

February 8 to February 14, 2015 (week 06)

## Overall Summary

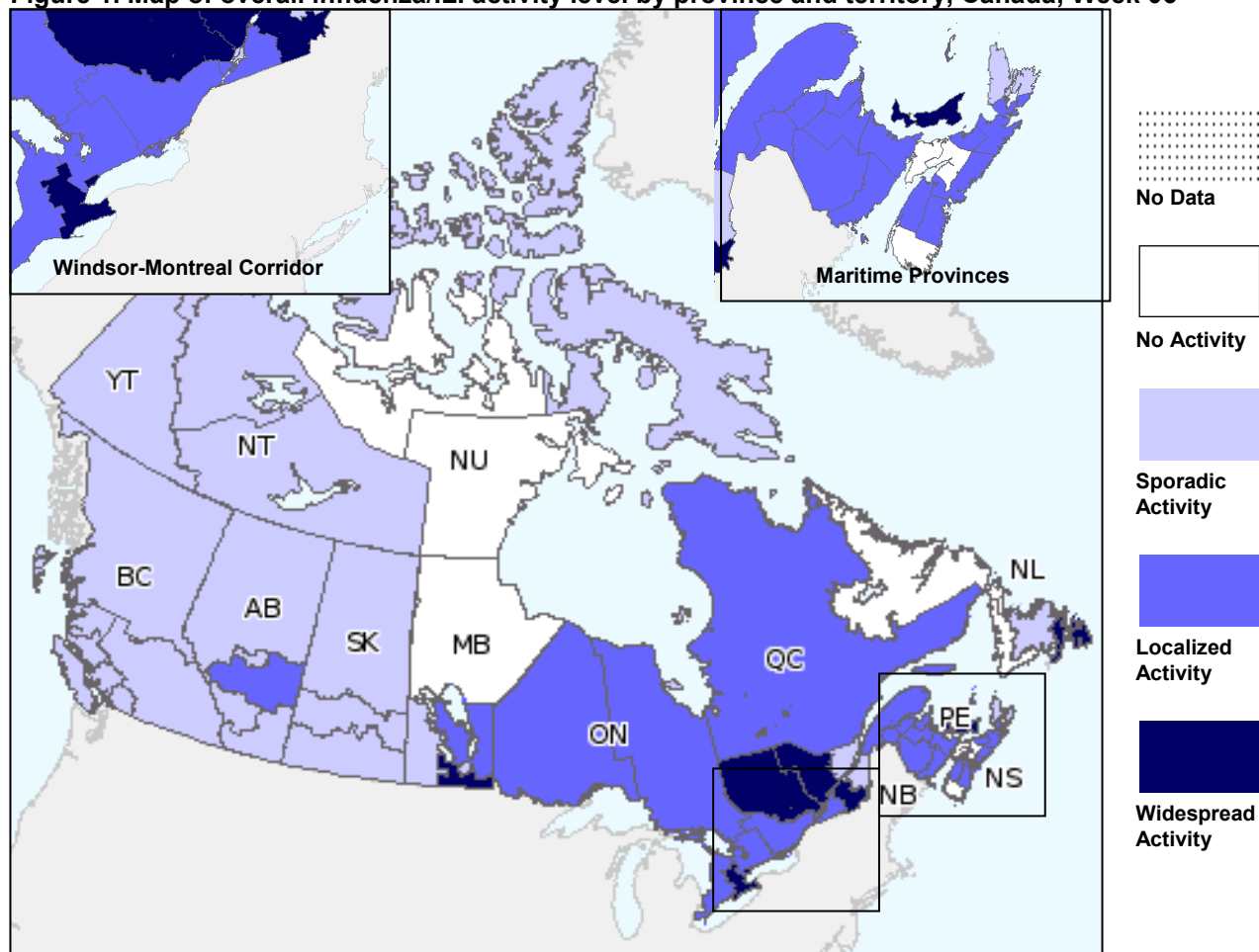
- In week 06, all influenza indicators declined from, or remained similar to, the previous week.
- Influenza activity in the Central and the Atlantic Provinces continued into week 06 (mainly due to influenza A) while activity in the Western provinces and the Territories declined.
- For the past few weeks, influenza B detections have been increasing steadily, particularly in the Prairies and in Quebec.
- A(H3N2) continues to be the most common type of influenza affecting Canadians. Seniors continue to have the highest number of positive laboratory detections, hospitalizations and deaths.
- Detections of respiratory syncytial virus (RSV) continue to be the second most frequently detected virus after influenza.
- Evidence from the National Microbiology Laboratory (NML) does indicate that this year's vaccine will continue to provide protection against the circulating A(H1N1) and B strains.

Are you a primary health care practitioner (General Practitioner, Nurse Practitioner or Registered Nurse) interested in becoming a FluWatch sentinel for the 2014-15 influenza season? Contact us at [FluWatch@phac-aspc.gc.ca](mailto:FluWatch@phac-aspc.gc.ca)

## Influenza/ILI Activity (geographic spread)

In week 06, seven regions reported widespread activity: in MB, ON(2), QC(2), PEI and NL. Twenty-one regions reported localized activity: in AB, MB, ON(5), QC(2), NB(7), and NS(5). Twenty-two regions reported sporadic activity: in YK, NT(2), NU, BC(5), AB(4), SK(3), MB(2), QC(2), NS, and NL. No activity was reported for eight regions: NU(2), MB, NS(3) and NF(2). Compared to the previous week, influenza activity declined overall in the Western provinces while influenza activity increased or remained similar in the Central and Atlantic provinces.

