

Ontario Respiratory Virus Bulletin | 2015-2016

SURVEILLANCE WEEKS 37 AND 38 (September 13, 2015 – September 26, 2015)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from September 13, 2015 to September 26, 2015 (Weeks 37 and 38). Unless otherwise specified, **data presented in this issue of the bulletin is for Weeks 37 and 38** and data extraction occurred on Wednesday, September 30, 2015. Weekly production of the expanded version of the bulletin will resume in the fall for the 2015-16 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 6 influenza cases (5 influenza A and 1 influenza B) reported ¹ in Weeks 37 and 38, which was similar to the 2 influenza cases reported in weeks 35 and 36 (both influenza A).
Respiratory sample percent positivity for influenza ²	Similar	Percent positivity ² of laboratory tests for all influenza types in Weeks 37 and 38 was 0.4%, which was similar to the percent positivity in Weeks 35 and 36 (0.1%).
Influenza outbreaks ³	Similar	There were no new influenza outbreaks reported in Weeks 37 and 38, which was the same as Weeks 35 and 36.
Influenza activity levels reported by health units	Higher	In Week 38, 29 health units reported no activity and 4 reported sporadic activity. In Week 37, 31 health units reported no activity and 2 reported sporadic activity.
OVERALL ASSESSMENT	Similar	Overall, the indicators show that influenza activity for Weeks 37 and 38 was similar to Weeks 35 and 36.
Measures of severity for influenza		
Hospitalizations among laboratory-confirmed cases of influenza ¹	Similar	There were 5 hospitalized cases reported in Weeks 37 and 38, which was similar to the 1 hospitalized case reported in Weeks 35 and 36.
Deaths among laboratory-confirmed cases of influenza ¹	Similar	There were no deaths reported in Weeks 37 and 38, which was the same as the number of deaths reported in Weeks 35 and 36 (0).

