



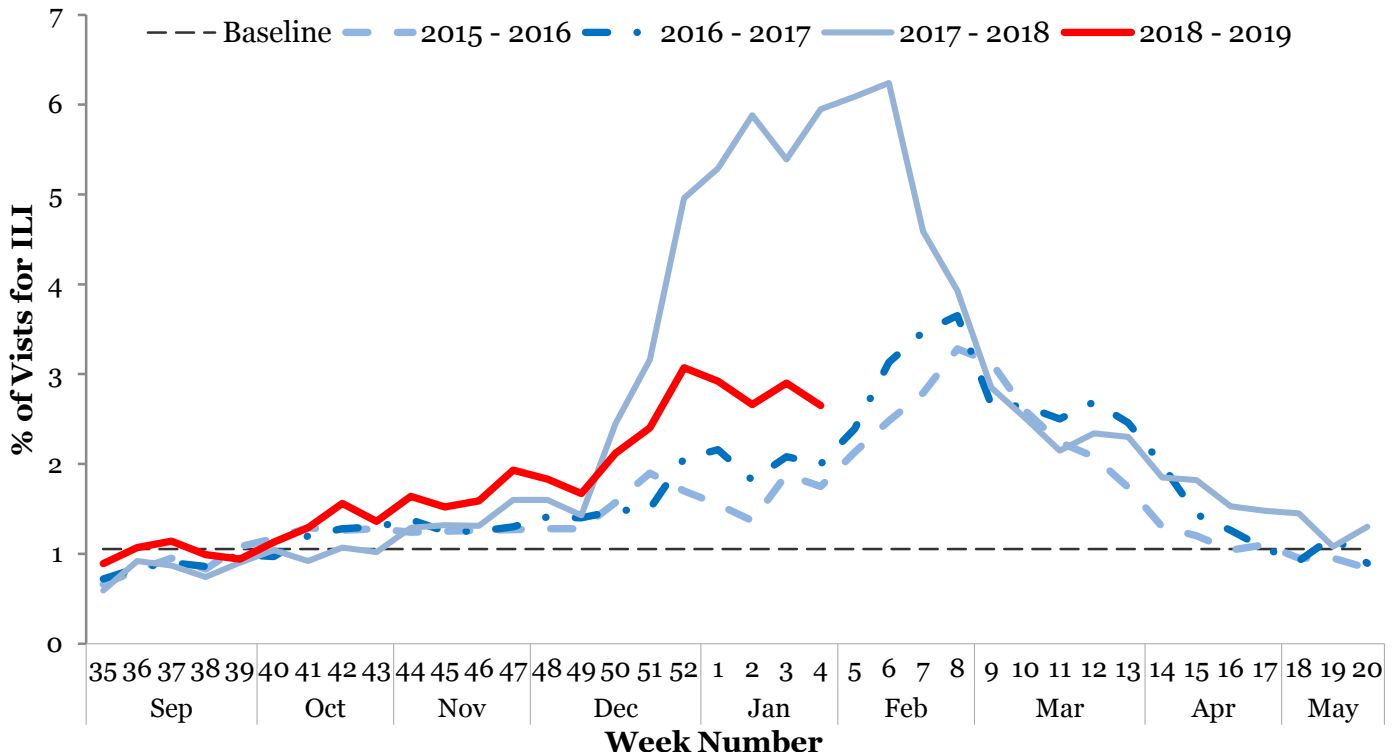
## I. Influenza-like Illness (ILI) Weekly Summary

- Influenza activity is currently **high**. This risk assessment is based on:
  - The proportion of emergency department visits for ILI was 2.65%, above the regional baseline of 1.05%, and has been decreasing for one week.
  - The proportion of outpatient provider visits for ILI was 1.31%, above the regional baseline of 0.73%, and has been decreasing for one week.
  - The proportion of deaths associated with pneumonia or influenza was 5.96%, below the epidemic threshold of 6.91%.
- 558 (17.91%) laboratory specimens tested positive for influenza: 55 influenza A H1N1, 6 influenza A H3N2, 484 influenza A unknown subtype, and 13 influenza B.
- Ten influenza-associated intensive care unit (ICU) hospitalizations were reported during Week 4. Sixty-seven ICU hospitalizations have been reported since Week 35.
- Since Week 35, 0 influenza-associated pediatric deaths, 0 clusters of ILI in schools, and 6 outbreaks of influenza in congregate care settings have been reported.
- **Current recommendations:** Promote vaccination, respiratory hygiene, and prompt treatment with antivirals. Facilities may wish to consider temporary visitor restrictions.