**Figure 1. Map of overall influenza/ILI activity level by province and territory, Canada, Week 06**

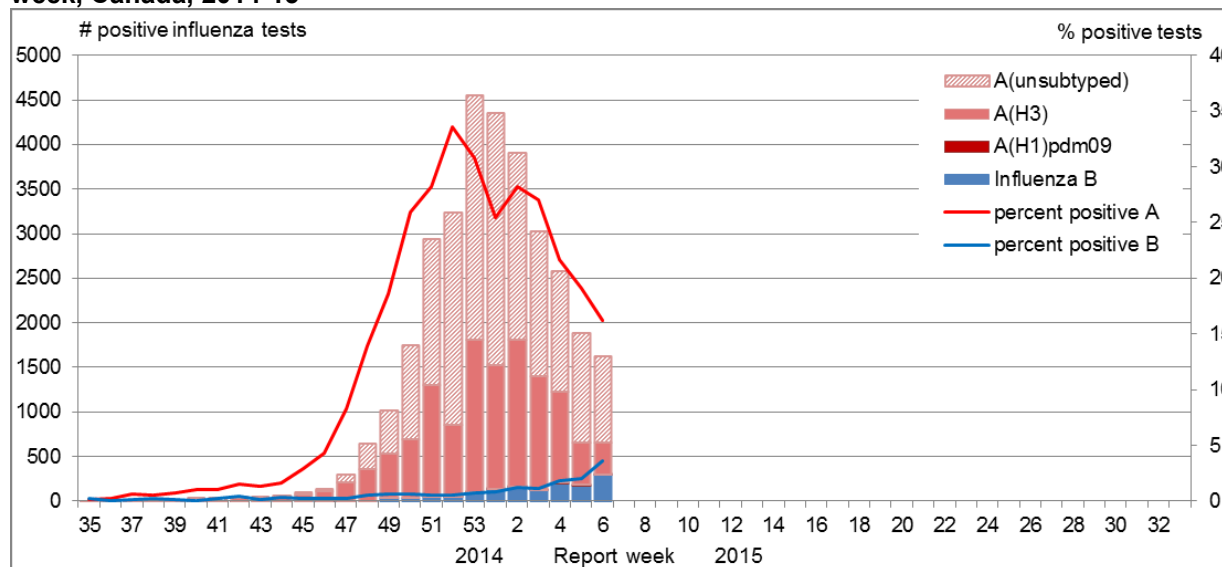


Note: Influenza/ILI activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, based on laboratory confirmations, sentinel ILI rates and reported outbreaks. Please refer to detailed definitions at the end of the report. Maps from previous weeks, including any retrospective updates, are available on the [FluWatch website](http://FluWatch.gc.ca).

## Influenza and Other Respiratory Virus Detections

In week 06, the number of positive influenza tests (1,625) and the percentage positive for influenza A (16.3%) continued to decline from the previous week. The percentage of positive influenza B tests continued to increase and was 3.6% in week 06, the highest this season thus far (Figure 2). In week 06, influenza B accounted for 33%-52% of influenza detections in AB, SK and QC. To date, 95% of influenza detections have been influenza A, and 99.7% of those subtyped have been A(H3N2) (Table 1). To date this season, detailed information on age and type/subtype has been received for 28,650 cases. A significantly greater proportion of laboratory detections of influenza have been reported in adults  $\geq 65$  years of age (61%) this season (Table 2) compared to the 2013-14 season when only 15.6% of cases were in adults  $\geq 65$  years of age.

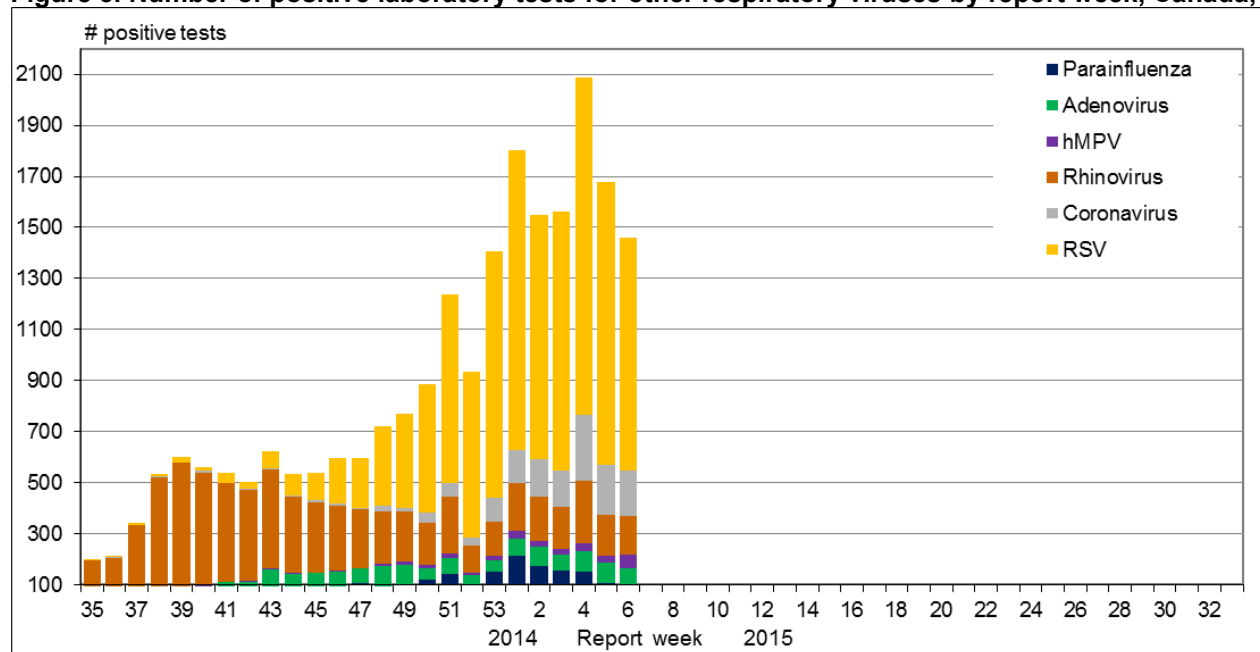
**Figure 2. Number of positive influenza tests and percentage of tests positive, by type, subtype and report week, Canada, 2014-15**



In week 06, the number of positive respiratory syncytial virus (RSV) tests decreased to 914 RSV detections and remains the second most frequently detected virus after influenza (Figure 3). In week 06, the percent positive for RSV detections were highest in the Prairies and has surpassed the percent positive for influenza detections in those regions. Detections of RSV since week 38 have been higher than in the previous season. Detections of all other respiratory viruses except human metapneumovirus decreased in week 06. Detections of respiratory viruses (other than RSV) have generally been lower this season compared to the previous season.

For more details, see the weekly [Respiratory Virus Detections in Canada Report](#).

