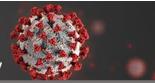


A Weekly Surveillance Summary of U.S. COVID-19 Activity



Key Updates for Week 29, ending July 18, 2020

Nationally, levels of influenza-like illness (ILI) are below baseline, but higher than typically seen at this time of year. Indicators that track COVID-19-like illness (CLI) and laboratory confirmed SARS-CoV-2 showed decreases from week 28 to week 29 nationally; however, there were regional differences. Areas of the country with high levels of CLI and laboratory confirmed SARS-CoV-2 in recent weeks (Regions 4 [South East], 6 [South Central] and 9 [South West/ Coast]) are starting to show signs of decreasing activity whereas other parts of the country (Regions 7 [Midwest], 5 [Central] and 8 [Mountain]) are increasing. Hospitalization rates show an increasing trend. Mortality attributed to COVID-19 remains above the epidemic threshold and increased slightly during the first two weeks of July after declining for 11 weeks since mid-April.

Virus

Public Health, Commercial and Clinical Laboratories

Nationally, the overall percentage of respiratory specimens testing positive for SARS-CoV-2 decreased from week 28 (9.3%) to week 29 (8.6%) but increased in four regions. National percentages of specimens testing positive for SARS-CoV-2 by type of laboratory:

- Public health laboratories increased from 7.5% during week 28 to 8.0% during week 29;
- Clinical laboratories decreased from 7.2% during week 28 to 5.7% during week 29;
- Commercial laboratories decreased from 9.9% during week 28 to 9.1% during week 29.

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 fourteenth week but is higher than typically seen at this time of year.
- During week 29, most regions had only slight changes in the percentage of visits for ILI or CLI; however, Regions 4 (South East), 6 (South Central) and 9 (South West/ Coast) reported a decrease in the percentage of visits for CLI.
- Recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing, are likely affecting data reported from 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 is 120.9 per 100,000, with the highest rates in people aged 65 years and older (338.2 per 100,000) and 50-64 years (182.3 per 100,000). From June 20 – July 11, overall weekly hospitalization rates increased for three consecutive week.

Mortality

Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) increased from week 26 – week 28 (June 27 – July 11) for the first time since mid-April. The percentage for week 29 is 9.1% and currently lower than the percentage during week 28 (11.5%); however,the percentage remains above the epidemic threshold. These percentages will likely change as more death certificates are processed.

Key Points

- There are increases in the percentage of specimens testing positive for SARS-CoV-2 and the percentage of visits for ILI and/or CLI in multiple parts of the country. Three HHS regions (Regions 4 [South East], 6 [South Central] and 9 [South West/Coast]) are reporting percentage of visits for CLI and/or percentage of specimens testing positive for SARS-CoV-2 at higher levels than were seen in March/April, but these regions are starting to show evidence of declines in activity following the early July peak.
- 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 week 28 (9.3%) to week 29 (8.6%).
 - The highest percentages of specimens testing positive for SARS-CoV-2 were seen in Regions 4 (South East, 13.9%), 6 (South Central, 15.7%) and 9 (South West/Coast, 9.7%).
 - Increasing trends in the percentage of specimens testing positive for SARS-CoV-2 were reported in four of ten HHS surveillance regions: Regions 2 (NY/NJ/Puerto Rico), 5 (Midwest), 7 (Central) and 8 (Mountain).
- The percentage of outpatient and ED visits for ILI are below baseline nationally and in all regions of the country; however, ILI activity is above what is typical for this time of year. The percentage of visits to EDs for CLI decreased nationally and in the 3 regions (Region 4 [South East], 6 [South Central] and 9 [South West/ Coast] that were previously reporting the highest levels of CLI activity. CLI remained stable in the remaining areas of the country.
 - Systems monitoring ILI and CLI may be influenced by recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing.
- The overall cumulative COVID-19-associated hospitalization rate is 120.9 per 100,000; rates were highest in people 65 years of age and older (338.2 per 100,000) followed by people 50-64 years (182.3 per 100,000). Hospitalization rates are cumulative and will increase as the pandemic continues.
 - From week 25 week 28 (weeks ending June 20 July 11), overall weekly hospitalization rates increased for three consecutive weeks.
 - Non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.3 times that of non-Hispanic White persons. Rates for non-Hispanic Black persons and Hispanic or Latino persons are approximately 4.7 and 4.6 times the rate among non-Hispanic White persons, respectively.
 - Over a period of time similar to the length of an influenza season, overall cumulative hospitalization rates for COVID-19 are higher than cumulative end-of-season hospitalization rates for influenza for each of the past 5 influenza seasons. However, for children (0-17 years), cumulative COVID-19 hospitalization rates are lower than cumulative influenza hospitalization rates during recent influenza seasons.
- Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) increased from week 26 – week 28 (weeks ending June 27 – July 11) after declining for 11 weeks since mid-April. The percentage of deaths due to PIC for week 29 is 9.1%, lower than the percentage during week 28 (11.5%), but above the epidemic threshold. These percentages will likely change as more death certificates are processed.



