



Ontario Respiratory Virus Bulletin | 2013-2014

SURVEILLANCE WEEKS 36 and 37 (September 1, 2013 – September 14, 2013)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from September 1, 2013 to September 14, 2013 (weeks 36 and 37). Unless otherwise specified, **data presented are for weeks 36 and 37**; data extraction and analysis for this issue occurred on Wednesday, September 18, 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 abbreviated versions of the Ontario Respiratory Virus Bulletin on alternating weeks 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 cases (two influenza A and two influenza B) reported ¹ in weeks 36 and 37, compared to one influenza B case reported in weeks 34 and 35. Percent positivity ² of laboratory tests for all influenza types in Ontario was 0.7% (0.46% influenza A; 0.23% influenza B) for weeks 36 and 37 combined, compared to 0.28% in weeks 34 and 35 combined.
Influenza outbreaks	Similar	No new influenza outbreaks were reported ³ in weeks 36 and 37. There were six other outbreaks for which no aetiological agent was reported (Figure 2).
Influenza activity levels reported by health units	Slightly higher	One health unit reported 'sporadic activity' in week 37 (Figure 3), which represents slightly higher influenza activity in Ontario overall compared to health units reporting no influenza activity in week 35.
ILI consultation rate reported by sentinels	Similar	The average provincial influenza-like-illness (ILI) consultation rate ⁴ in weeks 36 and 37 (13.96 per 1,000 patient visits) was similar compared to the average rate in weeks 34 and 35 (14.98 per 1,000 patient visits).
OVERALL ASSESSMENT	<i>Slightly higher</i>	In weeks 36 and 37, overall the indicators show that influenza activity was slightly higher compared to weeks 34 and 35.

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 reflects positive specimens reported to Public Health Ontario by 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.

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Highlights of all other respiratory virus activity in Ontario

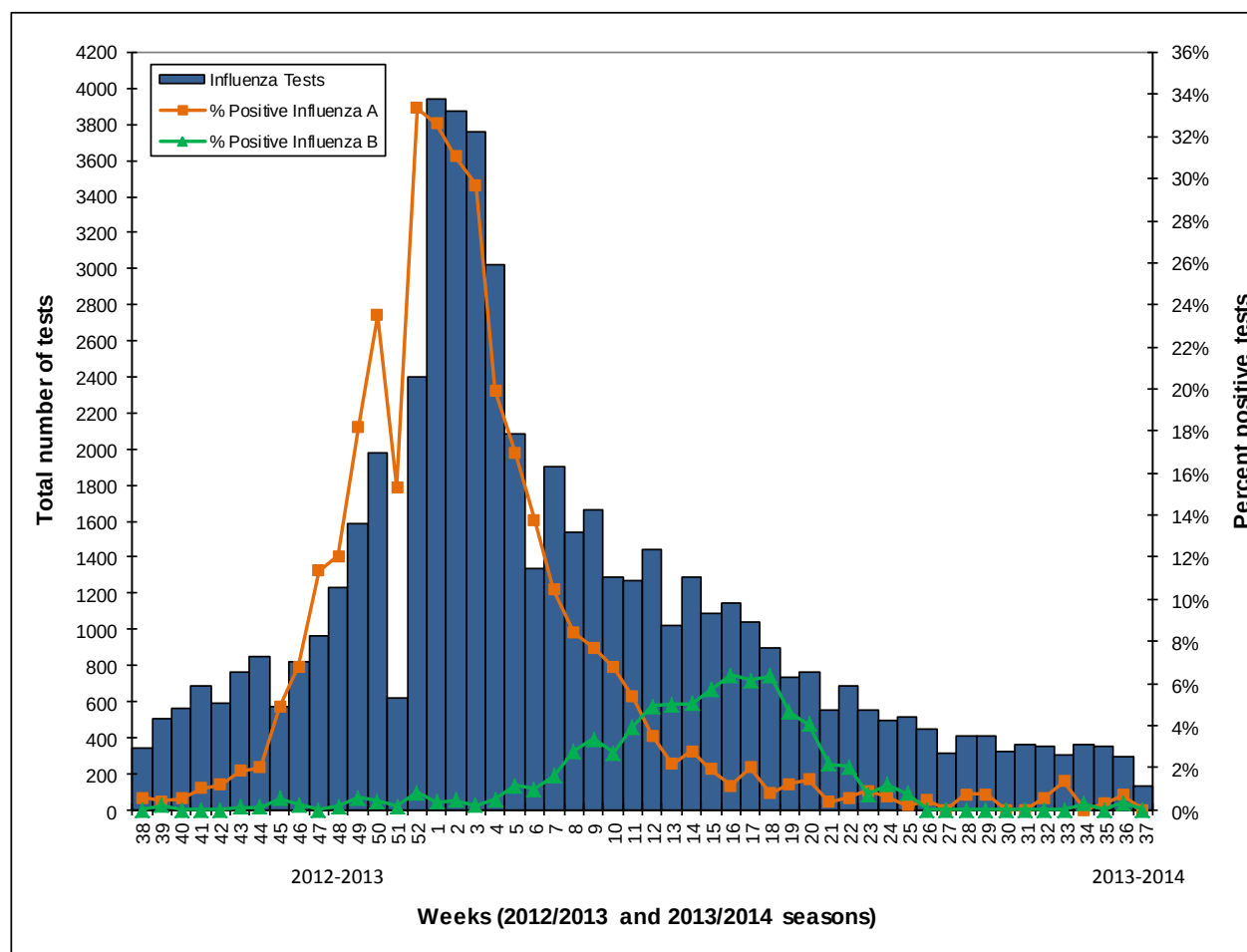
For weeks 36 and 37 compared to weeks 34 and 35

