DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION

Committees on Appropriations of the House of Representatives and the Senate,
Committee on Energy and Commerce of the House of Representatives,
and
Committee on Health, Education, Labor, and Pensions of the Senate

Report to Congress on

Paycheck Protection Program and Health Care Enhancement Act Disaggregated Data on U.S. Coronavirus Disease 2019 (COVID-19) Testing

3rd 30-Day Update

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Contents

Overview	3
Executive Summary	
Key Findings	
Data Sources and Completeness	
Case Report Data	
COVID-NET Hospitalization Data	
Mortality Data	
Trends in Reported Cases	
All Cases	
Cases by Sex	
Cases by Age	
Cases by Race/Ethnicity	10
Cases by Race/Ethnicity and Age Group	11
Summary of Case Data	12
Trends in Hospitalizations	
Overall Hospitalizations	14
Hospitalizations by Sex	14
Hospitalizations by Age	14
Hospitalizations by Race/Ethnicity	15
Hospitalizations by Race/Ethnicity and Age Group	16
Summary of Hospitalization Data	17
Trends in Deaths	17
All Deaths	17
Deaths by Sex	17
Deaths by Age Group	18
Deaths by Race/Ethnicity	19
Deaths by Race/Ethnicity and Age Group	20
Summary of Death Data	22
Testing	23
Summary of Testing	
County Level Analysis	24
Counties with High Recent Burden of COVID-19 (July 10-23, 2020)	24
Distribution of high recent burden counties across race-ethnicity groups	26
Counties with large non-Hispanic Black populations and high recent burden	27
Counties with large Hispanic populations and high recent burden	28
Counties with large non-Hispanic Asian populations and high recent burden	30

Counties with large non-Hispanic Native Hawaiian or other Pacific Islander populations recent burden	O
Counties with large non-Hispanic American Indian or Alaska Native populations and hig	,
Future reporting on geographic disparities by race and ethnicity	3!
Looking Forward	3!
Appendix A: Sources of Data for Race and Ethnicity	37
Appendix B: Case and Death Count by Jurisdiction Table	

Overview

The Paycheck Protection Program and Health Care Enhancement Act, in appropriating supplemental funds to the Department of Health and Human Services (HHS) for coronavirus response, states, in part:

Provided further, That not later than 21 days after the date of enactment of this Act, the Secretary, in coordination with other appropriate departments and agencies, shall issue a report on COVID–19 testing: Provided further, That such report shall include data on demographic characteristics, including, in a de-identified and disaggregated manner, race, ethnicity, age, sex, geographic region and other relevant factors of individuals tested for or diagnosed with COVID–19, to the extent such information is available: Provided further, That such report shall include information on the number and rates of cases, hospitalizations, and deaths as a result of COVID–19: Provided further, That such report shall be submitted to the Committees on Appropriations of the House and Senate, and the Committee on Energy and Commerce of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate, and updated and resubmitted to such Committees, as necessary, every 30 days until the end of the COVID–19 public health emergency first declared by the Secretary on January 31, 2020 (P.L. 116-139, division B, title I, 134 Stat. 620, 626)

The Centers for Disease Control and Prevention (CDC) prepared this 30-day update report in response to this requirement.

Executive Summary

This report contains data on demographic characteristics, including data on race, ethnicity, age, sex, geographic region and other relevant factors of individuals tested for or diagnosed with COVID-19. It also includes information on the number and rates of cases, hospitalizations, and deaths as a result of COVID-19. These data collected by CDC help target critical COVID-19 interventions. CDC is working quickly with states, counties, cities, territories, tribes and other partners to improve data collection and reporting.

This report contains the data we currently have available from reporting entities and describes efforts to obtain additional data requested by Congress. CDC looks forward to providing more complete information in forthcoming reports. Appendix A provides detailed information on the data sources used to collect patient demographic data, and web links throughout the document are provided for the convenience of the reader, since some data elements are regularly updated.

Over 97% of COVID-19 case reports include documented age and sex. Although there is still more work to be done to ensure complete race and ethnicity data in the case report forms, from April 2 to August 11, the proportion of case reports with complete information on race increased from 21% to 60% and the case reports with complete information on ethnicity increased from 18% to 50%. Currently, the total proportion of case reports with complete race *and* ethnicity data is 48%, compared to 14% on April 2.

In the July Report to Congress, CDC reported a total of 3,296,599 cases of COVID-19 in the U.S. and 134,884 deaths. As of August 11, there are now a total of 5,119,711 cases of COVID-19 in the U.S. and 163,651 deaths.

Key Findings

- CDC is continuing to make progress to ensure key data are available to identify those most affected by this pandemic.
- CDC recently released an 'all of response' <u>Health Equity Strategy</u>¹ for CDC's COVID-19 response that provides an evidence-based, comprehensive, and coordinated framework for reducing COVID-19 disparities, which includes expanding testing to populations at highest risk.
- The "County Level Analysis" section of this report identifies geographic areas where different racial and ethnic groups might be disproportionately affected by COVID-19; however, there are some limitations in this analysis. Large group representation within a county with high recent COVID-19 burden does not necessarily mean higher group risk.
- COVID-19 continues to disproportionately impact some populations:
 - O Non-Hispanic Native Hawaiian or other Pacific Islander persons had the highest case rate at 1,333.2 cases of COVID-19 per 100,000. Hispanic or Latino persons also had a high case rate at 953.3 per 100,000, with Non-Hispanic American Indian/Alaska Native persons at 942.4 per 100,000 population. By comparison, non-Hispanic White persons had a much lower case rate at 370.7 per 100,000 population.
 - Non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.2 times that of non-Hispanic White persons.
 Rates for non-Hispanic Black persons and Hispanic or Latino persons are approximately 4.7 times the rate among non-Hispanic White persons, respectively.
 - Significant racial and ethnic disparities in deaths from COVID-19 are also apparent. Non-Hispanic Black persons have the highest death rate (80.1 per 100,000 population), followed by Non-Hispanic American Indian or Alaska Native persons (58.8 per 100,000) and Hispanic or Latino persons (48.6 per 100,000). For comparison, the death rate for non-Hispanic White persons is 39.1 per 100,000.

Data Sources and Completeness

COVID-19 is a nationally notifiable condition, with state, local, and territorial health departments *voluntarily* sending case reports to CDC through the National Notifiable Diseases Surveillance System to help monitor and mitigate the adverse effects of this pandemic. In addition to this case-based reporting, CDC uses three other primary sources of data in this report. The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) collects data on COVID-19-associated hospitalizations. The National Vital Statistics System gathers death certificate data from state vital statistics offices. The final data

4

¹ https://www.cdc.gov/coronavirus/2019-ncov/downloads/community/CDC-Strategy.pdf

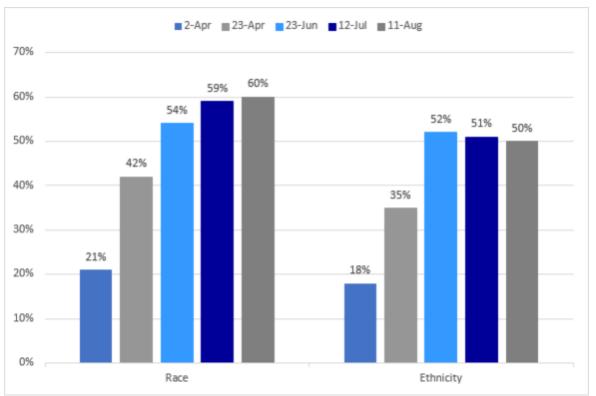
source used is COVID-19 laboratory testing data, which are reported to CDC. These data sources support analyses that help us better understand COVID-19 and inform prevention approaches. In addition to these systematic collections of data, CDC conducts focused investigations in outbreaks and other defined settings to gain insights into transmission, clinical characteristics, and prevention strategies. Numerous serosurveys are in progress to understand the changes in antibody levels in diverse geographic areas over time. Please see Appendix A, as well as the paragraphs below, for additional information about the sources of data in this report.

Case Report Data

Case-based reporting received through the National Notifiable Diseases Surveillance System helps to determine case numbers, estimate infection rates, examine trends over time, determine geographic distributions, and identify outbreaks. Case report forms are completed by hospitals, healthcare providers, and laboratories; the health departments de-identify the data before sending to CDC. Case report forms have a standardized case definition and defined demographic and clinical variables. However, while case report forms for notifiable diseases are required by state law, completion of demographic data, including race/ethnicity, is voluntary; there is no mandate requiring that healthcare providers or health departments fill out all data fields, including race/ethnicity, in the case report form. CDC relies on state, local, and territorial health departments to voluntarily report case data. Missing data for some questions in the form create a challenge in understanding whether the subset of data received are representative of the U.S. population. While some data fields are reliably reported (state, county, age, and sex data fields are between 97-100% complete), others are less reliably completed.