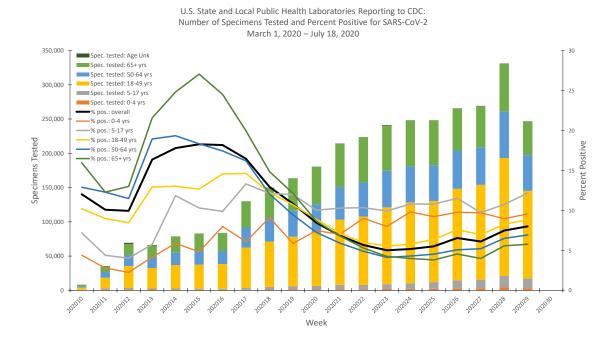
U.S. Virologic Surveillance

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 29 (July 12 – July 18, 2020)	Cumulative since March 1, 2020		
No. of specimens tested	1,796,223	28,745,587		
Public Health Laboratories	246,839	3,342,648		
Clinical Laboratories	168,389	2,834,547		
Commercial Laboratories	1,380,995	22,568,392		
No. of positive specimens (%)	155,204 (8.6%)	2,762,464 (9.6%)		
Public Health Laboratories	19,771 (8.0%)	285,259 (8.5%)		
Clinical Laboratories	9,615 (5.7%)	177,956 (6.3%)		
Commercial Laboratories	125,818 (9.1%)	2,299,249 (10.2%)		

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

Public Health Laboratories



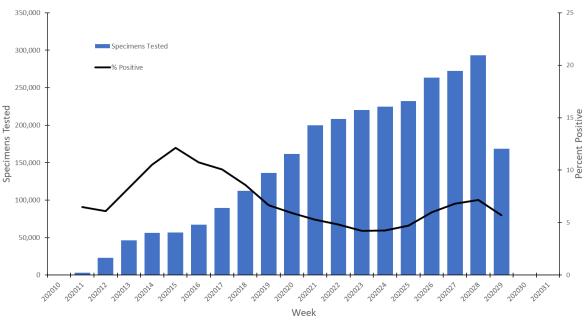


Clinical Laboratories

U.S. Clinical Laboratories Reporting to the National Respiratory and Enteric Virus Surveillance System:

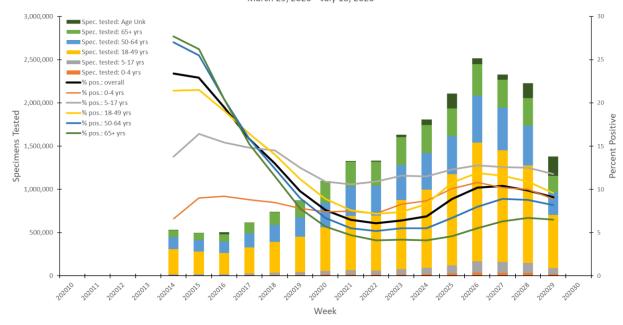
Number of Specimens Tested and Percent Positive for SARS-CoV-2

March 8, 2020 – July 18, 2020

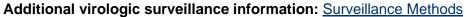


Commercial Laboratories

Select Commercial Laboratories Reporting to CDC: Number of Specimens Tested and Percent Positive for SARS-CoV-2 March 29, 2020 – July 18, 2020



^{*} 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.





Outpatient/Emergency Department Illness

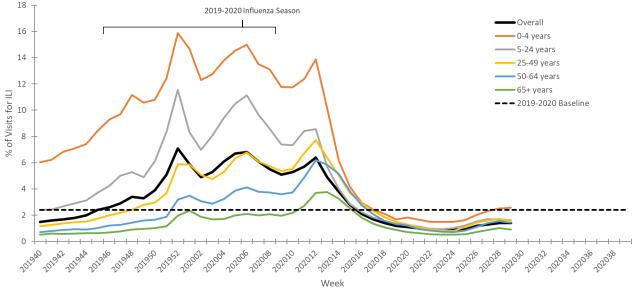
Two syndromic surveillance systems are being used to monitor trends in outpatient and emergency department visits that may be associated with COVID-19 illness. Each system monitors a slightly different syndrome, and together, these systems provide a more comprehensive picture of mild-to-moderate COVID-19 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 emergency department (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 29, 1.4% of patient visits reported through ILINet were due to ILI. This percentage is well below the national baseline of 2.4% and, while low overall, is higher than what is typical for this time of year compared to previous influenza seasons. Compared to week 28, the percentage of visits for ILI during week 29 was slightly higher for 0-4 year olds but slightly lower for all other age groups.





