Summary of Los Angeles County Department of Public Health (LAC DPH) COVID-19 Related Surveillance

Updated: 5-22-2020 MMWR Week: 20 Ending on: 5-16-2020 To subscribe to LAC DPH Viral Respiratory Illness Surveillance Updates email "Subscribe" to fluwatch@listserv.ph.lacounty.gov

COVID-19 At a Glance

Virology	Activity	Severity
7.6% of specimens tested at select Los Angeles area laboratories* in week 20 were positive for SARS-CoV-2, which is a decrease since week 19.	Around 18 per 1,000 ED visits during week 20 were for influenza-like illness. The rate of emergency-department visits for influenza-like illness has decreased since week 19.	covidence for 15% of deaths registered in LAC during week 20. Pneumonia, influenza, and covidence for 21% of all deaths registered in LAC during week 20, which was a decrease since week 19. This percentage may change as death certificates representing recent deaths are processed.

^{*} See indicator specific sections for associated methods.

LAC DPH prepares this newsletter to summarize current COVID-19 and respiratory illness surveillance data in Los Angeles County. Because the COVID-19 pandemic is evolving rapidly, our methods, systems, and data are being added and revised constantly. *Weekly surveillance data are preliminary and subject to change.*

Daily counts of cases and deaths are available on the LAC DPH website at http://dashboard.publichealth.lacounty.gov/covid19 surveillance dashboard/.



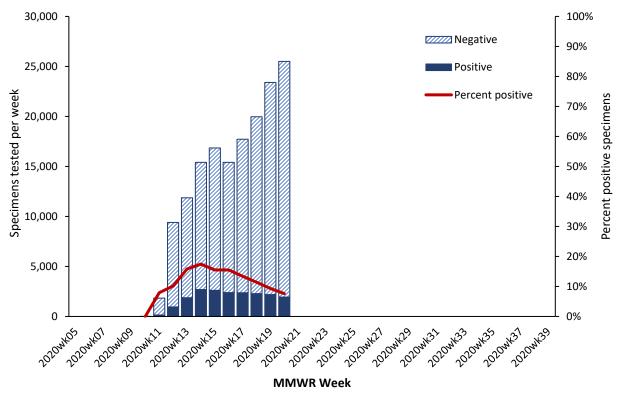
^{*} LAC DPH surveillance data excludes the cities of Long Beach and Pasadena.

^{**} The respiratory virus surveillance period starts with MMWR week 40 and runs through week 39 of the following year. The 2019-20 season started on Sept 29, 2019.

Virologic Surveillance

The percentage of specimens testing positive for SARS-CoV-2 is calculated from a subset of Los Angeles County area clinical and commercial laboratories that have both on-site testing and report results through *Electronic Laboratory Reporting* (ELR). Because data from the same laboratories are reported every week, these sites serve as virtual "sentinel surveillance" sites. Specimens tested by the LAC DPH Public Health Laboratory are excluded from analyses because testing at the PHL is prioritized for situations where a positive result is more likely to inform a public health response (healthcare workers, critically ill patients, persons in settings experiencing a respiratory illness outbreak).

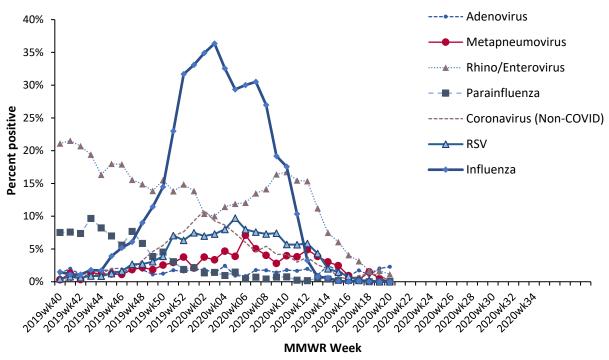
Figure 1. Respiratory Specimens Tested and Percent Positive for SARS-CoV-2 Reported by Select LAC Area Laboratories by MMWR Week of Specimen Collection.



Other Respiratory Viruses

Viral surveillance data is provided by eight clinical laboratories serving hospitals and healthcare networks across Los Angeles County. Participating laboratories provide the number of positive tests and total number of specimens tested for influenza and respiratory syncytial virus. Many participating laboratories also report data on other respiratory viruses.

Figure 2. Percentage of Respiratory Specimens Testing Positive by Viral Etiology, Los Angeles County Sentinal Surveillance Labs 2019-20 Influenza Season



Activity

Los Angeles County Emergency Department (ED) Influenza-Like Illness (ILI)

Public Health's Syndromic Surveillance Project monitors initial self-reported symptoms from patients presenting to participating emergency departments throughout LAC. These symptoms are categorized into different clinical syndromes according to specific code words. The syndrome of ILI is defined as mention of influenza; or fever (subjective or measured greater than 100°F) plus cough or sore throat. The proportion of ILI-ED visits for all ages and by age group is analyzed weekly and is conducted year-round. (Figures on following pages)



Figure 3. Emergency Department Visits for Influenza-like Illness, per 1,000, Los Angeles
County 2015-16 through 2019-20 Influenza Seasons