As of August 11, 2020, CDC has received a total of 3,822,986 case reports. Among these case reports, 60% contain race data, 50% contain ethnicity data, and 48% contain race *and* ethnicity data. Figure 1, below, shows the improvement in the percent of case reports with complete race and ethnicity from April 2 through August 11. Overall, from April 2 to August 11, there was an improvement in completeness of race and ethnicity in the case reports, from 21% to 60% for race and from 18% to 50% for ethnicity. However, further progress in reaching improved completeness is needed, as improvements have stabilized since late June. CDC continues to work with its state, local, and territorial partners to improve their case reporting.

Figure 1: Percent of COVID-19 Case Reports with complete Race and Ethnicity data, April 2 through August 11, National Notifiable Diseases Surveillance System



Data source: Data are based on COVID-19 case-level data reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC).

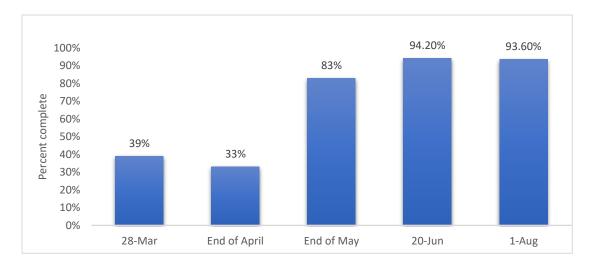
COVID-NET Hospitalization Data

COVID-NET² is a population-based surveillance system that collects data on laboratory-confirmed COVID-19-associated hospitalizations among children and adults through a network of over 250 acute-care hospitals in 14 states. This system produces high-quality information on hospitalization rates and risk factors for hospitalizations. Completeness of race and ethnicity data in COVID-NET is 93.6% as of August 1, 2020. The data have high completion rates of key risk factors such as race and ethnicity, and the surveilled population is similar to the total U.S. population in terms of key risk factors.

 $^2\ https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covid-net/purpose-methods.html$

6

Figure 2: Percent of COVID-19 Hospitalizations with complete Race/Ethnicity data, March 1- August 1, COVID-NET



Mortality Data

CDC's National Center for Health Statistics collects death certificate data from state vital statistics offices for all deaths occurring in the United States. Provisional counts for COVID-19 deaths are based on mortality data in the National Vital Statistics System. The National Vital Statistics System captures all deaths from all causes across every state in the nation to track the characteristics of those dying in the United States, help determine life expectancy, and allow comparisons of death trends with other countries. Current estimates indicate that within 8 weeks of when the death occurred, at least 75% of death certificates are complete, primarily due to delays in reporting. It takes time for death certificates to be completed, registered, and coded; and the timeliness varies from state to state. Currently, CDC receives information on approximately 60% of deaths within about ten days of the date of death. However, it can take as little as one week and as many as eight weeks or more for CDC to receive information from the death certificates registered by the states. These data are updated as more information becomes available.

Trends in Reported Cases

All Cases

As of August 11, 5,119,711 probable and confirmed cases of COVID-19 in the U.S., and 163,651 deaths, had been reported. The cumulative case rate is 1,564.9 per 100,000. Figure 3, below, displays the number of new probable and confirmed COVID-19 cases reported each day in the U.S. since the beginning of the outbreak. Data on <u>cases and deaths</u> are updated daily on CDC's website.

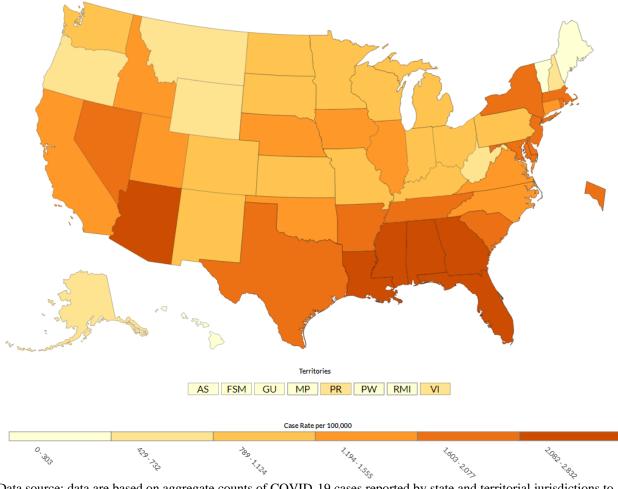
³ https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

United States Cases O Deaths 7-Day moving average

Figure 3: Daily number of COVID-19 cases reported to CDC through August 11, 2020, United States

Data source: CDC COVID Data Tracker

The map below highlights areas of the country with the greatest number of COVID-19 cases reported. As of August 11, 43 reporting jurisdictions each reported more than 10,000 cumulative cases of COVID-19. California reported the highest number of cases at 574,411 and Florida reporting the second highest number of cases with 536,981 cases. Adjusting for population size, Louisiana has the highest number of cases per 100,000 population (2,857), and New York City the second highest (2,738).



Map 1: COVID-19 case rate per 100,000 reported to the CDC, by state/territory through August 11, 2020

Data source: data are based on aggregate counts of COVID-19 cases reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC) since January 21, 2020.

Cases by Sex

Table 1, below, outlines the breakdown of cases by sex. Among the cases for which sex was reported (99% of cases), there were somewhat more cases among women than men, with 1,797,946 among men and 1,927,543 among women. The cumulative COVID-19 case rate is 1,168.5 cases per 100,000 population, and it is slightly higher among females at 1,160.9 per 100,000 and males at 1,115.8 per 100,000 population.

Table 1: Cumulative number of COVID-19 cases and case rates by sex, through August 11, 2020

Sex	Number of Cases	Cases per 100,000
Female	1,927,543	1160.9
Male	1,797,946	1115.8
Unknown*	97,497	-
Total	3,822,986	1168.5

Data source: Data are based on COVID-19 case-level data reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC). Case-level data include about 80% of total cases.

Cases by Age

Table 2, below, outline the number of cases and case rate by age group. When looking at cases per 100,000 population, adults 18-29 years of age had the highest rate of cases at 1,544.2 per 100,000 population, followed by those ages 30-44 years at 1,506.0 per 100,000 population.

Table 2: COVID-19 cases and case rates by age group, through August 11, 2020

Age	Number of Cases	Cases per 100,000
0-17 years	287,386	391.5
18-29 years	834,156	1,544.2
30-44 years	955,001	1,506.0
45-64 years	1,127,920	1,344.3
65-74 years	302,161	990.9
≥75 years	311,343	1,419.1
Unknown age	5,019	-
Total	3,822,986	1,168.5

Data source: Data are based on COVID-19 case-level data reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC). Case-level data include about 80% of total cases.

Cases by Race/Ethnicity

Figure 4 below shows the case rate by race/ethnicity reported to CDC from the National Notifiable Diseases Surveillance System. It is important to note that approximately 51.6% of cases had unknown race/ethnicity.

Non-Hispanic Native Hawaiian/Other Pacific Islander population had the highest case rate at 1,333.2 per 100,000, followed by non-Hispanic multiple/other race population at 1,089.9 per 100,000. Hispanic or Latino population also had a high case rate at 953.3 per 100,000. Non-Hispanic American Indian/Alaska Native and non-Hispanic Black populations also had high case rates at 942.4 and 909.0 per 100,000 population, respectively. Non-Hispanic Asian and non-Hispanic White populations had the lowest case rate at 362.9 per 100,000 and 370.7 per 100,000, respectively.

^{*} Indicates unknown sex in the case report form.

