

WEEKLY NEW BRUNSWICK INFLUENZA REPORT

Reporting period: December 20 2015 to January 2 2016 (weeks 51 & 52)

Summary:

In New Brunswick, influenza activity remains low in weeks 51 & 52

New Brunswick:

- There have been 6 positive influenza detections during weeks 51 & 52, all influenza A (unsubtyped) viruses. To date this season, a total of 12 influenza detections have been reported, 10 influenza A (unsubtyped) and 2 influenza B.
- There have been 5 influenza associated hospitalizations during weeks 51 & 52. So far this season, a total of 8 influenza associated hospitalizations were reported in New Brunswick.
- The ILI consultation rate was 7.9 and 5.1 consultations per 1,000 patients visits, respectively for weeks 51 and 52, and was below the expected levels for both weeks.
- No new influenza or ILI outbreaks were reported during the 2-week period.

Canada:

- In week 52, seasonal influenza activity increased slightly in Canada. Laboratory detections of influenza increased but remain below expected levels for this time of the year.
- There has been an increase in the number of influenza A (H1N1) cases reported over the past few weeks.
- To date, the majority of influenza laboratory detections and hospitalizations have been in seniors greater than 65 years of age.
- 183 laboratory detections of influenza were reported during week 52, and the percentage of laboratory tests positive for influenza was 4.3%.
- The national ILI consultation rate was 50.3 consultations per 1,000 patients' visits for week 52, the highest ILI rate was found in the 0-4 age group.
- Antigenic characterization: NML has antigenically characterized 71 H3N2 viruses, all of which showed a match to the vaccine strain, 26 A (H1N1)pdm09 that was a match to the vaccine strain and 25 B viruses, all of which were a match to the vaccine strain (quadrivalent).

International:

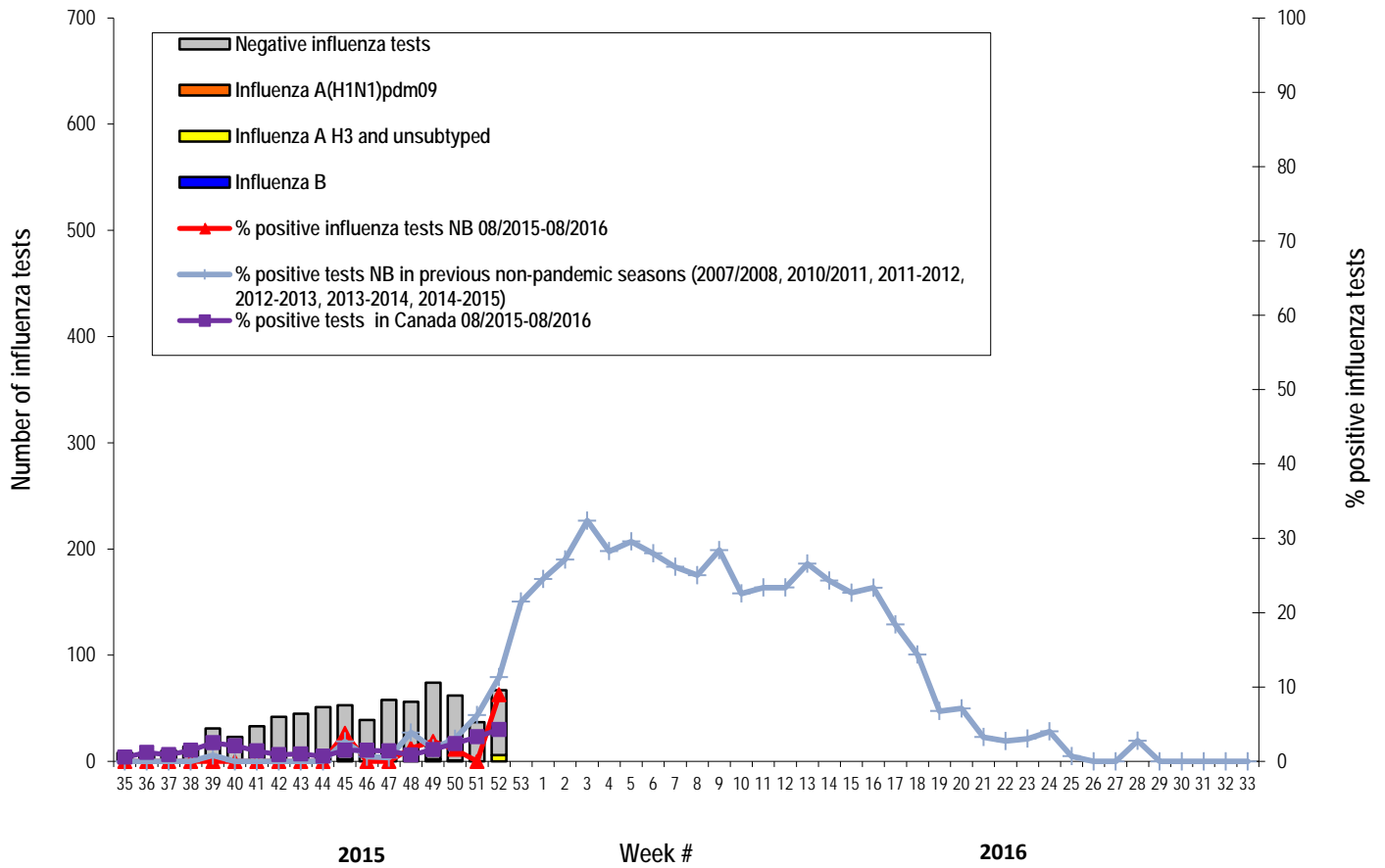
- No new updates on international influenza activity.

