

I. Week 4 Summary

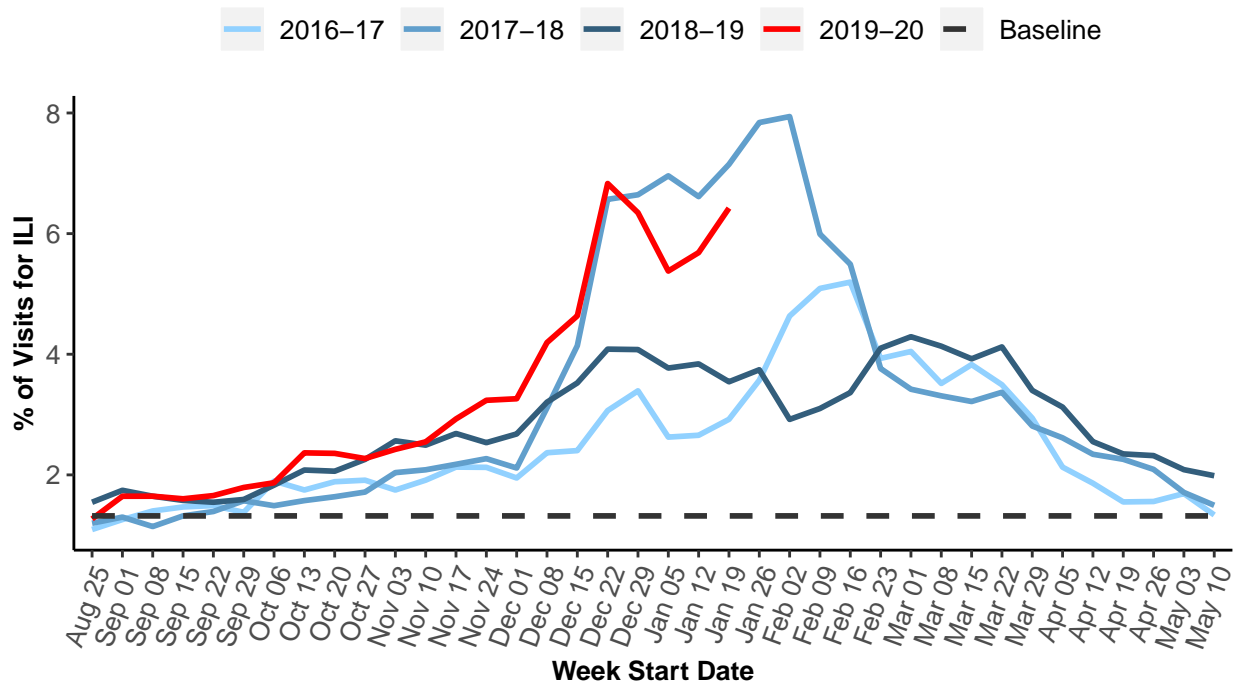
Influenza activity is currently **high**. This assessment is based on the following surveillance indicators:

- The proportion of emergency department visits for influenza-like illness (ILI) was 6.42%, above our local baseline of 1.32, and has been increasing for two weeks.
- The proportion of outpatient provider visits for ILI was 3.75%, above our local baseline of 0.71, and has been increasing for two weeks.
- The proportion of deaths associated with pneumonia and/or influenza was 6.57%, below our local epidemic threshold of 7.22%.
- 853 (34.11%) laboratory specimens tested positive for influenza: 452 influenza A unknown subtype, 62 influenza A H1N1, 2 influenza A H3N2, and 337 influenza B.
- Nineteen influenza-associated intensive care unit (ICU) hospitalizations were reported during Week 4. One hundred eight ICU hospitalizations have been reported since Week 35.
- Since Week 35, 0 influenza-associated pediatric deaths, 6 clusters of ILI in schools, and 8 outbreaks of influenza in long term care facilities have been reported.

Current recommendations are to promote influenza vaccination, [respiratory hygiene](#), and prompt [treatment with antivirals](#). Facilities may wish to consider temporary visitor restrictions.