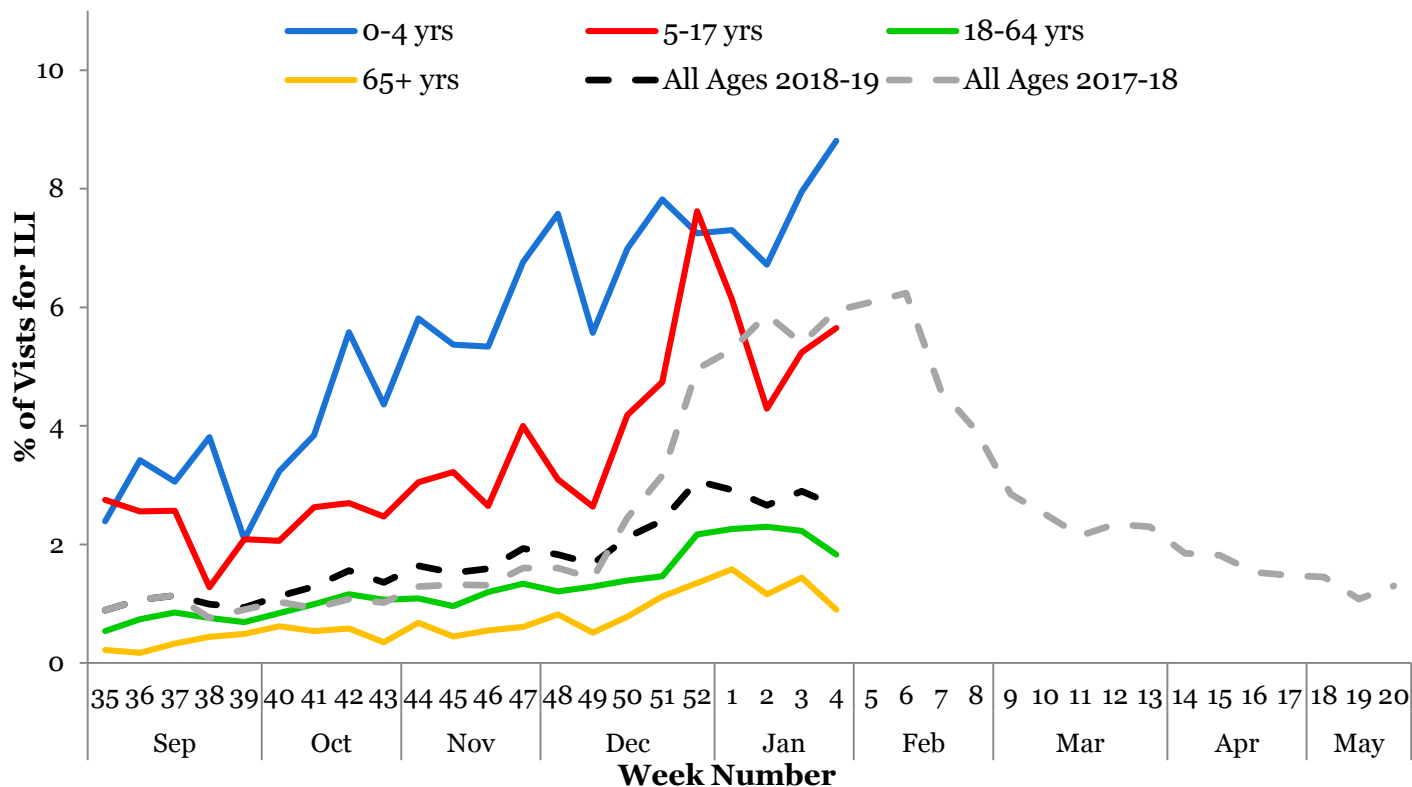
Note: Surveillance for ILI in suburban Cook County involves the weekly collection of data from hospitals, physicians' offices, and laboratories. Thank you to all of our surveillance partners for their help in collecting this information.

