

MDCH Pandemic Materials

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Avian Flu Fact Sheet for the Public

- Avian flu is an infection caused by bird flu viruses. These flu viruses occur naturally among birds. Wild birds worldwide carry the viruses in their intestines, but usually do not get sick from them. However, bird flu is very contagious among birds and can make some domesticated birds, including chickens, ducks, and turkeys, very sick and kill them.
- Beginning in June 2004 infection among poultry was reported by several countries in Asia: Cambodia, China, Indonesia, Malaysia, Thailand and Vietnam. Since May 2005 outbreaks among poultry have been reported in Russia, China, Kazakhstan, Turkey, and Romania. Mongolia has reported outbreaks in wild migratory birds. In October 2005 Croatia reported bird flu in migrating swans.
- Bird flu viruses do not usually infect humans, but more than 126 confirmed cases of human infection with bird flu viruses have occurred since 1997, killing 64 of them. So far, there have been no human cases associated with the current outbreak of bird flu in the United States.
- The risk of getting bird flu is low for most people because the virus occurs mainly among birds and does not usually infect humans. However, during an outbreak of bird flu among poultry (domesticated chicken, ducks, turkeys), there is a possible risk to people who have contact with infected birds or surfaces that have been contaminated with excretions from infected birds.
- Experts fear that bird flu could trigger the next flu pandemic by mutating to become capable of passing easily from person to person. Despite isolated reports of human to - human spread, so far there is no strong evidence of sustained person to person transmission.
- Since February 2004, medical and public health personnel in the U. S. have been watching closely to find any bird flu cases. MDCH and local health departments are prepared to detect, diagnose and prevent the spread of bird flu.
- Work is under way to produce a vaccine against bird flu. However, if the virus mutates significantly, the vaccine may not prove effective. There is evidence that one antiviral drug, Tamiflu is effective against bird flu, but until a pandemic flu virus derived from bird flu emerges and spreads it is not possible to predict how effective Tamiflu will be.

For more information visit: <http://www.michigan.gov/mdch> or <http://www.cdc.gov/flu/avian/index.htm> or call the CDC Public Response Service Hotline: English: 1-888-246-2675, Español: 1-888-246-2857, TTY: 1-866-874-2646



Avian Flu: Frequently Asked Questions Information for the Public

What is Avian or 'bird' flu?

Avian flu is an infection caused by bird flu viruses. These flu viruses occur naturally among birds. Wild birds worldwide carry the viruses in their intestines. All bird species are thought to be susceptible to infection but domestic poultry flocks are especially vulnerable. Bird flu is very contagious among birds and can make some domesticated birds, including chickens, ducks, and turkeys, very sick and kill them. Some bird flu viruses are more serious than others and can cause severe illness and high death rates of birds.

Where does avian flu occur?

The current outbreak of bird flu began in Korea in December 2003. By June 2004 infection among poultry was reported by several countries in Asia: Cambodia, China, Indonesia, Malaysia, Thailand and Vietnam. Since May 2005 outbreaks among poultry have been reported in Russia, China, Kazakhstan, Turkey, and Romania. Mongolia has reported outbreaks in wild migratory birds. In October 2005 Croatia reported bird flu in migrating swans.

By the middle of March 2004, the virus had resulted in the loss of more than 100 million poultry.

Do bird flu viruses infect people?

Bird flu viruses do not usually infect humans, but more than 126 confirmed cases of human infection with bird flu viruses have occurred since 1997, killing 64 of them. The risk of getting bird flu is low for most people because the virus occurs mainly among birds and does not usually infect humans. However, during an outbreak of bird flu among poultry (domesticated chicken, ducks, turkeys), there is a possible risk to people who have contact with infected birds or surfaces that have been contaminated with excretions from infected birds. Investigation into the cases of human infected with bird flu showed that close contact with live infected poultry was the source of human infection.

Have there been human cases of avian flu in the United States?

So far, there have been no human cases associated with the current outbreak of bird flu in the United States. It remains a very remote possibility that the bird flu in its current form could be introduced to poultry or humans in the US, either by the migration or illegal importation of wild birds carrying the virus or the importation of contaminated dead chickens for consumption. Person-to-person spread, has done so only with difficulty and has not yet resulted in transmission of the infection. However, World Health Organization experts have expressed concern that human viruses are continuing to evolve in a manner consistent with the possible development of human-to-human transmission.

Is it safe to eat chicken, poultry, and eggs?

YES, it is safe to eat chicken, poultry, and eggs. For protection against many types of food borne illnesses, all poultry should be cooked to 165° F or hotter. Cooking food properly also destroys against other viruses and bacteria, including Salmonella and E.coli.

