

Toronto Weekly Influenza News Technical Notes

Purpose of Report

The intent of this report is to share the most recent weekly data for influenza activity in Toronto with the larger healthcare community. The data are presented as case counts and rates, to give an overall picture of the disease activity. Additionally, a more in-depth understanding of disease risk using descriptive epidemiologic factors are presented when available, including: age, gender, hospitalization, and mortality data.

Frequency and Timing of Report

Data are summarized weekly during the influenza season (generally October through April) and cover a Sunday to Saturday period, as per the influenza week schedule used globally. The reports are shared by Friday afternoon of a given week.

Disease Report Sources

- Data are reported to the Medical Officer of Health at Toronto Public Health (TPH) under the auspices of the Health Protection and Promotion Act (HPPA) and associated regulations for Reportable Diseases.
- Reports are primarily submitted by physicians, laboratories, infection control practitioners, and administrators of long-term care facilities and hospitals.

Case Definitions

 All influenza cases included in this report meet the case definition provided by the Ministry of Health and Long Term Care (MOHLTC), and are based on laboratory test results. Additional case counts within institutions are included based on clinical diagnosis and confirmation of an institutional outbreak.

Database

• Data are entered into and retrieved from the provincially mandated *integrated Public Health Information System* (iPHIS), in which all case management and surveillance information is stored.

Format

- Cases are listed by either when they were reported to TPH (e.g. Table 1 lists all newly reported cases, some of which may have been acquired in earlier weeks) or according to the 'episode date' recorded in iPHIS. The episode date is the date closest to the time when symptoms first appear. This date can range from the first appearance of symptoms to the date the report was made to TPH. Each table and/or graph specified which date is used.
- Previous 5-season means are calculated based on the most updated data for the season. These are intended as a point of comparison, and are not

adjusted for outbreaks or other anomalous events that could skew or inflate them.

Limitations

- Although outbreaks are reported immediately to public health, a lag in reporting of complete epidemiologic details exists, and can range anywhere from weeks to several months.
- Data for outbreaks that are still active may not be complete given that reporting and total counts of ill and susceptible individuals are often difficult to validate while the investigation is ongoing.
- Sporadic case counts in this report tend to disproportionately represent those who are more likely to be tested (e.g. young children, immunocompromised persons).
- Outbreak-associated cases which are lab-confirmed do not reflect the extent of an outbreak, as only three to six nasopharyngeal swabs (NP) are tested per institution/setting when an outbreak is suspected to confirm the presence of an agent. The combined counts of laboratory confirmed and influenza-like illness (ILI) are more indicative of the true breadth of cases in outbreak facilities.
- The results of continuing investigations of some influenza outbreaks may lead to changes in the number of cases listed for a given week.
- Starting in the 2017/18 season, Public Health Ontario (PHO) has changed the requirements for case follow-up and data entry of laboratory-confirmed cases into iPHIS, as outlined in the Influenza and Respiratory Infection Surveillance Package 2018–19. In summary, health units are no longer required to investigate any laboratory-confirmed cases, and only information from the initial laboratory report to Public Health is entered into iPHIS. As a result, subtype information will be reported for a smaller proportion of influenza A cases and hospitalization and death information will be underestimated. The aforementioned changes do not apply to influenza outbreaks investigations, and counts of outbreak-related outcomes (e.g. hospitalization, deaths, etc.) will not be impacted.