

2011/2012 Season

Week 5: January 29 – February 4, 2012

*The number of lab-confirmed cases of influenza has increased since last week; however, overall activity remains **low**.*

Summary:

- During week 5 (Jan 29 – Feb 4, 2012), influenza activity remained **low**.
- The influenza-like-illness rate was 2% with 68.2% of sentinel physician sites reporting.
- The number of respiratory tests performed by CPL has **increased** since last week, and the percent positive for influenza has also **increased**.
- There were **no** lab-confirmed outbreaks of influenza reported this week.
- There were **two** hospitalizations reported associated with a lab-confirmed report of influenza.

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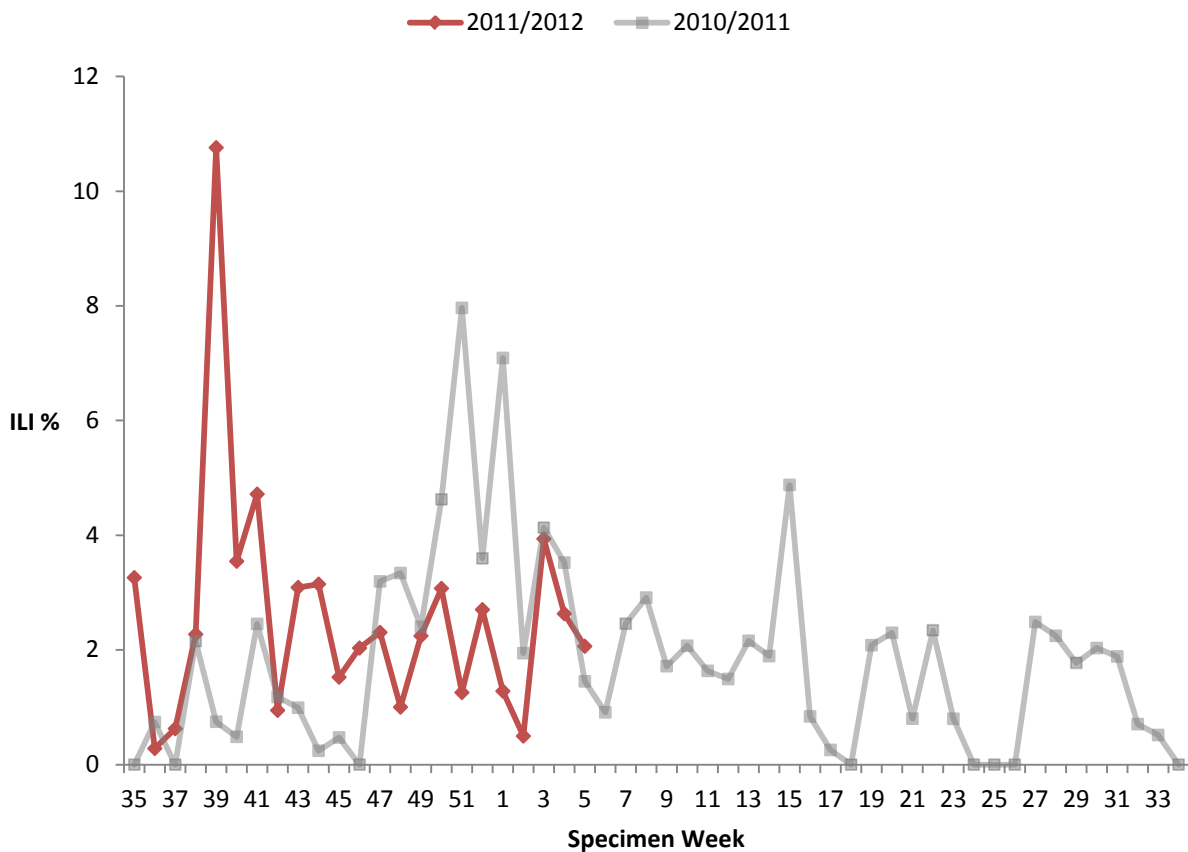
Sentinel Physicians

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 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. The graph below depicts the proportion of total patients who were seen for an ILI. 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 proportion of patients seen for an ILI remained fairly stable during week 5 at 2.0% from 2.6% last week. The proportion is slightly higher than what was observed at the same time last season.

