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## What you need to know about Pandemic Influenza (“flu”)

### What is pandemic flu?

A pandemic is an outbreak of a disease in many countries at the same time. A pandemic of influenza—or flu—occurs when a new flu virus rapidly spreads from country to country around the world. The swift spread of a pandemic flu happens because people are not immune to the new flu virus, and an effective vaccine would take months to develop.

In addition, sick people who travel from country to country can be a source of infection, as occurred in the SARS (Severe Acute Respiratory Syndrome) outbreak in Asia and Canada in 2003. Pandemics are not just particularly bad flu seasons. In fact, they are not seasonal at all; they can happen anytime.

### What is the difference between a pandemic and an epidemic?

An *epidemic* is an outbreak of a disease that occurs in one or several limited areas, like a city, state or country.

Once the disease spreads beyond the borders of several countries and affects many countries across the globe, it is called a *pandemic*. In the last century, several pandemics of influenza occurred – the biggest one in 1918. During the 1918 pandemic, at least 500,000 Americans died; estimated deaths worldwide numbered 10 million.

### What is avian flu?

There are many strains—or types—of flu virus. Certain strains infect humans, birds or animals. An influenza virus strain that infects birds is called *avian* flu or bird flu. Usually this virus only infects birds, and when an outbreak occurs it can have a very serious impact on poultry flocks. Outbreaks of avian flu have occurred on several continents including North America in the last five years. An ongoing outbreak of avian flu in Southeast Asia and Eastern Europe has resulted in the killing of millions of chickens and other domestic birds to control the spread of the disease. Rarely, a virus may be able to infect both birds and animals, or birds and humans.

### Are pandemic flu and avian flu the same thing?

No. Pandemic flu is not a type of flu but is the way the flu spreads. In fact any disease can be a pandemic if it spreads rapidly between people all over the world.

The avian flu currently in Southeast Asia and Eastern Europe (H5N1) may be spread to people who directly handle infected birds or bird waste, but currently can't be spread easily from person to person. However, flu viruses change, and this virus could change in a way that makes it possible for people to pass it to each other. If that happens and people in many countries get sick, the virus becomes a pandemic flu strain.

## Why should we be concerned about a virus that infects birds?

The strain of avian flu causing the outbreak in Asian and Eastern European birds is of concern for several reasons:

- This flu strain can spread from birds to people, and when it does, it can cause very serious human illness and even death. So far, the virus does not appear to spread from person-to-person, but that could change.
- Whenever a bird flu strain infects people, there is a chance that the virus could change to a brand new flu virus that spreads easily from person-to-person and causes serious illness.
- Infections with new human flu strains can't be prevented by the flu vaccine that people get each year, so no one will be immune to the virus. Making a safe vaccine that can prevent infection with a new human virus can take months.
- Because this type of new virus couldn't be easily controlled, it could spread rapidly around the world and cause a pandemic.

## Why is everyone so concerned about this flu? Don't people get the flu every year?

The flu we get each year is called "seasonal" flu. Although the virus changes slightly from year to year, it is always a version of the flu from recent years so most of us have built-up some immunity or tolerance to it. The flu that may develop from the bird flu would be completely new and that makes it more dangerous because we have no immunity to it.

## Will a seasonal flu shot protect me from avian flu?

No. The flu shot available each year only protects you from that season's flu. There is currently no vaccine for avian flu. A seasonal flu shot is still a good idea, though, and should be part of everyone's personal health plan. For other ideas on staying healthy, see the Washington State Department of Health's *Preventing the Spread of Germs* fact sheet.

## Is it safe to eat chicken and turkey?

Yes. Currently there are no reported poultry flocks in the U.S. infected with avian flu. Poultry is safe to eat. You can make sure poultry is safe to eat by cooking it to an internal temperature of 165 °F (check the temperature with a cooking thermometer). This kills all bacteria and viruses including the avian influenza virus. Always use [safe preparation and cooking procedures](#) when handling and cooking poultry. Be sure to thoroughly wash your hands after handling any uncooked meat.

