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Ontario Respiratory Virus Bulletin | 2012-2013

SURVEILLANCE WEEKS 28 and 29 (July 7, 2013 – July 20, 2013)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from July 7, 2013 to July 20, 2013 (weeks 28 and 29). Unless otherwise specified, **data presented are for weeks 28 and 29**; data extraction and analysis for this issue occurred on Wednesday, July 24, 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	Similar	There were three influenza cases (two influenza A and one influenza B case) reported[1] in weeks 28 and 29, compared to two cases reported in weeks 26 and 27. Percent positivity[2] of laboratory tests for all influenza types in Ontario was 0.7% (0.7% influenza A; 0.0% influenza B) for weeks 28 and 29 combined, compared to 0.3% in weeks 26 and 27 combined.
Influenza outbreaks	Similar	No new influenza outbreaks were reported[3] in weeks 28 and 29. There were three other outbreaks for which no aetiological agent was reported (Figure 2).
Influenza activity levels reported by health units	Higher	Two health units reported 'sporadic' level influenza activity in week 29 (Figure 3), which was higher compared to the number of health units reporting 'sporadic' activity in week 27.
ILI consultation rate reported by sentinels	Lower	The average provincial influenza-like-illness (ILI) consultation rate[4] in weeks 28 and 29 (17.15 per 1,000 patient visits) was lower than the average rate in weeks 26 and 27 (20.27 per 1,000 patient visits).
OVERALL ASSESSMENT	***Similar***	**In weeks 28 and 29, overall the indicators show that influenza activity was similar than in weeks 26 and 27.**

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.

Highlights of all other respiratory virus activity in Ontario

For weeks 28 and 28 compared to weeks 26 and 27

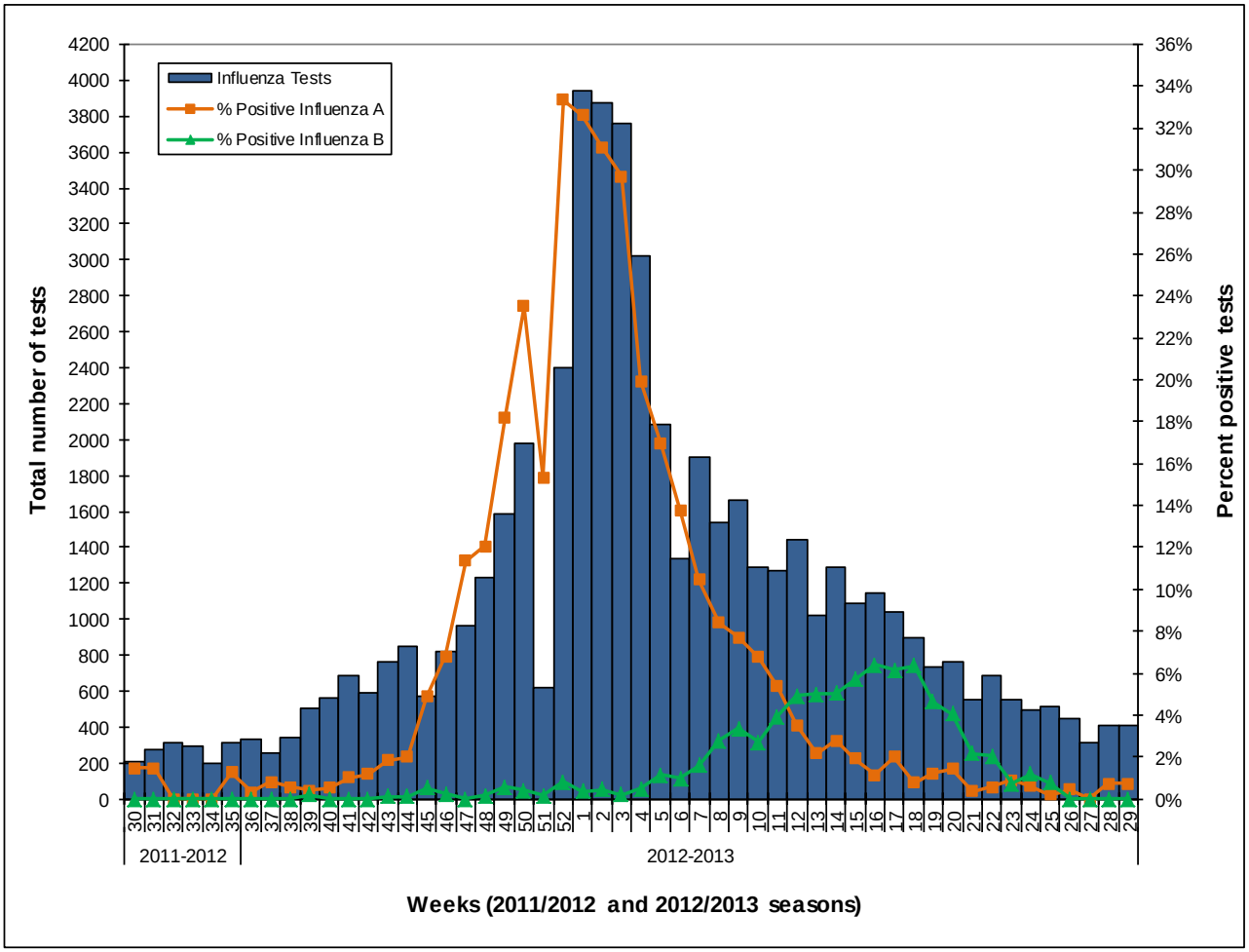
- Among all other circulating respiratory viruses, entero/rhinovirus had the highest percent positivity (19.7%) in weeks 28 and 29 combined, which was higher than weeks 26 and 27 combined (18.0%).[1]

