COVIDView

A Weekly Surveillance Summary of U.S. COVID-19 Activity

Key Updates for Week 39, ending September 26, 2020

Nationally, indicators that track COVID-19 activity continued to decline or remain stable (change of ≤0.1%); however, three regions reported an increase in the percentage of specimens testing positive for SARS-CoV-2, the virus causing COVID-19, and two of those regions also reported an increase in the percentage of visits for influenza-like illness (ILI) or COVID-like illness (CLI) to emergency departments (EDs) or outpatient providers. Mortality attributed to COVID-19 declined but remains above the epidemic threshold.

Virus

Public Health, Commercial and Clinical Laboratories

Nationally, the percentage of respiratory specimens testing positive for SARS-CoV-2 decreased from 5.0% during week 38 to 4.8% during week 39. National percentages of specimens testing positive for SARS-CoV-2 by type of laboratory are listed.

- Public health laboratories – decreased from 5.1% during week 38 to 4.9% during week 39
- Clinical laboratories – increased slightly from 6.2% during week 38 to 6.3% during week 39
- Commercial laboratories – decreased from 4.8% during week 38 to 4.6% during week 39

Outpatient and Emergency Department Visits

Outpatient Influenza-Like Illness Network (ILINet) and National Syndromic Surveillance Program (NSSP)

Two surveillance networks are being used to track outpatient or emergency department (ED) visits for illness with symptoms compatible with COVID-19.

- Nationally, ILI activity remains below baseline for the 24th consecutive week and is at levels that are typical for this time of year.
- Nationally, the percentage of visits for ILI reported by ILINet participants and the percentage of visits for COVID-like illness (CLI) reported to NSSP remained stable (change of ≤0.1%) in week 39 compared with week 38.
- Recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit ED visits to severe illnesses, and increased social distancing, are likely affecting both networks, making it difficult to draw conclusions at this time. Tracking these systems moving forward will give additional insight into illness related to COVID-19.

Severe Disease

Hospitalizations

Cumulative COVID-19-associated hospitalization rates since March 1, 2020, are updated weekly. The overall cumulative COVID-19 hospitalization rate was 178.2 per 100,000, with the highest rates in people aged 65 years and older (481.5 per 100,000) and 50–64 years (266.3 per 100,000).

Mortality

Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza, or COVID-19 (PIC) for week 39 is 6.4%. This is currently lower than the percentage during week 38 (9.5%); however, the percentage remains above the epidemic threshold and will likely increase as more death certificates are processed.

All data are preliminary and may change as more reports are received. A description of the surveillance systems summarized in COVIDView, including methodology and detailed descriptions of each data component, is available on the surveillance methods page.

Key Points

- Nationally, since mid-July, there has been an overall decreasing trend in the percentage of specimens testing positive for SARS-CoV-2 and a decreasing or stable (change of ≤0.1%) trend in the percentage of visits for ILI and CLI; however, there has been some regional variation.
- Using combined data from the three laboratory types, the national percentage of respiratory specimens testing positive for SARS-CoV-2 with a molecular assay decreased from 5.0% during week 38 to 4.8% during week 39.
    - Regionally, the percentage of respiratory specimens testing positive for SARS-CoV-2 increased in Regions 7 (Central), 8 (Mountain) and 10 (Pacific Northwest) and decreased or remained stable in the remaining seven regions.
    - The highest percentage of specimens testing positive for SARS-CoV-2 were seen in Regions 6 (South Central, 8.0%), 7 (Central, 9.1%), and 8 (Mountain, 7.3%). Compared to week 38, the percentage of specimens testing positive during week 39 is increasing in Regions 7 and 8 and decreasing in Region 6.
- The percentage of outpatient or ED visits to ILINet providers for ILI is below baseline nationally and in all 10 regions of the country.
    - Compared with week 38, the percentage of visits for ILI during week 39 remained stable nationally and decreased or was stable (change of ≤0.1%) in nine of the 10 regions. Region 10 (Pacific Northwest) reported a slight increase.
- Nationally, the percentage of visits to EDs for CLI and ILI remained stable (change of ≤0.1%) in week 39 compared with week 38. This is the 11th consecutive week of a declining or stable percentage of visits for CLI and ILI.
    - Regions 5 (Midwest) and 8 (Mountain) reported an increase in the percentage of visits for CLI in week 38 compared to week 37, and Region 10 (Pacific Northwest) reported an increase in the percentage of visits for ILI. The remaining regions reported a stable (change of ≤0.1%) or decreasing percentage.
- The overall cumulative COVID-19-associated hospitalization rate was 178.2 per 100,000; rates were highest in people 65 years of age and older (481.5 per 100,000) followed by people 50–64 years (266.3 per 100,000).
    - From the week ending August 1 (MMWR week 31) to the week ending September 26 (MMWR week 39), weekly hospitalization rates declined for all adult age groups. However, over this same time period, weekly rates remained steady for the pediatric age groups. Data for the most recent weeks may change as additional admissions occurring during those weeks are reported.
    - The age-adjusted hospitalization rate for Hispanic or Latino persons was approximately 4.6 times that of non-Hispanic White persons. Age-adjusted hospitalization rates for both non-Hispanic Black persons and non-Hispanic American Indian or Alaska Native persons were approximately 4.5 times that of non-Hispanic White persons.
- Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza, or COVID-19 (PIC) for week 39 was 6.4%, which was lower than the percentage during week 38 (9.5%), but above the epidemic threshold. These percentages will likely increase as more death certificates are processed.
- All surveillance systems aim to provide the most complete data available. Estimates from previous weeks are subject to change as data are updated with the most complete data available.

