



Do you know what to do in a pandemic flu outbreak?

This handbook can help you find out. It provides basic information about pandemic flu, and space for recording ideas so you'll be ready in case a flu pandemic strikes.

Taking common-sense steps can help you minimize the effects

of a flu pandemic in your family and community. This handbook covers:

- what pandemic flu is
- information on how to prepare and respond
- tips on staying informed and working together with family, community and authorities.

There is also a checklist to help you plan. You can follow the recommendations in this handbook, and keep it for your future reference.

There's a lot you can do to be prepared for pandemic flu!

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Pandemic flu is not the same as seasonal flu.

Seasonal flu goes around every year, usually in the fall and winter. It is not a completely new virus.

- Some people already have immunity to seasonal flu from being exposed to a similar flu virus in past years.
- Seasonal flu may be prevented by getting a yearly flu shot.
- The same groups of people tend to be at higher risk for serious complications from seasonal flu from year to year. (See page 12.)

By contrast, a new pandemic flu virus can be more unpredictable. For example, it may put different groups of people at higher risk. Also, there may not be a vaccine ready for a new pandemic flu virus right away.

There have been several flu pandemics in recent history.

All caused widespread illness—and many deaths.

- The most severe pandemic was in 1918, when the “Spanish flu” killed tens of millions of people around the world. About 675,000 died in the U.S. alone.
- In 1957, the “Asian flu” killed about 2 million worldwide and about 70,000 in the U.S.
- In 1968, the “Hong Kong flu” killed up to 1 million people around the world. About 34,000 died in the U.S.
- In 2009, an H1N1 flu (“swine flu”) started a pandemic. Tens of millions of people in the U.S. became sick—and thousands died.

Flu pandemics can occur at any time.

A flu pandemic:

- may start without warning in any country
- may spread quickly, especially because modern travel means the virus can be carried easily from country to country
- may also spread quickly because many areas are densely populated
- may come in multiple waves over several months. Different communities or groups of people may be affected by different waves. Each outbreak in a community may last 6-8 weeks.



Where do pandemic flu viruses come from?

Animal flu viruses can sometimes play a role.

Influenza is not just a human disease.

Animals such as birds and pigs can get the flu, too. (Bird flu is sometimes called “avian flu” and pig flu is sometimes called “swine flu.”) Normally, an animal flu virus only affects a given species of animal. But flu viruses are unpredictable.

- Because they change constantly, animal flu viruses sometimes become able to spread to other types of animals—or to people. (This usually requires direct contact with sick animals.)
- It’s even less common, but sometimes animal flu viruses that are able to infect people also become able to spread from person to person. That can create the potential for a new flu pandemic.

Flu viruses can also mix to form new viruses.

Flu pandemics can be caused by new flu viruses that are mixtures of animal and human flu viruses, for example. (This is what happened with the H1N1 flu that started a pandemic in 2009.)

Disease experts study flu viruses carefully.

They track the progress of flu viruses in animals and humans around the world. They carefully monitor any flu virus that could lead to a pandemic.

Public health authorities are prepared for outbreaks.

If people seem to be getting sick from a new flu virus, testing and monitoring can help confirm what’s going on. How severe the disease is and how quickly it spreads will determine the next steps. See page 21 about staying informed.

What are the effects of animal flu in humans?

Symptoms are usually similar to the seasonal flu. (See page 27.) But this can vary by flu virus. Stay informed. Authorities will tell us which symptoms to watch out for.

In general, if you or a family member becomes sick after being around a sick animal, contact your health-care provider right away for advice.

No matter what virus causes a flu pandemic, the same basic steps can help us handle it.



States and communities also have plans for pandemic flu.

Each state has an emergency plan. Your state's plan may include:

- strategies for mass immunization (vaccination) of people in a given area
- increasing an area's ability to continue essential services (such as medical care) and respond to developing problems (such as running low on food and water)
- organizing cooperative efforts between law enforcement, utilities, public health personnel, local health-care organizations, hospitals, emergency management officials and elected officials.

Businesses have also been encouraged to prepare.

Employers' plans may include:

- assessing their employees' on-the-job flu exposure risks
- deciding how to continue business during an outbreak of pandemic flu
- having an emergency communications plan for contacting employees
- having flexible work schedules
- arranging for employees to work from home if possible
- setting policies for sick leave and compensation
- having guidelines for healthy hygiene on the job.

It's important to consider how you would handle any loss of income that might result from not being able to work during an outbreak.

Individuals can play an active role locally.

For health efforts to be successful, your participation is needed! You can help minimize the impact of a flu pandemic on:

- yourself
- your loved ones
- your community
- your country
- the world.

Find out how you can get involved (see page 30 for contact information).

Notes



Antiviral medications are often used to help treat seasonal flu.