Has the U.S. banned poultry coming from countries affected by avian (bird) flu?

Yes, the U.S. government has banned imported poultry from countries affected by bird flu. The U.S. Department of Agriculture (USDA) has made very strict importing restrictions to prevent the spread of the bird flu virus in the U.S.

The USDA has also developed an elaborate surveillance system in place to monitor bird populations in the U.S. For more information, visit the USDA Food Safety and Inspection Office at

www.usda.gov/birdflu

How does avian flu spread?

Infected birds shed flu virus in their saliva, nasal secretions, and feces. Susceptible birds become infected when they have contact with feces droppings. A single gram of contaminated feces can contain enough virus to infect one million birds. Droppings can also contaminate dust, soil, water, feed, equipment and clothing. It is believed that most cases of bird flu infection in humans have resulted from contact with infected poultry or contaminated surfaces.

What are the chances of bird flu spreading person-to-person?

Human infection with A/H5N1 has been rare up to now. The virus has not acquired the ability to pass easily from person to person. Should it acquire this characteristic, it would meet all the criteria of a pandemic flu strain.

While there have been instances of possible person to person transmission, so far these have been isolated occurrences. Person to person transmission must be efficient and sustainable if the virus is to become capable of causing a pandemic. In other words, there must be a sustained chain of transmission causing communitywide outbreaks.

To date investigators have not been able to prove the occurrence of person to person transmission. However, the pattern of disease appears to have changed in a way that makes the development of person to person transmission possible. At the WHO inter-country consultation in Manila in May 2005, experts concluded that the virus continues to evolve and could pose a pandemic threat.

What are the symptoms of bird flu in humans?

Symptoms of bird flu in humans have ranged from typical flu-like symptoms (fever, cough, sore throat and muscle aches) to eye infections, pneumonia, severe respiratory diseases (such as acute respiratory distress), and other severe and life-threatening complications. The symptoms of bird flu may depend on which virus caused the infection.

How could bird flu lead to a pandemic?

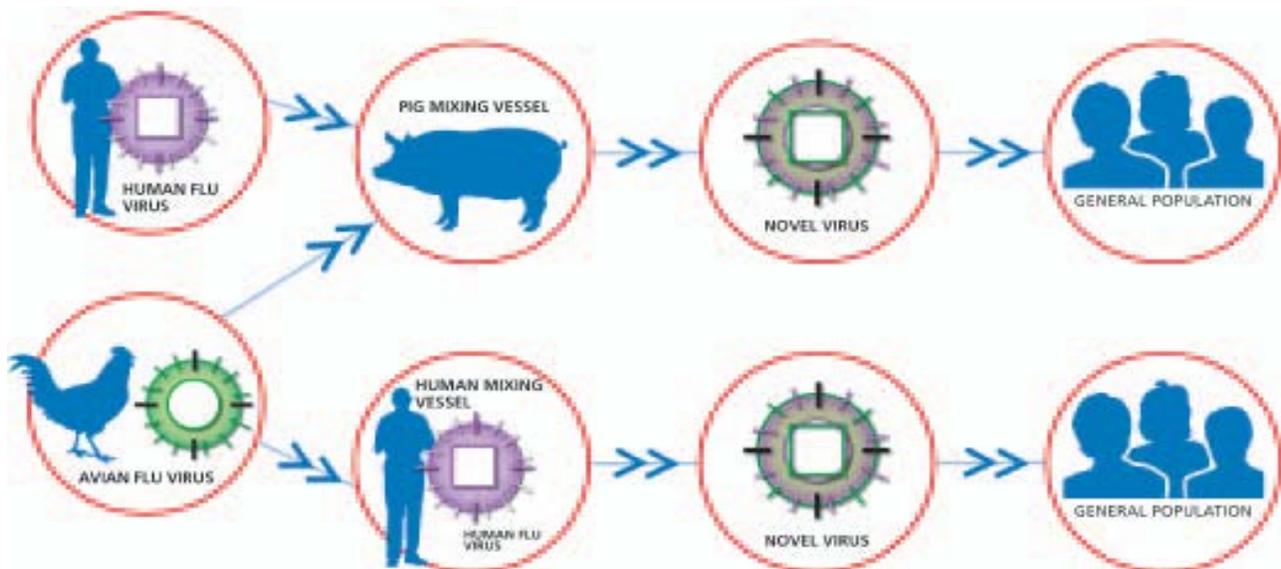
Experts fear that the bird flu viruses could trigger the next pandemic for several reasons. First, it has already demonstrated an ability to infect people and cause severe disease, one of the key characteristics of a pandemic strain. Secondly, this particular virus has the ability to mutate and to acquire genes from viruses that infect humans and animals like pigs. Only Type A influenza viruses can cause a pandemic, because it is the only type that is found in both animals like pigs, birds and

horses, as well as in humans. Experts fear that the bird flu virus could, either become compatible with human flu viruses, or exchange genes with a human flu virus, thereby producing a completely new virus capable of spreading easily between people, and causing a pandemic.

