

PANDEMIC INFLUENZA

Important information for Nova Scotians



Frequently Asked Questions

What is pandemic influenza?

Pandemic influenza is influenza that spreads rapidly to affect almost all countries and regions around the world. Influenza pandemics occur when a new strain of influenza virus appears that most people have no immunity to. Influenza pandemics generally affect more people, cause more severe illness, and result in much more serious disruption to society than the “ordinary” influenza we see in Canada each winter.

How often do influenza pandemics occur?

Influenza pandemics have occurred every few decades. There were three influenza pandemics in the last century.

What happened in the previous pandemics?

Previous pandemics affected large numbers of the population, caused many deaths, and resulted in severe economic and social disruption.

Previous Influenza Pandemics

Spanish Flu

Year: 1918-1919

Estimated deaths: 20-40 million (global)

Age groups most affected: Healthy young adults (20-50 years)

Likely origin: Uncertain

Asian Flu

Year: 1957-1958

Estimated deaths: 1 million (global)

Age groups most affected: Very young and very old

Likely origin: China

Hong Kong Flu

Year: 1968-1969

Estimated deaths: 1-4 million (global)

Age groups most affected: Very old and those with underlying medical conditions

Likely origin: China



When is the next pandemic due?

No one knows for sure. Intervals between previous pandemics have varied with no recognizable pattern. Also, a pandemic may not follow the usual seasonal pattern of ordinary influenza and could occur at any time of the year.

What is the difference between “ordinary” influenza and pandemic influenza?

Ordinary influenza is the influenza that circulates most of the time and produces the outbreaks we see in Canada every winter. For most people this is an unpleasant though not life-threatening illness. The strains of virus causing this type of influenza change from year to year, but can be fairly reliably predicted so that an appropriate vaccine can be prepared each year. Pandemic influenza is caused when a new strain of influenza virus emerges that is markedly different from recently circulating strains. These changes cannot be predicted in the same way as the changes in ordinary influenza viruses, so a vaccine specifically against the new strain cannot be developed in advance.

How will we know a pandemic has started?

The World Health Organization monitors influenza activity around the world. It will announce the start of a pandemic and will inform governments.

Can a pandemic be prevented at an early stage?

Not likely. Efforts will be made internationally to try to control a pandemic at an early stage. However, influenza is highly infectious. Whole populations will be susceptible to the new virus. It is likely to continue to spread despite efforts to contain it.

How will it spread to Canada?

Most likely it will spread to Canada through people catching the infection in an affected part of the world and developing symptoms after arriving in Canada.



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How will we know it has reached Canada?

Canada has a well-developed surveillance system and its own network of laboratories that refer unusual viruses to the National Microbiology Laboratory (located in Winnipeg) for precise identification. This will help us identify the pandemic strain as early as possible.

How long will the pandemic last in Canada?

Pandemic influenza will be widespread in Canada within about 10 weeks of its first arriving in the country and will last for about 2-3 months. There may be a second wave of infection a few weeks or months later. These times are estimates and may change as more information becomes available.

Who will be at risk during an influenza pandemic?

Everyone is potentially at risk of catching influenza during an influenza pandemic. Few, if any, will have immunity to the virus. Certain groups or age groups may be at greater risk than others, but we will not know for certain who they will be until the virus starts circulating.

How many people in Canada are likely to catch influenza during the pandemic?

From past experience, around 15 to 35 per cent of the population is likely to develop influenza, although it could be more.

Are many people likely to die?

Maybe. This will depend on several factors such as how infectious the virus proves to be, which age groups are mainly affected, how soon vaccine is available and in what quantity, and how effective antiviral drugs are in treating people. It is estimated that a pandemic could lead to several million deaths worldwide.



How will an influenza pandemic affect health services?

An influenza pandemic will place considerable pressure on health and social services. An increased number of patients with influenza will require treatment both in the community and in hospital, there will be a reduced workforce due to illness, and the general disruption that is likely to occur. The province's experience with past provincial emergencies, such as Hurricane Juan, will help planning.

How will an influenza pandemic affect business?

Each pandemic is different, and the impact on business cannot be fully established until more is known about how a pandemic is evolving. Absences from work will depend largely on the age group most affected by the virus. A quarter or more of the working population may have to take days off work at some stage during the pandemic. In addition to absence due to illness, some workers may need time off to care for family members or may have difficulty getting to work.

How will other sectors of the community be affected?

A influenza pandemic will affect all sectors of the community through the illness itself and the consequences of staff sickness, travel restrictions, reduced transport and deliveries, and so forth.

Will people be prevented from travelling?

Perhaps. If a pandemic starts outside Canada, people are likely to be advised not to travel to affected areas or attend international gatherings such as large conferences and sports events. Later, depending on how the pandemic develops, it may be necessary to reduce the movement of people within Canada to prevent or delay further spread of the virus.



What contingency plans does Canada have for an influenza pandemic?

Canada was one of the first countries to have an influenza pandemic contingency plan in place. The plan provides the overall framework for an integrated nation-wide response, escalating as a pandemic threat increases and then as the pandemic evolves. Canada's plan, as well as Nova Scotia's, seeks to reduce the health impact of a pandemic and the possible disruption it may cause to essential services and people's daily lives. This will be through the best application of measures such as antiviral treatment and immunization (when this becomes available) and preparing the province and the district health authorities as well as possible.

What preparations are being made in Canada?