^{*} Age-group specific percentages should not be compared to the national baseline.



On a <u>regional level</u>, the percentage of outpatient visits for ILI ranged from 0.5% to 2.2% during week 29. All ten regions are below their region-specific baselines and reported only slight fluctuations in the percentrage of visits for ILI during week 29 compared to week 28.

Note: In response to the COVID-19 pandemic, new data sources will be incorporated into ILINet as we move into summer weeks when lower levels of influenza and other respiratory virus circulation are typical. Starting in week 21, increases in the number of patient visits will be seen as new sites are enrolled and the percentage of visits for ILI may change in comparison to previous weeks. 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 <u>ILI activity</u> for all 50 states, Puerto Rico, the District of Columbia and New York City. The mean reported percentage of visits due to ILI for the current week is compared to the mean reported during non-influenza weeks, and the activity levels correspond to the number of standard deviations below, at or above the mean.

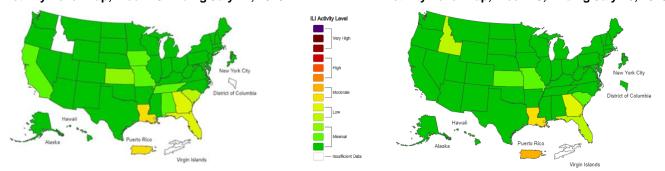
The number of jurisdictions at each activity level during week 29 and the change compared to the previous week are summarized in the table below and shown in the following maps.

	Number of Jurisdictions				
Activity Level	Week 29 (Week ending July 18, 2020)	Compared to Previous Week			
Very High	0	No change			
High	0	No change			
Moderate	2	No change			
Low	3	+1			
Minimal	48	-1			
Insufficient Data	1	No change			



ILI Activity Level Map, Week 28 Ending July 11, 2020

ILI Activity Level Map, Week 29, Ending July 18, 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.

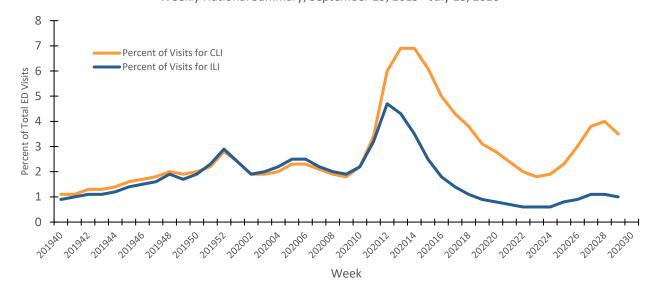
Nationwide during week 29, 3.5% of emergency department visits captured in NSSP were due to CLI and 1.0% were due to ILI. In comparison to week 28, this week there was a decrease in the percentage of visits for both CLI and ILI. However, the percentage of visits for CLI increased from week 23 through week 28, and trends presented this week may change as more ED visit data are received.

During week 29, seven of <u>ten HHS regions</u> (Regions 1 [New England], 2 [NY/NJ/Puerto Rico], 3 [Mid-Atlantic], 5 [Midwest], 7 [Central], 9 [Mountain] and 10 [Pacific Northwest]) reported only slight fluctuations in percentage of visits for CLI compared to week 28. Three regions (Regions 4 [South East], 6 [South Central] and 9 [South West/Coast] that have been reporting elevated levels of CLI for several weeks, reported declines in week 29 compared to week 28.



