

PANDEMIC INFLUENZA

Important information
for you and your family



NOVA SCOTIA

An influenza (flu) pandemic is currently being predicted by experts at the World Health Organization. This fact sheet describes pandemic influenza, the risk of it occurring in Canada, what makes it different from the 'ordinary' influenza we get every winter, and what the province is doing to prepare for a possible influenza pandemic.

What is pandemic influenza?

A pandemic is a rapidly spreading epidemic of a disease that affects most countries and regions of the world.

The symptoms of a pandemic influenza virus are similar to those of “ordinary” influenza, but are usually more severe.

Some of the differences between pandemic and ordinary influenza are listed in the table on the following pages.

How does an influenza pandemic start?

Influenza viruses are constantly changing, producing new strains and varieties. Pandemics occur when a virus emerges that is so different from previously circulating strains that few, if any, people have any immunity to it. This allows it to spread widely and rapidly, affecting many hundreds of thousands of people. A new pandemic virus may be the result of an animal virus and a human virus mixing to produce a new strain. The animal virus usually comes from birds.

What is the difference between pandemic influenza and ordinary influenza?

Ordinary influenza

- occurs every year during the winter
- affects up to 10 per cent of the population

For most people, it is an unpleasant but not life-threatening infection, but can be life threatening for those with high-risk conditions.

The very young, the very old, and people with certain chronic illnesses are most at risk of serious illness.

Annual vaccination is available for those at risk of serious illness.

Antiviral drugs are available to treat those at special risk.

Pandemic influenza

- occurs about three times each century—at any time of the year
- may affect around 15 to 35 per cent of the population

It is a more serious infection for everyone.

People of every age may be at risk of serious illness.

A vaccine won't be available at the beginning of a pandemic. When it does become available, the aim will be to immunize the whole population as rapidly as possible as soon as vaccine supplies become available.

Antiviral drugs are likely to be in limited supply and will have to be used for groups key of people: for example, treatment of individuals ill with influenza, health-care workers, and essential care workers required to care for the sick and keep the province running.

How likely is an influenza pandemic?

Three pandemics occurred in the last century (see opposite page). Scientists predict that another pandemic will happen, although they cannot say exactly when that will be.

How likely is it that pandemic influenza will spread to Canada?

The World Health Organization is on constant lookout for the first signs of a pandemic emerging so steps can be taken to try to contain it. However, with the numbers of people now flying all around the world, the chances of it reaching Canada are much increased since the last pandemic in 1968. Once an influenza pandemic affects other countries, it will almost certainly reach Canada.

Pandemics during the last century

Spanish Flu

Year: 1918-1919

Estimated deaths: 20-40 million (global)

Age group most affected:

Healthy young adults (20-50 years)

Asian Flu

Year: 1957-1958

Estimated deaths: 1 million (global)

Age group most affected:

Very young and very old

Hong Kong Flu

Year: 1968-1969

Estimated deaths: 1-4 million (global)

Age group most affected:

Very old and those with underlying medical conditions

How will an influenza pandemic differ from an outbreak of ordinary influenza?

It is difficult to say just how serious a pandemic will be. It depends on how easily the particular virus spreads, which age groups are affected most, the severity of the symptoms it produces, and how many deaths it causes.

It is likely that pandemic influenza will affect far more people than ordinary influenza. Around a quarter of the population could have been affected by the end of the pandemic (which may occur in two waves of infection several months apart, each lasting about two or three months). It is also likely to be a more serious illness.

And the vaccine against ordinary influenza will not protect against pandemic influenza.

What will this mean for Canada?

Once in Canada, an influenza pandemic will spread across the country in a matter of weeks and may cause

- high levels of influenza
- intense pressure on health services
- disruption to many aspects of daily life
- many deaths

In anticipation of such an occurrence, the Canadian government has developed the Canadian Pandemic Influenza Plan (see www.phac-aspc.gc.ca). This recognizes the exceptional demands that are likely to be placed on the health system.



How likely am I to catch the strain of influenza?

You are more likely to catch it than ordinary influenza, because it spreads rapidly and very few people will have any immunity to it. Everyone will be at risk. Some groups of people may be more at risk than others, but every pandemic is different. Until the virus starts spreading, it is very difficult to predict who these groups might be.



With ordinary influenza those groups of people more likely to become seriously ill include

- the very young
- people over 65 years of age
- people with existing medical conditions such as lung diseases, diabetes, cancer, or kidney or heart problems
- people who have weakened immune systems because of certain treatments, or illnesses such as HIV/AIDS.

These may be different in an influenza pandemic.



Won't there be a vaccine to prevent pandemic influenza?

Influenza vaccines have to be made specifically for the particular virus causing an epidemic or pandemic. That is why the annual influenza vaccine changes each year. The vaccines also take several months to produce. Steps will be taken to produce a vaccine to protect against a new pandemic strain of influenza as quickly as possible, but a vaccine is unlikely to be available for the first wave of the illness.

Depending on the timing of the second wave of an influenza pandemic, scientists may be able to develop a vaccine so that

Antivirals

Antiviral drugs can be used to treat pandemic influenza, but their use has several limitations:

- To be effective, they have to be given very quickly after symptoms start.
- It would not be possible to give everybody antiviral drugs, and some will not need them.
- It is also difficult to identify those groups of people who will develop more serious illness and who need them most.

people can get vaccinated. Preparation and research are already underway, which should help towards making a vaccine available as quickly as possible.

Aren't there drugs to treat pandemic influenza?

There are antiviral drugs that may be effective in treating pandemic influenza, but their use before or during a pandemic is not straightforward. Canada is taking steps to ensure that they are available. In the event of a pandemic, they will be used in the most effective way, based on how the disease develops.

- It is impossible to measure the effectiveness of these drugs until the virus is circulating.
- The pandemic influenza virus may develop resistance to the antiviral drugs.
- How many people we can treat will depend on when an influenza pandemic occurs.

We are already building a stockpile of antiviral drugs in Canada

If it arrives in Canada, how can I protect myself and my family against catching it?

The virus is spread when people cough or sneeze. There are some basic measures that you can take to reduce the risk of infection. Face masks will have little place in preventing the spread of the virus, but you can

- Maintain good hygiene—washing hands protects against picking the virus up from surfaces and passing it on. Proper handwashing involves washing with soap and water, or an alcohol-based rub, for at least 30 seconds.
- Cover your mouth and nose when coughing or sneezing with a tissue or your sleeve.
- Avoid large crowds of people whenever possible.

Key facts about pandemic influenza

Until the virus is identified it is not possible to make a vaccine.

Pandemic influenza will spread very rapidly because people will have no immunity.

Pandemic influenza is likely to be more severe than ordinary influenza.

How will I know if pandemic influenza has reached Canada?

The World Health Organization has an international system in place to watch out for pandemic influenza. The Government of Canada has a plan (*the Canadian Pandemic Influenza Plan*), which will be put into action. It includes work undertaken now to improve our preparedness. If it looks as if a pandemic is going to reach Canada, the government will issue warnings and work with the media to advise on the best course of action that people can take.

Groups at particular risk won't be known until the disease starts to circulate—they may be different from those in ordinary influenza years.

Antivirals are being stockpiled, but they have limitations—their effectiveness won't be known until the virus is circulating.

MORE INFORMATION

If you would like more information, visit

www.gov.ns.ca/pandemic

www.phac-aspc.gc.ca

If an influenza pandemic occurs, it will be announced on the television and radio and in the newspapers.



Health