



August 28 to September 10, 2011 (Weeks 35 and 36)

Overall Influenza Summary

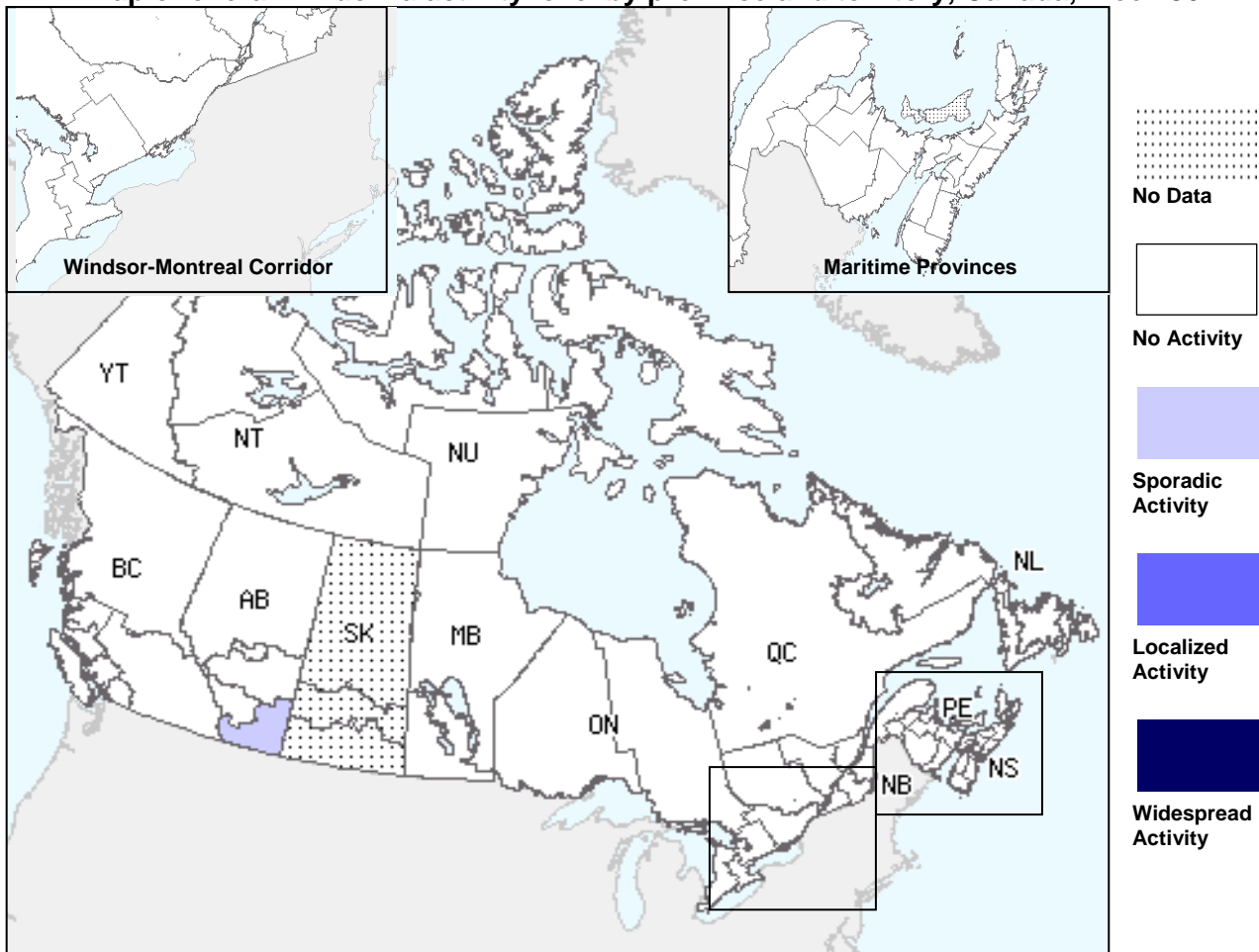
- Week 35 marks the beginning of the influenza surveillance season for 2011-12; influenza activity continues at low inter-seasonal levels. In weeks 35 and 36, only 6 laboratory detections of influenza were reported; two regions in Quebec and one region in Alberta reported sporadic influenza activity; and the ILI consultation rate remained low.
- Other respiratory viruses continue to circulate at low levels.

