

Pandemic (H1N1) 2009 Update



Update – September 3, 2009

The World Health Organization has declared a global pandemic of H1N1 influenza and the level of influenza pandemic alert is Phase 6. This reflects the spread of the disease worldwide, not the severity of illness. The WHO considers the severity of the influenza pandemic to be moderate.

Global Information

The World Health Organization reported on August 28, 2009 that there had been over 209,438 laboratory confirmed cases of pH1N1 reported by 177 countries. At that time, at least 2,185 deaths had been linked to the virus.

Many countries, including Canada, have stopped counting all individual cases of pH1N1. Therefore, the number of cases reported is significantly lower than the number of individuals affected by the virus.

Southern Hemisphere

- Infection rates of pH1N1 are now declining in most of the Southern Hemisphere.
- This influenza season, pH1N1 was the dominant strain of influenza circulating in the Southern Hemisphere.
- Generally, in the Southern Hemisphere the effects of pH1N1 appear to be slightly worse than a normal influenza season; pH1N1 has resulted in an increased number of hospitalizations requiring respiratory critical care.

North America & Europe

- Overall, pH1N1 infection rates are declining.
- The virus continues to spread in communities across North America and Europe.

Asia

- Areas in Tropical Asia are currently reporting increased pH1N1 illness. This is a time when the usual seasonal influenza peaks in this region.
- In Japan, influenza activity has risen above normal levels for this time of year, which has signaled a very early beginning to the annual flu season.

At Risk Groups:

Indigenous peoples in several countries (Canada, U.S., Australia and New Zealand) appear to be at increased risk for hospitalizations and deaths because of pH1N1 infection.

If they become infected, pregnant women are vulnerable to complications from pH1N1 infection.

People with medical conditions (such as respiratory disease, asthma, cardiovascular disease, diabetes and immunosuppression) are at increased risk of severe illness and death if they become infected with pH1N1.

Anti-viral Resistance:

Worldwide, there have been 12 known cases of oseltamivir resistant pH1N1 virus reported to the WHO. There is no evidence of spread of oseltamivir resistant pH1N1 from person to person.

National Information

Pandemic (H1N1) 2009 influenza activity is currently decreasing across Canada. The Public Health Agency of Canada has reported as of August 22, 2009, 1441 hospitalizations and 72 deaths among Canadian lab confirmed cases of pH1N1 (see Table 1).

While the virus is generally reported to cause mild illness among affected Canadians, a number of serious cases of pH1N1 have been reported among First Nations peoples and pregnant women. Aboriginals and pregnant women appear to have higher morbidity and mortality rates than the general population.

Table 1: Hospitalizations and deaths among Canadian cases of pH1N1 influenza by province.

Province	Hospitalizations	Deaths
British Columbia	42	4
Alberta	126	7
Saskatchewan	23	4
Manitoba	217	7
Ontario	353	23
Quebec	591	25
New Brunswick	2	0
Nova Scotia	17	1
Prince Edward Island	1	0
Newfoundland	3	0
Yukon	0	0
Northwest Territories	4	0
Nunavut	62	1
TOTAL	1441	72

Accurate as of August 22, 2009.

Provincial Information

Influenza activity in Ontario has been decreasing since June. ILI rates in Ontario still remain above what is expected for this time of year. The pH1N1 virus continues to spread within communities in Ontario and 34 Health Units have reported laboratory confirmed cases of pH1N1. The pH1N1 virus is the primary strain of influenza circulating in Ontario at this time.

In the majority of Ontario cases illness caused by pH1N1 was mild. However, 367 people with the virus have been hospitalized and 23 people infected with the virus have died (as of September 3, 2009).

- pH1N1 has a population based mortality rate of 0.18 deaths per 100,000 Ontarians
- pH1N1 has a population based hospitalization rate of 2.79 admissions per 100,000 Ontarians

Ontario has moved towards more focused testing for this virus; health care providers have been asked to only have tests performed on patients requiring hospitalization and on patients at high risk of complications from the flu. Therefore the current case counts likely underestimate the true number of individuals that have been infected with the pH1N1 virus. As of August 22, 2009, a total of 4,053 laboratory confirmed cases of pH1N1 have been reported in Ontario.

Ontario now reports cases of pH1N1 on a weekly basis. The MOHLTC produces weekly flu bulletins which provide surveillance information on influenza activity within the province. Flu Bulletins may be accessed online at http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_08/flubul_mn.html

Local Information

4 confirmed cases of pH1N1 influenza have been reported in Peterborough County/City. One of these cases was hospitalized for this illness, but has since been released. Confirmed cases of pH1N1 have also been reported in neighbouring Health Units.

Surveillance of local pharmacies, schools and family physicians indicates that there has not been a significant increase in flu-like illnesses in the community since the emergence of the pH1N1 virus.

There has been no significant increase since the pH1N1 virus emerged on April 21, 2009 in the number of people visiting the local PRHC emergency department with respiratory symptoms, fevers, or flu-like illnesses. Visits to the local PRHC emergency department for respiratory symptoms or influenza-like illnesses have been decreasing since this spring (see Figure 1).

In the past two weeks (August 21, 2009 – September 3, 2009), on average the PRHC emergency department was visited by 4 patients each day with a fever or flu-like illness, and 15 people each day with respiratory symptoms, and 1 person every week with symptoms of a febrile respiratory illness. Over the past two week the PRHC emergency department had on average 197 visits per day.

pH1N1 Vaccine

In preliminary discussions, the province of Ontario estimates that it will be able to provide public health units with vaccine by the third week of November. The amounts are still to be determined. The vaccine will likely require two doses to be effective and will likely require a minimal interval of at least 21 days between doses. While we are awaiting official word, health unit staff are preparing for the possibility of mass vaccination of Peterborough residents, starting as early as the third week of November. It is hoped that we will be able to engage local partners, such as hospitals, physicians and other health service providers, in reaching as many of the eligible residents who wish to receive vaccine as possible. Recommended priority groups will be determined nationally and approved provincially, and may evolve over time, depending on the epidemiology of the disease. We will keep you posted on vaccine developments over the coming weeks and months.



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