

Manitoba Interim Guidance for Clinicians in Ambulatory Care Settings^a for Adults and Adolescents Presenting with Symptoms of Acute Respiratory Illness During a Pandemic Influenza Period (H1N1)

http://www.gov.mb.ca/health/publichealth/sri/docs/interim_guidance_clinicians_ambulatory.pdf

This document has been developed to provide interim guidance to clinicians for patients presenting with influenza-like illness (ILI). **For up to date recommendations clinicians should refer to the Manitoba Health website at:**

<http://www.gov.mb.ca/health/publichealth/sri/index.html>.

For a **2-page summary** of these guidelines refer to *Clinical Decision Making Algorithm for Adults/Adolescents Presenting with Symptoms of Acute Respiratory Illness During a Pandemic Influenza Period (H1N1)* at:

<http://www.gov.mb.ca/health/publichealth/sri/docs/algorithm.pdf> .

For management in **children**, refer to *Pediatric Clinical Decision Making Algorithm Presenting with Symptoms of Acute Respiratory Illness During a Pandemic Influenza Period (H1N1)* available on the Manitoba Government website at:

http://www.gov.mb.ca/health/publichealth/sri/docs/algorithm_pediatric.pdf .

For management of **pregnant and post-partum women**, refer to *Manitoba Interim Clinical Care Guidance for Pregnant and Post-partum Women Presenting with Symptoms of Acute Respiratory Illness During a Pandemic Influenza Period (H1N1)* available at:

http://www.gov.mb.ca/health/publichealth/sri/docs/interim_guidance_clinicians_pregnancy.pdf .

For management of **immunocompromised individuals**, refer to *Manitoba Interim Guidance for Immunocompromised Individuals Presenting with Symptoms of Acute Respiratory Illness During a Pandemic Influenza Period (H1N1)* available at:

http://www.gov.mb.ca/health/publichealth/sri/docs/immunocomp_respiratory_guidelines.pdf .

As a resource for staff to assist in telephone screening, patients contacting your office can be directed to Health Links–Info Santé at 788-8200 in Winnipeg or toll-free at 1-888-315-9257 for information and for assessment/triage of symptoms. Patients determined to have mild non-ILI (e.g. common cold) should be assessed and provided with advice by telephone, encouraged to stay at home and self-observe for symptoms of ILI.

Note: It is expected that viral testing and antiviral drug use recommendations will change as further information about the clinical spectrum of illness, knowledge of risk factors and antiviral susceptibilities becomes available.

INFECTION PREVENTION AND CONTROL

Refer to Manitoba Health document *Infection Prevention and Control Guidelines Influenza-like illness including NOVEL A/H1N1 Influenza: All Health and Health-Care Settings* available at: <http://www.gov.mb.ca/health/publichealth/sri/index.html>

Entry screening in ambulatory care settings for patients with symptoms of an acute respiratory illness:

All patients who present to a health care setting should be screened for a history of fever and respiratory symptoms. This could include:

- Visual alerts posted at the entrances to all health care institutions and/or
- On first contact, receptionist staff should ask about fever and cough as well as other respiratory symptoms (sneezing, sore throat, coryza or runny nose). Patients with

^a Ambulatory care settings includes doctor's offices, drop-in clinics, community primary care centres, outpost nursing stations, emergency departments etc.

shortness of breath or severe weakness should be triaged for immediate care.

If transfer to hospital is required, routine infection control practices, including droplet and contact precautions, should be followed.

Patients who report fever and respiratory symptoms should be instructed to:

- Clean their hands with 60-90% alcohol-based hand gel
- Don a surgical or procedure mask
- Be separated by at least one metre from others, and if feasible, a two metre separation may be preferred. Infection Prevention and Control signage should be placed on the door indicating precautions required.

SYMPTOMS OF MILD INFLUENZA-LIKE ILLNESS (ILI)

For the purposes of guiding healthcare providers, the following Public Health Agency of Canada (PHAC) influenza-like illness surveillance case definition remains the basis for consideration of the presence of any influenza type, including pandemic H1N1:

Acute onset of respiratory illness with fever and cough and one or more of the following:
sore throat, arthralgia, myalgia or prostration.

Note I: Not all cases of severe pandemic H1N1 have presented with symptoms consistent with the above definition. The following symptoms have been observed during the first wave of pandemic H1N1 and should also be considered in the clinical diagnosis of ILI at this time.

Almost always:

- **Cough and Fever**

Common:

- **Fatigue, muscle aches, sore throat, headache**

Sometimes:

- **Nausea, vomiting, diarrhea**

Note II: Young children and the elderly may not present with fever or a history of fever. Fever may be muted in patients undergoing cancer and blood disorder treatments, and with receipt of acetaminophen, ibuprofen, corticosteroids or immunosuppressive drugs.

