

## INFLUENZA SURVEILLANCE UPDATE

# ILLINOIS DEPARTMENT OF PUBLIC HEALTH Division of Infectious Disease Week 4: Week Ending Saturday, January 27, 2018

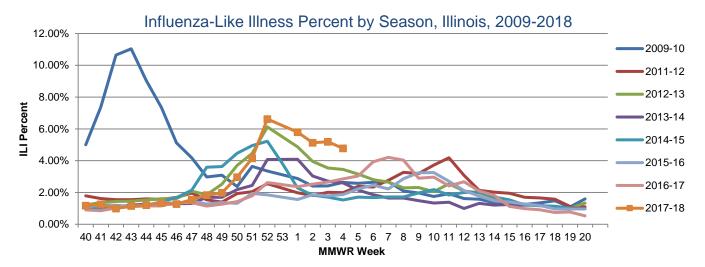
All data in this report are provisional and may change as additional reports are received. Data are obtained from providers and health care facilities who voluntarily report influenza-like illness visit data from their facilities and submit clinical specimens for testing at IDPH laboratories. This is a sample which provides a picture of influenza activity in Illinois and not inclusive of every case of influenza in Illinois.

For questions, please contact the IDPH CD Section at 217-782-2016 or <a href="mailto:dph.influenza@illinois.gov">dph.influenza@illinois.gov</a>. Additional reports on influenza in Chicago can be found on the City of Chicago Influenza Website

### **Current Week Quick Stats**

| Illinois Influenza Geographic Spread                    | Widespread   |
|---|--|
| Percent of Outpatient Visits for ILI <sup>1, 4</sup>    | 4.78 % (baseline 1.8%)                                       |
| Percent/Number of Influenza Positive Tests <sup>2</sup> | Current Week: 26.2% (258/986);<br>Season: 19.3% (3070/15872) |
| Influenza-Associated ICU Admissions <sup>3</sup>        | Current Week: 132; Season: 1229                              |
| Influenza Outbreaks                                     | Current Week: 12; Season: 319                                |
| Influenza-Associated Pediatric Deaths (Season Total)    | 2  |

### Illinois Sentinel Influenza-Like Illness (ILI) Surveillance



<sup>&</sup>lt;sup>1</sup> ILI "Influenza like Illness" is defined as fever ≥ 100°F with a cough and/or sore throat.

<sup>&</sup>lt;sup>2</sup> Specimens tested by WHO/NREVSS collaborating laboratories and IDPH laboratories.

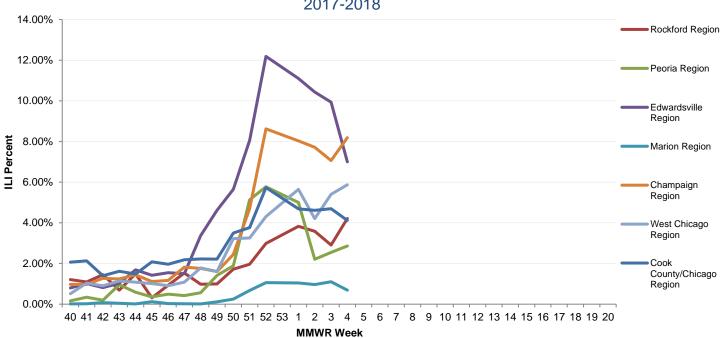
<sup>&</sup>lt;sup>3</sup> For the purpose of diagnosis, influenza can be diagnosed by using the following test: reverse transcription polymerase chain reaction RT-PCR], viral culture, Immunofluorescence [Direct Fluorescent Antibody (DFA) or Indirect Fluorescent Antibody (IFA) Staining], Enzyme Immuno Assay (EIA) or any rapid diagnostic test. Sensitivities of rapid diagnostic tests are approximately 50-70% when compared with viral culture or reverse transcription polymerase chain reaction (RT-PCR), and specificities of rapid diagnostic tests for influenza are approximately 90-95%. False-positive (and true-negative) results are more likely to occur when disease prevalence in the community is low, which is generally at the beginning and end of the influenza seasons. False-negative (and true-positive) results are more likely to occur when disease prevalence is high in the community, which is typically at the height of the influenza season.

