

2011/2012 Season  
Week 3: January 15-21, 2012

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

## Summary:

- During week 3 (January 15-21, 2012), influenza activity remained **low**.
- The influenza-like-illness rate was 4% with 59.1% of sentinel physician sites reporting.
- The number of respiratory tests performed by CPL has **decreased** since last week; however, the percent positive for influenza has **increased** slightly.
- There were **no** lab-confirmed outbreaks of influenza reported this week.
- There have been **two** hospitalizations reported associated with a lab-confirmed report of influenza.

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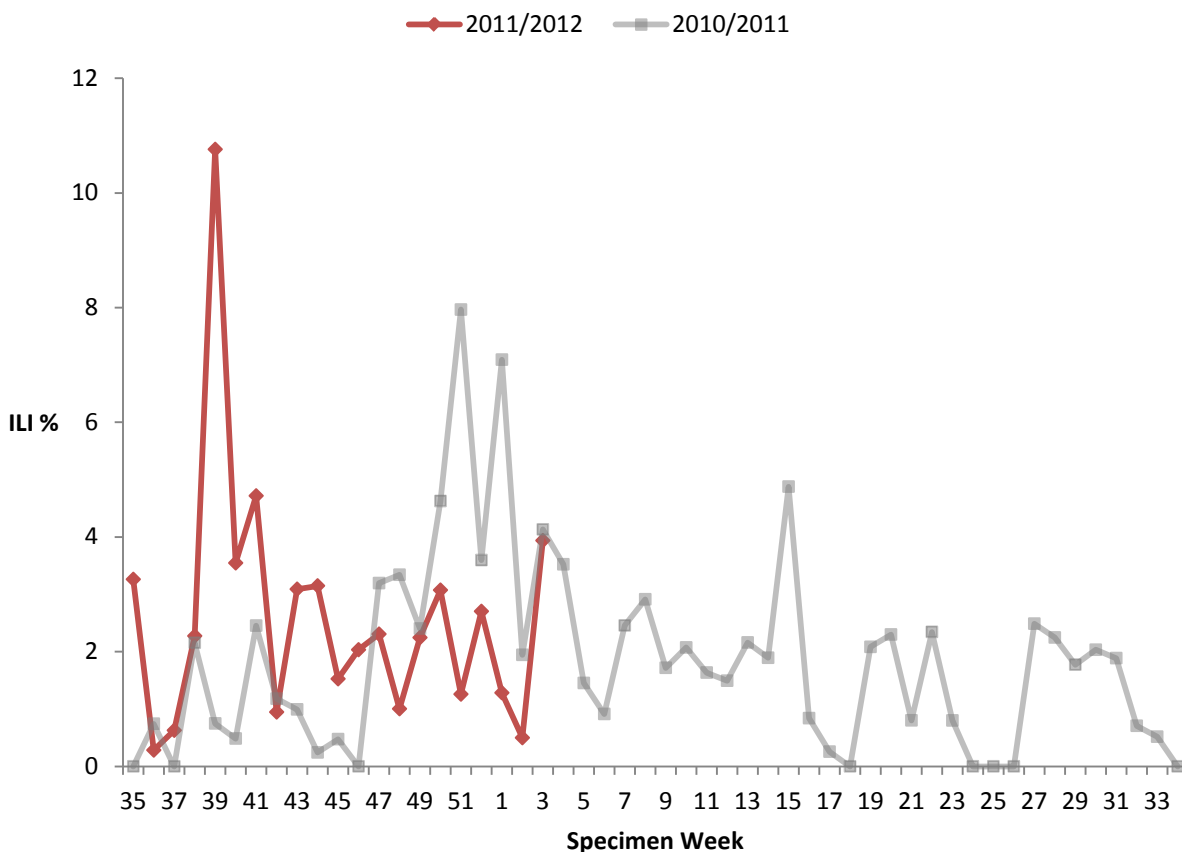
### Sentinel Physicians

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. 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 increased during week 3 to 4% from 0.5% last week. The rate is comparable to the rate observed at the same time last season.

