



September 11 to 24, 2011 (Weeks 37 and 38)

Overall Influenza Summary

- Influenza activity continues at low inter-seasonal levels. In weeks 37 and 38, only 4 laboratory detections of influenza were reported; three regions in Quebec and British Columbia reported sporadic influenza activity; and the ILI consultation rate remained low.
- There was an increase in detections of rhinovirus in weeks 37 and 38.

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

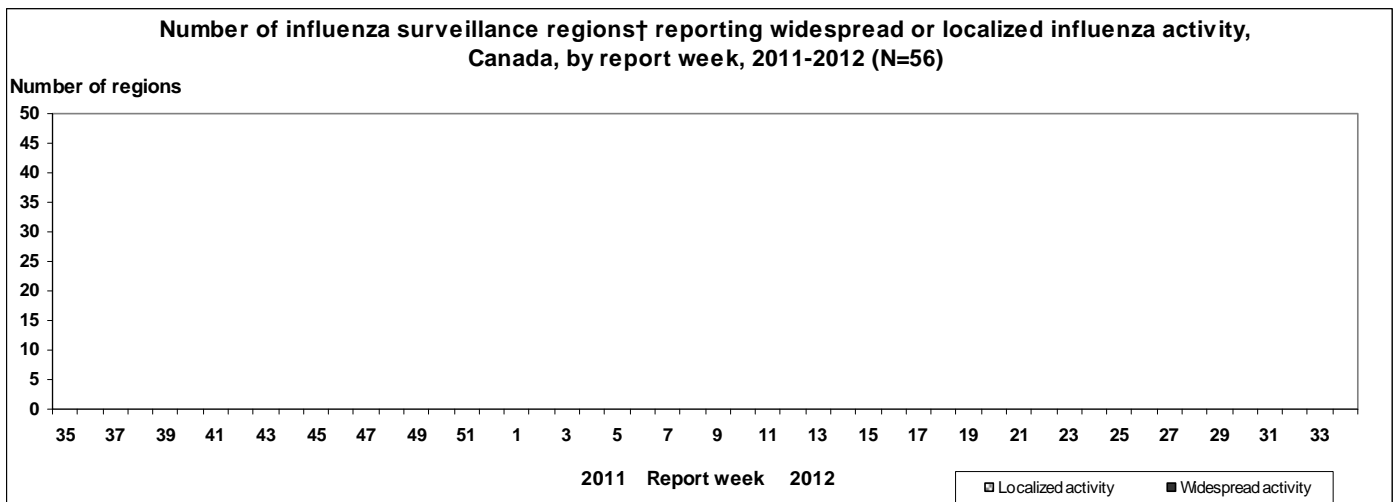
Influenza Activity and Outbreaks

In week 37, one region in Quebec and one in British Columbia reported sporadic influenza activity. In week 38, a different region in BC reported sporadic activity. Saskatchewan has not yet started reporting for the 2011-2012 season (see Activity level Map). No new outbreaks of influenza or ILI were reported in weeks 37 or 38.

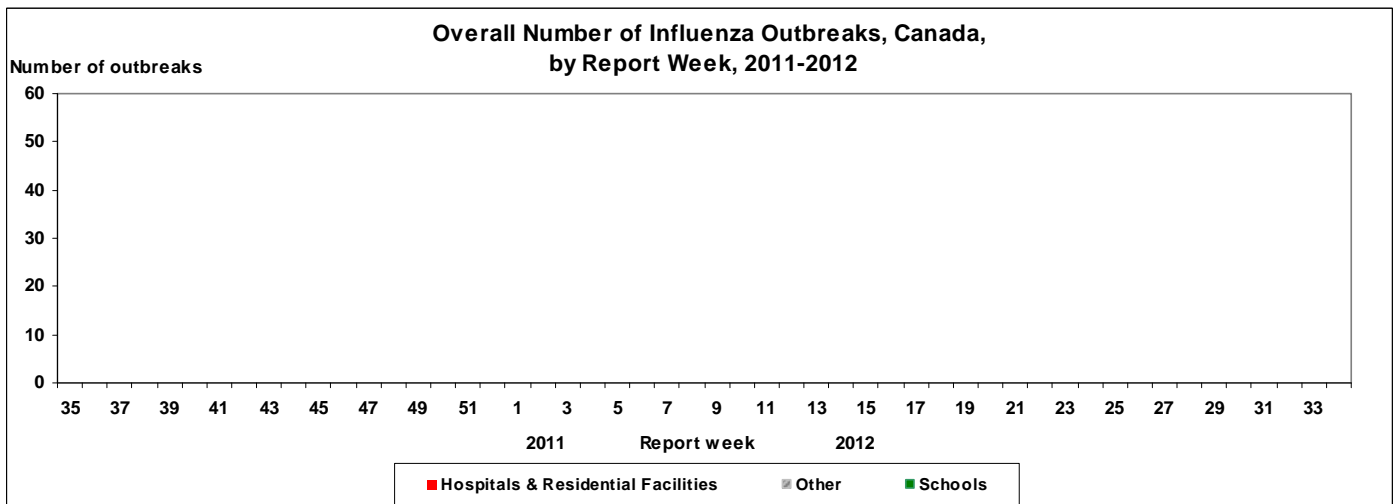
Map of overall Influenza activity level by province and territory, Canada, Week 38



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.