Note: Weekly FluWatch reports will resume on 21 October 2011 (week 41)

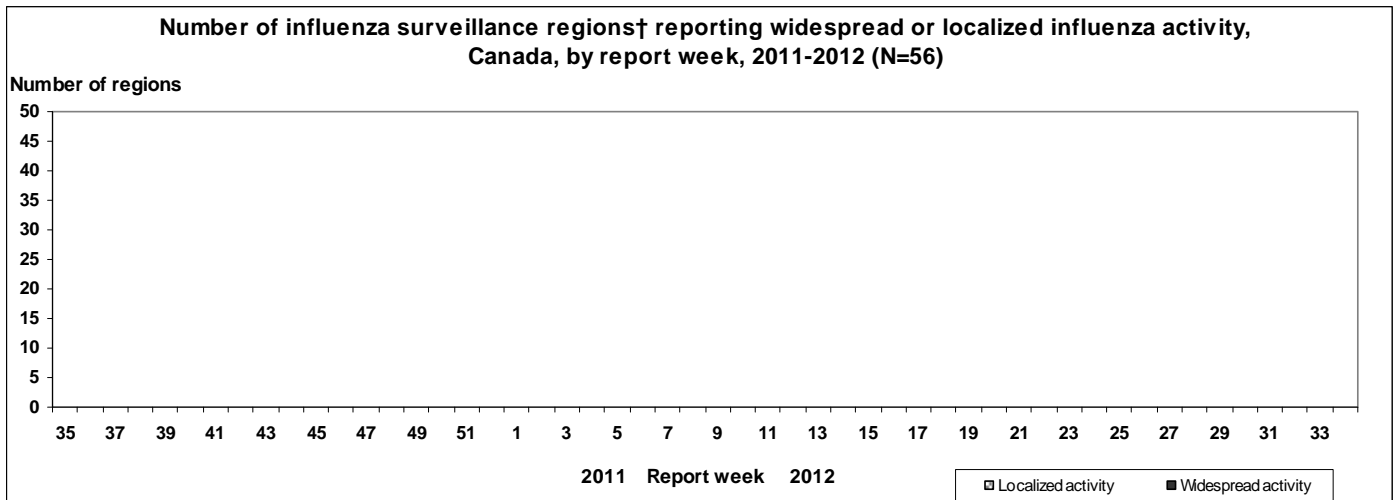
Influenza Activity and Outbreaks

In week 35, two regions in Quebec reported sporadic influenza activity. In week 36, one region in Alberta reported sporadic activity. Saskatchewan and Prince Edward Island have not yet started reporting for the 2011-2012 season (see Activity level Map). No new outbreaks of influenza or ILI were reported in weeks 35 or 36.