Figure 1. Proportion of patients seen for ILI as reported by *FluWatch* sentinel physicians by week and flu season, Manitoba

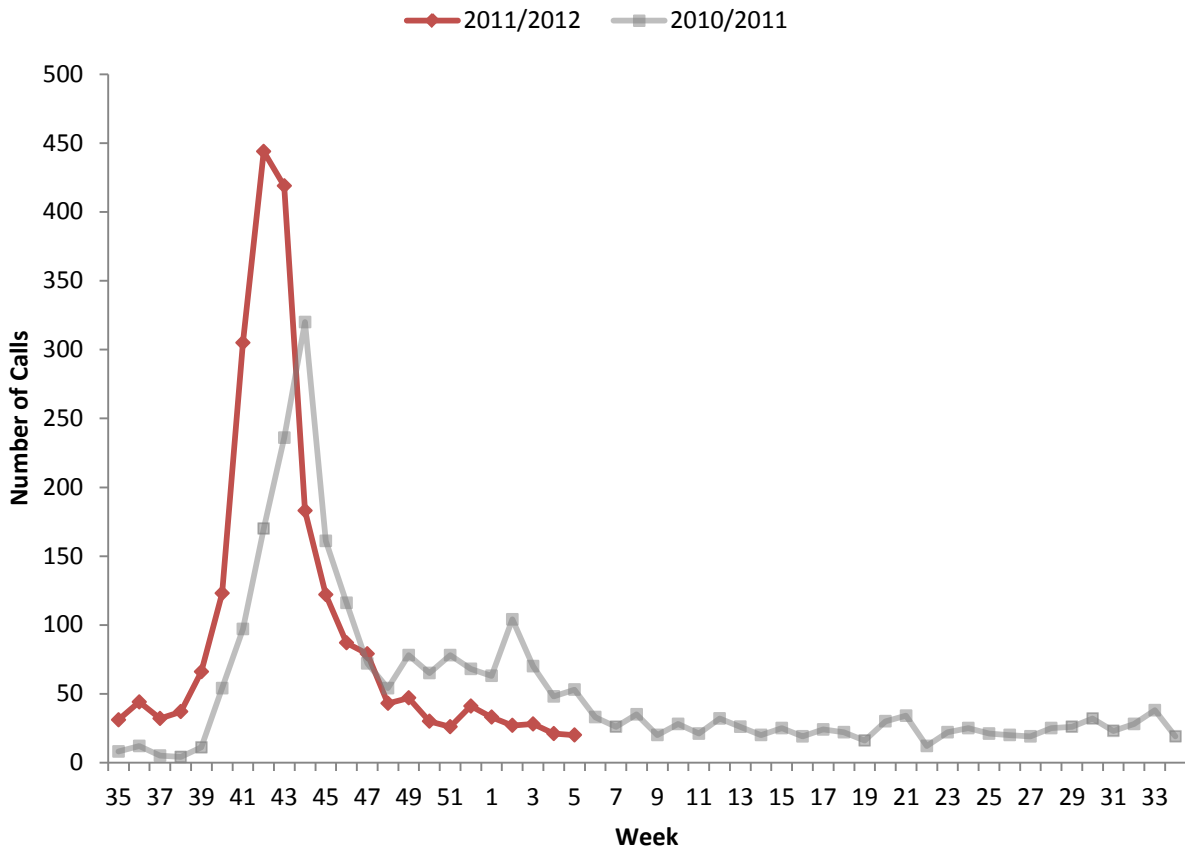


Health Links – Info Santé (HL-IS)

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.

The number of calls to HL-IS Influenza Service continues to decline gradually. The weekly total remains lower than the same time last season.

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 were three new cases of influenza A and no new cases of influenza B reported this week. A total of eight lab-confirmed cases of influenza A and two cases of influenza B have been reported since the beginning of the season.

Table 1. Reported Cases of Influenza A and B by Age Group, Manitoba, 2011/2012

Age Group	Influenza A		Influenza B	
	# of cases	% of total	# of cases	% of total
<1 yrs	3	37.5%	0	0.0%
1-4 yrs	0	0.0%	0	0.0%
5-9 yrs	0	0.0%	0	0.0%
10-14 yrs	0	0.0%	0	0.0%
15-19 yrs	0	0.0%	0	0.0%
20-24 yrs	0	0.0%	0	0.0%
25-29 yrs	0	0.0%	0	0.0%
30-39 yrs	1	12.5%	0	0.0%
40-49 yrs	0	0.0%	0	0.0%
50-59 yrs	0	0.0%	0	0.0%
60-69 yrs	0	0.0%	1	50.0%
70-79 yrs	1	12.5%	1	50.0%
>79 yrs	3	37.5%	0	0.0%
Missing	0	0.0%	0	0.0%
TOTAL	8		2	

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.)