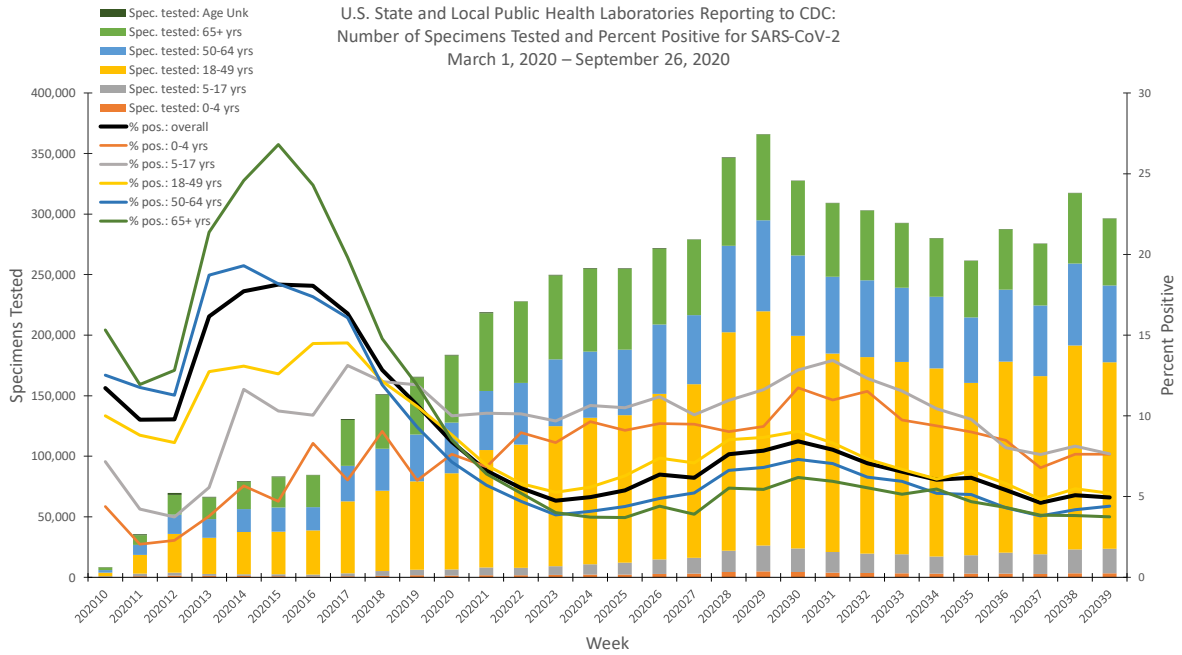
U.S. Virologic Surveillance

The number of specimens tested for SARS-CoV-2 using a molecular assay and reported to CDC by public health laboratories and a subset of clinical and commercial laboratories in the United States are summarized below. All laboratories are performing primary diagnostic functions; therefore, the percentage of specimens testing positive across laboratory types can be used to monitor overall trends in COVID-19 activity. As the outbreak progresses, it is possible that different types of laboratories will take on different roles, and the data interpretation may need to change.

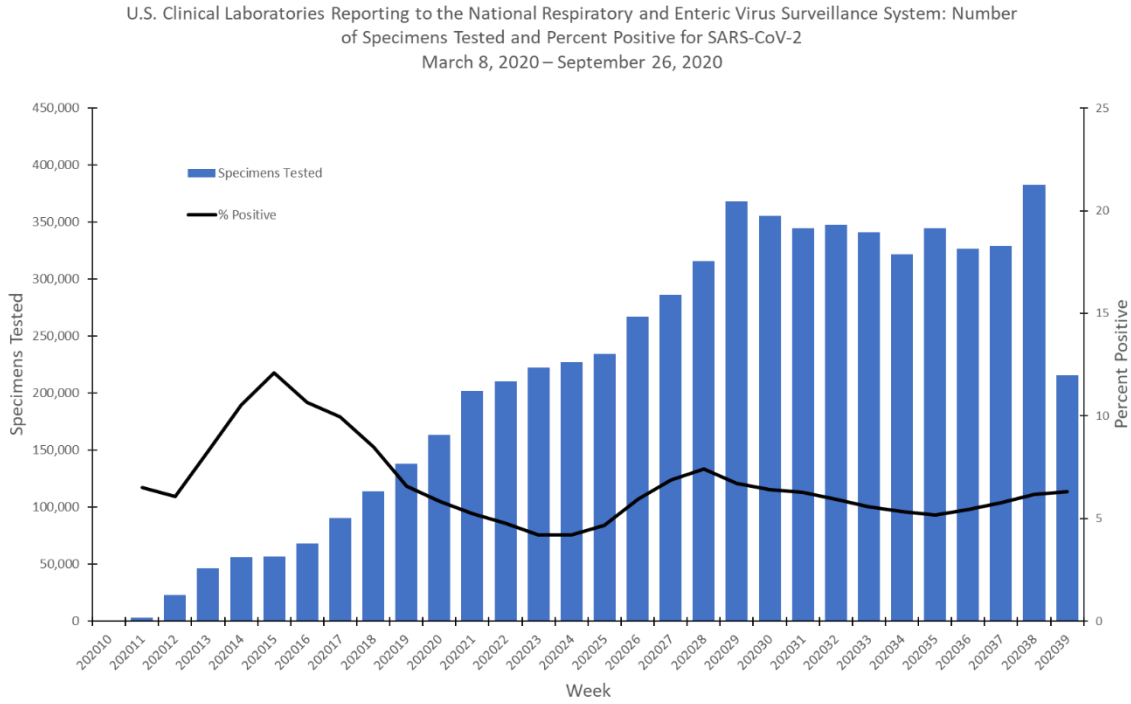
Summary of Laboratory Testing Results Reported to CDC*	Week 39 (Sept. 20–Sept. 26, 2020)	Cumulative since March 1, 2020
No. of specimens tested	2,080,268	53,644,944
Public Health Laboratories	296,373	6,481,480
Clinical Laboratories	216,040	6,403,163
Commercial Laboratories	1,567,855	40,760,301
No. of positive specimens (%)	99,950 (4.8%)	4,292,225 (8.0%)
Public Health Laboratories	14,670 (4.9%)	480,199 (7.4%)
Clinical Laboratories	13,629 (6.3%)	390,489 (6.1%)
Commercial Laboratories	71,651 (4.6%)	3,421,537 (8.4%)

* Commercial and clinical laboratory data represent select laboratories and do not capture all tests performed in the United States.

