

# Pandemic (H1N1) 2009 Influenza A Situation Update for Partners

## Simcoe Muskoka District Health Unit

October 16, 2009

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The Ministry of Health and Long-Term Care has released guidelines for the management of influenza-like illness (ILI) during Pandemic (H1N1) 2009 for emergency departments, and ambulatory care and long-term care settings. [Here is the link to these guidance documents](#). The guidance documents include information on:

- Risk of infection and complications
- Prevention
- Infection prevention & control/Occupational health & safety
- Clinical assess, diagnosis, management & treatment
- Lab testing
- Special considerations for pregnant women

Community physicians, long-term care homes and the health unit are starting the first phase of this year's influenza immunization program with the delivery of seasonal influenza vaccine to the two key target groups. All indications are that we are still on target to begin pH1N1 flu vaccination in early November. There is a possibility that some supplies of pH1N1 vaccine could arrive in late October and may be made accessible to high-risk patients. See the Vaccine section for details.

We are working to communicate information to the public through media channels, our website and our phone lines to clarify who gets what vaccines, when and why. We have also reinstated our pH1N1 email address to support prompt access to answers to your questions you may have about pH1N1. Please don't hesitate to contact us at [QandAFlu@smdhu.org](mailto:QandAFlu@smdhu.org). (Please note that this is not an email for public use. It has been reserved to respond to partner inquiries/feedback).

You will find a link to the [previous biweekly updates](#) on our website. We will continue to work with and communicate to partners through regular channels, where they exist, to support ongoing planning and updates. If you have questions please contact your regular liaison at the health unit or call *Your Health Connection* at 721-7520 or 1 877-721-7520.

Sincerely,

Dr. Charles Gardner  
Medical Officer of Health

## **Current Situation**

**World** – Pandemic H1N1 (pH1N1) 2009 influenza virus continues to be the predominant circulating strain of influenza, both in the northern and southern hemisphere. There have been no significant antigenic or genetic changes detected in the pH1N1 virus. Antiviral susceptibility testing indicates that the pH1N1 virus remains sensitive to the antiviral drugs oseltamivir and zanamivir, but is resistant to amantadine and rimantadine. Antigenic and genetic testing suggest that seasonal influenza vaccination will provide little to no protection against pH1N1.

While pH1N1 is generally considered a mild disease at the community level, it has had serious consequences at the acute end of the disease. Critical illness can occur rapidly after hospital admission and often requires prolonged use of mechanical ventilation. Recently published data from Australia and New Zealand suggest that impacts on ICU resources in a given region may peak approximately 4 to 6 weeks after the first confirmed ICU admission, with up to 1 in 5 ICU beds occupied by patients with pH1N1. Additional ICU workload demands of 5 per cent overall may continue for several weeks.

In the temperate regions of the northern hemisphere, influenza-like-illness (ILI) activity levels have continued to increase marking an unusually early start to fall and winter influenza season in many countries. In the United States, most regions are reporting widespread influenza activity; however, the proportion of deaths attributed to pneumonia and influenza remains below the epidemic threshold. In the temperate regions of the southern hemisphere, influenza activity has largely subsided or continues to decrease substantially. In the tropical regions of the Americas and Asia, influenza virus transmission persists; however influenza activity remains variable.

**Canada/Ontario** – In Canada, overall influenza activity continues to increase and remains high for this time of the year. British Columbia has started to see widespread influenza activity in many areas, with nearly 15 per cent of laboratory influenza tests positive for flu and eighteen ongoing influenza outbreaks. The national hospitalization rate is 4.5 per 100,000 people with the highest rates in children aged less than 15 years of age (10.6 per 100,000). In comparison, the national mortality rate was 2 per 1,000,000 people; those 45 and older had the highest mortality rate (3.4 per 1,000,000). One in five pH1N1 cases requiring hospitalization were admitted to the intensive care unit (ICU) and one in ten required ventilation. ICU admission rate and ventilation rate are highest among children under five years of age (1.6 and 1.1 per 100,000, respectively).

The number of hospitalizations and deaths attributable to seasonal influenza varies from year to year and is dependent on a number of different factors including how closely the vaccine matches the circulating virus strains for a given year. Still, from the available data it appears that overall deaths and hospitalizations due to pH1N1 are less than what is typically seen with seasonal flu, due primarily to a large reduction in deaths and hospitalizations among older adults (60 years and up). However, hospitalizations among younger populations, particularly those resulting in critical illnesses requiring advanced care, appear to be higher than expected. A recent Canadian study found that the median age of critically ill pH1N1 patients was 32 years old and nearly one-third were children and adolescents under 18 years of age. Deaths associated with pH1N1 among young adults 20 to 49 years of age are also higher than expected—two per 1,000,000 compared with 0.3 per 1,000,000 for seasonal flu.

