



Ontario Influenza Bulletin | 2012-2013

SURVEILLANCE WEEKS 40 and 41 (September 30, 2012 – October 13, 2012)

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from September 30, 2012 to October 13, 2012 (weeks 40 and 41). Unless otherwise specified, **the data presented are for weeks 40 and 41**; data extraction and analysis for this issue of the Bulletin occurred on Wednesday October 17, 2012. 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 this is the final issue of the Ontario Influenza Bulletin. An Influenza Activity Map will be issued next week. Starting on November 2, 2012, full weekly reports will re-commence, with the information contained in this report presented as part of the new [Ontario Respiratory Virus Bulletin](#).**

Assessment of Influenza and Other Respiratory Virus Activity in Ontario

Measure of Activity	Assessment of measure compared to previous assessment period (Lower, Similar, Higher)	Reasoning behind assessment
Laboratory Confirmed Influenza Cases*	Higher	Nine new influenza cases were reported by health units in weeks 40 and 41, which is higher than the number reported in weeks 38 and 39 (3). The percent positivity for influenza in Ontario was slightly higher in weeks 40 and 41 at 0.80% compared to 0.59% for weeks 38 and 39 (Table 1).**
Respiratory virus activity	Entero/rhinovirus activity is similar	Among all circulating respiratory viruses (Table 1), entero/rhinovirus had the highest percent positivity in weeks 40 and 41 at 18.47%, which is similar to weeks 38 and 39 at 18.39%.
Institutional Respiratory Infection Outbreaks	Higher	Thirty-two (32) new institutional respiratory infection outbreaks were reported in weeks 40 and 41. This is higher than the number of new institutional respiratory infection outbreaks reported in weeks 38 and 39 (22). Four institutional influenza outbreaks have been reported to date this season (Figure 1).
Influenza Activity Levels Reported by Health Units	Higher	For week 41, Algoma and Waterloo health units reported 'localized' levels of influenza activity. Lambton, Niagara, and Wellington-Dufferin-Guelph health units reported 'sporadic' levels of influenza activity (Figure 2).
Influenza-Like Illness (ILI) Consultation Rate reported by Sentinels	Higher	The provincial ILI consultation rate increased from 19.95/1,000 patient visits in week 39 to 35.25/1,000 patient visits in week 40, then declined to 9.27/1,000 patient visits in week 41. The rate for week 40 is higher than the average consultation rate for the week based on previous years (Figure 3).
OVERALL ASSESSMENT FOR VIRUS ACTIVITY	Influenza activity in Ontario was higher compared to the previous weeks.	Overall, the indicators show that influenza activity during weeks 40 and 41 was slightly higher compared to weeks 38 and 39.

*This is the number of cases by **reported** date from iPHIS and should be interpreted with caution as there is a lag between the onset of illness and reporting to public health.

**Positivity reflects positive specimens reported to Public Health Ontario by the Centre for Immunization and Respiratory Infectious Diseases (CIRID).

Highlights of current respiratory virus activity for weeks 40 and 41 compared to weeks 38 and 39

- Enterovirus/rhinovirus had the highest percent positivity for weeks 40 and 41 at 18.47% (Table 1). Parainfluenza virus had the second highest percent positivity among specimens submitted for testing in weeks 40 and 41. Percent positivity for parainfluenza virus increased from 2.30% for weeks 38 and 39 to 2.82% for weeks 40 and 41.
- In weeks 40 and 41, a total of 32 new institutional respiratory infection outbreaks were reported, including four outbreaks of influenza A, one outbreak of respiratory syncytial virus, nine outbreaks of enterovirus/rhinovirus and 18 outbreaks with no organism reported (Figure 1). For the 2012-2013 season to date, 105 institutional respiratory infection outbreaks have been reported.

Table 1. Number of respiratory specimens tested by all methods for influenza and other respiratory viruses and percent positivity, Ontario: Weeks 40 and 41

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 A (all)	3 (0.54)	7 (1.02)	21 (0.65)	559	684	3212
Influenza B	0 (0)	0 (0)	1 (0.03)	559	684	3212
Parainfluenza virus	15 (3.21)	16 (2.53)	82 (2.89)	467	632	2833
Adenovirus	1 (0.21)	2 (0.32)	10 (0.35)	467	632	2833
Respiratory syncytial virus	4 (0.84)	9 (1.42)	17 (0.59)	474	634	2878
Enterovirus/rhinovirus	128 (27.41)	60 (10.89)	404 (17.14)	467	551	2357
Human metapneumovirus	1 (0.41)	1 (0.29)	3 (0.18)	242	347	1688
Coronavirus	1 (0.41)	1 (0.38)	11 (0.91)	242	266	1212

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 & 41, 2012. Please note that the last version received from PHAC as of 12:00 PM on October 17, 2012 was used.

