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Ontario Respiratory Virus Bulletin | 2013-2014

SURVEILLANCE WEEKS 38 and 39 (September 15, 2013 – September 28, 2013)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from September 15, 2013 to September 28, 2013 (weeks 38 and 39). Unless otherwise specified, **data presented are for weeks 38 and 39;** data extraction and analysis for this issue occurred on Wednesday, October 1, 2013. In order to enable our readers to better assess influenza activity in Ontario, we have combined various sources of information in the following table.

Please note that Public Health Ontario is now publishing biweekly versions of the Ontario Respiratory Virus Bulletin until November 2013. Influenza Activity Maps are available during the weeks that the Bulletin is not published.

Assessment of Influenza Activity in Ontario

Measure of activity	Assessment of measure *compared to previous assessment period* (Lower, Similar, Higher)	Reasoning behind assessment
Laboratory confirmed influenza cases	Slightly lower	There was one influenza A case reported[1] in weeks 38 and 39, compared to four cases (two influenza A and two influenza B) reported in weeks 36 and 37. Percent positivity[2] of laboratory tests for all influenza types in Ontario was 0.1% (0.1% influenza A; 0% influenza B) for weeks 38 and 39 combined, compared to 0.7% in weeks 36 and 37 combined.
Influenza outbreaks	Similar	No new influenza outbreaks were reported[3] in weeks 38 and 39. There were nine outbreaks for which no aetiological agent was reported (Figure 2).
Influenza activity levels reported by health units	Similar	One health unit reported 'sporadic activity' in week 39 (Figure 3), which represents similar influenza activity to week 37.
ILI consultation rate reported by sentinels	Higher	The average provincial influenza-like-illness (ILI) consultation rate[4] in weeks 38 and 39 (33.89 per 1,000 patient visits) was higher compared to the average rate in weeks 36 and 37 (13.96 per 1,000 patient visits).
OVERALL ASSESSMENT	***Similar***	**In weeks 38 and 39, overall the indicators show that influenza activity was similar compared to weeks 36 and 37.**

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. 4. Small numbers of sentinels reporting can make the ILI rates unstable. Please interpret these data correspondingly.

Produced by: Surveillance Services and Communicable Diseases, Public Health Ontario

Ontario Respiratory Virus Bulletin, 2013-2014 season
Weeks 38 and 39: September 15, 2013 – September 28, 2013

Highlights of all other respiratory virus activity in Ontario

For weeks 38 and 39 compared to weeks 36 and 37

- Among all other circulating respiratory viruses, entero/rhinovirus had the highest percent positivity (28.0%) in weeks 38 and 39 combined, which was slightly lower than weeks 36 and 37 combined (29.5%).[1]