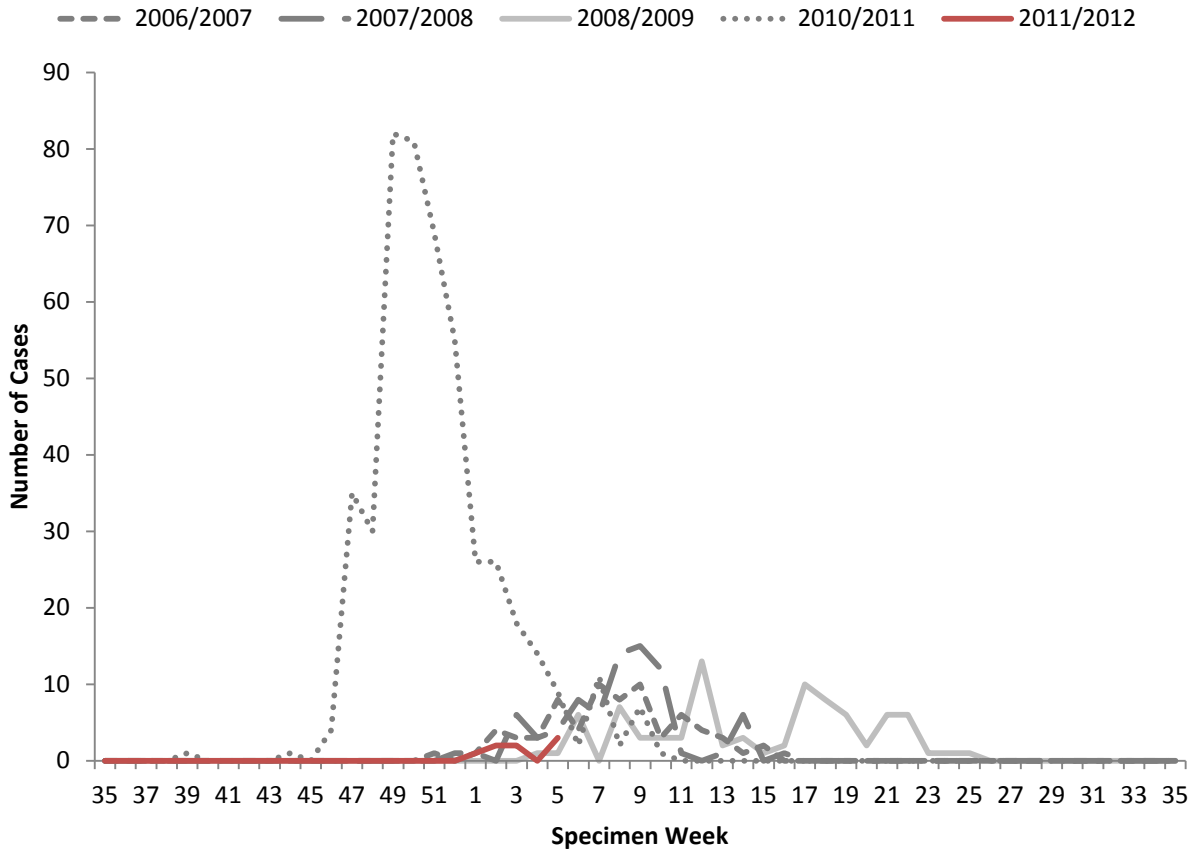
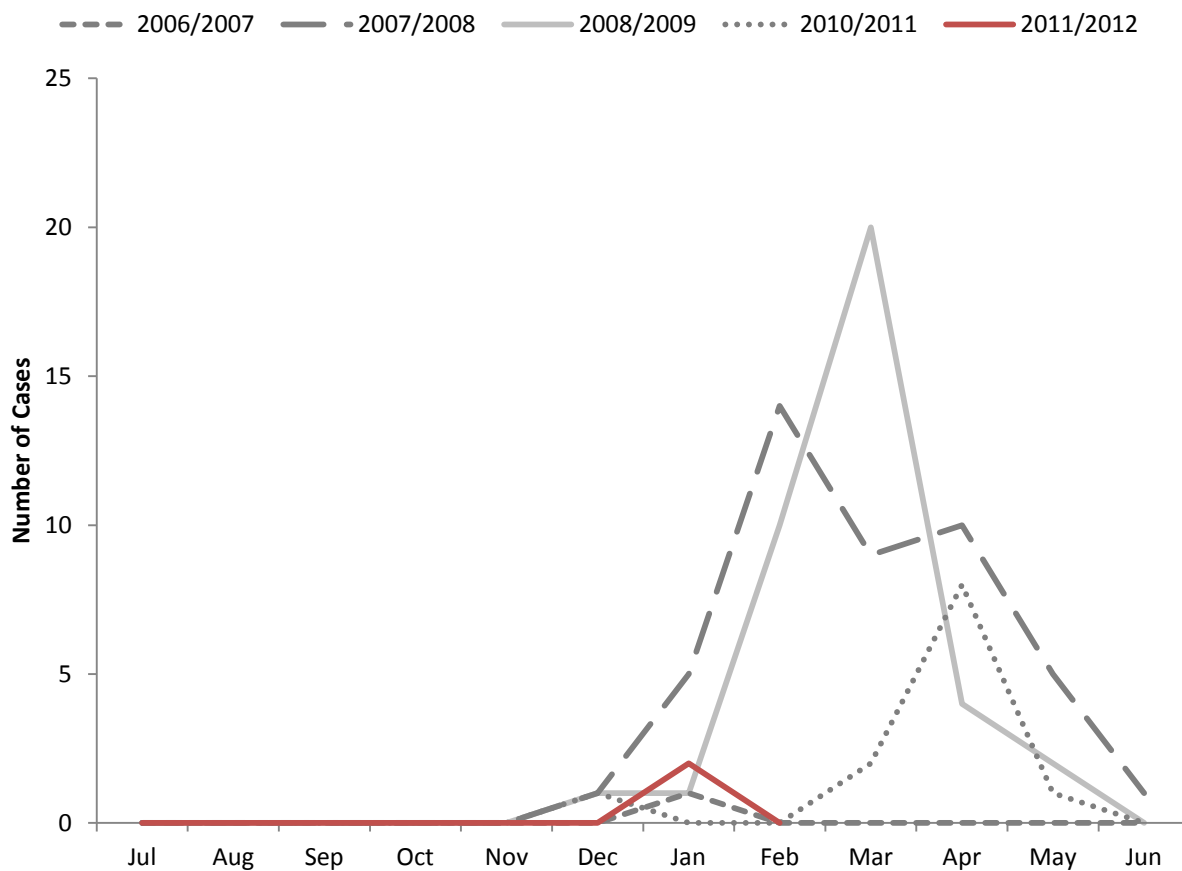