- Among all other circulating respiratory viruses, entero/rhinovirus had the highest percent positivity (29.5%) in weeks 36 and 37 combined, which was higher than weeks 34 and 35 combined (15.9%).¹
- Parainfluenza virus had the second highest percent positivity (2.9%) in weeks 36 and 37 combined, which was lower than weeks 34 and 35 combined (4.6%).¹
- In weeks 36 and 37, a total of nine new institutional respiratory infection outbreaks were identified, including two entero/rhinovirus outbreaks, one parainfluenza outbreak, and six outbreaks with no organism reported (Figure 2). For the 2013-2014 season to date, a total of nine institutional respiratory infection outbreaks have been reported.

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

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Figure 1. Total number of influenza tests performed and percent of positive tests by report week: Ontario, September 16, 2012 to September 14, 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 September 18, 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.

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Table 1. Number and percent positivity (in brackets) of respiratory specimens tested by all methods for influenza and other respiratory viruses: Ontario, weeks 36 and 37 and cumulative for the 2013-2014 season

Detected viruses	Number and percent positive specimens			Total number of specimens tested		
	Week 36 n (%)	Week 37 n (%)	Cumulative n (%)	Week 36 n	Week 37 n	Cumulative n
Influenza (All)	3 (1.02)	0 (0)	5 (0.45)	296	135	1,130
Influenza A	2 (0.68)	0 (0)	3 (0.27)	296	135	1,130
Influenza B	1 (0.34)	0 (0)	2 (0.18)	296	135	1,130
Parainfluenza virus	7 (3)	2 (2.56)	33 (3.38)	233	78	975
Adenovirus	1 (0.43)	1 (1.28)	4 (0.41)	233	78	975
Respiratory syncytial virus	2 (0.67)	2 (1.48)	12 (1.05)	298	135	1,140
Enterovirus	38 (27.74)	11 (37.93)	91 (19.65)	137	29	463
Human metapneumovirus	0 (0)	0 (0)	3 (0.33)	210	78	906
Coronavirus	0 (0)	0 (0)	0 (0)	111	29	387

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 36 and 37, 2013. Please note that the last versions of data received from PHAC as of 11:00 a.m. on September 18, 2013 were used.

