

PANDEMIC FLU

Crystal Lake
Fire Rescue Department
Pandemic Flu Preparedness Guide



INFLUENZA

The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness and at times can lead to death. The best way to prevent this illness is by getting a flu vaccination each fall. Annually in the United States, 3% to 11% of the population gets the flu and more than 400,000 people are hospitalized from flu complications on average each year. About 36,000 people die from influenza annually.

SYMPTOMS

There can be many different problems associated with influenza. Symptoms include problems such as fever (usually high), muscle aches, headache, extreme tiredness, dry cough, sore throat, runny or stuffy nose, nausea, vomiting and diarrhea. Symptoms can occur in adults but are more common in children.

COMPLICATIONS OF THE FLU

Complications of the flu can include bacterial pneumonia, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma or diabetes. Children may have sinus problems and ear infections.

HOW FLU SPREADS

Flu viruses spread in respiratory droplets caused by coughing and sneezing. Viruses usually spread from person to person. It is possible to become infected by touching something with flu viruses on it, then touching your mouth, nose or eyes. Most healthy adults may be able to infect others beginning one day before symptoms develop and up to 5 to 7 days after becoming sick. People are most contagious in the first 3 days. That means that you can transmit the flu to someone else before you know you are sick, as well as while you are sick.

PANDEMIC FLU (INFLUENZA)

A pandemic is a global disease outbreak. Pandemic influenza is a global outbreak of flu that involves a new flu virus and causes serious human illness. The flu strain that causes the pandemic will spread quickly and easily from person to person because people are unlikely to have immunity against it. Pandemics have occurred three times in the last century.

CORONAVIRUS

Coronaviruses are a large family of viruses that are common in many different species of animals. Only recently has the COVID-19 strain changed so that it is able to cause illness and death in humans.

SEASONAL VS. PANDEMIC

Seasonal flu occurs every year, mostly during the winter months. It affects about 10% of the world's population. Pandemic flu can occur at any time of the year. Experts believe another pandemic is likely to occur. Pandemic flu may cause illness in 30-50% of the world's population. Pandemic flu will likely have more severe symptoms than seasonal flu. For most people, seasonal flu is unpleasant but not life threatening. However, seasonal flu does result in an average of 36,000 deaths each year. Pandemic flu may result in millions of deaths worldwide.

Young children, elderly and those with chronic illness are at higher risk for seasonal flu but an annual vaccination is available. People of every age may be at risk for infection of pandemic flu: however, a vaccine may not be available when the pandemic starts. Most people will have no immunity to a pandemic virus. Illness and death rates due to pandemic flu are expected to be higher than a normal seasonal outbreak of influenza. Scientists estimate that a large percentage of the world's population will require some form of medical care. Countries may take measures such as border closures and travel restrictions during a pandemic. These actions would possibly delay the arrival of the virus but cannot stop it. The three pandemics of the 1900's encircled the globe in six to nine months. Modern transportation may help the virus spread even faster globally.



PANDEMIC FLU VACCINE AND DRUG TREATMENT

Flu vaccines have to be created specifically for the type of flu virus circulating that year. Until the specific pandemic flu virus is identified, it is not possible to make the vaccine. A flu vaccine takes four to six months to produce, so a vaccine probably will not be available at the start of the pandemic. If a pandemic flu develops, a new vaccine will be produced as quickly as possible. Research for an effective vaccine against bird flu in humans is currently underway. Vaccine availability will be based on global vaccine manufacturing capacity and an increased demand. Antiviral drugs may be available to lessen the severity and duration of symptoms due to pandemic flu.

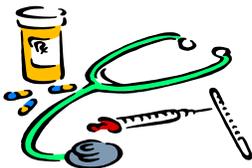
VACCINATION INFORMATION

VACCINATIONS

October or November is the best time to get vaccinated, but getting vaccinated in December or even later can still be beneficial. Flu season can begin as early as October and end as late as May. In general, anyone who wants to reduce their chances of getting the flu should get vaccinated. People who are at high risk of having serious flu complications or people who live with or care for those at high risk for serious complications should get vaccinated each year.

PEOPLE AT HIGH RISK SHOULD BE VACCINATED ANNUALLY

- ◆ People 65 years and older. People who live in nursing homes and other long-term care facilities that house those with long-term illnesses. Women who will be pregnant during the influenza season.
- ◆ Adults and children 6 months and older with chronic heart or lung conditions, including asthma. Those who need regular medical care or were in a hospital during the previous year because of a metabolic disease (like diabetes), chronic kidney disease, or weakened immune system (including immune system problems caused by medicines or by infection with human immunodeficiency virus [HIV/AIDS]).
- ◆ All children 6 to 23 months of age. Children 6 months to 18 years of age who are on long-term aspirin therapy. Children given aspirin while they have influenza are at risk of Reye's syndrome.
- ◆ People with any condition that can compromise respiratory function or the handling of respiratory secretions (a condition that makes it hard to breathe or swallow, such as brain injury or disease, spinal cord injuries, seizure disorders, or other nerve or muscle disorders).
- ◆ Nearly one-third of people 50 to 64 years of age in the United States have one or more medical conditions that place them at increased risk for serious flu complications. Vaccination is recommended for all persons 50 to 64 years of age.



- ◆ Any person in close contact with someone in a high-risk group should get vaccinated. This includes all healthcare workers, household contacts, out-of-home caregivers of children 6 to 23 months of age, and close contacts of people 65 years of age and older.