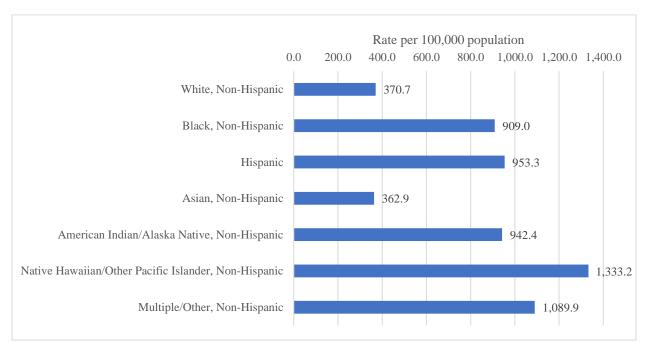


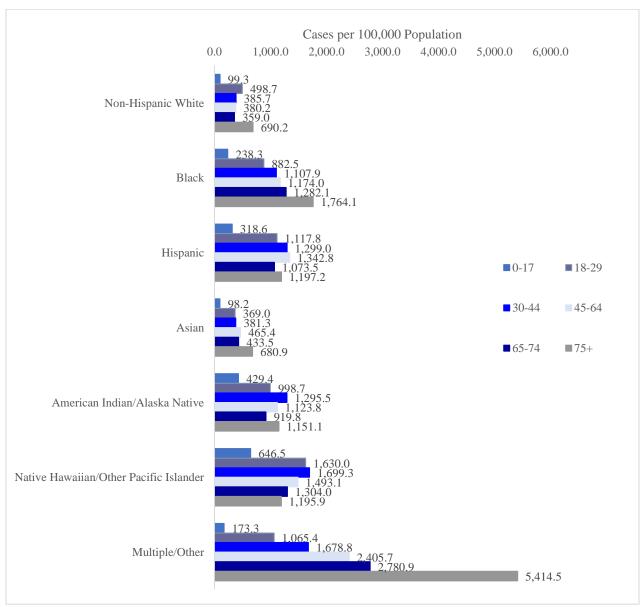
Figure 4: COVID-19 case rates per 100,000 by race and ethnicity, through August 11, 2020

Data source: Data are based on COVID-19 case-level data reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC). Note that 51.6% of cases had unknown race and/or ethnicity. Case-level data include about 80% of total cases.

Cases by Race/Ethnicity and Age Group

Figure 5, below, shows the case rates by age and race/ethnicity. Approximately 0.1% of case reports were missing age. For non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, and non-Hispanic multiple/other race and ethnic groups, persons ages 75 years and older had the highest case rate compared to other age groups within each race or ethnic group. Among Hispanic persons, people ages 45-64 had the highest case rate compared to Hispanics in other age groups at 1,342.8 per 100,000 population. Among non-Hispanic American Indian/ Alaska Native persons, people ages 30-44 had the highest case rates at 1,295.5 compared to other age groups. Among non-Hispanic Native Hawaiian or other Pacific Islander persons, people ages 30-44 had the highest case rate compared to other age groups at 1,699.3 per 100,000 population.

Figure 5: COVID-19 case rates per 100,000 by race and ethnicity and age group, through August 11, 2020



Data source: Data are based on COVID-19 case-level data reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC). Note that 51.6% of cases had unknown race and/or ethnicity. Case-level data include about 80% of total cases.

Summary of Case Data

The U.S. experienced a steep increase in COVID-19 cases during June and July. The 7-day average of cases steadily climbed from June 15 (21,132 cases per week) to July 24 (66,960 cases per week). The number of daily new cases has begun to decline after July 24, with 52,986 cases during the week ending August 11.

The week ending August 11, eleven of 54 states and territories had a greater than 10% increase in cases compared to the previous week (down from 26 states and territories). Twenty-two states and territories had a greater than 10% decrease in cases compared to the previous week (up from three). At the county level, 1025 out of 2899 counties (35% of counties) had a greater than 10% increase in cases, and 1334 counties (46% of counties) had a greater than 10% decrease compared to the previous week.

The geographic distribution of the outbreak has shifted from New York City and states in the Northeast to new areas compared to the early months of the epidemic. Jurisdictions with the highest cumulative case rates include Louisiana (2,857), New York City (2,738), Arizona (2,632), Florida (2,521), Mississippi (2,287), Alabama (2,125), and Georgia (2,116). The U.S. case rates per 100,000 among people ages 18–29 (1,544.2) and 30-44 (1,506.0) are higher than those among people ages 75 and older (1,419.1), 45–64 (1,344.3) and 65–74 (990.9) and children ages 0–18 (391.5).

Marked improvements in reporting race and ethnicity occurred from April to late June; however, variable completeness for these indicators plateaued in recent weeks. This has hampered public health efforts to rigorously and definitively understand and define racial and ethnic disparities in COVID-19 incidence. Data on COVID-19 infections among racial and ethnic minority populations highlight disparities in incidence. Case rates among non-Hispanic Black, Hispanic, American Indian/Alaska Native, Native Hawaiian and other Pacific Islander, and non-Hispanic multiple/other race persons were higher than case rates among non-Hispanic White and Asian persons. It is important to note that some racial and ethnic groups represent a relatively small proportion of U.S. residents. Therefore, small increases in the numbers of cases among these groups can result in large shifts in case rates.

Case data disaggregated by age and race/ethnicity show that older Americans (people ages 75 or older and 65–74) who are racial or ethnic minorities have the highest case rates compared to younger age groups and Non-Hispanic White persons of the same age group. The case rate among non-Hispanic White persons ages 75 and older (690.2) – considered a high-risk group due to age – is lower than the case rate among most racial and ethnic minorities ages 18-29 and 30–44, with the only exception being non-Hispanic Asian persons.

Trends in Hospitalizations

COVID-NET collects data on COVID-19-associated hospitalizations, producing information on hospitalization rates that can be broken down by sex, age, and race and ethnicity. COVID-19-associated hospitalization rates by race and ethnicity are calculated using hospitalized COVID-NET cases with known race and ethnicity for the numerator and CDC National Center for Health Statistics <u>bridged-race population estimates</u>⁴ for the denominator. Rates are adjusted to account for differences in age distributions within race and ethnicity strata in the COVID-NET catchment area.

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⁴ https://www.cdc.gov/nchs/nvss/bridged_race.htm

Overall Hospitalizations

A total of 44,865 laboratory-confirmed COVID-19-associated hospitalizations were reported by sites between March 1, 2020 and August 1, 2020 to the COVID-NET system. The overall cumulative hospitalization rate was 137.6 per 100,000 population.

Hospitalizations by Sex

Table 3 shows the distribution of hospitalizations by sex. The rate of hospitalization among men was 143.2 per 100,000 population and the rate of hospitalization among women was 132.0 per 100,000.

Table 3: COVID-NET Cumulative Number and Rate of Hospitalizations by Sex, through August 1, 2020

Sex	Number of Hospitalizations	Hospitalizations per 100,000
Female	21,951	132.0
Male	22,879	143.2
Unknown	0	-
Total	44,865	137.6

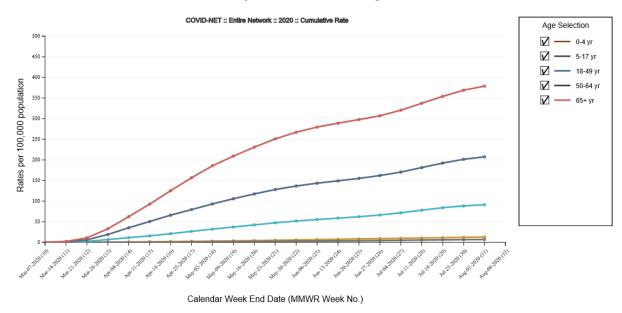
Hospitalizations by Age

Figure 6, below, outlines the laboratory confirmed COVID-19 associated hospitalizations over time with the most recent data available through August 1, 2020. For children ages 0-4 years, the hospitalization rate was 12.9 per 100,000. For children ages 5-17 years, the hospitalization rate was 7.0 per 100,000, while the hospitalization rates for adults ages 18-49 years was 91.3 per 100,000. Hospitalization rate for adults ages 50-64 years was 207.4 per 100,000 and was highest for adults ages 65 years and older at 378.8 per 100,000.

Figure 6: COVID-NET Hospitalization Rates by Age Group, through August 1, 2020

Laboratory-Confirmed COVID-19-Associated Hospitalizations

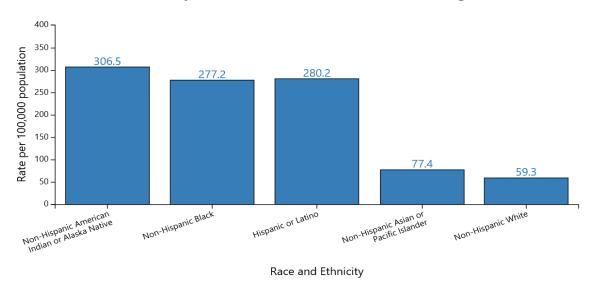
Preliminary cumulative rates as of Aug 01, 2020



Hospitalizations by Race/Ethnicity

Figure 7, below, shows the distribution of hospitalizations by race/ethnicity. Among the 44,865 laboratory-confirmed COVID-19-associated hospitalized cases, 41,989 (93.6%) had information on race and ethnicity. Age-adjusted hospitalization rates were highest for non-Hispanic American Indian/Alaska Native persons at 306.5 per 100,000 population. The hospitalization rate for non-Hispanic Black persons was 277.2 per 100,000 population, and for Hispanic or Latino persons was 280.2 per 100,000 population. Hospitalization rates were lowest for non-Hispanic Asian or Native Hawaiian/Other Pacific Islander persons at 77.4 per 100,000 population and non-Hispanic White persons at 59.3 per 100,000 population.