For more information: the [Washington State Department of Fish and Wildlife](#) monitors wild birds in our state, and the [Department of Agriculture](#) monitors U.S. birds in the farming and poultry industries.

## **Are my pets safe from avian flu?**

There is no current risk to pets in Washington. Cats fed raw infected poultry in Asia have developed avian flu, however pets have not been infected elsewhere.

There are a few precautions you should take with pet birds:

- Keep all pet birds inside to avoid exposure to wild or migratory birds.
- Always wash your hands after handling birds or having contact with bird waste.
- If you are buying a new pet bird—especially an exotic type—be sure it was born and raised locally. It is illegal to import birds from regions that are infected with avian flu because these birds can be a source of introducing avian flu to a new area.

## **Are birds with avian flu a health threat if they land in the lakes or rivers that supply my drinking water?**

No. Even if avian flu were present in wild or migratory birds, the virus that causes the flu is easily killed by the disinfectants, such as chlorine and ozone, used to make drinking water safe. Most public water systems also use filtration processes capable of removing viruses from the water

## **Pandemic influenza**

### **How soon after the beginning of an influenza pandemic will a vaccine be available? Why can't vaccine manufacturers start producing a pandemic flu vaccine now?**

An influenza pandemic starts when a new, deadly flu virus infects people. Before a pandemic, we don't know what this new influenza virus will look like. Experts will need that information to develop a new vaccine. Making a vaccine is a labor intensive, time consuming process. Once a pandemic virus is identified, it will take at least six months to produce an effective vaccine. And even at that point, supplies will likely be very limited.

The federal government is funding research to find faster ways to produce vaccine. They are also working with vaccine suppliers to arrange production and distribution of vaccine in an emergency.

### **Will antiviral medications like Tamiflu be effective?**

Antiviral drugs such as Tamiflu and Relenza can prevent or reduce the severity and length of illness caused by seasonal flu. They may or may not work for a new virus that causes a flu pandemic. Unfortunately—as with vaccine—we won't know what medications are effective in fighting the virus until a specific virus is identified.

Antiviral drugs are only effective when taken within 48 hours of the first flu symptoms. It is also possible for a virus to become resistant to an antiviral. Children under one year of age cannot take Tamiflu and children under seven cannot take Relenza.

Scientists are working to find new antiviral drugs and government is working to increase the supply of existing antiviral drugs.

## **What are some of the steps government officials could take to slow the spread of the flu during a pandemic? What do the terms isolation and quarantine really mean?**

State or local government officials may try several measures to slow the spread of the flu, including:

- Canceling or limiting public gatherings such as concerts, meetings and church services.
- Closing schools, theaters and other places where large numbers of people gather.
- Requesting that people who have the flu stay home or at a healthcare facility. (This is called isolation.)
- Requesting that people who have been exposed to the flu virus to stay at home and avoid contact with others. (This is called quarantine.)
- Asking everyone to stay home for a period of time. This is sometimes compared to a “snow day”—a day when regular activities are suspended due to bad weather.

### **Should I buy masks?**

**There are other good ways to avoid getting the flu.** Flu spreads from one person to another through droplets from coughing and sneezing. The best way to avoid getting the flu is to avoid crowded conditions and close contact with others during flu season. It is also important to wash your hands often, particularly after coughing if you are sick or before touching your face. Stay home if you are coughing or sneezing, or if you might be coming down with the flu.

**We don't know if wearing a mask will help.** There is very little research about using masks to prevent flu. Masks are probably most useful when worn by sick people to keep their sneezes and coughs from infecting others.

During a flu pandemic (outbreak) you may want to wear a mask when you are in crowded settings. A mask may protect you from other people's coughs and make it more difficult for you to cough on others.

If you are taking care of a person with the flu at home you may want to wear a mask or respirator. Respirators include thicker fiber masks often worn by nurses or construction workers. Respirators are labeled N-95.

**Using a mask can present some problems.** You risk being infected by your mask if you do not handle it very carefully. Masks may become contaminated by sneezing or coughing droplets and are also uncomfortable to wear. Touching your eyes, nose or mouth while adjusting or changing the mask can infect you with the flu. Masks need to be discarded carefully to keep spreading infection. N-95 masks need to fit closely on the face to work properly.