**Figure 3. Number of positive laboratory tests for other respiratory viruses by report week, Canada, 2014-15**



RSV: Respiratory syncytial virus; hMPV: Human metapneumovirus

**Table 1. Weekly and cumulative numbers of positive influenza specimens by type, subtype and province, Canada, 2014-15**

Reporting provinces <sup>1</sup>	Weekly (February 8 to February 14, 2015)					Cumulative (August 24, 2014 to February 14, 2015)				
	Influenza A				B	Influenza A				B
	A Total	A(H1)pdm09	A(H3)	A(UnS)	B Total	A Total	A(H1)pdm09	A(H3)	A(UnS)	B Total
BC	174	3	102	69	9	3046	12	2228	806	93
AB	31	0	22	9	33	3573	8	3412	153	371
SK	18	0	13	5	12	1610	0	1092	518	46
MB	32	0	3	29	3	1078	0	369	709	33
ON	535	5	199	331	37	9422	17	4079	5326	152
QC	366	0	0	366	181	10517	4	422	10091	716
NB	89	0	0	89	11	665	0	102	563	35
NS	49	0	0	49	8	353	0	123	230	34
PE	18	0	18	0	1	98	1	95	2	2
NL	17	0	0	17	1	537	0	53	484	4
<b>Canada</b>	<b>1,329</b>	<b>8</b>	<b>357</b>	<b>964</b>	<b>296</b>	<b>30899</b>	<b>42</b>	<b>11975</b>	<b>18882</b>	<b>1486</b>
<b>Percentage<sup>2</sup></b>	81.8%	0.6%	26.9%	72.5%	18.2%	95.4%	0.1%	38.8%	61.1%	4.6%

**Table 2. Weekly and cumulative numbers of positive influenza specimens by type, subtype and age-group reported through case-based laboratory reporting<sup>3</sup>, Canada, 2014-15**

Age groups (years)	Weekly (February 8 to February 14, 2015)					Cumulative (August 24, 2014 to February 14, 2015)						
	Influenza A				B	Influenza A				B	Influenza A and B	
	A Total	A(H1)pdm09	A(H3)	A (UnS)	Total	A Total	A(H1)pdm09	A(H3)	A (UnS)	Total	#	%
<5	61	0	8	53	18	1875	9	734	1132	119	1994	7.0%
5-19	29	0	4	25	38	1654	1	900	753	191	1845	6.4%
20-44	58	0	7	51	46	3154	11	1545	1598	222	3376	11.8%
45-64	106	0	13	93	58	3480	10	1516	1954	322	3802	13.3%
65+	441	0	57	384	82	17033	8	6663	10362	490	17523	61.2%
Unknown	4	0	3	1	0	108	0	92	16	2	110	0.4%
<b>Total</b>	<b>699</b>	<b>0</b>	<b>92</b>	<b>607</b>	<b>242</b>	<b>27304</b>	<b>39</b>	<b>11450</b>	<b>15815</b>	<b>1346</b>	<b>28650</b>	<b>100.0%</b>
<b>Percentage<sup>2</sup></b>	74.3%	0.0%	13.2%	86.8%	25.7%	95.3%	0.1%	41.9%	57.9%	4.7%		

<sup>1</sup> Specimens from NT, YT, and NU are sent to reference laboratories in other provinces. Cumulative data includes updates to previous weeks.

<sup>2</sup> Percentage of tests positive for sub-types of influenza A are a percentage of all influenza A detections.

<sup>3</sup> Table 2 includes specimens for which demographic information was reported. These represent a subset of all positive influenza cases reported. UnS: unsubtype: The specimen was typed as influenza A, but no result for subtyping was available.

## Antiviral Resistance

During the 2014-2015 influenza season, the NML has tested 575 influenza viruses for resistance to oseltamivir and 574 influenza viruses for resistance to zanamivir and all were sensitive to both agents. A total of 856 (99.9%) influenza A viruses were resistant to amantadine (Table 3).

**Table 3. Antiviral resistance by influenza virus type and subtype, Canada, 2014-15**

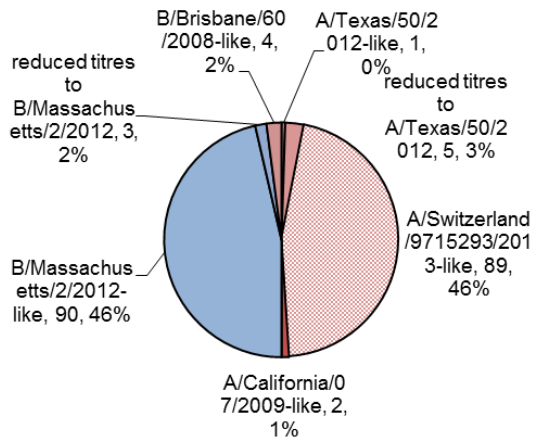
Virus type and subtype	Oseltamivir		Zanamivir		Amantadine	
	# tested	# resistant (%)	# tested	# resistant (%)	# tested	# resistant (%)
A (H3N2)	491	0	490	0	855	854 (99.9%)
A (H1N1)	2	0	2	0	2	2 (100%)
B	82	0	82	0	NA <sup>1</sup>	NA <sup>1</sup>
<b>TOTAL</b>	<b>575</b>	<b>0</b>	<b>574</b>	<b>0</b>	<b>857</b>	<b>856</b>

<sup>1</sup>NA: Not Applicable

## Influenza Strain Characterizations

During the 2014-2015 influenza season, the National Microbiology Laboratory (NML) has characterized 194 influenza viruses [95 A(H3N2), 2 A(H1N1) and 97 influenza B].

**Influenza A (H3N2):** When tested by hemagglutination inhibition (HI) assay (n=95), one virus was antigenically similar to A/Texas/50/2012, five showed reduced titers to A/Texas/50/2012 and 89 were antigenically similar to A/Switzerland/9715293/2013, which is the influenza A(H3N2) component recommended for the 2015 Southern Hemisphere influenza vaccine. Additionally, 686 A(H3N2) viruses were unable to be tested by HI assay; however, sequence analysis showed that 684 belonged to a genetic group that typically shows reduced titers to A/Texas/50/2012. **Influenza A(H1N1):** Two A(H1N1) viruses characterized were antigenically similar to A/California/7/2009. **Influenza B:** Of the 97 influenza B viruses characterized, 90 viruses were antigenically similar to B/Massachusetts/2/2012, three viruses showed reduced titers against B/Massachusetts/2/2012, and four were B/Brisbane/60/2008-like (Figure 4).



