

## I. Week 45 Summary

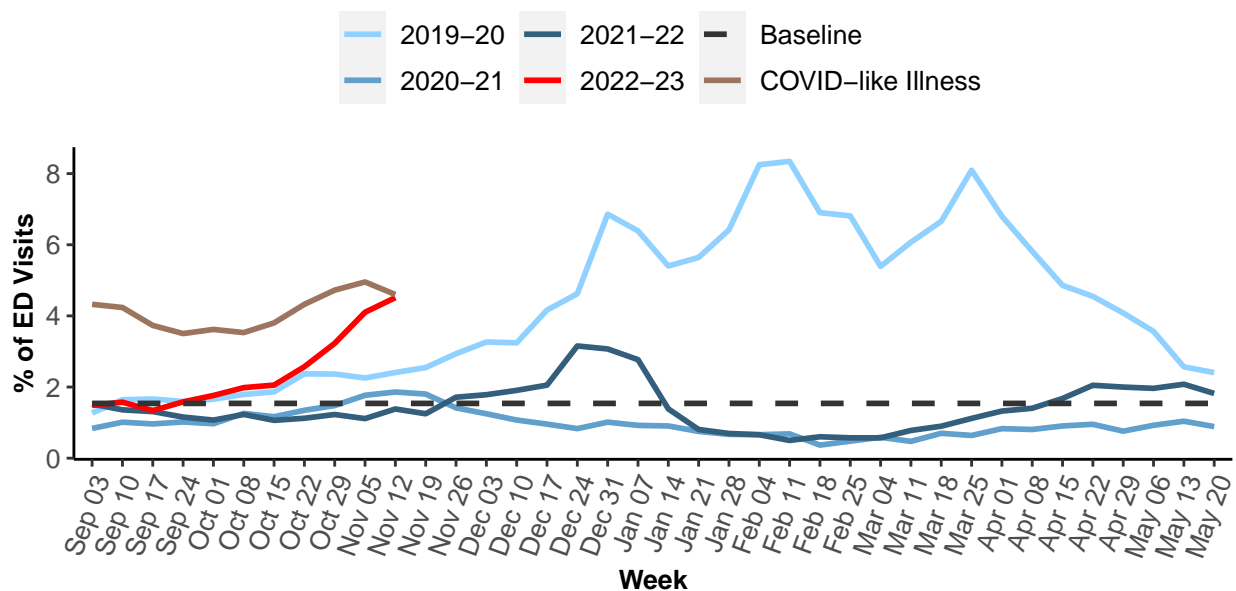
Influenza activity is currently **high**. This assessment is based on the following surveillance indicators:

- The proportion of emergency department visits for influenza-like illness (ILI) was 4.51%, above our local baseline of 1.54%, and has been increasing for eight weeks.
- The proportion of outpatient provider visits for ILI was 4.94%, above our local baseline of 0.84%, and has been increasing for six weeks.
- The proportion of deaths associated with pneumonia, influenza, or COVID-19 was 6.62%, below our local epidemic threshold of 8.95%.
- Seven hundred fifteen (13.8%) laboratory specimens tested positive for influenza: 689 influenza A unknown subtype, 0 influenza A H1N1, 13 influenza A H3N2, and 13 influenza B.
- Two influenza-associated intensive care unit (ICU) hospitalizations were reported during Week 45. 22 ICU hospitalizations have been reported since Week 35.
- Since Week 35, 0 influenza-associated pediatric deaths, 9 clusters of ILI in schools, and 0 outbreaks of influenza in long term care facilities have been reported.

**Current recommendations** are to promote influenza vaccination and respiratory hygiene. Follow [CDC testing guidance](#) for when SARS-CoV-2 and influenza viruses are co-circulating.

