

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: November 6, 2011 – November 12, 2011 (week 45)

Summary

In New Brunswick, low influenza activity for week 45 and within expected levels

New Brunswick:

- There have been no positive influenza detections during week 45, consistent with baseline levels.
- The ILI consultation rate in week 45 was lower than week 44 and is slightly lower than the expected range for this time of year.
- No new ILI or influenza outbreaks were reported in week 45, consistent with baseline levels.

Canada:

- Influenza activity continues to increase in some regions (AB, BC, ON & QC) but remains low in the rest of the country. One region in AB reported localized influenza activity; six regions reported sporadic influenza activity (in BC, AB, ON & QC), a slight increase compared to previous weeks.
- Eleven influenza detections were reported in week 45, a slight increase compared to previous weeks.
- The ILI consultation rate declined slightly in week 45 and remains low. One ILI school outbreak was reported in week 45 in Alberta.

International:

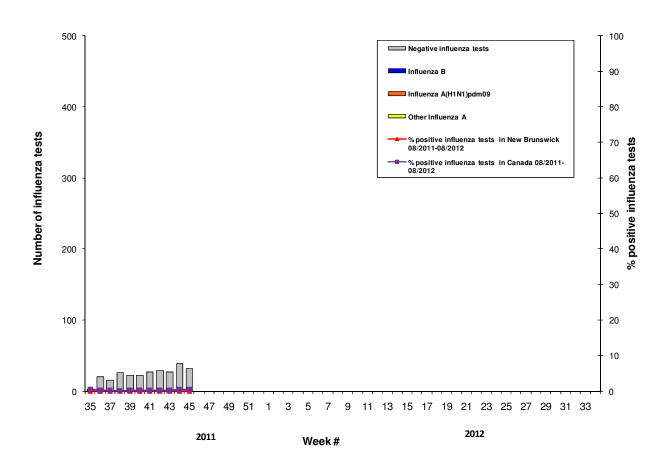
- United States: In 2011, the CDC has reported five cases of human infection with a swine-origin influenza A(H3N2) virus that carries the M gene from the 2009 H1N1 virus. This virus was first detected in a child in Indiana, subsequently 3 additional cases were detected in Pennsylvania and the fifth case was reported recently in Maine. No sustained human-to-human transmission was found. All had previous exposure to swine. No such viruses have been detected in Canada.
- China: In Hong Kong, 15 pigs were found infected with a swine influenza H3N2 virus that has picked up some genes of human swine influenza virus (Source: ProMED update).

1) Influenza Laboratory Data¹

- Overall influenza activity remains low in week 45.
- No influenza detections were reported during that period.
- Since the beginning of the season, no positive influenza detections have been reported.

Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of 7 sites in Emergency Rooms, 5 sites in Family Practice, 3 sites in First Nations communities, 1 site in a Nursing Home, 3 sites in Universities and 8 sites in Community Health Centers. Diagnostic specimens are submitted by physicians in the community/hospital setting. Influenza laboratory data is comprised of results from surveillance and diagnostic specimens. All laboratory specimens are tested using a real-time PCR assay, which is a rapid detection method designed for detection of all known variants of influenza A and B. All laboratory-confirmed cases are reported for the week when laboratory confirmation was received.

<u>Graph 1</u>: Number and percent of positive influenza specimens in New Brunswick, by week, up to November 12, 2011 (data source: G. Dumont lab results)



<u>Table 1</u>: Positive influenza test results by Health Region in New Brunswick up to November 12, 2011 (data source: G. Dumont lab results)

| Region | Reporting period: November/06/2011-November/12/2011 | | | | | | Cumulative: (2011/2012 season) Aug./28/2011 –Nov./12/2011 | | | | Cumulative: (2010/2011 season) Aug./29/2010 – Aug./27/2011 | | | |
|----------|--|-------|-------|-----------------|----------------|---|--|-------|-----------------|----------------|---|---------------|-------|-----|
| | Activity level ² | А | | | | В | А | | | | В | A B | | |
| | | A(H1) | A(H3) | (H1N1) pdm09 | unsubt yped | | A(H1) | A(H3) | (H1N1) pdm09 | unsubt yped | | Non- pH1N1 | pH1N1 | |
| Region 1 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 433 | 56 | 29 |
| Region 2 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 2 | 13 |
| Region 3 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 16 | 19 |
| Region 4 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 58 | 56 |
| Region 5 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 3 | 1 |
| Region 6 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 27 | 5 |
| Region 7 | No activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 3 | 3 |
| Total NB | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 785 | 165 | 126 |

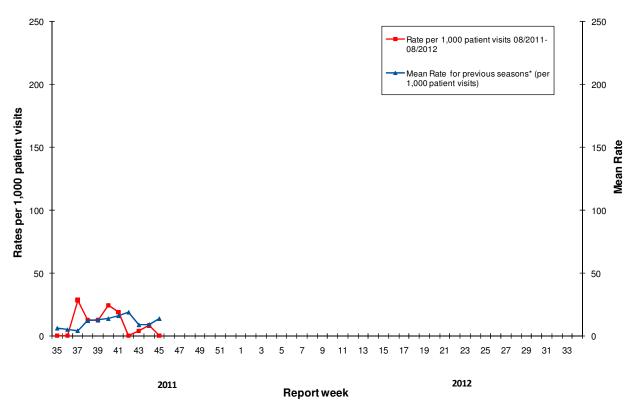
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² Influenza activity level definition is available on the PHAC FluWatch website: http://www.phac-aspc.gc.ca/fluwatch/11-12/def11-12-eng.php