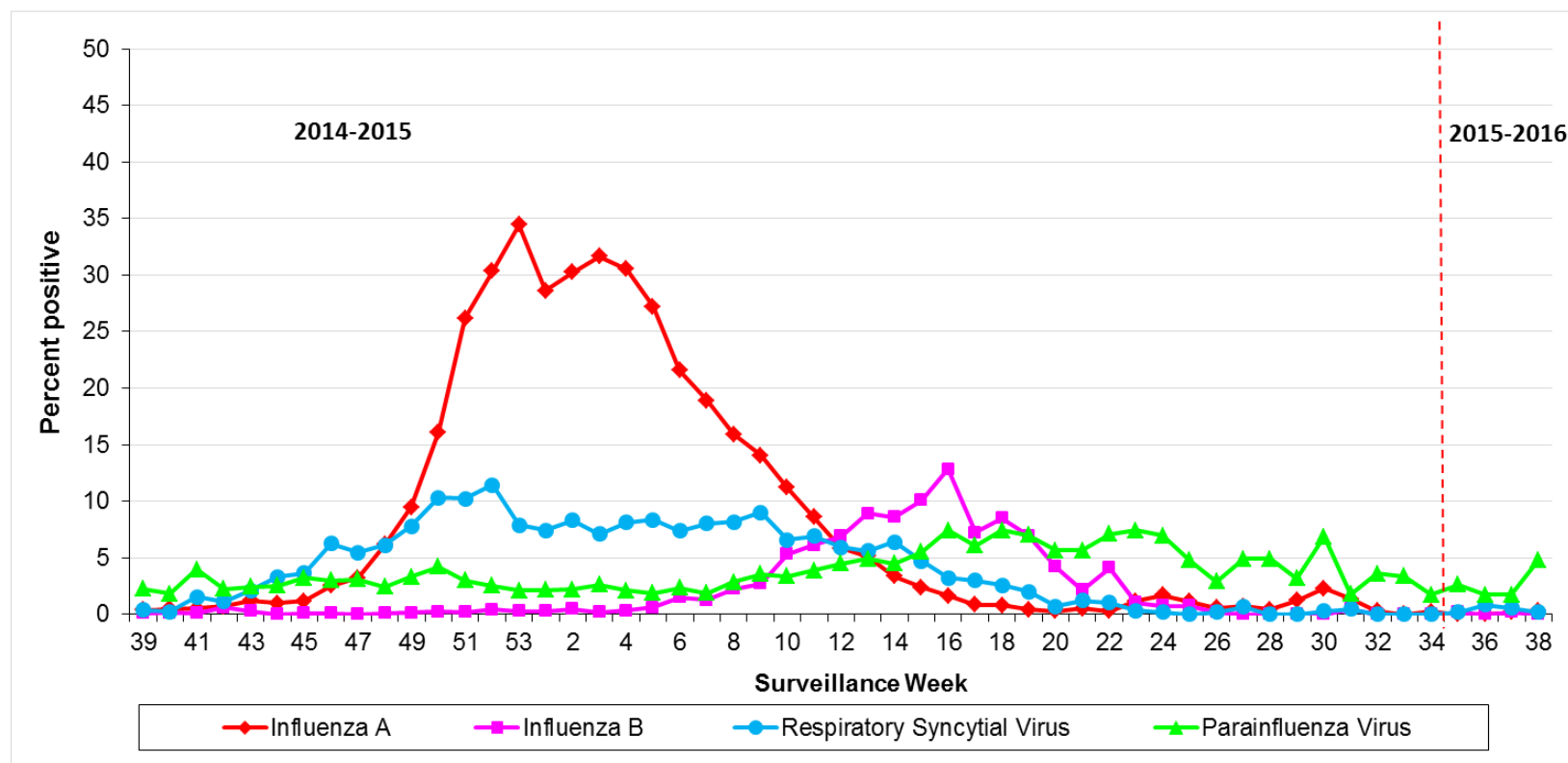
¹ The number of **reported** cases needs to be interpreted with caution because there is a lag between the onset of illness, hospital admission or death and when this information is reported to public health. ² Positivity among specimens submitted for testing to Ontario laboratories reporting to the 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 weeks was similar compared to the previous two weeks and at low levels typically expected for this time of year.
 - Influenza B percent positivity was 0.1% in Weeks 37 and 38, which was the same as Weeks 35 and 36 (0.1%); influenza A percent positivity was 0.3% in Weeks 37 and 38, which was higher than Weeks 35 and 36 (0.0%).
 - For the 2015-2016 surveillance season to date, eight² laboratory-confirmed influenza cases have been reported, and most were influenza A (87.5%, 7/8).
 - For the season to date, six³ hospitalizations and no deaths have been reported among laboratory-confirmed influenza cases. All hospitalizations occurred among influenza A cases.
 - Of the 44 institutional respiratory infection outbreaks reported to date, none were influenza outbreaks.
- Among other circulating non-influenza respiratory viruses identified through laboratory testing:
 - Rhinovirus was the dominant circulating virus in Weeks 37 and 38; the percent positivity for rhinovirus was 22.2% in Weeks 37 and 38, which was higher than Weeks 35 and 36 (17.1%).
 - Parainfluenza was the second most common circulating virus in Weeks 37 and 38; the percent positivity for parainfluenza was 3.2% in Weeks 37 and 38, which was higher than Weeks 35 and 36 (2.2%).

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). ² The cumulative count includes laboratory-confirmed cases with a 'Reported Date' between September 1, 2015 and the last day of the current surveillance week.

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, September 21, 2014 to September 26, 2015



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 September 30, 2015; they are based on data submitted to PHAC from 16 laboratories in Ontario.

