



Ontario Influenza Bulletin | 2011-2012

SURVEILLANCE WEEKS 22 and 23 (May 27, 2012 – June 9, 2012)

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from May 27, 2012 to June 9, 2012 (weeks 22 and 23). Unless otherwise specified, **the data presented are for weeks 22 and 23** and data extraction and analysis for this issue of the Bulletin occurred on June 13, 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 Public Health Ontario is now publishing abbreviated versions of the Ontario Influenza Bulletin on alternating weeks until November 2012. [Influenza Activity Maps](#) will be available on the weeks that the Bulletin is not published**

Assessment of Influenza and Other Respiratory Virus Activity in Ontario

Measure of Activity	Assessment of measure compared to previous two-week period (Lower, Similar, Higher)	Reasoning behind assessment
Laboratory Confirmed Influenza Cases*	Lower	Twenty-six (26) new influenza cases were reported in weeks 22 and 23, which is lower than the number reported in weeks 20 and 21 (90). The percent positivity for influenza A in Ontario was lower in weeks 22 and 23 at 0.56% compared to 0.58% for weeks 20 and 21. For influenza B, the percent positivity was 1.89% for weeks 22 and 23 compared to 2.70% for weeks 20 and 21 (Tables 1 and 2).
Respiratory virus activity	Entero/rhinovirus activity is lower	Among all circulating respiratory viruses (Tables 1 and 2), entero/rhinovirus had the highest percent positivity in weeks 22 and 23 at 9.68%, which is lower than weeks 20 and 21 at 10.57%.
Institutional Respiratory Infection Outbreaks	Similar	Nine (9) new institutional respiratory outbreaks were reported for weeks 22 and 23. This is similar to the number of new institutional respiratory outbreaks reported in weeks 20 and 21 (8). One hundred and thirty-seven (137) institutional influenza outbreaks have been reported to date this season (Figure 1).
Influenza Activity Levels Reported by Health Units	Lower	For week 23, Central West and Toronto regions reported 'localized' level influenza activity, while North West region reported 'sporadic' level activity. North East, Eastern, Central East, and South West regions reported no activity (Figure 2).
Influenza-Like Illness (ILI) Consultation Rate reported by Sentinels	Higher	The provincial ILI consultation rate increased from 12.33/1,000 patient visits in week 22 to 19.55/1,000 patient visits in week 23. This rate is higher than the average rate for week 23 from previous years (Figure 3).
OVERALL ASSESSMENT FOR VIRUS ACTIVITY	Influenza activity in Ontario was lower compared to the previous week.	Overall, the indicators show that influenza activity was lower during weeks 22 and 23 compared to weeks 20 and 21.

*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.

Highlights of current respiratory virus activity for weeks 22 and 23

- Enterovirus/rhinovirus had the highest percent positivity for weeks 22 and 23 at 9.68%. Parainfluenza virus had the second highest percent positivity among specimens submitted for testing in weeks 22 and 23. Percent positivity for parainfluenza virus increased from 3.26% in weeks 20 and 21 to 5.08% in weeks 22 and 23.
- In weeks 22 and 23, a total of 9 new institutional respiratory infection outbreaks were reported, including two outbreaks of enterovirus/rhinovirus and one outbreak of respiratory syncytial virus (RSV), with no new institutional outbreaks of influenza. For the 2011-2012 season to date, 634 institutional respiratory outbreaks have been reported, including 137 outbreaks of influenza A and B.

Table 1. Number of respiratory specimens tested by all methods for influenza and other respiratory viruses and percent positivity, week 22

Detected viruses	Number and percent positive specimens		Total number of specimens tested	
	Current n (%)	Cumulative n (%)	Current n	Cumulative n
Influenza A (all)	3 (0.6)	948 (2.48)	503	38207
Influenza B	13 (2.58)	2749 (7.2)	503	38207
Parainfluenza virus	24 (4.89)	748 (2.34)	491	32008
Adenovirus	1 (0.2)	476 (1.49)	491	31983
Respiratory syncytial virus	8 (1.61)	3471 (10.7)	498	32453
Enterovirus/rhinovirus	41 (9.45)	1247 (4.45)	434	28027
Human metapneumovirus	2 (1)	476 (3.34)	201	14251
Coronavirus	3 (3.03)	474 (4.6)	99	10303

Source: CIRID, Public Health Agency of Canada. 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: week 22, 2012. Please note that the last version received from PHAC as of 12:00 PM on June 6, 2012 was used.