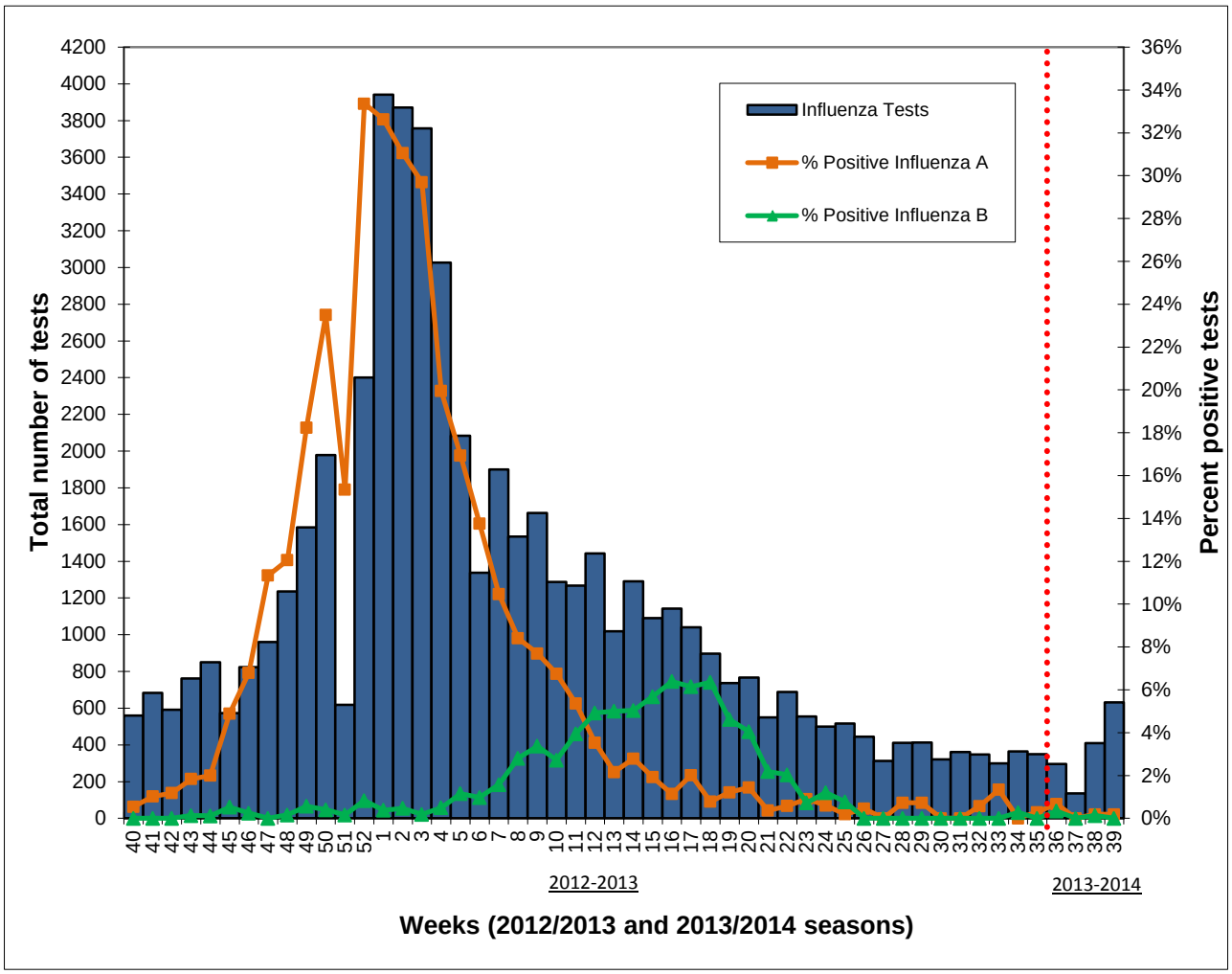
- Parainfluenza virus had the second highest percent positivity (4.2%) in weeks 38 and 39 combined, which was higher than weeks 36 and 37 combined (2.9%).[1]

- In weeks 38 and 39, a total of sixteen new institutional respiratory infection outbreaks were identified, including seven entero/rhinovirus outbreaks and nine outbreaks with no organism reported (Figure 2). For the 2013-2014 season to date, a total of 29 institutional respiratory infection outbreaks have been reported.

1. Positivity among specimens submitted for testing to Ontario laboratories reporting to the Centre for Immunization and Respiratory Infectious Diseases (CIRID).

Ontario Respiratory Virus Bulletin, 2013-2014 season
Weeks 38 and 39: September 15, 2013 – September 28, 2013

Figure 1. Total number of influenza tests performed and percent of positive tests by report week: Ontario, September 30, 2012 to September 28, 2013



Source: Public Health Agency of Canada (PHAC). These data have been obtained from the PHAC Respiratory Virus Detection tables from 16 labs in Ontario and do not include data from late reports to PHAC. Please note that the last versions of data received from PHAC as of 4:00 p.m. on October 2, 2013 were used.

Notes:
The data in the figure is based on when test results are reported.
Cumulative numbers for the season to date are also available through FluWatch: http://www.phac-aspc.gc.ca/fluwatch/
The numbers reported in this table represent respiratory viruses identified in both Public Health Ontario Laboratories and other microbiology laboratories that perform testing for influenza in Ontario.
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.

Ontario Respiratory Virus Bulletin, 2013-2014 season
Weeks 38 and 39: September 15, 2013 – September 28, 2013