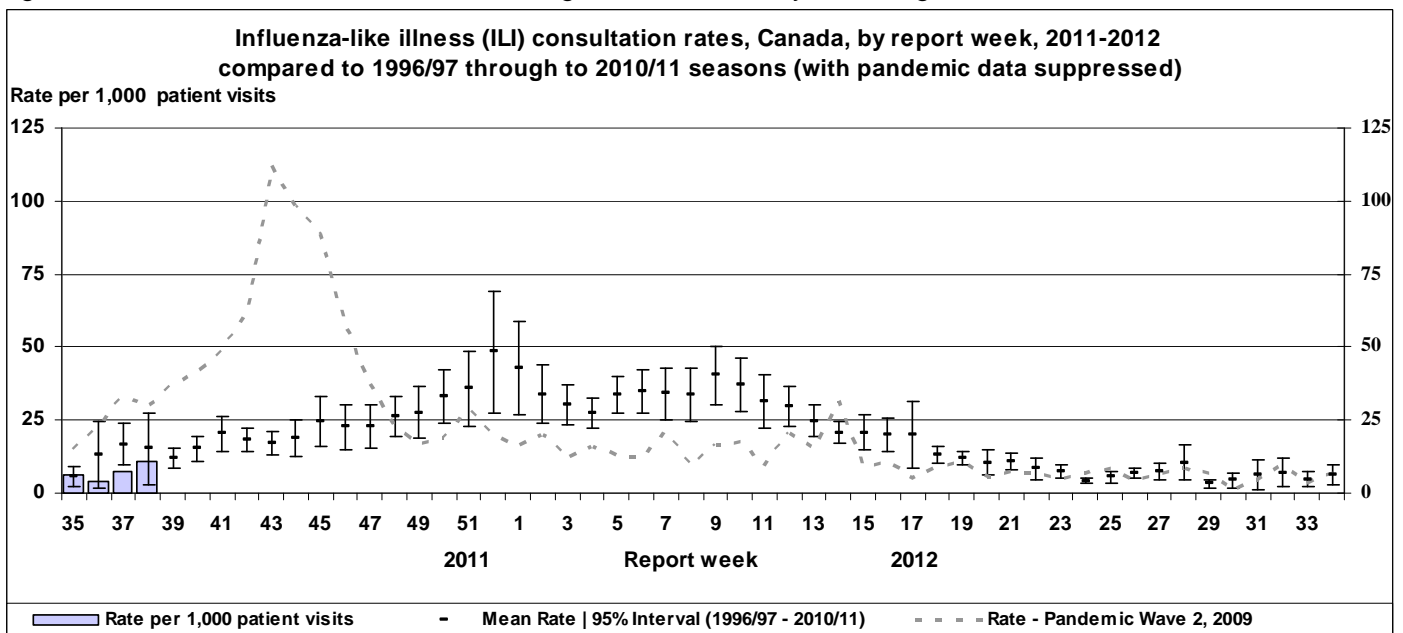


† sub-regions within the province or territory as defined by the provincial/territorial epidemiologist. Graph may change as late returns come in.



ILI consultation rate

The national ILI consultation rate was 7.7 and 11.0 consultations per 1,000 patient visits in weeks 37 and 38 respectively, which is within or below 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 4 detections of influenza were reported across Canada in weeks 37 and 38, one A/H3N2 (BC), one unsubtype influenza A (QC), and 2 influenza B (BC and AB). The proportion of tests positive for influenza was 0.3% in week 37 and 0.1% in week 38 (see Influenza tests graph). No detailed case-based laboratory reporting has yet been received for the 2011-12 season (see Tests detailed table). During week 38, detections of other respiratory viruses continued at low levels: 0.7% of tests for respiratory syncytial virus (RSV) were positive, 2.1% for parainfluenza, and 0.8% for adenovirus (see Respiratory Viruses graph). Detections of rhinovirus increased to 24.8% of tests positive in week 37 and 20.4% in week 38, which is near the peak levels observed in early July. 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

