



Ontario Respiratory Virus Bulletin | 2012-2013

SURVEILLANCE WEEKS 22 and 23 (May 26, 2013 – June 8, 2013)

This issue of the Ontario Respiratory Virus Bulletin provides information on the surveillance period from May 26, 2013 to June 8, 2013 (weeks 22 and 23). Unless otherwise specified, **data presented are for weeks 22 and 23**; data extraction and analysis for this issue occurred on Wednesday, June 12, 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 on 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	Lower	There were 22 influenza cases (77% were influenza B) reported ¹ in weeks 22 and 23, compared to 63 cases reported in weeks 20 and 21. Percent positivity ² of laboratory tests for all influenza types in Ontario was 2.2% (0.7% influenza A; 1.5% influenza B) for weeks 22 and 23 combined, compared to 4.3% in weeks 20 and 21 combined.
Influenza outbreaks	Lower	No new influenza outbreaks were reported ³ in weeks 22 and 23. Two outbreaks for which no aetiological agent was identified were also reported (Figure 2).
Influenza activity levels reported by health units	Lower	Three health units reported 'sporadic' levels of influenza activity in week 23 (Figure 3), compared to one health unit reporting 'localized' activity in week 21.
ILI consultation rate reported by sentinels	Higher	The average provincial influenza-like-illness (ILI) consultation rate ⁴ in weeks 22 and 23 (28.01 per 1,000 patient visits) was higher than the average rate in weeks 20 and 21 (18.23 per 1,000 patient visits).
OVERALL ASSESSMENT	Lower	In weeks 22 and 23, overall the indicators show that influenza activity was lower than in weeks 20 and 21.
Measures of severity for influenza		
Hospitalizations among lab confirmed cases of influenza	Lower	There were 85 hospitalized cases reported ¹ in weeks 22 and 23, which was lower than the number (87) reported in weeks 20 and 21.
Deaths among lab confirmed cases of influenza	Lower	There were 6 deaths reported ¹ in weeks 22 and 23, which was lower than the number (7) reported in weeks 20 and 21.

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

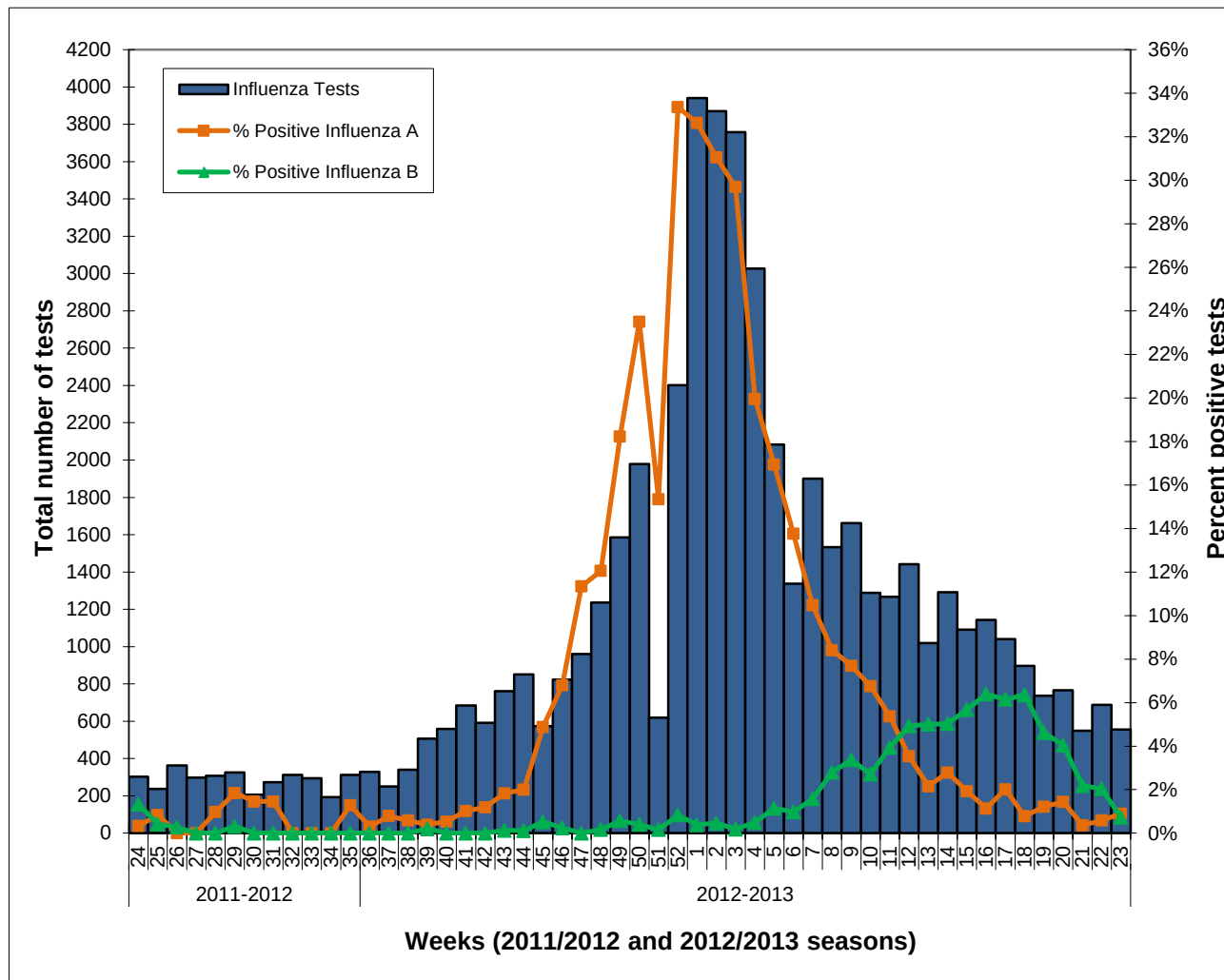
For weeks 22 and 23 compared to weeks 20 and 21

