

Ontario Respiratory Virus Bulletin | 2014-2015

SURVEILLANCE WEEKS 41 AND 42 (October 5, 2014 – October 18, 2014)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from October 5, 2014 to October 18, 2014 (Weeks 41 and 42). Unless otherwise specified, **data presented in this issue of the Bulletin is for Weeks 41 and 42** and data extraction occurred on Wednesday, October 22, 2014. Weekly production of the expanded version of the Bulletin will resume on November 7 for the 2014-15 season.

Assessment of Influenza Activity in Ontario

Measure of activity	Assessment of measure compared to the previous week (Lower, Similar, Higher)	Reasoning behind assessment
Laboratory-confirmed influenza cases ¹	Similar	There were 15 influenza cases (11 influenza A and 4 influenza B) reported ¹ in Weeks 41 and 42, which was similar to the 9 influenza cases reported in Weeks 39 and 40 (7 influenza A and 2 influenza B).
Respiratory sample percent positivity for influenza ²	Similar	Percent positivity ² of laboratory tests for all influenza types in Weeks 41 and 42 was 0.9%, which was similar to the percent positivity in Weeks 39 and 40 (0.5%).
Influenza outbreaks ³	Similar	There was one new influenza outbreak reported in Weeks 41 and 42, which was similar to Weeks 39 and 40.
Influenza activity levels reported by health units	Similar	In Week 41, 29 health units reported no influenza activity, three reported sporadic activity and two reported localized activity. In Week 42, 30 health units reported no activity, three reported sporadic activity and one reported localized activity.
OVERALL ASSESSMENT	Similar	Overall, the indicators show that influenza activity for Weeks 41 and 42 was similar to Weeks 39 and 40.
Measures of severity for influenza		
Hospitalizations among laboratory-confirmed cases of influenza ¹	Similar	There were four hospitalized cases reported in Weeks 41 and 42, which was similar to the four hospitalized cases reported in Weeks 39 and 40.
Deaths among laboratory-confirmed cases of influenza ¹	Similar	There were no deaths reported in Weeks 41 and 42, which was similar to no deaths reported in Weeks 39 and 40.

¹ The number of **reported** cases needs to be interpreted with caution because there is a lag between the onset of illness, hospital admission or death and when this information is reported to public health. ² Positivity among specimens submitted for testing to Ontario laboratories reporting to the Centre for Immunization and Respiratory Infectious Diseases (CIRID). ³ The number of new outbreaks reported for the current week is based on the onset date of illness for the first case in an outbreak.

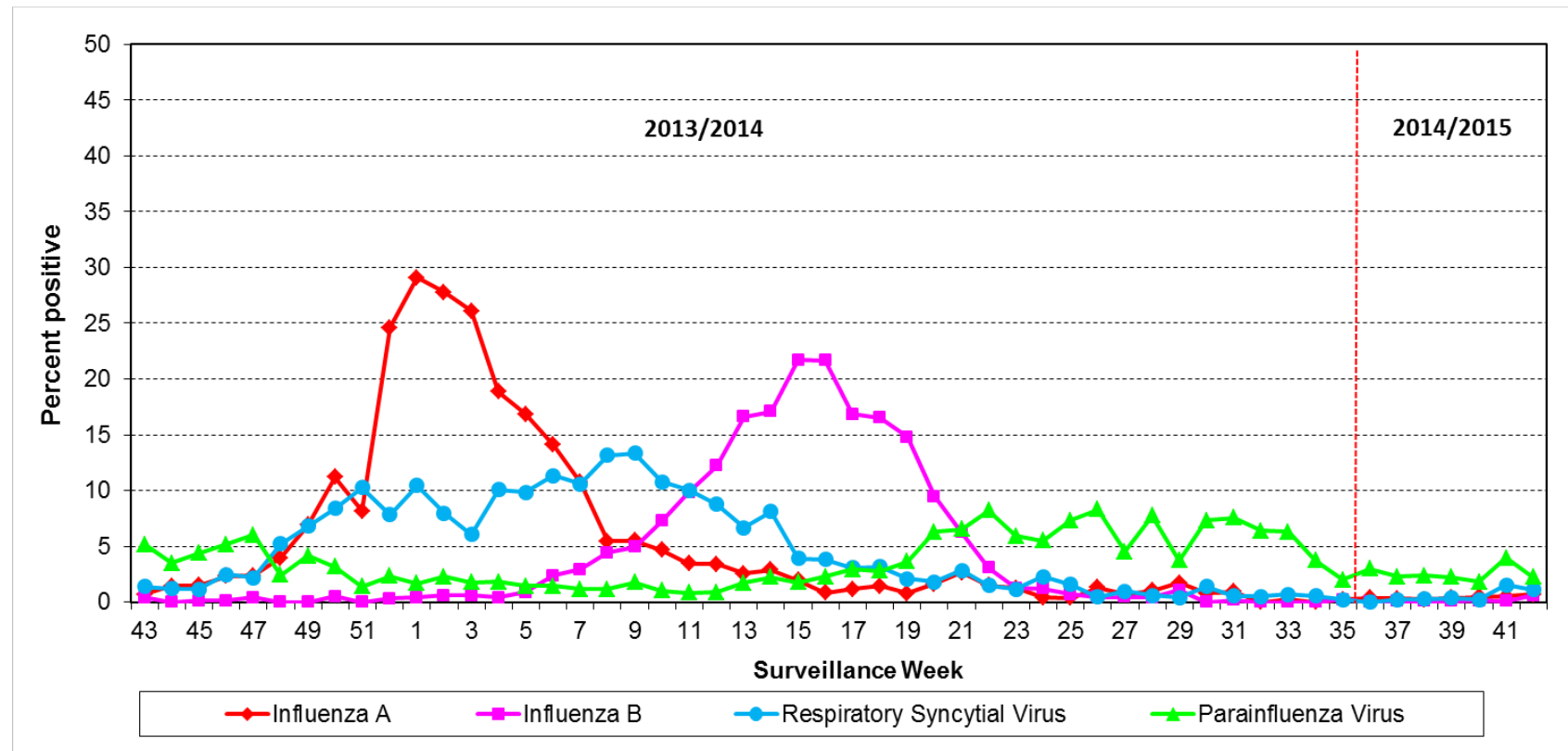
Summary of current and season-to-date respiratory virus activity in Ontario