<sup>4</sup> Beginning with week 44 (October 29, 2017), 2017-2018 influenza-like illness data from Chicago sentinel providers are included; previous seasonal ILI

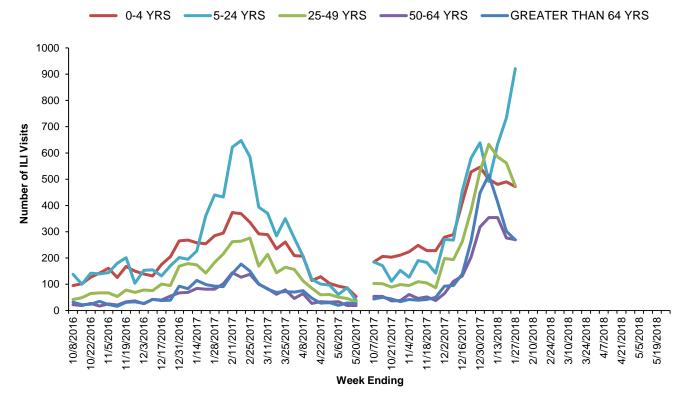
<sup>&</sup>lt;sup>4</sup> Beginning with week 44 (October 29, 2017), 2017-2018 influenza-like illness data from Chicago sentinel providers are included; previous seasonal IL data excluded Chicago participants.

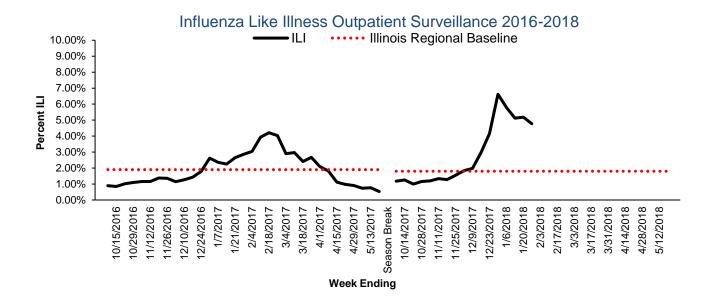
### **Sentinel Provider Reports**





### Proportion Of ILI Office Visits by Age Group, Illinois, Influenza Season 2016-2018

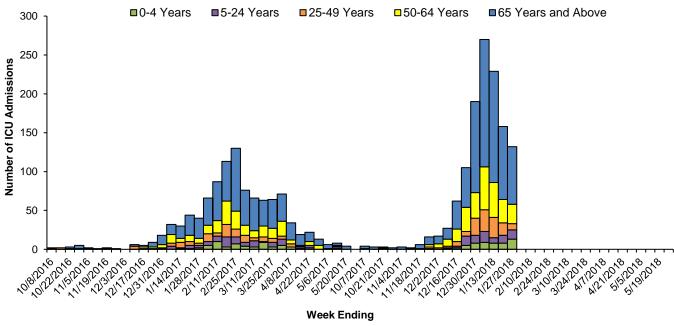




### Illinois Influenza-associated Intensive Care Unit (ICU) Admissions

| Age          | Current Week | Season Total (10/01/2017 – Current Week) |
|--------------|--------------|--|
| 0-4          | 13           | 54                                       |
| 5-24         | 12           | 69                                       |
| <b>25-49</b> | 8            | 122                                      |
| 50-64        | 25           | 253                                      |
| <u>≥</u> 65  | 74           | 731                                      |
| Total        | 132          | 1229                                     |

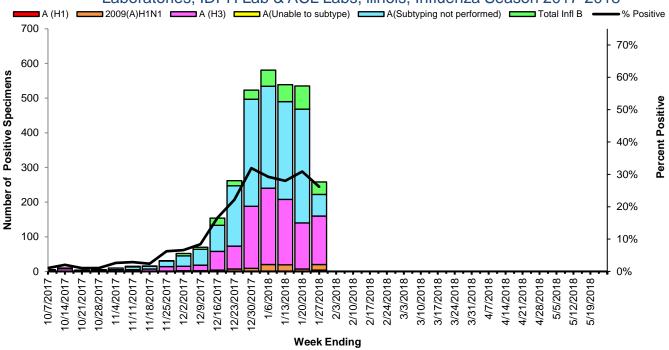




### 2017-2018 Illinois Laboratory Surveillance (IDPH, NREVSS, & ACL Laboratories)

|                 | Α      | Α    | Α                     | В                     | В                     | В                    |
|-----------------|--------|------|-----------------------|-----------------------|-----------------------|----------------------|
|                 | (H1N1) | (H3) | (Sub-type<br>Unknown) | (Victoria<br>Lineage) | (Yamagata<br>Lineage) | (Lineage<br>Unknown) |
| Current<br>Week | 20     | 140  | 62                    | 0                     | 16                    | 20                   |
| Season<br>Total | 90     | 1058 | 1641                  | 0                     | 50                    | 231                  |

# Influenza Isolates Reported by WHO/NREVSS Collaborating Laboratories, IDPH Lab & ACL Labs, Ilinois, Influenza Season 2017-2018



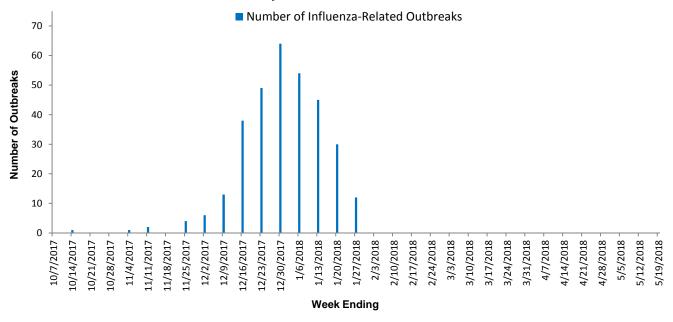
# Vaccination is the best way to protect against influenza infection. All Illinois residents aged six months and older should be vaccinated annually.