What causes Pandemic Influenza?

Only type A influenza virus can cause a pandemic, because it is the only type that is found in both animals (pigs, birds, horses) and humans. Type A influenza is less genetically stable than type B. It is in a family of viruses that uses RNA to reproduce and viral RNA is notoriously fickle about swapping genetic material with other RNA that it meets. When this unpredictable swapping occurs between human flu and bird flu it leads to a new virus in a population that has not been exposed to it before. Our bodies will not know how to respond to this threat.

We used to think it took an animal like a pig to serve as the ‘mixing vessel’ for the bird flu and human flu viruses. However, more recently experts fear that people may also serve as ‘mixing vessels’. In 1997, in Hong Kong, experts learned that a new flu virus can occur directly when a bird flu virus infects a human who has the flu.



This possibility that people could act as ‘mixing vessels’ is causing experts to be concerned. Bird flu has demonstrated the ability to infect people. The person infected could have the human flu, allowing an exchange of genes, which could lead to the emergence of a pandemic strain.

While we typically think of this scenario playing out in Asia, it could occur anywhere birds and people come together. In the last few years, this has happened in Delaware, the Netherlands and the Fraser Valley of British Columbia.

Once the pandemic flu strain has established itself in humans, it is spread like any other flu. Droplets are produced and spread by coughs and sneezing. These droplets are infectious in adults from 1 day prior to the onset of symptoms to about 5 days after onset. This means it will spread very easily.

Once the flu is in you, it takes about 1 to 4 days to become ill. Once you are ill, you experience the normal fever, aches, pains, cough and other symptoms associated with the regular flu.

With pandemics flu treatment options are limited. Vaccination is the preferred option, however, the vaccine requires at least 5 months to be developed. Development depends on adequate seed stock to grow the virus and enough chicken eggs to grow the virus in.

Is there a vaccine against avian flu?

There currently is no commercially available vaccine to protect humans against the bird flu virus that is being seen in Asia and Europe. However, vaccine development efforts are taking place. Research studies to test a vaccine began in April 2005, and a series of clinical trials is underway.

There are several potential vaccines for protecting humans from infection with bird flu. Whether these will be suitable for use against a new pandemic flu virus depends on how much the pandemic virus has 'drifted' from the bird flu virus currently in circulation in poultry. As a precautionary measure, the United States has ordered 2 million doses in hopes that the vaccine would provide some cross protection.

What drugs are available to treat bird flu?

There is evidence that the recent bird flu viruses respond to an antiviral drug called Tamiflu. This has led experts to conclude that it may also be effective against a pandemic flu strain. However, the effectiveness of antiviral drugs in a pandemic situation cannot be known with any certainty until the pandemic is under way. Studies suggest that the prescription medicines approved for human flu viruses should work in preventing bird flu infection in humans. However, flu viruses can become resistant to these drugs, so these medications may not always work. Additional studies are needed to prove the effectiveness of these medicines.

Why is the virus difficult to get rid of in poultry?

Despite international efforts, bird flu viruses have been difficult to eliminate for several reasons:

High proportion of poultry in backyard farms - The internationally recommended measures for controlling infection in poultry; culling, quarantining and disinfection, are difficult to apply to small rural and backyard farms. Yet in several of the countries experiencing outbreaks, 80% of poultry are raised on small farms. In China alone, 60% of its estimated 13.2 billion chickens are raised on small farms in close proximity to people and domestic animals, including pigs.

Economic significance of poultry production - Because so many people in the region are so dependent on poultry, important measures such as culling are difficult to implement.

Lack of experience - Since the disease is new to most countries in the region, very little experience exists at national and international levels to guide the best control measures at the country level.

Lack of resources - Several countries with very widespread outbreaks lack adequate infrastructure and resources, including funds to compensate farmers in order to encourage compliance with government recommendations.

Scale of spread - With so many adjacent countries affected, one country's gains in control may be compromised by inadequate control in another.

For these reasons, getting rid of the bird flu in Asia is expected to take several years (and may not even be achievable). Until we do get rid of it, the possibility that the virus could mutate into a pandemic strain remains.

