



What you should
know about
a flu pandemic.



An influenza (flu) pandemic spreads easily and rapidly through many countries and regions of the world.



Talk of an influenza pandemic has occupied the media of late. During the 20th century, the world faced three flu pandemics. The most deadly, the “Spanish Flu” in 1918 and 1919, killed over 20 million people.

Public health experts tell us that another flu pandemic could happen anytime. They also tell us that if we are prepared, we can reduce the number of people who become infected and the number who die.

And since pandemic flu spreads the same way as seasonal flu – through droplets contained in sneezes and coughs and by hand contact – basic precautions can greatly reduce its spread.

1. What is a pandemic?

A pandemic is distinguished by its scope. It becomes a worldwide epidemic, or *pandemic*, when a disease spreads easily and rapidly through many countries and regions of the world and affects a large percentage of the population where it spreads.

2. How does a flu pandemic start?

The viruses that cause flu are constantly changing. A pandemic starts when a new strain of flu virus emerges that is different from common strains of flu. Because people have no immunity to the new virus, it can spread quickly and infect hundreds of thousands of people. Pandemic flu strains often develop when an animal or bird virus mixes with a human virus to form a new virus.

3. What is the contagious period?

Flu can be contagious for 24 hours before any symptoms arise and for seven days after the onset of symptoms. This means you could spread the virus without knowing you are infected.

4. What is the difference between ordinary flu and pandemic flu?

A pandemic flu can appear very similar to seasonal flu. Because people have little or no immunity to a pandemic flu virus, the spread of the disease can occur more quickly than with an ordinary flu.

The symptoms are the same: fever, headache, aches and pains, tiredness, stuffy nose, sneezing, sore throat and cough. However, they can be much more severe with a pandemic flu and affect people who do not normally suffer as much from seasonal flu – such as younger, healthy adults. For example, in the 1918 and 1919 pandemic, the death rate was highest among healthy adults.

Both ordinary flu and a pandemic flu are spread in the same way. The flu virus is spread when someone with the flu coughs or sneezes, and droplets containing the virus come in contact with another person's nose, mouth or eyes. It can also be spread when people with the flu cough or sneeze into their hands and contaminate things they touch, such as a door handle. Other people can become infected if they touch the same object and then touch their face.

Here is what you should know about a flu pandemic.

Ordinary flu	Pandemic flu
Ordinary flu happens every year.	Pandemic flu happens only two or three times a century.
Ordinary flu is usually around from November to April – and then stops.	Pandemic flu usually comes in two or three waves several months apart. Each wave lasts about two to three months.
About 10% of Ontarians get ordinary flu each year.	About 35% of Ontarians may get pandemic flu over the course of an outbreak.
Most people who get ordinary flu will get sick, but they usually recover within a couple of weeks.	About half of the people who get pandemic flu will become ill. Most will recover, but it may take a long time. And some people will die.
Ordinary flu is hardest on people who don't have a strong immune system: the very young, the very old, and people with certain chronic illnesses.	People of any age may become seriously ill with pandemic flu, depending on the virus.
In a normal flu season, up to 500 Ontarians die of complications from the flu, such as pneumonia.*	During a flu pandemic, Ontario would see many more people infected and possibly many more deaths.
There are annual flu shots that will protect people from ordinary flu.	There is no existing vaccine for pandemic flu. It will take four to five months after the pandemic starts to develop a vaccine.
There are drugs that people can take to treat ordinary flu.	These same drugs may also help people with pandemic flu but we may not have a large enough supply for everyone and we will not know their effectiveness until the virus is identified.

*Kwong JC, Stukel TA, Lim J, McGeer AJ, Upshur REG, et al. (2008) The effect of universal influenza immunization on mortality and health care use. PLoS Med 5(10): e211. Doi:10.1371/journal.pmed.0050211



*Up to 35% of Ontarians may get
pandemic flu.*



Flu pandemics can attack and kill healthy young adults.

5. Will Ontario be affected?

Yes. With all the air travel between countries, a flu pandemic is likely to spread into all parts of the world, including Ontario.

