

## Pandemic Influenza

### Question to the editor

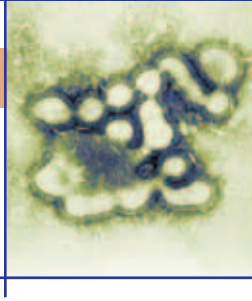
#### *How is influenza spread and how can I protect myself and my family?*

Infected people transmit the influenza virus for seven days or longer, beginning the day before their first symptoms begins to appear. Infections occur through proximity to ill people when they are sneezing, coughing or talking, or through touching your nose, mouth or eyes after touching infected people or objects where the virus has landed. The influenza virus can survive for up to 24 to 48 hours on hard surfaces (doorknobs, telephones, and keyboards), 8 to 12 hours on paper/tissue/cloth, and approximately 5 minutes on unwashed hands. The virus itself can be deactivated on surfaces with standard disinfectants, and on your hands with soap and/or commercial hand sanitizers. Consider the following as important personal protection strategies:

- Wash your hands frequently with soap and water and/or commercial hand sanitizers – **the importance of hand washing cannot be overemphasized**
- Cover your mouth with a tissue when coughing or sneezing and dispose of the tissue carefully
- Clean hard surfaces around your home and office with standard germicidal products, such as Lysol brand disinfectant or household bleach
- Avoid shaking hands
- Do not share drinks, cutlery, cigarettes or other personal items
- Avoid large gatherings or crowded spaces during a pandemic

When caring for ill family members and friends at home, caregivers should employ the following strategies to protect themselves from infection:

- Frequent and proper handwashing
- Separating the personal items of infected people, such as towels and bed linens
- Ensure scrupulous cleaning of household items that ill persons have come into contact with, such as telephones and bathroom fixtures



### Preparations for a pandemic

As concern about an influenza pandemic escalates around the world, York Region is committed to transparency in planning initiatives and the ongoing provision of information and guidelines regarding health and safety in the face of a health emergency.

World health experts are warning of a global influenza pandemic that would have a widespread impact. It is this advanced warning system that has allowed governments worldwide to plan for the preparedness of their citizens and the continuity of essential services.

#### *What is pandemic influenza?*

Pandemic influenza occurs when an influenza (flu) virus undergoes genetic changes that give it the capability to infect human beings on a global scale, all or most of whom have no immunity. Experts believe that the H5N1 virus, also known as the avian or 'bird' flu which is currently affecting both animals and human beings in Asia could trigger the next global influenza pandemic.

With increases in global transportation, new influenza viruses would spread rapidly, overwhelm societies, and cause severe illness and death across age groups. Health experts estimate that such an event could cause between 133,000 and 311,000 people to become ill in York Region alone.

This newsletter is prepared on behalf of the Commissioner of Health Services and Medical Officer of Health for York Region. It will be distributed periodically throughout the year and is edited by Emergency Planning Specialist, Sandra Vessel. It is intended to facilitate communication between frontline staff and the Health Services Control Group regarding emergency preparedness. This issue focuses on personal preparedness for an influenza pandemic.

## What is happening on the global scene?

The influenza pandemic is expected to originate in Asia where the H5N1 virus (avian influenza) is currently endemic (widespread) in the bird population of 11 countries and more than 150 million domestic poultry and numerous migratory birds have been destroyed in an unprecedented attempt to slow the spread of the virus. **Since late July 2005, both Russia and Kazakhstan have reported outbreaks in poultry as well as in wild birds.**

As of September, 2005 there have been 114 laboratory confirmed human cases and 59 deaths from H5N1 in four countries; Vietnam, Cambodia, Thailand, and Indonesia. Thus far, most humans have contracted the disease directly from infected birds.

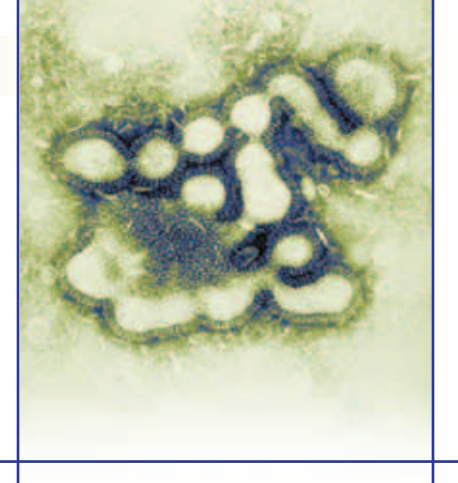
There has **not been efficient** human-to-human transmission reported, which is recognized as a condition to be met before the virus has the ability to trigger a pandemic in the human population.