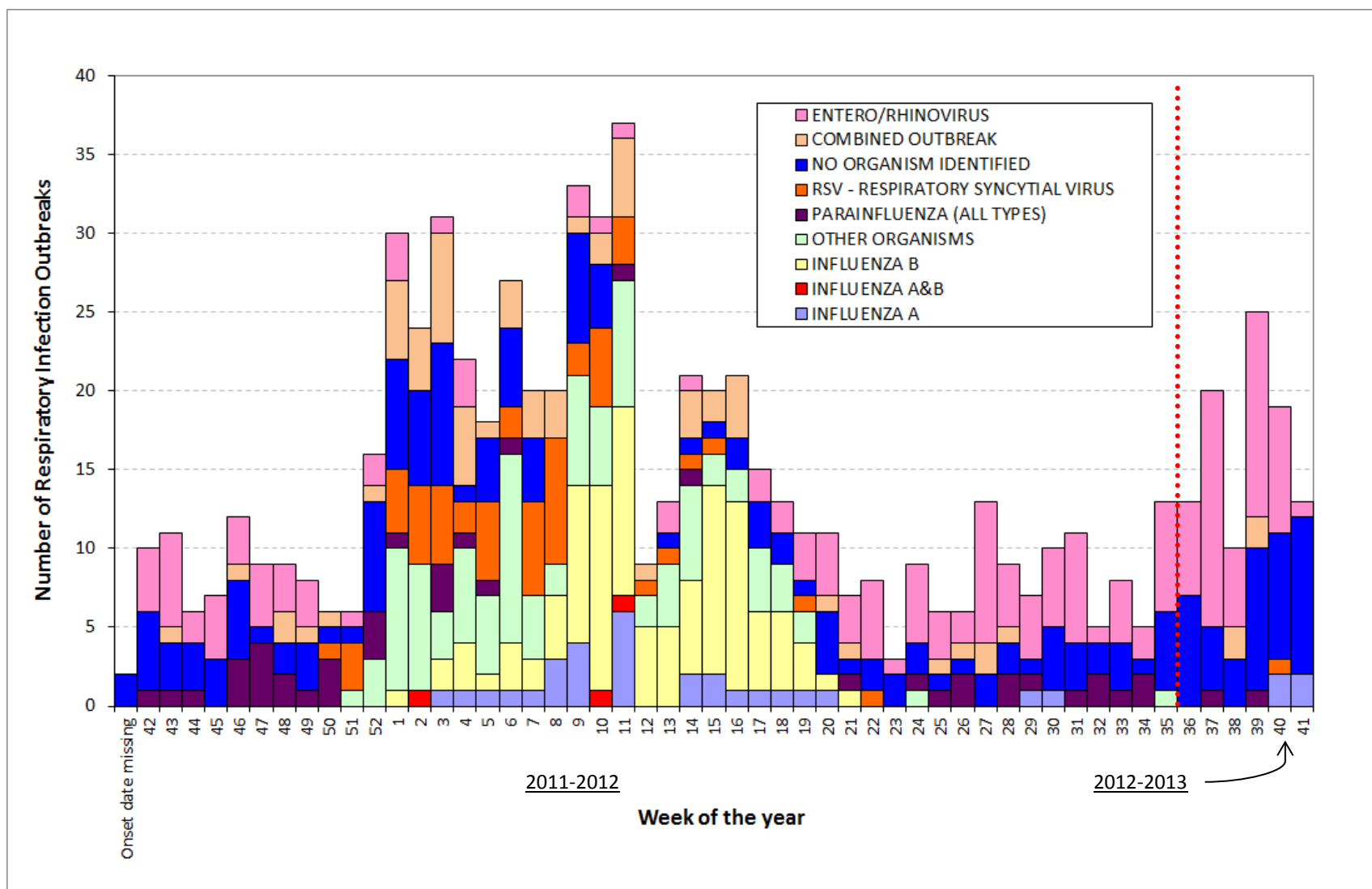
Note: Cumulative numbers include reports from week 35, as reporting by PHAC includes week 35 as part of the 2012-2013 season.

Note: Total numbers reported include late reports from previous weeks; therefore totals may not be equal to the sum of the weekly numbers.