In Ontario, about half of the health units are reporting “localized or sporadic” influenza activity. The rate of influenza-like illness (ILI) in patients seen by sentinel physicians continues to trend upward, particularly among 5 to 19 year olds, and is above expected levels for this time of the year. The per cent of influenza laboratory tests that were positive for pH1N1 has been less than five per cent since the beginning of August, which is down considerably from the peak of more than 40 per cent in June. Respiratory viruses other than influenza continue to be identified through laboratory testing, including parainfluenza, respiratory syncytial virus and adenovirus.

**Simcoe Muskoka** – Locally, we have begun to see sporadic influenza activity but have no active institutional outbreaks related to influenza.

## Surveillance

**SMDHU has had its first laboratory confirmed case of Influenza A, subtype pH1N1. This is our first confirmed case since late July.** We have also started to receive some reports of increased clinical influenza-like illness (ILI) through local reports to public health from a variety of health care and community settings. Influenza activity in Simcoe Muskoka is currently classified as sporadic. However, we expect rates of ILI to continue to increase in the weeks to come.

## Public Health Measures

**(no change since last update)**

The health unit has produced materials to promote the key public health messages related to hand washing/hand sanitizing, cough/sneeze etiquette, cleaning shared surfaces, staying home if you are sick and seasonal/pH1N1 vaccines.

You can find poster, decal and tip sheet materials (English and French) that you can order from the health unit and other promotional materials (poster & video) that you can download on our website. Here is the link.

<http://www.simcoemuskokahealth.org/Topics/InfectiousDiseases/InfectionPrevention/orderresources.aspx>

We have also created a web link to multilanguage information and material that is available from the Public Health Agency of Canada and the Ontario Ministry of Health and Long-Term Care. Here is the link.

<http://www.simcoemuskokahealth.org/Promos/HumanSwineFlu/H1N1InfoMultilanguages.aspx>

## Seasonal and pH1N1 Vaccine

This year's MOHLTC seasonal influenza immunization program recommendations differ from previous years. With the arrival of pH1N1, the Ministry is recommending a three-phased approach to influenza immunization this year:

Phase I: Immunization for everyone aged 65+ in Ontario, and all residents (of all ages) in long-term care homes, with seasonal influenza vaccine in October 2009.

Phase II: Immunization for all those who need and want the pH1N1 vaccine as per the nationally recommended sequenced groups, in November/December 2009

Phase III: "Catch-up" seasonal influenza vaccine will be offered to all those 6 months of age and older who live, work or attend school in Ontario, including anyone 65 years and older who did not receive the seasonal influenza vaccine during Phase I. This will likely occur in early 2010.

Three-Phased Approach:	
Phase I: Limited Seasonal Influenza vaccination (slated for October 2009)	Phase II: pH1N1 vaccination (slated for November/December 2009)
People 65 years of age or older in Ontario. Residents of Long-Term Care Homes (of any age) living in Ontario	Those who would benefit most from immunization and/or those who care for them: <ul style="list-style-type: none"><li>● People with chronic medical conditions, under the age of 65</li></ul>

	<ul style="list-style-type: none"> <li>● Pregnant women</li> <li>● Healthy children six months to five years old</li> <li>● People living in remote and isolated settings or communities</li> <li>● Health care workers involved in pandemic response or who deliver essential health services</li> <li>● Household contacts and care providers of persons at high risk who cannot be immunized or may not respond to vaccines</li> <li>● Populations otherwise identified as high risk</li> </ul> <p>Others who would benefit from immunization include:</p> <ul style="list-style-type: none"> <li>● Healthy children five to 18 years of age</li> <li>● First responders to emergencies</li> <li>● Swine and poultry workers</li> <li>● Healthy adults between 19 and up to 64 years of age</li> <li>● Adults over 65 years of age and over</li> </ul>
Phase III: Season UIIP (slated for early 2010)	
Universal influenza immunization program for all people six months of age and older who live, work or attend school in Ontario including anyone who was not immunized during Phase I.	

The reasons for the three phase approach are due to a number of unique and complicated issues related to this being a pandemic influenza year.