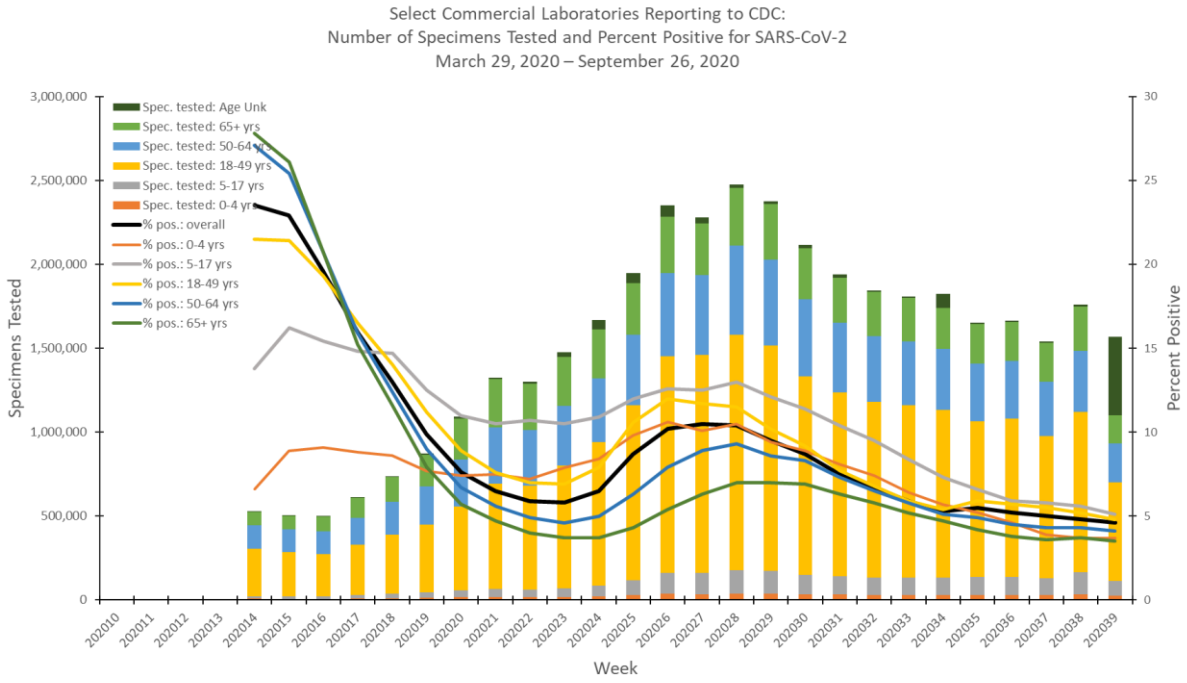
Public Health Laboratories



Clinical Laboratories



Commercial Laboratories



***** Commercial laboratories began testing for SARS-CoV-2 in early March, but the number and geographic distribution of reporting commercial laboratories became stable enough to calculate a weekly percentage of specimens testing positive as of March 29, 2020.

Additional virologic surveillance information: Surveillance Methods

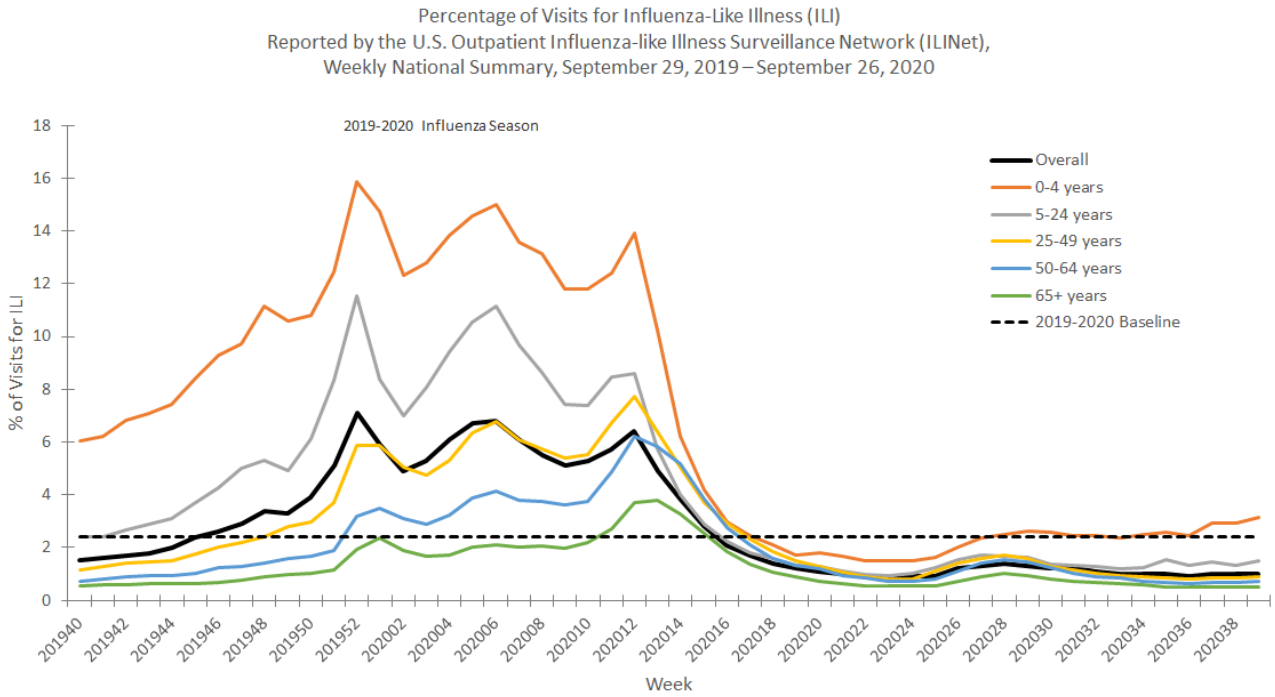
Outpatient/Emergency Department Illness

Two syndromic surveillance systems are being used to monitor trends in outpatient and emergency department (ED) visits that may be associated with COVID-19 illness. Each system monitors a slightly different syndrome, and together, these systems provide a more comprehensive picture of mild-to-moderate COVID-19 illness than either would individually. Both systems are currently being affected by changes in health care seeking behavior, including increased use of telemedicine, compliance with recommendations to limit ED visits to severe illnesses, and increased social distancing. These changes affect the numbers of people seeking care in the outpatient and ED settings and their reasons for doing so.