1) Influenza Laboratory Data¹

- Influenza activity remains low.
- Six influenza detections were reported during weeks 51 & 52, all were influenza A (unsubtyped) viruses.
- Since the beginning of the season, 12 positive influenza detections were reported, 2 influenza B and 10 influenza A (unsubtyped).

¹ Surveillance specimens are submitted by recruited New Brunswick Sentinel Practitioner Influenza Network (NB SPIN) practitioners, which are comprised of sites in Emergency Rooms, in Family Practice, in First Nations communities, in Nursing Home, in Universities and 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.

Graph 1: Number and percent of positive influenza specimens in New Brunswick by week, up to January 2 2016
 (data source: G. Dumont Lab results)



Note: Most of the Influenza A untyped specimens are of the predominant strain.

Table 1: Positive influenza test results by Health Region, in New Brunswick for reporting week, cumulative current and previous seasons.
(data source: G. Dumont lab results up to January 2 2016)

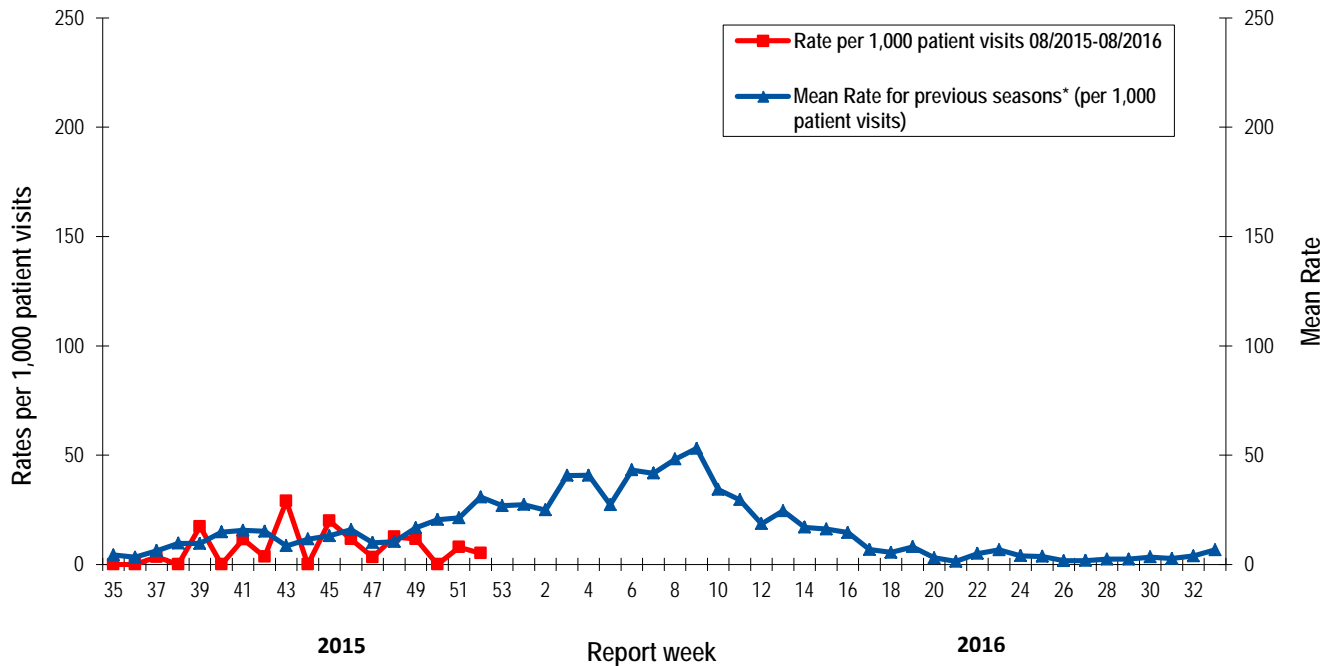
Zone	Reporting period: Dec./20/2015–Jan./02/2016						Cumulative: (2015/2016 season) Aug./30/2015 –Jan./02/2016					Cumulative: (2014/2015 season) Aug./24/2014 – Aug./29/2015				
	Activity level ²	A				B	A				B	A				B