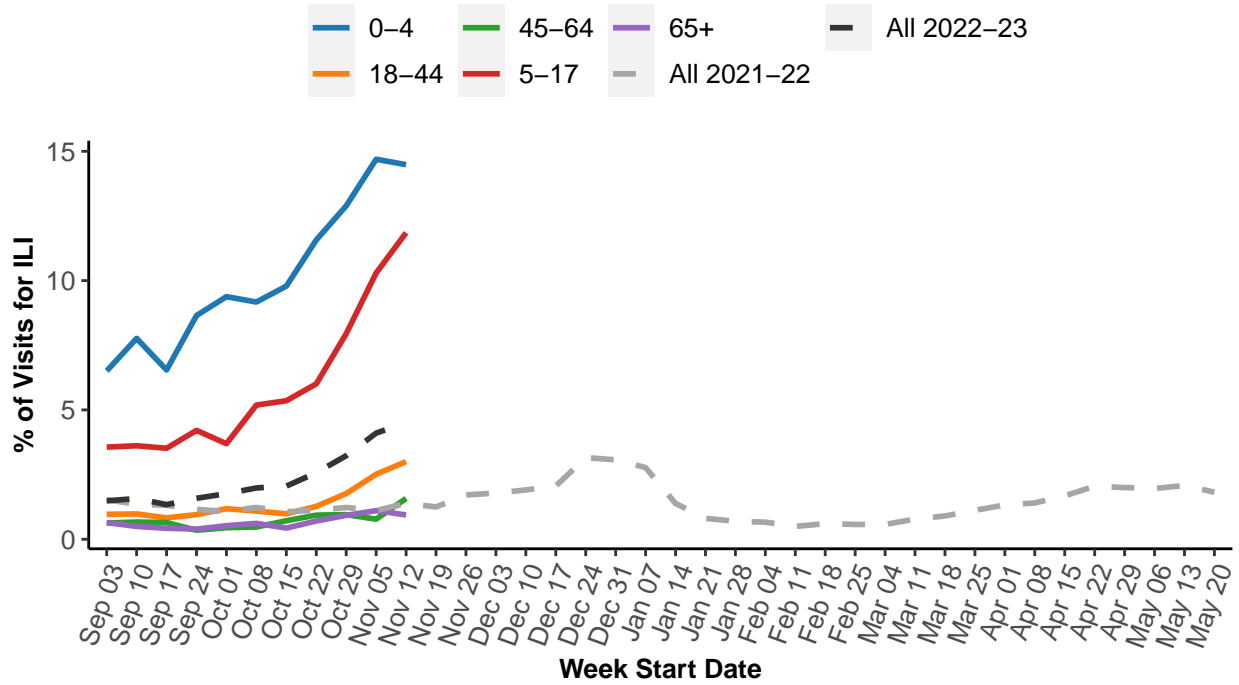
## II. Activity Level Graphs

**Emergency Department Syndromic Surveillance**

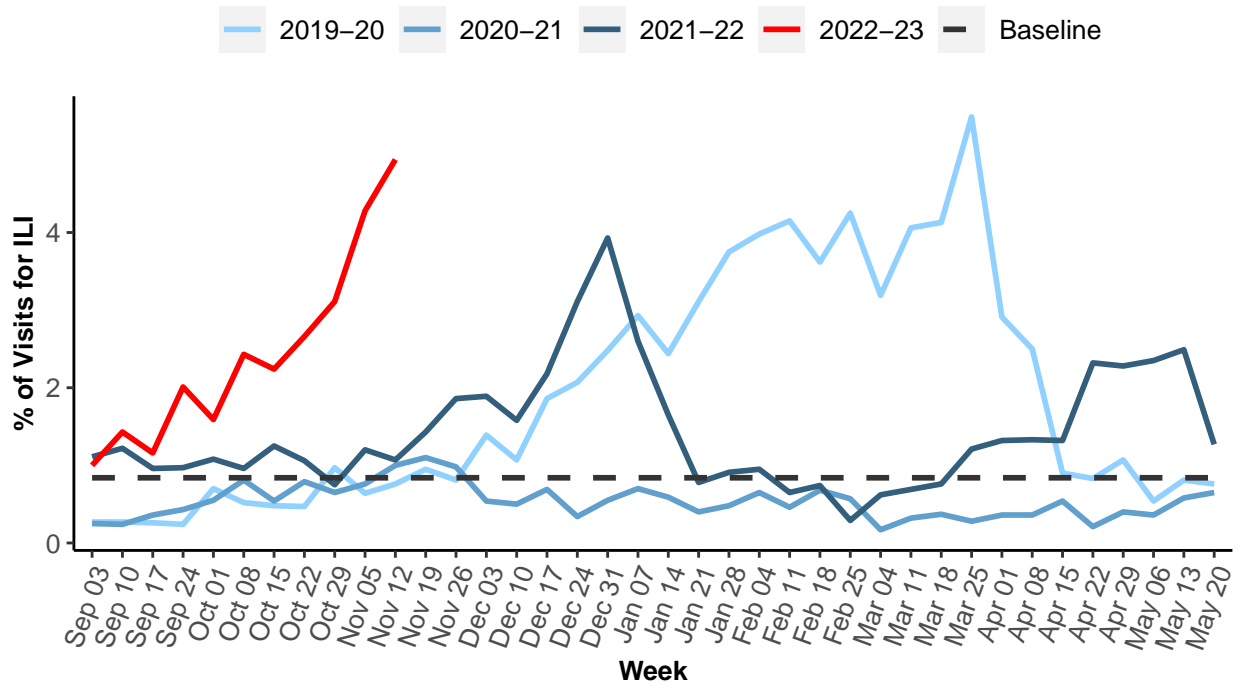




**Syndromic Surveillance by Age Group**

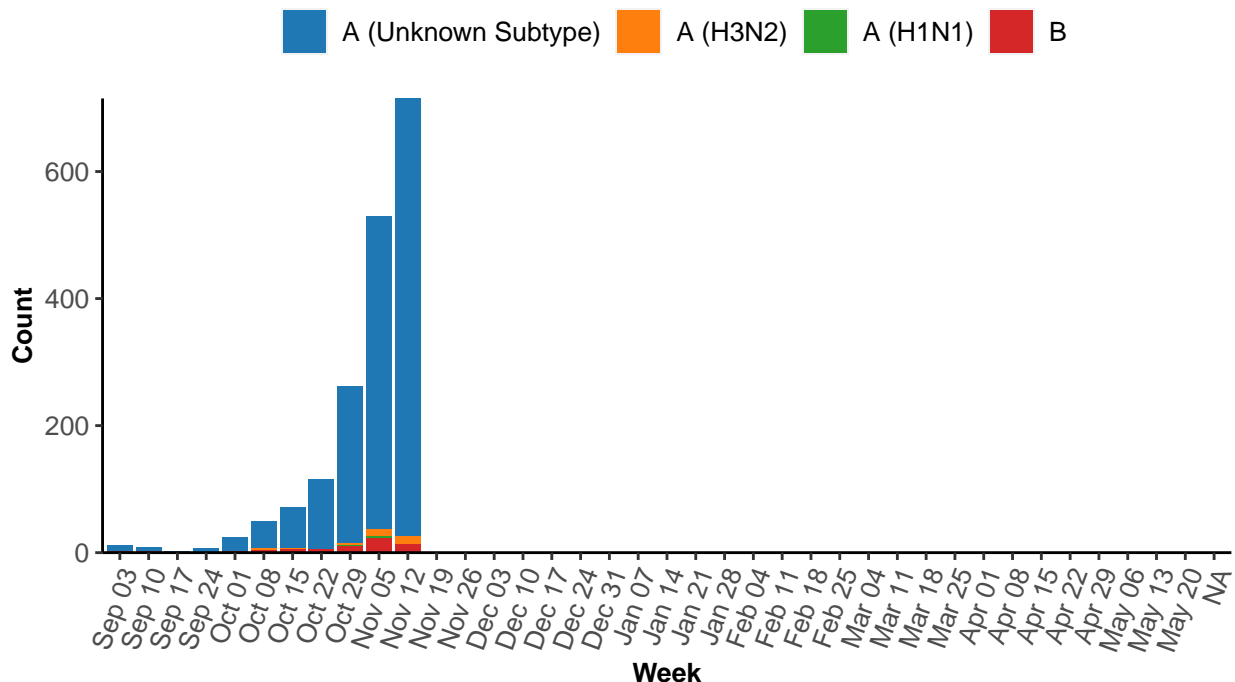