ILINet

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) provides data on visits for influenza-like illness (ILI) (fever [≥100°F] and cough and/or sore throat) to approximately 2,600 primary care providers, emergency departments, and urgent care centers in all 50 states, Puerto Rico, the District of Columbia, and the U.S. Virgin Islands. Mild COVID-19 illness presents with symptoms similar to ILI, so ILINet is being used to track trends of mild-to-moderate COVID-19 illness and allows for comparison with prior influenza seasons.

Nationwide during week 39, 1.0% of patient visits reported through ILINet were due to ILI. This percentage is below the national baseline of 2.4% and is typical for this time of year compared to previous influenza seasons. Compared with week 38, the percentage of visits for ILI during week 39 remained increased among those aged 0 to 4 years and 5 to 24 years but remained stable overall and among the adult age groups.



* Age-group specific percentages should not be compared with the national baseline.

On a regional level, the percentage of outpatient visits for ILI ranged from 0.7% to 1.4% during week 39 and was below the region-specific baseline in all regions. Compared with week 38, the percentage during week 39 increased in Region 10 (Pacific Northwest) and decreased or remained stable (change of ≤0.1%) in the remaining nine regions.

Note: In response to the COVID-19 pandemic, new data sources are being incorporated into ILINet through the summer weeks, when lower levels of influenza and other respiratory virus circulation are typical. Starting in week 21, enrollment of new sites began, leading to increases in the number of patient visits. While all regions remain below baseline levels for ILI, these system changes should be considered when drawing conclusions from these data. Any changes in ILI due to changes in respiratory virus circulation will be highlighted here.

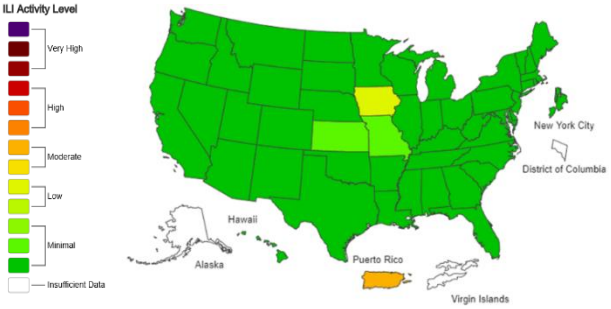
ILI Activity Levels

Data collected in ILINet are used to produce a measure of ILI activity for all 50 states, Puerto Rico, the U.S. Virgin Islands, the District of Columbia, and New York City. The mean reported percentage of visits due to ILI for the current week is compared with the mean reported during non-influenza weeks, and the activity levels correspond to the number of standard deviations below, at, or above the mean.

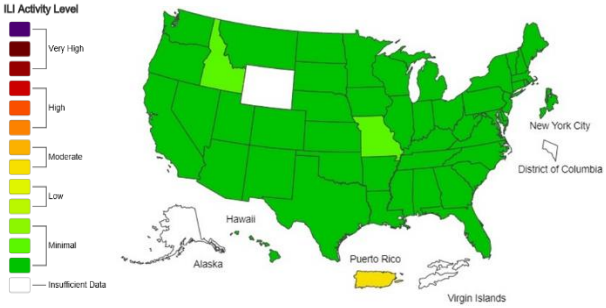
The number of jurisdictions at each activity level during week 39 and changes compared with the previous week are summarized in the table below and shown in the following maps.

Activity Level	Number of Jurisdictions	
	Week 39 (Week ending September 26, 2020)	Compared with Previous Week
Very High	0	No change
High	0	No change
Moderate	1	No change
Low	0	-1
Minimal	49	No change
Insufficient Data	4	+1

ILI Activity Level Map, Week ending 38September 19, 2020



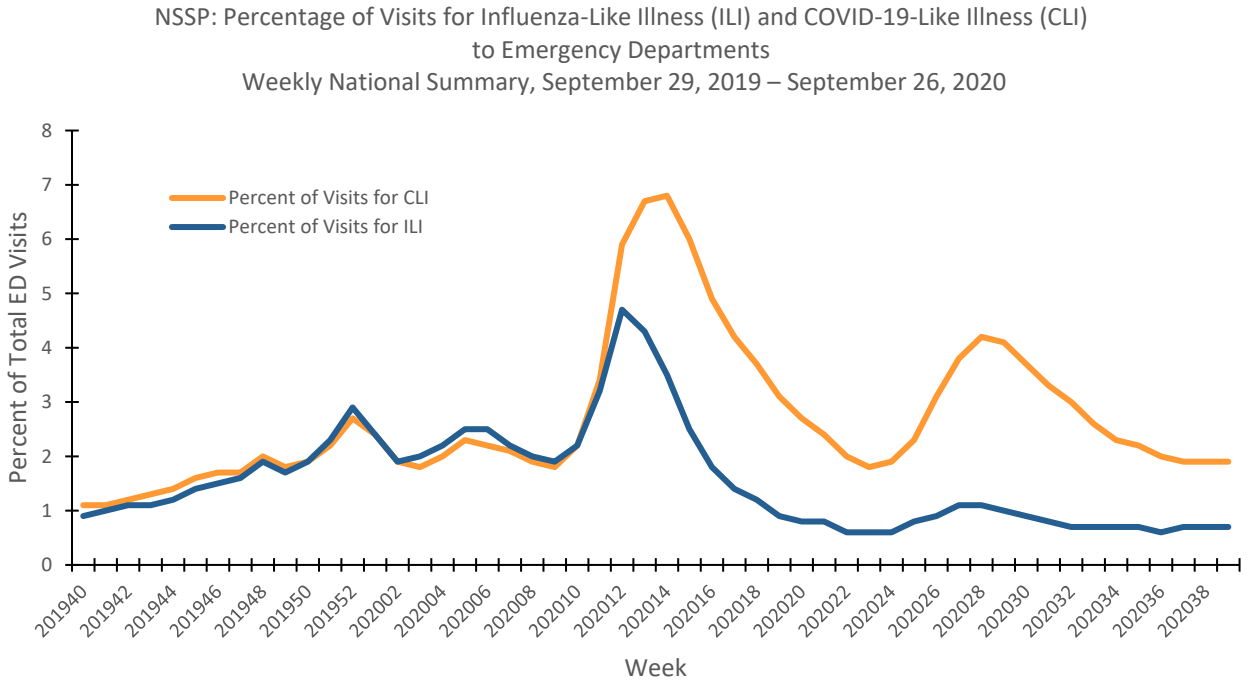
ILI Activity Level Map, Week 39 ending September 26, 2020