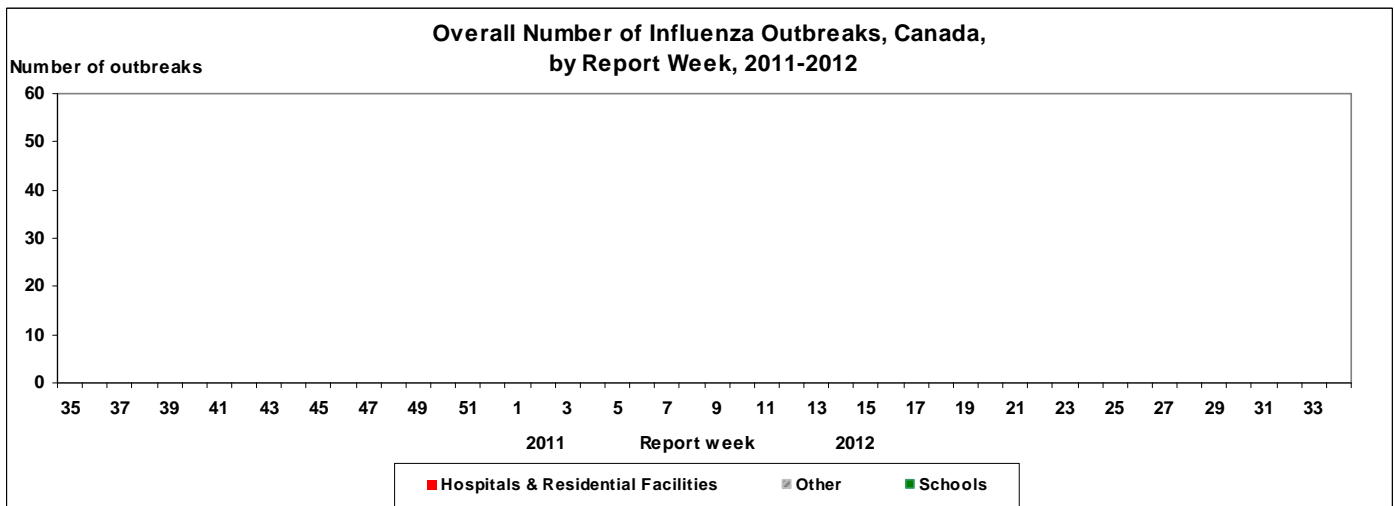
Map of overall Influenza activity level by province and territory, Canada, Week 36



Note: Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, based on laboratory confirmations, sentinel ILI rates (see graphs and tables) and reported outbreaks. Please refer to detailed definitions on the last page. For areas where no data is reported, late reports from these provinces and territories will appear on the FluWatch website.