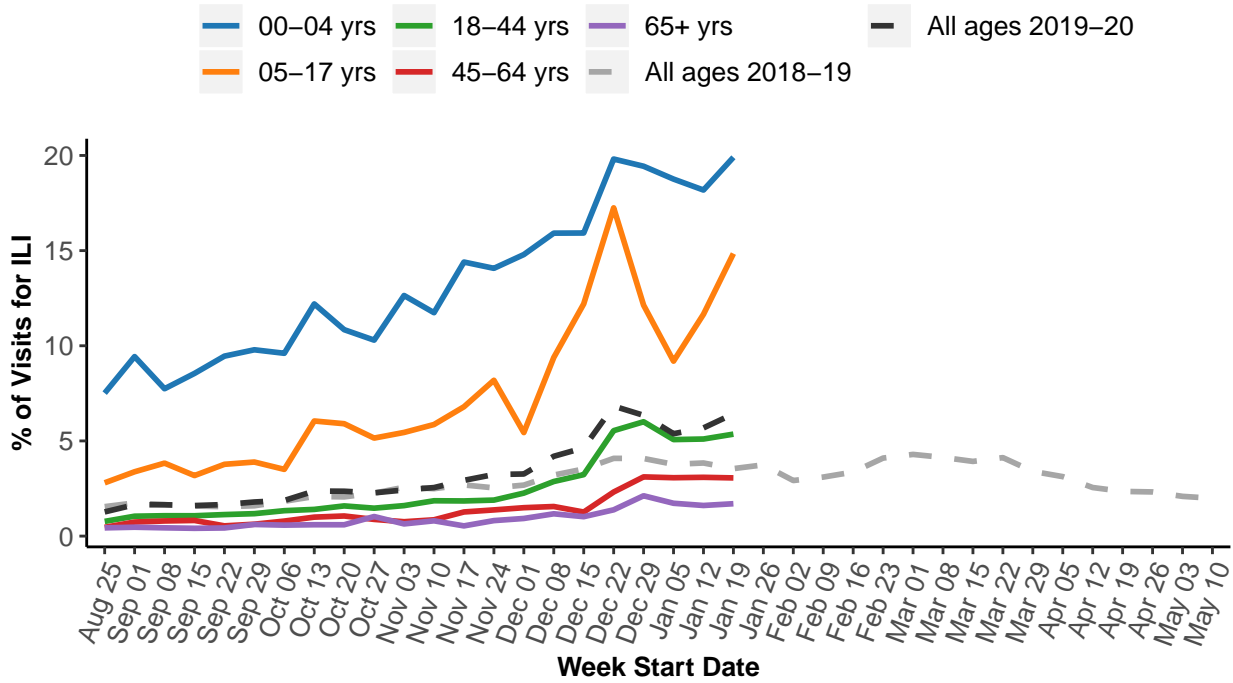
II. Activity Level / Disease Burden Graphs