The World Health Organization and public health experts around the world are watching carefully for the first signs of a flu pandemic so they can take steps to slow down its spread.

6. What will happen if a flu pandemic hits Ontario?

Once a pandemic flu virus arrives in Ontario, it will likely spread quickly. Many people will become ill, and there will be a lot of pressure on our health care services.

Depending on how widespread the flu pandemic is, our daily routines may be disrupted. For example, companies may have to close down some of their operations. Cities may decide to provide essential services only. Public health officials may cancel public gatherings, such as concerts and sporting events, where the flu virus can spread easily. They may close schools.

We cannot predict just how Ontario will be affected until we know how strong the virus is.



7. Who is most at risk?

We are all at risk of getting a pandemic flu virus. Pandemic flu will spread more quickly than ordinary flu because very few Ontarians will be immune. Some groups of people – such as the very young or very old – may be more at risk than others of getting seriously ill or dying.

But everyone must be careful and aware. The 1918 and 1919 flu pandemic infected and killed mainly healthy young adults in their 20s and 30s.

We won't know for sure who is most at risk until we know more about the virus.



8. How many people will fall ill? What kind of care will they need?

- Of the 35% estimated to get pandemic flu, roughly half will require a visit with their family doctor or nurse practitioner. The other half will need information and advice to help them take care of themselves at home.
- Depending on the severity of the symptoms, others may need to be admitted to hospital for care.

9. When will there be a treatment for pandemic flu?

There are drugs known as antivirals that can treat flu, but for them to be effective people have to start taking them very soon after they start to get sick – in some cases before the symptoms start.

Right now, Ontario has a stockpile of antiviral drugs for the province.

In the case of a flu pandemic, we will only know if Ontario's supply of antiviral drugs works when we know more about the specific strain. The number of people we'll be able to treat will depend on our supply of drugs at that time.

10. When will there be a vaccine for pandemic flu?

Once scientists analyze the pandemic flu virus we can begin to produce a vaccine that can treat Ontarians.

The faster we learn about a specific strain of the flu virus, the faster we can produce a vaccine that can help to prevent the spread of the flu. It's important to remember that it will take time to do this, but our best defence is being prepared for a pandemic in the first place.



Good hand hygiene is the best way to prevent the spread of all flu viruses.

11. How can I protect myself and my family from a flu pandemic?

If a flu pandemic spreads to Ontario, you can reduce your risk by doing the same things you do to protect yourself and your family from ordinary flu:

- Get your flu shot every year – the flu shot will not protect you from a pandemic flu virus, but it will protect you from getting ordinary flu, which could weaken your immune system or resistance to the pandemic flu.
- Wash your hands with soap thoroughly and often – good hand hygiene is the best way to prevent the spread of all flu viruses.
- Keep an alcohol-based sanitizer (gel or wipes) handy at work, home and in the car.
- Cover your mouth and nose with a tissue when you cough or sneeze.
- Stay home when you are sick.
- Avoid large crowds of people where viruses can spread easily.
- Reduce non-essential travel.
- Follow any instructions given by public health officials.

12. What is the health system doing to protect us from a pandemic?

The Chief Medical Officer of Health and the Ministry of Health and Long-Term Care are working with local public health units, primary care providers, hospitals, long-term care homes, home care providers – all parts of the health care system – to prepare for a flu pandemic. Our goal is to limit the spread of pandemic flu and provide the health services Ontarians will need.

We are:

- *monitoring* flu in Ontario and in the rest of the world
- *stockpiling* antiviral drugs and equipment
- *setting up* distribution systems so we can get drugs and protective equipment to where they are needed quickly
- *developing emergency plans* so we can maximize the number of health care providers and facilities able to provide care
- *developing information* for the public and health care providers
- *ensuring* we can supply a lot of vaccine quickly as soon as one has been developed.

We have set up communications systems that are focused, timely and accurate so we can provide regular updates to tell Ontarians how to protect and care for themselves and their families.



If you want more information about
pandemics or Ontario's pandemic plans
go to www.health.gov.on.ca/pandemic

For more information:
ServiceOntario INFOline 1 800 476-9708
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