FluWatch

Public Health Agency of Canada | Agence de la santé publique du Canada

August 28 to September 10, 2016 (Weeks 35-36)

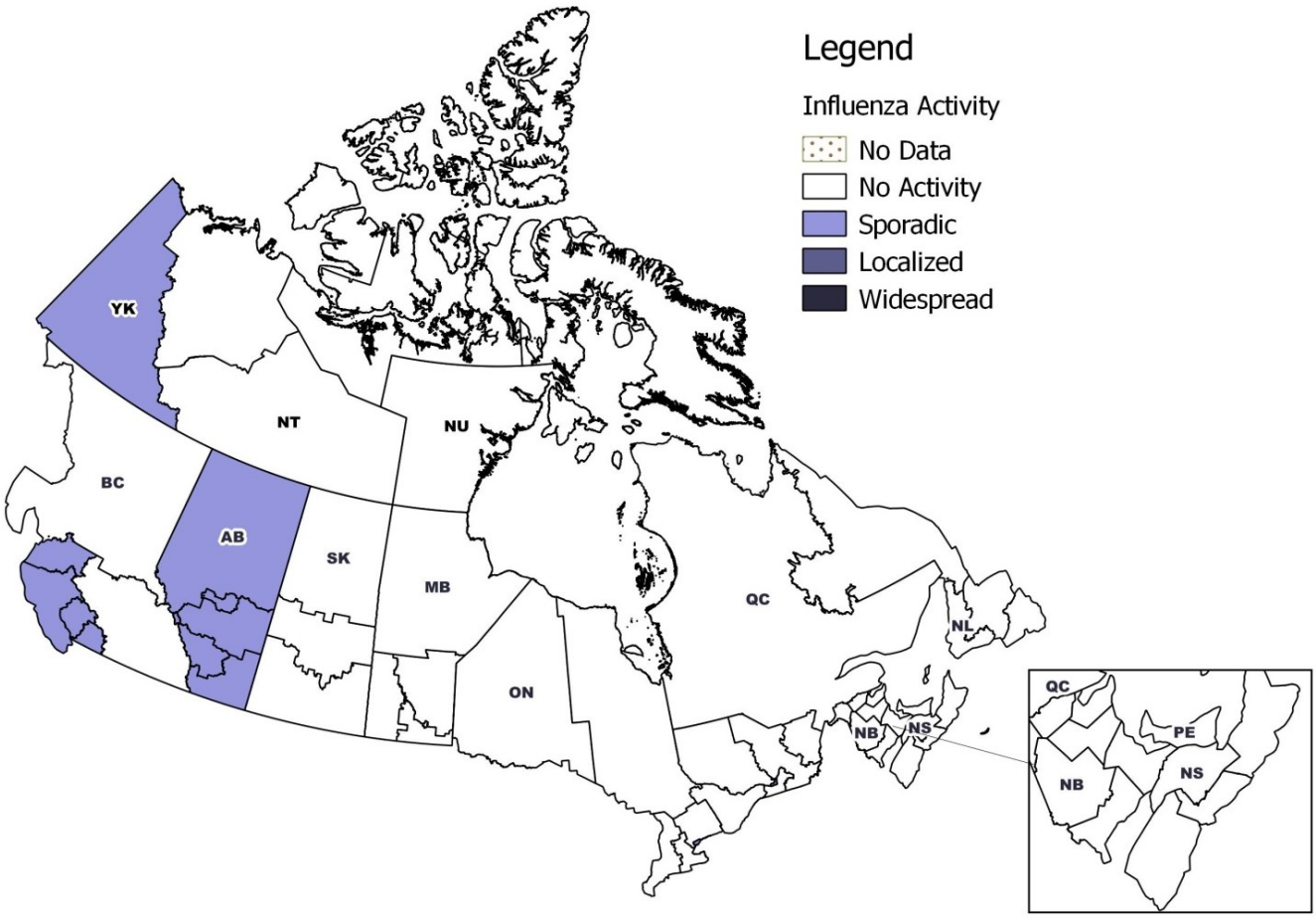
Overall Summary

- This is the first FluWatch report of the 2016-17 influenza season.
- Influenza activity is at interseasonal levels with all regions of Canada reporting low to no influenza activity.
- In week 36, sporadic influenza activity was reported in 11 regions across five provinces and territories (YK, BC, AB, ON, and QC).
- A total of 13 positive influenza detections were reported in weeks 35 and 36 and the detections of influenza A and B were approximately equal.
- In week 36, 0.98% of visits to sentinel healthcare professionals were due to ILI.
- No outbreaks were reported in weeks 35 and 36.
- Low numbers of hospitalizations were reported in weeks 35 and 36.
- For more information on the flu, see our Flu(influenza) web page.