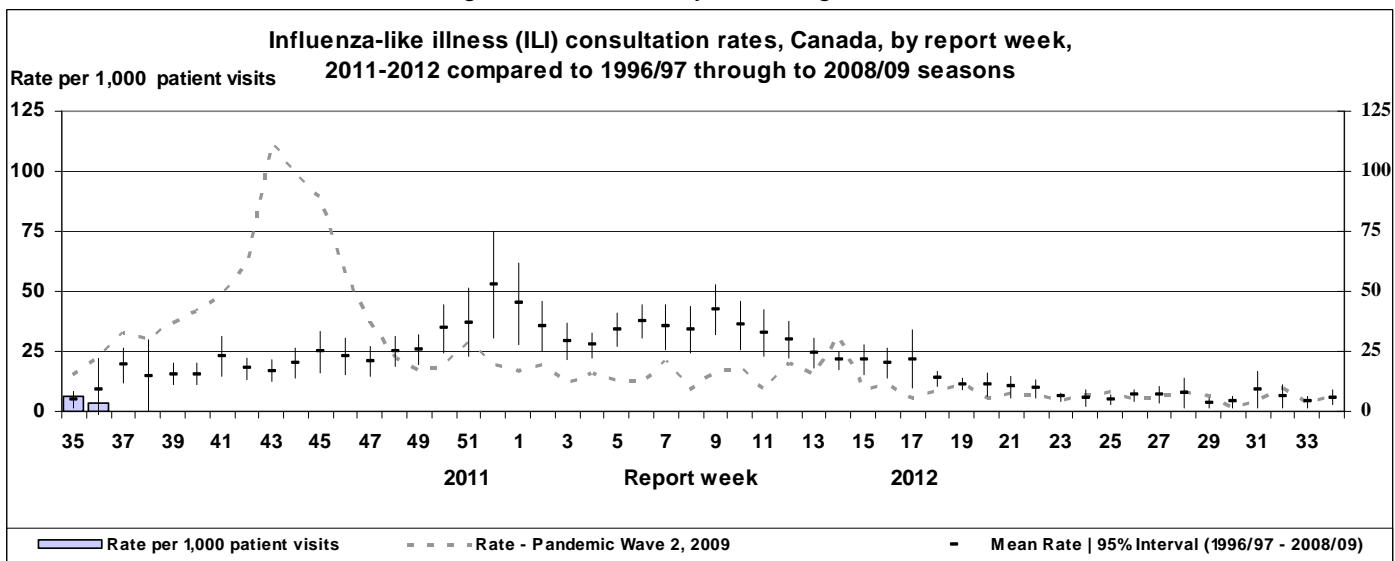


† sub-regions within the province or territory as defined by the provincial/territorial epidemiologist. Graph may change as late returns come in.



ILI consultation rate

The national ILI consultation rate was 6.1 and 3.8 consultations per 1,000 patient visits in weeks 35 and 36, respectively, which is within the expected levels for this time of year (see ILI graph). In both weeks, the highest consultation rate was observed among children under 5 years of age.



Note: No data available for mean rate in previous years for weeks 19 to 39 (1996-1997 through 2002-2003 seasons). Delays in the reporting of data may cause data to change retrospectively.

Laboratory Surveillance Summary

Only 6 detections of influenza were reported across Canada in weeks 35 and 36, one pH1N1 2009 (AB), 3 unsubtype influenza A (QC), and 2 influenza B (QC). The proportion of tests positive for influenza was 0.5% in week 35 and 0.2% in week 36 (see Influenza tests graph). No detailed case-based laboratory reporting has been received for the 2011-12 season (week 35 & 36) (see Tests detailed table). During week 36, detections of other respiratory viruses continued at low levels: 0.5% of tests for respiratory syncytial virus (RSV) were positive, 3.1% for parainfluenza, and 1.9% for adenovirus (see Respiratory Viruses graph). Rhinovirus detections continued to decline from the peak in mid-July, and in week 36 20.0% of tests were positive. For more details of weekly respiratory virus detections in Canada, see <http://www.phac-aspc.gc.ca/bid-bmi/dsd-dsm/rvdi-divr/index-eng.php>.

Weekly & Cumulative numbers of positive influenza specimens by Provincial Laboratories, Canada, 2011-2012