Emergency Department Syndromic Surveillance

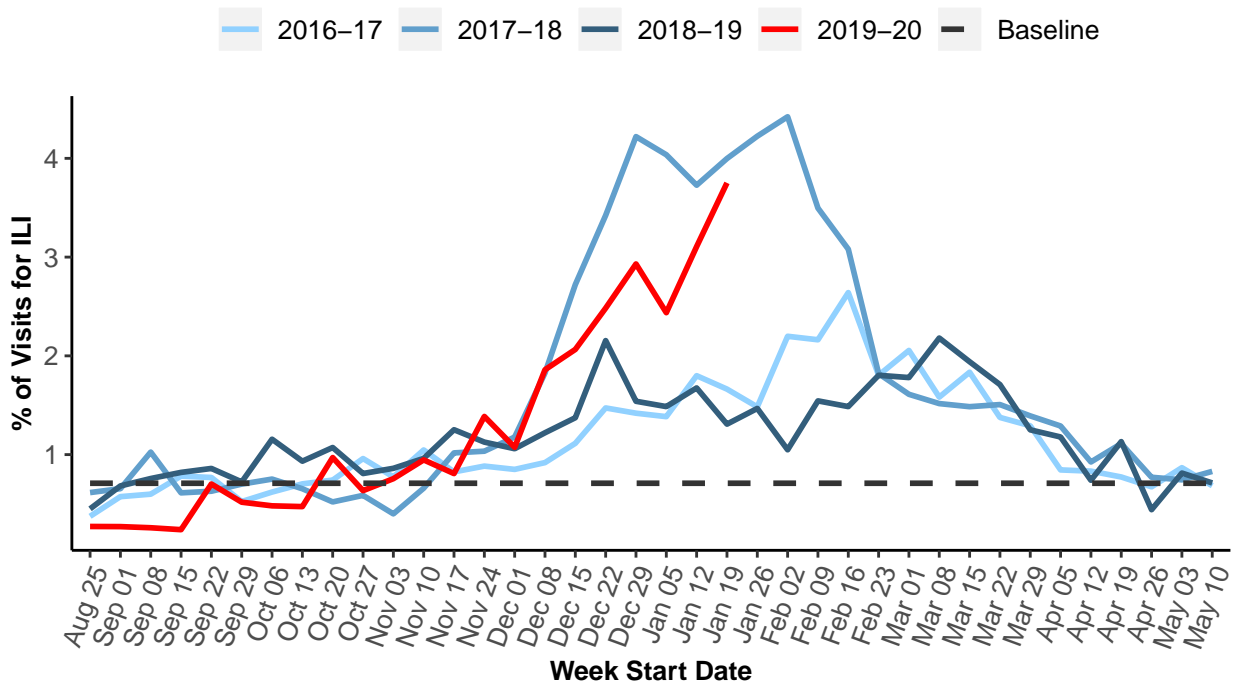




Syndromic Surveillance by Age Group



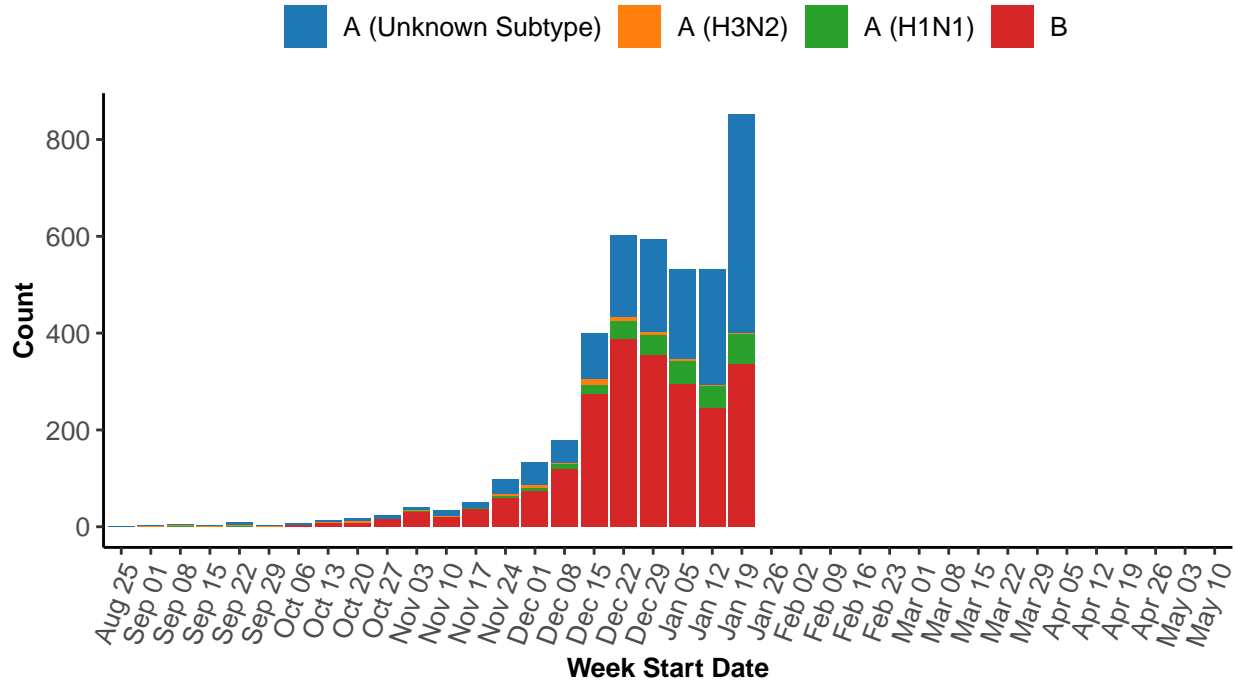
Outpatient Sentinel Providers



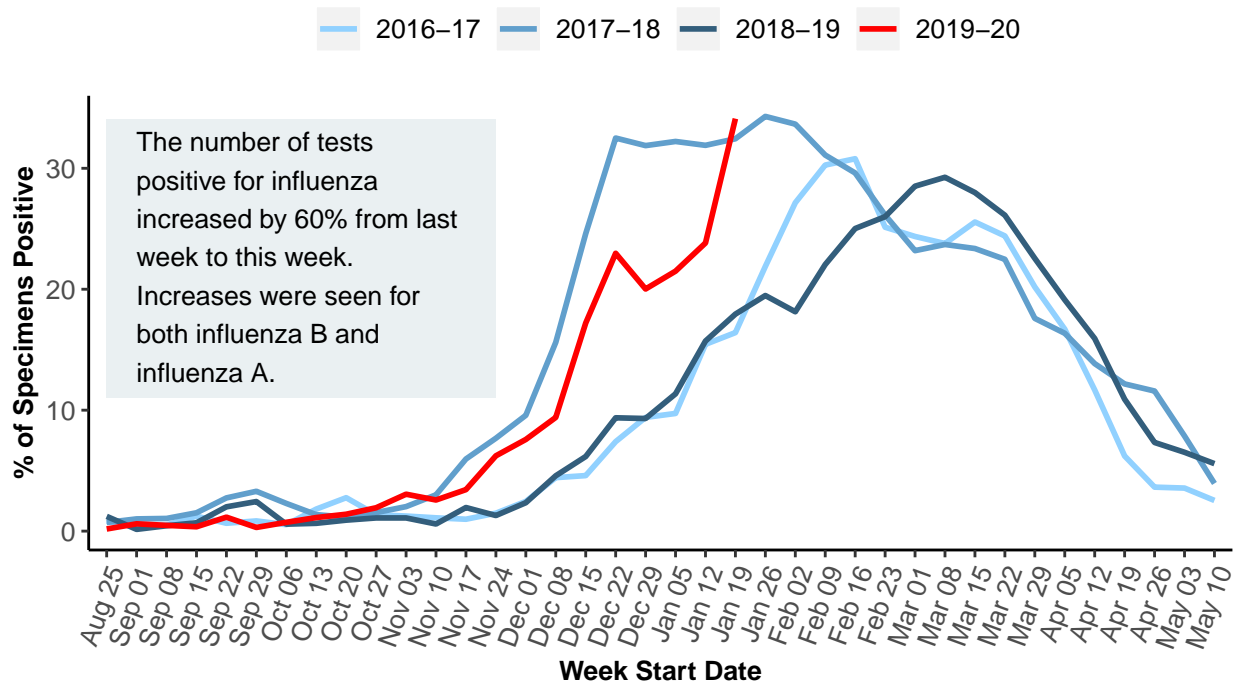