Figure 7: COVID-NET Hospitalization Rates by Race/Ethnicity, through August 1, 2020 Age-adjusted COVID-19-associated hospitalization rates by race and ethnicity, COVID-NET, March 1 – August 1, 2020



* Other category includes multiple races and unknown race/ethnicity.

** The COVID-NET data is collected through retrospective medical chart review and the Asian, Native Hawaiian, and other Pacific Islander racial categories cannot be easily distinguished in the medical charts. The protocol for COVID-NET data collection underwent OMB review and was approved prior to deployment in March 2020.

Hospitalizations by Race/Ethnicity and Age Group

Table 4, below, shows the hospitalization rates by race/ethnicity and age. Non-Hispanic Black persons aged 65+ years had the highest hospitalization rate at 860.1 per 100,000 population, which is 3.8 times the hospitalization rate for their White counterparts. Non-Hispanic American Indian/Alaska Native persons had the highest hospitalization rate among 18-64-year-olds. Among adults aged 50-64 years, non-Hispanic American Indian/Alaska Native persons had a hospitalization rate of 553 per 100,000 population – 7.1 times that of their White counterparts. Among adults aged 18-49 years, non-Hispanic American Indian/Alaska Native persons had a hospitalization rate of 225.3 per 100,000 population – 9.3 times that of their White counterparts. Hispanic or Latino persons aged 0-17 years had a hospitalization rate of 17.1 per 100,000 population, which is 8.1 times higher than their White counterparts.

Table 4: Hospitalization rates per 100,000 population by age and race and ethnicity — COVID-NET, through August 1, 2020

Age Group	NH American Indian or Alaska Native	NH Black	Hispanic or Latino	NH Asian or Pacific Islander	NH White
0-17 years	9.7	11.2	17.1	4.0	2.1
18-49 years	225.3	142.4	218.7	41.8	24.1
50-64 years	553.0	426.3	473.7	124.3	89.4
65+ years	651.9	860.1	605.3	233.2	228.2

NH = non-Hispanic

Summary of Hospitalization Data

When examining overall age-adjusted rates by race/ethnicity, non-Hispanic American Indian or Alaska Native persons had an age-adjusted hospitalization rate approximately 5.2 times that of non-Hispanic White persons. Rates for non-Hispanic Black persons and Hispanic or Latino persons are approximately 4.7 times the rate among non-Hispanic White persons, respectively.

Trends in Deaths

It can take several weeks for death records to be submitted, processed, coded, and tabulated. Therefore, the data will likely not include all deaths that occurred during a given time period, especially for the more recent time periods. Death counts for earlier weeks are continually revised and may increase or decrease as new and updated death certificate data are received from the states by CDC. COVID-19 death counts shown here may differ from other published sources because of the data lag. Appendix B shows the current total deaths, confirmed deaths, and probable deaths by jurisdiction.

All Deaths

As of August 12, there were a total of 149,192 deaths due to COVID-19 in the U.S. reported to CDC's National Center for Health Statistics, representing 45.6 deaths per 100,000 population. While the recent national trend had indicated an increase in COVID-19 deaths, the week ending August 10 showed a 4% decrease in deaths compared to the previous week.

Deaths by Sex

Table 5, below, shows the COVID-19 deaths by sex. There were 68,892 COVID-19 related deaths in females and 80,294 in males. The death rate among females was 41.5 deaths per 100,000 population and the death rate among males was somewhat higher at 49.8 per 100,000 population.

Table 5: Provisional COVID-19 death counts and rates per 100,000 by sex, reported through August 12, 2020

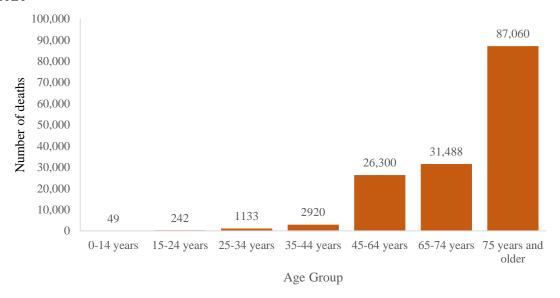
Sex	Number of Deaths	Deaths per 100,000
Female	68,892	41.5
Male	80,294	49.8
Unknown	6	-
Total	149,192	45.6

Note: Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring after the reporting period are not included in the table. Source: NCHS Provisional Death Counts (https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm).

Deaths by Age Group

Figure 8 and Table 6, below, show provisional death counts and rates through August 12, 2020. The mortality rate was highest for adults aged 75 years and older at 396.8 per 100,000 population. This was almost 4 times higher than the death rate for adults aged 65-74 years at 103.3 per 100,000 population and nearly 13 times higher than the death rate for adults aged 45-64 years at 31.3 per 100,000 population.

Figure 8: Provisional COVID-19 death counts by age group, reported through August 12, 2020



Note: Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring after the reporting period are not included in the table. Source: NCHS Provisional Death Counts⁵

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⁵ https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm

Table 6: Provisional COVID-19 death counts and rates per 100,000 by age category, reported through August 12, 2020

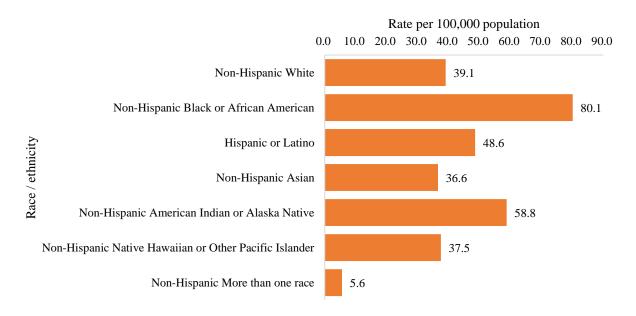
Age Group	Number of Deaths	Percent of Deaths	Deaths Per 100,000
0-14 years	49	0.0%	0.1
15-24 years	242	0.2%	0.6
25-34 years	1133	0.8%	2.5
35-44 years	2920	2.0%	7.1
45-64 years	26,300	17.6%	31.3
65-74 years	31,488	21.1%	103.3
75 years and older	87,060	58.4%	396.8
Total	149,192	100.0%	45.6

Note: Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring after the reporting period are not included in the table. Source: NCHS Provisional Death Counts (https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm).

Deaths by Race/Ethnicity

Figure 9 and Table 7 show the death rates per 100,000 population by race/ethnicity. The death rate per 100,000 population was highest for non-Hispanic Black persons at 80.1 deaths per 100,000 population. This is 2 times the death rate for non-Hispanic White persons at 39.1 per 100,000 population, non-Hispanic Asian persons at 36.6 per 100,000 population, and Hispanic or Latino persons at 48.6 deaths per 100,000 population. Non-Hispanic American Indian/Alaska Native persons had a death rate of 58.8 per 100,000 population.

Figure 9: Provisional COVID-19 death rates by race and ethnicity, reported through July 18, 2020



Note: Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring after the reporting period are not included in the table. Source: NCHS Provisional Death Counts⁶

Table 7: Provisional COVID-19 death counts and rates per 100,000 by race/ethnicity, reported through August 12, 2020

Race/Ethnicity	Number of Deaths	Percent of Deaths	Deaths Per 100,000
Non-Hispanic White	77,210	51.8%	39.1
Non-Hispanic Black or African American	32,768	22.0%	80.1
Hispanic or Latino	29,089	19.5%	48.6
Non-Hispanic Asian	6,848	4.6%	36.6
Non-Hispanic American Indian or Alaska Native	1,421	1.0%	58.8
Non-Hispanic Native Hawaiian or other Pacific Islander	220	0.1%	37.5
Non-Hispanic More than one race	397	0.3%	5.6
Unknown	1,239	0.8%	
Total	149,192	100.0%	45.6

Note: Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring after the reporting period are not included in the table. Source: NCHS Provisional Death Counts (https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm).

Deaths by Race/Ethnicity and Age Group

Table 8 highlights the number of deaths by race/ethnicity and age group. Non-Hispanic Black persons ages 75 years and older had the highest death rate at 824.7 per 100,000 population. Hispanic or Latino persons ages 75 years and older also had a high death rate at 656.0 deaths per 100,000, followed by non-Hispanic American Indian/Alaska Native persons ages 75 years and older at 428.3 deaths per 100,000 population.