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

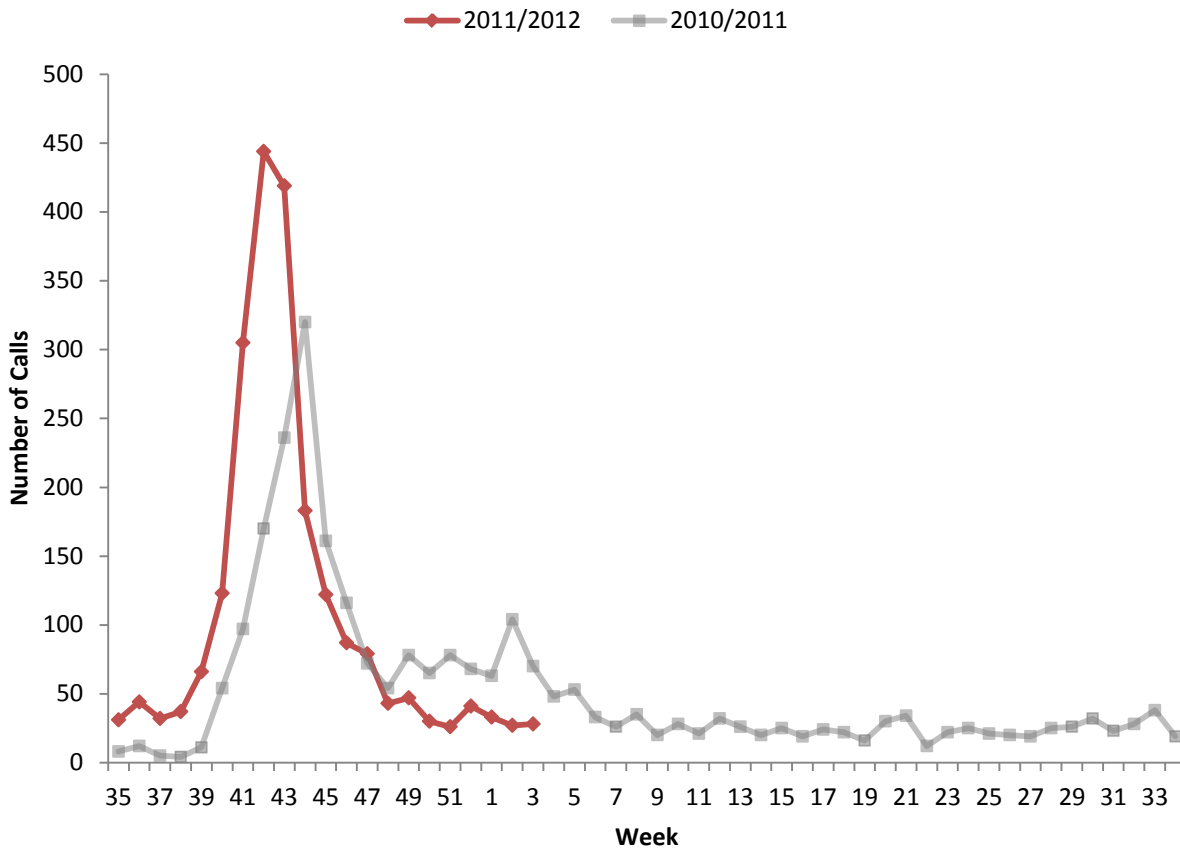


**Health Links – Info Santé (HL-IS)**

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.

The number of calls to HL-IS Influenza Service was comparable to last week; however, 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.

The number of lab-confirmed cases reported has increased since last week; however, it is still lower or comparable to what was observed in previous seasons. There have been five lab-confirmed cases of influenza A and one of Influenza B 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       | 1           | 20.0%      | 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    | 0           | 0.0%       | 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%       | 0           | 0.0%       |
| 70-79 yrs    | 1           | 20.0%      | 0           | 0.0%       |
| >79 yrs      | 3           | 60.0%      | 1           | 100.0%     |
| Missing      | 0           | 0.0%       | 0           | 0.0%       |
| <b>TOTAL</b> | <b>5</b>    |            | <b>1</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.)