Home Care Information

- ❑ Keep a care log. At least once a day, record the date, time and information about the ill person, such as temperature, unusual skin color or rash, and quantity of fluids consumed. Keep the ill person as comfortable as possible. Remember that rest is very important in the healing process.
- ❑ Keep tissues and a trash bag for their disposal within reach of the patient. Keep in mind that fever is a sign that the body is fighting the infection. The fever will go away as the patient gets better. Watch for complications.
- ❑ It is important to seek professional medical care if the person is not improving or has any of the following symptoms:
 - ◆ Difficulty breathing, rapid breathing, or bluish color to the skin or lips.
 - ◆ Call if the person does not respond appropriately or appears confused.
 - ◆ Call if the person complains of pain or pressure in the chest or if the patient has convulsions.
 - ◆ Call a medical professional if the person becomes worse after appearing to improve for a short time.



- ❑ Call the doctor immediately if an infant younger than 2 months old has a fever, is feeding poorly, is urinating less than 3 times per day or has other signs of illness.
- ❑ Use ibuprofen or acetaminophen or other measures, as recommended by your healthcare provider, for fever, sore throat and general discomfort.

Do not use aspirin in children or teenagers with influenza because it can cause Reye's syndrome, a life-threatening illness.

- ❑ Babies who are breast-fed and vomiting can continue to nurse, but offer smaller amounts than normal.
- ❑ Do not allow the patient to drink alcohol or use tobacco, especially if the person shows signs of dehydration and cannot consume a normal amount of liquids.
- ❑ Someone who is dehydrated may have weakness or be unresponsive to their name. They may have decreased saliva, a dry mouth and dry tongue, and decreased output of urine, which becomes dark in color. If a person is ill and they are getting enough fluids, they should urinate at least once every 8–12 hours.



- ❑ If the ill person is dehydrated, give a generous amount of fluid through frequent sips or spoonfuls over a 4-hour period. Watch for an increase in urination, a lighter colored urine, and improvement in the patient's overall condition. If the patient is **not** vomiting, offer small amounts of fluid frequently to prevent dehydration, even if he or she does not feel thirsty.
- ❑ If the ill person is not eating solid foods, include fluids that contain sugar and salt, such as broth, sports drinks (diluted half and half with water), Pedialyte, and regular soft drinks, but not diet soft drinks.
- ❑ If the patient is vomiting, do not give any fluid or food for at least one hour. Next, offer a clear fluid in very small amounts. If the patient vomits, let the stomach rest again for another hour. Again, try to give frequent small, amounts of clear fluid. When there is no vomiting, gradually increase the amount of fluid offered and use fluids that contain sugar and salt.
- ❑ After 6–8 hours of a liquid diet without vomiting, add solid food that is easy to digest, such as saltine crackers, soup, or rice.

Prevention

To reduce human exposure, poultry with avian flu are destroyed immediately. Surveillance systems to detect avian flu are being enhanced. The State of Illinois is able to rapidly test possible avian flu cases. The McHenry County Department of Health has plans in place to detect and monitor a pandemic flu event. There are also regional efforts in place to detect and monitor pandemic flu cases that may occur in Northern Illinois.

PREVENTING THE FLU

The single best way to prevent the flu is to get a flu vaccination each fall. About two weeks after vaccination, antibodies develop that protect against influenza virus infection. Flu vaccines will not protect against influenza-like illnesses caused by other viruses. There are two types of vaccines available. The "flu shot" is an inactivated vaccine (containing killed virus) that is given with a needle. The flu shot is approved for use in people older than 6 months, including healthy people and people with chronic medical conditions. The second is a nasal-spray flu vaccine. It is made with live, weakened flu viruses that do not cause the flu (sometimes called LAIV for "Live Attenuated Influenza Vaccine"). LAIV is approved for use in healthy people 5 years to 49 years of age who are not pregnant.

PROTECTION AGAINST INFECTION

All flu viruses spread through the air when people cough or sneeze. Basic actions that may reduce the risk of getting or spreading flu are:

- Wash your hands frequently with soap and warm water for at least 20 seconds.
- Use a 60% alcohol-based hand sanitizer if soap and water are not available.
- Cover your mouth and nose when you cough or sneeze.
- Avoid large crowds whenever possible.
- **Do not** go to work when you are ill.
- **Do not** send an ill child to school or day care.
- Avoid close contact with those who are sick.
- Avoid touching your eyes, nose and mouth at all times.

MORE INFORMATION

- ◆ The Centers for Disease Control and Prevention <http://www.cdc.gov/flu/pandemic>
- ◆ The World Health Organization <http://www.who.int/>
- ◆ U.S. Department of Health and Human Services <http://www.hhs.gov>
- ◆ The Illinois Department of Public Health www.idph.state.il.us
- ◆ McHenry County Department of Health www.mcdh.info.
- ◆ McHenry County Department of Health Emergency Response Program
<https://www.co.mchenry.il.us/county-government/departments-a-i/health-department/emergency-preparedness>

YOU CAN PREVENT THE SPREAD OF GERMS BY FOLLOWING SIMPLE RULES

- Stay home from work when you are feeling ill. You have control over the spread of germs to your co-workers and maintaining a healthy work environment.
- Use antibiotics appropriately. Remember they should be taken exactly as prescribed by your doctor. Antibiotics do not work against viruses such as colds or flu. Unnecessary antibiotics can be harmful to your body.
- Avoid contact with wild animals that may carry disease and pass them on to you or your pets.
- Keep garbage cans sealed and do not leave food outdoors. Pets should be routinely cared for by a vet. Always wash your hands after touching animals or animal waste.
- Getting immunizations is easy, low cost and saves lives. Make sure you and your children get the shots suggested by your doctor.