For more information on Avian Flu:

- Visit the Michigan Department of Community Health website:
<http://www.michigan.gov/mdch>
- Visit the Centers for Disease Control and Prevention:
<http://www.cdc.gov/flu/avian/index.htm>
- Call the Centers for Disease Control and Prevention Public Response Service Hotline:
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Pandemic Influenza

Fact Sheet for the Public

The Disease

- Pandemic flu is a type of influenza that spreads rapidly to affect most countries and regions around the world.
- Unlike the ordinary flu that occurs every winter in Michigan, pandemic flu can occur at any time of year.
- Pandemics of influenza have occurred sporadically throughout history – three times in the last hundred years – resulting in many deaths.
- Experts predict another pandemic will occur but cannot say exactly when it will happen. When it does, it may come in two or more waves several months apart. Each wave may last two to three months.
- Pandemic flu is more serious than ordinary flu. It's possible that one quarter of the population may be seriously affected.
- Pandemic flu is likely to cause the same symptoms as ordinary flu; fever, cough, headache, fatigue, sore throat and runny nose. The symptoms may be more severe because nobody will have any immunity or protection against that particular virus.
- A serious pandemic is likely to cause many deaths, disrupt the daily life of many people and cause intense pressure on health and other services.
- Each pandemic is different, and until the virus starts circulating, it is impossible to predict its full effects.

For more information on Pandemics:

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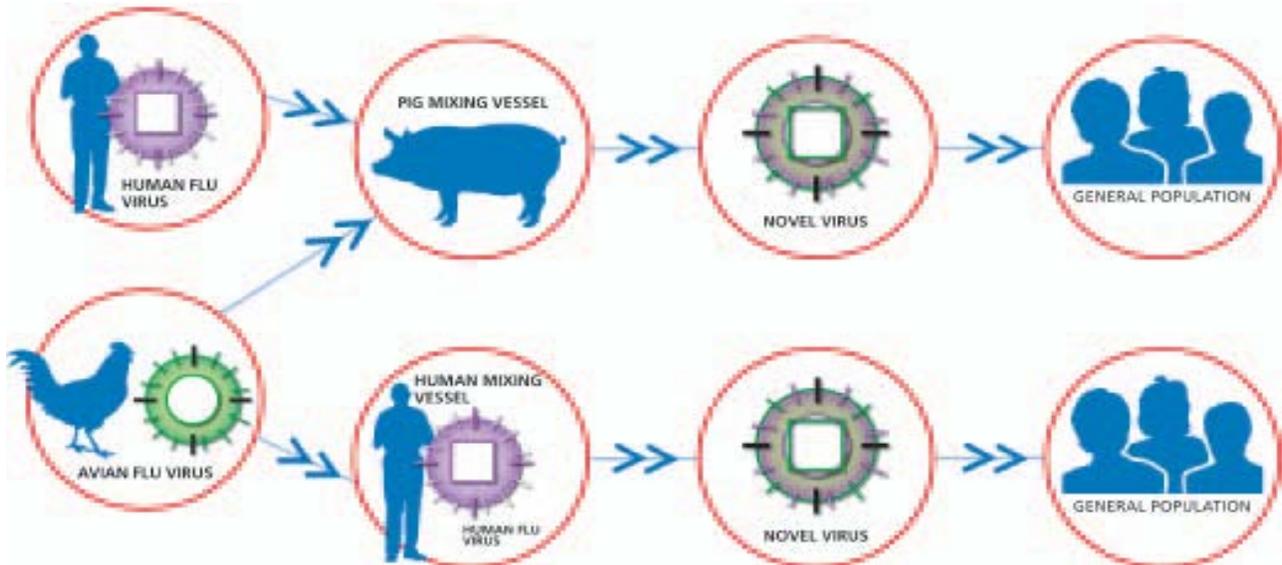


Causes of Pandemic Influenza Fact Sheet the Public

What causes Pandemic Influenza?

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We used to think it took an animal like a pig to serve as the ‘mixing vessel’ for the avian flu strain and a human flu strain. However, more recently experts fear that people may also serve as ‘mixing vessels’. In 1997, in Hong Kong, experts learned that a new strain can occur directly when an avian influenza strain infects a human who has a human flu virus at the same time.



This possibility that people could act as ‘mixing vessels’ has caused particular concern with the avian flu (A/H5N1) currently circulating in Asia. This strain of avian flu has demonstrated the ability to infect people. Experts fear that people infected with avian flu could also have human flu. This would allow the exchange of genes, that could lead to the emergence of a pandemic strain.

While we typically think of this scenario playing out in Asia, it can occur anywhere birds and people come together. In the last few years, this has happened in Delaware, the Netherlands and the Fraser Valley of British Columbia.