**Figure 4. Influenza strain characterizations, Canada, 2014-15, N = 194**

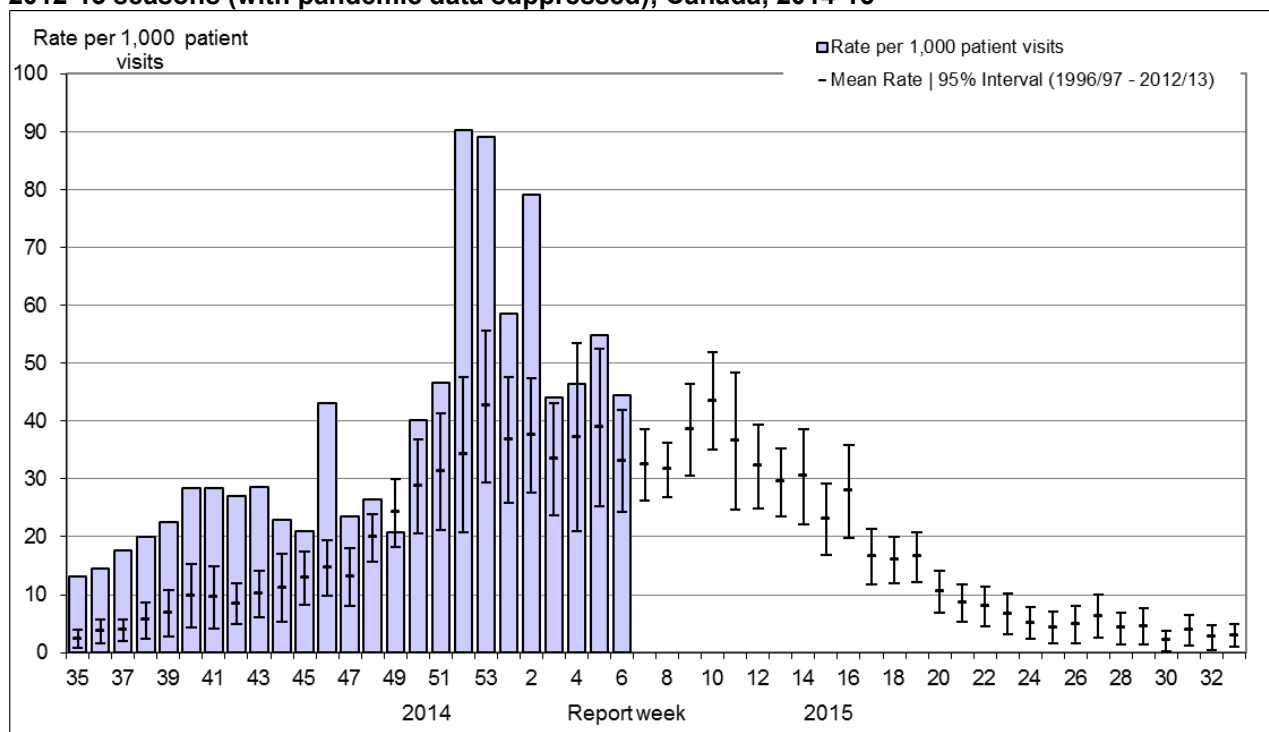
The NML receives a proportion of the number of influenza positive specimens from provincial laboratories for strain characterization and antiviral resistance testing. Characterization data reflect the results of haemagglutination inhibition (HAI) testing compared to the reference influenza strains recommended by [WHO](http://www.who.int).

The recommended components for the 2014-2015 northern hemisphere trivalent influenza vaccine include: an A/California/7/2009(H1N1)pdm09-like virus, an A/Texas/50/2012 (H3N2)-like virus, and a B/Massachusetts/2/2012-like virus (Yamagata lineage). For quadrivalent vaccines, the addition of a B/Brisbane/60/2008-like virus is recommended.

## Influenza-like Illness Consultation Rate

The national influenza-like-illness (ILI) consultation rate decreased to 44.5 consultations per 1,000, which is slightly above expected levels for week 06 (Figure 5). The rate was highest among the 5 to 19 years of age group (60.1 consultations per 1,000) and lowest among the adults  $\geq 65$  years of age (36.2 consultations per 1,000)

**Figure 5. Influenza-like-illness (ILI) consultation rates by report week, compared to the 1996-97 through to 2012-13 seasons (with pandemic data suppressed), Canada, 2014-15**

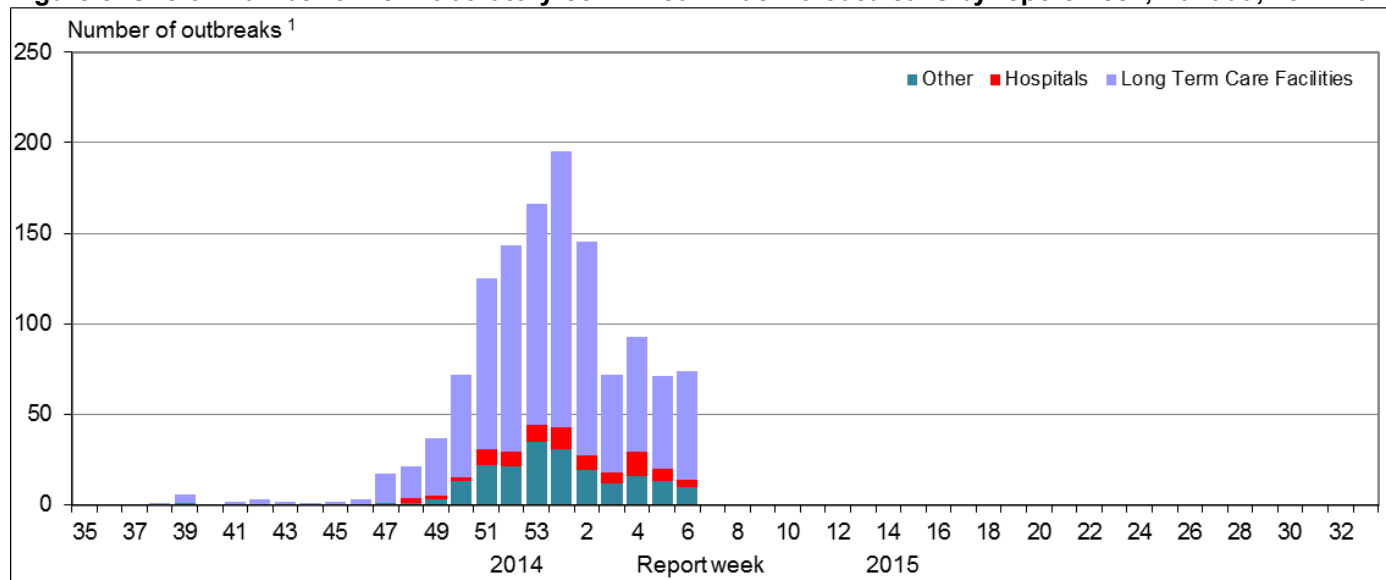


No data available for mean rate for weeks 19 to 39 for the 1996-1997 through 2002-2003 seasons. Delays in the reporting of data may cause data to change retrospectively. The calculation of the average ILI consultation rate over 17 seasons was aligned with influenza activity in each season. In BC, AB, and SK, data is compiled by a provincial sentinel surveillance program for reporting to FluWatch. Not all sentinel physicians report every week.

