Influenza Surveillance Report Week 40: Sep 27 - Oct 03, 2020

I. Week 40 Summary

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

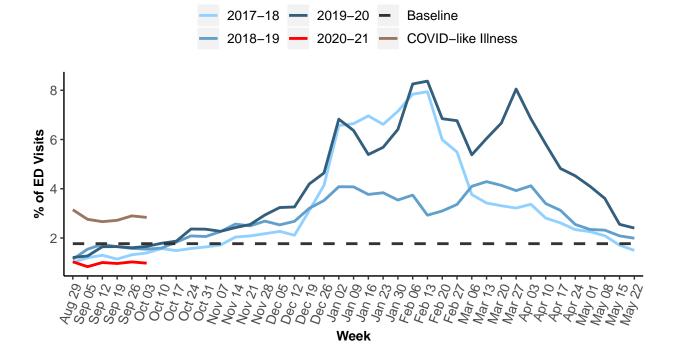
- The proportion of emergency department visits for influenza-like illness (ILI) was 0.98%, below our local baseline of 1.77%, and has been decreasing for one week.
- The proportion of outpatient provider visits for ILI was 0.43%, below our local baseline of 0.7%, and has been increasing for three weeks.
- The proportion of deaths associated with pneumonia, influenza, or COVID-19 was 9.29%, above our local epidemic threshold of 5.99%.
- Zero (0%) laboratory specimens tested positive for influenza: o influenza A unknown subtype, o influenza A H1N1, o influenza A H3N2, and o influenza B.
- Zero influenza-associated intensive care unit (ICU) hospitalizations were reported during Week 40. Zero ICU hospitalizations have been reported since Week 35.
- Since Week 35, o influenza-associated pediatric deaths, o clusters of ILI in schools, and o outbreaks of influenza in long term care facilities have been reported.

Current recommendations are to promote influenza vaccination and respiratory hygiene.

Please see the Technical Notes on page 6 for an important note on the COVID-19 pandemic.

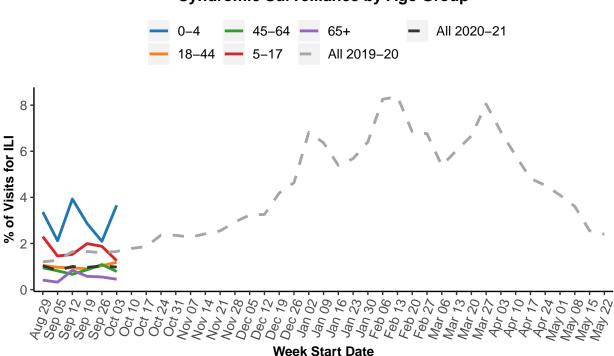
II. Activity Level Graphs

Emergency Department Syndromic Surveillance

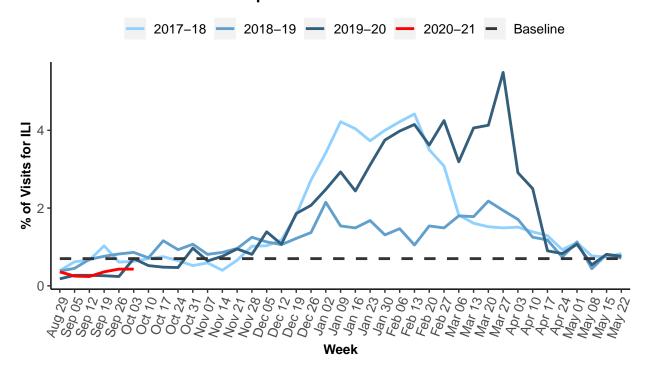




Syndromic Surveillance by Age Group



Outpatient Sentinel Providers

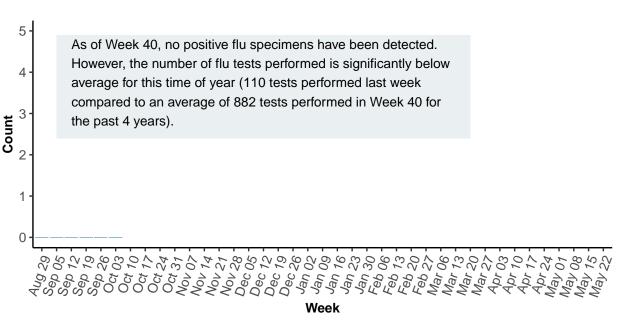




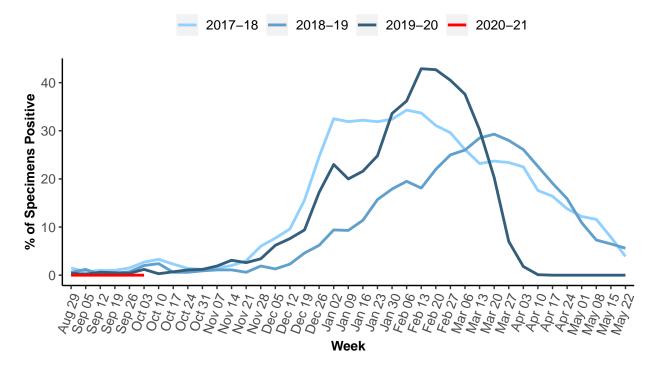
III. Circulating Strains and Positive Laboratory Specimens