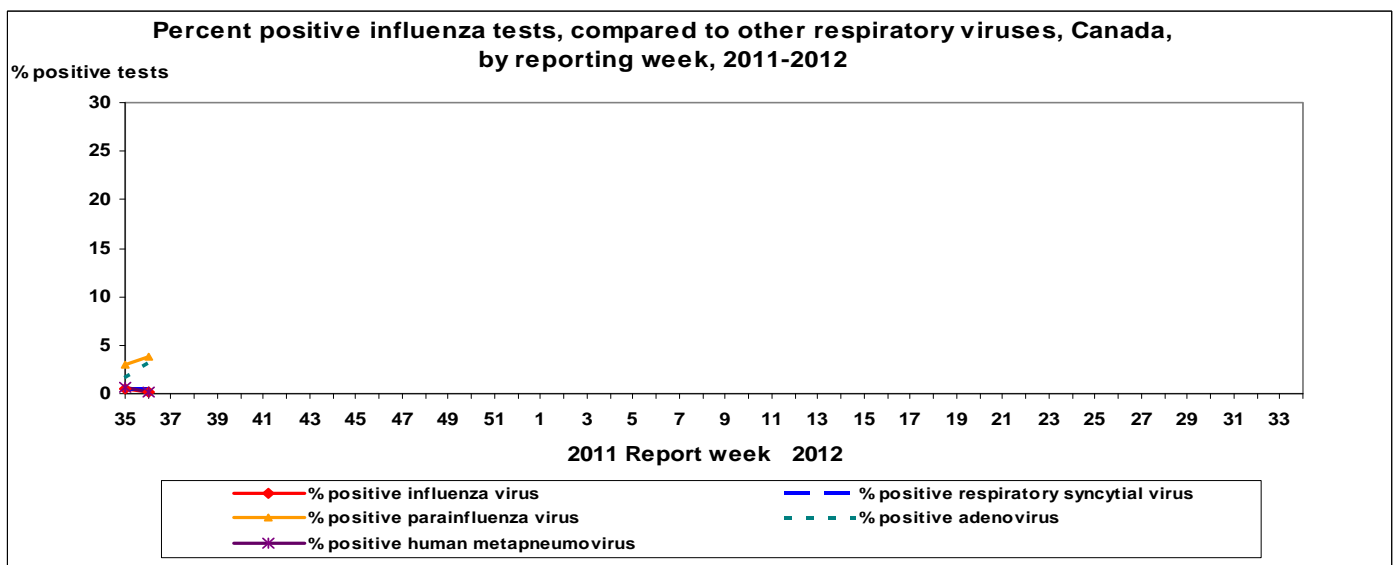
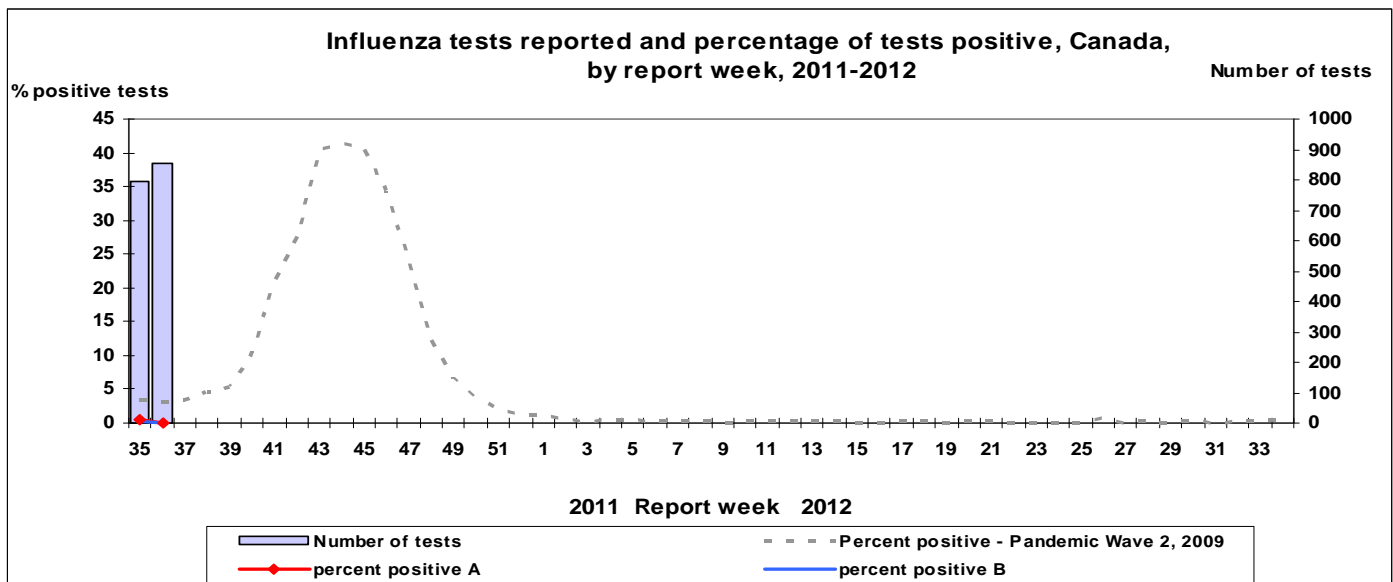
Reporting provinces	Weekly (August 28 to September 10, 2011)						Cumulative (August 28, 2011 to September 10, 2011)					
	Influenza A					B	Influenza A					B
	A Total	A(H1)	A(H3)	Pand H1N1	A (UnS)*	Total	A Total	A(H1)	A(H3)	Pand H1N1	A (UnS)*	Total
BC	0	0	0	0	0	0	0	0	0	0	0	0
AB	1	0	0	1	0	0	1	0	0	1	0	0
SK	0	0	0	0	0	0	0	0	0	0	0	0
MB	0	0	0	0	0	0	0	0	0	0	0	0
ON	0	0	0	0	0	0	0	0	0	0	0	0
QC	3	0	0	0	3	1	3	0	0	0	3	1
NB	0	0	0	0	0	0	0	0	0	0	0	0
NS	0	0	0	0	0	0	0	0	0	0	0	0
PE	0	0	0	0	0	0	0	0	0	0	0	0
NL	0	0	0	0	0	1	0	0	0	0	0	1
Canada	4	0	0	1	3	2	4	0	0	1	3	2