## Influenza Outbreak Surveillance

In week 06, 74 new outbreaks of influenza were reported, which is slightly higher than the number of outbreaks reported in the previous week. The majority of the outbreaks occurred in the Central and Atlantic provinces. Sixty outbreaks were reported in long-term care facilities (LTCF), four in hospitals and 10 in institutional or community settings (Figure 6). An additional five outbreaks of ILI were reported in schools. Among the outbreaks in which the influenza subtype was known, four LTCF outbreaks were associated with A(H3N2) and five outbreaks were associated with influenza B. To date this season, 970 outbreaks in LTCFs have been reported and the majority of those with known subtypes were attributable to A(H3N2). There has been a higher number of reported influenza outbreaks to date this season compared to the same period in previous seasons.

**Figure 6. Overall number of new laboratory-confirmed influenza outbreaks by report week, Canada, 2014-2015**

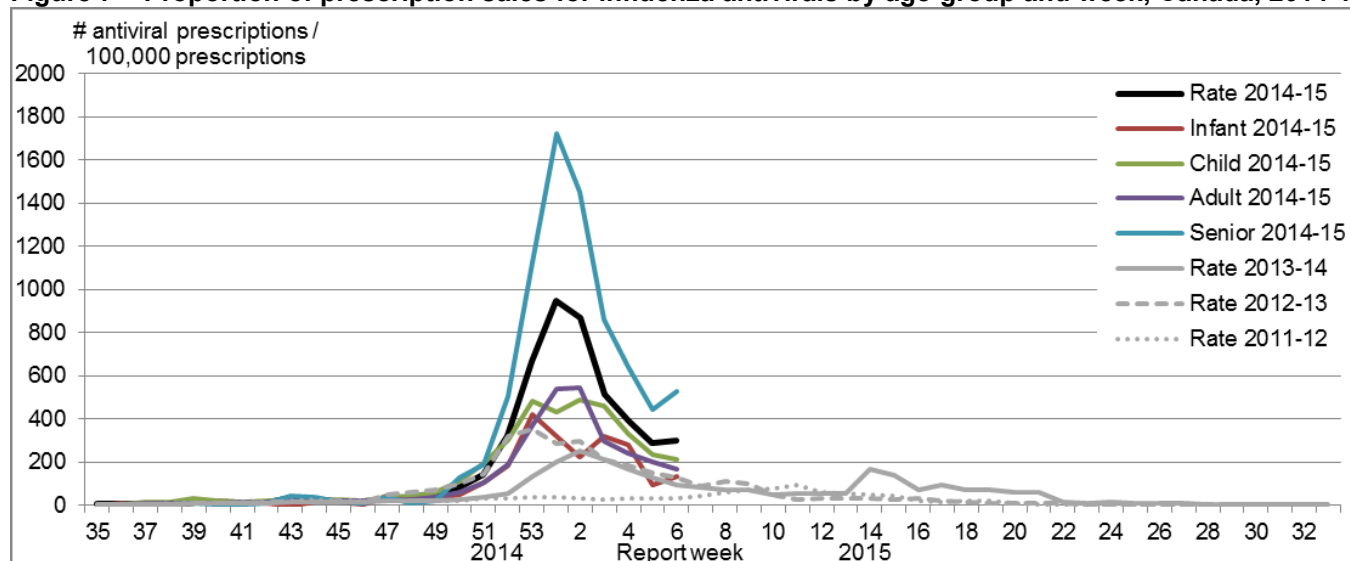


<sup>1</sup>All provinces and territories except NU report influenza outbreaks in long-term care facilities. All provinces and territories with the exception of NU and QC report outbreaks in hospitals. Outbreaks of influenza or influenza-like-illness in other facilities are reported to FluWatch but reporting varies between jurisdictions. Outbreak definitions are included at the end of the report.

## Pharmacy Surveillance

During week 06, the proportion of prescriptions for antivirals increased slightly to 298.1 antiviral prescriptions per 100,000 total prescriptions (from 289.9 per 100,000). The rate for antivirals since week 48 has been higher than the previous three seasons (Figure 7). The rate in infants and seniors increased in week 06, while the rate in children and adults decreased. The rate was highest amongst seniors at 527.0 per 100,000 total prescriptions and lowest among infants at 135.4 per 100,000 total prescriptions.

**Figure 7 – Proportion of prescription sales for influenza antivirals by age-group and week, Canada, 2014-15**



Note: Pharmacy sales data are provided to the Public Health Agency of Canada by Rx Canada Inc. and sourced from major retail drug chains representing over 2,500 stores nationwide (excluding Nunavut) in 85% of Health Regions. Data provided include the number of new antiviral prescriptions (for Tamiflu and Relenza) and the total number of new prescriptions dispensed by Province/Territory and age group. Age-groups: Infant: 0-2y, Child: 2-18y; Adult: 19-64y, Senior: ≥65y

## Sentinel Hospital Influenza Surveillance

### Paediatric Influenza Hospitalizations and Deaths (IMPACT)

In week 06, 14 laboratory-confirmed influenza-associated paediatric ( $\leq 16$  years of age) hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network: seven cases of influenza A and seven cases of influenza B (Figure 8a). Among the reported cases, six (43%) were  $< 2$  years of age, seven (50%) were 2 to 9 years of age and one (7%) was 10-16 years of age. One case was admitted to the ICU. To date this season, 503 hospitalizations have been reported by the IMPACT network, 465 (93%) of which were cases of influenza A. Among cases for which the influenza A subtype was reported, 99% (142/144) were A(H3N2) (Table 4). To date, 57 cases were admitted to the ICU, of which 35 (61%) were 2 to 9 years of age (Figure 9a). Three deaths have been reported.

Note: The number of hospitalizations reported through IMPACT represents a subset of all influenza-associated paediatric hospitalizations in Canada. Delays in the reporting of data may cause data to change retrospectively.