**Outpatient Sentinel Providers**

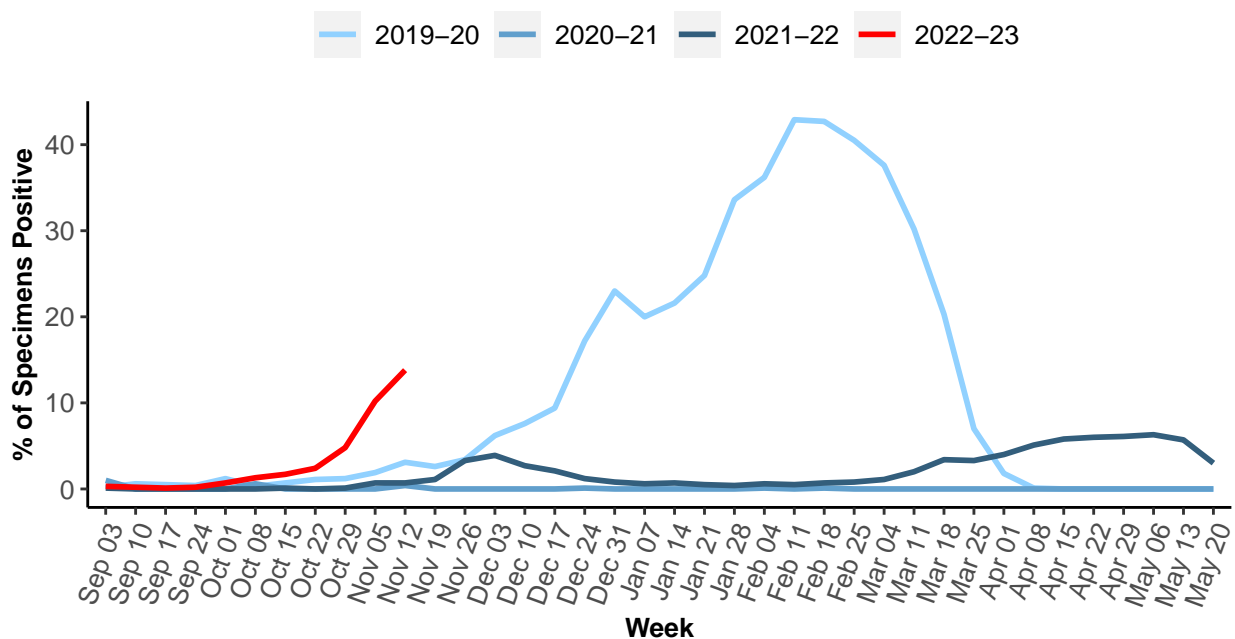


### III. Circulating Strains and Positive Laboratory Specimens

**Laboratory Specimens Positive for Influenza by Strain**

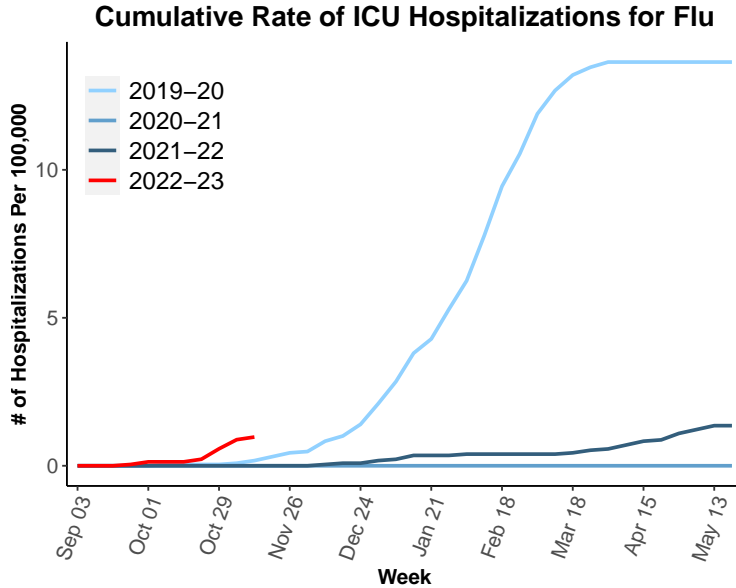


