



Ontario Respiratory Virus Bulletin | 2013-2014

SURVEILLANCE WEEKS 40 and 41 (September 29, 2013 – October 12, 2013)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from September 29, 2013 to October 12, 2013 (weeks 40 and 41). Unless otherwise specified, **data presented are for weeks 40 and 41**; data extraction and analysis for this issue occurred on Wednesday, October 16, 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 higher	There were four influenza A cases reported ¹ in weeks 40 and 41, compared to one influenza A case reported in weeks 38 and 39. Percent positivity ² of laboratory tests for all influenza types in Ontario was 0.4% (0.3% influenza A; 0.1% influenza B) for weeks 40 and 41 combined, compared to 0.1% in weeks 38 and 39 combined.
Influenza outbreaks	Similar	No new influenza outbreaks were reported ³ in weeks 40 and 41. There were fourteen 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 41 (Figure 3), which is similar to influenza activity from week 39.
ILI consultation rate reported by sentinels	Slightly higher	The average provincial influenza-like-illness (ILI) consultation rate ⁴ in weeks 40 and 41 (39.09 per 1,000 patient visits) was slightly higher compared to the average rate in weeks 38 and 39 (33.89 per 1,000 patient visits).
OVERALL ASSESSMENT	Similar	In weeks 40 and 41, overall the indicators show that influenza activity was similar compared to weeks 38 and 39.

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.

Ontario Respiratory Virus Bulletin, 2013-2014 season
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Highlights of all other respiratory virus activity in Ontario

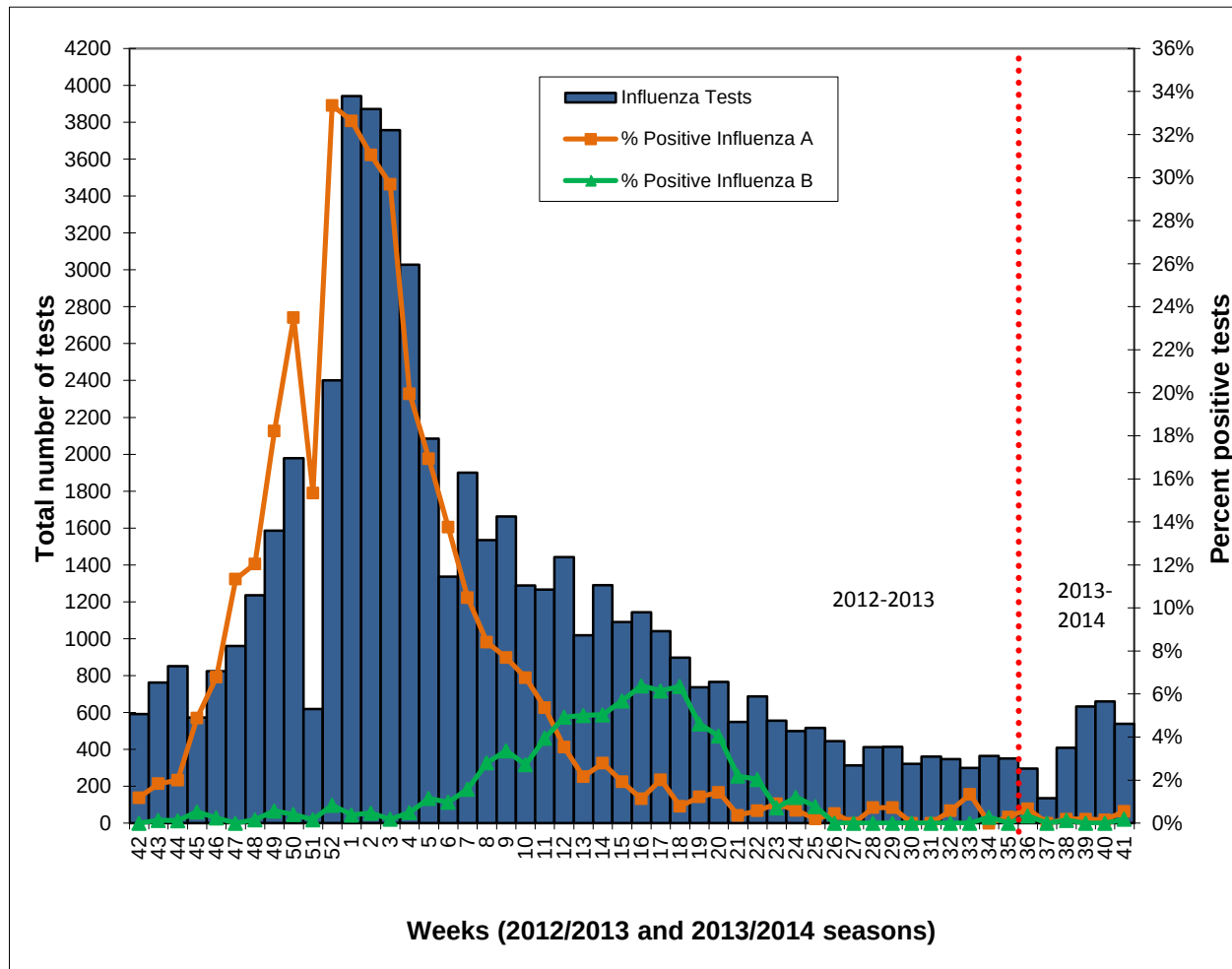
For weeks 40 and 41 compared to weeks 38 and 39

