# 2011/2012 Season Week 2: January 8-14, 2012



# Influenza activity in Manitoba remains <u>low</u>.

# Summary:

- During week 2 (January 8-14, 2012), influenza activity remained low.
- The influenza-like-illness rate was 0.5% with 63.6% of sentinel physician sites reporting.
- The number of respiratory tests performed by CPL continues to **increase**; however, the percent positive for influenza remains **low**.
- There was **one** lab-confirmed outbreak of influenza A reported in a personal care home.
- There were **no** hospitalizations, ICU admissions, or deaths reported associated with a lab-confirmed report of influenza.

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#### **Sentinel Physicians**

Manitoba Health participates in the National *FluWatch* Program coordinated by PHAC. In addition to laboratory-confirmation of influenza, this program relies on weekly reports of ILI as reported by 22 current Manitoban sentinel physicians. These sentinels reflect cases found in eight RHAs.

Manitoba Health receives weekly reports from PHAC presenting the provincial ILI rate and the specific data for each of the participating sentinel physicians. These numbers should be interpreted with caution as the number of sentinel physicians reporting to *FluWatch* varies from week to week and may not be representative of ILI activity across the province.

The ILI rate decreased during week 2 to 0.5% from 1.3% in week 1 and 2.7% in week 52. The rate is lower compared to the same time last season, where it was 2% in week 2 and 7% in week 1.

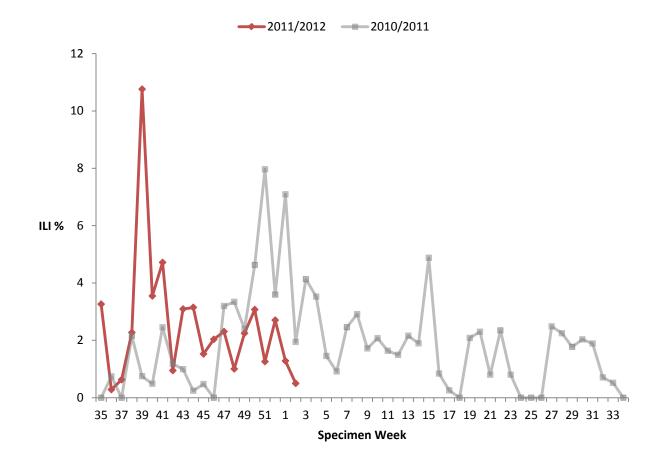


Figure 1. ILI percentage as reported by *FluWatch* sentinel physicians by week and flu season, Manitoba

#### Health Links – Info Santé (HL-IS)

HL-IS is a 24-hour, 7-days a week telephone information service staffed by registered nurses with the knowledge to provide answers over the phone to health care questions and guidance to appropriate care. When a caller phones HL-IS and selects the Influenza Service, they are given an option to select information on (1) the groups of individuals who are at an increased risk of serious illness, (2) how to arrange a flu shot, (3) the annual influenza immunization campaign, or (4) the management of flu and its potential complications.

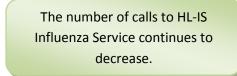
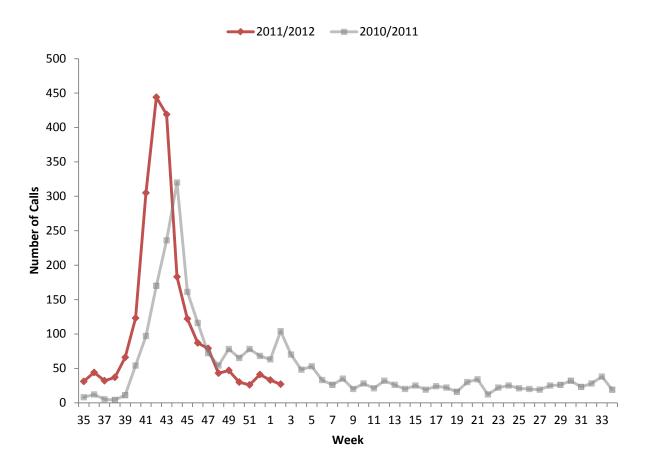


Figure 2. The number of calls to HL-IS Influenza Service by season, Manitoba

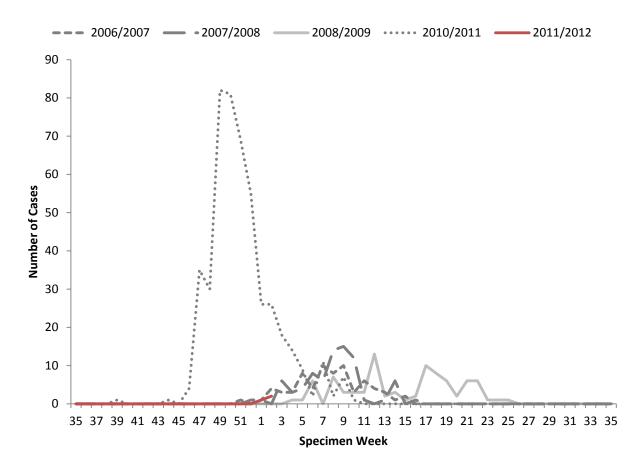


## Laboratory Surveillance

Reports of culture isolations and enzyme immunoassay (EIA) detections from Cadham Provincial Laboratory (CPL) are forwarded to the Public Health Surveillance (PHS) Unit weekly. While EIA detections and culture isolations comprise the largest number of reports from CPL, seroconversions are similarly forwarded to the PHS Unit weekly.