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

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

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Table 2. Number of respiratory specimens tested by all methods for influenza and other respiratory viruses and percent positivity, week 23

Detected viruses	Number and percent positive specimens		Total number of specimens tested	
	Current n (%)	Cumulative n (%)	Current n	Cumulative n
Influenza A (all)	2 (0.51)	950 (2.46)	395	38644
Influenza B	4 (1.01)	2753 (7.12)	395	38644
Parainfluenza virus	23 (5.3)	772 (2.38)	434	32484
Adenovirus	5 (1.15)	482 (1.48)	434	32459
Respiratory syncytial virus	2 (0.45)	3473 (10.54)	442	32937
Enterovirus	43 (9.91)	1298 (4.55)	434	28503
Human metapneumovirus	4 (2.04)	481 (3.32)	196	14490
Coronavirus	0 (0)	474 (4.52)	137	10483

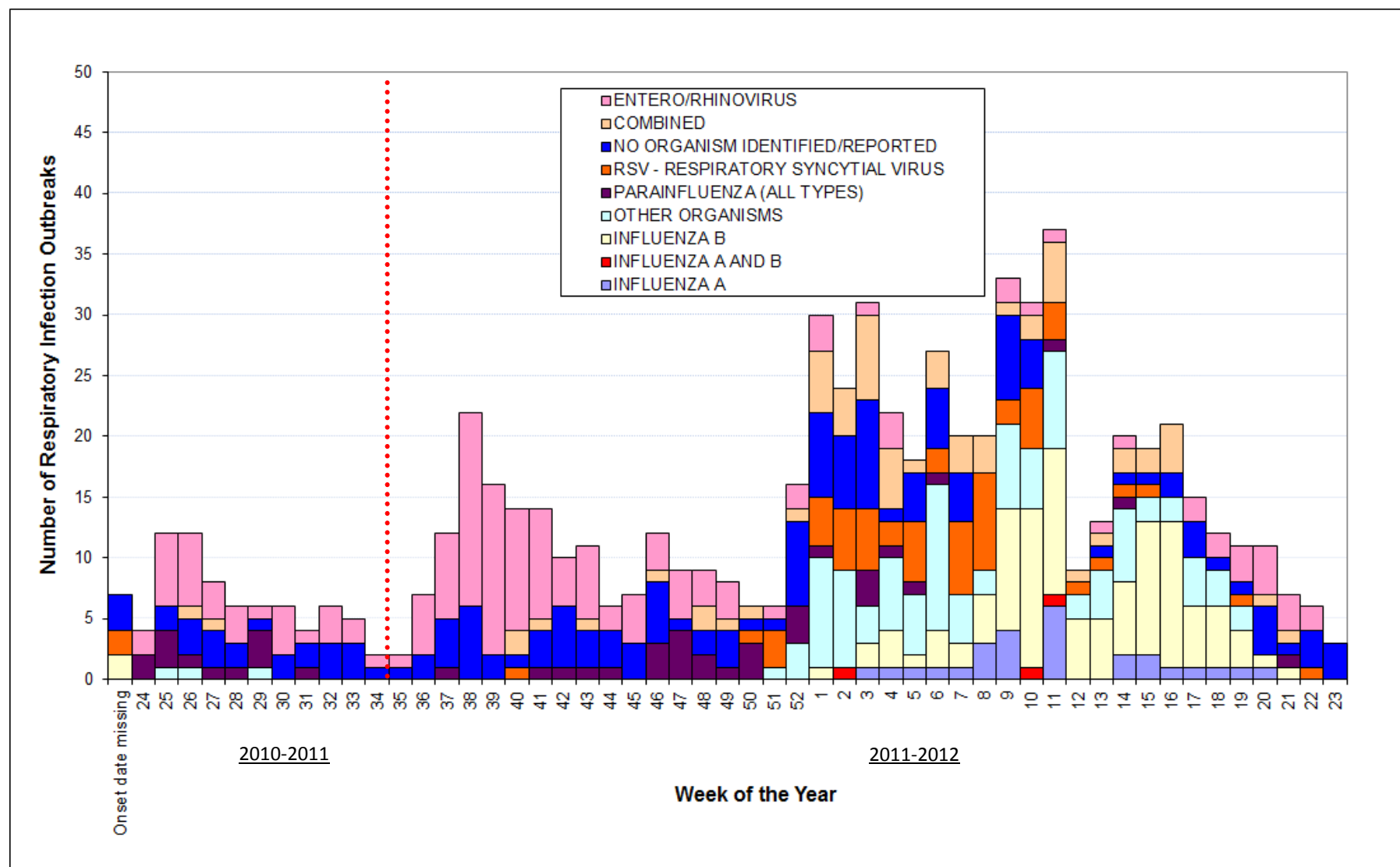
Source: CIRID, Public Health Agency of Canada. These data have been obtained from the Respiratory Virus Detection tables of Public Health Agency of Canada from 16 labs in Ontario and do not include data from late reports to PHAC for the current season: week 23, 2012. Please note that the last version received from PHAC as of 12:00 PM on June 13, 2012 was used.