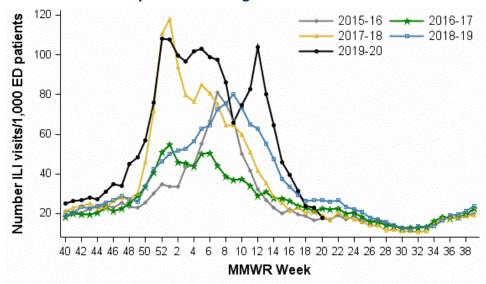


Figure 4. Emergency Department Visits for Influenza-like Illness by Age Groups
Los Angeles County, 2019-20 Influenza Season

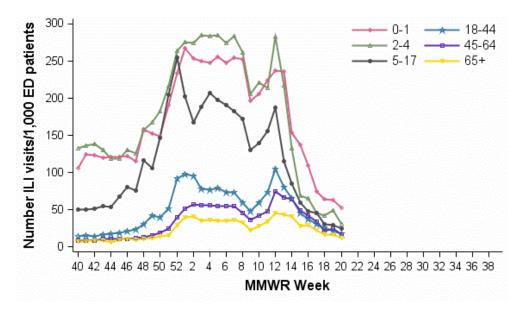
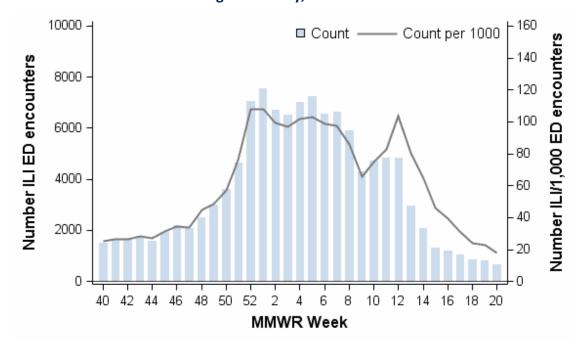


Figure 5. Rate and Count of Emergency Department Visits for Influenza-like Illness
Los Angeles County, 2019-20 Influenza Season

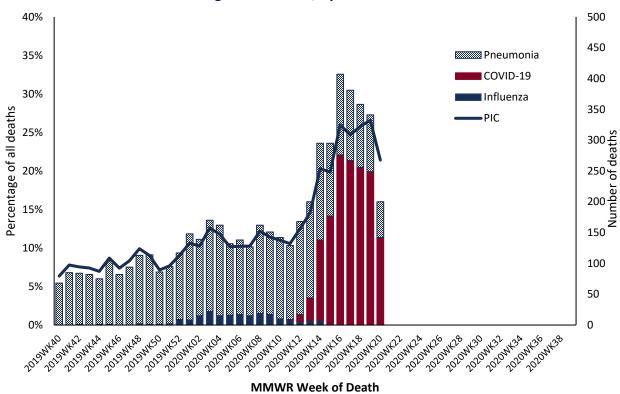


Severity

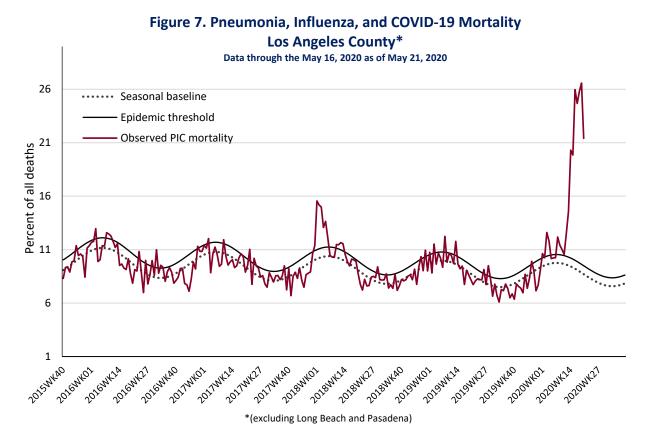
Pneumonia, Influenza and COVID-19 Mortality

Each week, the Office of Health Assessment and Epidemiology at LAC DPH reports the total number of death certificates received and the number of those for which pneumonia, influenza or COVID-19 (PIC) was listed as the underlying or contributing cause of death by age group.

Figure 6. Pneumonia, Influenza and COVID-19 Deaths and Percentage of All Deaths Registered in LAC, by MMWR Week of Death



The seasonal baseline of pneumonia, influenza and COVID-19 (PIC) deaths is calculated using a periodic regression model that incorporates a robust regression procedure applied to data from the previous 5 years. An increase of 1.645 standard deviations above the seasonal baseline of PIC deaths is considered the "epidemic threshold," i.e., the point at which the observed proportion of deaths attributed to pneumonia, influenza or COVID-19 was significantly higher than would be expected at that time of the year in the absence of substantial virus-related mortality.



Technical note: The number of deaths reported in recent weeks does not represent all deaths that occurred in the reporting period. Data may be incomplete due to a lag between when the death occurred and when the death was registered. Previous weeks counts or percentages may change as vital records are updated with lagged death certificates. The count includes all certificates of deaths (excludes fetal deaths) occurring in the County of Los Angeles (excluding Long Beach and Pasadena) regardless of the residence of the deceased.