## York Region's preparations for a pandemic

Feedback from regional employees following our response to the SARS crisis has resulted in the recognition of the importance of addressing the health and safety of our staff as one part of the Region's planning process. A Health and Safety planning sub-committee has been established with the goal of promoting both the physical safety and psychosocial well-being of regional staff during any emergency response. Planning is underway to ensure all staff are appropriately supported at all stages of an emergency by conducting site inspections and providing ongoing two way communication and education to staff on relevant health and personal protective safety issues including preventative (and critical incident) stress management strategies.

### Members of the Health & Safety Committee, Preparedness Phase:

- Teresa DuCroix, Chair – Corporate Services
- Wendy Kirkos, Co-Chair – Manager, Public Health
- Brian Hall – Manager, Emergency Medical Services
- Debbie Hinton – Public Health
- Robert Kerr – Emergency Medical Services
- Ann Koch – Manager, Corporate Services
- Mona Hughes – Public Health
- Gloria Kostiuik – Public Health
- Marg McGibbon – Manager, Public Health
- Nancy Paterson – Manager, Corporate Services
- Lee Snow – Long Term Care
- Irene Wu-Lau – Corporate Services



## Antiviral drugs for protection of front-line staff

One of the strategies to protect front-line health care workers in the event of an influenza pandemic could be the use of antiviral medications. Antivirals such as Tamiflu (oseltamivir) are used in both the prevention and treatment of influenza infection. When these capsules are taken within 48 hours of the onset of symptoms, they may shorten the duration of the illness, decrease virus shedding (spread) to the environment around the patient and decrease the possibility of complications. Antivirals inhibit the ability of the virus to reproduce but do not provide immunity against the virus. Protection is virtually immediate and lasts as long as the medication is being taken.

The federal and provincial governments are stockpiling Tamiflu to be used in the event of pandemic influenza, as it is expected that these medications will be in high demand and short supply. Due to these factors, priority groups for receipt of antivirals have been developed in an effort to maintain the integrity of health care, public health and essential services. Priority groups include front-line health care workers, emergency responders (such as EMS, fire and police), public health workers and persons who have been hospitalized due to severe influenza.

Antiviral drugs may be contraindicated in some people who have chronic illness, are taking other medications, or are pregnant or breastfeeding.



## What about a vaccine?

When a vaccine becomes available (3 to 5 months after the pandemic emerges), it will be the primary public health initiative to save lives, and will be administered according to the same priority groups described above. Individuals may need up to two separate doses of vaccine approximately one month apart in order to mount a sufficient immune response.

Every available staff may be needed to assist in mass clinics to administer vaccine to the 890,000 residents of York Region. In anticipation, now would be an appropriate time for public health staff – particularly those who are qualified to administer vaccines - to **check your Hepatitis and Tetanus status** with your physician.

Health experts are also urging people to get their regular seasonal flu shot. Without this protection, it is possible for an individual to simultaneously acquire both the regular circulating human influenza and the pandemic influenza. This combination gives the viruses an opportunity to mutate into a new, more deadly virus.

**WATCH FOR INFORMATION ON THE DATES AND LOCATION OF A FLU CLINIC NEAR YOU!**

## What are the symptoms of influenza?

The influenza A virus infects the respiratory tract (nose, throat, and lungs). A sudden fever and cough are the main indicators for influenza when it is prevalent in the community. With adequate fluids and bed rest, most patients recover from influenza without serious complications. Their temperature returns to normal over six days, but respiratory symptoms may persist longer. There can be lingering fatigue and weakness for up to six weeks.

Persons living with chronic lung or heart conditions, compromised immune systems, pregnant women in the second/third trimester and children two years and younger may be at greater risk of developing complications from the influenza virus. If you or someone you know is in one of these higher risk categories, it may be advisable to consult with your health care provider on how to protect yourself.

### Symptoms of Influenza A

- Sudden high fever (38°C)
- Severe muscle aches and weakness
- Dry cough
- Stuffiness or runny nose
- Headache
- Fatigue
- Sore throat
- Diarrhea and vomiting in children

## What is the difference between a cold and influenza?

Influenza and the common cold both affect the respiratory system, but are caused by different viruses. They share similar symptoms, and it can be difficult to differentiate between the two. However, influenza tends to be more debilitating than the common cold, as symptoms such as fever, body aches, extreme fatigue, and cough are much more severe and last for a longer period of time.

Colds are usually milder than influenza, and are more likely to cause a runny or stuffy nose. Colds generally do not result in serious health problems, such as pneumonia, bacterial infections, or hospitalizations. (Source – Centre for Disease Control June 2005)