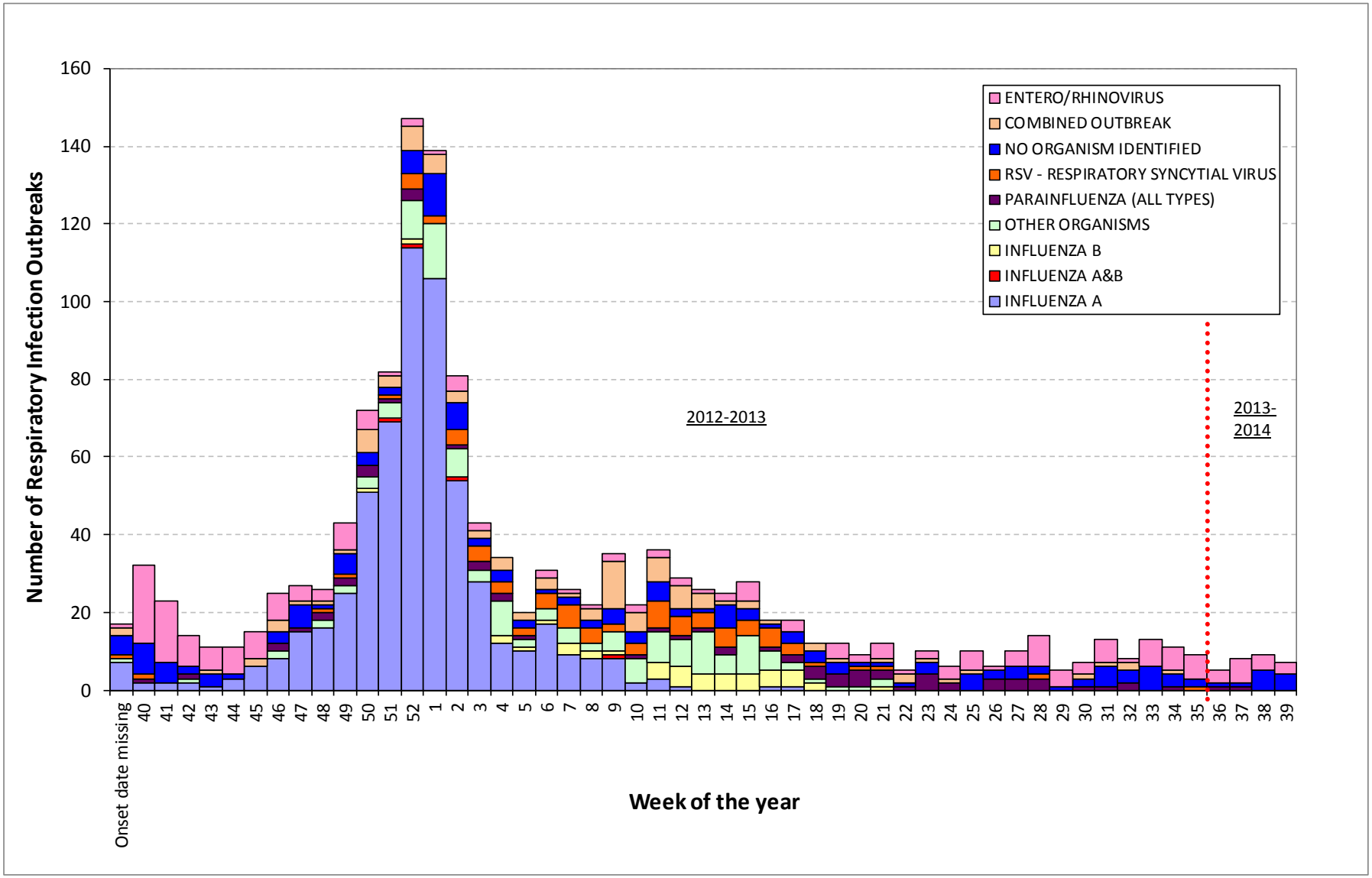
Table 1. Number and percent positivity (in brackets) of respiratory specimens tested by all methods for influenza and other respiratory viruses: Ontario, weeks 38 and 39 and cumulative for the 2013-2014 season

Detected viruses	Number and percent positive specimens			Total number of specimens tested		
	Week 38 n (%)	Week 39 n (%)	Cumulative n (%)	Week 38 n	Week 39 n	Cumulative n
Influenza (All)	0 (0)	1 (0.16)	6 (0.27)	409	632	2,204
Influenza A	0 (0)	1 (0.16)	4 (0.18)	409	632	2,204
Influenza B	0 (0)	0 (0)	2 (0.09)	409	632	2,204
Parainfluenza virus	15 (3.7)	26 (4.63)	75 (3.8)	405	562	1,975
Adenovirus	4 (0.99)	2 (0.36)	10 (0.51)	405	562	1,975
Respiratory syncytial virus	1 (0.25)	8 (1.29)	21 (0.95)	405	621	2,199
Entero/rhinovirus	53 (30.11)	71 (26.69)	222 (23.67)	176	266	938
Human metapneumovirus	0 (0)	1 (0.19)	4 (0.21)	385	537	1,861
Coronavirus	1 (0.65)	5 (3.03)	6 (0.81)	153	165	738

Source: Centre for Immunization and Respiratory Infectious Diseases, Public Health Agency of Canada (PHAC). These data have been obtained from the Respiratory Virus Detection tables of Public Health Agency of Canada from 16 labs in Ontario and do not include data from late reports to PHAC for the current season: Weeks 38 and 39, 2013. Please note that the last versions of data received from PHAC as of 4:00 p.m. on October 2, 2013 were used.