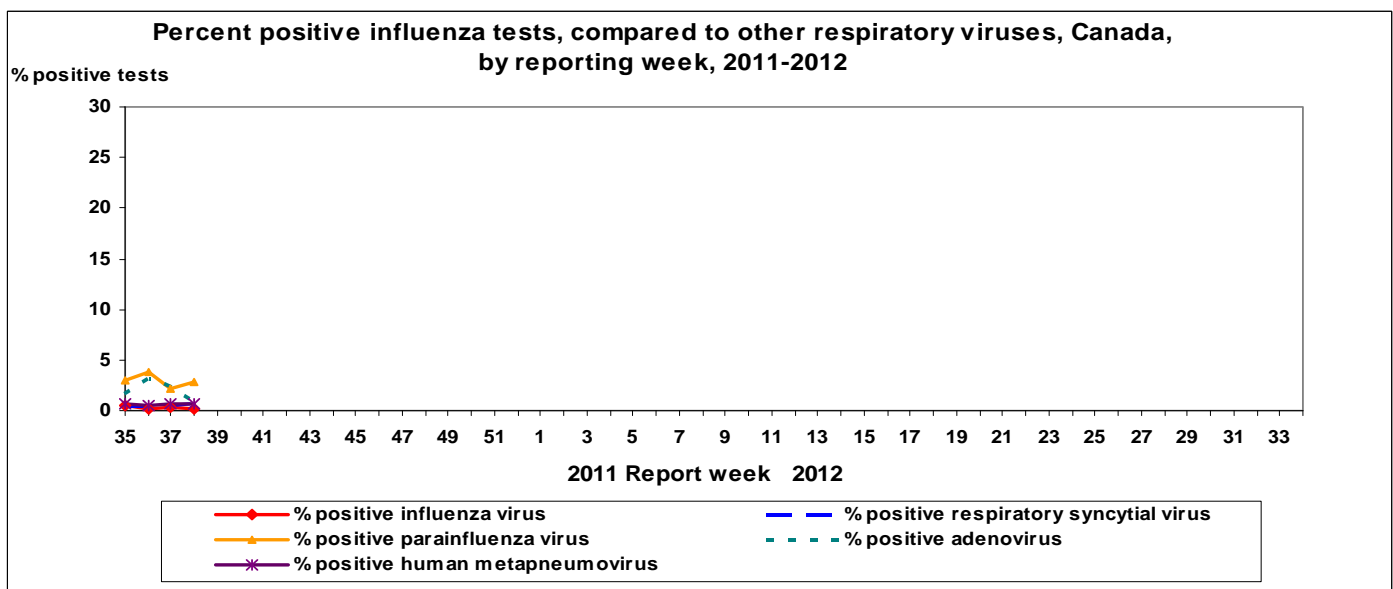
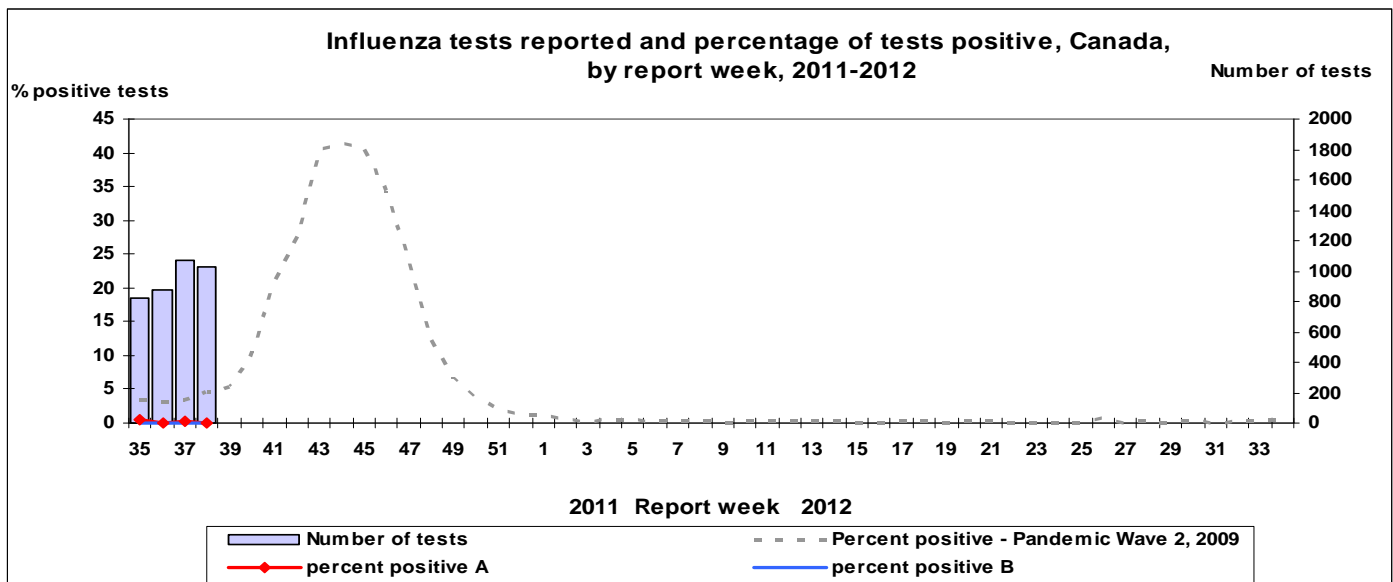
Reporting provinces	September 11 to September 24, 2011						Cumulative (August 28, 2011 to September 24, 2011)					
	Influenza A					B	Influenza A					B
	A Total	A(H1)	A(H3)	Pand H1N1	A (UnS)*	Total	A Total	A(H1)	A(H3)	Pand H1N1	A (UnS)*	Total
BC	1	0	1	0	0	1	1	0	1	0	0	1
AB	0	0	0	0	0	1	1	0	0	1	0	1
SK	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	1	0	0	0	1	0	4	0	0	0	4	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	0	0	0	0	0	0	0
Canada	2	0	1	0	1	2	6	0	1	1	4	3