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

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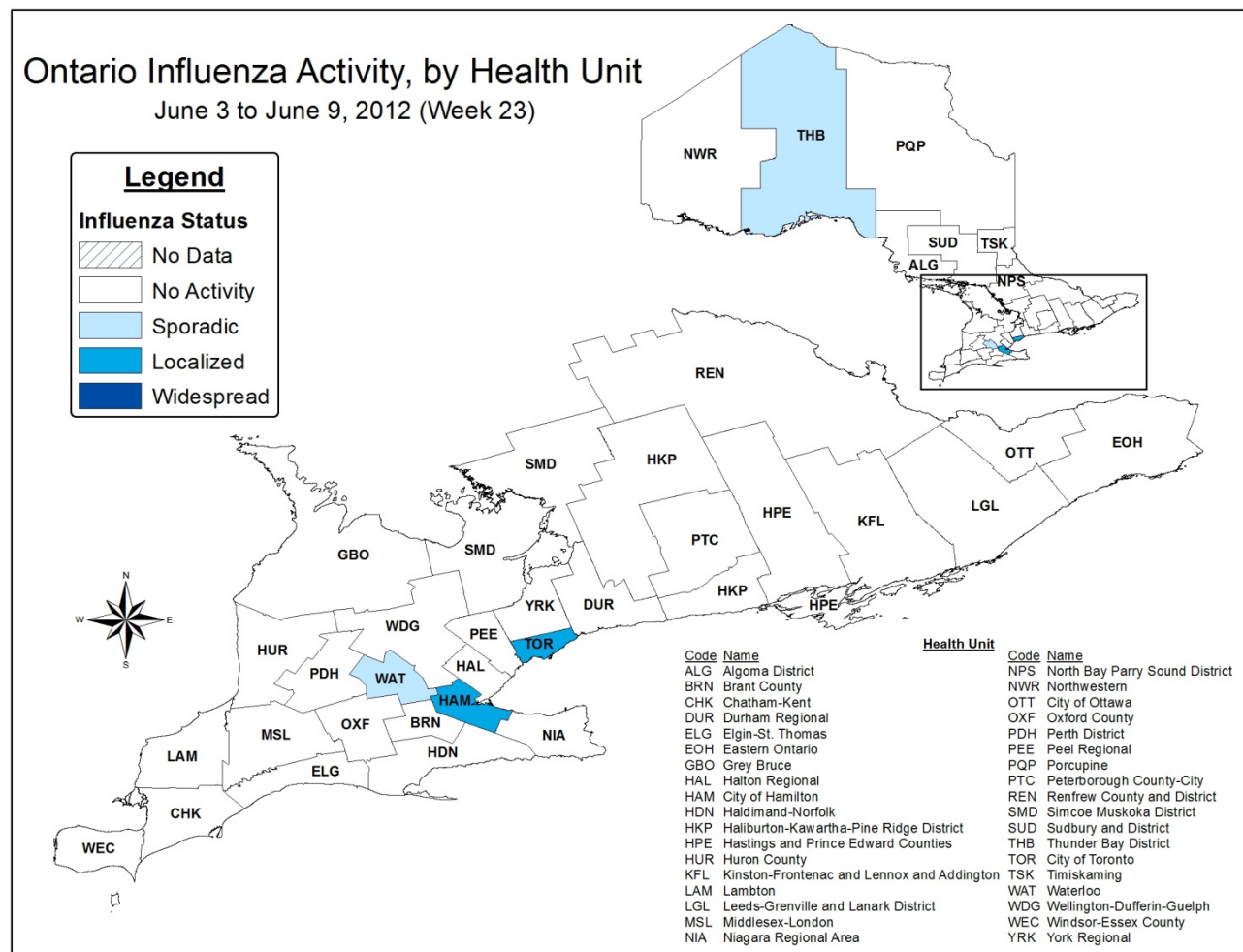
Figure 1: Institutional respiratory infection outbreaks in Ontario by onset of illness in the first case: Total outbreaks up to and including week 23 of the 2011-2012 season by causative organism