Although they keep sick people from spreading disease, masks are not entirely effective. Do not rely on masks alone for protection during a pandemic. Masks may reduce the spread of flu if you also avoid crowds or gatherings, stay home when you are sick, cover your cough and wash your hands often.

## **How much food and water should I store to be prepared? I have seen varying estimates.**

The U.S. Department of Health and Human Services recommends that you stock a week's worth of food, water and other supplies for each family member. This is the minimum amount you will need. However, a flu pandemic could last for months and supplies from stores and other sources may be limited for much of that time. If you can store more than one week of supplies, we encourage you to do so. Remember your pets when stocking your supplies.

## **How will the community be alerted about a health emergency? What about other languages and translations?**

Government agencies will keep the public informed through television, radio, newspapers and the Internet. Telephone information lines will also be available on a limited basis.

The Washington State Department of Health and its partners will work to provide information in languages other than English. Many materials on preparing for pandemic influenza are now available on the Department of Health's Web site in Spanish, Vietnamese, Chinese, Korean, Cambodian and Russian. For a list of resources visit:

<http://www.doh.wa.gov/phepr/factsheets.htm>.

## **Government planning**

### **Will there be enough anti-viral drugs and vaccines for everyone during a pandemic? How will the distribution be prioritized?**

The federal government is working to ensure fast and effective ways of making enough vaccine for everyone in a pandemic, but it will still take time. It will take at least six months to produce an effective vaccine once a virus is identified and supplies will be limited.

Local governments will develop distribution plans for vaccines and medicines, and these plans may vary from one community to another. With limited supplies, it is very likely people who are ill will be the first priority for receiving medications. Also, it may be necessary to give vaccine and medicines first to community members who provide essential services to the public such as healthcare personnel, emergency responders and police.

A pandemic will most likely be caused by a new virus, so antiviral drugs such as Tamiflu and Relenza may not be helpful. As with vaccine, we won't know what medications will fight the virus until a specific pandemic virus is identified. The federal government and some local governments are stockpiling antiviral drugs, but again, supplies are limited.

### **How is the state involving persons with disabilities and vulnerable populations in pandemic planning?**

Pandemic influenza is an issue that involves everyone, and there are important issues to consider for people with special needs. State and local governments are working to include special needs communities in pandemic influenza planning and resource development efforts on all levels, from planning to community outreach.

Our state sent a delegation (Department of Health, Department of Social and Human Services, Department of the Military's Emergency Management Division and the Governor's Office) to Washington D.C. as part of the Working Conference on Emergency Preparedness for Disabled and Aging Populations. This conference was an opportunity for partners nationwide to work together on important issues facing special needs communities.

We also work with organizations serving special populations to make sure their issues and concerns are addressed in our public outreach materials. (All materials are also available on request in alternate formats, and our Web site meets accessibility standards for assistive technologies such as screen readers.)

Also, to better serve non-English speaking communities, we regularly translate emergency preparedness materials into Spanish, Korean, Chinese, Vietnamese and Russian, and other key languages as appropriate. All translated materials are checked by community groups to make sure they are accurate and useful.

Many important efforts also happen on the local level as Local Health Jurisdictions work directly with special needs communities in their areas to help meet outreach and emergency planning needs.

### **What is the Department of Health doing to prepare for pandemic flu?**

The Department of Health—working with local, state, federal and Canadian partners—has been planning for a potential pandemic flu outbreak and taking action to help protect the health of people in our state. For complete details, please see the Washington State Department of Health's Pandemic Influenza Plan Summary.

### **Where can I get further information?**

You can find additional information about pandemic influenza on these Web sites:

**Washington State Department of Health:** [www.doh.wa.gov/panflu](http://www.doh.wa.gov/panflu)

**Centers for Disease Control and Prevention** [www.cdc.gov/flu/avian](http://www.cdc.gov/flu/avian)

**Department of Health and Human Services:** [www.pandemicflu.gov](http://www.pandemicflu.gov)