- Among all other circulating respiratory viruses, entero/rhinovirus had the highest percent positivity (28.1%) in weeks 40 and 41 combined, which was similar to weeks 38 and 39 combined (28.0%).¹
- Parainfluenza virus had the second highest percent positivity (3.6%) in weeks 40 and 41 combined, which was slightly lower than weeks 38 and 39 combined (4.2%).¹
- In weeks 40 and 41, a total of 17 new institutional respiratory infection outbreaks were identified, including three entero/rhinovirus outbreaks and 14 outbreaks with no organism reported (Figure 2). For the 2013-2014 season to date, a total of 64 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
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Figure 1. Total number of influenza tests performed and percent of positive tests by report week: Ontario, October 14, 2012 to October 12, 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 11:00 a.m. on October 16, 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 40 and 41: September 29, 2013 – October 12, 2013

Table 1. Number and percent positivity (in brackets) of respiratory specimens tested by all methods for influenza and other respiratory viruses: Ontario, weeks 40 and 41 and cumulative for the 2013-2014 season

Detected viruses	Number and percent positive specimens			Total number of specimens tested		
	Week 40 n (%)	Week 41 n (%)	Cumulative n (%)	Week 40 n	Week 41 n	Cumulative n
Influenza (All)	1 (0.15)	4 (0.75)	11 (0.33)	660	538	3,402
Influenza A	1 (0.15)	3 (0.56)	8 (0.24)	660	538	3,402
Influenza B	0 (0)	1 (0.19)	3 (0.09)	660	538	3,402
Parainfluenza virus	23 (3.83)	19 (3.42)	117 (3.74)	601	555	3,131
Adenovirus	7 (1.16)	4 (0.72)	21 (0.67)	601	555	3,131
Respiratory syncytial virus	4 (0.61)	4 (0.72)	29 (0.85)	651	555	3,405
Enterovirus	69 (23.39)	80 (34.04)	371 (25.27)	295	235	1,468
Human metapneumovirus	1 (0.17)	0 (0)	5 (0.17)	576	531	2,968
Coronavirus	2 (0.93)	2 (0.97)	10 (0.86)	216	206	1,160

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 40 and 41, 2013. Please note that the last versions of data received from PHAC as of 11:00 a.m. on October 16, 2013 were used.