NSSP: Percentage of Visits for Influenza-Like Illness (ILI) and COVID-19-Like Illness (CLI) to Emergency Departments

Weekly National Summary, September 29, 2019 - July 18, 2020



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

Hospitalizations

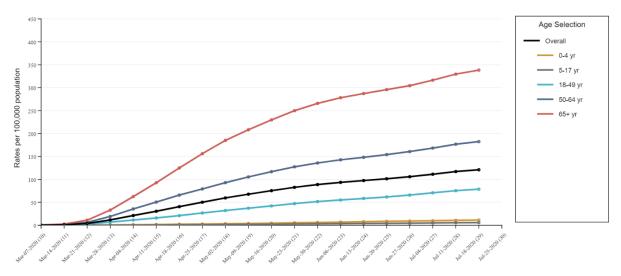
The COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in select counties participating in the Emerging Infections Program (EIP) and the Influenza Hospitalization Surveillance Project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

A total of 39,432 laboratory-confirmed COVID-19-associated hospitalizations were reported by sites between March 1, 2020 and July 18, 2020. The overall cumulative hospitalization rate is 120.9 per 100,000 population. Among the 0-4 years, 5-17 years, 18-49 years, 50-64 years, and \geq 65 years age groups, the highest rate of hospitalization is among adults aged \geq 65, followed by adults aged 50-64 years and adults aged 18-49 years.



Laboratory-Confirmed COVID-19-Associated Hospitalizations

Preliminary cumulative rates as of Jul 18, 2020



Calendar Week End Date (MMWR Week No.)

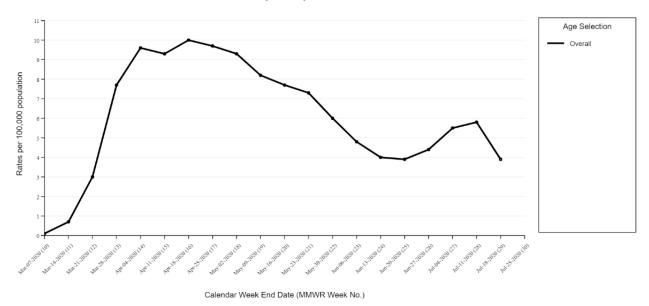
Age Group	Cumulative Rate per 100,000 Population
Overall	120.9
0-4 years	11.2
5-17 years	5.8
18-49 years	78.6
18-29 years	47.1
30-39 years	77.2
40-49 years	121.0
50-64 years	182.3
65+ years	338.2
65-74 years	249.6
75-84 years	400.1
85+ years	635.1

From June 20 (MMWR week 25) - July 11 (MMWR week 28), overall weekly hospitalization rates increased for three consecutive weeks. Data for the week ending July 18 (MMWR week 29) currently show a decline; however, those data are likely to change as more data for admissions occurring during that week are received.



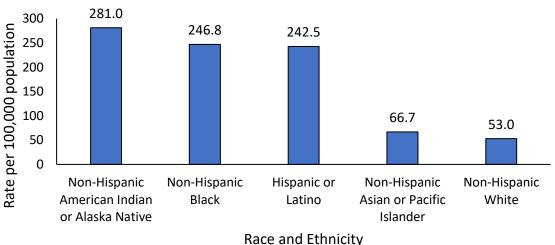
Laboratory-Confirmed COVID-19-Associated Hospitalizations

Preliminary weekly rates as of Jul 18, 2020



Among the 39,432 laboratory-confirmed COVID-19-associated hospitalized cases, 37,108 (94.1%) have information on race and ethnicity, while collection of race and ethnicity is still pending for 2,324 (5.9%) cases. When examining overall age-adjusted rates by race/ethnicity, non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.3 times that of non-Hispanic White persons. Rates for non-Hispanic Black persons and Hispanic or Latino persons are approximately 4.7 and 4.6 times the rate among non-Hispanic White persons, respectively.







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 are 7.5 times higher among Hispanic or Latino persons aged 0-17 years; 9.8 times higher among non-Hispanic American Indian or Alaska Native persons aged 18-49 years; 7.4 times higher among non-Hispanic American Indian or Alaska Native persons aged 50-64 years; and 3.8 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–July 18, 2020

An Ind		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	Rate ¹	Rate Ratio ²	Rate ¹	Rate Ratio ²	Rate ¹	Rate Ratio ²	Rate ¹	Rate Ratio ²
0-17y	7.8	3.9	9.2	4.6	14.9	7.5	3.6	1.8	2.0	1
18-49y	205.8	9.8	120.0	5.7	190.8	9.1	34.8	1.7	20.9	1
50-64y	510.4	7.4	381.0	5.5	414.3	6.0	107.0	1.5	69.3	1
65+y	597.2	2.9	784.5	3.8	513.4	2.5	204.5	1.0	206.9	1
Overall rate ³ (age-adjusted)	281.0	5.3	246.8	4.7	242.5	4.6	66.7	1.3	53.0	1

¹ COVID-19-associated hospitalization rates by race/ethnicity are calculated using hospitalized COVID-NET cases with known race and ethnicity for the numerator and NCHS bridged-race population estimates for the denominator.