**Percent of Respiratory Specimens Positive for Flu**





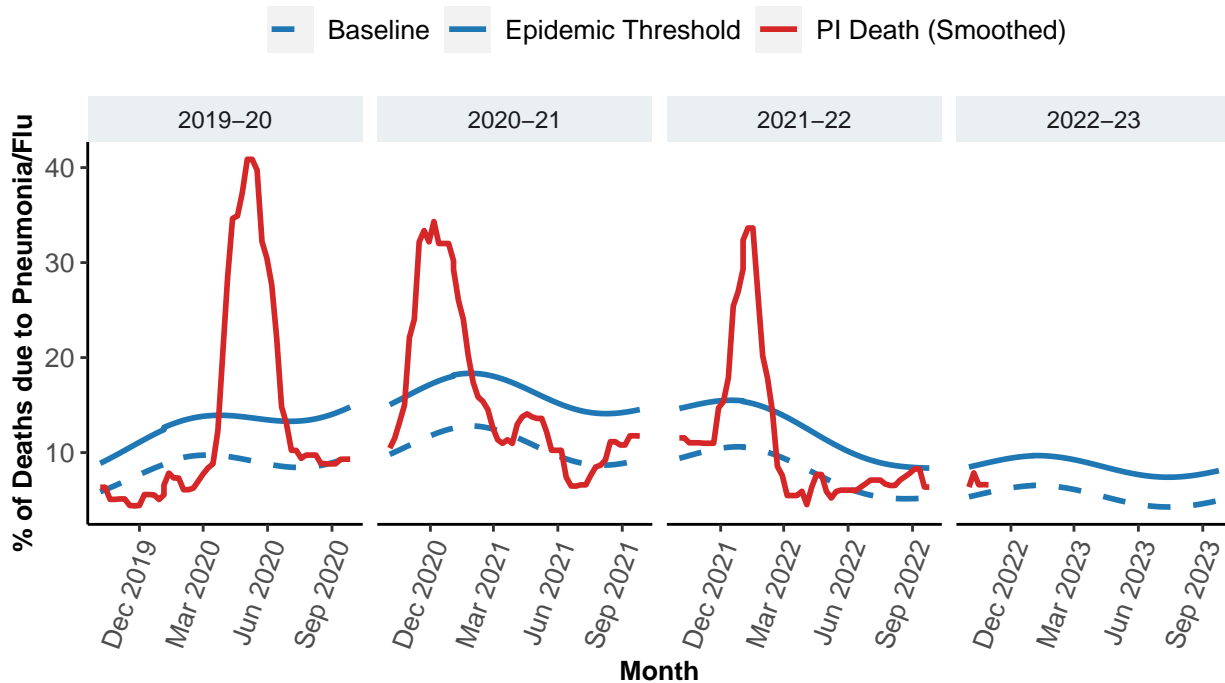
### III. Seasonal Severity



**Total ICU Hospitalizations by Age and District**

Category	Count	Rate per 100,000
<b>Age</b>		
0-4	3	2.09
5-17	3	0.5