- Based on what occurred in the Southern hemisphere's winter influenza season, we expect that the pH1N1 influenza virus will be the main strain circulating in the Northern hemisphere this fall and winter, thus the pH1N1 vaccine will be the more important influenza vaccine this year for the general population.
- Those who are 65 years of age and over are more susceptible to serious complications, such as hospitalization and death from seasonal influenza infection. Thus it recommended that this group be immunized with the seasonal influenza vaccine now, despite the likelihood that the pH1N1 strain will be the predominant strain

this season. In addition the evidence to date has shown that those born prior to 1957 appear to be less likely to become infected with pH1N1.

- There is emerging, unpublished, uniquely Canadian evidence to show a possible association between previous immunization with seasonal influenza vaccine and an increased risk of acquiring pH1N1 influenza infection for those under the age of 50. This is cited as one of the reasons for delaying people under 65 years of age from getting their seasonal influenza vaccine until after they have received the pH1N1 influenza vaccine.

The Canadian research findings are case-control studies and are not randomized controlled trials. The research findings have not been seen elsewhere in the world. The Canadian research shows no evidence that those who were aged 65 and older who had received seasonal influenza vaccine in the past were at greater risk of acquiring pH1N1 disease. There is also no evidence that those who received seasonal influenza vaccine and acquired pH1N1 disease were at risk of more severe illness.

The health unit will be offering a limited number of seasonal flu clinics (by appointment only) in October, for those persons 65 and over who do not have access to a health care provider. The universal seasonal flu clinics for residents six months of age and older will be offered at later time, likely in early 2010.

### **pH1N1 vaccination**

In order to ensure that the pH1N1 immunization program is accessible to all people who need and want vaccination we will need the participation of as many health care providers who routinely offer influenza vaccination. A challenge to this is the requirement of the MOHLTC for those who administer the pH1N1 vaccine to collect, and report to the health unit weekly, the following data on each dose: date of birth, gender, sequencing group and vaccine wastage reporting and AEFI reporting. The health unit will work with all those who provide the vaccine to collect these data in as seamless and least labour-intensive manner as possible.

The health unit is prepared to begin the public pH1N1 vaccination clinics on November 3<sup>rd</sup>. If we receive vaccine in advance of this date we will begin the distribution to health care providers in order to support the vaccination of high-risk patients.

Public clinics will be held on Tuesdays, Wednesdays, Thursdays and Saturdays. The clinics will be in 6 locations across our region each of these days over a 4 week period. The clinics will operate 10 a.m. to 8 p.m. on the weekdays and 10 a.m. to 5 p.m. on Saturdays. We are in the process of finalizing all of the clinic location details and will notify the public as soon as we have confirmation of the date that the pH1N1 vaccine will arrive.

In order to meet the requirements of this demanding schedule health unit staff from all services, (corporate, clinical, health protection, healthy lifestyles and family health) are being redeployed. This will have significant impact on our regular programming. We will notify partners and the public of the program changes in the very near future.

### ***Antivirals***

(no changes since [Sept 18<sup>th</sup> update](#))

### ***Flu Assessment Centres***

The Simcoe Muskoka Influenza Assessment Centre Sub-Committee (SMIACSC), comprised of representative health care agencies and municipalities, was established in January 2007. SMIACSC was tasked by the Simcoe Muskoka Health Sector Emergency Planning Committee

(SMHSEPC) to develop an integrated plan for the establishment and operation of flu assessment centres. These centres would become operational in the event the primary care system becomes overwhelmed and additional system support is required.

Despite agreeing on a model for assessment centres and much effort from the sub-committee, and health care and municipal partners, there has not been sufficient commitment of staff and assessment sites to implement the model. Unfortunately, the same obstacles faced in operationalizing flu assessment centres have been echoed throughout the province. We realize that all health care agencies will be stretched during the response to the 2<sup>nd</sup> wave of H1N1, and we urge you to continue to examine and prepare your own surge capacity. Preliminary projections, based on the southern hemisphere winter flu season experience indicate that the our own influenza season will likely remain relatively mild in clinical severity for most of the population, and consequently, it is hoped that our health care system's surge capacity will not be overwhelmed.

The subcommittee regrets that an impasse has been reached in this matter, but will continue to explore potential solutions. We will post a [summary of the report and recommendations](#) of the SMIACSC by Oct. 21<sup>st</sup>. If you have any comments or suggestions, please contact us at [QandAFlu@smdhu.org](mailto:QandAFlu@smdhu.org).

*Situation updates are distributed to a broad range of health unit partners including health care professionals, health sector emergency planners, community service providers (including those who work with vulnerable populations), educators and day care providers.*