SEVERE INFLUENZA-LIKE ILLNESS INCLUDING: Viral Pneumonia, Adult Respiratory Distress Syndrome and Shock

Pandemic H1N1 patients with more severe symptoms than the usual milder ILI symptoms require prompt or immediate care to reduce the need for intensive care and/or to prevent death.

Most severe cases of pandemic H1N1 have begun with symptoms of ILI, followed within a few days by progression of symptoms including dyspnea, worsening cough, dehydration and/or weakness. Tachypnea, hypoxia and hypotension are cardinal signs. X-rays have been consistent with a viral pneumonitis and/or adult respiratory distress syndrome.

REPORTING RESPONSIBILITIES

Clinicians are required to report within 24 hours any current or recent case(s) of ILI resulting in hospitalization. The “Hospitalized Influenza-Like Illness (ILI) Reporting Form” (available at: <http://www.gov.mb.ca/health/publichealth/sri/index.html#forms>) can be faxed to the Surveillance Unit, Public Health Division, Manitoba Health and Healthy Living at (204) 948-3044 or a verbal report can be made by leaving a message at (204) 788-6481 or other arrangements can be made as approved by the Regional Medical Officer of Health.

The previous case report form titled “Severe Respiratory Illness/Novel Influenza A H1N1 Case Report Form” has been revised and renamed the “Pandemic H1N1/Severe Respiratory Case Report Form (available at: <http://www.gov.mb.ca/health/publichealth/sri/index.html#forms>). This form should be completed for all patients admitted to hospital and diagnosed with either pandemic H1N1 or SRI or for any patient who dies in hospital and the death is suspected to be H1N1 or SRI related. Completed forms should be faxed to the Surveillance Unit, Public Health Division, Manitoba Health and Healthy Living at (204) 948-3044.

VIRAL TESTING

Recommendations for nasopharyngeal (NP) swabbing/sampling and policies for laboratory testing may change as the pandemic H1N1 outbreak progresses, and may vary depending upon prevalence, relative presence of antiviral resistance, laboratory and other resources, and other factors. The following guidelines refer to recommendations for obtaining test specimens in the clinical setting. Because clinical decision-making for non-severe cases should rarely, if ever, depend on the results of a test for influenza, laboratory testing will be performed on a priority basis and not necessarily on every specimen submitted, considering the information available on the requisition and other factors, including those described above.

Please note that testing is not required in order for treatment to be initiated.

Cadham Provincial Laboratory (CPL) will not process specimens for pandemic H1N1 testing unless one or more of the following indications are present on the CPL requisition for clients/patients with ILI:

- a. hospitalized patients (for differential diagnosis and monitoring for severity);
- b. immunocompromised patients (monitoring for antiviral resistance);
- c. patients being observed in emergency departments, observation units, etc (for surveillance);
- d. patients seen at designated sentinel sites, as authorized by regional and provincial public health authorities (for surveillance).

If the indication and other information are not recorded, specimen testing may be delayed. In exceptional circumstances, specimens may not be tested. Inadequately labeled and packaged specimens (e.g., leaking) may not be processed. For outbreak investigation, testing should only be performed in consultation with a public health professional. The laboratory will communicate positive test results for pandemic H1N1 influenza to those ordering the testing on a priority basis, based on information provided on the requisition.

If testing is indicated:

- A well taken nasopharyngeal swab is preferred but an oropharyngeal swab, tracheal aspirate or bronchial wash may be appropriate in some circumstances.
- A nasopharyngeal aspirate should be taken for children < 5 years of age. For all others, a nasopharyngeal swab is preferred. Pediatric swabs, if available, are preferred for use in the 5 to 15 year population.

- Excess mucous should be removed before specimen collection. In all cases, the specimen should be collected with a nasopharyngeal (wire) swab or flocked (microRheologics) swab and placed in viral transport medium (VTM). Only one specimen per patient is required. A fact sheet about these procedures for testing can be found at: http://www.gov.mb.ca/health/publichealth/sri/docs/nasopharyngeal_collection.pdf
- Ensure the correct viral flocked swab and transport medium is used and that it is not past its expiry date.
- An appropriately labeled Cadham Provincial Laboratory requisition MUST accompany the specimen. Ensure that both the specimen and the requisition are clearly labeled with the specimen date, patient's name and another unique identifier such as date of birth and health care number. If urgent reporting of test results is requested by the clinician (rarely required for clinical decision-making), the requisition should include a practitioner telephone number or information for other faster methods of reporting. Requisitions without clinical information will be prioritized last. Important information includes:
 - Underlying medical conditions;
 - Date of onset of symptoms;
 - Symptoms and signs;
 - Hospitalized or not;
 - Prescription date and/or start date of antiviral medications.
- A number label should be removed from the requisition and attached to the specimen.