Figure 4. Number of lab-confirmed cases of influenza B by specimen collection month and season up to February 4, 2012, Manitoba



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 **four** hospitalizations, of which **one** resulted in an ICU admission, and **one** death associated with influenza reported in Manitoba this season.¹

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.

There were **no** lab-confirmed outbreaks of influenza A or B reported to Manitoba Health this past week. There has been a total of one lab-confirmed outbreak of Influenza A reported this season.

Table 2. Number of lab-confirmed outbreaks of influenza A by RHA and season, Manitoba

RHA:	2010/2011 (up to Feb 5, 2011)				2011/2012 (up to Feb 4, 2012)			
	LTCF	Workplace	ACF	Community	LTCF	Workplace	ACF	Community
Winnipeg	19	1	1		1			
Brandon	1							
North Eastman								
South Eastman								
Interlake	2							
Central	2		1					
Assiniboine	4							
Parkland	1							
Nor-Man								
Burntwood				1				
Churchill								

LTCF: long term care facility

ACF: acute care facility

¹ 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.

Sub-Typing, Strain Characterization, and Antiviral Resistance

Sub-Typing:

Table 3. Sub-typing of influenza A specimens as reported by CPL, 2011/2012 flu season, Manitoba

A/H1N1	A/H3N2	A Unsubtyped	A Total
0	3	2	5

Strain Characterization:

Since September 1, 2011, NML has antigenically characterized 179 influenza viruses (50 H3N2, 43 H1N1, and 86 B viruses) that were received from Canadian laboratories with the following results:

- 50 A/Perth/16/2009 (H3N2)-like²;
- 43 A/California/7/2009 (H1N1(pdm09))-like³;
- 50 B/Brisbane/60/08-like (B/Victoria/02/87 lineage)⁴;
- 36 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:

- 116 influenza A viruses (71 H3N2 and 45 H1N1) were tested for resistance to amantadine, and it was found that 70 H3N2 viruses were resistant to amantadine and one was sensitive to amantadine. All 45 H1N1 viruses were resistant to amantadine.
- 174 influenza viruses (48 H3N2, 41 H1N1 and 85 B) were tested for resistance to oseltamivir, and it was found that all 174 viruses were sensitive to oseltamivir.
- 171 influenza viruses (48 H3N2, 41 H1N1 and 82 B) were tested for resistance to zanamivir, and it was found that all 171 viruses were sensitive to zanamivir.

There were no isolates tested from CPL.

² Strain match to recommended H3N2 component for the 2011/2012 northern hemisphere influenza vaccine.

³ Strain match to recommended H1N1 component for the 2011/2012 northern hemisphere influenza vaccine.

⁴ 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

Cumulative data:

Cumulative data includes updates to previous weeks; due to reporting delays or amendments, the sum of weekly report totals may not add up to cumulative totals.

Data extraction date:

Manitoba-specific information contained within this update is based on data confirmed in Manitoba's PHS Unit databases on or before **February 10, 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:

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

For national surveillance data, refer to:

<http://www.phac-aspc.gc.ca/fluwatch/index-eng.php>