Influenza/Influenza-like Illness (ILI) Activity (geographic spread)

In week 36, the majority of regions in Canada reported no influenza activity. Sporadic influenza activity was reported in 11 regions across five provinces and territories (YK, BC, AB, ON, and QC). For more details on a specific region, click on the map.

Figure 1 – Map of overall influenza/ILI activity level by province and territory, Canada, Week 36

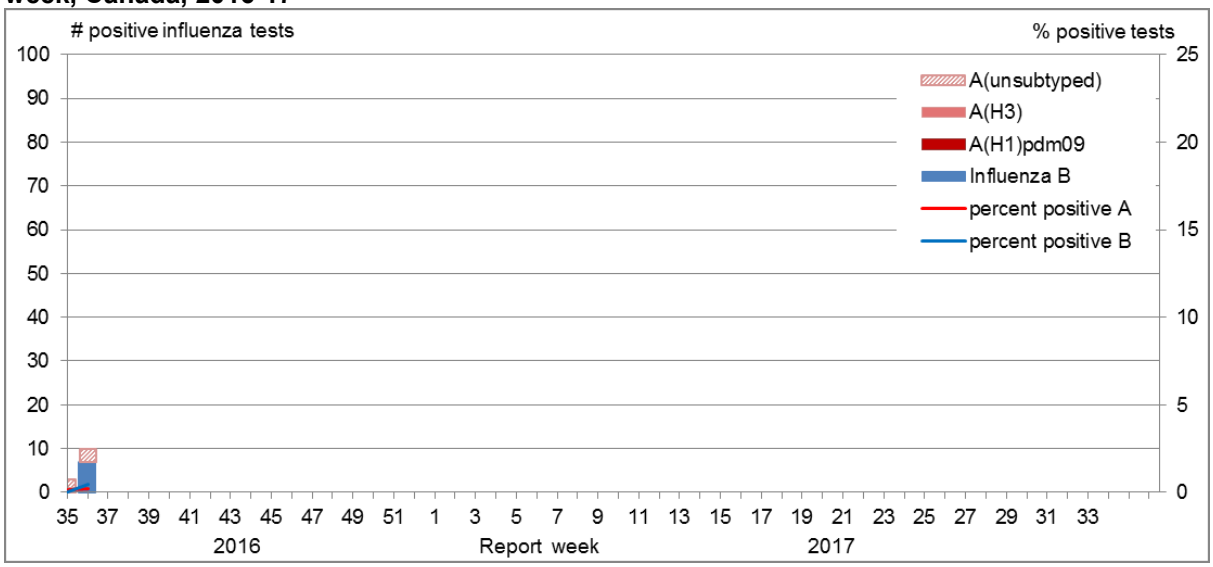


Note: Influenza/ILI activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, based on laboratory confirmations, sentinel ILI rates and reported outbreaks. Please refer to detailed definitions at the end of the report. Maps from previous weeks, including any retrospective updates, are available in the mapping feature found in the Weekly Influenza Reports.

Laboratory Confirmed Influenza Detections

In week 35-36, the percentage of tests positive for influenza remained at interseasonal levels, ranging from 0.2% in week 35 to 0.7% in week 36. For data on other respiratory virus detections, see the Respiratory Virus Detections in Canada Report on the Public Health Agency of Canada (PHAC) website.