Notes:

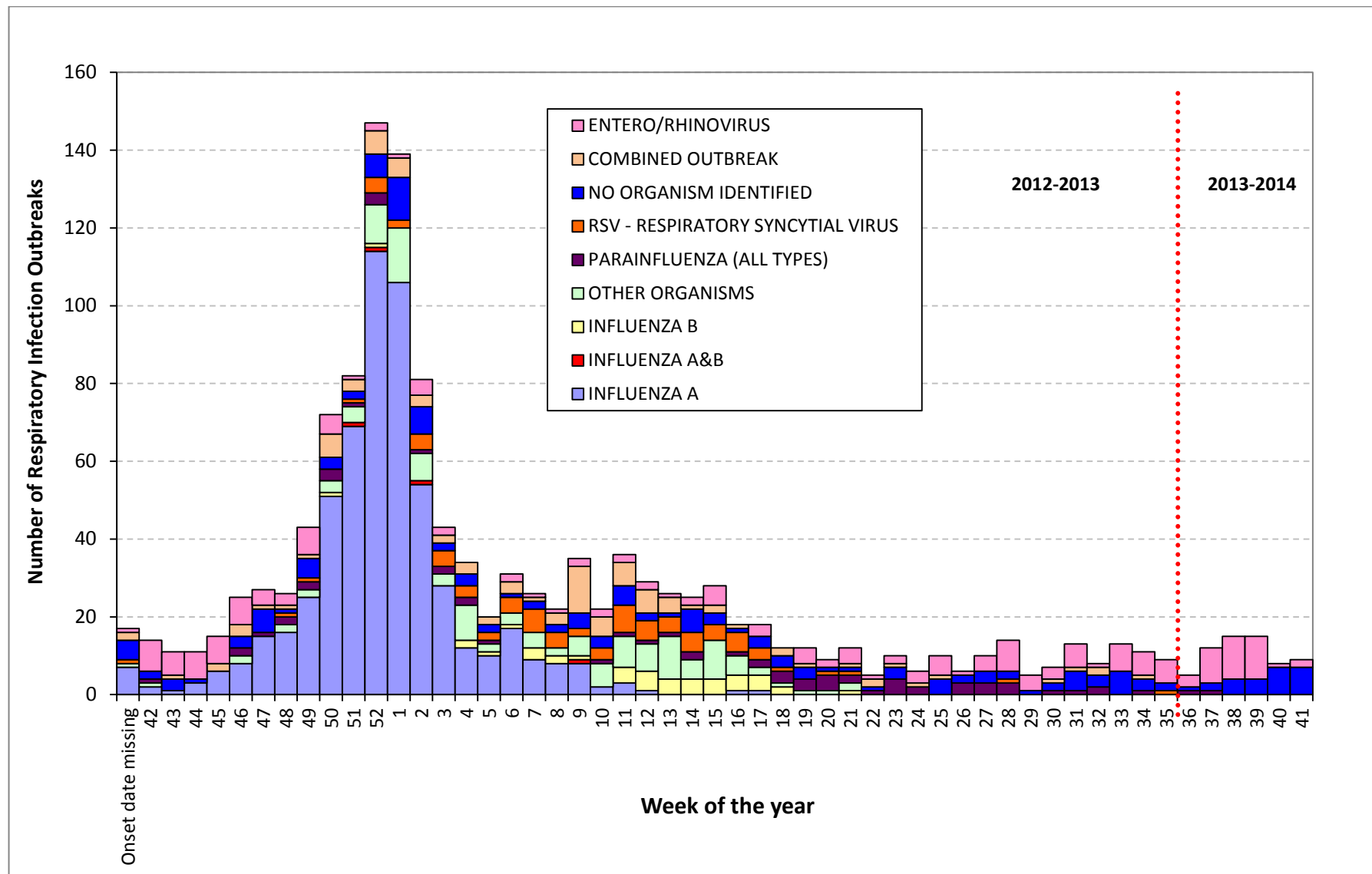
The data in this table is based on when test results are reported. Total numbers reported include late reports from previous weeks; therefore, totals may not be equal to the sum of the weekly numbers.

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.