Source: Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted by Public Health Ontario [2012/06/13]

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Figure 2: Influenza activity* levels in Ontario by health unit for week 23, 2012

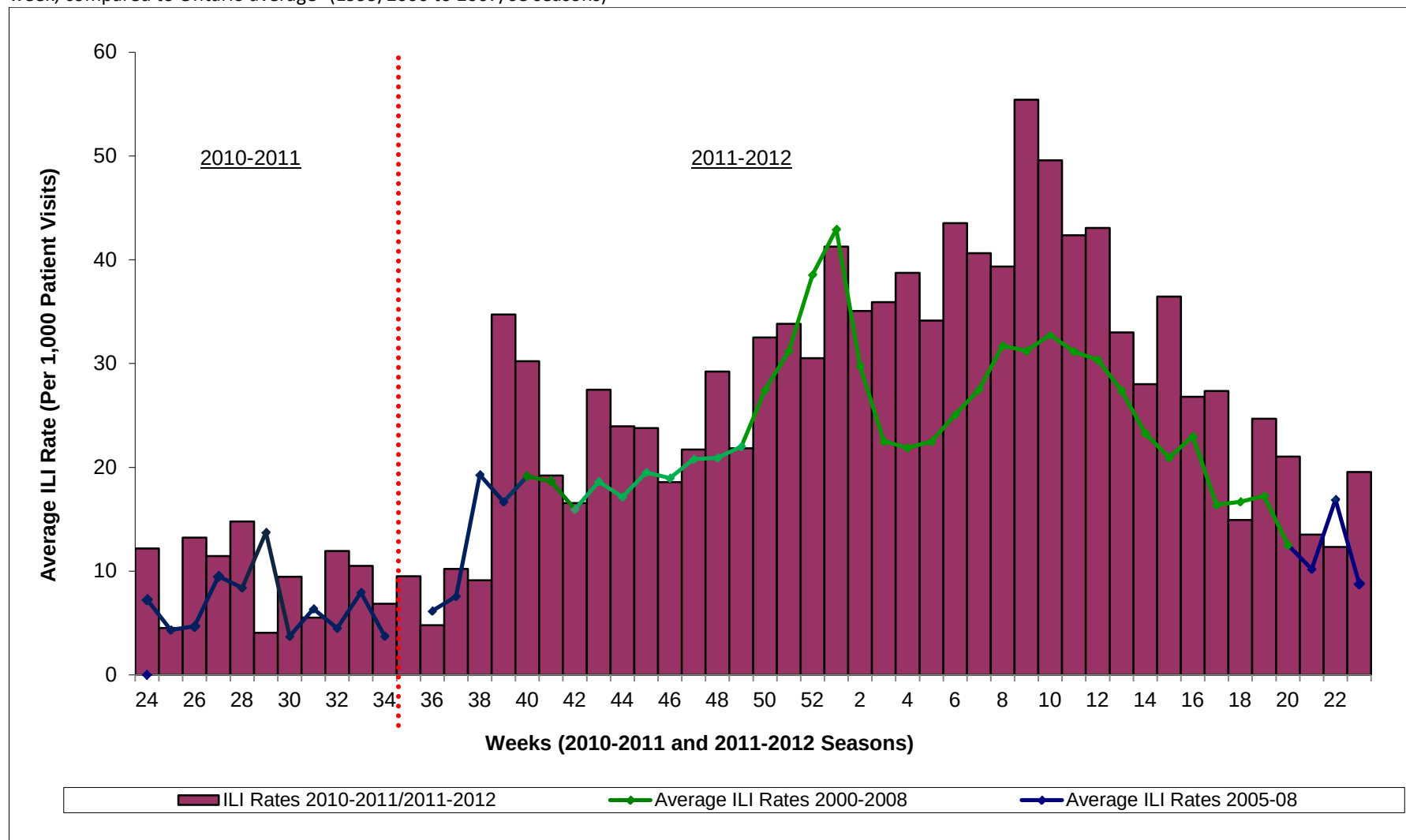


Source: PHO [Provincial Influenza Activity Report (Appendix C) Database]

* Influenza activity levels are assigned by local public health units and reported to PHO 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 2011-2012 season](#).

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Figure 3: Average ILI consultation rate (per 1,000 patient visits) reported by sentinels* in Ontario up to week 23 of the 2011-2012 surveillance season, by report week, compared to Ontario average[†] (1999/2000 to 2007/08 seasons)