CLINICAL MANAGEMENT

Patients with significant risk factors should be assessed more urgently and considered strongly for early antiviral therapy. Due to the higher risk of bacterial superinfections in some patients with influenza, there should be a low threshold for starting antimicrobial therapy for such patients. The following recommendations apply to patients presenting with ILI with or without prior antiviral treatment and with or without previous immunization with seasonal or pandemic H1N1 vaccine.

TABLE 1: Recommended Clinical Case Management

(adapted with permission from the WRHA draft guidelines)

Clinical Presentation	Recommendations
1. Mild upper respiratory illness that does not meet the case definition for influenza like illness (ILI) (e.g. "common cold" or non-infectious illness)	<ul style="list-style-type: none"> ▪ No specific treatment for influenza is recommended. ▪ NP testing should not be done. ▪ Advise patients to seek follow up if symptoms worsen or if symptoms of ILI develop.
2. Mild influenza like illness (ILI) with no risk factors ^b and normal vital signs	<ul style="list-style-type: none"> ▪ Treatment with antivirals is not generally recommended as these patients have a lower risk for developing severe illness, but may be initiated at the discretion of the clinician; if initiated, should occur within 48 hours of onset of illness. ▪ No NP testing unless one or more indications in the "Viral Testing" section are present (e.g. sentinel site). ▪ Advise patients to seek follow up promptly if symptoms persist or worsen.

<p>3. Mild ILI in individuals with risk factors^b and normal vital signs</p>	<ul style="list-style-type: none"> ▪ Early antiviral treatment should be initiated as soon as practical, unless contraindicated, preferably within 48 hours of onset of symptoms, and without waiting for viral test results. ▪ No NP testing unless one or more indications in the “Viral Testing” section are present (e.g., sentinel site).
<p>4. ILI individuals with abnormal vital signs</p> <p>OR</p> <p>Severe ILI symptoms and/or worsening clinical status- (or any of the following signs of pneumonia, ARDS, or shock: dyspnea, prostration, hypotension, tachycardia and tachypnea, dehydration)</p>	<ul style="list-style-type: none"> ▪ Depending on severity of illness, urgent diagnosis and treatment should be arranged, including x-rays, blood tests, more viral testing, appropriate monitoring and observation in a health care setting, and appropriate use of oxygen, fluid and electrolyte replacement, blood pressure stabilization, antivirals, and anti-microbials. Consultation with Infectious Diseases or Intensive Care is recommended (204) 787-2071. • NP testing as per indications in “Viral Testing” section.

^bRisk Factors for Complications from Pandemic H1N1:

- Children < 5 years of age (especially those < 2 years).
- Individuals ≥ 65 and others < 65 but who may be frail, have mobility problems or live alone.
- Chronic diseases (lung including asthma, heart, kidney, central nervous system including neuromuscular diseases, endocrine system including diabetes mellitus).
- Immune disorders or immunosuppression (such as cancer patients on treatment, autoimmune diseases or rheumatologic diseases on TNF inhibitors or corticosteroids, transplant patients, HIV infection).
- Children under 19 years of age with conditions treated with long-term acetylsalicylic acid (ASA).
- Severe obesity and/or malnutrition.
- Other conditions (i.e., smoking, substance abuse, alcoholism, homelessness) considered to increase the risk of complications from influenza or be associated with delays in seeking or receiving care for mild or severe influenza-like-illness.
- Persons of Aboriginal ancestry have had increased risk for severe illness even in the absence of known risk conditions.
- Pregnant women, especially later pregnancy, and women within six weeks post-partum.

TABLE 2. Antiviral treatment dosing^c recommendations for Adults and Children

[Table based on IDSA guidelines for seasonal influenza, *CID* 2009; 48: 1003-1032: www.idsociety.org/content.aspx?id=9202#flu) and Public Health Agency of Canada Interim Guidance for emergency use of oseltamivir (Tamiflu®) in children under one year of age in the context of 2009 (H1N1) pandemic at <http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/guidance-orientation-07-20-eng.php>].

Age Group	Weight	Drug	Dosing Schedule
Infants and children	≤ 15 kg	Oseltamivir (Tamiflu®)	2 mg/kg/dose orally twice daily x 5 days
Children < 13 years of age	>15-23 kg	Oseltamivir (Tamiflu®)	45 mg orally twice daily x 5 days
	>23-40 kg	Oseltamivir (Tamiflu®)	60 mg orally twice daily x 5 days
	> 40 kg	Oseltamivir (Tamiflu®)	75 mg orally twice daily x 5 days
Adults and children ≥ 13 years of age		Oseltamivir (Tamiflu®)	75 mg orally twice daily x 5 days
Adults and children ≥ 7 years of age		Zanamivir (Relenza®)	2 inhalations twice daily x 5 days

^cDosages may need to be modified based on the presence of renal disease or other co-morbidities. Refer to product monograph for details, and/or consult with an Infectious Diseases specialist, Nephrologist or Pharmacist. For potential medication errors with liquid Tamiflu®, please see: http://www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/2009/2009_158-eng.php for more information.