		A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	A(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total	(H3)	(H1N1) pdm09	Unsubtyped / Other	A Total	Total
Zone 1	Sporadic	0	0	3	3	0	0	0	5	5	2	88	0	353	441	280
Zone 2	Sporadic	0	0	2	2	0	0	0	2	2	0	19	0	69	88	58
Zone 3	No activity	0	0	0	0	0	0	0	0	0	0	19	0	69	88	55
Zone 4	No activity	0	0	0	0	0	0	0	1	1	0	56	0	31	87	27
Zone 5	No activity	0	0	0	0	0	0	0	0	0	0	8	0	14	22	2
Zone 6	No activity	0	0	0	0	0	0	0	1	1	0	81	0	95	176	29
Zone 7	Sporadic	0	0	1	1	0	0	0	1	1	0	12	0	24	36	19
Total NB		0	0	6	6	0	0	0	10	10	2	283	0	655	938	470

² Influenza activity level definition is available on the PHAC FluWatch website: <http://healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/season-definitions-saison-eng.php#/>

2) ILI Consultation Rates³

- During weeks 51 & 52, the ILI consultation rate was 7.9 and 5.1 consultations per 1,000 patients visits, respectively, and was below the expected levels for both weeks.
- During weeks 51 & 52, the sentinel response rate was 34%, for both weeks, for both the FluWatch sentinel physicians and the NB SPIN practitioners.

Graph 2: ILI Consultation Rates in New Brunswick, by report week, season 2015/16 compared to previous seasons*



* The mean rate was based on data from the 1996/97 to 2014/2015 seasons and excludes the Pandemic season (2009-2010).