## II. Influenza Activity Level / Disease Burden

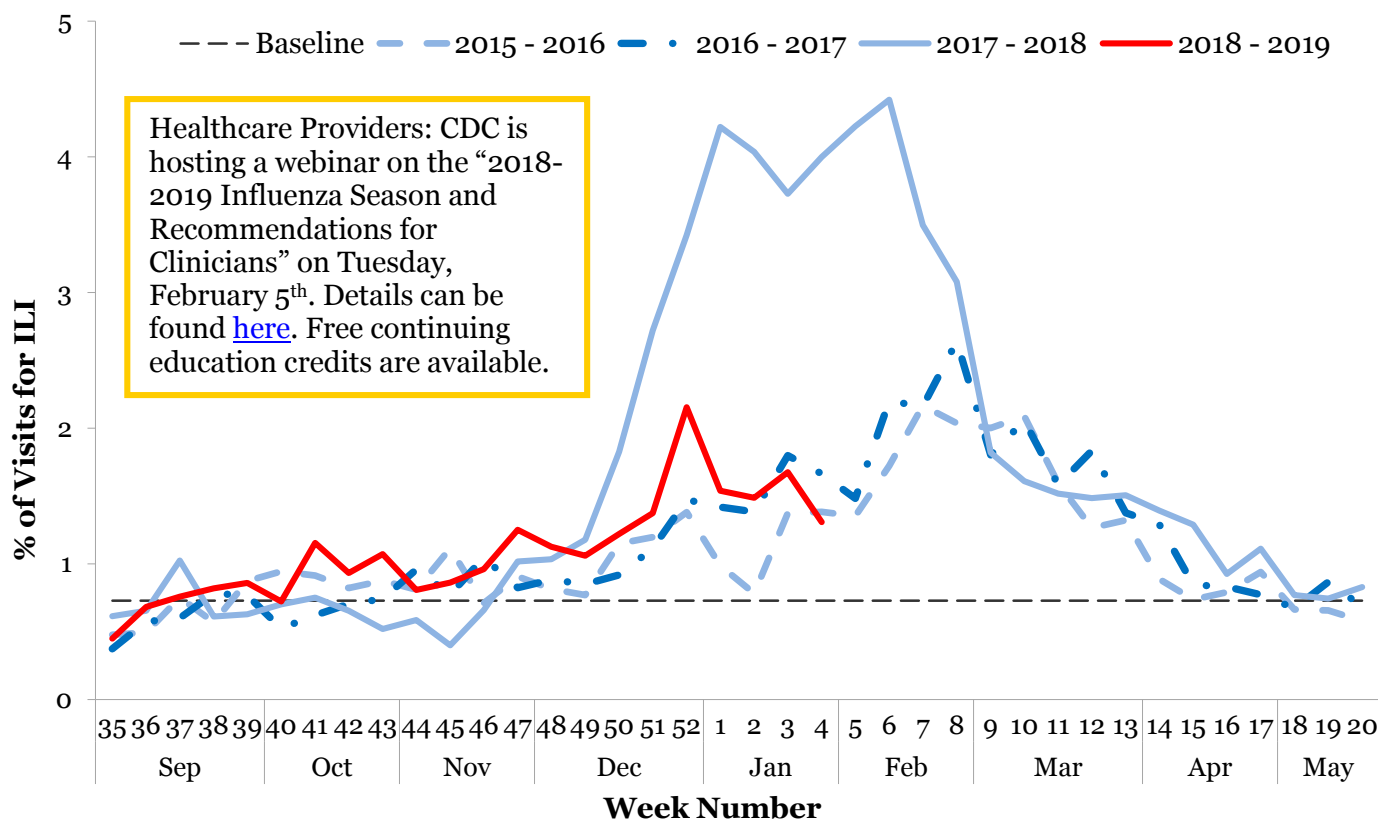
### Emergency Department Syndromic Surveillance<sup>1</sup>