III. Circulating Strains and Positive Laboratory Specimens

Laboratory Specimens Positive for Influenza by Strain

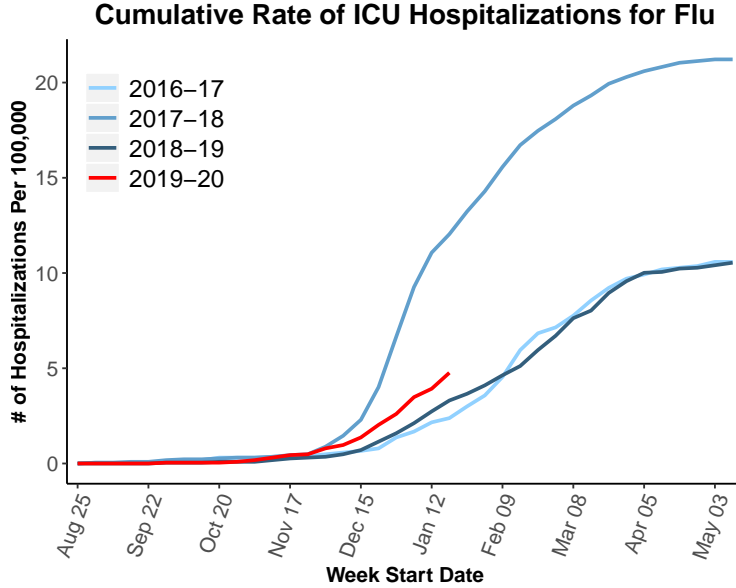


Percent of Respiratory Specimens Positive for Flu





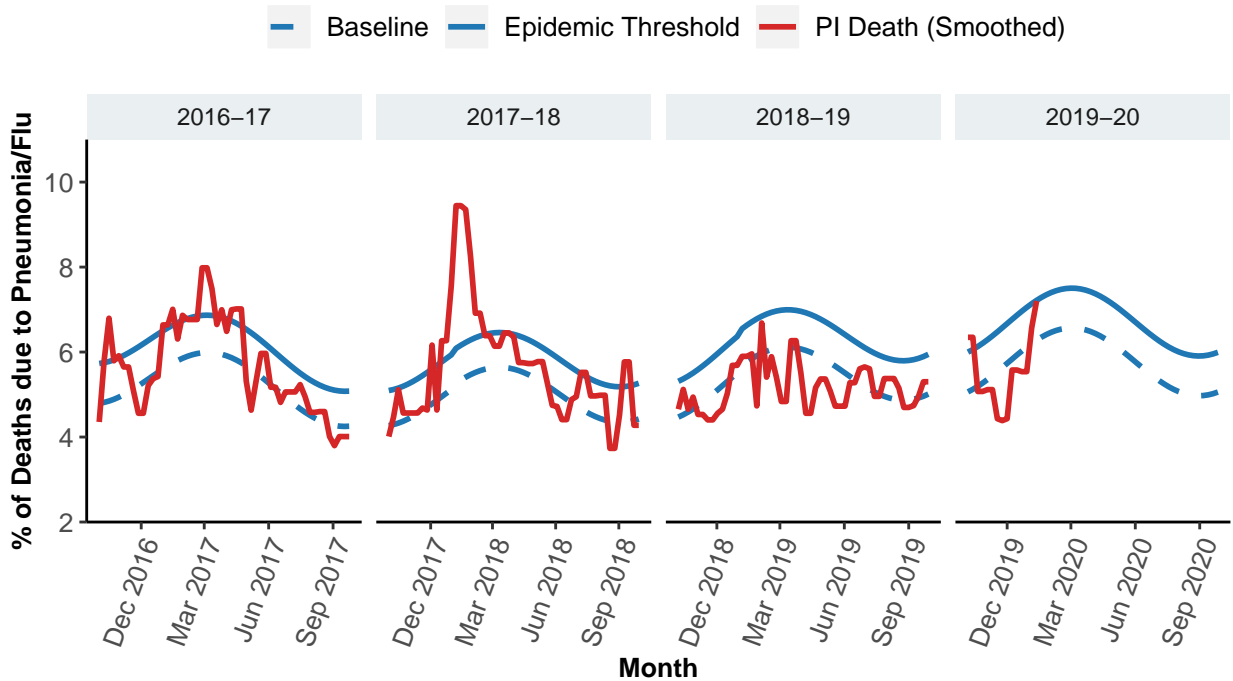
III. Seasonal Severity



Total ICU Hospitalizations by Age and District

Category	Count	Rate per 100,000
Age		
0-04	6	4.19
05-17	7	1.16
18-44	15	1.99
45-64	32	7.07
65+	48	15.42
District		
North	45	4.85
West	8	1.59
Southwest	23	6.32
South	32	6.78
Total		
Total	108	4.76