*Data collected in ILINet may disproportionally represent certain populations within a state and may not accurately depict the full picture of influenza activity for the whole state. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

National Syndromic Surveillance Program (NSSP): Emergency Department (ED) Visits
NSSP is a collaboration among CDC, federal partners, local, and state health departments and academic and private sector partners to collect, analyze, and share electronic patient encounter data received from multiple health care settings. To track trends of potential COVID-19 visits, visits for COVID-19-like illness (CLI) (fever and cough or shortness of breath or difficulty breathing or presence of a coronavirus diagnosis code) and ILI to a subset of emergency departments in 47 states are being monitored.

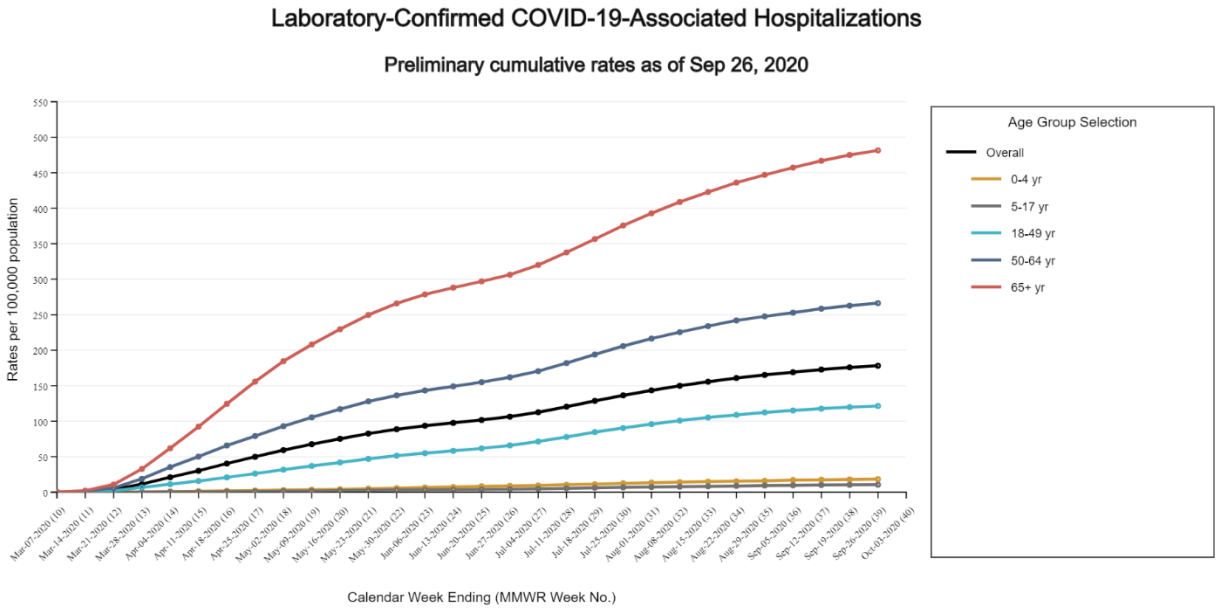
Nationwide during week 39, 1.9% of ED visits captured in NSSP were due to CLI and 0.7% were due to ILI. Compared with week 38, the percentage of visits for CLI and the percentage of visits for ILI this week decreased or remained stable (changes of ≤0.1%) nationally and in eight of 10 HHS regions. Regions 5 (Midwest) and 8 (Mountain) saw an increase in CLI while ILI percentages remained stable compared with week 38.



Additional information about medically attended outpatient and emergency department visits for ILI and CLI: Surveillance Methods

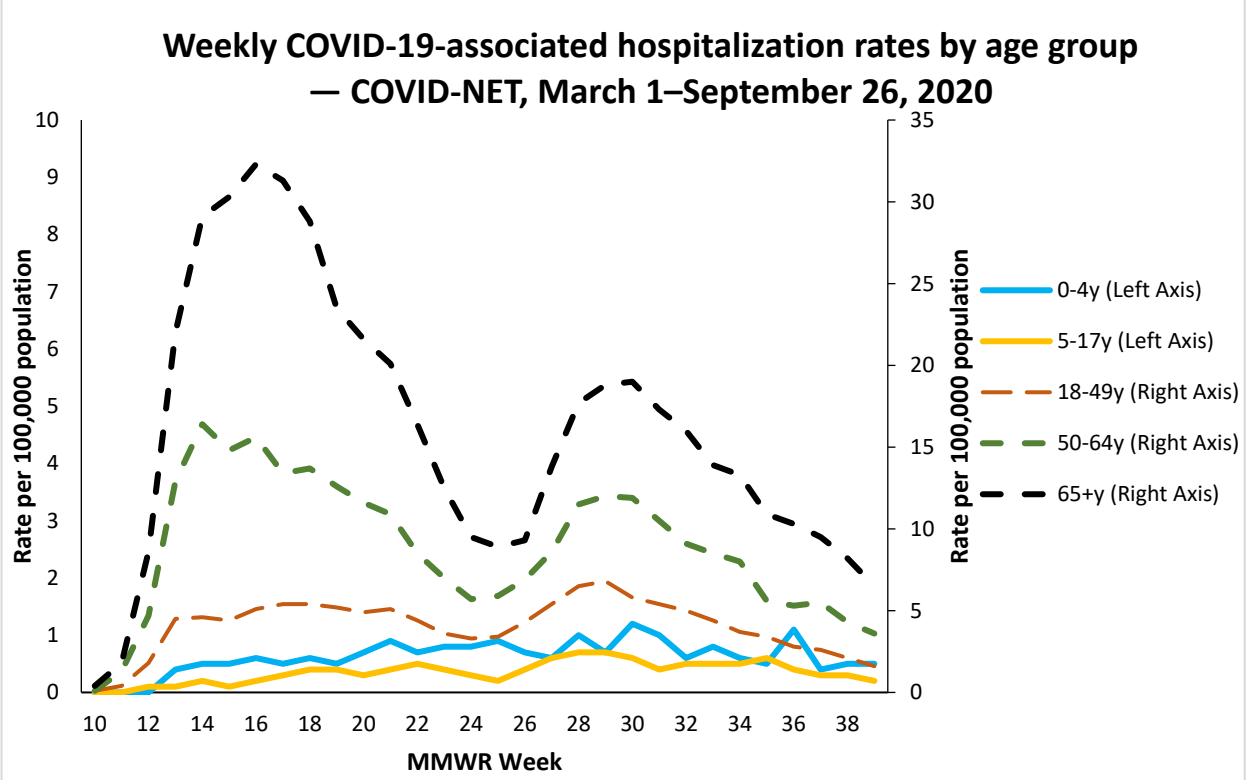
Hospitalizations
The COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in select counties participating in the Emerging Infections Program (EIP) and the Influenza Hospitalization Surveillance Project (IHSP).