These medications can sometimes:

- help reduce flu symptoms in infected people
- help make infected people less contagious
- decrease the risk of flu in healthy people who are exposed to people with the disease.

Antiviral medications may also help fight pandemic flu.

So, the government keeps stockpiles of these medications. Unfortunately, not all antiviral medications work against all new flu viruses.

Stockpiling your own antiviral medications is not recommended.

Here's why:

- It may deplete the national supply. Then there might not be enough medication for people who need it the most.
- The medication may not work against a particular pandemic flu virus.
- The medication may not work if it's stored incorrectly.
- You should not take medication without a health-care provider's OK. There could be serious side effects.

During pandemic flu outbreaks,

vaccines and medications may be limited—or not yet available. Authorities may give any available vaccines or medications first to the people who need them most. These “priority groups” may vary by flu virus. They may also differ for vaccines and medications.

For example, highest priority for vaccines may be given to:

- health-care workers with direct patient contact
- emergency public health workers
- pregnant women.

Highest priority for antiviral medications may be given to:

- hospital patients
- emergency medical service workers
- people with weakened immune systems.

It's important to help by complying with these decisions.

It's helpful to know how the flu spreads

and how you can protect yourself from germs.



Flu germs spread mainly through coughs and sneezes.

These can spray droplets through the air and:

- into the mouths or noses of people nearby
- onto surfaces that people touch before touching their nose, mouth or eyes.

People with the flu can also leave the flu virus on things they touch if they have flu germs on their hands (for example, right after using a tissue).

Practice cough and sneeze etiquette.

If you are about to cough or sneeze:

- try to stay at least 6 feet away from other people
- cover your mouth and nose with a tissue, then throw the tissue away
- use your upper sleeve if you have no tissue (not your hand)
- always wash your hands right away afterward.

If you are sick, act responsibly.

To avoid spreading germs, stay home from work, school or other outings. As much as possible, keep your distance from family and loved ones until you are well again. It's a good idea to have sick children stay home, too. (See page 27 for more on flu treatment.)

Infection can be passed before a sick person has signs or symptoms.

Flu symptoms may not show up for a day or so. So, a person could have the flu and not know it. But he or she could still pass the flu virus to others.

Be careful around people who are sick.

Avoid those invisible flu germs! Try to stay at least 6 feet away from a person who is coughing or sneezing. Don't touch your eyes, nose or mouth. Wash your hands often to prevent any germs on your hands from getting into your body.

During pandemic flu outbreaks,

follow recommendations from authorities. These may include, for example:

- how long to stay home if you're sick (generally, at least 24 hours after a fever is gone without fever-reducing medicine)
- whether or not—and in what situations—to use medical face masks or respirators. For example, they may recommend using a medical face mask if you have the pandemic flu and can't avoid close contact with people.

Follow any instructions for proper fit, use, removal and disposal of face masks and respirators. Remember that they do not take the place of hand washing, not touching your mouth, nose or eyes, and staying home if you're sick.

Simple hand-washing steps

Have your family take care to wash hands well—every time!

1. Wet hands with clean, running water.

If possible, use warm water.



2. Lather both hands with soap.

Regular soap is fine. Antibacterial soap may be helpful to some—check with your health-care provider.



3. Scrub all surfaces of hands for 20 seconds.

This scrubbing action helps loosen and remove germs.



4. Rinse hands well with running water.



5. Dry hands with a paper towel or an air dryer.

If possible, use your paper towel to turn off the faucet.



Alcohol-based hand sanitizers can substitute for soap and water.

In general, alcohol-based hand sanitizers are fast-acting germ-killers. They don't require water, so they may be particularly useful during a pandemic if water service is disrupted. They can also be less drying to skin than some soap and water. (Make sure the product you use is at least 60% alcohol.)

To use an alcohol-based hand sanitizer:

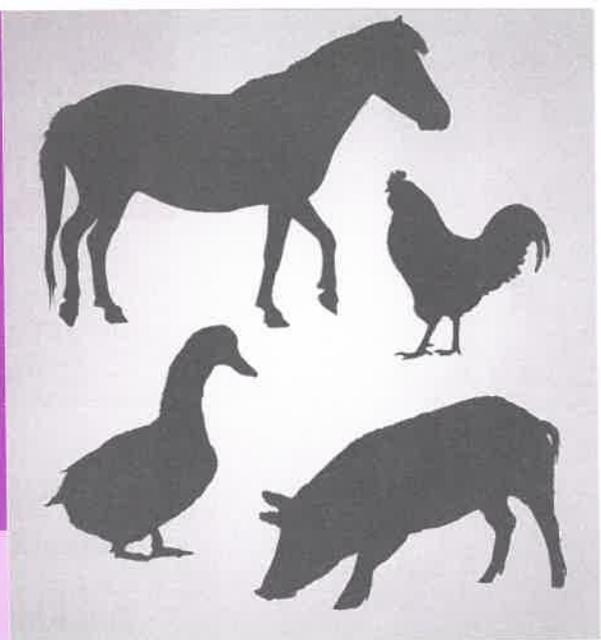
- Apply the product to the palm of one hand.
- Rub both hands together. Spread the product over all surfaces of hands and fingers until they are dry.