Notes:

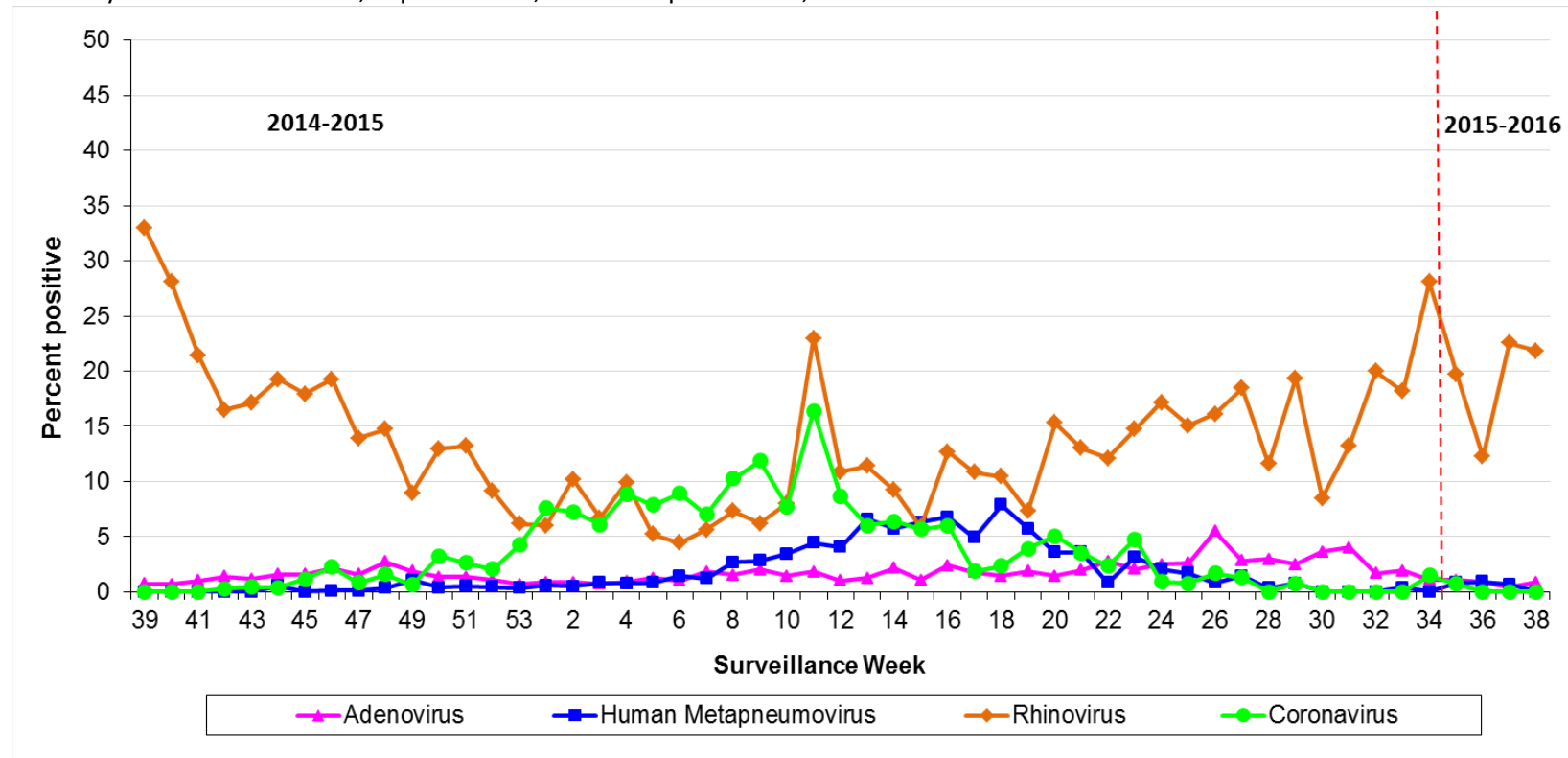
The numbers reported in this figure represent results submitted to the CIRID by 16 participating laboratories in Ontario, including 11 Public Health Ontario Laboratories (PHOLs) and five hospital-based laboratories.

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, September 21, 2014 to September 26, 2015



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 September 30, 2015; they are based on data submitted to PHAC from 16 laboratories in Ontario.