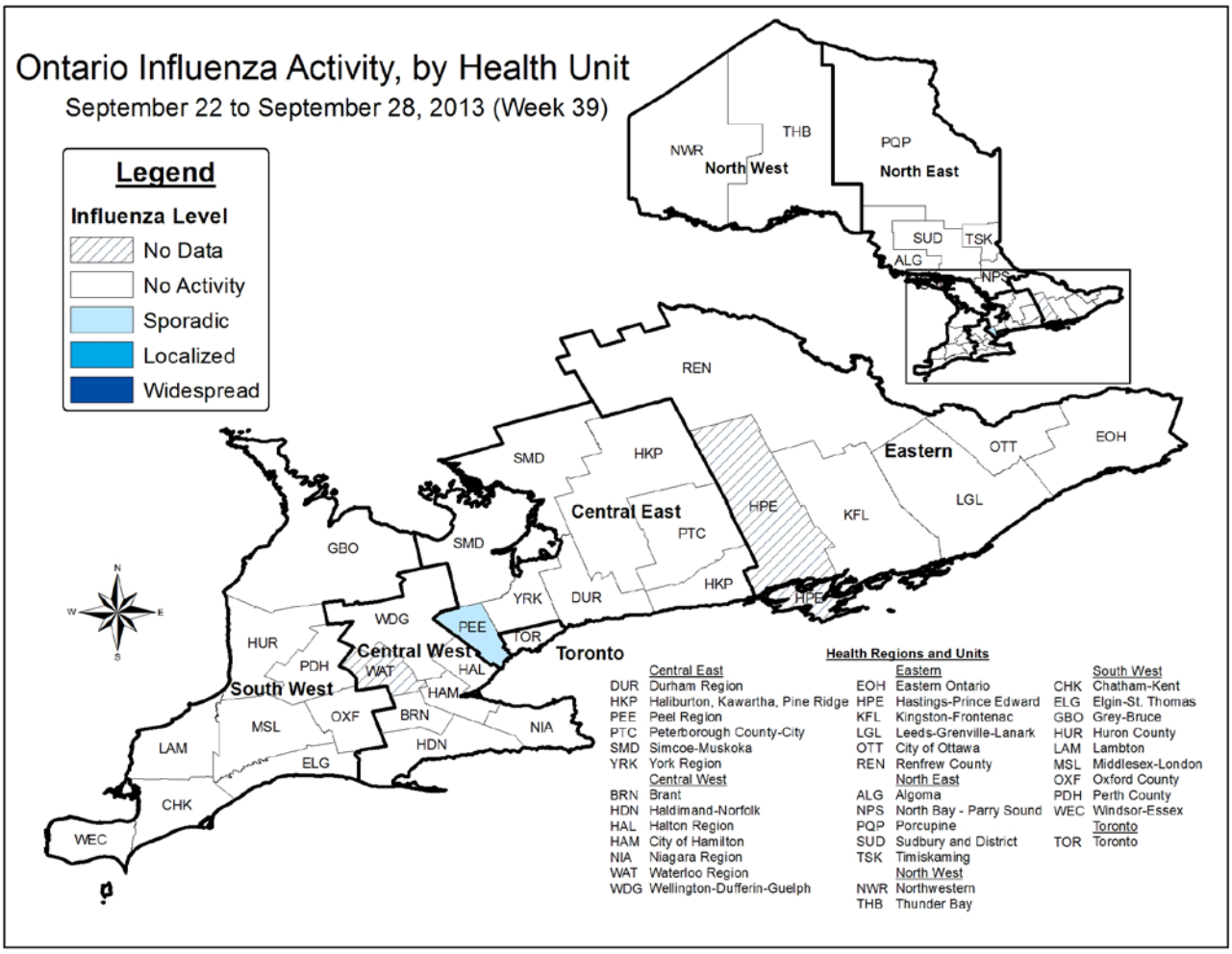
Notes:
The data in this table is based on when test results are reported. Total numbers reported include late reports from previous weeks; therefore, totals may not be equal to the sum of the weekly numbers.
Cumulative numbers include reports from week 35, as reporting by PHAC includes week 35 as part of the 2013-2014 season. Cumulative numbers for the season to date are also available through FluWatch: http://www.phac-aspc.gc.ca/fluwatch/
The numbers reported in this table represent respiratory viruses identified at both Public Health Ontario Laboratories and other laboratories in Ontario.
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.

Figure 2. Institutional respiratory infection outbreaks by week of illness onset in the first case: Ontario, September 30, 2012 to September 28, 2013



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2013/10/01].

Figure 3. Influenza activity levels by health unit: Ontario, week 39



Source: Public Health Ontario [Provincial Influenza Activity Report (Appendix C) Database]
Note: Influenza activity levels are assigned by local public health units and reported to Public Health Ontario by the Tuesday following the end of the 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.