Table 8: Provisional COVID-19 death counts and rates per 100,000 by race/ethnicity and age category, reported through August 12, 2020

Race/Ethnicity	Age Group	Deaths	Percent within Race/Ethnic Group	Deaths Per 100,000
Non-Hispanic	0-14 years	10	0.0%	0.0
White	15-24 years	38	0.0%	0.2
	25-34 years	187	0.2%	0.7
	35-44 years	435	0.6%	1.9
	45-64 years	7,339	9.5%	13.2
	65-74 years	13,465	17.4%	58.7
	75 years and older	55,736	72.2%	324.6
Non-Hispanic	0-14 years	12	0.0%	0.1
Black	15-24 years	74	0.2%	1.2
	25-34 years	317	1.0%	5.0
	35-44 years	842	2.6%	16.0
	45-64 years	7,901	24.1%	78.4

⁶ https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm

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		0.600	2	202.5
	65-74 years	8,690	26.5%	293.5
	75 years and older	14,932	45.6%	824.7
Hispanic or	0-14 years	22	0.1%	0.1
Latino	15-24 years	106	0.4%	1.1
	25-34 years	483	1.7%	5.1
	35-44 years	1401	4.8%	16.3
	45-64 years	8,811	30.3%	73.9
	65-74 years	6,882	23.7%	256.5
	75 years and older	11,384	39.1%	656.0
Non-Hispanic	0-14 years	2	0.0%	0.1
Asian	15-24 years	8	0.1%	0.3
	25-34 years	50	0.7%	1.5
	35-44 years	113	1.7%	3.8
	45-64 years	1,319	19.3%	28.4
	65-74 years	1,606	23.5%	112.8
	75 years and older	3,750	54.8%	396.4
Non-Hispanic	0-14 years	2	0.1%	0.4
American	15-24 years	9	0.6%	2.5
Indian/Alaska	25-34 years	64	4.5%	17.3
Native	35-44 years	81	5.7%	27.2
	45-64 years	489	34.4%	83.1
	65-74 years	331	23.3%	180.8
	75 years and older	445	31.3%	428.3
Non-Hispanic	0-14 years	1	0.5%	0.8
Native Hawaiian	15-24 years	3	1.4%	3.5
or Other Pacific	25-34 years	16	7.3%	15.7
Islander	35-44 years	17	7.7%	19.5
	45-64 years	88	40.0%	66.3
	65-74 years	57	25.9%	154.9
	75 years and older	38	17.3%	190.1
Non-Hispanic	0-14 years	0	0.0%	0.0
More than one	15-24 years	3	0.8%	0.2
race	25-34 years	8	2.0%	0.8
	35-44 years	12	3.0%	1.8
	45-64 years	89	22.4%	9.5
	65-74 years	91	22.9%	35.8
	75 years and older	194	48.9%	128.6
Unknown	0-14 years	0	0.0%	120.0
	15-24 years	1	0.1%	
	25-34 years	8	0.6%	
	35-44 years	<u>8</u> 	1.5%	
	45-64 years	264	21.3%	
	65-74 years	366	29.5%	
	75 years and older	581	46.9%	
	13 years and older	301	40.9%	

To	otal/Average	149,192	100.0%	45.6

Note: Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring after the reporting period are not included in the table. Source: NCHS Provisional Death Counts (https://www.cdc.gov/nchs/nvss/vsrr/COVID19/index.htm).

Summary of Death Data

Trends in deaths have followed similar patterns to cases. From February 1, 2020 to August 12, 2020, 149,192 COVID-19-related deaths have been reported. From an initial peak of 16,966 deaths the week ending April 18, weekly deaths had declined steadily through the end of June (3,321 deaths the week ending June 27). That trend has reversed through the month of July, with an apparent plateau in the first half of August.

The death rate for males (49.8 deaths per 100,000 population) is slightly higher than that for females (41.5 per 100,000), a ratio of 1.2. Though the factors leading to these differences are not yet fully understood, they could reflect differences in prevalence of underlying risk factors that contribute to more severe outcomes among COVID-19 patients.

Older Americans continue to represent the largest proportion of deaths from COVID-19. People ages 75 and older represent 58% of deaths, followed by people ages 65–74 (21% of deaths) and people ages 45–64 (18% of deaths).

Significant racial and ethnic disparities in deaths from COVID-19 are also apparent. Non-Hispanic Black persons have the highest death rate (80.1 per 100,000 population), followed by Non-Hispanic American Indian or Alaska Native persons (58.8 per 100,000) and Hispanic or Latino persons (48.6 per 100,000). These disparities could reflect underlying differences in risk factors as well as lack of access to care and increased risk of exposure to COVID-19.

The 7-day count of deaths the week ending August 12 (7,207) was lower than the highest 7-day counts during the months of April (19,993), May (13,844), and July (7,857), but higher than the 7-day peak in June (7,166). These patterns likely reflect a shift in cases to people of younger age groups and also a slight increase in deaths through July that lagged increases in cases.

Recent trends show increases in deaths. The week ending August 12, 15 out of 54 states and territories had a greater than 10% increase in deaths compared to the previous week, and 23 had a greater than 10% decline in deaths. At the county level, 301 counties out of 1161 (26% of counties) had a greater than 10% increase in deaths compared to the previous week, and 646 counties (56% of counties) had a greater than 10% decrease in cases. The jurisdictions with the highest death rates include New York City (281 deaths per 100,000), New Jersey (178 deaths per 100,000), Massachusetts (127 per 100,000), and Connecticut (124 per 100,000). Jurisdictions with the lowest death rates include Hawaii (2 per 100,000), Guam (3 per 100,000), Alaska (4 per 100,000), and Wyoming (5 per 100,000). As trends in deaths lag trends in cases, it is important to continue to monitor death counts to fully assess the impact of the recent surge in cases on the most severe outcomes.

Testing

Laboratory testing data, in conjunction with case reports and other data, provide vital guidance for COVID-19 mitigation and control activities. Testing data are also critical to better understanding the impact of COVID-19 on socially vulnerable populations.

As of August 11, CDC received reports for 70,212,154 diagnostic tests from public health departments, hospitals, and commercial laboratories. Of these, 6,256,214 (8.9%) were positive for COVID-19. Diagnostic test data are compiled from a number of sources, including commercial, hospital, and public health laboratories. Not all tests are directly reported to CDC, and there is currently no data by race/ethnicity for testing numbers. However, on June 4, 2020, HHS issued new guidance under the CARES Act that specifies laboratories must report additional demographic data, including patient race and ethnicity, to state and local health departments for all COVID-19 test results beginning August 1, 2020. Under this new guidance, we expect to gain more critical information about people who test positive for COVID-19 and expect to include that data in the subsequent report to Congress on this topic.

It is important to note that the number of positive tests in a state is not equal to the number of cases, as one person may be tested more than once. For that reason, CDC distinguishes between testing data and case report data on its website. The daily count of cases, found here, is based on case report data, not on testing data. Public health laboratories in all 50 states, Washington DC, Guam, Puerto Rico, and United States Virgin Islands are now testing for COVID-19. Additional information about testing is available on CDC's website.

Summary of Testing

Testing data show promising results of recent efforts to increase availability of testing compared to earlier periods in the outbreak, although there are long lag times before results are available in many areas. For the week ending August 8, 3,896,757 diagnostic tests were administered (1,175 per 100,000 population), which is higher than the 7-day peaks for June (3,310,668 tests in a week), May (1,773,547 tests), and April (813,161 tests) but lower than the 7-day peak for July (4,713,810 tests).

Despite increases in the number of tests administered, test positivity remains high in many areas; the test positivity for the U.S. was 6.7% the week ending August 8. While this is an improvement from the July seven-day peak of 9.6%, there is a continued need for communities – especially those with increasing numbers of cases and high test positivity – to wear face masks, physically distance, avoid crowds (especially indoors), and practice good hand hygiene.

Testing data at the state and territory level show significant geographic variation in positivity; 19 states and territories had a 7-day test positivity rate of less than 5%, whereas 11 states and

⁷ https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

 $^{^8\} https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/previous-testing-in-us.html$

⁹ https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/testing-in-us.html

territories had 7-day test positivity greater than 10% (ranging from 10.1% for Arizona to 19.0% for Arkansas).

County Level Analysis

CDC has developed a methodology to identify geographic areas where different racial and ethnic groups might be disproportionately affected by COVID-19. Using reported case data, we identified counties with high recent burden of COVID-19 cases. Using Census data, we identified counties with large populations of a specific racial and ethnic group relative to the proportion in the U.S. population. Then, for each racial and ethnic group, we analyzed population proportion and recent burden at the county level to identify the ten counties where there was both high recent COVID-19 burden and where large proportions of each racial and ethnic group resided.