Notes:

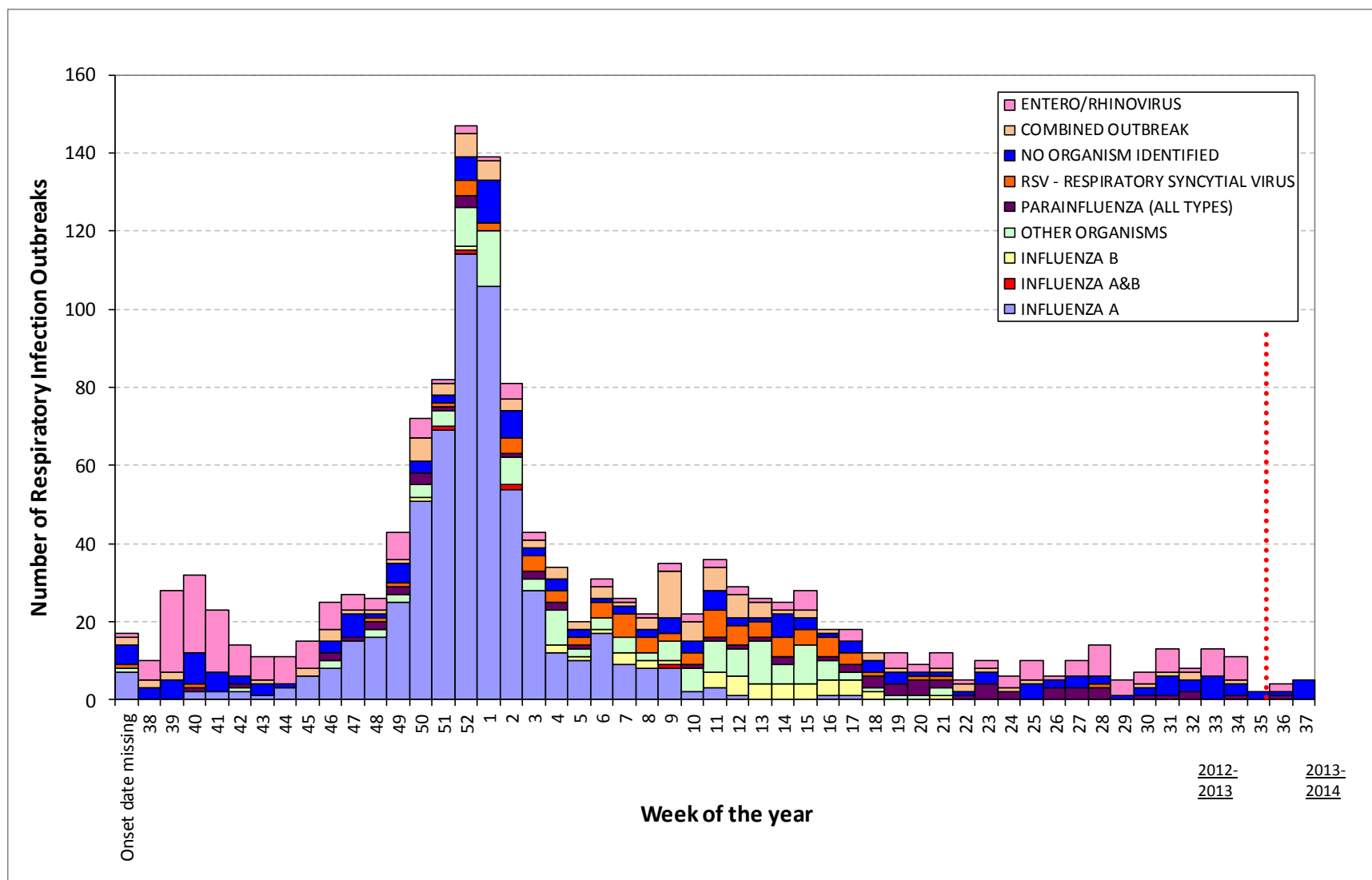
The data in this table is based on when test results are reported. Total numbers reported include late reports from previous weeks; therefore, totals may not be equal to the sum of the weekly numbers.

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.