A total of 58,088 laboratory-confirmed COVID-19-associated hospitalizations were reported by sites between March 1, 2020 and September 26, 2020. The overall cumulative hospitalization rate was 178.2 per 100,000 population. Among those aged 0–4 years, 5–17 years, 18–49 years, 50–64 years, and ≥65 years, the highest rate of hospitalization was among adults aged ≥65 years, followed by adults aged 50–64 years and adults aged 18–49 years.

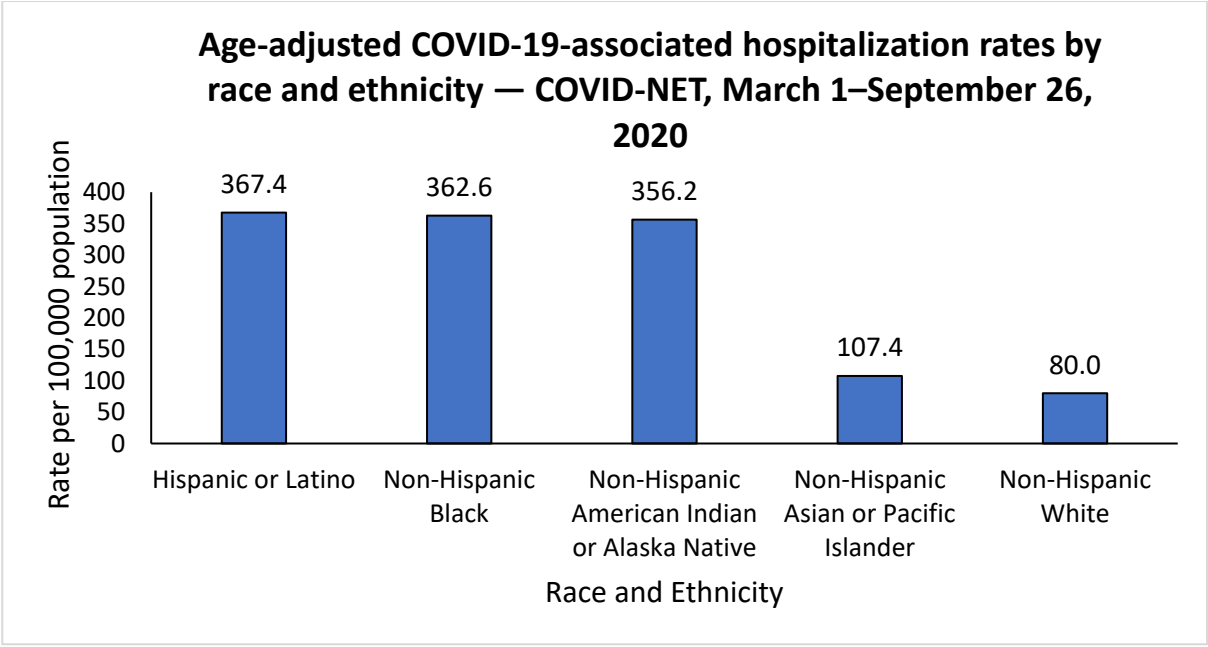


Age Group	Cumulative Rate per 100,000 Population
Overall	**178.2**
0–4 years	**18.4**
5–17 years	**10.6**
18–49 years	**121.4**
18–29 years	78.5
30–39 years	121.4
40–49 years	176.8
50–64 years	**266.3**
65+ years	**481.5**
65–74 years	361.5
75–84 years	572.6
85+ years	865.8

Weekly hospitalization rates among all ages first peaked during the week ending April 18 (MMWR week 16), followed by a second peak during the week ending July 18 (MMWR week 29). From the week ending August 1 (MMWR week 31) to the week ending September 26 (MMWR week 39), weekly hospitalization rates declined for all adult age groups. However, over this same time period, weekly rates remained steady for the pediatric age groups. Data for the most recent weeks may change as additional admissions occurring during those weeks are reported.



Among the 58,088 laboratory-confirmed COVID-19-associated hospitalizations, 55,241 (95.1%) had information on race and ethnicity, while collection of race and ethnicity was still pending for 2,847 (4.9%) cases. When examining overall age-adjusted rates by race and ethnicity, the rate for Hispanic or Latino persons was approximately 4.6 times the rate among non-Hispanic White persons. Age-adjusted hospitalization rates for both non-Hispanic Black persons and non-Hispanic American Indian or Alaska Native persons were approximately 4.5 times that of non-Hispanic White persons.



When examining age-stratified crude hospitalization rates by race and ethnicity, compared with non-Hispanic White persons in the same age group, crude hospitalization rates were 7.5 times higher among Hispanic or Latino persons aged 0–17 years; 8.2 times higher among Hispanic or Latino persons aged 18–49 years; 6.1 times higher among non-Hispanic American Indian or Alaska Native persons aged 50–64 years; and 3.7 times higher among non-Hispanic Black persons aged ≥65 years.