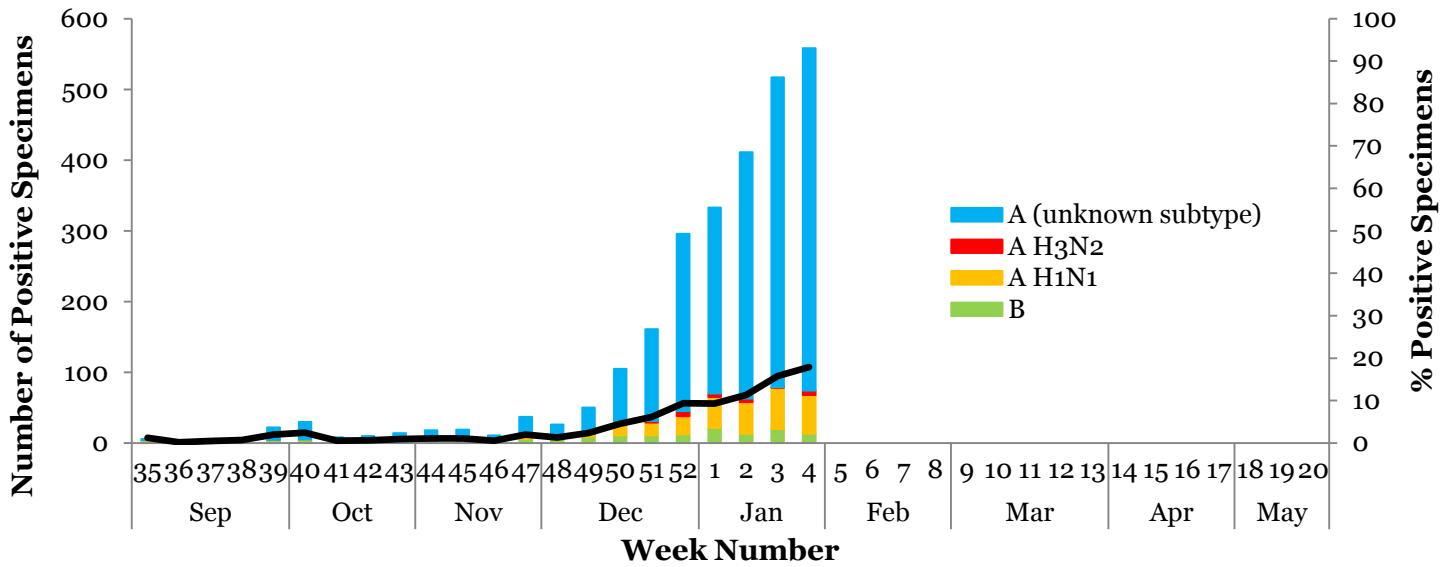
**Syndromic Surveillance by Age Group<sup>1</sup>**



**Outpatient Sentinel Providers<sup>2</sup>**



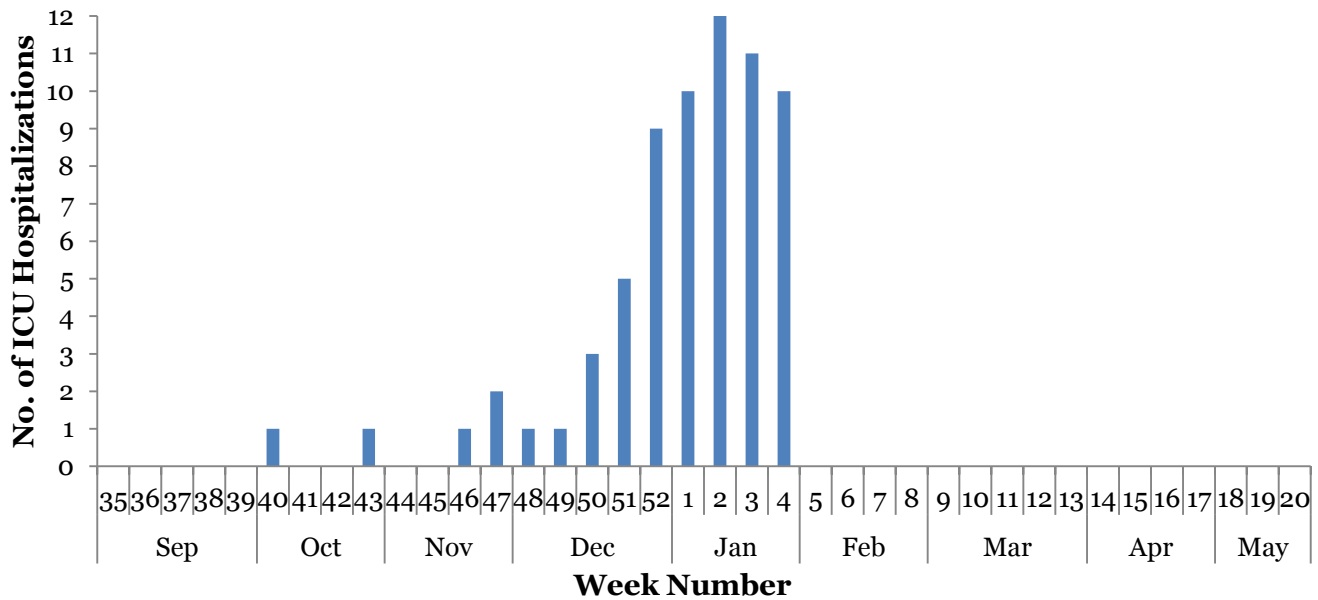
### III. Circulating Strains<sup>3</sup>