*Unsubtyped: The specimen was typed as influenza A, but no test for subtyping was performed. Specimens from NT, YT, and NU are sent to reference laboratories in other provinces. Note: Cumulative data includes updates to previous weeks; due to reporting delays, the sum of weekly report totals do not add up to cumulative totals.

Weekly & Cumulative numbers of positive influenza specimens by age groups reported through case-based laboratory reporting, Canada, 2011-2012*

Age groups	Weekly (Aug 28 to Sep. 10, 2011)					Cumulative (Aug. 28, 2011 to Sep.10, 2011)				
	Influenza A				B	Influenza A				B
	A Total	Pandemic H1N1	A/H3N2	A unsubtype	Total	A Total	Pandemic H1N1	A/H3N2	A unsubtype	Total
<5	0	0	0	0	0	0	0	0	0	0
5-19	0	0	0	0	0	0	0	0	0	0
20-44	0	0	0	0	0	0	0	0	0	0
45-64	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0

*Please note that this table reflects the number of specimens for which demographic information was reported. These represent a subset of all positive influenza cases reported. Delays in the reporting of data may cause data to change retrospectively.



Antigenic Characterization and Antiviral Resistance

In weeks 35 and 36, the National Microbiology Laboratory (NML) has not reported any antigenic characterization or antiviral resistance data.

Severe Illness Surveillance

In weeks 35 and 36, no paediatric (>16 years of age) hospitalizations with laboratory-confirmed influenza were reported through the Immunization Monitoring Program Active (IMPACT) network.

International influenza update

Northern Hemisphere

All countries in the temperate regions of the northern hemisphere reported little or no influenza activity.

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

United States: In August and September 2011, 4 cases of swine-origin influenza A/H3N2 have been identified in children <10 years of age in Indiana(1) and Pennsylvania(3). The three Pennsylvanian cases were related to exposure to pigs at the same agricultural fair. All 4 virus isolates were reassortants of classical swine influenza containing the M gene from pH1N1 2009 influenza. <http://www.cdc.gov/flu/swineflu/>

Tropical Zone

In week 34, RSV continued to be the primary virus in circulation in many countries in Central America and the Caribbean. Cuba, Dominican Republic and Honduras have reported influenza circulation in recent weeks. In Andean and tropical South America, declining levels of influenza activity were reported in Brazil, Columbia, Bolivia following peak transmission in June-July with variations in the regional proportion of influenza (sub)types.

http://new.paho.org/hq/index.php?option=com_content&task=view&id=3352&Itemid=2469&to=2246,

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

In Africa, Ghana, Togo, Kenya, and Cameroon reported continued mixed transmission of influenza B and pH1N1 2009, all with decreasing trends except for Cameroon. In tropical Asia, most areas reported low influenza activity although Bangladesh, India, Thailand and Singapore reported moderate transmission, predominantly A/H3N2. Viet Nam and Cambodia reported declining transmission of pH1N1 2009 and influenza B.

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

Southern Hemisphere

South America: In the Southern Cone, the influenza season appears to have peaked and has been mild compared with previous years. Respiratory virus detections and disease activity peaked in late-July to mid-August in Argentina and Chile, respectively. The predominantly circulating influenza viruses have been pH1N1 2009 and A/H3N2, with different proportions across the region and season.