Influenza activity in the current surveillance period was similar to the previous period.

- Influenza B percent positivity was 0.3% in Weeks 41 and 42, which was similar to Weeks 39 and 40 (0.1%); influenza A percent positivity was 0.6% in Weeks 41 and 42, which was similar to Weeks 39 and 40 (0.4%).¹
 - For the 2014-2015 surveillance season to date, 29 laboratory-confirmed influenza cases have been reported.
 - Of the 85 institutional respiratory infection outbreaks reported to date in the 2014-2015 season, three were due to influenza; two influenza A (one H3N2 and one unsubtype) and one influenza B.
- Among other circulating non-influenza respiratory viruses identified through laboratory testing:
 - Rhinovirus was the dominant circulating virus in Weeks 41 and 42; the percent positivity for rhinovirus was 18.6% in Weeks 41 and 42 compared to 30.1% in Weeks 39 and 40. Of all institutional respiratory infection outbreaks reported to date, 60.0% (51/85) were due to enterovirus/rhinovirus.
- Parainfluenza viruses (PIV) were the second most common circulating virus in Weeks 41 and 42; the percent positivity for PIV was 3.2% in Weeks 41 and 42 compared to 2.1% in Weeks 39 and 40.

¹ Based on percent positivity among specimens submitted for testing to laboratories reporting to the Public Health Agency of Canada's Centre for Immunization and Respiratory Infectious Diseases (CIRID).

Figure 1. Percentage of respiratory viral pathogens (influenza A, influenza B, respiratory syncytial virus, and parainfluenza virus) detected among specimens tested by all methods: Ontario, October 20, 2013 to October 18, 2014



Source: These data have been obtained from the Public Health Agency of Canada's (PHAC) Centre for Immunization and Respiratory Infectious Diseases (CIRID) respiratory virus detection tables as of October 22, 2014; they are based on data submitted to PHAC from 16 laboratories in Ontario.

Notes:

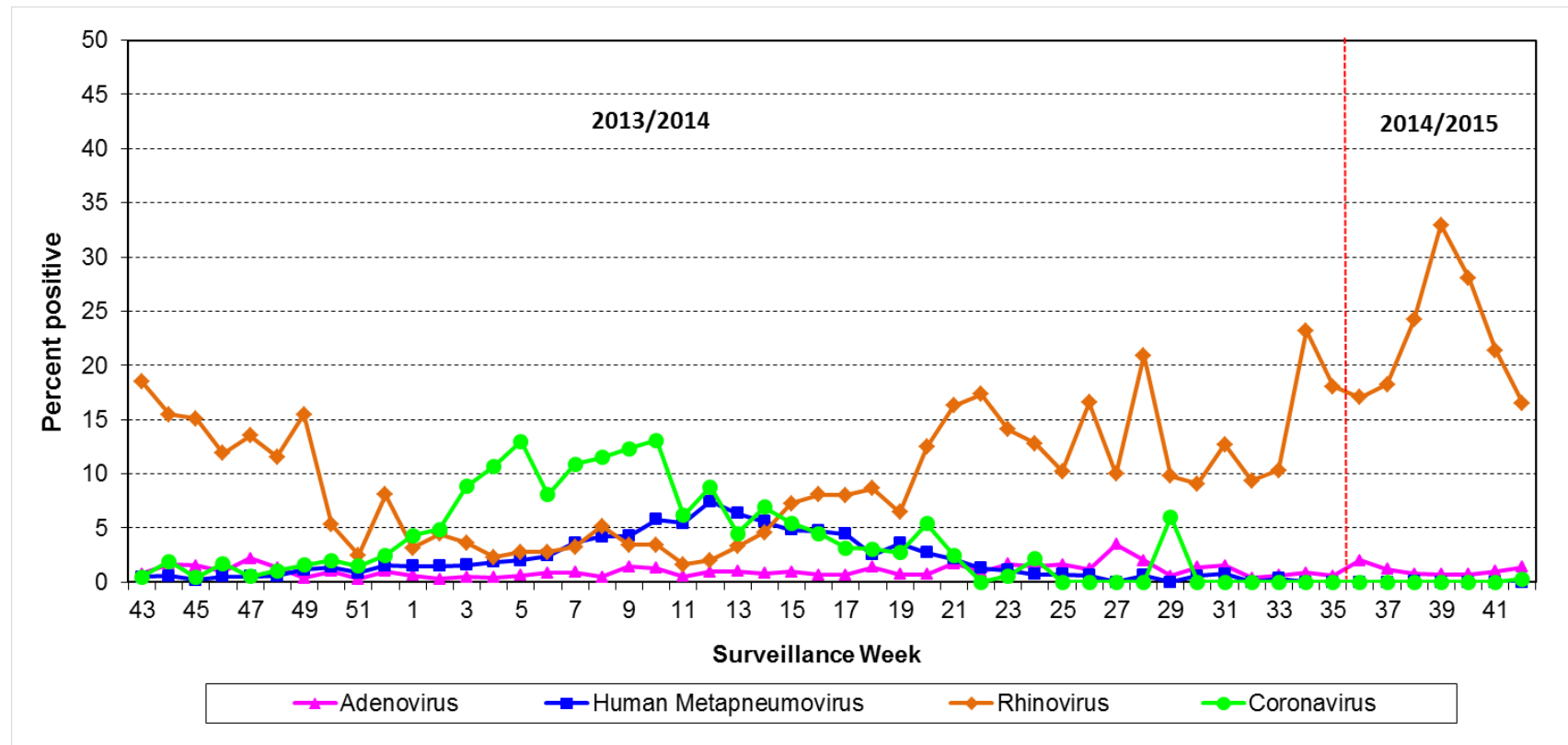
The numbers reported in this figure represent results submitted to the CIRID by 16 participating laboratories in Ontario, including 11 Public Health Ontario Laboratories (PHOLs) and five hospital-based laboratories.

Interpret results for Week 51 with caution as only four laboratories in Ontario, three of which were hospital-based laboratories, submitted results to the CIRID.

Results above are assigned to a particular surveillance week based on when test results are reported to PHAC; these data are not updated when results are submitted late for previous surveillance weeks. These data represent the number of specimens tested, which may not necessarily correspond with the number of patients as more than one specimen may have been submitted per patient.

Cumulative numbers for the season to date are also available through FluWatch: <http://www.phac-aspc.gc.ca/fluwatch/>

Figure 2. Percentage of respiratory viral pathogens (adenovirus, human metapneumovirus, rhinovirus and coronavirus) detected among specimens tested by all methods: Ontario, October 20, 2013 to October 18, 2014



Source: These data have been obtained from the Public Health Agency of Canada's (PHAC) Centre for Immunization and Respiratory Infectious Diseases (CIRID) respiratory virus detection tables as of October 22, 2014; they are based on data submitted to PHAC from 16 laboratories in Ontario.

