

Ministry of Health and Long-Term Care

Guidance for Management of Patients with Influenza-like Illness (ILI) in Emergency Departments

Please refer to Important Health Notice Volume 6, Issue 10 issued on May 19, 2009

Information as of May 19, 2009 indicates that the current H1N1 influenza virus has characteristics similar to seasonal influenza¹ (clinical features, morbidity and mortality, epidemiology). However, because it is a novel virus with pandemic potential, these guidelines are precautionary and will be updated as new information and evidence becomes available.

The current H1N1 influenza A virus has been identified in both travelers to affected areas as well as the local community. The presence of the virus in the community and associated transmission from person-to-person suggests that H1N1 should be assumed to be one of the predominant circulating strains of influenza at this time.

This has been issued to update the previous information provided and should be used as the most current guidance for the management of ILI in the clinical setting.

Background

The Ontario Health Plan for an Influenza Pandemic (OHPIP) advises that it is prudent to wear fit tested N95 respirators while within 2 metres of caring for a patient with an influenza virus of pandemic potential. Because travel history can no longer accurately predict who is infected with the novel H1N1 strain, it follows that a fit tested N95 respirator in addition to droplet and contact precautions should be used by healthcare workers

¹ Influenza is predominantly a droplet-borne disease; however transmission via small airborne sized particles cannot be ruled out. Influenza virus can also survive on surfaces; therefore, both droplet and contact precautions are recommended to prevent transmission.

when within 2 metres of caring for all patients with influenza-like illness(ILI).

The recommendations outlined are based upon implementation of the broadest level of precautionary measures. Where supplies of N95 respirators and other personal protective equipment (PPE) are limited or depleted, N95 respirator and PPE use by healthcare workers should be prioritized as recommended in chapter 7 of the OHPIP. If an N95 respirator is not available, healthcare workers are advised to don a surgical mask wherever an N95 respirator is called for in this document and, if possible, to put a surgical mask on their patient.

Individuals who meet the symptom criteria for ILI should self-isolate and not present to their work setting. The length of time the individual should remain off work will depend on their work setting (see Patient Disposition and Treatment for advice in the non-healthcare and healthcare settings).

1. Screening

All patients presenting to the Emergency Department should be actively screened at the time of triage for respiratory illnesses using the 'Screening Tool for Influenza-like Illness' (available at:http://www.health.gov.on.ca/english/public/updates/archives/hu_09/provider/default.html). Passive surveillance (signage asking patients to self-report symptoms) should also be available at the point of entry to the department. Patient who present to triage with a new/worsening cough or respiratory illness should be asked to perform hand hygiene and don a surgical mask.

Triage staff should wear fit-tested N95 respirators and eye protection when conducting active

surveillance of patients presenting with respiratory symptoms. Respirators and eye protection are not required for triage of patients without respiratory symptoms.

2. Patient Management

Patients will be managed based on symptoms and history of onset of symptoms. Patients with onset of symptoms within the previous 7 days or with acute clinical symptoms will be cared for using N95 respirators and eye protection in addition to Routine Practices.

Influenza-like Illness (ILI)

Acute onset of respiratory illness with fever and cough and with one or more of the following: sore throat, arthralgia, myalgia, or prostration, which could be due to influenza virus. In children under 5 years of age, gastrointestinal symptoms may also be present. In patients aged under 5 years or 65 and older fever may not be prominent.

Infection Prevention and Control for Health Care Workers

Those providing direct care to patients with ILI should use the following precautions in addition to Routine Practices.

- Hand hygiene (alcohol-based hand rub or soap and running water)
- Eye protection
- Gown and gloves if there is a risk of widespread contamination with respiratory secretions
- Fit-tested N95 respirator

After the patient leaves the examining area, surfaces which may have been touched by the patient (stretcher, counters, overbed tables) and been contaminated with droplets must be cleaned with a hospital-grade disinfectant.

3. Laboratory Testing

Laboratory testing for influenza on patients with ILI is not currently required unless the patient presents with moderate to severe disease or the clinician determines that it is required. If collected, specimens should be forwarded to the clinician's local community or hospital laboratory. Influenza A positive samples (and all other samples where

Influenza A molecular testing is not available) will be forwarded for further testing at the Central Public Health Laboratory (Toronto) or the nearest Regional Public Health Laboratory (PHL).