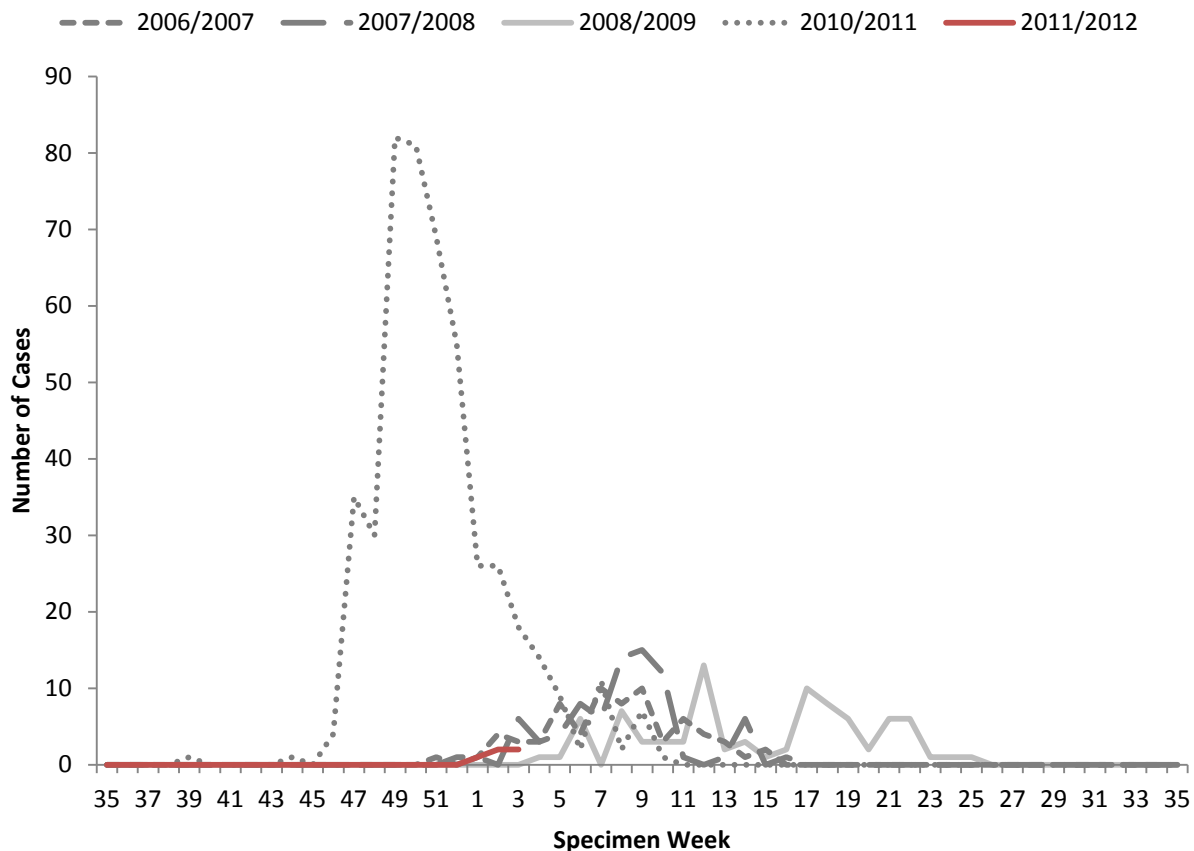
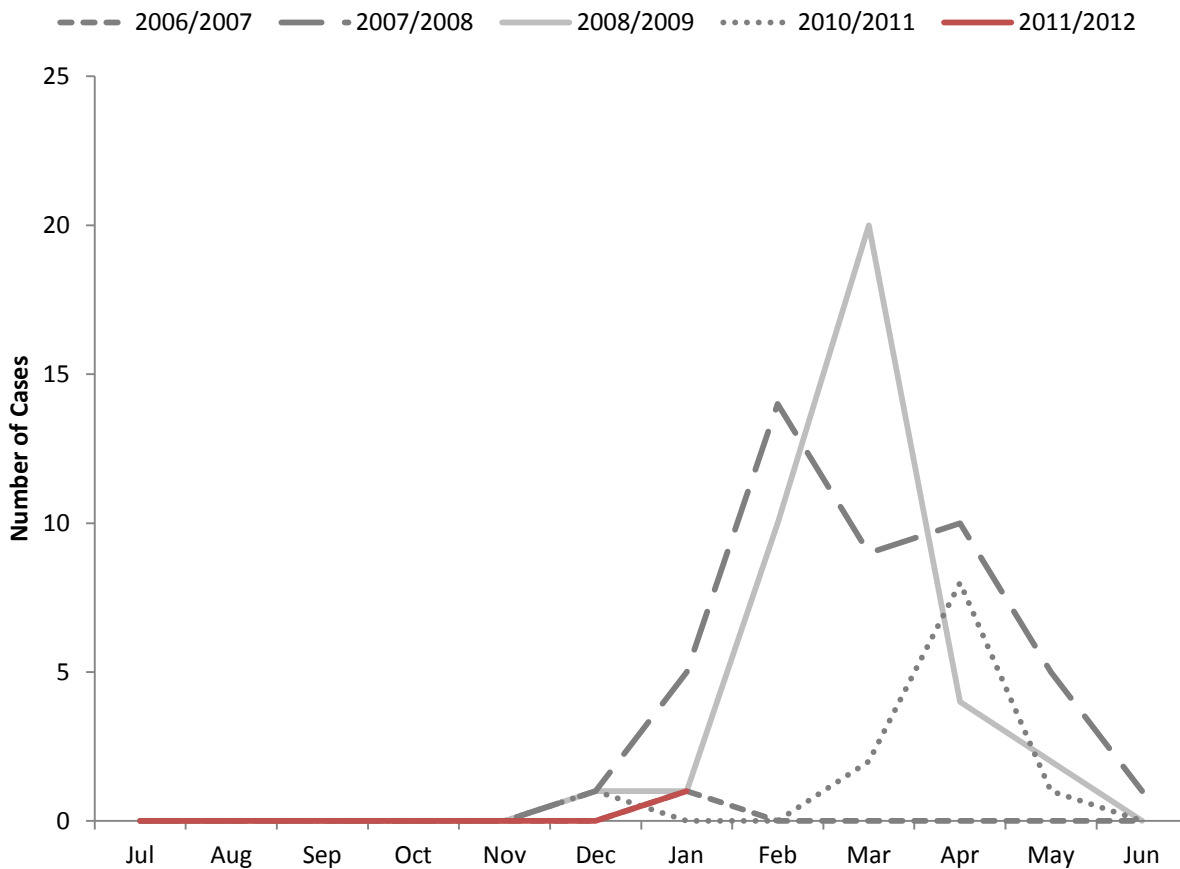