Once the pandemic flu strain has established itself in humans, it is spread like any other flu.

Droplets are produced and spread by coughs and sneezing. These droplets are infectious in adults from 1 day prior to the onset of symptoms to about 5 days after onset. This means it will spread very easily.

Once the flu is in you, it takes about 1 to 4 days to become ill. Once you are ill, you experience the normal fever, aches, pains, cough and other symptoms associated with the regular flu.

With pandemics flu treatment options are limited. Vaccination is the preferred option, however, the vaccine requires at least 5 months to be developed. Development depends on adequate seed stock to grow the virus and enough chicken eggs to grow the virus in.

For more information on influenza:

- Contact your local public health department. Check <http://www.malph.org/page.cfm/108/> for your jurisdiction. A list of local public health departments is also available at http://www.michigan.gov/documents/June2003LHDLList_69658_7.pdf
- Visit the Michigan Department of Community Health website: <http://www.michigan.gov/mdch>
- Visit: www.pandemicflu.gov
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Controlling Pandemic Flu Fact Sheet for the Public

- Rapid detection, diagnosis, vaccination, antiviral drugs and ‘social’ interventions are the principle tools in controlling a pandemic.
- A vaccine for use against pandemic flu can only be produced once the pandemic strain has been identified. This means that vaccines will not be available immediately.
- Antiviral drugs are the only other medical treatment. There are important limitations to the use of antiviral drugs, including uncertainty over their effectiveness.
- The United States Pandemic plan has identified strategies and has identified vulnerable groups for receipt of both vaccines and antiviral drugs according to their availability.
- Various ‘social’ interventions at both the personal and national level may be necessary. These include personal hygiene and possible restrictions on travel and mass gatherings.
- You can reduce the chances of spreading the flu by:
 - covering your nose and mouth when coughing or sneezing, using a tissue when possible
 - disposing of dirty tissues promptly and carefully – bag and bin them
 - avoiding nonessential travel and large crowds whenever possible
 - maintaining good basic hygiene, for example washing your hands frequently with soap and water to reduce the spread of the virus from your hands to your face, or to other people
 - cleaning hard surfaces (e.g. kitchen worktops, door handles) frequently using a normal cleaning product, and
 - making sure your children follow this advice.

For more information on Pandemics:

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Controlling A Pandemic: Frequently Asked Questions Information for the Public

What can we do to prevent or contain a flu pandemic?

It is unlikely that the global spread of a pandemic flu virus could be prevented once it emerges. The emphasis in pandemic flu control is on reducing its impact.

Several tools help achieve this aim:

- year round global surveillance
- effective and accurate methods of diagnosis
- vaccines (once they become available)
- antiviral drugs
- social interventions.

Surveillance

Surveillance is a year round global activity. Its objective is to detect the emergence of 'unusual' viruses (that may have pandemic potential) as soon as they emerge. The sooner a potential pandemic virus is detected, the sooner scientist can begin developing an effective vaccine. Effective surveillance is vital, not only in detecting the first virus, but also for detecting the first signs of person to person transmission. The United States is part of a worldwide network of laboratories that work daily to detect and track influenza viruses.

Vaccination during a pandemic

Vaccines offer the best line of defense in reducing illness and deaths during a flu pandemic.

However, influenza viruses are changing all the time. Currently available flu vaccines are likely to provide little or no immunity in a pandemic situation. A new vaccine must be developed to match the exact pandemic influenza virus.

How long will it take to make enough vaccine for everyone?

It is difficult to make large amounts of vaccine without knowing the exact pandemic influenza virus. It takes months to produce a batch of influenza vaccine, once the virus strain is known. There are a limited number of companies that make influenza vaccine.

Vaccines are unlikely to be available during the early stages of a pandemic. The U.S. is working to have more producers of vaccine. Research is underway on methods to make additional vaccine more quickly. When a vaccine is available, the aim will be to immunize the whole population as quickly as possible. This means that vaccines will be given to some high risk groups of people before others.

Who would be vaccinated first?

People who provide essential society services will likely be vaccinated first. Health care workers who are likely to be at increased risk of infection through their contact with patients. Essential services workers, such as police officers, are likely to be vaccinated to prevent disruption to key services through absence due to illness. Other groups will be identified

for vaccination based on the pandemic.

Who decides who will get vaccine and who will not?

Scientific and public groups made recommendations about who will get vaccine first in a pandemic. The recommendations will be provided to the President. Fairness in vaccine use during a pandemic is important. Protecting people at high risk is an important consideration. Protecting essential day-to-day services, such as electricity and water, is an important consideration. These decisions have been discussed by the public and medical experts.