This methodology allows us to better understand the potential disproportionate impact on communities of color and is critical to inform public health efforts that focus on responding to the pandemic and protecting communities placed at increased risk of COVID-19. CDC will update these data routinely.

High recent burden was defined as greater than 100 new COVID-19 cases per 100,000 population in the past two weeks, with more than five new cases in the same time period. Counties with greater than 100 new COVID-19 cases per 100,000 population in the past two weeks but with five or fewer new cases in the same time period would not meet the criteria for high recent burden. "Highest" recent burden was defined as 612 or more new COVID-19 cases per 100,000 population in the past two weeks.

Large group representation for each racial/ethnic group was defined as counties with a larger proportion of persons belonging to that racial/ethnic group than the 2018 national average, which are as follows: 18.3% Hispanic or Latino, 12.5% non-Hispanic Black, 5.7% non-Hispanic Asian, 0.7% non-Hispanic American Indian or Alaska Native, or 0.2% non-Hispanic Native Hawaiian or other Pacific Islander. Counties with population sizes above each of those racial/ethnic groups were considered to have large group representation for that group.

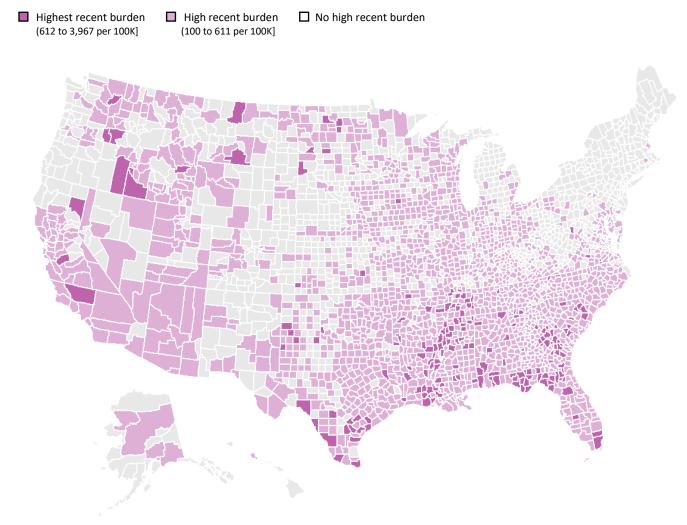
There are some limitations in this analysis. Large group representation within a county with high recent burden does not necessarily mean higher group risk. Also, counties can have large group representation for more than one group if more than one minority group has a larger population than the national average in that county. Finally, in counties with smaller populations, even where new case rates are high the absolute number of new cases may be comparatively low.

Counties with High Recent Burden of COVID-19 (July 28-August 10, 2020)

As of August 10, 2020, **2,004** (**63.8%**) **counties** had a high recent burden of COVID-19 cases. The map below shows the location of these counties in violet. The intensity of the color indicates higher burden relative to burden in other counties.

More than half of the counties with high recent burden of COVID-19 are designated as rural. Across the country, there are more than 17 million people who live in rural counties without a Rural Health Clinic, more than 15 million in rural counties without a Federally Qualified Health Center, and nearly 4.5 million in rural counties without an acute care hospital 10. Most counties noted as rural are designated as health professional shortage areas for primary care and many rural counties rate high on vulnerability in CDC's Social Vulnerability Index 11. Many rural counties do not have a physician, and many rural hospitals have closed, making access to care difficult.

Map 2: Counties with high recent burden of COVID-19, July 28-August 10, 2020



Unshaded (grey) counties do not have high recent burden of COVID-19, light violet-shaded counties have high recent burden, and darker-shaded counties have highest recent burden.

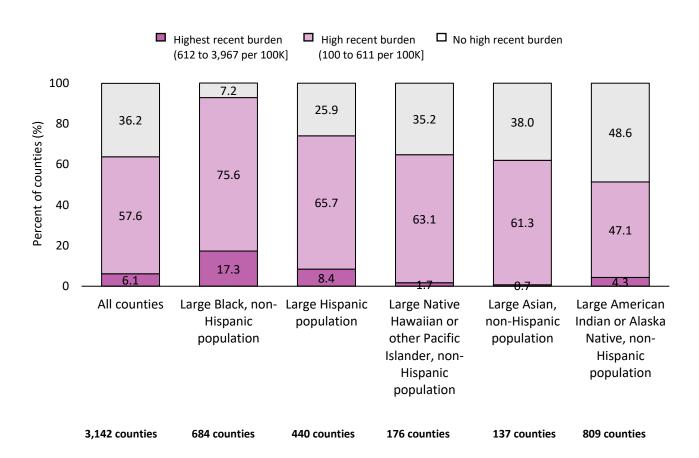
¹⁰ From https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2018/01/AccesstoPrimaryCare.pdf.

¹¹ https://svi.cdc.gov/

Distribution of high recent burden counties across race-ethnicity groups

Compared with the U.S.-wide distribution, counties with large non-Hispanic Black, large Hispanic, large Native Hawaiian or other Pacific Islander, and large non-Hispanic Asian populations relative to the national average all had a larger proportion of counties with high recent burden of COVID-19 cases. Counties with large non-Hispanic Black populations had the largest proportion of high or highest recent burden (92.8%), compared with the U.S.-wide proportion of 63.8%.

Figure 10: Distribution of high recent burden counties among all counties and counties with large population of racial/ethnic groups



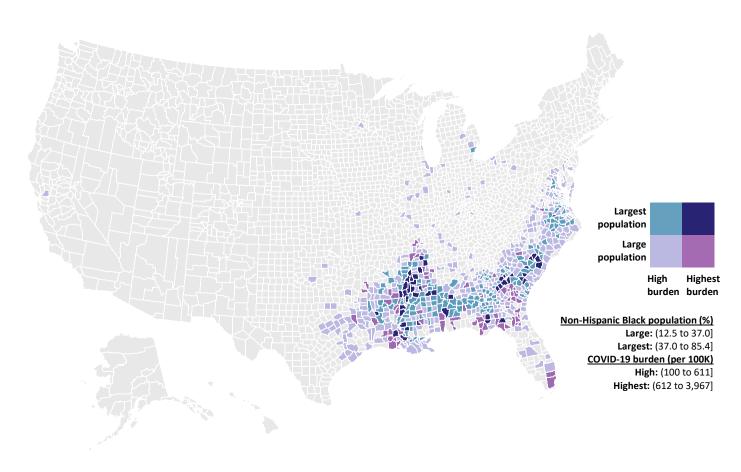
The sections below focus on counties for which there are **large populations** and **high recent burden** (**high and highest burden combined**) of **COVID-19 cases** for five racial and ethnic groups: non-Hispanic Black, Hispanic, non-Hispanic Asian, non-Hispanic Native Hawaiian or other Pacific Islander, and non-Hispanic American Indian or Alaska Native. Counties that are identified in the tables provided in the following pages have the largest population/highest burden, largest population/high burden, or large population/highest burden (presented in that order). For each of these counties listed, the urbanization level of the county is provided.

Urbanization level was defined using the 2013 National Center for Health Statistics Urban-Rural Classification Scheme for Counties and categorized as large metropolitan, medium or small metropolitan, or rural (non-metropolitan).

Counties with large non-Hispanic Black populations and high recent burden

Among 684 counties that had large non-Hispanic Black populations relative to the national average 12, 635 (92.8%) had high recent burden of COVID-19 cases. These 635 counties are pictured below. Colors are assigned based on both group representation and COVID-19 burden relative to other counties. Counties in gray either do not have high recent burden or do not have large group representation.

Map 3: Counties with large <u>non-Hispanic Black populations</u> and high recent burden



The table below shows the top ten counties with large non-Hispanic Black populations and high recent burden of COVID-19. All top ten counties had the largest non-Hispanic Black populations and highest recent burden of COVID-19. The eight counties where the non-Hispanic Black population is the predominant racial and ethnic group of the county are starred (*).

¹² In 2018, an estimated 12.5% of the U.S. population was non-Hispanic Black.

Table 9: Top 10 U.S. counties with large <u>non-Hispanic Black</u> populations and high recent burden of COVID-19

		Percent of population non-	Non-Hispanic Black predominant group	New cases per 100,000 in the
County	Urbanization level	Hispanic Black	(*)	past 2 weeks
Largest population	ı, highest recent burdeı	n		
Chicot, AR	Rural	53.4%	*	3,966.28
Sharkey, MS	Rural	70.3%	*	2,193.28
Clarke, AL	Rural	44.3%		1,680.60
Tunica, MS	Large metropolitan	77.0%	*	1,679.40
Gadsden, FL	Small or medium	55.1%	*	1,538.33
	metro			
Quitman, MS	Rural	70.9%	*	1,389.87
Tallahatchie, MS	Rural	56.1%	*	1,372.70
Haywood, TN	Rural	50.2%	*	1,246.03
Bolivar, MS	Rural	63.6%	*	1,123.42
Decatur, GA	Rural	42.0%		1,061.15

Note: The list of counties with high recent burden can significantly change over time. Large group representation within a county with high recent burden does not necessarily mean higher group risk. Finally, in counties with smaller populations, even where new case rates are high the absolute number of new cases may be comparatively low.