Note: Cumulative numbers for the season to date are available through FluWatch: <http://www.phac-aspc.gc.ca/fluwatch/>

Ontario Influenza Bulletin, 2012-2013 (September 30, 2012 – October 13, 2012)

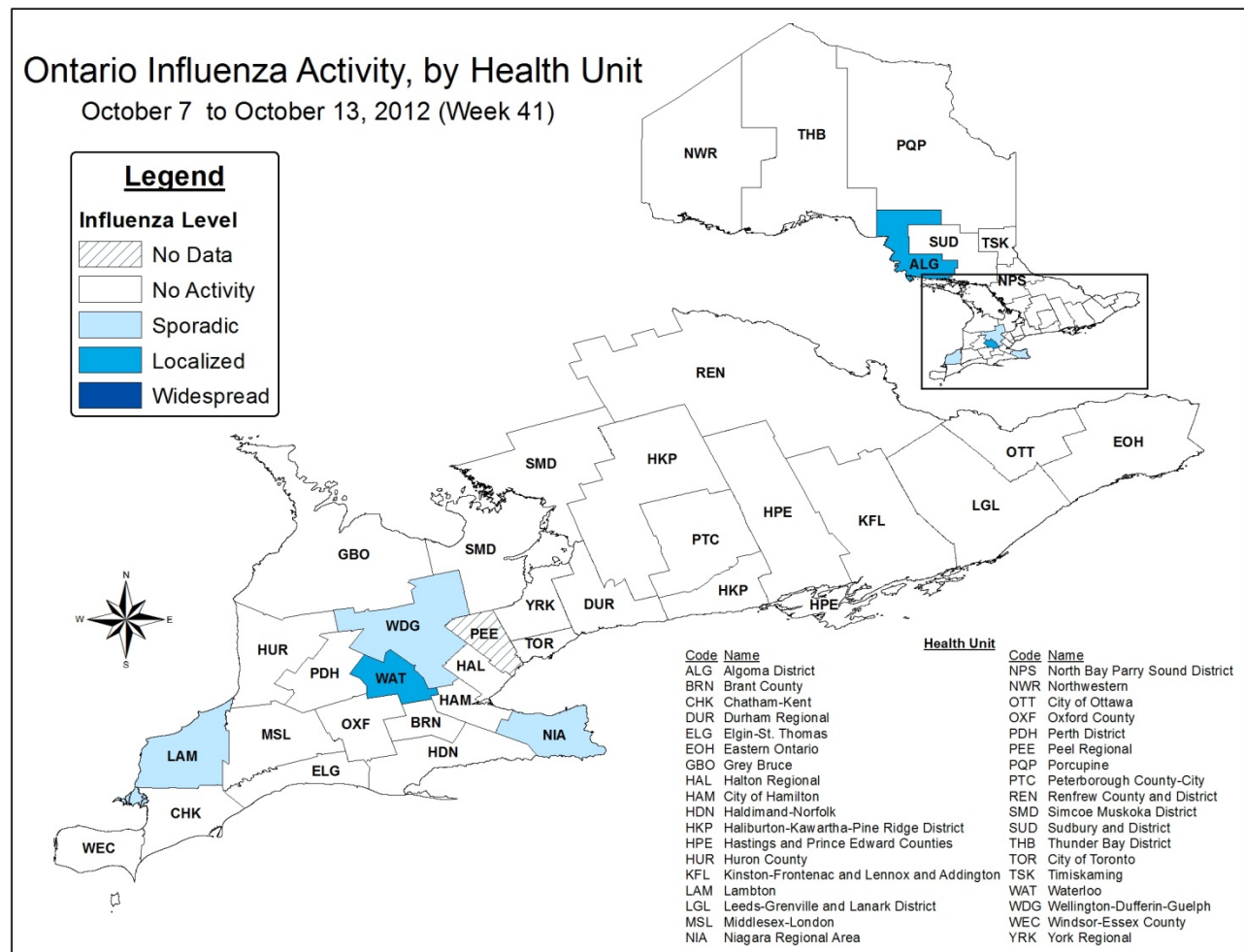
Figure 1: Institutional respiratory infection outbreaks in Ontario by onset of illness in the first case: Total outbreaks up to and including week 41 of the 2012-2013 season by causative organism



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2012/10/17].