Hospitalization rates per 100,000 population by age and race and ethnicity — COVID-NET, March 1, 2020–September 26, 2020

Age Category	Non-Hispanic American Indian or Alaska Native		Non-Hispanic Black		Hispanic or Latino		Non-Hispanic Asian or Pacific Islander		Non-Hispanic White	
	Rate[1]	Rate Ratio[2,3]	Rate[1]	Rate Ratio[2,3]	Rate[1]	Rate Ratio[2,3]	Rate[1]	Rate Ratio[2,3]	Rate[1]	Rate Ratio[2,3]
0–17 years	11.7	3.4	19.2	5.6	25.5	**7.5**	6.6	1.9	3.4	1
18–49 years	269.2	7.8	198.2	5.7	285.2	**8.2**	57.0	1.6	34.7	1
50–64 years	654.0	**6.1**	553.3	5.2	610.4	5.7	170.3	1.6	107.2	1
65+ years	719.2	2.4	1091.0	**3.7**	807.2	2.7	327.9	1.1	298.2	1
Overall rate[4](age-adjusted)	356.2	4.5	362.6	4.5	367.4	**4.6**	107.4	1.3	80.0	1

[1] COVID-19-associated hospitalization rates by race and ethnicity are calculated using COVID-NET hospitalizations with known race and ethnicity for the numerator and NCHS bridged-race population estimates for the denominator.
[2] For each age category, rate ratios are the ratios between crude hospitalization rates within each racial and ethnic group and the crude hospitalization rate among non-Hispanic white persons in the same age category.
[3] The highest rate ratio in each age category is presented in **bold**.
[4] Overall rates are adjusted to account for differences in age distributions within race and ethnicity strata in the COVID-NET catchment area; the age strata used for the adjustment include 0–17, 18–49, 50–64, and 65+ years.

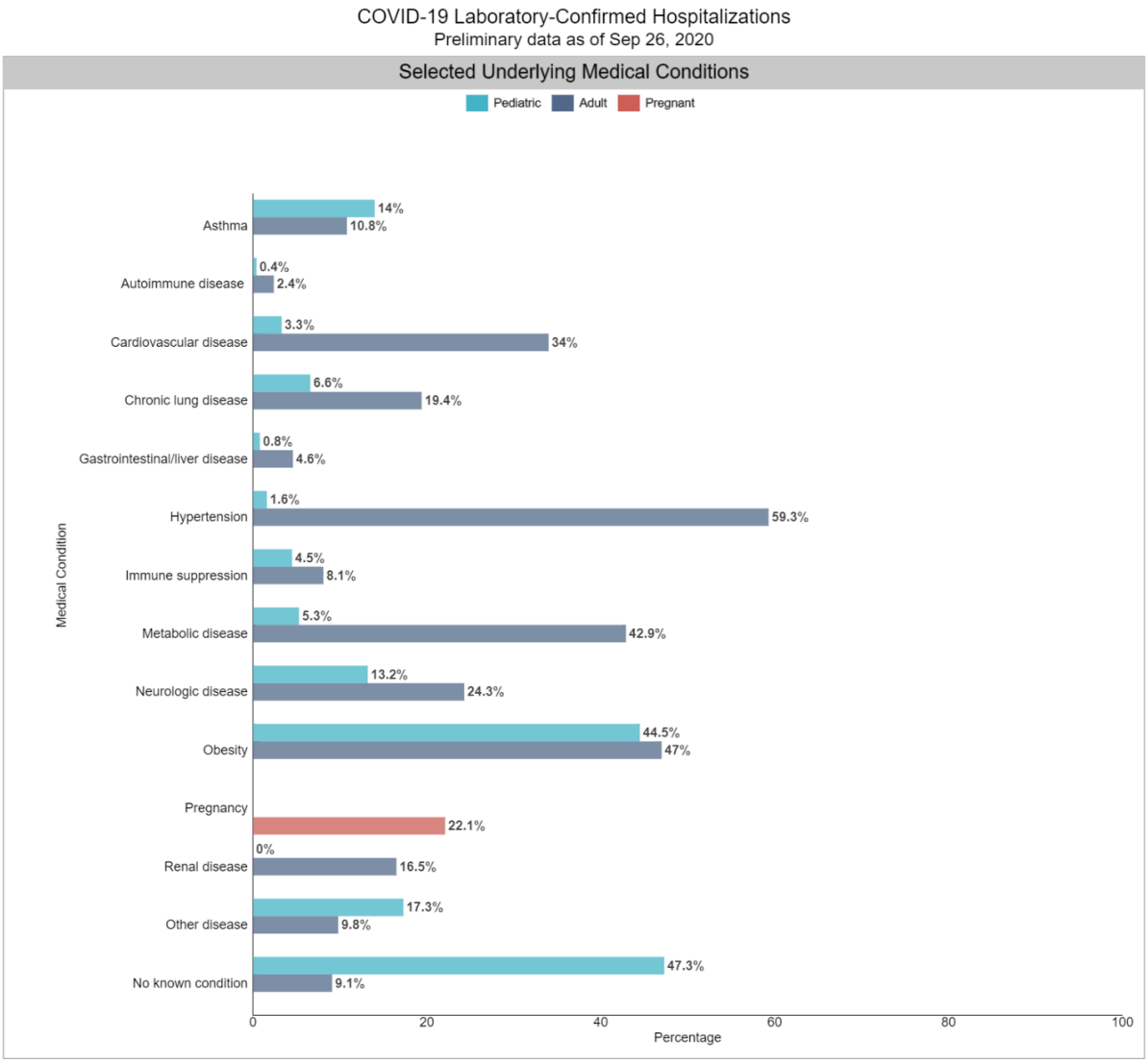
Non-Hispanic Black persons and non-Hispanic White persons represented the highest proportions of hospitalizations reported to COVID-NET, followed by Hispanic or Latino, non-Hispanic Asian or Pacific Islander, and non-Hispanic American Indian or Alaska Native persons. However, some racial and ethnic groups are disproportionately represented among hospitalizations as compared with the overall population of the catchment area. Prevalence ratios were highest among non-Hispanic American Indian or Alaska Native persons, followed by non-Hispanic Black persons and Hispanic or Latino persons.