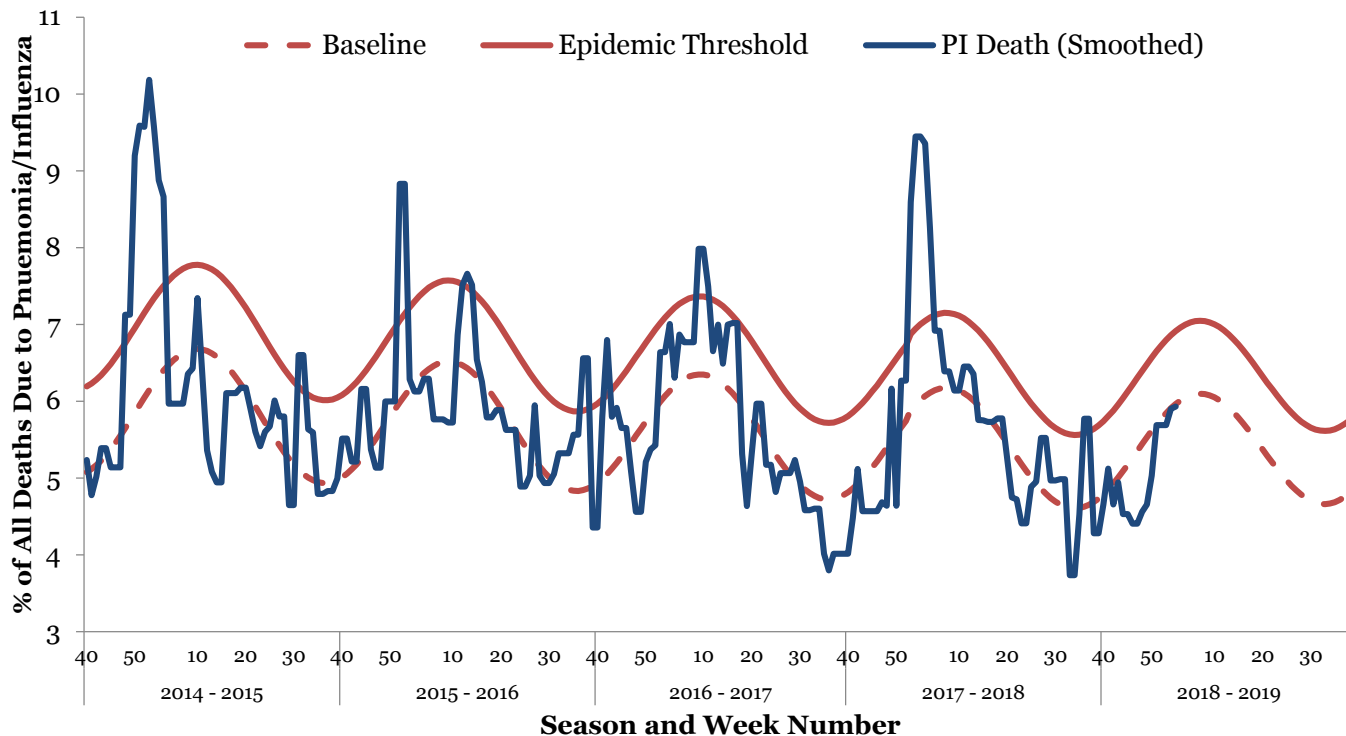
### IV. Seasonal Severity

#### ICU Hospitalizations<sup>4</sup>

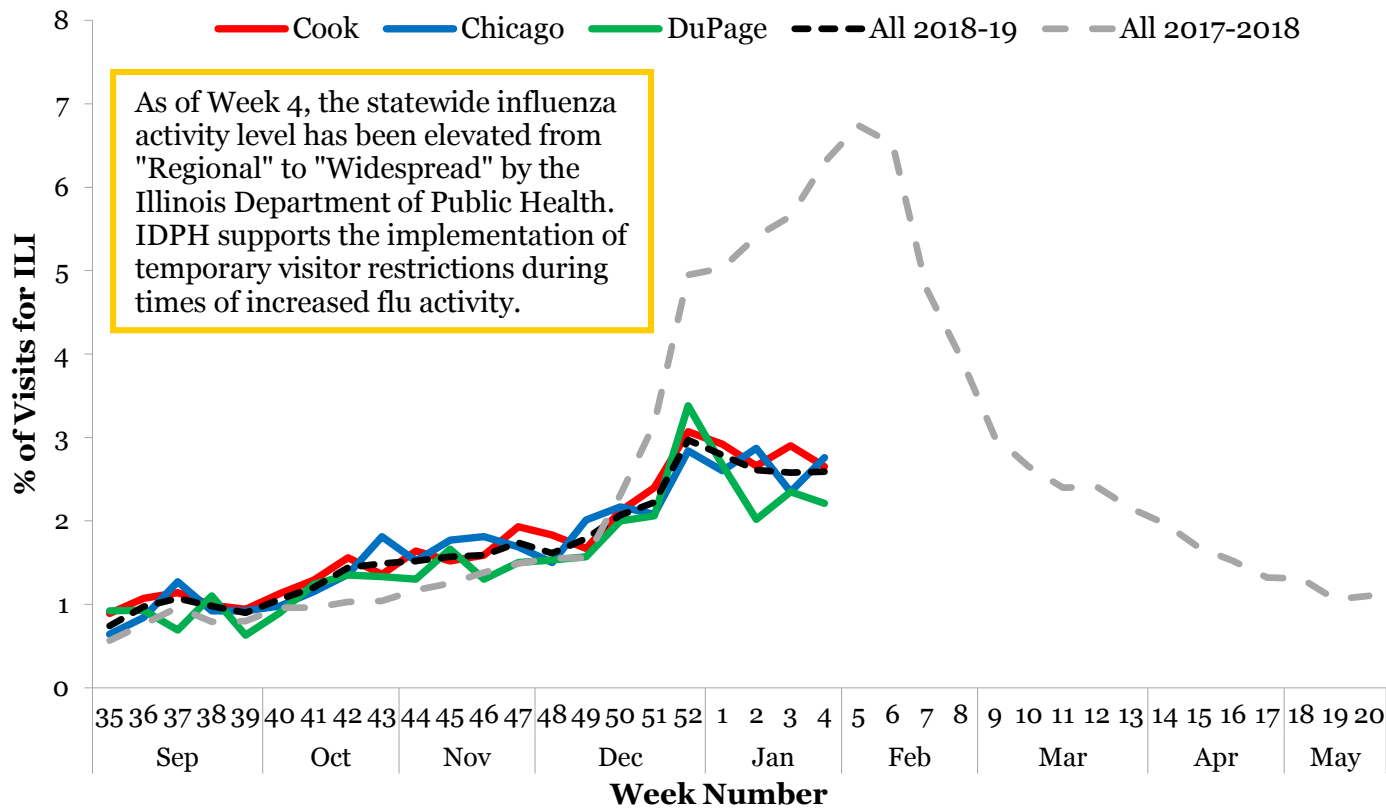
| Cumulative Case Count | #    | Incidence Rate           | Per 100,000 |
|-----------------------|------|--------------------------|-------------|
| Total Cases           | 67   |                          | 2.96        |
| Incidence Rate by Age |      | Incidence Rate by Region |             |
| 0-4                   | 5.58 | North                    | 1.83        |
| 5-24                  | 0.17 | West                     | 3.77        |
| 25-49                 | 1.99 | Southwest                | 4.95        |
| 50-64                 | 3.76 | South                    | 2.76        |
| 65+                   | 8.03 |                          |             |



