases in Adults and Children

Adults catch 2 to 3 viral respiratory diseases per year. Children can get as many as eight. It's important to know about respiratory viruses because they are common and sometimes can lead to a bacterial ear infection, sinus infection or pneumonia. In some cases, respiratory viruses can be dangerous, and result in respiratory distress and the need for immediate medical attention.

Viruses include the common cold, flu, and the more recent coronavirus infection also called COVID-19. Medications may help with influenza, but most respiratory viruses do not have antiviral medication.

In the U.S., the influenza killed more than 30,000 people last year, with many more getting very sick and needing to be hospitalized.

Respiratory viruses, are more dangerous for young babies, the elderly, and people who have a chronic condition that puts them at risk. Some examples of conditions include asthma, Chronic Obstructive Pulmonary Disease (COPD), and other lung diseases, heart disease, and diabetes.

The best prevention for viruses is getting a vaccine -- available for influenza, chickenpox, polio and some other infections. There is no vaccine for the common cold or Coronavirus yet.

The flu shot does not prevent all forms of the flu. It does make a big difference in preventing you from getting the flu 40-60% of the time. Imagine if you had a choice of getting hit by a truck 100% of the time, or 40-60% of the time?

Preventing Respiratory Viruses

To prevent getting or spreading respiratory viruses, including influenza and the Coronavirus:

1. Avoid crowded public places during the flu season.
2. Wash your hands with soap and water for at least 20 seconds often during the day (see Resources #1 below). This is especially important after handling or touching surfaces or things where other people may have also touched them.
3. Avoid rubbing your eyes, nose or putting your fingers in your mouth. Viruses can survive for many hours on surfaces you may touch.
4. Teach your children and others around you to sneeze or cough into a tissue. If they don't have a tissue, then turn and sneeze into their elbow. Viruses ride on small invisible drops of mucus from sneezes and coughs and then travel around the room to infect others.
5. You and your child are most contagious during the first few days of a respiratory illness. Avoid going out where you may infect others and be especially careful of other people in your home. Don't drink out of the same glasses, wash your hands often, and keep away from those with infection. Use and teach others to use an elbow bump instead of a handshake during the flu, Coronavirus or other infection season.
6. Using a lot of cough and cold medications may not be helpful. A healthy diet, a multivitamin that includes zinc, and getting enough rest and exercise are important to prevent and treat viral respiratory infections.

Warning Signs of Viruses

Respiratory viruses can be very dangerous, especially for young babies and older adults.

1. A young infant with a fever should always be seen by a medical provider, even if it seems like they just have a cold.
2. A fever that comes and goes for 2-3 days may happen with a respiratory virus. A very high fever, a fever that continues for several days, or a fever that goes away and then comes back, is a concern. A bacterial infection can develop and lead to pneumonia, ear infections, and sinus infections, and a medical provider should be seen.
3. Any sign of difficult breathing, unusual noises with breathing, not being able to drink liquids, severe coughing, extreme tiredness or constant fussiness in an infant or child is serious and a medical provider should be seen.
4. A parent or caregiver who is even uncomfortable with the condition of an ill child or elder in the family should be taken seriously and be encouraged to get medical care.
5. Protective face masks may help, but do not completely protect you from getting a respiratory infection as air comes in around the mask. They also need to be replaced frequently, depending on the type of mask, at least daily.

Pneumonia and other problems from a respiratory illness can be very dangerous. Antibiotics do work for bacterial infections that can occur as a result of viral infections. Getting medical attention can be life-saving.

Knowing when the flu and other dangerous viruses are in the community can help in making sure you and your family are not exposed. Keeping 2 weeks of supplies of food, paper products and prescription medications can be helpful if needed during community level emergencies and pandemics (see Resources # 5).

This learning module is intended to help you be prepared. Your state department of health, and the Centers for Disease Control (CDC) may be the most up to date knowledge resource during any specific respiratory virus situation.

Remember:

- 1. Wash your hands with soap and water for at least 20 seconds.**
- 2. DON'T rub or touch your eyes, nose or mouth.**
- 3. Avoid crowded places during the flu and respiratory virus season.**
- 4. Know the warning signs for bacterial infections and get medical help when needed.**

What will you do to prevent respiratory viruses in your family?

Resources

1. CDC Guide to Hand Washing - <https://www.cdc.gov/handwashing/when-how-handwashing.html>
2. Guide to community and home strategies of preventing flu and relevant to Coronavirus - <https://www.cdc.gov/nonpharmaceutical-interventions/>
3. Situation update from CDC re Coronavirus – <https://www.cdc.gov/coronavirus/2019-ncov/summary.html>
4. Ohio Department of Health Coronavirus update - <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Novel-Coronavirus/2019-nCoV>
5. Being prepared for community emergencies and pandemics - <https://www.ready.gov/pandemic>
6. General Coronavirus information CDC - <https://www.cdc.gov/coronavirus/2019-ncov/>

References

1. CDC, & Ncird. (n.d.). *Nonspecific Upper Respiratory Tract Infection Fact Sheet*. Retrieved from www.cdc.gov/
2. Number of Flu Cases Averted Through Vaccination. (n.d.). Retrieved February 18, 2020, from <https://www.cdc.gov/getsmart/community/materials-references/print-materials/hcp/adult-tract-infection.pdf>
3. Allan, G. M., & Arroll, B. (2014). Prevention and treatment of the common cold: Making sense of the evidence. *CMAJ*, Vol. 186, pp. 190–199. <https://doi.org/10.1503/cmaj.121442>