How will vaccine be distributed quickly if a pandemic breaks out?

Most likely the federal government will direct shipments of influenza vaccine to the states. The Michigan Department of Community Health and local health departments throughout Michigan have developed pandemic plans to distribute a vaccine rapidly. The Strategic National Stockpile is designed to get medical supplies anywhere in the country, quickly. MDCH has a plan for distributing medicines and vaccines from the SNS. Informing the public of where to go for vaccine is part of each local health department's pandemic plan. An important part of this planning is to keep the public informed.

What is the treatment of choice for pandemic flu?

With flu treatment options are limited. Vaccination is the preferred intervention, however vaccines are unlikely to be available during the early stages of a pandemic. Antiviral drugs are likely to have an important role in the prevention and treatment of pandemic flu. Antiviral drugs work by preventing the flu virus from reproducing if taken within 48 hours of the onset of symptoms. The antiviral medication Tamiflu is the treatment of choice. Early treatment may shorten illness by around a day and reduce hospitalizations. It is important to note that the effectiveness of antiviral drugs in reducing mortality in cases of severe disease is not known. Until the pandemic is underway, we cannot say who will benefit most. A pandemic flu virus may develop resistance to antiviral drugs.

Are there enough antiviral drugs available for everyone during a pandemic?

Antiviral drugs are expensive, take time to manufacture, have a limited shelf life, and will be in high international demand at the time of a pandemic. The US is building up a stockpile of antiviral drugs. As with other medicines it will be necessary to use them in the most effective way.

Are there other ways of slowing the spread of influenza?

Non-medical interventions like 'social distancing' may be important in delaying or slowing the spread of pandemic flu to allow time for a vaccine to be produced. People should anticipate that daily life could change for a while, such as school and business closings. Travel and public gatherings could be limited to prevent the spread of infection. Other emergency measures, such as voluntary isolation of ill individuals, or voluntary quarantine might be needed.

What can individuals do to prepare?

Some basic measures can be taken at the individual level to reduce the risk of infection:

- covering your nose and mouth when coughing or sneezing, using a tissue
- disposing of dirty tissues promptly and carefully – bag and bin them
- avoiding nonessential travel and large crowds whenever possible
- maintaining good basic hygiene, for example washing your hands frequently with soap and water to reduce the spread of the virus

- from your hands to your face, or to other people
- cleaning hard surfaces (e.g. kitchen worktops, door handles) frequently using a normal cleaning product, and
- making sure your children follow this advice.

Will wearing masks be useful?

The widespread wearing of masks by the general public during a pandemic is unlikely to be effective in preventing people from becoming infected with the virus. However, they may have some limited use for those already infected with the virus in order to prevent them spreading it.

What should people do to prepare for an outbreak?

If pandemic influenza starts, public health officials will provide more specific information through the media and websites. Now is the time to develop an emergency response plan. Prepare as you would for any emergency that affects large segments of society, such as blizzards. Keep a supply of essential supplies at home, such as food, water, medicine and a thermometer. Practice good health habits, including eating a balanced diet and getting sufficient rest. Get your annual flu shot.

What can businesses do to prepare?

Develop an emergency response plan to maintain operations during a pandemic. Identify essential functions and personnel needed to keep your business running. Work with your employees on understanding and practicing ways of reducing the spread of influenza in the work place. If they do catch the flu, employees should stay home and rest and follow instructions from healthcare providers and public health officials.

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Pandemic Influenza: Frequently Asked Questions Information for the Public

What is an influenza pandemic?

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the population. The virus causes serious illness and spreads easily person-to-person worldwide.

How is pandemic influenza different from seasonal flu?

Seasonal flu is caused by viruses that are already among people. Pandemic flu is caused by a virus that is new to people. Seasonal flu occurs every year in the winter. Pandemic influenza has happened about 30 times in recorded history. Pandemic influenza is likely to be more severe than seasonal flu and could affect a broader set of the population, including young adults.

Have there been influenza pandemics before?

Influenza pandemics have occurred throughout history. There were three influenza pandemics in the last century. The 1918 pandemic killed tens of millions of people worldwide. Deaths from the 1968-69 pandemic were about the same as for seasonal flu. The severity of a pandemic will depend on the virus that causes it. Increased travel and greater populations could speed the spread of pandemic flu. Better detection and medical treatment could lessen the effects. It is difficult to predict how the next pandemic will compare to the past.

What are the chances there will be another pandemic?

Pandemic influenza will occur again. It is difficult to predict when the next pandemic will occur and how severe it will be. Influenza viruses are always changing. Scientists are concerned that the bird flu in Asia could change causing a pandemic.