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

Australia: From 20 August to 2 September, 2011, levels of ILI in the community continued to increase. Notifications of influenza have decreased in most regions, except the Northern Territory. The weekly number of notifications in several regions exceeds the peak observed in 2010. The majority of states and territories have reported a predominance of pH1N1 2009 with co-circulation of influenza B. Among the 14,222 notifications to date this year, 35% were influenza A unsubtype, 32% pH1N1 2009, 28% influenza B, and 5% A/H3N2.

Two additional cases have been linked to the cluster of 25 oseltamivir-resistant pH1N1 2009 cases reported in the Hunter New England health region of New South Wales (NSW). These cases were identified in other regions of NSW, and had no prior travel to the Hunter region.

<http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm>

New Zealand: In week 35 (29 Aug – 4 Sep 2011), the average consultation rate for ILI was 63.2 cases per 100,000, which is above the baseline rate. Among the 815 detections of influenza to date (week 1 to 35), influenza B predominates (56%) followed by A/H3N2 (24%). http://www.surv.esr.cri.nz/PDF_surveillance/Virology/FluWeekRpt/2011/FluWeekRpt201135.pdf

FluWatch reports include data and information from the following sources: laboratory reports of positive influenza tests in Canada (National Microbiology Laboratory), sentinel physician reporting of influenza-like illness (ILI), provincial/territorial assessment of influenza activity based on various indicators, including laboratory surveillance, ILI reporting, and outbreaks, influenza-associated paediatric and adult hospitalizations, antiviral sales in Canada, and WHO and other international reports of influenza activity.

Abbreviations: Newfoundland/Labrador (NL), Prince Edward Island (PE), New Brunswick (NB), Nova Scotia (NS), Quebec (QC), Ontario (ON), Manitoba (MB), Saskatchewan (SK), Alberta (AB), British Columbia (BC), Yukon (YT), Northwest Territories (NT), Nunavut (NU).

ILI definition for the 2010-2011 season

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.

Definitions of ILI/Influenza outbreaks for the 2010-2011 season

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. Note: it is recommended that ILI school outbreaks be laboratory confirmed at the beginning of influenza season as it may be the first indication of community transmission in an area.

Hospitals and residential institutions: two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case. Institutional outbreaks should be reported within 24 hours of identification. Residential institutions include but not limited to long-term care facilities (LTCF) and prisons.

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.

Influenza Activity Levels Definition for the 2010-2011 season

Influenza Regional Activity levels are defined as:

- 1 = No activity: no laboratory-confirmed influenza detections in the reporting week, however, sporadically occurring ILI may be reported
- 2 = Sporadic: sporadically occurring ILI and lab confirmed influenza detection(s) with **no outbreaks** detected within the influenza surveillance region†
- 3 = Localized: (1) evidence of increased ILI* and
(2) lab confirmed influenza detection(s) together with
(3) **outbreaks** in schools, hospitals, residential institutions and/or other types of facilities occurring in **less than 50% of the influenza surveillance region†**
- 4 = Widespread: (1) evidence of increased ILI* and
(2) lab confirmed influenza detection(s) together with
(3) **outbreaks** in schools, hospitals, residential institutions and/or other types of facilities occurring in **greater than or equal to 50% of the influenza surveillance region†**

Note: ILI data may be reported through sentinel physicians, emergency room visits or health line telephone calls.

* More than just sporadic as determined by the provincial/territorial epidemiologist.

† Influenza surveillance regions within the province or territory as defined by the provincial/territorial epidemiologist.

We would like to thank all the Fluwatch surveillance partners who are participating in this year's influenza surveillance program.

This report is available on the Public Health Agency website at the following address: <http://www.phac-aspc.gc.ca/fluwatch/index.html>. Ce rapport est disponible dans les deux langues officielles. Pour en recevoir un exemplaire dans l'autre langue chaque semaine, veuillez communiquer avec Estelle Arseneault, Division de l'immunisation et des infections respiratoires au (613) 998-8862.