2) ILI Consultation Rates³

- During week 45, the ILI consultation rate was 0.0 consultations per 1,000 patient visits, a lower rate than week 44 (8.2 consultations per 1,000 patient visits) and was slightly below the expected levels for this time of year.
- During week 45, the sentinel response rate was 33% for the FluWatch sentinel physicians and 32% for the NB SPIN practitioners. (4 FluWatch and 6 NB SPIN)

<u>Graph 2</u>: ILI Consultation Rates in New Brunswick, by report week, season 2011/12 compared to previous seasons*



^{*} The mean rate was based on data from the 1996/97 to 2010/2011 seasons and excludes the Pandemic season (2009-2010).

³ A total of 31 practitioner sites (12 FluWatch sentinel physicians and 19 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

3) ILI and Laboratory-Confirmed Outbreak Data

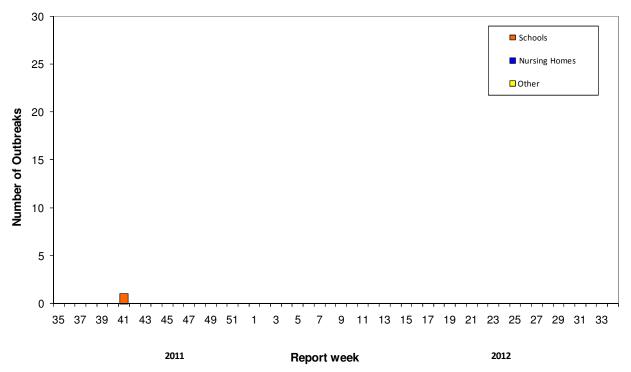
<u>Table 2:</u> ILI activity/outbreaks in New Brunswick nursing homes and schools for the reporting week, current and previous seasons.

| | Novembe | Reporting period: er/06/2011 –Novembe | Cumulative # of | Cumulative # of outbreaks | | |
|----------|---|--|--|-------------------------------|---------------------|--|
| | Lab-confirmed outbreaks in Nursing Homes* | Schools reporting ILI outbreaks** | Lab-confirmed outbreaks in Other Settings* | outbreaks season 2011-2012 | season 2010-2011 | |
| Region 1 | 0 out of 13 | 0 out of 74 | 0 | 0 | 17 | |
| Region 2 | 0 out of 15 | 0 out of 81 | 0 | 0 | 21 | |
| Region 3 | 0 out of 14 | 0 out of 95 | 0 | 0 | 12 | |
| Region 4 | 0 out of 6 | 0 out of 22 | 0 | 0 | 12 | |
| Region 5 | 0 out of 2 | 0 out of 18 | 0 | 0 | 17 | |
| Region 6 | 0 out of 9 | 0 out of 35 | 0 | 0 | 10 | |
| Region 7 | 0 out of 4 | 0 out of 27 | 0 | 1 | 22 | |
| Total NB | 0 out of 63 | 0 out of 352 | 0 | 1 | 111 | |

^{*}Two or more ILI cases within a seven day period, including at least one laboratory-confirmed case of influenza. Outbreaks are reported in the week when laboratory confirmation is received.

^{**}Schools reporting 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.

Graph 3: Number of Influenza Outbreaks in Nursing Homes¹ and ILI Outbreaks in Schools² reported to Public Health in New Brunswick, by report week, season 2011/12.



¹ The National FluWatch definition of an outbreak in a nursing home is stated as two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case.

National Flu Watch Program - Additional information on influenza activity in Canada and around the world is available on the Public Health Agency of Canada's website at: www.phac-aspc.gc.ca/fluwatch/index.html

Other Links:

World-

http://www.who.int/influenza/surveillance monitoring/updates/latest update GIP surveillance/en/index.html Europe: http://www.euroflu.org/cgi-files/bulletin v2.cgi and

http://www.ecdc.europa.eu/en/healthtopics/seasonal influenza/epidemiological data/Pages/Weekly Influenza Surveillance Overview.aspx

PAHO:http://new.paho.org/hq/index.php?option=com content&task=blogcategory&id=805&Itemid=569]

Australia: http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm] New Zealand: [http://www.surv.esr.cri.nz/virology/influenza weekly update.php

Argentina: http://www.msal.gov.ar/archivos/INFORME%20INFLUENZA%20PANDÉMICA%20 H1N1 %2005-08-2009.pdf

South Africa: http://www.nicd.ac.za/ US: www.cdc.gov/flu/weekly/

² The National FluWatch definition of an ILI outbreak in a school is stated as absenteeism greater than 10% (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.