18-44	4	0.53
45-64	4	0.88
65+	8	2.57
<b>District</b>		
North	5	0.54
West	5	0.99
Southwest	6	1.65
South	6	1.27
<b>Total</b>		
Total	22	0.97

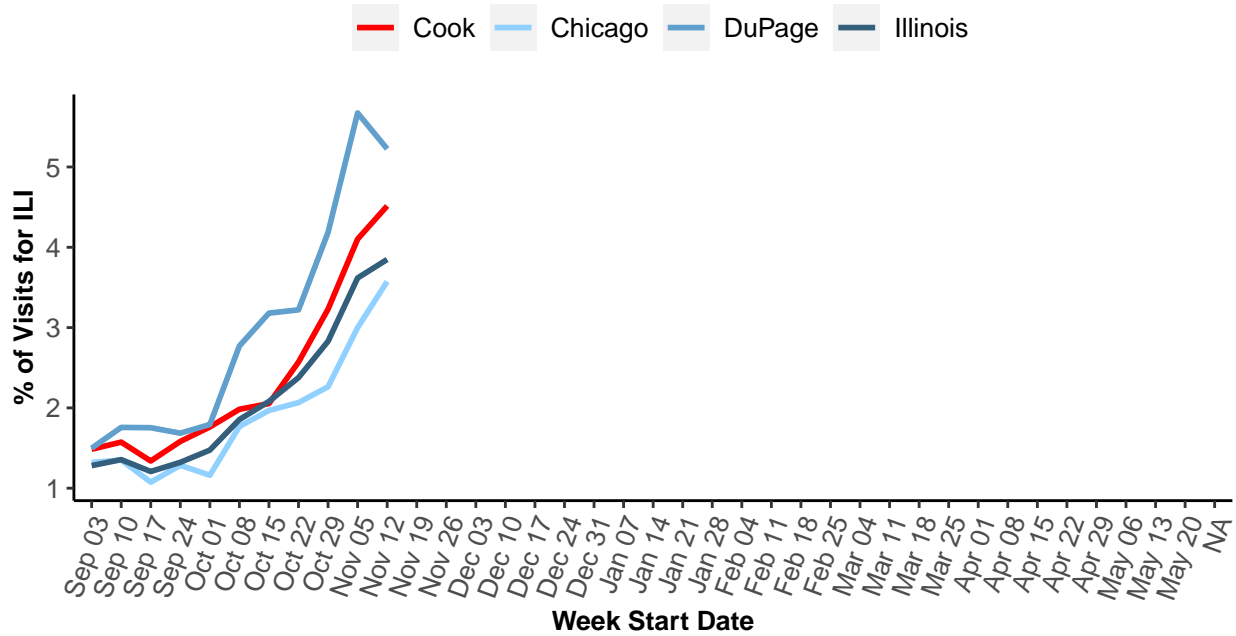
### Deaths Associated with Pneumonia, Influenza, or COVID-19