- Parainfluenza virus had the second highest percent positivity (7.0%) in weeks 28 and 29 combined, which was similar to weeks 26 and 27 combined (7.7%).[1]

- In weeks 28 and 29, a total of 10 new institutional respiratory infection outbreaks were identified, including one outbreak of parainfluenza virus, six entero/rhinovirus outbreaks, and three outbreaks with no organism reported (Figure 2). For the 2012-2013 season to date, a total of 1,354 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).

Figure 1. Total number of influenza tests performed and percent of positive tests by report week: Ontario, July 22, 2012 to July 20, 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 9:30 a.m. on July 24, 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 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.

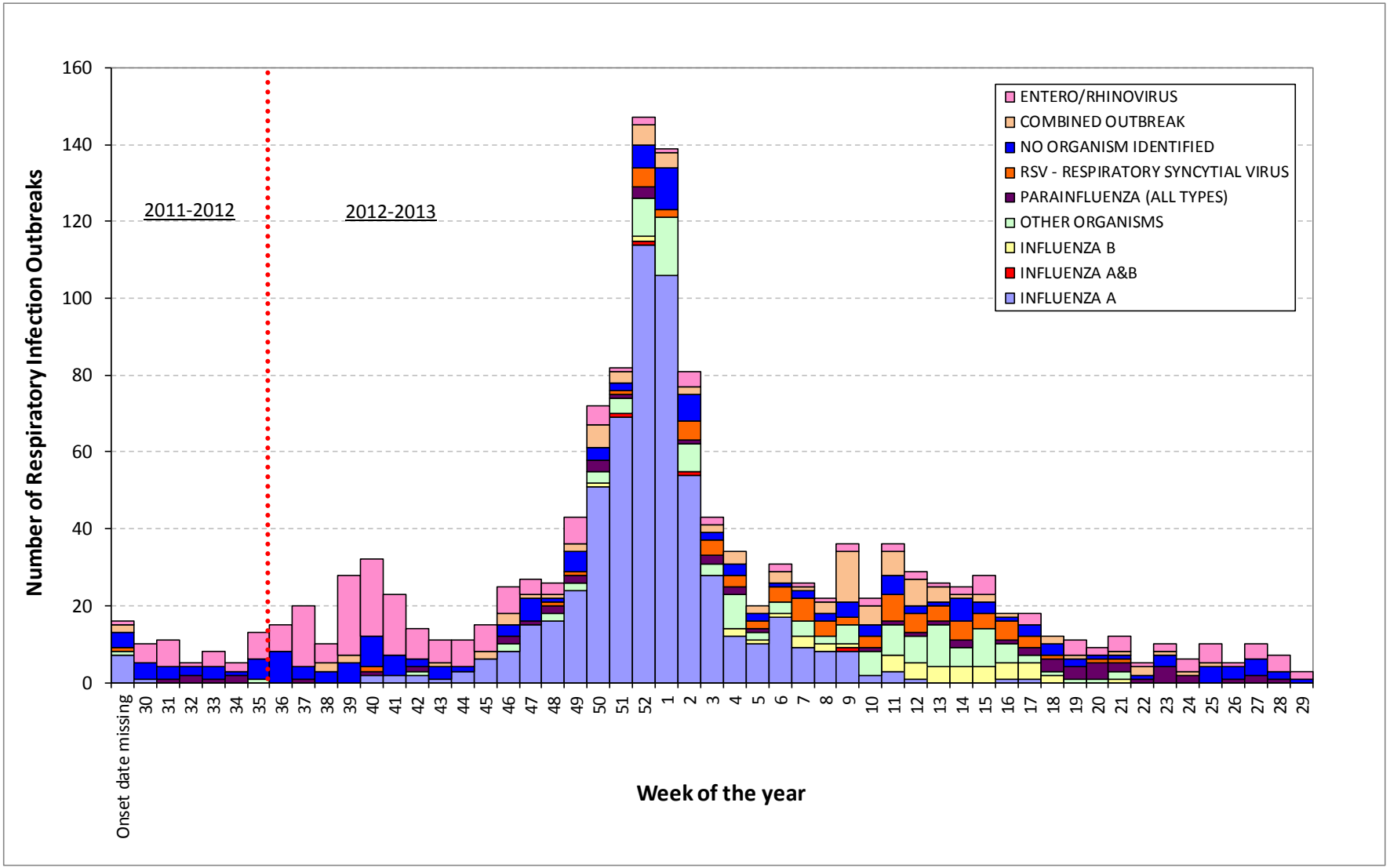
Table 1. Number and percent positivity (in brackets) of respiratory specimens tested by all methods for influenza and other respiratory viruses: Ontario, weeks 28 and 29 and cumulative for the 2012-2013 season

Detected viruses	Number and percent positive specimens			Total number of specimens tested		
	Week 28 n (%)	Week 29 n (%)	Cumulative n (%)	Week 28 n	Week 29 n	Cumulative n
Influenza (All)	3 (0.73)	3 (0.73)	9,244 (15.54)	412	413	59,457
Influenza A	3 (0.73)	3 (0.73)	8,291 (13.94)	412	413	59,457
Influenza B	0 (0)	0 (0)	953 (1.60)	412	413	59,457
Parainfluenza virus	29 (6.74)	26 (7.24)	1,581 (3.31)	430	359	47,731
Adenovirus	5 (1.16)	2 (0.56)	316 (0.66)	430	359	47,565
Respiratory syncytial virus	2 (0.47)	3 (0.73)	4,124 (7.78)	430	413	52,995
Entero/rhinovirus	40 (19.80)	32 (19.63)	1,656 (7.73)	202	163	21,429
Human metapneumovirus	5 (1.22)	3 (0.88)	1,150 (2.61)	411	340	44,018
Coronavirus	0 (0)	1 (0.71)	610 (3.68)	177	141	16,572

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 28 and 29, 2013. Please note that the last versions of data received from PHAC as of 9:30 a.m. on July 24, 2013 were used.