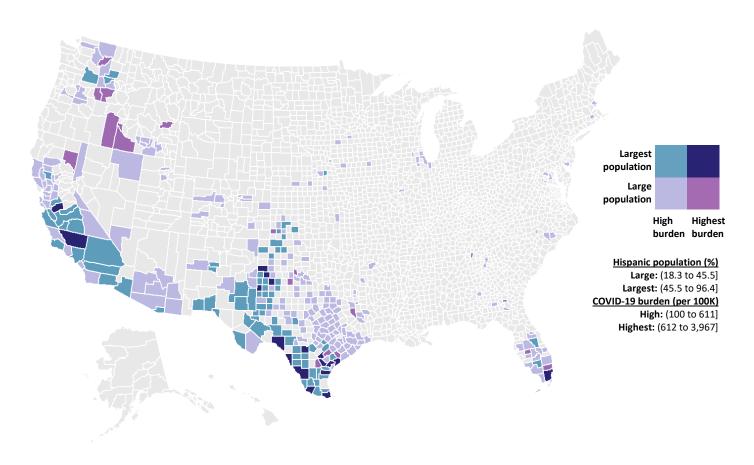
Counties with large <u>Hispanic</u> populations and high recent burden

Among 440 counties that had large Hispanic populations relative to the national average ¹³, **326** (**74.1%**) had high recent burden of COVID-19 cases. These 326 counties are pictured below. Colors are assigned based on both group representation and COVID-19 burden relative to other counties. Counties in gray either do not have high recent burden or do not have large group representation.

-

¹³ In 2018, an estimated 18.3% of the population was Hispanic.

Map 4: Counties with large <u>Hispanic</u> populations and high recent burden



The table below shows the top 10 counties with large Hispanic populations and high recent burden of COVID-19. All top 10 counties had the largest Hispanic populations and highest recent burden of COVID-19. 10 counties where the Hispanic population is the predominant racial and ethnic group of the county population are starred (*).

Table 10: Top 10 U.S. counties with large $\underline{\text{Hispanic}}$ populations and high recent burden of COVID-19

		Percent of	Hispanic predominant	New cases per 100,000 in the
County	Urbanization level	population Hispanic	group (*)	past 2 weeks
Largest population,	highest recent burden			
Karnes, TX	Rural	55.3%	*	2,766.77
Bee, TX	Rural	59.3%	*	2,479.52
Cameron, TX	Small or medium metro	89.8%	*	1,978.97
Maverick, TX	Rural	95.2%	*	1,434.56
Nueces, TX	Small or medium metro	64.2%	*	1,318.37
Kern, CA	Small or medium metro	54.0%	*	1,052.34
Webb, TX	Small or medium metro	95.5%	*	1,017.36
Refugio, TX	Rural	50.3%	*	995.45

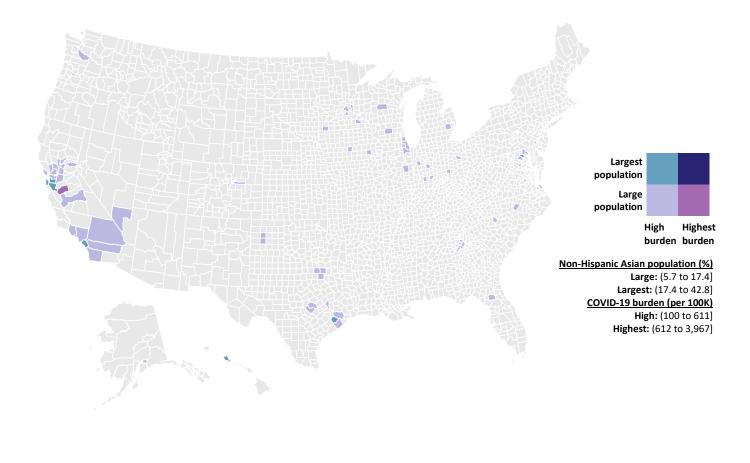
Starr, TX	Rural	96.4%	*	982.56
Miami-dade, FL	Large metropolitan	69.1%	*	952.64

Note: The list of counties with high recent burden can significantly change over time. Large group representation within a county with high recent burden does not necessarily mean higher group risk. Finally, in counties with smaller populations, even where new case rates are high the absolute number of new cases may be comparatively low.

Counties with large non-Hispanic Asian populations and high recent burden

Among 137 counties that had large non-Hispanic Asian populations relative to the national average ¹⁴, **85** (**62.0%**) had high recent burden of COVID-19 cases. These 85 counties are pictured below. Colors are assigned based on both group representation and COVID-19 burden relative to other counties. Counties in gray either do not have high recent burden or do not have large group representation.

Map 5: Counties with large non-Hispanic Asian populations and high recent burden



30

 $^{^{14}}$ In 2018, an estimated 5.7% of the U.S. population was non-Hispanic Asian.

The table below shows the top 10 counties with large non-Hispanic Asian populations and high recent burden of COVID-19. None of the counties with the largest non-Hispanic Asian populations had highest recent burden of COVID-19. Three counties where the non-Hispanic Asian population is the predominant racial and ethnic group of the county population are starred (*).

Table 11: Top 10 U.S. counties with large, <u>non-Hispanic Asian</u> populations and high recent burden of COVID-19

County	Urbanization level	Percent of population Non- Hispanic Asian	Non-Hispanic Asian predominant group (*)	New cases per 100,000 in the past 2 weeks
Largest population, hig			group ()	puso = woods
Fort Bend, TX	Large metropolitan	20.5%		424.19
Honolulu, HI	Small or medium metro	41.8%	*	191.41
Orange, CA	Large metropolitan	20.9%		184.59
San Francisco, CA	Large metropolitan	35.3%		181.25
Santa Clara, CA	Large metropolitan	37.7%	*	179.55
San Mateo, CA	Large metropolitan	29.4%		169.84
Alameda, CA	Large metropolitan	31.1%	*	166.79
Howard, MD	Large metropolitan	19.0%		157.18
Large population, high	est recent burden			
Merced, CA	Small or medium metro	7.2%	·	810.15
Large population, high	recent burden			
Clark, NV	Large metropolitan	9.9%		522.44

Note: The list of counties with high recent burden can significantly change over time. Large group representation within a county with high recent burden does not necessarily mean higher group risk. Finally, in counties with smaller populations, even where new case rates are high the absolute number of new cases may be comparatively low.

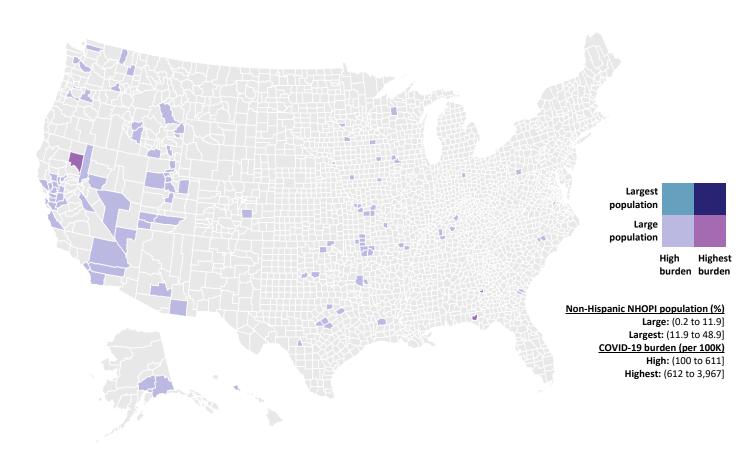
Counties with large <u>non-Hispanic Native Hawaiian or other Pacific Islander</u> populations and high recent burden

Among 176 counties that had large non-Hispanic Native Hawaiian or other Pacific Islander populations relative to the national average¹⁵, **114** (**64.8%**) **had high recent burden of COVID-19 cases**. These 114 counties are pictured below. Colors are assigned based on recent burden and group representation within the county relative to other counties shown. Counties in gray either do not have high recent burden or do not have large group representation.

-

¹⁵ In 2018, an estimated 0.2% of the U.S. population was non-Hispanic Native Hawaiian or other Pacific Islander.