Non-Hispanic Black persons and non-Hispanic White persons represent the highest proportions of hospitalized cases 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 hospitalized cases as compared with the overall population of the catchment area. Prevalence ratios show a similar pattern to that of the age-adjusted hospitalization rates: non-Hispanic American Indian or Alaska Native persons have the highest prevalence ratio, followed by non-Hispanic Black, and Hispanic or Latino persons.



² For each age category, rate ratios are the ratios between crude hospitalization rates within each racial/ethnic group and the crude hospitalization rate among non-Hispanic white persons in the same age category.

³ Overall rates are adjusted to account for differences in age distributions within race/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.

Comparison of proportions of COVID-19-Associated Hospitalizations, by race and ethnicity, COVID-NET, March 1–July 18, 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 hospitalized COVID- NET cases ¹	1.5%	32.9%	22.8%	4.7%	31.8%
Proportion of population in COVID-NET catchment area	0.7%	17.7%	14.0%	8.8%	58.8%
Prevalence ratios ²	2.1	1.9	1.6	0.5	0.5

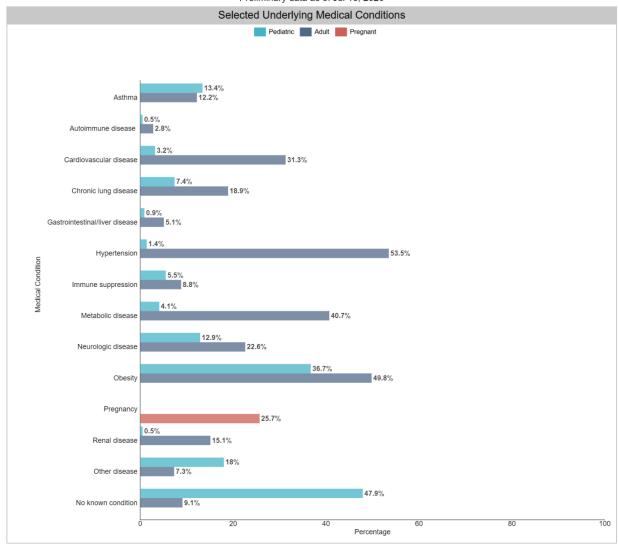
¹ Persons of multiple races (0.2%) or unknown race and ethnicity (6.1%) are not represented in the table but are included as part of the denominator.

Among 10,227 hospitalized adults with information on underlying medical conditions, 90.9% have at least one reported underlying medical condition. The most commonly reported were hypertension, obesity, chronic metabolic disease, and cardiovascular disease. Among 217 hospitalized children with information on underlying conditions, 52.1% had at least one reported underlying medical condition. The most commonly reported were obesity, asthma, and neurologic conditions.



² Prevalence ratio is calculated as the ratio of the proportion of hospitalized COVID-NET cases over the proportion of population in COVID-NET catchment area.

COVID-19 Laboratory-Confirmed Hospitalizations Preliminary data as of Jul 18, 2020



<u>Additional data</u> 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:

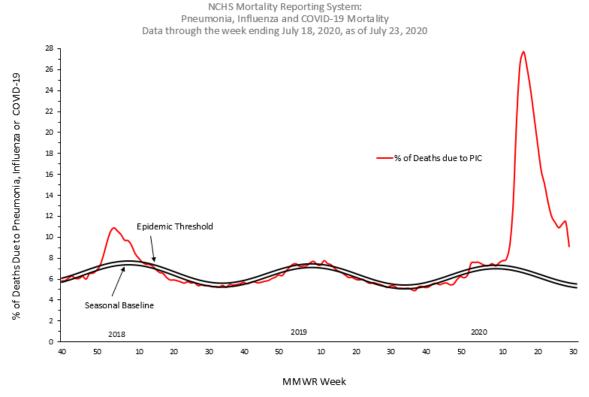
Surveillance Methods | Additional rate data | Additional demographic and clinical data



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 July 23, 2020, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) increased from week 26 – week 28 (June 27 – July 11) after declining for 11 weeks since mid-April. The percentage of deaths due to PIC for week 29 is 9.1% and, while lower than the percentage during week 28 (11.5%), remains above the epidemic threshold. These percentages will likely change 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: <u>Surveillance Methods</u> | <u>Provisional Death Counts for COVID-19</u>

Report prepared: July 23, 2020

Detailed data tables are available on the COVIDView page