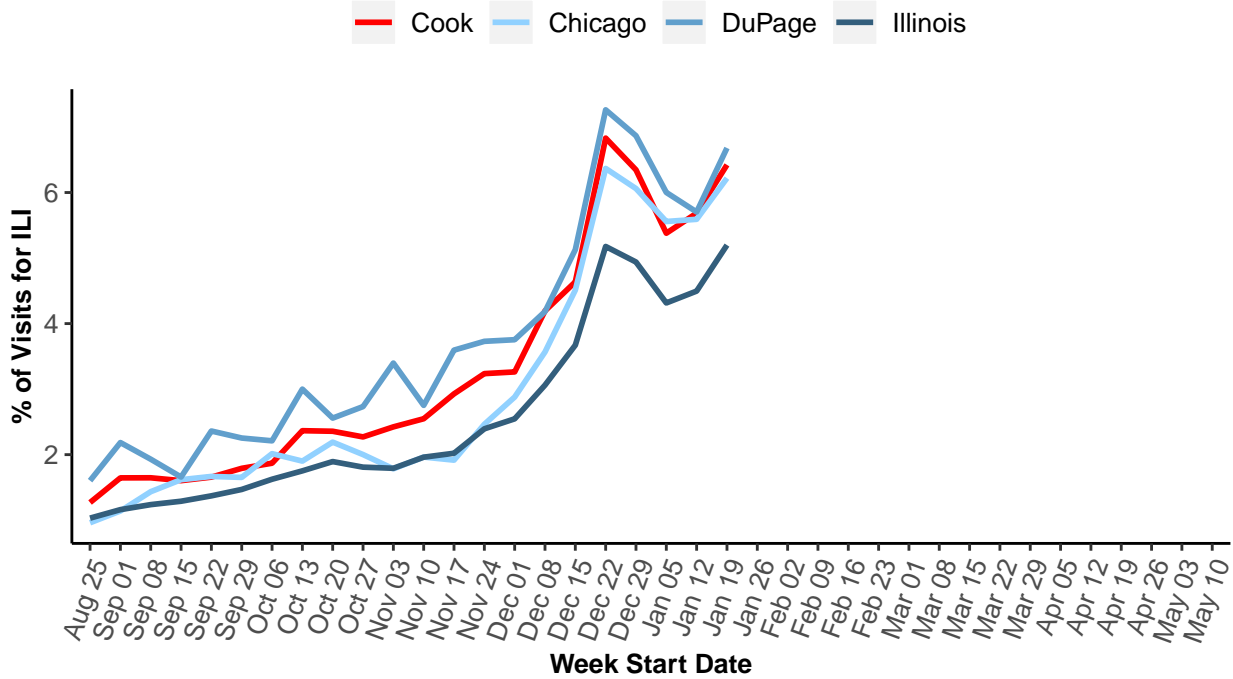
Pneumonia or Influenza Mortality



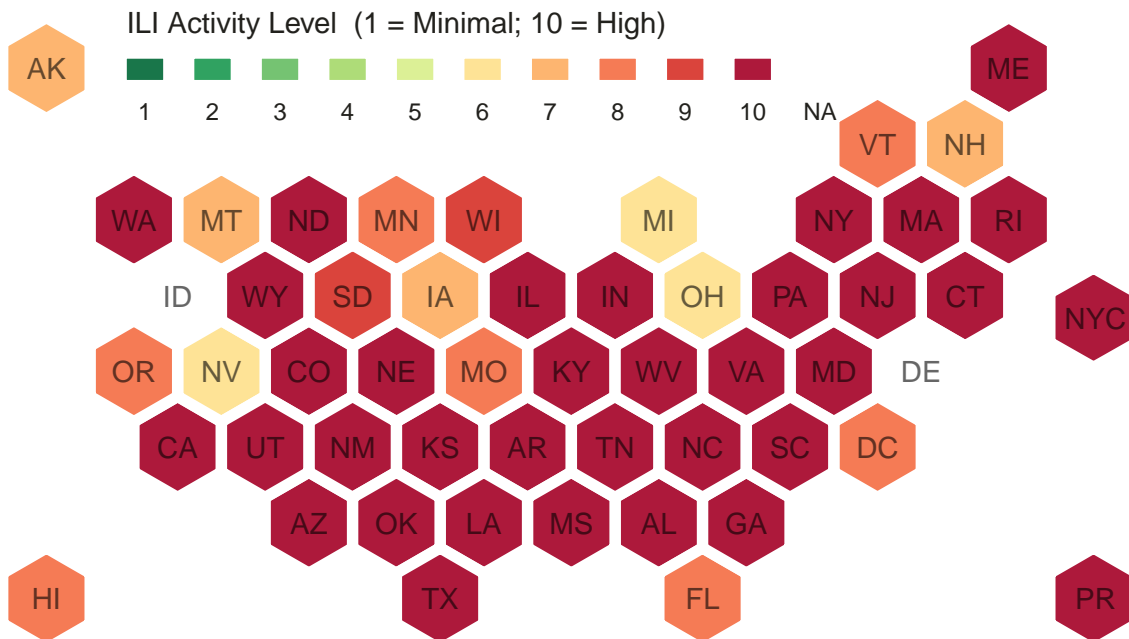


IV. Regional and National Activity

Syndromic Surveillance by Region



National ILI Activity



V. Technical Notes

Surveillance for ILI in suburban Cook County involves the weekly collection of data from hospitals, physicians' offices, and laboratories. We would like to thank all of our surveillance partners for their help in collecting this information.

For further information about influenza activity see: [City of Chicago Surveillance Report](#), [DuPage County Surveillance Report](#), [Illinois Department of Public Health Surveillance Report](#), [CDC Surveillance Report](#).

1. **Syndromic Surveillance:** Data extracted from the National Syndromic Surveillance Program (NSSP) Biosense Platform. All hospital emergency departments (EDs) in Illinois participate in the NSSP. Influenza-like-illness (ILI) is defined as a symptom complex of fever and cough or sore throat. $ILI \% = \# \text{ of ED visits for ILI} / \text{total } \# \text{ of ED visits}$.
2. **Sentinel Outpatient Providers:** Data extracted from the U.S. Influenza-like Illness Surveillance Network (ILINet); 6 hospitals and 3 physician offices serve as CDC sentinel sites in suburban Cook County. ILI defined as fever over 100 degrees F, cough and/or sore throat in the absence of a known cause other than influenza. $ILI \% = \# \text{ of visits for ILI} / \text{total } \# \text{ of visits}$.
3. **Laboratory Specimens:** Includes viral culture, RT-PCR, and the rapid antigen test. Cases may reside outside suburban Cook County. Participating laboratories: Illinois Department of Public Health Sentinel Laboratories, NorthShore University Health System, Loyola University Medical Center, and ACL Laboratories.