Notes:

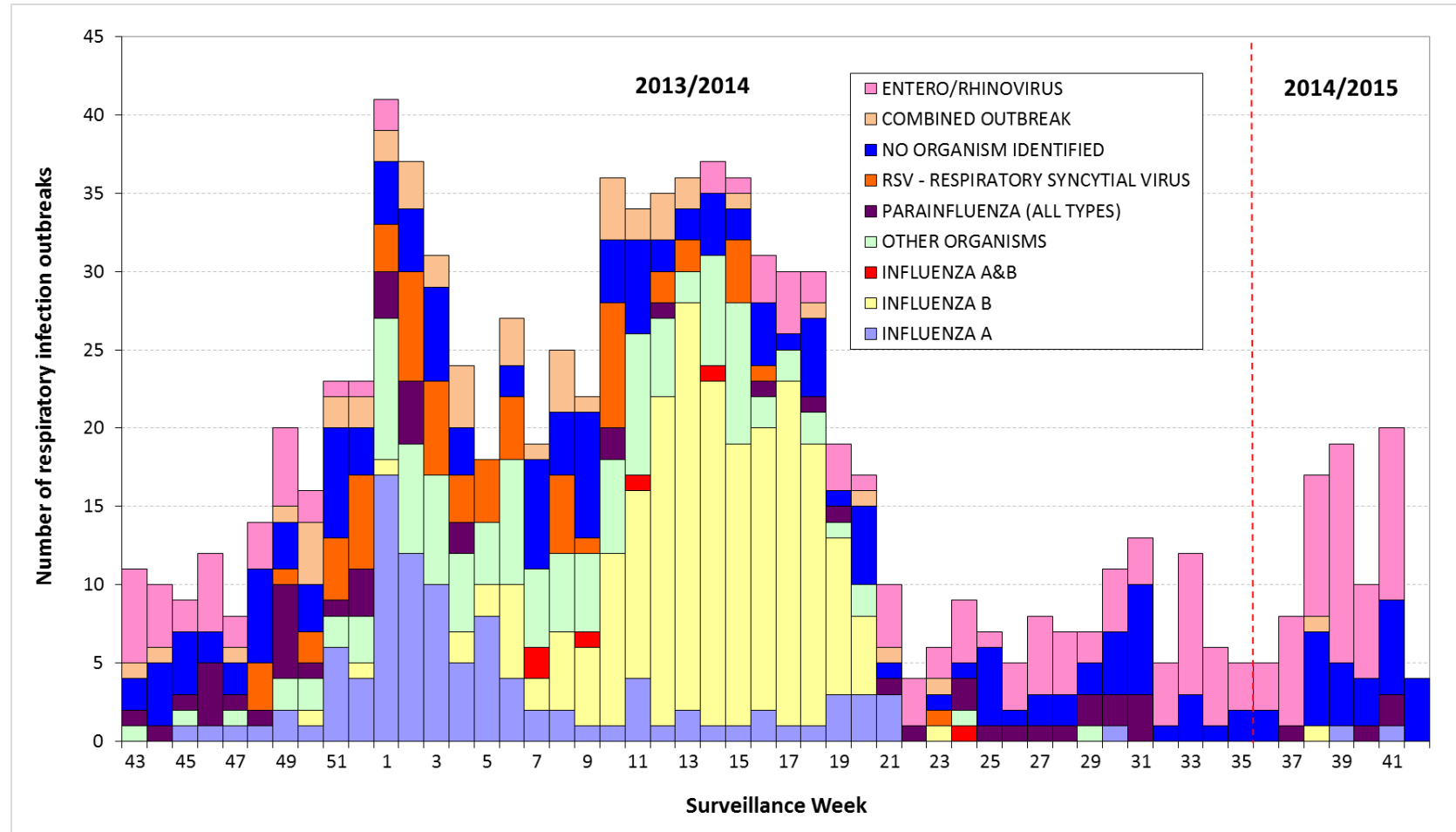
The numbers reported in this figure represent results submitted to the CIRID by 16 participating laboratories in Ontario, including 11 Public Health Ontario Laboratories and five hospital-based laboratories.

Interpret results for Week 51 with caution as only four laboratories in Ontario, three of which were hospital-based laboratories, submitted results to the CIRID.

Results above are assigned to a particular surveillance week based on when test results are reported to PHAC; these data are not updated when results are submitted late for previous surveillance weeks. These data represent the number of specimens tested, which may not necessarily correspond with the number of patients as more than one specimen may have been submitted per patient.