There have been three lab-confirmed reports of influenza A (all from WRHA) since the beginning of the season. One case is aged <1 year, and the other two cases are aged over 80 years. There have been no reports of influenza B.

Figure 3. Number of lab-confirmed cases of influenza A by specimen collection week and season, Manitoba (*Note: 2009/2010 season excluded due to the H1N1 pandemic, making the numbers incomparable with other seasons.*)



## **Clinically Severe Cases**

This season, PHAC is requesting provinces and territories to report the number of hospitalizations, ICU admissions, and deaths **associated** with a lab-confirmed report of influenza. The reason for hospitalization, ICU admission, or death does not have to be attributable to the influenza diagnosis in order to be included in this count. These data are collected in order to continue with the surveillance system implemented during the 2009 H1N1 pandemic to help monitor the severity/burden of illness during the influenza season.

There have been no hospitalizations, ICU admissions, or deaths associated with influenza reported in Manitoba this season.

## Outbreaks

Outbreaks of influenza must be accompanied by a positive influenza lab report to be counted. The outbreak-related cases reflected on tables and figures within this report are lab-confirmed. However, most outbreak-related cases will not be lab-confirmed.

As of January 14, 2012, there has been <u>one</u> lab-confirmed outbreak of influenza A reported to Manitoba Health for the 2011/2012 season. This was in a personal care home in WRHA. There have been no outbreaks of Influenza B reported.

	2010/2011 (up to Jan 15, 2011)			2011/2012 (up to Jan 14, 2012)				
RHA:	LTCF	Workplace	ACF	Community	LTCF	Workplace	ACF	Community
Winnipeg	17	1	1		1			
Brandon	1							
North Eastman								
South Eastman								
Interlake	2							
Central	2		1					
Assiniboine	2							
Parkland	1							
Nor-Man								
Burntwood				1				
Churchill								

Table 1. Number of lab-confirmed outbreaks of influenza A by RHA and season, Manitoba

LTCF: long term care facility ACF: acute care facility

## Sub-Typing, Strain Characterization, and Antiviral Resistance

#### Sub-Typing:

Table 2. Sub-typing of influenza A specimens as reported by CPL, 2011/2012 flu season, Manitoba

A/H1N1	A/H3N2	A Unsubtyped	A Total
0	0	3	3

#### Strain Characterization:

Since September 1, 2011, NML has antigenically characterized 47 influenza viruses (26 H3N2, 6 H1N1, and 15 B viruses) that were received from Canadian laboratories with the following results:

- 26 A/Perth/16/2009 (H3N2)-like<sup>1</sup>;
- 6 A/California/7/2009 (H1N1(pdm09))-like<sup>2</sup>;
- 7 B/Brisbane/60/08-like (B/Victoria/02/87 lineage)<sup>3</sup>;
- 8 B/Wisconsin/01/2010-like (Yamagata lineage)

There were no viruses characterized from CPL.

## Antiviral Resistance:

Since September 1, 2011, NML has performed drug susceptibility testing on influenza isolates received from Canadian laboratories with the following results:

- 29 influenza A viruses (24 H3N2 and 5 H1N1) were tested for resistance to amantadine, and it was found that all 29 influenza A viruses were resistant to amantadine.
- 45 influenza viruses (25 H3N2, 6H1N1 and 14 B) were tested for resistance to oseltamivir, and it was found that all 45 viruses were sensitive to oseltamivir.
- 45 influenza viruses (25 H3N2, 6 H1N1 and 14 B) were tested for resistance to zanamivir, and it was found that all 45 viruses were sensitive to zanamivir.

There were no isolates tested from CPL.

<sup>&</sup>lt;sup>1</sup> Strain match to recommended H3N2 component for the 2011/2012 northern hemisphere influenza vaccine.

<sup>&</sup>lt;sup>2</sup> Strain match to recommended H1N1 component for the 2011/2012 northern hemisphere influenza vaccine.

<sup>&</sup>lt;sup>3</sup> Strain match to recommended influenza B component for the 2011/2012 northern hemisphere influenza vaccine.

## Abbreviations

ACF = acute care facility CPL = Cadham Provincial Laboratory HL-IS = Health Links – Info Santé PHAC = Public Health Agency of Canada ICU = intensive care unit ILI = influenza-like-illness LTCF = long term care facility NML = National Microbiology Laboratory PHS = Public Health Surveillance RHA = Regional Health Authority WRHA = Winnipeg Regional Health Authority

## **Explanatory Notes and Definitions**

#### Data extraction date:

Manitoba-specific information contained within this update is based on data confirmed in Manitoba's PHS Unit databases on or before **January 18, 2012**, the date of data extraction.

#### ILI in the general population:

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

#### ILI outbreaks :

Schools: Greater than 10% absenteeism (or absenteeism that is higher (e.g. >5-10%) than expected level as determined by school or public health authority) which is likely due to ILI.

Hospitals and residential institutions: Two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case.

Other settings: Two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case; i.e. workplace, closed communities.

#### Specimen collection date:

The date the laboratory specimen is taken is used to assign cases to the appropriate week in this report.

For other Epidemiology and Surveillance reports, please view the Manitoba Health internet website: <u>http://www.gov.mb.ca/health/publichealth/surveillance/index.html</u>

For national surveillance data, refer to: <u>http://www.phac-aspc.gc.ca/fluwatch/index-eng.php</u>