4. **ICU Hospitalizations:** Includes cases reported among suburban Cook County residents (excluding Evanston, Skokie, Oak Park, and Stickney) with known age and residence. Cases aggregated by week of hospital admission. Includes all cases reported through the presented week. Rates calculated with 2010 census data.
5. **Pneumonia Influenza Mortality:** Includes all deaths in Cook County where the immediate cause of death or a contributing factor was pneumonia and/or influenza (aspiration pneumonia excluded). Data has one week lag behind other surveillance indicators. The 3-week running median is displayed. The percentage of deaths due to P&I is compared with a seasonal baseline and epidemic threshold value calculated for each week. Seasonal baseline is calculated using a periodic regression model that incorporates a CDC based robust regression procedure applied to data from the previous four years. An increase of 1.645 standard deviations above the seasonal baseline of P&I deaths is considered the "epidemic threshold," i.e., the point at which the observed proportion of deaths attributed to pneumonia or influenza was significantly higher than would be expected at that time of the year in the absence of substantial influenza-related mortality. <http://www.cdc.gov/flu/weekly/overview.htm#Mortality>
6. **National Data:** Map produced using the proportion of outpatient visits to health care providers for ILI reported through ILINet. Activity levels are compared to the average percent of ILI visits that occur during weeks with little or no influenza virus circulation. <http://www.cdc.gov/flu/weekly/index.htm>