Figure 4. Number of lab-confirmed cases of influenza B by specimen collection month and season up to January 21, 2012, Manitoba



### 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 **two** hospitalizations, of which **one** resulted in an ICU admission, and **no** 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.

There were no lab-confirmed outbreaks of influenza A or B reported to Manitoba Health this past week.

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

| RHA:          | 2010/2011 (up to Jan 22, 2011) |           |     |           | 2011/2012 (up to Jan 21, 2012) |           |     |           |
|---------------|--------------------------------|-----------|-----|-----------|--------------------------------|-----------|-----|-----------|
|               | 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   | 3                              |           |     |           |                                |           |     |           |
| Parkland      | 1                              |           |     |           |                                |           |     |           |
| Nor-Man       |                                |           |     |           |                                |           |     |           |
| Burntwood     |                                |           |     | 1         |                                |           |     |           |
| Churchill     |                                |           |     |           |                                |           |     |           |

LTCF: long term care facility

ACF: acute care facility

## 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 107 influenza viruses (40 H3N2, 24 H1N1, and 43 B viruses) that were received from Canadian laboratories with the following results:

- 40 A/Perth/16/2009 (H3N2)-like<sup>1</sup>;
- 24 A/California/7/2009 (H1N1(pdm09))-like<sup>2</sup>;
- 25 B/Brisbane/60/08-like (B/Victoria/02/87 lineage)<sup>3</sup>;
- 18 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:

- 71 influenza A viruses (51 H3N2 and 20 H1N1) were tested for resistance to amantadine, and it was found that all 71 influenza A viruses were resistant to amantadine.
- 101 influenza viruses (37 H3N2, 22 H1N1 and 42 B) were tested for resistance to oseltamivir, and it was found that all 101 viruses were sensitive to oseltamivir.
- 101 influenza viruses (37 H3N2, 22 H1N1 and 42 B) were tested for resistance to zanamivir, and it was found that all 101 viruses were sensitive to zanamivir.

There were no isolates tested from CPL.

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

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

<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 26, 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>