Publishing the plan is an important step in preparing for a pandemic. The government is also building up a stockpile of antiviral drugs and working with the World Health Organization, international partners, industry, and others to put us in the best possible position to develop a pandemic influenza vaccine should the need arise. Improving our preparedness is a continuous process, putting into place the actions described in the plan.

What are antiviral drugs?

Antiviral drugs are special medicines for the treatment of certain viral infections. These drugs are likely to play an important role in treating pandemic influenza. Treatment with antiviral drugs can be expected to shorten the duration of the disease, alleviate symptoms, and reduce complications and serious illness. They can also be used to prevent influenza, particularly in the early stages of an influenza pandemic.

Does Canada have a stockpile of antiviral drugs?

Yes. Canada has a stockpile of antiviral drugs for emergency use and is building this up in case of an influenza pandemic.



Do antivirals have side effects?

Maybe. The antivirals that are likely to be of most use in a pandemic are generally well tolerated, but on occasion they can cause nausea and vomiting.

Why don't we make a vaccine against pandemic influenza now?

The virus will be new and not predictable in the way that ordinary influenza viruses are. Preparatory work is being undertaken to be in the best possible position to produce vaccine against a pandemic strain as quickly as possible when the need arises. But development of a vaccine will take time. A vaccine will not be available in the early stages of a pandemic.

How long would a vaccine take to produce?

About four to six months. There may be further delays due to unexpected technical difficulties. Once the virus has been identified and a suitable vaccine developed, then large-scale production will begin as quickly as possible.

Can we be sure Canada will be able to obtain enough vaccine for its own needs?

We will need more vaccine than we would usually use for annual vaccinations. Canada is therefore discussing its requirements with manufacturers.

Does this mean that certain people will get the vaccine before others?

Most likely. Priority may have to be given to certain groups. Health-care workers and key workers in other essential services may need to be vaccinated first, because we will need to maintain health and other essential services. Those groups most at risk of serious illness will be next to receive the vaccine as supplies increase.



Who will make the decision on prioritizing?

The government will make the decision based on advice from the Public Health Agency of Canada, medical, clinical, and public health experts, ethicists, and emergency planners.

Are there any other precautions people can take now?

Yes. What we already do now to reduce the impact of ordinary flu will help in a pandemic—simple measures such as hand washing, and staying home from work when sick. During a pandemic, more precautions would need to be taken such as limiting non-essential travel and discouraging mass gatherings of people.

How will we know what to do?

Watch for regular updates on the television and radio and in the national press. These will tell you what is happening and what to do. People with mild to moderate symptoms will be advised to stay at home. A helpline will be available for advice.

How can I reduce my risk and protect myself and my family?

- Cover your mouth and nose with a tissue or shirtsleeve when you sneeze or cough.
- If you blow your nose, carefully throw the tissues away into the garbage.
- Wash your hands often—especially after coming in from outside.
- Avoid touching your eyes, nose, or mouth.
- Avoid mass gatherings as much as possible.
- Stay at home when you are sick—if you have a cough and a fever, it is best to rest at home, take medicines to relieve the symptoms, and drink plenty of fluids. This will speed your recovery and help prevent the spread of infection. If you need medical advice or assistance, phone your doctor or local Public Health Services.



If I get sick, will I be quarantined?

- If you are ill with pandemic influenza, you may be isolated either at home or in the hospital. If you are admitted to the hospital, you will be placed either in a room by yourself or on a ward with other influenza patients. The reason for this is to stop the spread of the virus to other patients who have been admitted to the hospital for reasons other than influenza. The health-care workers looking after you will wear a gown, gloves and a mask in order to protect themselves from the virus.
- If you have pandemic influenza but do not require admission to the hospital, you will be asked to remain at home until your symptoms resolve. By avoiding contact with other people, such as at work, at movie theatres or at sports events, the spread of the virus in the community will be limited.

Why are experts concerned about an influenza pandemic now?

Experts believe we should be ready for a pandemic to emerge at any time. However, the avian influenza (often called “bird flu”) currently affecting poultry and some people in Asia has increased their concern.

What is avian influenza?

Avian influenza—bird flu—is infection caused by a strain of influenza virus that usually infects wild or domesticated birds, particularly poultry. It occasionally crosses the species barrier and infects people.

How does avian influenza affect people?

Until recently, it was thought that avian influenza only rarely affected people and caused only mild disease. Since 1997, however, more severe illness has occurred in people infected with avian influenza strains, and one strain of bird flu—H5N1—has been associated with a very high death rate when people have been affected.



Why are we concerned about avian influenza?

Experts believe a pandemic virus may emerge from an avian influenza virus, for example, if it mixes with a human influenza virus, creating a new virus that is highly infectious for people.

The avian (bird) influenza that is affecting poultry flocks in Europe and Asia at the present time has increased experts' concern. The avian influenza virus (H5N1) that is causing these outbreaks has affected some people, causing serious illness. Scientists fear that this virus may change with time to make it a more serious threat for people and that it could start another pandemic.

Is there a vaccine for avian influenza?

At the moment there is no vaccine for people. An H5N1 vaccine is being developed against the current H5N1 viruses. However, as these viruses will have to change to cause a pandemic, this vaccine may not then be effective.

Is there a treatment for avian influenza?

Antiviral drugs are helpful in treating avian influenza. To be effective, antiviral drugs have to be taken within 48 hours of the symptoms starting. The government has a stockpile of antiviral drugs for emergency use and is building up this stockpile in the event of a pandemic.

If you would like more information, visit:

www.gov.ns.ca/pandemic

www.phac-aspc.gc.ca