Cumulative numbers for the season to date are also available through FluWatch: <http://www.phac-aspc.gc.ca/fluwatch/>

Figure 3. Institutional respiratory infection outbreaks by week of illness onset in the first case: Ontario, October 20, 2013 to October 6, 2014

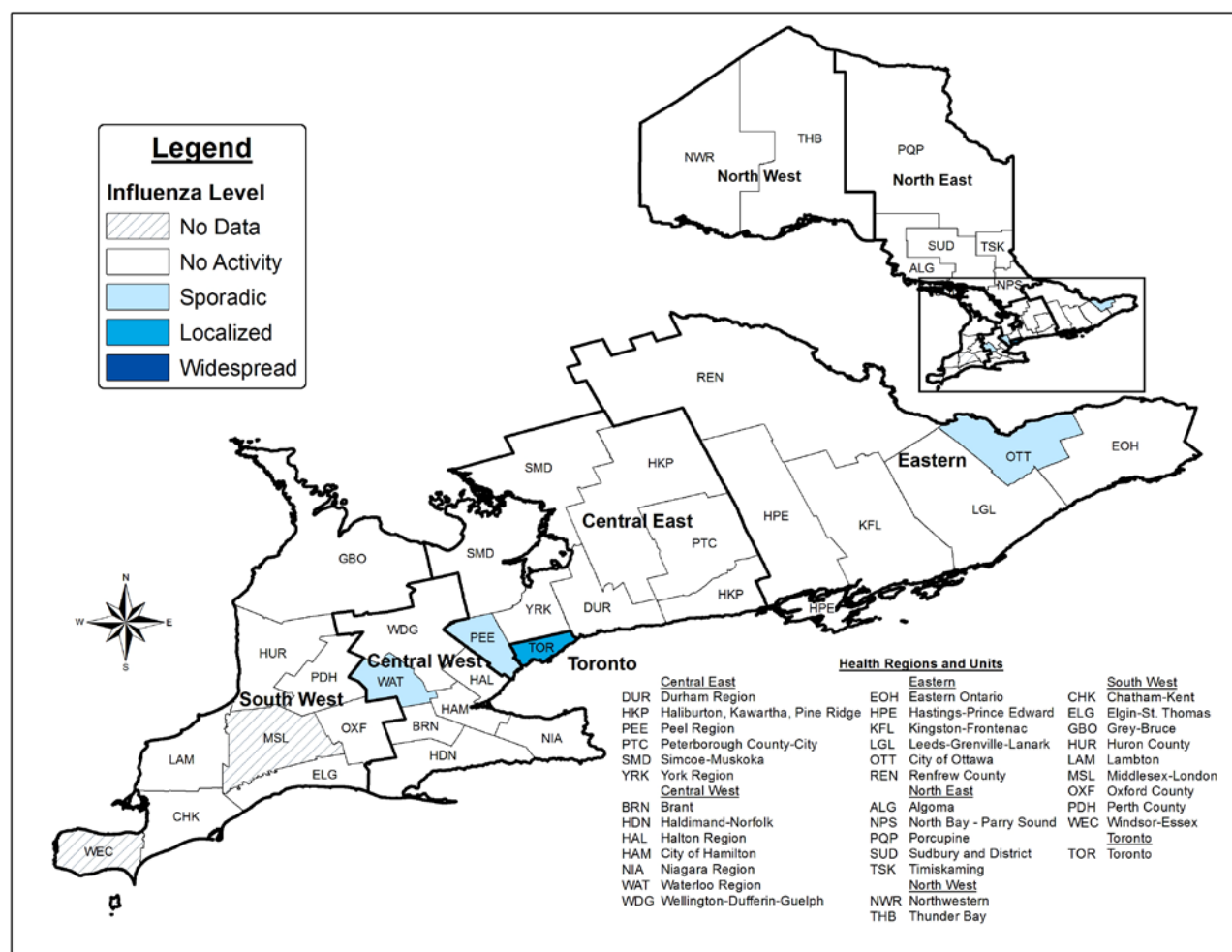


Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2014/10/22].

Notes:

Institutional respiratory infection outbreaks for which the date of onset of illness for the first case is missing are excluded in this figure. Interpret the most recent week with caution due to reporting delays.

Figure 4. Influenza activity levels reported by public health units: Ontario, October 12, 2014 to October 18, 2014 (Week 42)



Source: Public Health Ontario [Provincial Influenza Activity Report (Appendix C) Database]

Notes:

Influenza activity levels are assigned by local public health units and reported to Public Health Ontario by the Tuesday following the end of each surveillance week at 4:00 p.m. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional respiratory infection outbreaks. Please refer to the [detailed definitions for the 2014-2015 season for more information](#).

Activity levels reported for a particular surveillance week may not necessarily correspond to the number of new outbreaks reported in the same week in Table 3 because ongoing outbreaks from previous weeks, as well as laboratory confirmed outbreaks in schools, may be included in the assessment of the activity level.