### Adult Influenza Hospitalizations and Deaths (PCIRN)

In week 06, 56 laboratory-confirmed influenza-associated adult ( $\geq 16$  years of age) hospitalizations were reported by the PHAC/CIHR Influenza Research Network (PCIRN) Serious Outcomes Surveillance (SOS) network. Among the cases in week 06, 41 cases (73%) were in adults over the age of 65 and 46 cases (82%) had influenza A (Figure 8b). To date this season, 1,628 cases have been reported; 1,590 (98%) with influenza A. The majority of cases (83%) were among adults  $\geq 65$  years of age (Table 5). One hundred and nineteen ICU admissions have been reported and 89 cases were adults  $\geq 65$  years of age. A total of 86 ICU cases (72%) reported to have at least one underlying condition or comorbidity. Of the 82 ICU cases with known immunization status, 30 (37%) reported not having been vaccinated this season. Seventy-four deaths have been reported, 67 (91%) of the deaths were adults  $> 65$  years of age (Figure 9b).

Note: The number of hospitalizations reported through PCIRN represents a subset of all influenza-associated adult hospitalizations in Canada. Delays in the reporting of data may cause data to change retrospectively.

**Table 4 – Cumulative numbers of paediatric hospitalizations with influenza reported by the IMPACT network, Canada, 2014-15**

Age groups	Cumulative (24 Aug. 2014 to 14 Feb. 2015)					
	Influenza A				B	Influenza A and B
	A Total	A(H1) pdm09	A(H3)	A (UnS) <sup>2</sup>	Total	# (%)
0-5m	74	0	14	60	3	77 (15.3%)
6-23m	100	1	31	68	14	114 (22.7%)
2-4y	114	1	37	76	8	122 (24.3%)
5-9y	118	0	39	79	8	126 (25.0%)
10-16y	59	0	21	38	5	64 (12.7%)
<b>Total</b>	465	2	142	321	38	503
<b>%<sup>1</sup></b>	92.4%	0.4%	30.5%	69.0%	7.6%	100.0%

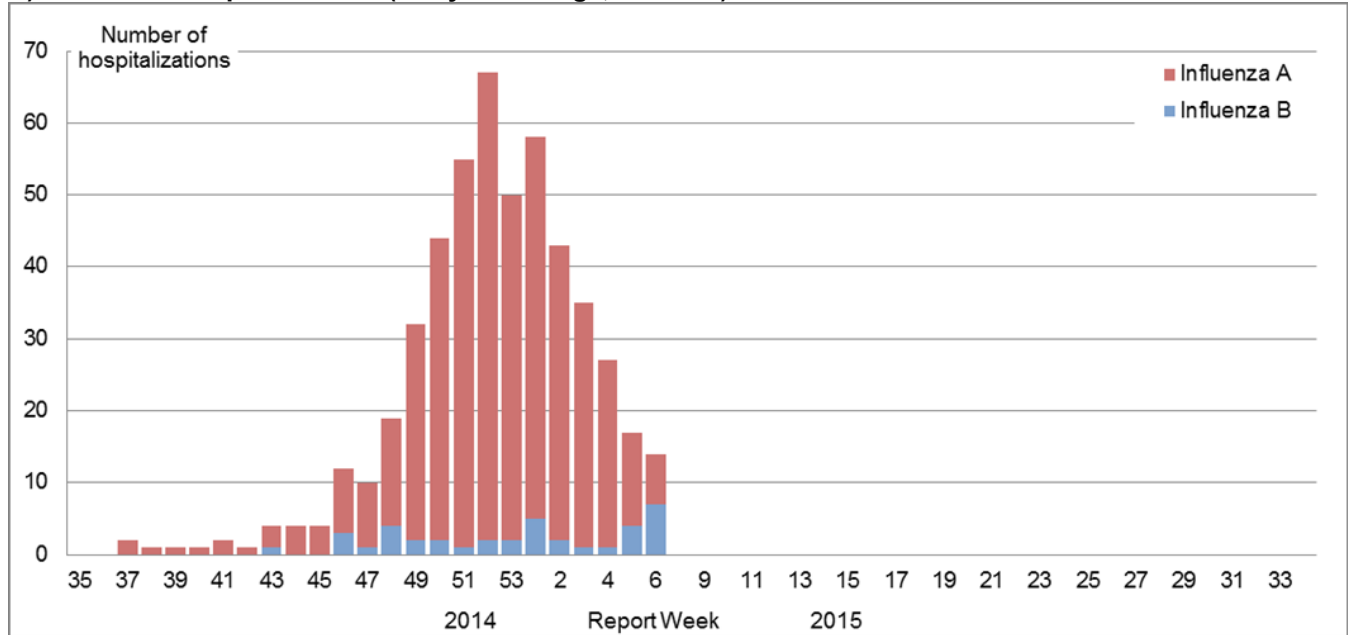
**Table 5 – Cumulative numbers of adult hospitalizations with influenza reported by the PCIRN-SOS network, Canada, 2014-15**

Age groups (years)	Cumulative (15 Nov. 2014 to 14 Feb. 2015)					
	Influenza A				B	Influenza A and B
	A Total	A(H1) pdm09	A(H3)	A (UnS)	Total	# (%)
16-20	5	0	1	4	0	5 (%)
20-44	88	1	37	50	2	90 (6%)
45-64	179	0	70	109	8	187 (11%)
65+	1318	3	511	804	28	1346 (83%)
<b>Total</b>	1590	4	619	967	38	1628
<b>%</b>	98%	0%	39%	61%	2%	100%