- Among all other circulating respiratory viruses, entero/rhinovirus had the highest percent positivity (11.2%) in weeks 22 and 23 combined, which was the same as weeks 20 and 21 combined (11.2%).¹
- Parainfluenza virus had the second highest percent positivity (9.1%) in weeks 22 and 23 combined, which was higher than weeks 20 and 21 combined (7.6%).¹
- In weeks 22 and 23, a total of five new institutional respiratory infection outbreaks were reported, including one outbreak of parainfluenza, two combined outbreaks,² and two outbreaks with no organisms reported (Figure 2). For the 2012-2013 season to date, a total of 1,296 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).

2. Other organisms include outbreaks involving pathogens such as human metapneumovirus, adenovirus, and coronavirus. Combined outbreaks include outbreaks where more than one non-influenza organism has been identified (e.g. respiratory syncytial virus and, parainfluenza virus).

Figure 1. Total number of influenza tests performed and percent of positive tests by report week: Ontario, June 10, 2012 to June 8, 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 version received from PHAC as of 10:00 a.m. on June 12, 2013 was 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.

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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 22 and 23 and cumulative for the 2012-2013 season

Detected viruses	Number and percent positive specimens			Total number of specimens tested		
	Week 22 n (%)	Week 23 n (%)	Cumulative n (%)	Week 22 n	Week 23 n	Cumulative n
Influenza (All)	18 (2.61)	9 (1.62)	9,221 (16.26)	688	555	56,710
Influenza A	4 (0.58)	5 (0.90)	8,279 (14.60)	688	555	56,710
Influenza B	14 (2.03)	4 (0.72)	942 (1.66)	688	555	56,710
Parainfluenza virus	63 (10.19)	37 (7.69)	1,422 (3.14)	618	481	45,349
Adenovirus	8 (1.29)	5 (1.04)	300 (0.66)	618	481	45,183
Respiratory syncytial virus	13 (1.85)	12 (2.20)	4,094 (8.15)	702	545	50,258
Enterovirus	22 (10.95)	22 (11.52)	1,492 (7.30)	201	191	20,427
Human metapneumovirus	12 (2.00)	8 (1.75)	1,126 (2.70)	600	457	41,768
Coronavirus	0 (0)	1 (0.65)	603 (3.83)	178	155	15,738

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 22 and 23, 2013. Please note that the last version received from PHAC as of 10:00 a.m. on June 12, 2013 was used.