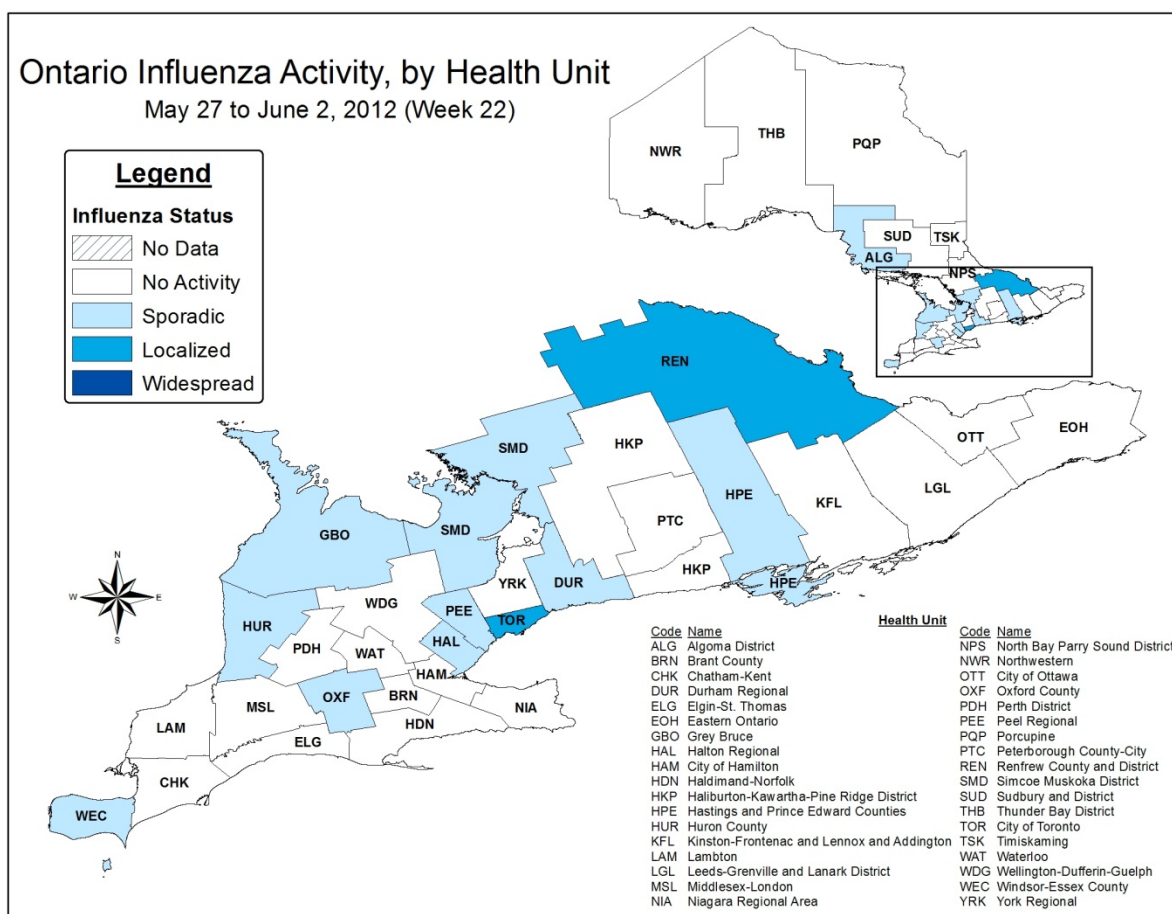
Source: Public Health Agency of Canada

* Sentinel information is reported to Public Health Agency of Canada, 54 sentinels reported in week 23.

[†] No data were available for mean rate calculations for previous years for weeks 21 to 39 (1999-2000 through 2004-2005 seasons). During weeks 20-39, 2002-2003/2004-2005 seasons, ILI was reported once every two weeks, on even weeks only



Weekly Ontario Influenza Activity Map | 2011-12



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 every week. Activity levels are assigned based on laboratory confirmation of influenza, influenza like illness (ILI) reports from various sources including hospitals, institutions experiencing respiratory infection outbreaks, physicians' offices, etc.

ACTIVITY LEVEL DEFINITIONS FOR THE 2011-12 INFLUENZA SEASON ARE AS FOLLOWS:

- **No Data:** No activity report corresponding to the surveillance week was received at Public Health Ontario by the Tuesday (at 4 p.m.) following the end of the surveillance period.
- **No Activity:** No laboratory-confirmed* influenza and NO outbreaks detected within the health unit/ influenza surveillance area, within the prior week, although sporadically occurring ILI may or may not be present.†
- **Sporadic:** Sporadically (infrequently) occurring ILI and at least one lab-confirmed influenza* case with NO outbreaks detected within the health unit area.†