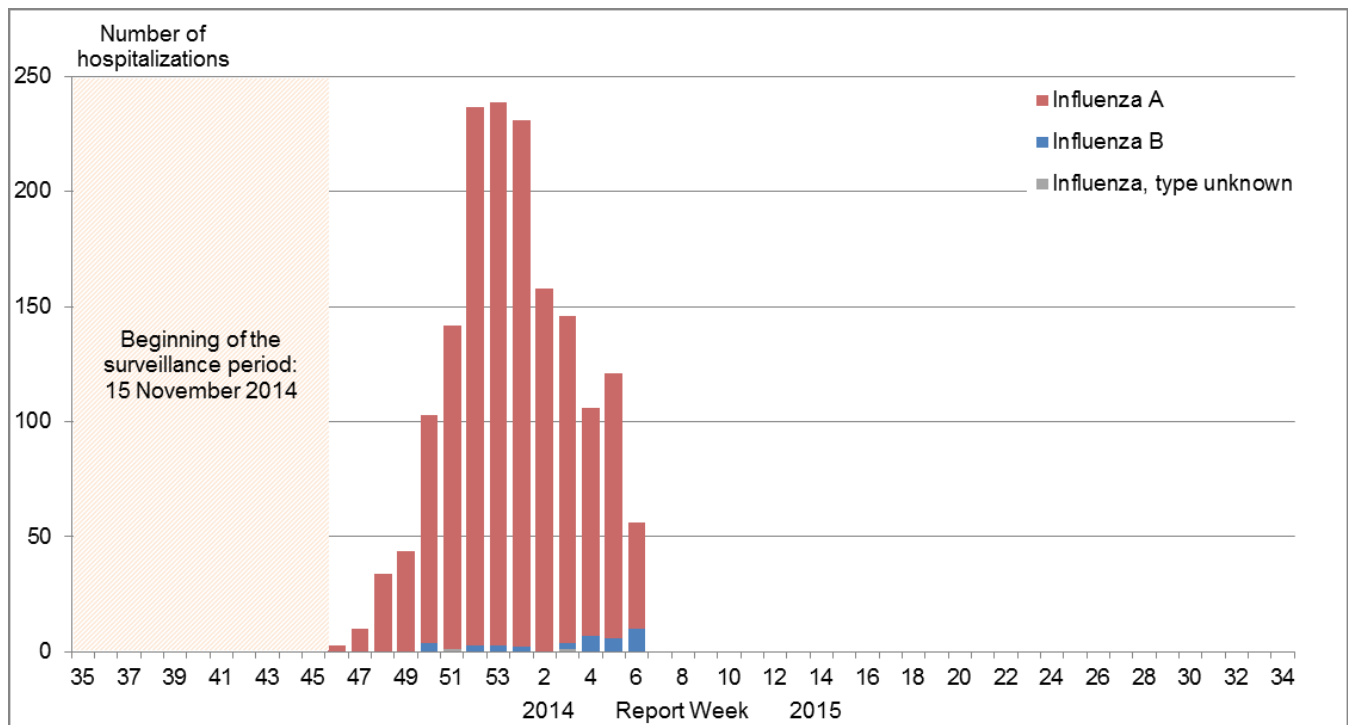
<sup>1</sup> Percentage of tests positive for sub-types of influenza A are a percentage of all influenza A detections. UnS: unsubtype: The specimen was typed as influenza A, but no result for subtyping was available.

**Figure 8 – Number of cases of influenza reported by sentinel hospital networks, by week, Canada, 2014-15**

**A) Paediatric hospitalizations (≤16 years of age, IMPACT)**



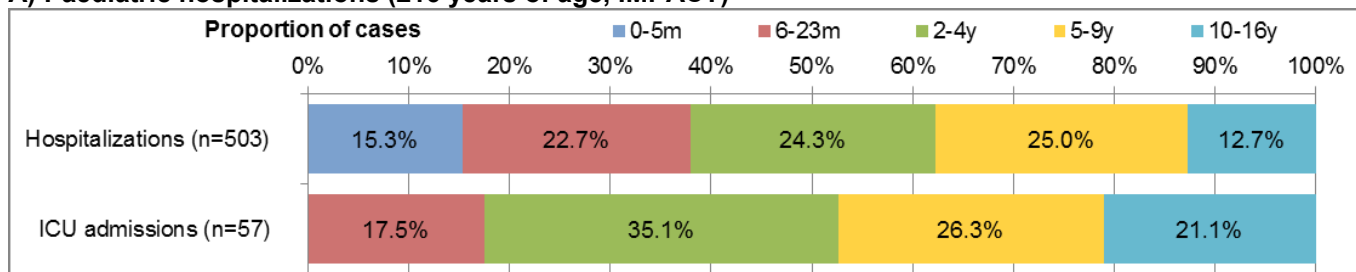
**B) Adult hospitalizations (≥16 year of age, PCIRN-SOS)**



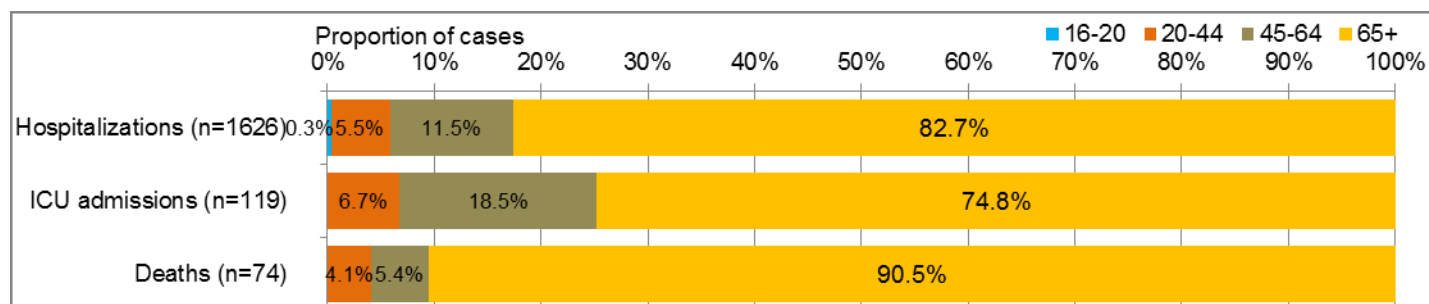
Note: Data for week 46 is based on data collected for 1 day only and do not represent the number of hospitalizations for the entire week.

**Figure 9 – Percentage of hospitalizations, ICU admissions and deaths with influenza reported by age-group, Canada, 2014-15**

**A) Paediatric hospitalizations (≤16 years of age, IMPACT)**



## B) Adult hospitalizations (≥16 year of age, PCIRN-SOS)



## Provincial/Territorial Influenza Hospitalizations and Deaths

In week 06, 264 laboratory-confirmed influenza-associated hospitalizations were reported from participating provinces and territories\* which is less than the number reported in week 05 (n=292). Of the 264 hospitalizations, all but two were influenza A, and 77% were in patients ≥65 years of age. Since the start of the 2014-15 season, 4,817 hospitalizations have been reported; 4,715 (98%) with influenza A. Among cases for which the subtype of influenza A was reported, 99.7% were A(H3N2). The majority of cases (72%) were ≥65 years of age (Table 6). A total of 237 ICU admissions have been reported to date: 55% (130) were in adults ≥65 years of age and 30% (73) were in adults 20-64 years. A total of 342 deaths have been reported since the start of the season: four children <5 years of age, one child 5-19 years, 24 adults 20-64 years, and 313 adults ≥65 years of age. Adults 65 years of age or older represent 92% of all deaths reported this season. Detailed clinical information (e.g. underlying medical conditions) is not known for these cases.