Notes:

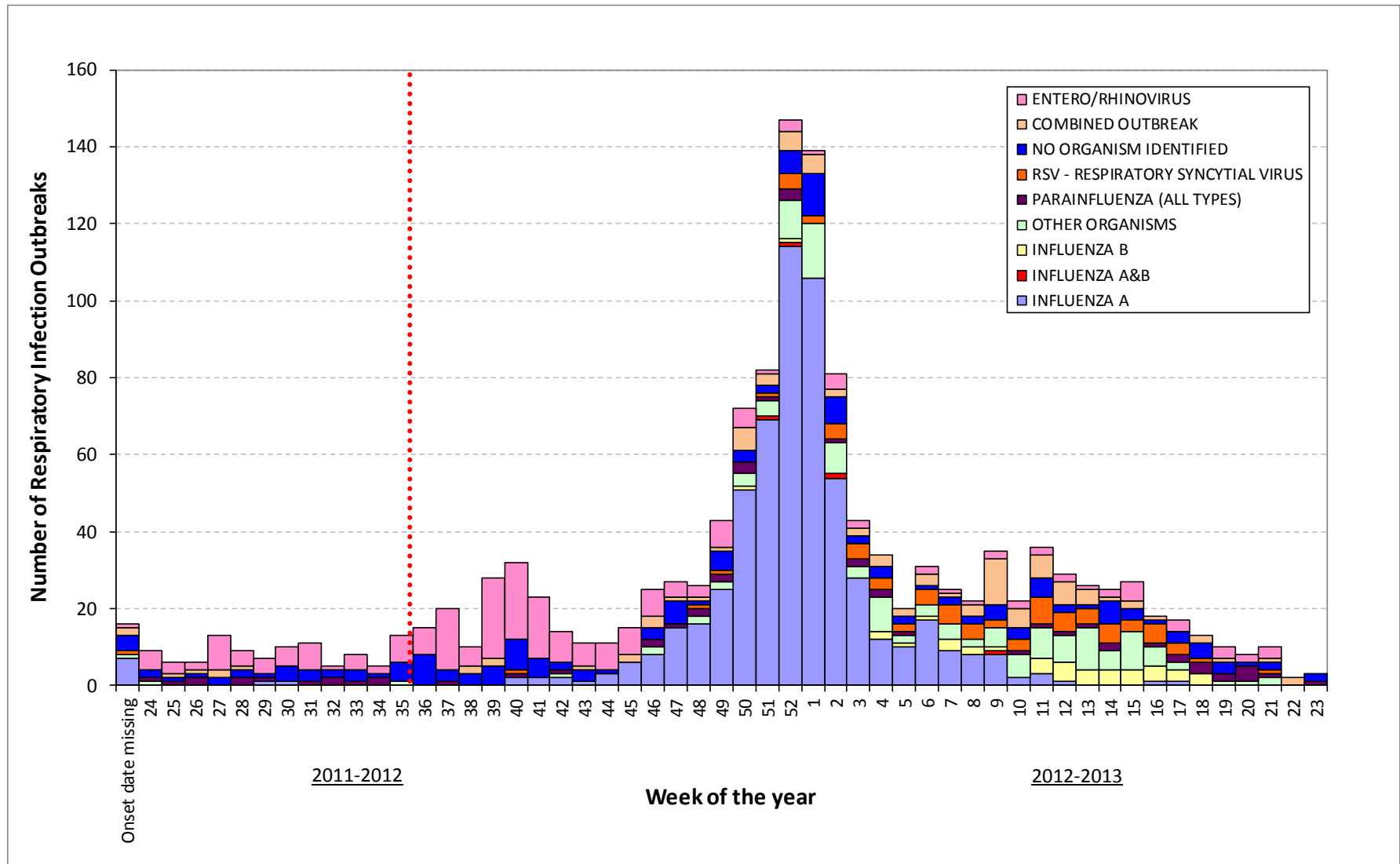
The data in this table is based on when test results are reported. Total numbers reported include late reports from previous weeks; therefore, totals may not be equal to the sum of the weekly numbers.

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.