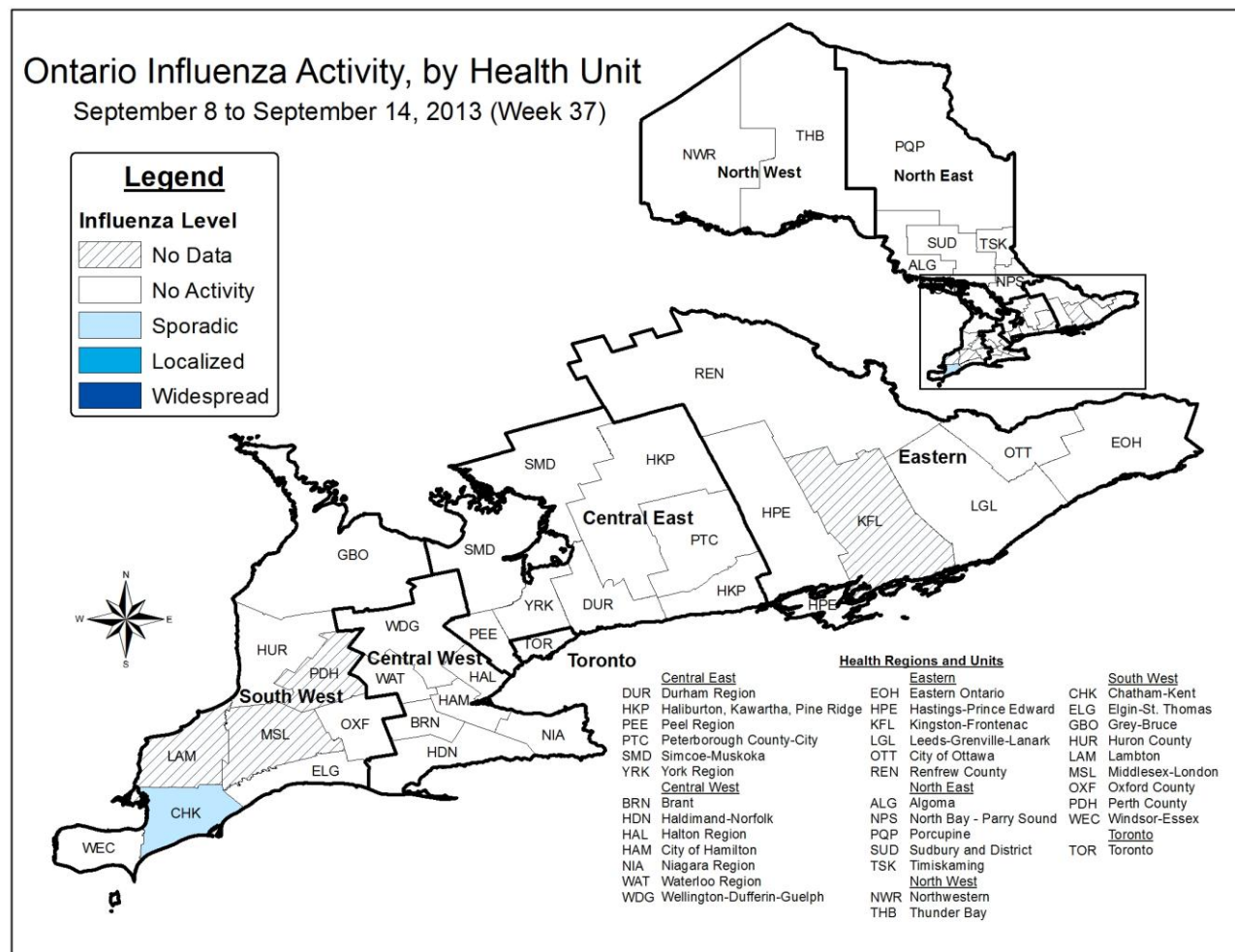
These data represent the number of specimens tested which may not necessarily correspond with the number of patients as more than one specimen may have been submitted per patient.

Figure 2. Institutional respiratory infection outbreaks by week of illness onset in the first case: Ontario, September 16, 2012 to September 14, 2013



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2013/09/18].

Figure 3. Influenza activity levels by health unit: Ontario, week 37



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.