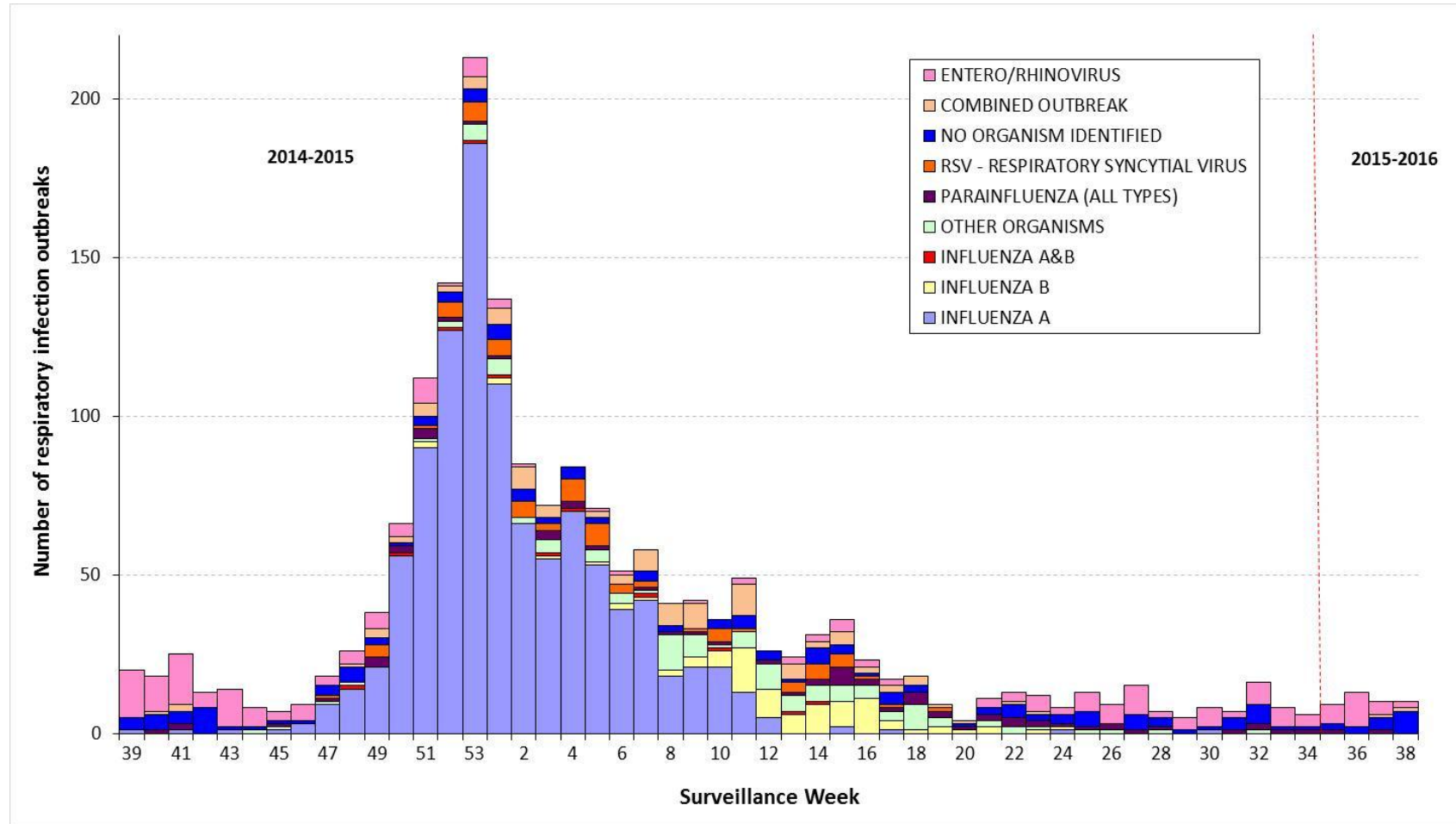
Notes:

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, September 21, 2014 to September 26, 2015