What is the government doing to prepare for a flu pandemic?

The Michigan Department of Community Health (MDCH) has prepared the State of Michigan Pandemic Influenza Plan which will be put into action in the event of a pandemic. The Plan includes initiatives to train personnel on how to respond during a pandemic and cope with the demands that are likely to be placed on them.

The United States government has started storing test vaccine and medicine. The U.S. is working with the World Health Organization and other countries to strengthen monitoring and response. Researchers are working to produce additional vaccine more quickly.

Public participation and cooperation will be important to response efforts. In a pandemic travel and public gatherings could be limited. Other emergency measures, such as voluntary isolation and quarantine might be needed. People can stay informed and be prepared as they would for any other emergency.

How much warning will we have if a pandemic starts?

Warning time will depend on where the new virus starts. New influenza viruses often originate in Asia. Many experts believe the worst recorded outbreak in 1918 started in the US. Warning time will also depend on how soon the virus is identified.

How fast would it spread?

It is likely to spread very quickly. Influenza is a contagious disease of the lungs. It spreads by infected people coughing and sneezing.

What strategies will help protect people?

Public health officials will take several actions to limit the spread of infection.

- Treating sick and exposed people with antivirals
- Isolating sick people in hospitals, homes or other facilities
- Identifying and quarantining exposed people
- Closing schools and workplaces as needed
- Canceling public events
- Restricting travel

In addition, people should protect themselves by:

- Getting seasonal flu shots
- Washing hands frequently with soap and water
- Staying away from people who are sick, and
- Staying home if they are sick

Could terrorist spread influenza viruses to create a pandemic?

Experts believe it highly unlikely that a pandemic influenza virus could be created by terrorists. Developing a pandemic influenza virus would require extraordinary scientific skill as well as sophisticated scientific equipment and other resources.

How worried should people be?

Preparing and staying informed are the best responses now. Currently there is no pandemic influenza in the US or the world. The US and other countries are preparing to respond to a pandemic and developing supplies of vaccine and medicines.

For more information on Pandemics:

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The Differences Between Ordinary and Pandemic Flu

There are a number of key characteristics which experts look for when deciding whether or not a particular flu virus is a potential pandemic threat. For an influenza virus to be capable of causing a pandemic, it must be able to; infect people not just mammals and birds, cause illness in a high proportion of those infected, spread easily from person to person, spread widely because the virus is significantly different from previously circulating flu viruses and be new so most people have little or no immunity to it. All previous flu pandemics exhibited these characteristics.

Ordinary Flu	Pandemic Flu
<ul style="list-style-type: none"> • Ordinary flu occurs every winter in the United States. • It affects 10- 20% of the U.S. population, causing around 36,000 deaths every year. • Globally, epidemics of ordinary flu are thought to kill between 500,000 to 1 million people every year. • Most people recover from ordinary flu within one or two weeks without requiring medical treatment. • Deaths are generally confined to ‘at risk’ groups including: <ul style="list-style-type: none"> ○ elderly people over 65 ○ people with health problems such as lung diseases, diabetes, cancer, kidney or heart problems ○ people whose immune systems are compromised due to HIV/AIDS or because they have a transplant ○ the very young. • The vaccine against ordinary flu is effective because the virus strain in circulation each winter can be fairly reliably predicted. • Annual vaccination, when the correct virus strain is fairly reliably predicted, and antiviral drugs are available for those at risk of becoming seriously ill. 	<ul style="list-style-type: none"> • Pandemic have occurred sporadically throughout history and can take place in any season. • It affects many more people than ordinary flu – a quarter or more of the population – and is associated with much higher rates of illness and death. For example, the worst flu pandemic last century – the 1918 Flu caused around 500,000 deaths in the US alone and up to 40 million deaths worldwide. • Pandemic flu, usually associated with a higher severity of illness and consequently a higher risk of death, represents a much more serious infection than ‘ordinary’ flu. • People of all age groups may be at risk of infection with pandemic flu. • A vaccine against pandemic flu will not be available at the start of a pandemic. This is because the virus strain will be completely new. It will be different from the viruses that circulated the previous winter, and not predictable in the same way. • Antiviral drugs may be in limited supply, their use depending on evidence of their effectiveness which will only emerge once the pandemic is under way.

BUSINESS PANDEMIC INFLUENZA PLANNING CHECKLIST



In the event of pandemic influenza, businesses will play a key role in protecting employees' health and safety as well as limiting the negative impact to the economy and society. Planning for pandemic influenza is critical. To assist you in your efforts, the Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklist for large businesses. It identifies important, specific activities large businesses can do now to prepare, many of which will also help you in other emergencies. Further information can be found at www.pandemicflu.gov and www.cdc.gov/business.