Comparison of proportions of COVID-19-associated hospitalizations by race and ethnicity, COVID-NET, March 1–September 26, 2020

	Non-Hispanic American Indian or Alaska Native	Non-Hispanic Black	Hispanic or Latino	Non-Hispanic Asian or Pacific Islander	Non-Hispanic White
Proportion of COVID-NET hospitalizations[1]	1.3%	32.8%	23.1%	5.1%	32.1%
Proportion of population in COVID-NET catchment area	0.7%	17.9%	14.1%	8.9%	58.5%
Prevalence ratios[2]	1.9	1.8	1.6	0.6	0.5

[1] Persons of multiple races (0.3%) or unknown race and ethnicity (5.3%) are not represented in the table but are included as part of the denominator.
[2] Prevalence ratio is calculated as the ratio of the proportion of COVID-NET hospitalizations over the proportion of population in COVID-NET catchment area.

For underlying medical conditions, data were restricted to cases reported during March 1–May 31, 2020, due to delays in reporting. During this time frame, sampling was conducted among hospitalized adults; therefore, weighted percentages are reported. Among 7,865 sampled adults hospitalized during March 1–May 31, 2020, 90.9% reported at least one underlying medical condition. The most commonly reported were hypertension, obesity, metabolic disease, and cardiovascular disease. No sampling was conducted among hospitalized children. Among 243 children hospitalized during March 1–May 31, 2020, 52.7% reported at least one underlying medical condition. The most commonly reported underlying medical conditions were obesity, asthma, and neurologic disease.



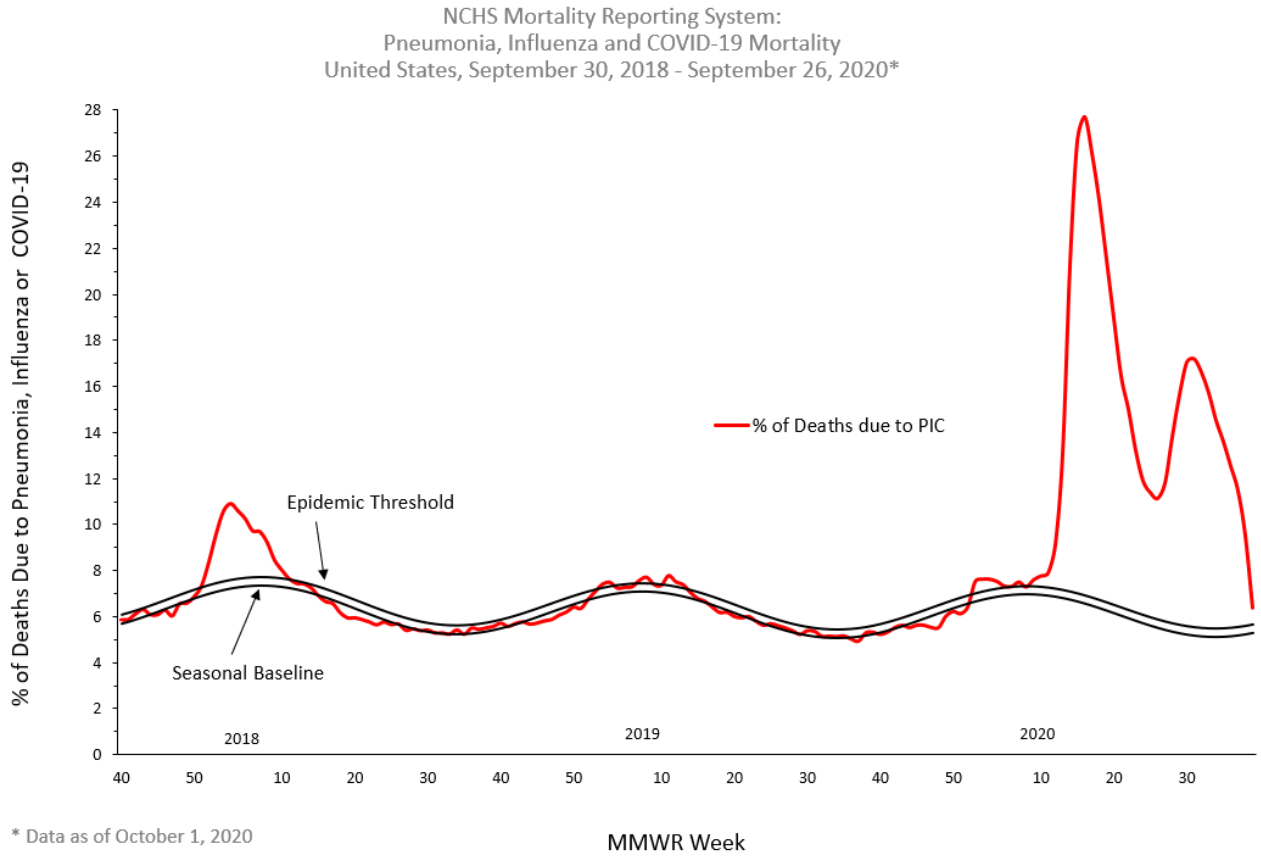
Additional data on demographics, signs and symptoms at admission, underlying conditions, interventions, outcomes and discharge diagnoses, stratified by age, sex and race and ethnicity, are available.

Additional hospitalization surveillance information:
Surveillance Methods | Additional rate data | Additional demographic and clinical data

Mortality Surveillance

The National Center for Health Statistics (NCHS) collects death certificate data from vital statistics offices for all deaths occurring in the United States. Based on death certificate data available on October 1, 2020, the percentage of deaths attributed to pneumonia, influenza, or COVID-19 (PIC) for week 39 is 6.4% and, while lower than the percentage during week 38 (9.5%), remains above the epidemic threshold. Percentages for recent weeks will likely increase as more death certificates are processed.

Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Percentages of deaths due to PIC are higher among manually coded records than more rapidly available machine coded records. Due to the additional time needed for manual coding, the initially reported PIC percentages may be lower than percentages calculated from final data.



*Data during recent weeks are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes.

Additional NCHS mortality surveillance information: Surveillance Methods | Provisional Death Counts for COVID-19

Report prepared: October 1, 2020

Detailed data tables are available on the COVIDView page