Antiviral Use in Pregnant and Post-partum Women:

Antiviral treatment should be strongly considered as soon as practical, preferably within 48 hours of onset of symptoms in all women who are pregnant or within 6 weeks post-partum who develop ILI, unless contraindicated. For more information refer to the MHL document *Manitoba Interim Clinical Care Guidance for Pregnant and Post-partum Women During a Pandemic Influenza Period (H1N1)* available at: http://www.gov.mb.ca/health/publichealth/sri/docs/interim_guidance_clinicians_pregnancy.pdf.

Other considerations for the use of antivirals for treatment of H1N1 influenza:

Recommendations for use of antiviral medications may change as information on antiviral effectiveness, clinical spectrum of illness, adverse events from antiviral use, or resistance among circulating viruses become available. At this time, oseltamivir-resistant 2009 H1N1 viruses have rarely been identified and are typically found among persons who develop illness while receiving oseltamivir for chemoprophylaxis or among immunocompromised patients with influenza who are being treated. For more information on H1N1 antiviral resistant strains, refer to *WHO Pandemic (H1N1) 2009 briefing note 12- Antiviral use and the risk of drug resistance*. http://www.who.int/csr/disease/swineflu/notes/h1n1_antiviral_use_20090925/en/index.html.

More information on both of these antiviral medications (oseltamivir and zanamivir) including reconstitution guidelines/instructions can be found in the Product Monograph. For recent Health Canada drug advisories please refer to: <http://www.hc-sc.gc.ca/dhp-mps/medeff/advisories-avis/new-neuf-advisories-avis-eng.php>. Adverse reactions should be reported to the Marketed Health Products Directorate at Health Canada at: http://www.hc-sc.gc.ca/dhp-mps/pubs/medeff/guide/2009-ar-ei_anti_guide-ldir/index-eng.php. Otherwise, treatment is supportive, such as acetaminophen-containing medications to ease fever and myalgias.

Management of Contacts and Prevention

Routine viral testing or antiviral chemoprophylaxis of asymptomatic close contacts is not recommended at the present time.

Exclusion from or avoidance of work or school is generally not considered effective or appropriate for individuals who feel well and do not have symptoms of ILI, even if they have risk factors for complications of influenza. Individuals with risk factors who have unresolvable concerns about their workplace health and safety should be advised to speak to their employer, contact Manitoba Workplace Health and Safety, discuss with their health care provider and/or visit www.manitoba.ca/flu for more information.

The focus of prevention should be on measures such as personal hygiene, cough etiquette, immunization, and early presentation to a health care provider if ILI symptoms develop, especially for people with risk factors for complications of influenza.

Immunization: Recommendations regarding immunization for pandemic H1N1 influenza can be found in the following documents:

- *Priority Groups in Manitoba* available at: <http://www.gov.mb.ca/health/publichealth/sri/docs/priority.pdf>
- *Interim Guidelines for Using the Pandemic H1N1 (pH1N1) Influenza Vaccine* available at: http://www.gov.mb.ca/health/publichealth/sri/docs/interim_guidelines_h1n1vaccine.pdf

Additional information related to pandemic H1N1 influenza vaccine is available at: <http://www.gov.mb.ca/health/publichealth/sri/index.html>.

References

1. Public Health Agency of Canada Interim Guidance for Ambulatory Care of Influenza-Like Illness in the context of H1N1 influenza virus, modified July 16, 2009, available at: <http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/guidance-orientation-amb-07-16-eng.php>
2. Harper Scott A, Bradley John S, Englund Janet A *et al.* Seasonal Influenza in Adults and Children—Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management: Clinical Practice Guidelines of the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2009; 48: 1003-1032 available at: <http://www.idsociety.org/content.aspx?id=9202#flu>
3. U.S. Centers for Disease Control and Prevention. Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010, October 16, 2009 Available at: <http://www.cdc.gov/h1n1flu/recommendations.htm>
4. Manitoba Health and Healthy Living: Severe Respiratory Illness/Novel Influenza A/H1N1 Case Report Form: Preliminary Case Analysis. June 12, 2009
5. Public Health Agency of Canada. Interim Clinical Guidance for Pregnant and Breastfeeding Women with Influenza-Like Illness in the context of the Pandemic H1N1 2009 Virus. Available at: <http://www.phac-aspc.gc.ca/alert-alerte/h1n1/guidance-orientation-07-09-eng.php>