Molecular testing for the 2009 Influenza A H1N1 virus is also at being performed at several hospital laboratories. Some of these laboratories are able to report confirmed cases of the novel influenza A H1N1. Further confirmation of these results at PHL is at the discretion of the laboratory director.

Specimens

Mandatory for patients with moderate to severe ILI

- Nasopharyngeal swab in viral transport media
- Blood in clotted tube (red top)
- Blood in EDTA (purple top)

It is critical that clinical symptoms and risk factors be written on the test requisition in order to triage specimens. Specimens from asymptomatic patients will not be tested.

4. Patient Reporting

There is no requirement for reporting cases of ILI to your local health unit beyond that which is usually required for seasonal influenza. Specifically, patients who have laboratory confirmed influenza or those who are part of an unusual cluster must be reported promptly to your local public health unit. Institutional outbreaks of respiratory infections are reportable as usual.

5. Patient Disposition and Treatment

a) Patients who are well enough to be discharged home should be instructed:

- To monitor for signs and symptoms and seek medical attention if symptoms worsen
- Absence from their workplace is dependent on the work setting. In general:
 - *Patients working in a non-healthcare setting should remain off work until they are afebrile and feeling better.*
 - *Patients who work in a healthcare setting should remain off work until 7 days after the onset of their symptoms and they are afebrile and feeling better.*

NOTE: It is not unusual for individuals to experience a cough for days to weeks post infection. Presence of a cough in the absence of other symptoms is not sufficient to keep an employee away from the work setting.

Individuals who work in health care settings are less likely to be able to practice social distancing during the course of their work. In addition, they may be providing close care to patients who may be at higher risk of complications should they become ill.

Patients should be provided with education to assist in containing the spread of their illness to others. This education should include information on:

- Hand hygiene
- Respiratory cough etiquette
- Social distancing (i.e. minimizing contact with family members, not going out in public)
- Not going to work until acute symptoms have resolved

b) Patients with severe ILI requiring admission should be managed with:

- Single room
- Healthcare providers wearing fit-tested N95 respirators and eye protection when providing direct patient care and within 2 metres of the patient. In settings where such a separation is not possible, healthcare workers are advised to maintain whatever separation is feasible.²

Treatment Recommendations

Treatment of the following groups with ILI with oseltamivir is currently recommended within 48 hours of the onset of symptoms:

- Fever and acute ILI or pneumonia requiring hospitalization
- ILI and at risk for complicated disease

Other patients with ILI do not require treatment.

² This is a precautionary measure as the incremental benefit of maintaining a 2 metre separation from influenza patients is unknown.

Comment on the treatment of children and pregnant women

Oseltamivir and zanamivir are ‘Pregnancy Category C’ medications, indicating that no clinical studies have been conducted in humans to assess the safety of these medications for pregnant women. The National Advisory Committee on Immunization has stated that in ‘healthy pregnant women the risk of influenza-related hospitalization increases with increasing length of gestation; e.g. it is higher in the 3rd than the 2nd trimester.’ In making treatment decisions, the 3rd trimester more than the 2nd trimester should be considered a risk factor for more severe influenza whereas first trimester pregnancy should not be considered a risk factor for severe disease.

On May 12, 2009, CDC published recommendations for the treatment of pregnant women. These recommendations are available at:

www.cdc.gov/mmwr/pdf/wk/mm58d0512.pdf

There are no corresponding Public Health Agency of Canada recommendations at this point in time.

Clinicians must make treatment decisions in collaboration with their patient considering the best available information, authoritative guidelines and the clinical presentation of the patient. Any decision related to the treatment of a pregnant woman should be made between the clinician and patient after careful discussion of the risks and benefits of the proposed treatment.

The use of oseltamivir in children under the age of 1 year has been studied in a very limited number of children. The Centers for Disease Control and Prevention (CDC) has recently received emergency approval in the United States for use in infants under 1 year of age with suggested dosing guidelines. The use of zanamivir in children under the age of 7 is not well studied and it is technically difficult to administer.

The Canadian Paediatric Society has recommended that the use of antivirals in children be confined to:

- Children hospitalized with H1N1 influenza
- Outpatient children with moderate illness and specified underlying chronic health conditions.
- Details regarding the treatment of children are available at:

www.cps.ca/english/statements/ID/H1N1Mexico2009.htm