3) ILI and Laboratory-Confirmed Outbreak Data

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

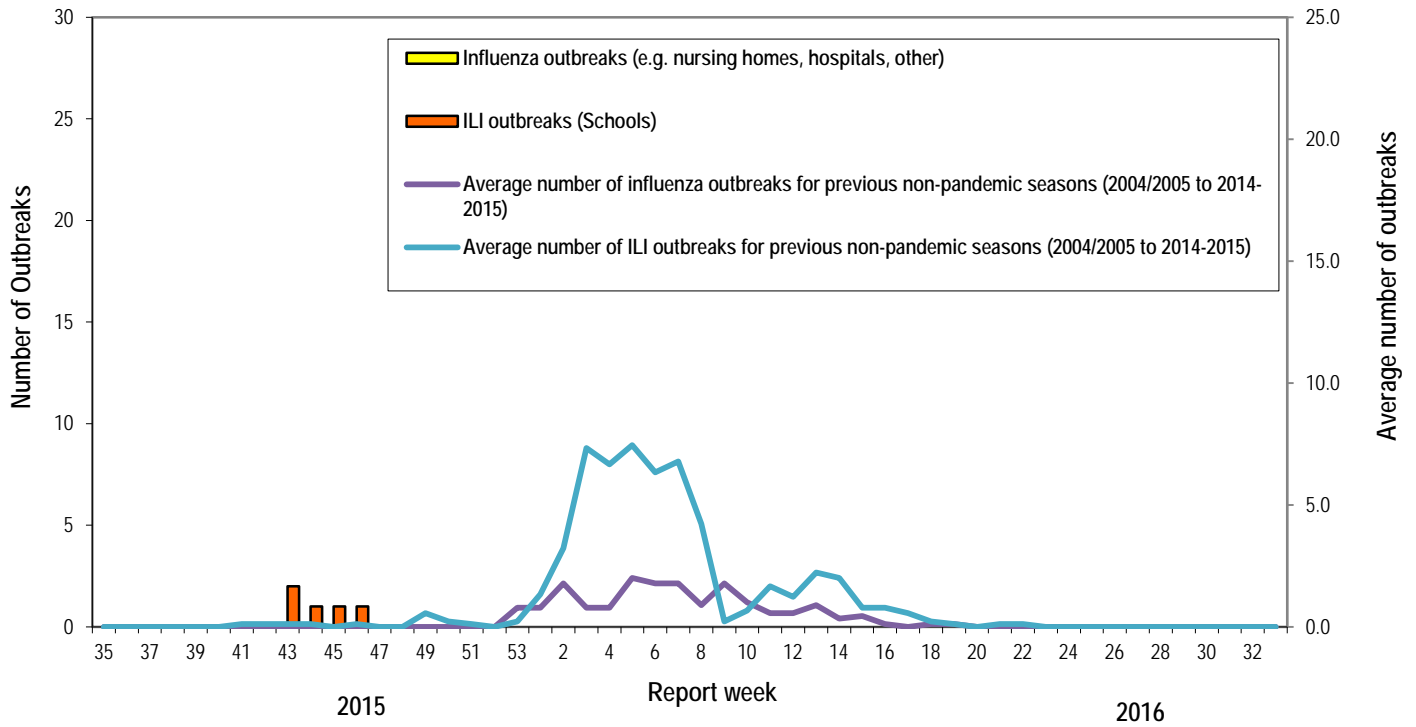
	Reporting period: Dec./20/2015–Jan./02/2016			Cumulative # of outbreaks season 2015-2016	Cumulative # of outbreaks season 2014-2015
	Lab-confirmed outbreaks in Nursing homes*	ILI school outbreaks**	Lab-confirmed outbreaks in Other settings*		
Zone 1	0 out of 13	0 out of 74	0	1	14
Zone 2	0 out of 15	0 out of 81	0	0	15
Zone 3	0 out of 14	0 out of 95	0	0	12
Zone 4	0 out of 6	0 out of 22	0	0	6
Zone 5	0 out of 2	0 out of 18	0	0	4
Zone 6	0 out of 9	0 out of 35	0	2	5
Zone 7	0 out of 4	0 out of 27	0	2	8
Total NB	0 out of 63	0 out of 352	0	5	64

*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 which is likely due to ILI.