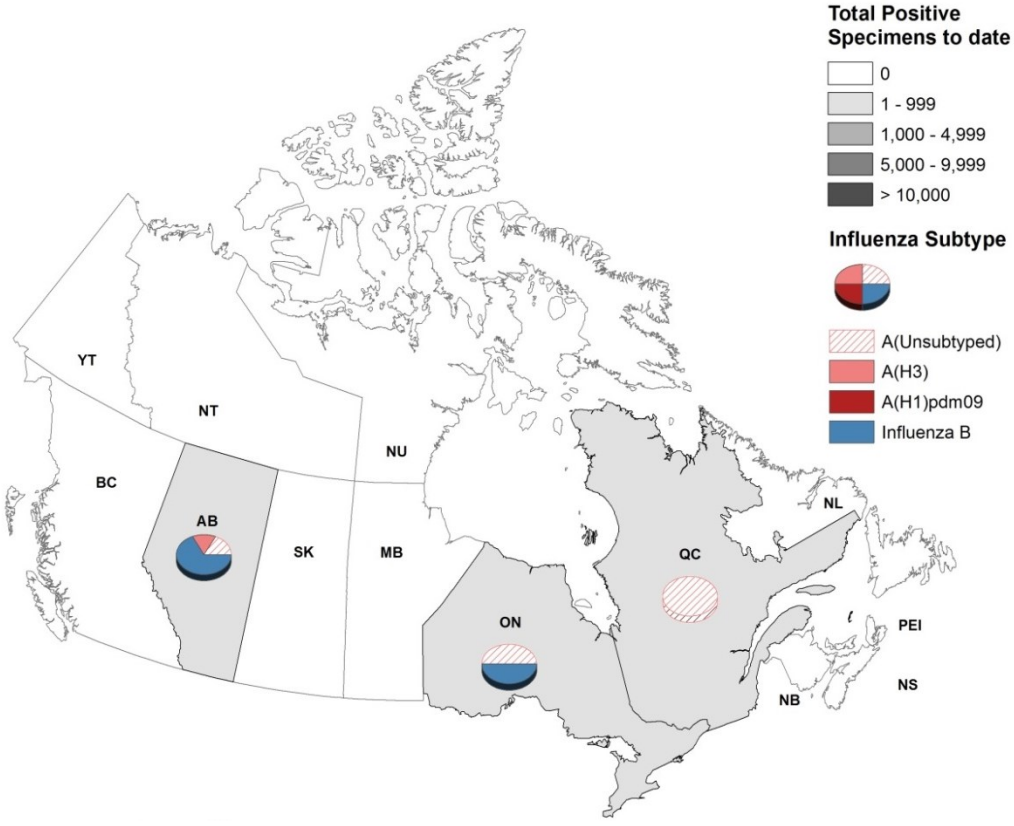
Figure 2 – Number of positive influenza tests and percentage of tests positive, by type, subtype and report week, Canada, 2016-17



The shaded area indicates weeks where the positivity rate was at least 5% and a minimum of 15 positive tests were observed, signaling the start and end of seasonal influenza activity.

Nationally in weeks 35-36, there were 13 positive influenza tests reported. The detections of influenza A and B were approximately equal in weeks 35 and 36. The majority of regions across Canada reported no influenza detections. For more detailed weekly and cumulative influenza data, see the text descriptions for figures 2 and 3 or the Respiratory Virus Detections in Canada Report.

Figure 3 – Cumulative numbers of positive influenza specimens by type/subtype and province/territory, Canada, 2016-17



To date this season, detailed information on age and type/subtype has been received for less than five cases.

Table 1 – Weekly and cumulative numbers of positive influenza specimens by type, subtype and age-group reported through case-based laboratory reporting[1], Canada, 2016-17

Age groups (years)	Weeks 35-36 (Aug. 28 to Sept. 10, 2016)					Cumulative (Aug. 28, 2016 to Sept. 10, 2016)						
	Influenza A				B	Influenza A				B	Influenza A and B	
	A Total	A(H1) pdm09	A(H3)	A (UnS)[3]	Total	A Total	A(H1) pdm09	A(H3)	A (UnS)[3]	Total	#	%
<5	0	0	0	0	0	0	0	0	0	0	0	0%
5-19	0	0	0	0	<5	0	0	0	0	<5	<5	50%
20-44	0	0	0	0	0	0	0	0	0	0	0	0%
45-64	<5	0	0	<5	0	<5	0	0	<5	0	<5	50%
65+	0	0	0	0	0	0	0	0	0	0	0	0%
Total	<5	0	0	<5	<5	<5	0	0	<5	<5	<5	100%
Percentage[2]	50%	0%	0%	100%	50%	50%	0%	0%	100%	50%		

[1]Table 1 includes specimens for which demographic information was reported. These represent a subset of all positive influenza cases reported. Cumulative data include updates to previous weeks.
[2]Percentage of tests positive for sub-types of influenza A are a percentage of all influenza A detections.
[3]UnS: unsubtyped: The specimen was typed as influenza A, but no result for subtyping was available.
Specimens from NT, YT, and NU are sent to reference laboratories in other provinces