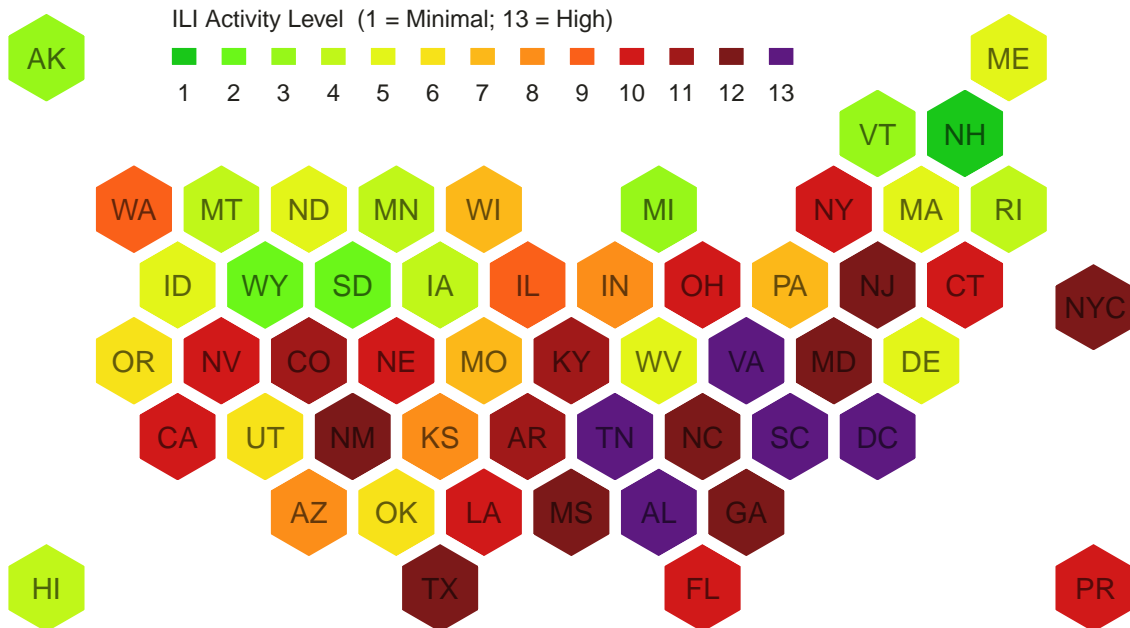


## IV. Regional and National Activity

### Syndromic Surveillance by Region



### National ILI Activity





## V. Technical Notes

*We are still learning how the [COVID-19](#) pandemic may influence influenza transmission and surveillance. Please interpret data with caution.*

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

1. **Syndromic Surveillance:** Data from the National Syndromic Surveillance Program (NSSP) Biosense Platform. All hospital emergency departments (EDs) in Illinois participate in the NSSP. ILI is defined as fever plus cough or sore throat.  $ILI\% = \# \text{ of ED visits for ILI} / \text{total } \# \text{ of ED visits}$ . CLI is defined as reporting fever plus cough or shortness of breath, or having a diagnosis of COVID-19.
2. **Sentinel Outpatient Providers:** Data from the U.S. Influenza-like Illness Surveillance Network (ILINet); 6 hospitals and 2 physician offices are CDC sentinel sites in suburban Cook County. ILI is defined as fever > 100 plus cough/sore throat in the absence of other known cause.  $ILI\% = \# \text{ of visits for ILI} / \text{total } \# \text{ of visits}$ .
3. **Laboratory Specimens:** Includes viral culture, RT-PCR, and 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 township) with known age and residence. Cases aggregated by week of hospital admission. Includes all cases reported through the presented week. Rates calculated with 2020 census data.
5. **Pneumonia Influenza COVID-19 Mortality:** Includes all deaths in Cook County where the immediate cause of death or a contributing factor was pneumonia (aspiration pneumonia excluded), influenza, and/or COVID-19 (PIC). Data has a one week lag behind other surveillance indicators. The 3-week running median is displayed. The percentage of deaths due to PIC 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 PIC was significantly higher than would be expected at that time of the year in the absence of substantial influenza or COVID-19-related mortality.
6. **National Data:** Map produced using the % of outpatient visits to health care providers for ILI reported through ILINet. Activity levels are compared to the average % of ILI visits that occur during weeks with minimal flu circulation.

*We would like to thank all of our surveillance partners for their help in collecting this information!*