\* Note: Influenza-associated hospitalizations are not reported to PHAC by the following Provinces and Territory: BC, NU, and QC. Only hospitalizations that require intensive medical care are reported by Saskatchewan. ICU admissions are not distinguished among hospital admissions reported from Ontario. Data may also include cases reported by the IMPACT and PCIRN networks. The number of new influenza-associated hospitalizations and deaths reported for the current week may include cases from Ontario that occurred in previous weeks, as a result of retrospective updates to the cumulative total. It is important to note that the hospitalization or death does not have to be attributable to influenza, a positive laboratory test is sufficient for reporting.

**Table 6 – Cumulative number of hospitalizations with influenza reported by the participating provinces and territories, Canada, 2014-15**

Age groups (years)	Cumulative (24 Aug. 2014 to 14 Feb. 2015)					
	Influenza A				B	Influenza A and B
	A Total	A(H1) pdm09	A(H3)	A (UnS)	Total	# (%)
0-4	333	2	126	205	4	337 (7%)
5-19	210	1	107	102	13	223 (5%)
20-44	288	1	174	113	12	300 (6%)
45-64	435	1	188	246	9	444 (9%)
65+	3395	1	1595	1799	57	3452 (72%)
Unknown	54	1	50	3	7	61 (1%)
<b>Total</b>	<b>4715</b>	<b>7</b>	<b>2240</b>	<b>2468</b>	<b>102</b>	<b>4817</b>
<b>Percentage<sup>1</sup></b>	<b>97.9%</b>	<b>0.1%</b>	<b>47.5%</b>	<b>52.3%</b>	<b>2.1%</b>	<b>100.0%</b>

<sup>1</sup> Percentage of tests positive for sub-types of influenza A are a percentage of all influenza A detections.  
UnS: untyped: The specimen was typed as influenza A, but no result for subtyping was available.

See additional data on [Reported Influenza Hospitalizations and Deaths in Canada: 2009-10 to 2014-15](#) on the Public Health Agency of Canada website.



## Emerging Respiratory Pathogens

### Human Avian Influenza

Influenza A(H7N9): Since the last FluWatch report, no new laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus were reported by the World Health Organization. Globally to February 19, 2015, the WHO reported a total of 571 laboratory-confirmed human cases with avian influenza A(H7N9) virus, including 204 deaths. Documents related to the public health risk of influenza A(H7N9), as well as guidance for health professionals and advice for the public is updated regularly on the following websites:

[PHAC – Avian influenza A\(H7N9\)](#)

[WHO – Avian Influenza A\(H7N9\)](#)

Influenza A(H5N6): Since the last FluWatch report, no new cases of human infection with avian influenza A (H5N6) virus from China has been reported by the World Health Organization. Globally to February 19, 2015, the WHO has been informed of a total of three cases of avian influenza A (H5N6) virus, including two deaths.

### Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

Since the last FluWatch report, 6 new laboratory-confirmed cases of MERS-CoV have been reported by the World Health Organization. Globally, from September 2012 to February 19, 2015, the WHO has been informed of a total of 983 laboratory-confirmed cases of infection with MERS-CoV, including 360 deaths. All cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East. The public health risk posed by MERS-CoV in Canada remains low (see the [PHAC Assessment of Public Health Risk](#)) and for the latest global risk assessment posted by the WHO on February 5, 2015: [WHO MERS-CoV](#)

Documents related to the public health risk of MERS-CoV, as well as guidance for health professionals and advice for the public is updated regularly on the following websites:

[PHAC – Middle East respiratory syndrome coronavirus \(MERS-CoV\)](#)

[WHO – Coronavirus infections](#)

### Avian Influenza A(H5)

The Canadian Food Inspection Agency (CFIA) is continuing its investigation into an outbreak of highly pathogenic avian influenza H5N2 virus in British Columbia's Fraser Valley. To date, there have been 11 commercial infected premises and one non-commercial infected premise with H5N2.

On February 7, 2015 an additional non-commercial farm in the Fraser Valley was confirmed to be infected with highly pathogenic avian influenza H5N1. The CFIA applies the same disease control measures following detections of H5N1 and H5N2. The infected premise is under quarantine, depopulation of the affected birds has been completed and disposal measures are underway. The CFIA has now reduced the size of the restricted zone as progress continues to be made in the control of avian influenza in British Columbia. Avian influenza viruses do not pose risks to food safety when poultry and poultry products are properly handled and cooked. Further information on the outbreak is provided on the following CFIA website.

[CFIA - Notifiable Avian Influenza](#)

For the latest Travel Health Notice on Avian Influenza (H5N1) visit the following webpage: [PHAC – Travel Health Notice](#)

### Enterovirus D68 (EV-D68)

A summary of surveillance information on hospitalized paediatric cases of EV-D68 in September 2014 from participating jurisdictions in Canada is scheduled for publication in the Canada Communicable Disease Report (CCDR) on Feb. 20, 2015. The report can be accessed in the [CCDR webpage](#).

Information related to enterovirus D68, as well as guidance for health professionals and advice for the public is updated regularly on the following website:

[PHAC – Non-polio enterovirus](#)

## International Influenza Reports

[World Health Organization influenza update](#)

[World Health Organization FluNet](#)

[WHO Influenza at the human-animal interface](#)

[Centers for Disease Control and Prevention seasonal influenza report](#)

[European Centre for Disease Prevention and Control - epidemiological data](#)

[South Africa Influenza surveillance report](#)

[New Zealand Public Health Surveillance](#)

[Australia Influenza Report](#)

[Pan-American Health Organization Influenza Situation Report](#)

## **FluWatch Definitions for the 2014-2015 Season**

**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).

**Influenza-like-illness (ILI):** 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/Influenza 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. 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.

**Workplace:** Greater than 10% absenteeism on any day which is most likely due to ILI.

**Other settings:** two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case; i.e. closed communities.

*Note that reporting of outbreaks of influenza/ILI from different types of facilities differs between jurisdictions.*

### **Influenza/ILI Activity Levels**

**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\* ;  
(2) lab confirmed influenza detection(s);  
(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\*;  
(2) lab confirmed influenza detection(s);  
(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.