**Pneumonia and Influenza Mortality<sup>5</sup>**

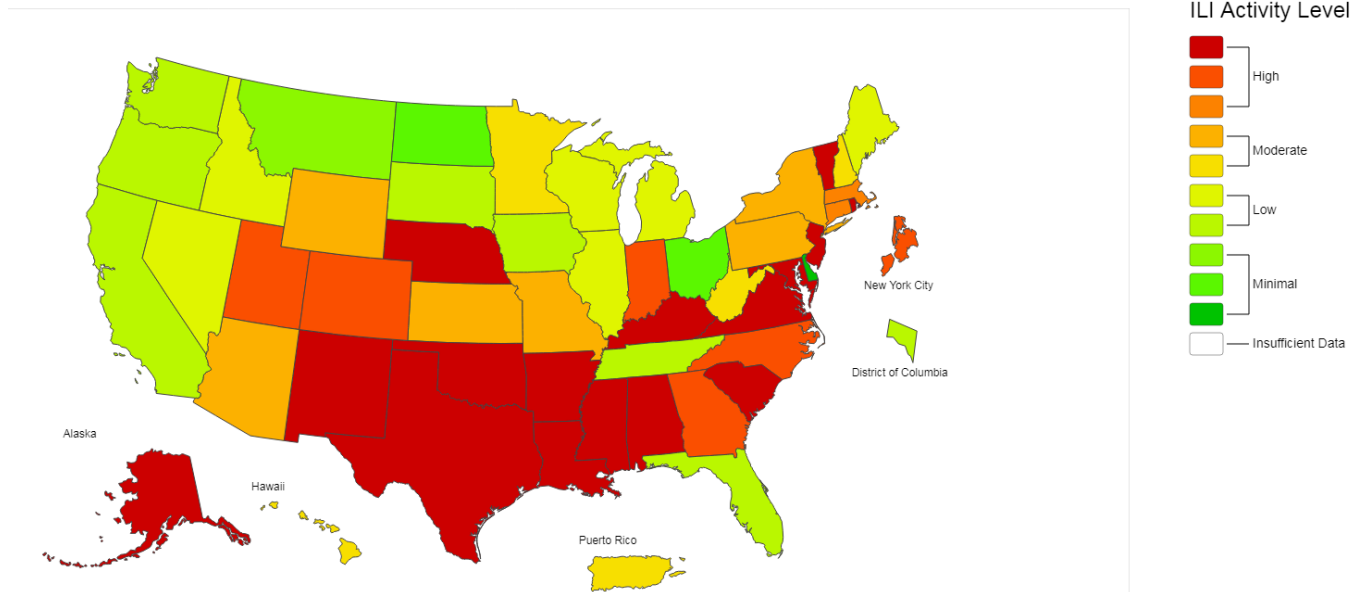


**V. Regional Flu Activity<sup>1</sup>**



## VI. United States Flu Activity<sup>6</sup>

2018-19 Influenza Season Week 4 ending Jan 26, 2019



(All data are preliminary and may change as more reports are received.)

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. Data extracted from syndromic surveillance system, ESSENCE; all hospital emergency departments (EDs) in suburban Cook County participate in ESSENCE. Influenza-like-illness (ILI) 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. Data extracted from the U.S. Influenza-like Illness Surveillance Network (ILINet); 6 hospitals and 3 physician offices serve as CDC sentinel sites in Cook County. ILI defined as fever  $\geq 100^{\circ}\text{F}$ , 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. 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. Cases reported are suburban Cook County residents (excluding Evanston, Skokie, Oak Park, and Stickney) with known age and residence. Cases aggregated by week of admission. Includes all cases reported through the presented week. Rates calculated with 2010 census data.
5. Includes all deaths where the immediate cause of death or a contributing factor was pneumonia and/or influenza (aspiration pneumonia excluded). Data includes all of Cook County and has one week lag behind other surveillance indicators. The 3-week running median is displayed. The percentage of deaths due to P&I are 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. 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>