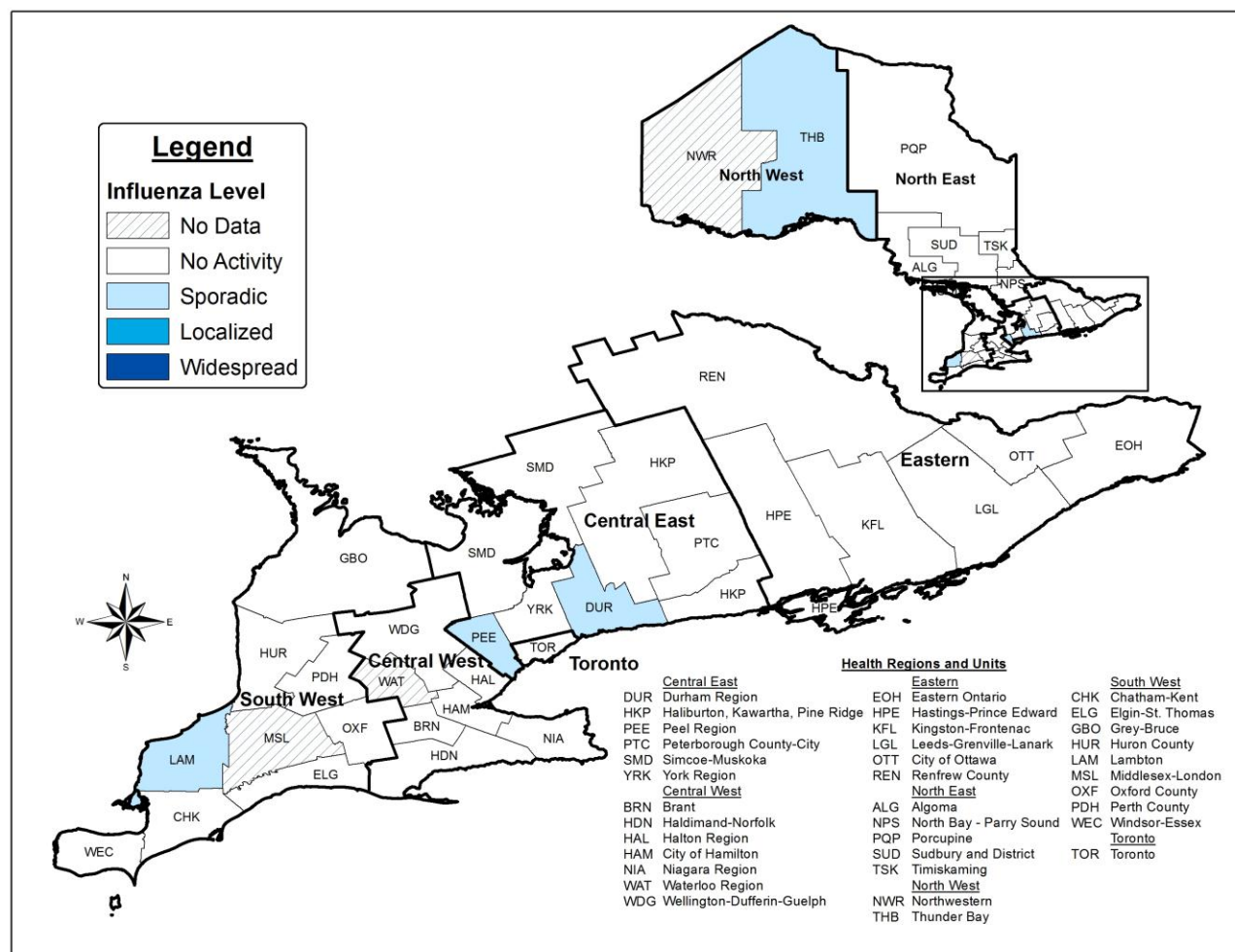


Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2015/09/30].

Notes:

Institutional respiratory infection outbreaks for which the date of onset of illness for the first case is missing are excluded in this figure.

Figure 4. Influenza activity levels reported by public health units: Ontario, September 20, 2015 to September 26, 2015 (Week 38)



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 2015-2016 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 because ongoing outbreaks from previous weeks, as well as laboratory confirmed outbreaks in schools, may be included in the assessment of the activity level.