- **Localized:** Sporadically occurring ILI and lab-confirmed influenza* together with outbreaks of ILI in schools and work sites, or laboratory-confirmed influenza in residential institutions occurring in < 50% of the health unit. Outbreaks affect a single and/or adjacent geographic area within the health unit jurisdiction, e.g. outbreaks in a nursing home and a school in close proximity to each other.†
- **Widespread:** Sporadically occurring ILI and lab-confirmed influenza* together with outbreaks of ILI in schools and work sites, or laboratory-confirmed influenza in residential institutions occurring in > 50% of the health unit. Outbreaks affect multiple and non-adjacent geographic areas within the health unit jurisdiction, such as two or more regions of the health unit, two or more municipalities, two or more electoral wards, etc.†

* Confirmation of influenza within the surveillance region at any time within the prior week

† Sub-regions within the province or territory as defined by the provincial/territorial epidemiologist

Note:

The Weekly Ontario Influenza Activity Map will be posted on this site bi-weekly, alternating with the abbreviated Ontario Influenza Bulletin (which contains the Influenza Activity map), until the end of October, 2012. As of November 2012, the full Ontario Influenza Bulletin will be published weekly.

For further information:

Ontario Influenza Bulletins published since September 1, 2011 are posted at <http://www.oahpp.ca/resources/flubulletin.html>.

Bulletins and archives from previous seasons will continue to be available at <http://www.health.gov.on.ca/en/pro/programs/publichealth/flu/bulletins/2010/default.aspx>.