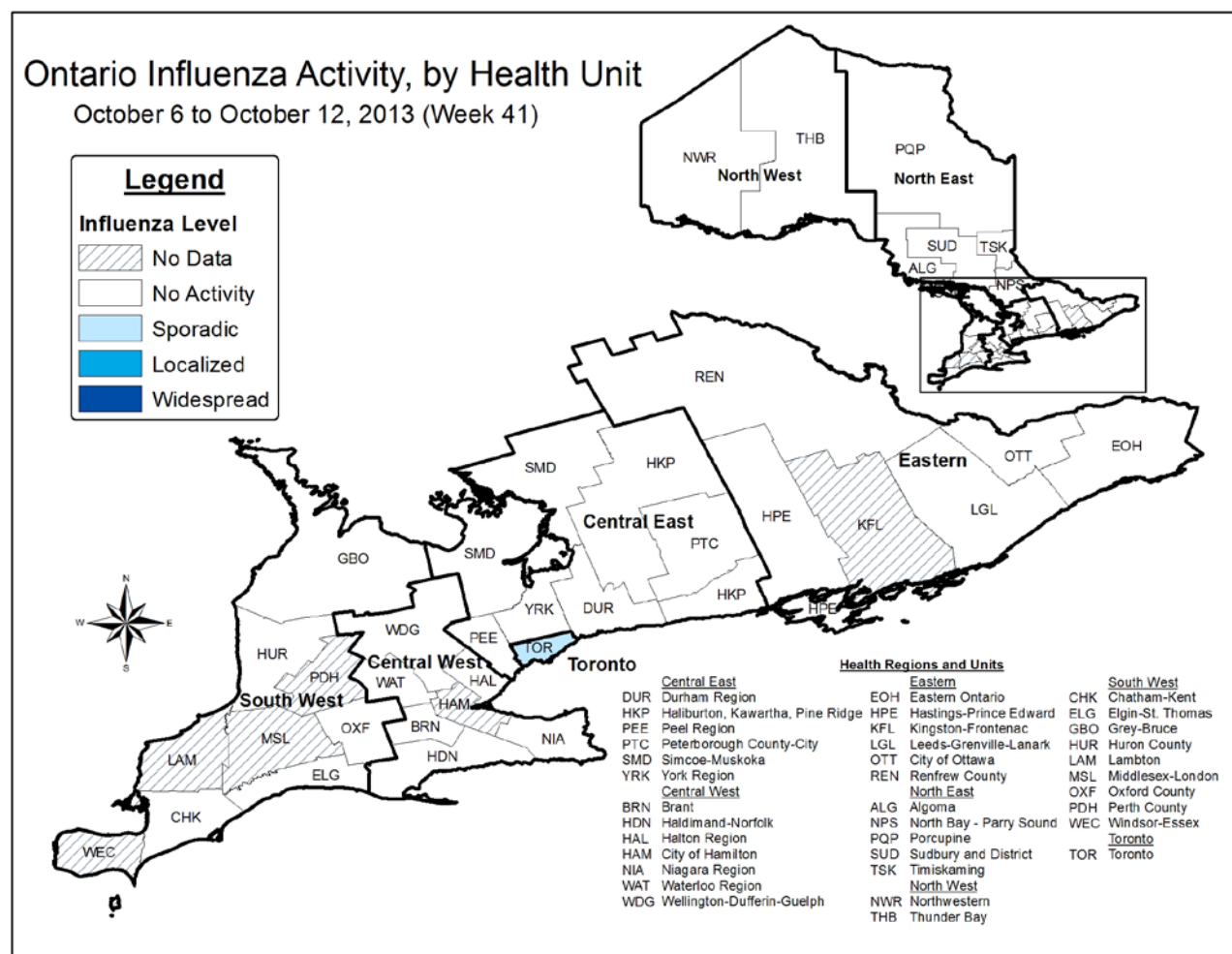
These data represent the number of specimens tested which may not necessarily correspond with the number of patients as more than one specimen may have been submitted per patient.

Figure 2. Institutional respiratory infection outbreaks by week of illness onset in the first case: Ontario, October 14, 2012 to October 12, 2013



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2013/10/16].

Figure 3. Influenza activity levels by health unit: Ontario, week 41



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.