
Family & Individual Pandemic Planning

When a pandemic starts, everyone around the world could be at risk. The United States has been working closely with other countries and the World Health Organization (WHO) to strengthen systems to detect outbreaks of influenza that might cause a pandemic.

A pandemic would touch every aspect of society, so every part of society must begin to prepare. All have roles in the event of a pandemic. Federal, state, tribal, and local governments are developing, improving, and testing their plans for an influenza pandemic. Businesses, schools, universities, and other faith-based and community organizations are also preparing plans.

The federal government will provide up-to-date information and guidance to the public if an influenza pandemic unfolds. For reliable, accurate, and timely information, visit the federal government's official Web site at www.pandemicflu.gov.

To prepare for a pandemic:

- Store a two week supply of water and food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages and disasters.
- Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.
- Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.

To limit the spread of germs and prevent infection:

- Wash hands frequently with soap and water.
- Cover coughs and sneezes with tissues.
- Stay away from others as much as possible if you are sick. Stay home from work and school if sick.

Food for an extended stay at home:

- Ready-to-eat canned meats, fish, fruits, vegetables, beans, and soups
- Protein or fruit bars
- Dry cereal or granola
- Peanut butter or nuts
- Dried fruit
- Crackers
- Canned juices
- Bottled water
- Canned or jarred baby food and formula
- Pet food
- Other non-perishable items

Medical Supplies:

- Prescribed medical supplies such as glucose and blood-pressure monitoring equipment
- Soap and water, or alcohol-based (60-95%) hand wash
- Medicines for fever, such as acetaminophen or ibuprofen
- Thermometer
- Anti-diarrheal medication
- Vitamins
- Fluids with electrolytes
- Cleansing agent/soap (Lysol)
- Flashlight and batteries
- Portable radio
- Manual can opener
- Garbage bags
- Tissues, toilet paper, disposable diapers

What to Expect During a Pandemic

Social Disruption May Be Widespread

Plan for the possibility that usual services may be disrupted. These could include services provided by hospitals and other health care facilities, banks, stores, restaurants, government offices, and post offices.

- Prepare backup plans in case public gatherings, such as volunteer meetings and worship services, are canceled.
- Consider how to care for people with special needs in case the services they rely on are not available.

Being Able to Work May Be Difficult or Impossible

- Find out if you can work from home.
- Ask your employer about how business will continue during a pandemic.
- Plan for the possible reduction or loss of income if you are unable to work or your place of employment is closed.
- Check with your employer or union about leave policies.

Schools May Be Closed for an Extended Period of Time

- Help schools plan for pandemic influenza. Talk to the school nurse or the health center. Talk to your teachers, administrators, and parent-teacher organizations.
- Plan home learning activities and exercises. Have materials, such as books, on hand. Also plan recreational activities that your children can do at home.
- Consider childcare needs.

Transportation Services May Be Disrupted

Think about how you can rely less on public transportation during a pandemic. For example, store food and other essential supplies so you can make fewer trips to the store.

- Prepare backup plans for taking care of loved ones who are far away.
- Consider other ways to get to work, or, if you can, work at home.

Be Prepared

Stock a supply of water and food. During a pandemic you may not be able to get to a store. Even if you can get to a store, it may be out of supplies. Public waterworks services may also be interrupted. Stocking supplies can be useful in other types of emergencies, such as power outages and disasters. Store foods that

- are nonperishable (will keep for a long time) and don't require refrigeration
- are easy to prepare in case you are unable to cook
- require little or no water, so you can conserve water for drinking

Get Informed

Knowing the facts is the best preparation. Identify sources you can count on for reliable information. If a pandemic occurs, having accurate and reliable information will be critical.

- Reliable, accurate, and timely information is available at www.pandemicflu.gov.
- Another source for information on pandemic influenza is the Centers for Disease Control and Prevention (CDC) Hotline at: 1-800-CDC-INFO (1-800-232-4636). This line is available in English and Spanish, 24 hours a day, 7 days a week. TTY: 1-888-232-6348. Questions can be e-mailed to cdcinfo@cdc.gov.
- Look for information on your local and state government Web sites. Links are available to each state department of public health at www.cdc.gov/other.htm#states.
- Listen to local and national radio, watch news reports on television, and read your newspaper and other sources of printed and Web-based information.
- Talk to your local health care providers and public health officials.

Understanding Influenza Pandemics

An influenza (flu) pandemic is a worldwide outbreak of flu disease that occurs when a new type of influenza virus appears that people have not been exposed to before (or have not been exposed to in a long time). The pandemic virus can cause serious illness because people do not have immunity to the new virus. Pandemics are different from seasonal outbreaks of influenza that we see every year. Seasonal influenza is caused by influenza virus types to which people have already been exposed. Its impact on society is less severe than a pandemic, and influenza vaccines (flu shots and nasal-spray vaccine) are available to help prevent widespread illness from seasonal flu.

Influenza pandemics are different from many of the other major public health and health care threats facing our country and the world. A pandemic will last much longer than most flu outbreaks and may include "waves" of influenza activity that last 6-8 weeks separated by months. The number of health care workers and first responders able to work may be reduced. Public health officials will not know how severe a pandemic will be until it begins.

A Historical Perspective

In the last century there were three influenza pandemics. All of them were called pandemics because of their worldwide spread and because they were caused by a new influenza virus. The 1918 pandemic was especially severe.