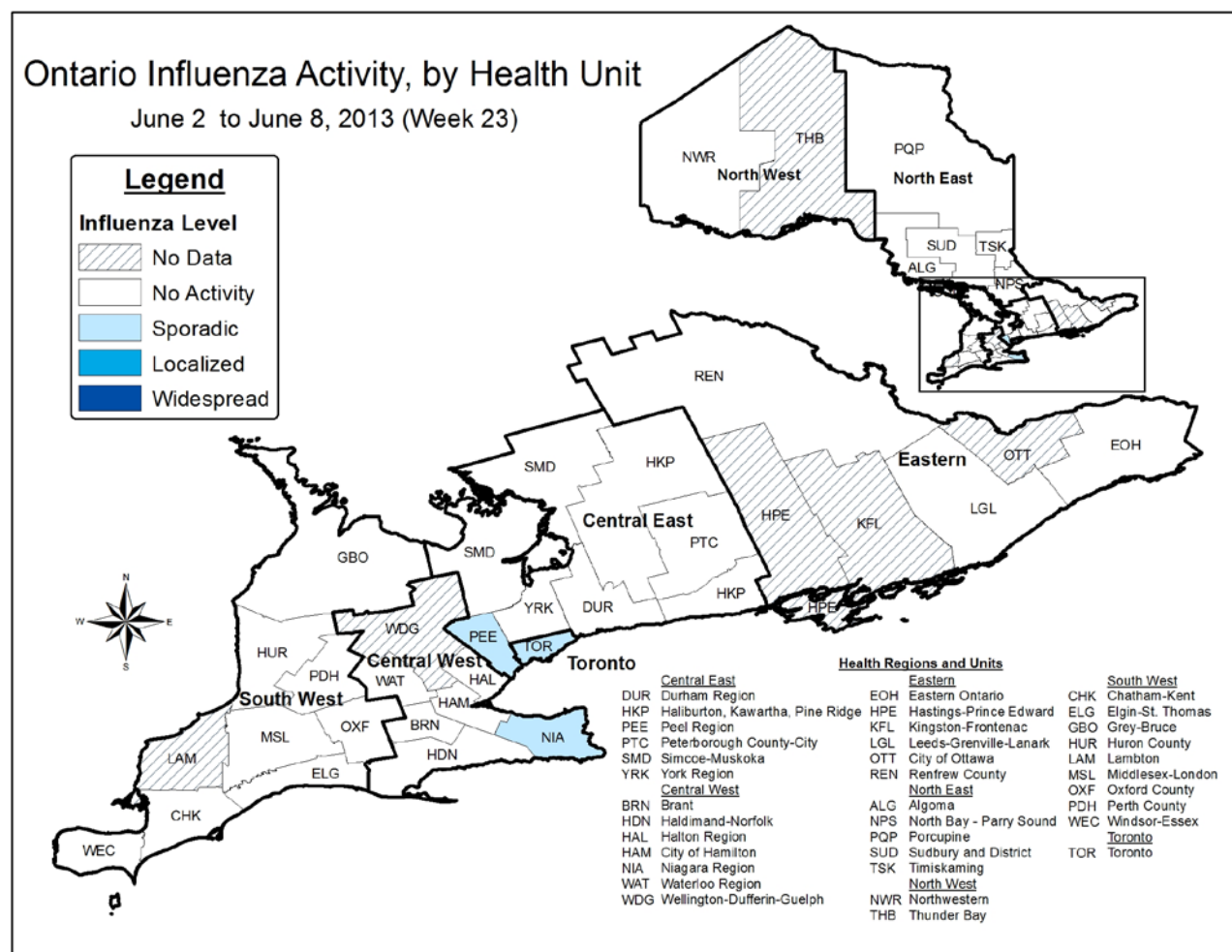
These data represent the number of specimens tested which may not necessarily correspond with the number of patients as more than one specimen may have been submitted per patient.

Figure 2. Institutional respiratory infection outbreaks by week of illness onset in the first case: Ontario, June 10, 2012 to June 8, 2013



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2013/06/12].

Figure 3. Influenza activity levels by health unit: Ontario, week 23



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. Please click here for [detailed definitions for the 2012-2013 season](#).