*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	September 11 to September 24, 2011					Cumulative (August 28, 2011 to September 24, 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 37 and 38, the National Microbiology Laboratory (NML) has not reported any antigenic characterization or antiviral resistance data.

Severe Illness Surveillance

In weeks 37 and 38, 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

Tropical Zone

Central and South America continued to report low levels of influenza circulation, and RSV continued to be the predominant respiratory virus detected. In week 37, Cuba reported increased detections of A/H3N2 and RSV, as well as some pH1N1 2009. The Dominican Republic reported continued circulation, primarily of influenza B. Honduras, and more recently also El Salvador reported a predominance of A/H3N2. Bolivia reported an increase in detections of pH1N1 2009 in recent weeks, in addition to continued circulation of influenza B and A/H3N2. Influenza transmission in Colombia and Brazil has declined.

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 sub-Saharan Africa, influenza activity continues mainly in the West where Cameroon reported continued mixed transmission of influenza B and pH1N1 2009. In tropical Asia, Bangladesh, India, Thailand and Singapore continued to report moderate transmission, predominantly A/H3N2. Viet Nam reported sustained transmission of pH1N1 2009. Lao People's Democratic Republic reported low-level circulation of A/H3N2, and Cambodia reported a slight increase in pH1N1 2009 and

influenza B circulation.

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

Southern Hemisphere

South America: In the Southern Cone, respiratory virus detections peaked in late-July to mid-August in Argentina and Chile, respectively, and ILI activity continued to decline in week 37. The predominantly circulating influenza viruses have been pH1N1 2009 and A/H3N2, with different proportions across the region and season.

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

South Africa: In week 36, the detection rate of influenza is increasing in South Africa, with more detections of A/H3N2 having previously peaked in week 24 when pH1N1 2009 was predominant. PH1N1 2009 represents 80% of positive influenza specimens from sentinel physicians this season, followed by smaller numbers of detections of A/H3N2 (12%) and influenza B (6%). http://www.nicd.ac.za/?page=seasonal_influenza&id=72

Australia: From 2 to 16 September, 2011, levels of ILI in the community started to decrease. Nationally, the majority of virus detections have been pandemic (H1N1) 2009, with co-circulation of influenza B. However, circulation of influenza subtypes varies by region, for example the Northern Territory and Western Australia reported primarily A/H3N2, while Tasmania and New South Wales reported influenza B. Among the 15,880 notifications to date this year, 36% were influenza A untyped, 29% pH1N1 2009, 28% influenza B, and 6% A/H3N2.

No additional cases have been linked to the cluster of oseltamivir-resistant pH1N1 2009 cases reported in the Hunter New England health region of New South Wales (NSW) between June and August 2011. The cluster consists of 29 cases, of which 6 were hospitalised and 3 were pregnant, and 2 additional cluster-linked cases who had no recent travel history to the region.

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

New Zealand: In week 38 (19 to 25 Sep 2011), the average consultation rate for ILI was 38.7 cases per 100,000, which is less than the previous week and below the baseline rate. Among the 1055 detections of influenza to date (week 1 to 38), influenza B predominates (51%) followed by A/H3N2 (30%).

http://www.surv.esr.cri.nz/PDF_surveillance/Virology/FluWeekRpt2011/FluWeekRpt201138.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 2011-2012 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 2011-2012 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 2011-2012 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.