If hands are visibly dirty, use soap and water if possible.

Use common sense around animals.

Follow some basic precautions to help prevent possible infection.



It's possible to catch flu germs from an infected bird, pig or other animal.

So safety around birds and other animals is important. Also, if a person or an animal is infected with animal flu and another flu virus, the 2 viruses might mix together. A new, dangerous flu virus could be created—and start to spread.

U.S. livestock producers are working to keep animals healthy.

To help prevent the spread of disease among animals, they are:

- monitoring animals for signs of disease
- cleaning and disinfecting equipment and vehicles
- having employees wear clean clothing and follow strict disinfecting practices.

Report sick animals.

If you are around domestic birds, such as chickens, turkeys, ducks and geese, let authorities know if you see any signs of avian flu. Signs may include:

- sudden death
- decreased energy or appetite
- fewer eggs
- deformed or thin-shelled eggs
- coughing or sneezing
- diarrhea or nasal discharge.

Also report sick pigs. Report to your local cooperative extension office—or call the USDA at 1-866-536-7593.

Be careful with wildlife.

Keep your distance from wild animals. Do not touch them. Do not pick up sick or dead wild animals.

Hunters should not handle or eat sick game. When handling game, wear rubber gloves. Wash hands, surfaces and tools thoroughly. Practice food safety with game (see page 16). Cook it to 165°F.

Talk to children.

Let them know not to play with or touch sick or dead animals. Ask them to let you know if they see any domestic birds or wild animals that look sick or are dead.

If you work with livestock,

follow all work safety regulations. For example, practice good hand hygiene by washing thoroughly and often. Wear any personal protective equipment (PPE) that is required, such as a respirator.



Medical essentials

- over-the-counter medication for fever or pain relief, such as acetaminophen or ibuprofen*
- extra prescription medication and medical supplies (talk to your health-care provider)
- vitamins (talk to your health-care provider)
- thermometer
- medical face masks and N95 respirators (see page 13)
- _____
- _____

Personal supplies

- tissues
- toilet paper
- disposable diapers, if needed
- feminine hygiene products, if needed
- _____
- _____

Household goods

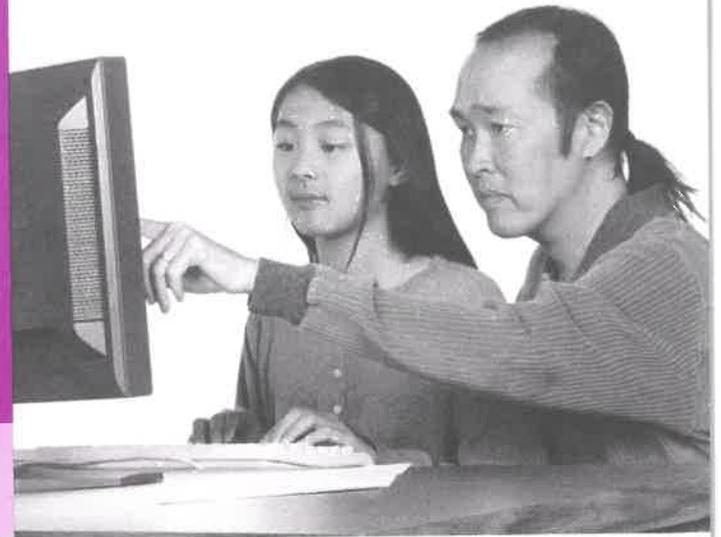
- flashlight
- portable radio
- spare batteries
- manual can opener
- soap and alcohol-based hand sanitizer
- garbage bags
- _____
- _____

***Do not give your child a medication**

(prescription or over-the-counter) unless your child's health-care provider says it's OK. For example, never give aspirin—or any medication containing aspirin or "salicylates"—to anyone under 20 (unless directed by a health-care provider). Aspirin and salicylates have been linked to Reye's syndrome, which can cause brain damage or death. Ask your child's health-care provider what medication is safe to use. Be sure to carefully read and follow labels, directions and warnings for medications.

Stay informed.

Being up-to-date is just as important as being prepared.



During a pandemic flu outbreak,

the situation may change from day to day. To help stay safer, keep track of what's going on in your area—and around the nation.