Ontario Influenza Bulletin, 2012-2013 (September 30, 2012 – October 13, 2012)

Figure 2: Influenza activity* levels in Ontario by health unit for week 41, 2012

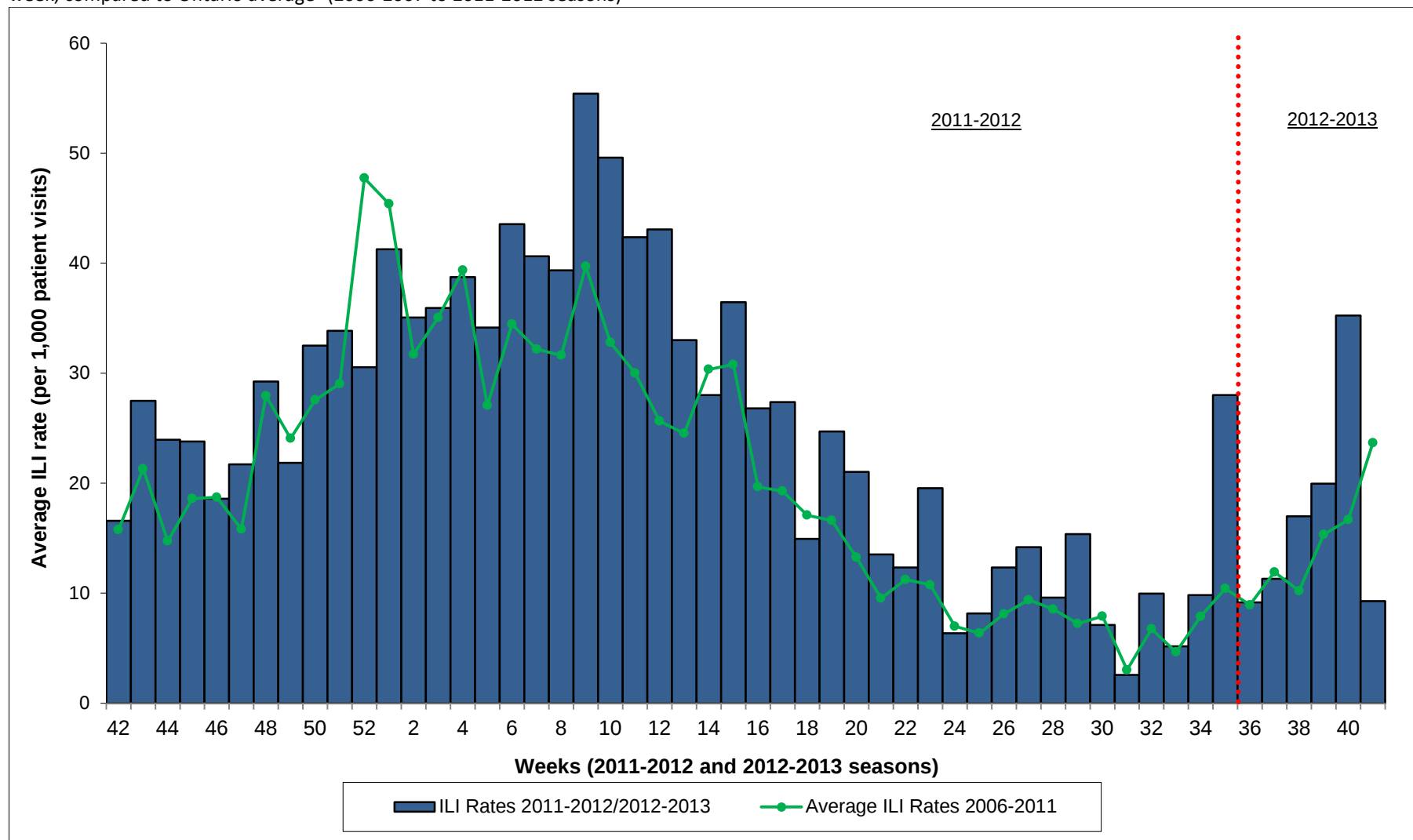


Source: Public Health Ontario [Provincial Influenza Activity Report (Appendix C) Database]

* 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 pm. 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](#).

Ontario Influenza Bulletin, 2012-2013 (September 30, 2012 – October 13, 2012)

Figure 3: Average ILI consultation rate (per 1,000 patient visits) reported by sentinels* in Ontario up to week 41 of the 2012-2013 surveillance season, by report week, compared to Ontario average[†] (2006-2007 to 2011-2012 seasons)



Source: Public Health Agency of Canada

* Sentinel information is reported to Public Health Agency of Canada; 46 sentinels reported in week 41.

[†] Ontario average ILI rates include data from the 2006-2007 to the 2011-2012 seasons, excluding ILI rates during the time period of the influenza A(H1N1)pdm09 pandemic in Ontario (April 2009 to January 2010) due to the incomparability of those rates to a regular influenza season.