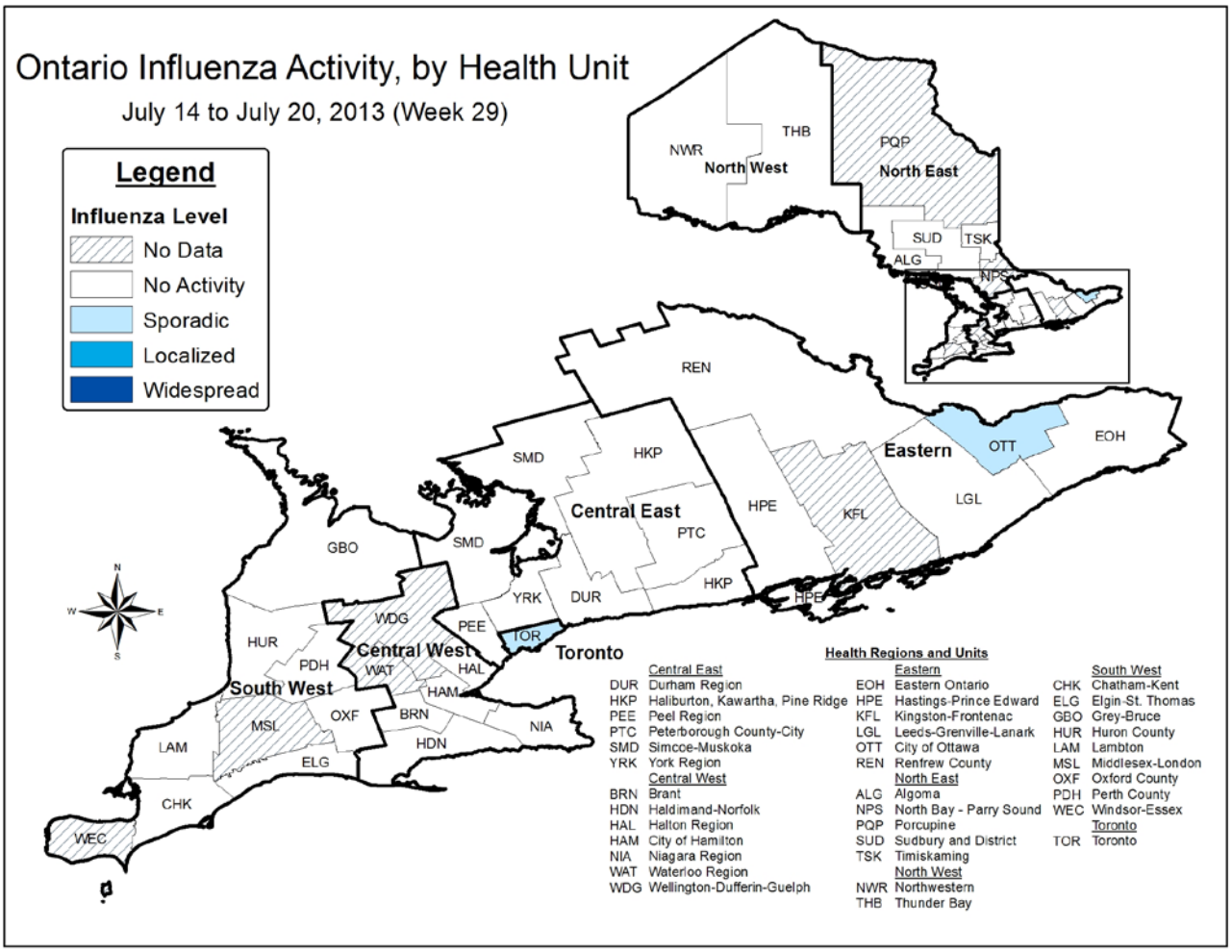
Notes:
The data in this table is based on when test results are reported. Total numbers reported include late reports from previous weeks; therefore, totals may not be equal to the sum of the weekly numbers.
Cumulative numbers include reports from week 35, as reporting by PHAC includes week 35 as part of the 2012-2013 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, July 22, 2012 to July 20, 2013



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2013/07/24].

Figure 3. Influenza activity levels by health unit: Ontario, week 29



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.