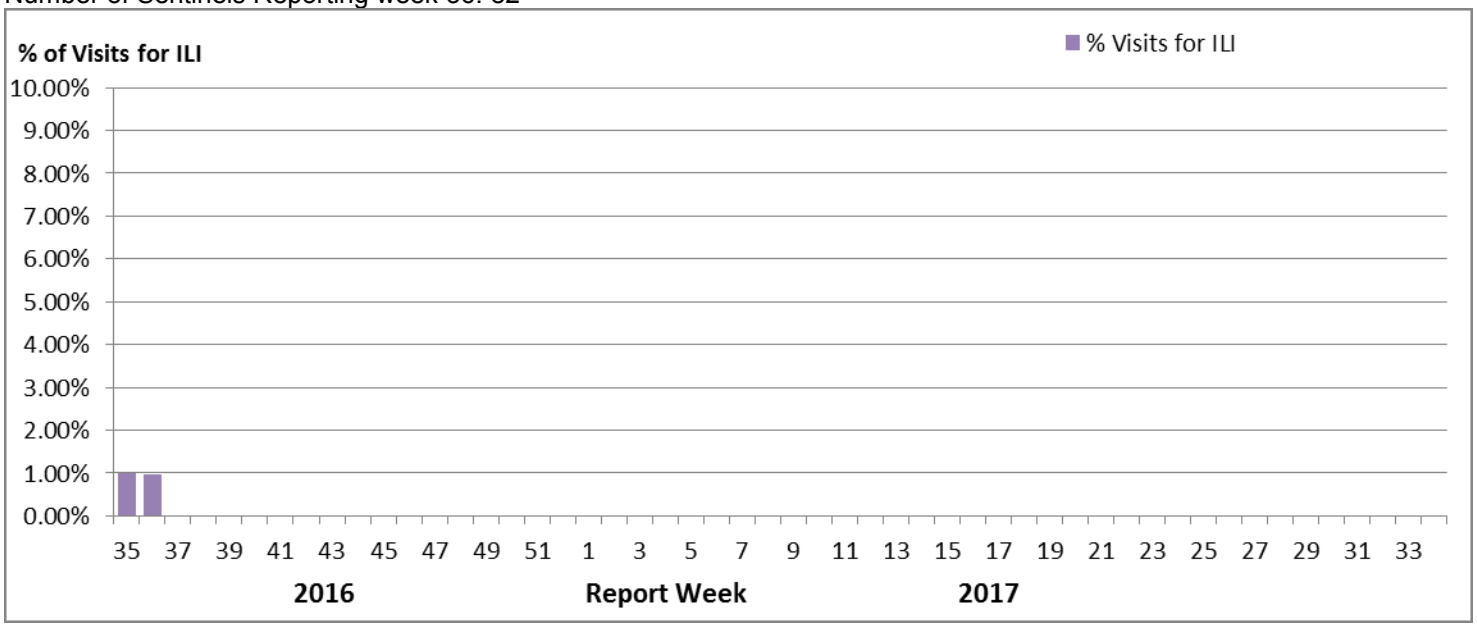
Syndromic/Influenza-like Illness Surveillance

Healthcare Professionals Sentinel Syndromic Surveillance

In week 36, 0.98% of visits to healthcare professionals were due to ILI.

Figure 4 – Percentage of visits for ILI reported by sentinels by report week, Canada, 2016-17