- 1918-1919 Most severe, caused at least 675,000 U.S. deaths and up to 50 million deaths worldwide.
- 1957-1958 Moderately severe, caused at least 70,000 U.S. deaths and 1-2 million deaths worldwide.
- 1968-1969 Least severe, caused at least 34,000 U.S. deaths and 700,000 deaths worldwide.

Some Differences Between Seasonal Flu and Pandemic Flu

Seasonal Flu

Caused by influenza viruses that are similar to those already circulating among people.

Symptoms include fever, headache, tiredness, dry cough, sore throat, runny nose, and muscle pain. Deaths can be caused by complications such as pneumonia.

Healthy adults usually not at risk for serious complications (the very young, the elderly, and those with certain underlying health conditions at increased risk for serious complications).

Every year in the United States, on average:

- 5% to 20% of the population gets the flu;
- More than 200,000 people are hospitalized from flu complications; and
- About 36,000 people die from flu.

Pandemic Flu

Caused by a new influenza virus that people have not been exposed to before. Likely to be more severe, affect more people, and cause more deaths than seasonal influenza because people will not have immunity to the new virus.

Symptoms similar to the common flu but may be more severe and complications more serious.

Healthy adults may be at increased risk for serious complications.

The effects of a severe pandemic could be much more damaging than those of a regular flu season. It could lead to high levels of illness, death, social disruption, and economic loss. Everyday life could be disrupted because so many people in so many places become seriously ill at the same time. Impacts could range from school and business closings to the interruption of basic services such as public transportation and food delivery.

Q&A

How do people become infected with avian influenza viruses?

Most cases of H5N1 avian influenza infection in humans have resulted from direct or close contact with infected poultry (e.g., domesticated chicken, ducks, and turkeys) or surfaces possibly contaminated from feces of infected birds. For a pandemic of influenza to occur, avian influenza must mutate/change to be able to be passed easily from person to person. A pandemic of influenza can arise from changes that occur in certain kinds of highly pathogenic bird flu but no one knows when or even if this will happen. Today, there have been no reported cases of sustained human-to-human transmission of avian flu.

What changes are needed for H5N1 or another avian influenza virus to cause a pandemic?

Three conditions must be met for a pandemic to start: 1) a new influenza virus subtype must emerge for which there is little or no human immunity; 2) it must infect humans and cause illness; and 3) it must spread easily and sustainably (continue without interruption) among humans.

The H5N1 virus in Asia, Europe, and Africa meets the first two conditions: it is a new virus for humans (H5N1 viruses have never circulated widely among people), and it has infected a growing number of people, killing over half of those known to have been infected. However, the third condition, the establishment of efficient and sustained human-to-human transmission of the virus, has not occurred. For this to take place, the H5N1 virus would need to improve its transmissibility among humans.

What age groups are most likely to be affected during an influenza pandemic?

Although scientists cannot predict the specific consequences of an influenza pandemic, it is likely that many age groups would be seriously affected. The greatest risk of hospitalization and death – as seen during the last two pandemics in 1957 and 1968 and during annual influenza – will be infants, the elderly, and those with underlying health conditions. However, in the 1918 pandemic, most deaths occurred in young adults. Few if any people would have immunity to the virus.

Can I get avian influenza by eating poultry? Is it safe to eat raw eggs?

There is no evidence that properly cooked poultry can be a source of infection for avian influenza viruses.

Eggs from infected poultry could be contaminated with the virus and therefore care should be taken in handling eggs or raw egg products. Commercial mayonnaise, dressings, and sauces that contain pasteurized eggs are safe to eat. Avoid raw batter, filling, or cookie dough made with raw eggs, eggnog and other egg-fortified beverages that are not thoroughly cooked; and homemade and fresh-made dressings and sauces made with raw eggs such as Caesar salad dressing, Béarnaise sauce, Hollandaise sauce, Aioli sauce, mayonnaise; homemade ice cream; mousse; meringue; or tiramisu.

What are the symptoms of avian influenza in humans?

People infected with the current strand of the avian virus (H5N1) have shown everything from typical human influenza-like symptoms (fever, cough, sore throat, and muscle aches) to pneumonia, severe respiratory diseases, and other life-threatening complications. Symptoms of avian influenza may depend on which specific virus subtype and strain caused the infection.

Does the current seasonal influenza vaccine protect me from avian influenza?

No. Influenza vaccine for the 2005-06 season does not provide protection against avian influenza.

How much time does it take to develop and produce an influenza vaccine?

The influenza vaccine production process is long and complicated. Traditional influenza vaccine production for the U.S. relies on long-standing technology based on chicken eggs. This production technology is labor-intensive and takes up to 9 months from start to finish. The flu vaccine production process is further complicated by the fact that influenza virus strains continually evolve. Thus, seasonal flu vaccines must be modified each year to match the strains of the virus that are known to be in circulation among humans around the world. As a result of this constant viral evolution, seasonal influenza vaccines cannot be stockpiled year to year. The appearance of an influenza pandemic virus would likely require creation of a vaccine. Researchers are making and testing possible H5N1 vaccines now. Large amounts of vaccine cannot be made before knowing exactly which virus will cause the pandemic. It could then take up to 6 months before a vaccine is available and in only limited amounts at first. Research is underway to make vaccines more quickly.