- Flu vaccination can keep you from getting sick with flu.
- Flu vaccination can reduce the risk of flu-associated hospitalization, including among children and older adults.
- Flu vaccination is an important preventive tool for people with chronic health conditions.
- Vaccination helps protect women during and after pregnancy. Getting vaccinated also protects the developing baby during pregnancy and for several months after the baby is born.
- Flu vaccination also may make your illness milder if you do get sick.
- Getting vaccinated yourself also protects people around you, including those who are more vulnerable to serious flu illness, like babies and young children, older people, and people with certain chronic health conditions.

### **Influenza Outbreaks in Institutional Settings**

| Region       | Current Week | Season Total<br>(10/01/2017 – Current Week) |
|--------------|--------------|---|
| Rockford     | 0            | 14  |
| Peoria       | 2            | 57  |
| Edwardsville | 2            | 62  |
| Marion       | 1            | 18  |
| Champaign    | 0            | 30  |
| West Chicago | 6            | 92  |
| Chicago/Cook | 1            | 46  |
|              | Total 12     | 319   |

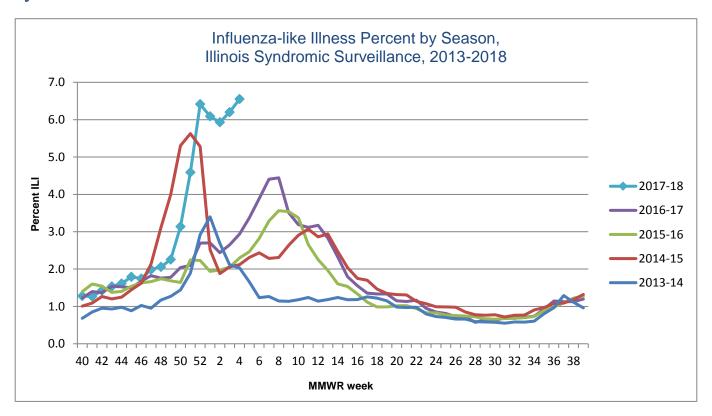
### Influenza Outbreaks by First Onset Date, Illinois, 2017-2018



#### **Become an Illinois Sentinel Provider**

Illinois outpatient health care providers are encouraged to join the Illinois influenza surveillance program. Each week, providers report data to CDC on the number of patients seen and the number with influenza-like illness. These reporters are critical to determining when and where influenza activity is occurring and who it is affecting. For more information on how to participate, contact <a href="mailto:DPH.INFLUENZA@ILLINOIS.GOV">DPH.INFLUENZA@ILLINOIS.GOV</a> or complete the <a href="mailto:sign-up form">sign-up form</a> and fax to 217-524-0962 to join the sentinel program.

### **Syndromic Surveillance**



The Illinois Department of Public Health collects emergency department visits daily from all acute care hospitals in Illinois for syndromic surveillance reporting. In this report, the visits are classified into an ILI syndrome based on chief complaints that include terms for influenza, or fever and cough or sore throat, similar to the CDC ILINet definition while excluding terms unrelated to ILI presentation. Data presented here should be comparable to the results in the ILI sentinel reporting, although the method and sources for data collection are different. For more information about the syndromic surveillance system utilized by IDPH and supported by CDC's National Syndromic Surveillance Program, visit <a href="https://www.syndromicsurveillance.org/">https://www.syndromicsurveillance.org/</a>

#### Resources

- IDPH Seasonal Influenza
- IDPH Immunization
- CDC Influenza
- CDC Influenza Vaccine
- Cook County Influenza Report
- DuPage County Influenza Report
- Kane County Influenza Report
- 2017-2018 Vaccine Recommendations Summary

- Vaccine Finder
- Immunization Action Coalition
- <u>National Respiratory and Enteric Virus</u>
   <u>Surveillance System (NREVSS), CDC</u>
- CDC FluView Activity Report and Maps
- International influenza surveillance (WHO)
- VFC Provider Search
- I-CARE Immunization Registry
- <u>FluVaxView Interactive (influenza vaccine coverage estimates)</u>