Number of Sentinels Reporting week 36: 82



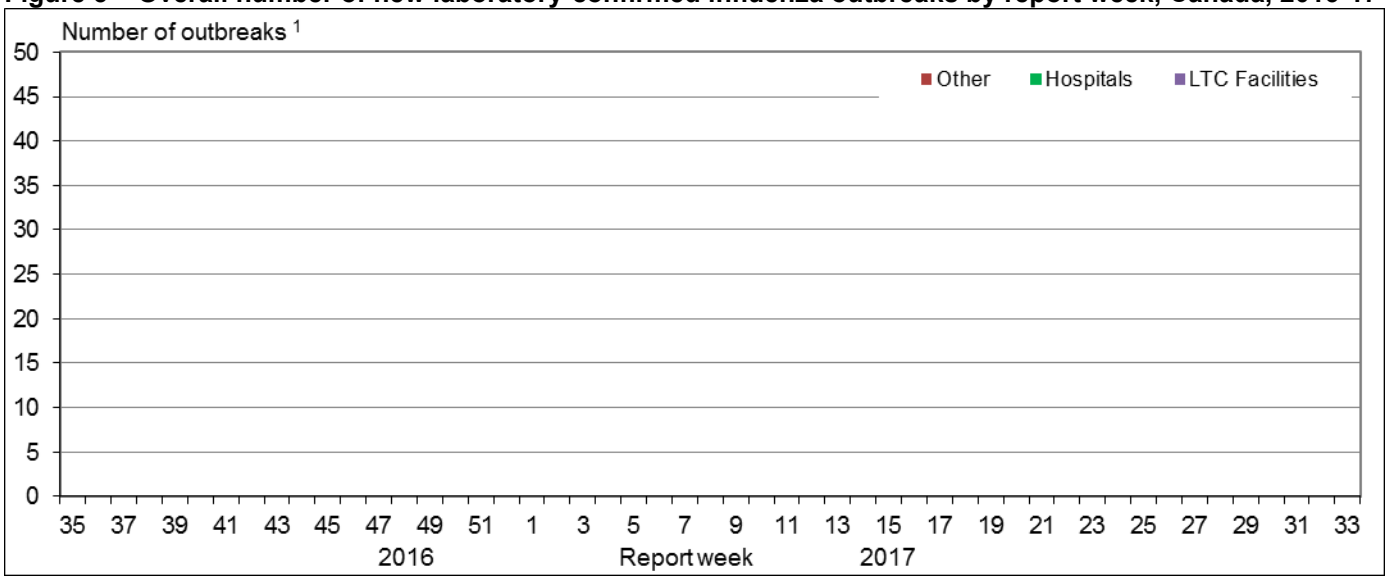
Delays in the reporting of data may cause data to change retrospectively. In BC, AB, and SK, data are compiled by a provincial sentinel surveillance program for reporting to FluWatch. Not all sentinel physicians report every week.

Are you a primary healthcare practitioner (General Practitioner, Nurse Practitioner or Registered Nurse) interested in becoming a FluWatch sentinel? Please visit our Influenza Sentinel page for more details.

Influenza Outbreak Surveillance

In weeks 35-36, no new laboratory confirmed influenza outbreaks were reported.

Figure 5 – Overall number of new laboratory-confirmed influenza outbreaks by report week, Canada, 2016-17



[1]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 this report.

Provincial/Territorial Influenza Hospitalizations and Deaths

In weeks 35-36, less than five influenza-associated hospitalizations were reported by participating provinces and territories*.

Table 2 – Cumulative number of hospitalizations, ICU admissions and deaths by age and influenza type reported by participating provinces and territories, Canada 2016-17

Age Groups (years)	Cumulative (Aug. 28, 2016 to Sept. 10, 2016)						
	Hospitalizations			ICU Admissions		Deaths	
	Influenza A Total	Influenza B Total	Total [# (%)]	Influenza A and B Total	%	Influenza A and B Total	%
0-4	0	0	0 (0%)	0	0%	0	0%
5-19	<5	0	<5 (100%)	0	0%	0	0%
20-44	0	0	0 (0%)	0	0%	0	0%
45-64	0	0	0 (0%)	0	0%	0	0%
65+	0	0	0 (0%)	0	0%	0	0%
Total	<5	0	<5 (100%)	0	0%	0	0%

Note: Influenza-associated hospitalizations are not reported to PHAC by: BC, NU, and QC. Only hospitalizations that require intensive medical care are reported by SK. ICU admissions are not distinguished among hospital admissions reported from ON. 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.

Sentinel Hospital Influenza Surveillance

Pediatric Influenza Hospitalizations and Deaths

Surveillance of laboratory-confirmed influenza associated pediatric (≤16 years of age) hospitalizations from the IMPACT network has not yet begun for the 2016-17 season.

Influenza Strain Characterizations

The National Microbiology Laboratory (NML) has not yet reported any influenza strain characterizations for the 2016-17 season.

Antiviral Resistance

The NML has not yet reported antiviral resistance results for influenza viruses collected during the 2016-17 season.

Provincial and 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*
- Alberta Health – Influenza Surveillance Report
- BC - Centre for Disease Control (BCCDC) - Influenza Surveillance
- New Brunswick – Influenza Surveillance Reports
- Newfoundland and Labrador – Surveillance and Disease Reports
- Nova Scotia - Flu Information
- Public Health Ontario – Ontario Respiratory Pathogen Bulletin
- Quebec - Système de surveillance de la grippe
- Manitoba – Epidemiology and Surveillance – Influenza Reports
- Saskatchewan – influenza Reports
- PEI – Influenza Summary

FluWatch Definitions for the 2016-2017 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. 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 Government of Canada Influenza webpage. Ce rapport est disponible dans les deux langues officielles.