The media will work with authorities

to give you information on:

- current flu-related events—locally, nationally and globally
- available services—such as what medical centers are open
- signs and symptoms of an outbreak
- actions to take to limit the effects of the flu—this guidance will depend on the situation
- what is expected to happen in the future.

The most reliable sources of information

are public health authorities and the government Web site at www.flu.gov. Other news outlets may include:

- television news reports
- local and national radio
- newspaper and magazine stories.

Remember, some services may not be available during a severe pandemic flu outbreak. If you can't get news from the regular media, try contacting local public health officials for updates.

Local hotlines may be set up

to help inform the public during an emergency. Hotline staff may be trained to:

- deal with local questions about what to do and what to expect
- advise people on whether they should seek medical care, depending on their symptoms
- tell sick people where they can seek care. For example, special clinics may be created for quickly assessing and helping many people at a time.

When routines must change

Write down information about pandemic response plans for your child's school, your workplace, etc. Make your own backup plans, too.

	Emergency plan	What I can do
<input type="checkbox"/> School closure plan	<p>Example: <i>Any school closings will be announced on the radio.</i></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Example: <i>If school closes, help Sam work through her textbooks and do reading at home.</i></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<input type="checkbox"/> Work plan	<hr/>	<hr/>
<input type="checkbox"/> Other	<hr/>	<hr/>

Flu treatment

Here is basic information on common symptoms and what you can do—whether the flu is seasonal or pandemic.



Flu symptoms

may include:

- cough
- fever
- fatigue
- headache
- sore throat
- stuffy or runny nose
- muscle aches
- vomiting
- diarrhea.

If you get the flu,

stay home. Check with your health-care provider to see if testing or treatment is needed. He or she may advise, for example:

- taking antiviral medication
- drinking lots of fluids
- getting plenty of rest.

Stay home for as long as your health-care provider or authorities recommend.

If you must care for others,

here are some basic guidelines:

- Keep the person away from others as much as possible.
- Follow health-care provider instructions.
- Give medications if prescribed and available.
- Have the person throw away used tissues immediately—place a container nearby.
- Wash or sanitize your hands.
- Avoid holding soiled laundry too closely.

During a pandemic flu outbreak,

officials and health-care providers will provide details and give specific recommendations. In general:

- Pandemic flu treatment may be similar to seasonal flu treatment.
- It's especially important to limit contact with people who have the pandemic flu—avoid it, if possible. Medical face masks and N95 respirators may be advised in some cases. See page 13.

Watch for emergency warning signs.

Get immediate medical attention if a child:

- has trouble breathing or is breathing fast
- has bluish skin color
- isn't drinking enough fluids
- isn't waking up or interacting, or is too irritable to be held
- has flu-like symptoms that improve but then return with fever and worse cough
- has a fever with a rash
- is an infant and can't eat, has no tears when crying or has a lot fewer wet diapers than usual.

Get immediate medical attention if an adult:

- has difficulty breathing or shortness of breath
- has pain or pressure in the chest or abdomen
- has sudden dizziness or confusion
- is severely or persistently vomiting
- has flu-like symptoms that improve but then return with fever and worse cough.



Flu pandemic checklist

Use this page to keep track of your plans.

- Store enough food for 2 weeks. Also store pet food, if needed.
- Store bottled drinking water to last at least 2 weeks (1 gallon per person per day). Have extra for pets.
- Store enough medical essentials, personal supplies and household goods for 2 weeks.
- Talk to your loved ones about pandemic flu.
- Remind all family members to practice healthy habits, such as covering coughs and sneezes and washing hands often.
- Learn home treatment for flu.
- Chart each family member's medical history.
- Ask your health-care provider about the yearly seasonal flu shot for you and your family members. Arrange to get shots as needed.
- Practice food safety—especially with raw meat and poultry. Also, don't touch or eat any animals found dead.
- Ask about flu pandemic plans at your child's school and at any organizations you belong to.
- Find out about your employer's flu pandemic plans and what would be expected of you.
- Find out about flu pandemic plans in your community or state.
- Make backup plans for possible school or work closures, or other disruptions.
- Consider volunteering to help community response efforts.
- Encourage and help family, friends and neighbors to prepare.
- Identify reliable sources of up-to-date health news.
- Plan for safe travel—check advisories.



You can help protect yourself— and others—from pandemic flu!

Be aware

of the risks from a flu pandemic. Understand how flu viruses spread.

Take steps

to get ready and make backup plans for a flu pandemic.

Plan to cooperate

with authorities to help prevent or limit the impact of a flu pandemic.

Practice healthy habits

and teach them to children. Everyone can help keep germs from spreading.

Stay informed

about the current status of any pandemic flu outbreaks.

Take the time to prepare responsibly for pandemic flu. It's worth it!