1.1 Plan for the impact of a pandemic on your business:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify a pandemic coordinator and/or team with defined roles and responsibilities for preparedness and response planning. The planning process should include input from labor representatives.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify essential employees and other critical inputs (e.g. raw materials, suppliers, sub-contractor services/products, and logistics) required to maintain business operations by location and function during a pandemic.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Train and prepare ancillary workforce (e.g. contractors, employees in other job titles/descriptions, retirees).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop and plan for scenarios likely to result in an increase or decrease in demand for your products and/or services during a pandemic (e.g. effect of restriction on mass gatherings, need for hygiene supplies).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determine potential impact of a pandemic on company business financials using multiple possible scenarios that affect different product lines and/or production sites.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determine potential impact of a pandemic on business-related domestic and international travel (e.g. quarantines, border closures).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Find up-to-date, reliable pandemic information from community public health, emergency management, and other sources and make sustainable links.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish an emergency communications plan and revise periodically. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement an exercise/drill to test your plan, and revise periodically.

1.2 Plan for the impact of a pandemic on your employees and customers:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Forecast and allow for employee absences during a pandemic due to factors such as personal illness, family member illness, community containment measures and quarantines, school and/or business closures, and public transportation closures.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement guidelines to modify the frequency and type of face-to-face contact (e.g. hand-shaking, seating in meetings, office layout, shared workstations) among employees and between employees and customers (refer to CDC recommendations).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Encourage and track annual influenza vaccination for employees.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evaluate employee access to and availability of healthcare services during a pandemic, and improve services as needed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evaluate employee access to and availability of mental health and social services during a pandemic, including corporate, community, and faith-based resources, and improve services as needed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify employees and key customers with special needs, and incorporate the requirements of such persons into your preparedness plan.

1.3 Establish policies to be implemented during a pandemic:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish policies for employee compensation and sick-leave absences unique to a pandemic (e.g. non-punitive, liberal leave), including policies on when a previously ill person is no longer infectious and can return to work after illness.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish policies for flexible worksite (e.g. telecommuting) and flexible work hours (e.g. staggered shifts).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish policies for preventing influenza spread at the worksite (e.g. promoting respiratory hygiene/cough etiquette, and prompt exclusion of people with influenza symptoms).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish policies for employees who have been exposed to pandemic influenza, are suspected to be ill, or become ill at the worksite (e.g. infection control response, immediate mandatory sick leave).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish policies for restricting travel to affected geographic areas (consider both domestic and international sites), evacuating employees working in or near an affected area when an outbreak begins, and guidance for employees returning from affected areas (refer to CDC travel recommendations).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Set up authorities, triggers, and procedures for activating and terminating the company's response plan, altering business operations (e.g. shutting down operations in affected areas), and transferring business knowledge to key employees.

1.4 Allocate resources to protect your employees and customers during a pandemic:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Provide sufficient and accessible infection control supplies (e.g. hand-hygiene products, tissues and receptacles for their disposal) in all business locations.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enhance communications and information technology infrastructures as needed to support employee telecommuting and remote customer access.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ensure availability of medical consultation and advice for emergency response.

1.5 Communicate to and educate your employees:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop and disseminate programs and materials covering pandemic fundamentals (e.g. signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (e.g. hand hygiene, coughing/sneezing etiquette, contingency plans).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Anticipate employee fear and anxiety, rumors and misinformation and plan communications accordingly.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ensure that communications are culturally and linguistically appropriate.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Disseminate information to employees about your pandemic preparedness and response plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Provide information for the at-home care of ill employees and family members.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop platforms (e.g. hotlines, dedicated websites) for communicating pandemic status and actions to employees, vendors, suppliers, and customers inside and outside the worksite in a consistent and timely way, including redundancies in the emergency contact system.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify community sources for timely and accurate pandemic information (domestic and international) and resources for obtaining counter-measures (e.g. vaccines and antivirals).

1.6 Coordinate with external organizations and help your community:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Collaborate with insurers, health plans, and major local healthcare facilities to share your pandemic plans and understand their capabilities and plans.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Collaborate with federal, state, and local public health agencies and/or emergency responders to participate in their planning processes, share your pandemic plans, and understand their capabilities and plans.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Communicate with local and/or state public health agencies and/or emergency responders about the assets and/or services your business could contribute to the community.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Share best practices with other businesses in your communities, chambers of commerce, and associations to improve community response efforts.