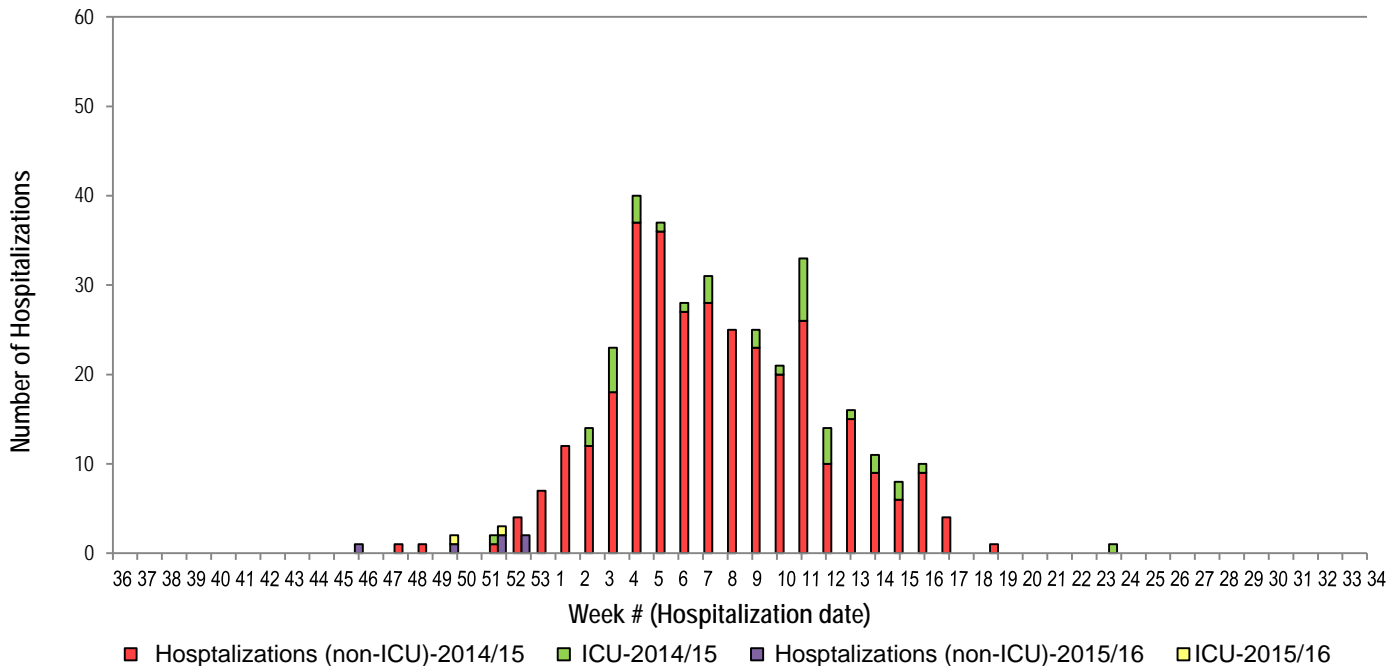
³ A total of 29 practitioner sites (17 FluWatch sentinel physicians and 12 NB SPIN sites) are recruited this season to report the number of ILI patients and total patient consultations one day during a reporting week.

Graph 3: Number of Influenza Outbreaks (nursing homes, hospitals, other)⁴ and ILI Outbreaks (schools)⁵ reported to Public Health in New Brunswick, by report week, season 2015/16.



4) Influenza associated Hospitalization⁴ and Death⁵ Surveillance⁶

Graph 4: Influenza associated Hospitalizations and ICU admissions in New Brunswick, by week of hospitalization for current and past season.*



*Those who had been hospitalized 15 days or more prior to laboratory confirmation date were excluded from the graph

** Twenty-six deaths were reported during season 2014-2015.

⁴ Hospitalizations (including ICU admissions) are influenza associated; they may or may not be due to influenza.

⁵ Deaths are influenza associated; influenza may not be the direct cause of death.

⁶ In early January 2014, the Office of the Chief Medical Officer of Health implemented a new provincial surveillance system in collaboration with the Regional Health Authorities to monitor influenza-associated hospitalizations, intensive care unit admissions and deaths.

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

Other Links:

World: http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

Europe: 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/>

South Africa: <http://www.nicd.ac.za/>

US: www.cdc.gov/flu/weekly/

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