Laboratory Specimens Positive for Influenza by Strain



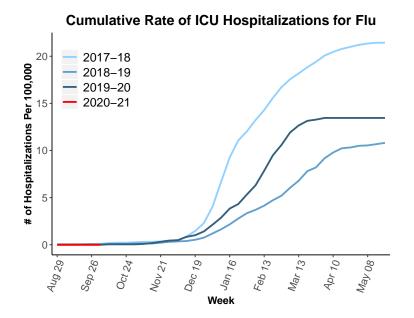


Percent of Respiratory Specimens Positive for Flu





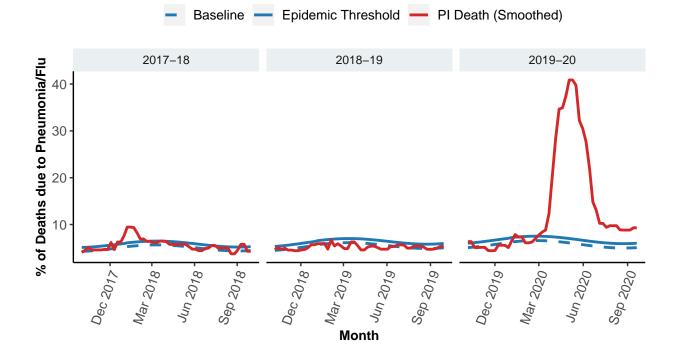
III. Seasonal Severity



Age and District Count Rate per 100,000 Category Age 0 0 0-4 0 0 5-17 0 0 18-44 0 0 45-64 65+ 0 0 District 0 North 0 0 0 West Southwest 0 0 South 0 0 Total Total 0 0

Total ICU Hospitalizations by

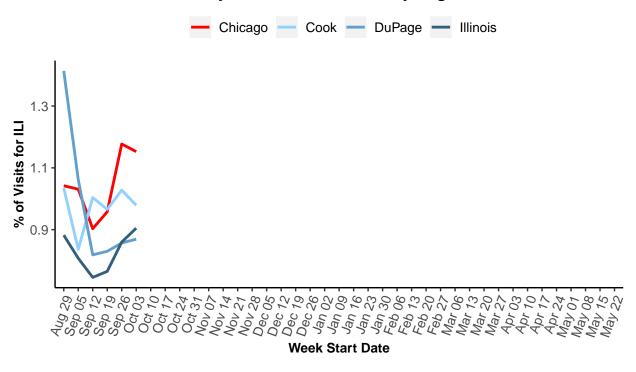
Deaths Associated with Pneumonia, Influenza, or COVID-19



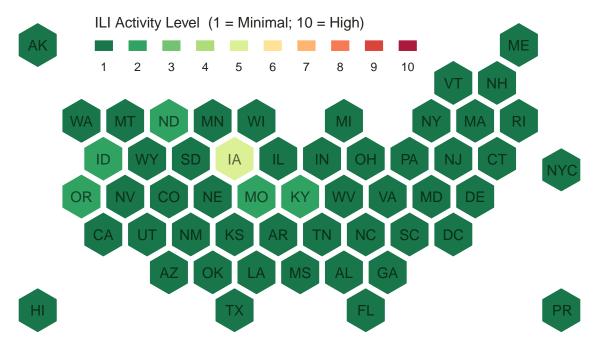


IV. Regional and National Activity

Syndromic Surveillance by Region



National ILI Activity





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V. Technical Notes

COVID-19 and influenza present with similar symptoms. As such, syndromic data for influenza-like illness (ILI) may be less accurate in reflecting influenza activity than in previous years. Interpret data with caution. In addition, it is too early to tell how behavioral changes resulting from the pandemic - including both social distancing measures and changes in health-care seeking behavior - will impact the influenza season. Surveillance data for COVID-19 is available here.

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 extracted from the National Syndromic Surveillance Program (NSSP) Biosense Platform. All hospital emergency departments (EDs) in Illinois participate in the NSSP. ILI is defined as a symptom complex of fever and cough or sore throat. ILI % = # of ED visits for ILI / total # of ED visits.
- 2. **Sentinel Outpatient Providers**: Data extracted from the U.S. Influenza-like Illness Surveillance Network (ILINet); 6 hospitals and 2 physician offices serve as CDC sentinel sites in suburban Cook County. ILI is defined as fever over 100 degrees F, cough and/or sore throat in the absence of a known cause other than influenza. ILI % = # of visits for ILI / total # 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 township) 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 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 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.

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