Map 6: Counties with large <u>non-Hispanic Native Hawaiian or other Pacific Islander (NHOPI)</u> populations and high recent burden



The table below shows the top 10 counties with large non-Hispanic Native Hawaiian or other Pacific Islander populations and high recent burden of COVID-19. None of the counties with the largest non-Hispanic Native Hawaiian or other Pacific Islander populations had highest recent burden of COVID-19. The non-Hispanic Native Hawaiian or other Pacific Islander population is not the predominant racial and ethnic group in any of the counties identified.

Table 12: Top 10 U.S. counties with large, <u>non-Hispanic Native Hawaiian or other Pacific</u> Islander (NHOPI) populations and high recent burden of COVID-19

County	Urbanization level	Percent of population non- Hispanic NHOPI	Non-Hispanic NHOPI predominant group (*)	New cases per 100,000 in the past 2 weeks
Large population, his	ghest recent burden			
Chattahoochee, GA	Small or medium metro	0.6%		2,358.67
Washington, FL	Rural	0.3%		1,748.39
Lassen, CA	Rural	0.8%		1,730.41
Large population, his	gh recent burden			
Pettis, MO	Rural	0.3%		597.06
Greene, AR	Rural	0.4%		562.60
Jackson, OK	Rural	0.3%		561.14
Colusa, CA	Rural	0.3%		545.61
Clark, NV	Large metropolitan	0.7%		522.44
Sevier, AR	Rural	1.0%		501.78
Jackson, MO	Large metropolitan	0.3%		475.36

Note: The NHOPI population comprises a very small percentage of the total population in all these counties. The list of counties with high recent burden can significantly change over time. Large group representation within a county with high recent burden does not necessarily mean higher group risk. Finally, in counties with smaller populations, even where new case rates are high the absolute number of new cases may be comparatively low.

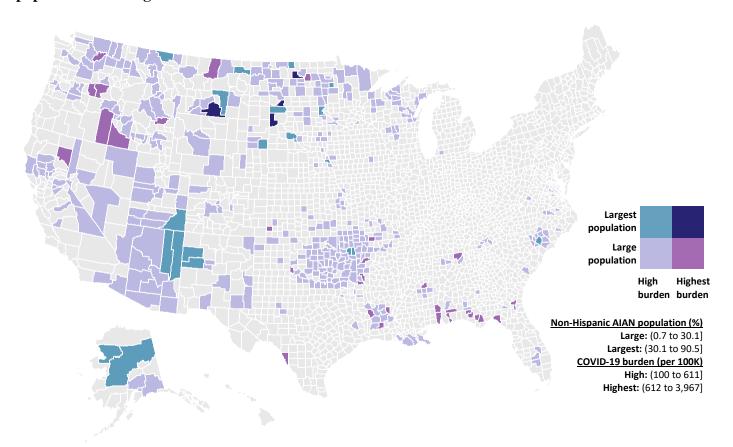
Counties with large <u>non-Hispanic American Indian or Alaska Native</u> populations and high recent burden

Among 809 counties that had large non-Hispanic American Indian or Alaska Native populations relative to the national average ¹⁶, **416** (**51.4%**) **had high recent burden of COVID-19 cases**. These 416 counties are pictured below. Colors are assigned based on both group representation and COVID-19 burden relative to other counties. Counties in gray either do not have high recent burden or do not have large group representation.

201

¹⁶ In 2018, an estimated 0.7% of the U.S. population was non-Hispanic American Indian or Alaska Native.

Map 7: Counties with large <u>non-Hispanic American Indian or Alaska Native (AIAN)</u> populations and high recent burden



The table below shows the top 10 counties with large non-Hispanic American Indian or Alaska Native populations and high recent burden of COVID-19. Four of these counties had the largest non-Hispanic American Indian or Alaska Native populations and highest recent burden of COVID-19. Nine counties where the non-Hispanic American Indian or Alaska Native population is the predominant racial and ethnic group of the county population are starred (*).

Table 13: Top 10 U.S. counties with large, non-Hispanic American Indian or Alaska Native

(AIAN) populations and high recent burden of COVID-19

populations and inglifective states of Co (12 1)								
		Percent of population non-	Non-Hispanic AIAN predominant group	New cases per 100,000 in the				
County	Urbanization level	Hispanic AIAN	(*)	past 2 weeks				
Largest population	on, highest recent burder	n						
Big Horn, MT	Rural	62.6%	*	1,581.95				
Ziebach, SD	Rural	66.6%	*	1,021.15				
Benson, ND	Rural	52.9%	*	1,019.82				
Sioux, ND	Small or medium metro	78.1%	*	734.28				
Largest population	on, high recent burden							
Adair, OK	Rural	42.1%	*	430.21				
Cherokee, OK	Rural	34.2%		421.16				
San Juan, UT	Rural	47.4%	*	388.37				
Rolette, ND	Rural	76.6%	*	384.59				

Apache, AZ	Rural	73.2%	*	367.60
Robeson, NC	Rural	39.8%	*	320.11

Note: The list of counties with high recent burden can significantly change over time. Large group representation within a county with high recent burden does not necessarily mean higher group risk. Finally, in counties with smaller populations, even where new case rates are high the absolute number of new cases may be comparatively low.

Future reporting on geographic disparities by race and ethnicity

CDC is continuing to review the availability of data to identify geographic locations that reflect a disproportionate burden of COVID-19 among racial and ethnic minorities. This report will continue to be updated with new information and as more complete data become available.

CDC will be pursuing several steps to improve future reporting, including:

- Continuing support for improvement of technical innovations at the state and local level to improve case report completeness
- Augmenting the available case report data through methods such as mathematical imputation
- Adjusting the methodology to evaluate the best approach to define and identify counties with large proportions of groups of interest
- Developing new data visualizations to display information about counties with both high recent burden of COVID-19 and high proportions of racial and ethnic minority population groups

Looking Forward

CDC recently released an 'all of response' Health Equity Strategy¹⁷ for CDC's COVID-19 response that provides an evidence-based, comprehensive and coordinated framework for reducing COVID-19 disparities, which includes recommending expanded testing of populations at highest risk. The strategy focuses on four priorities: 1) Expand the evidence base; 2) In order to reach populations that have been put at increased risk; expand programs and practices for testing, contact tracing, isolation, healthcare, and recovery from the impact of unintended negative consequences of mitigation strategies; 3) Expand program and practice activities to support essential and frontline workers to prevent transmission of COVID-19; and 4) Expand an inclusive workforce equipped to assess and address the needs of an increasingly diverse U.S. population.

To accelerate efforts to reduce COVID-19 disparities, CDC continues to expand collection, analysis, and dissemination of data, including data on racial and ethnic disparities to inform public health action. For example, CDC is currently working to enhance data on racial and ethnic disparities on the CDC website to help communities focus their efforts. In addition, CDC is supporting several local activities in African American, Hispanic/Latino, American Indian and Alaska Native, and Asian American, Pacific Islander and Native Hawaiian communities to deliver COVID-19 prevention messages and community mitigation strategies. These investments include engaging Historically Black Colleges and Universities and minority-serving organizations.

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¹⁷ https://www.cdc.gov/coronavirus/2019-ncov/downloads/community/CDC-Strategy.pdf

For example, the Building Hispanic/Latino Community Capacity to Respond to COVID-19 project will increase the capacity of Hispanic/Latino communities at high risk for COVID-19 through the engagement of trusted community-based organizations, tailored communications, and the mobilization of Spanish-speaking community health workers trained to effectively implement COVID-19 prevention messages and community mitigation strategies. This project will identify gaps in language access to CDC messages and recommendations in targeted communities and will contribute much-needed knowledge about culturally and linguistically appropriate strategies that can be implemented rapidly to improve health outcomes.

Appendix A: Sources of Data for Race and Ethnicity

CDC's COVID-19 surveillance strategy relies on reporting from multiple sources, including states, hospitals, labs, nursing homes and others. Receiving data from multiple sources enables CDC to compile a more complete and textured picture of the epidemiology of this virus and its spread. Below is a description of each of the sources of data used in this report, including reporting entities and the strengths and limitations of each source for race and ethnicity data.

	Case-based reporting	COVID-NET Hospitalization Data	Mortality Data	Laboratory Data
Description	COVID-19 cases are reported to CDC through a standardized, response-initiated case report form and populates the National Notifiable Diseases Surveillance System. Cases are reported to CDC using a standardized case definition and defined demographic and clinical variables. A confirmed case is defined as confirmed COVID-19 illness if SARS-CoV-2 RNA is detected in a specimen from the patient using rRT-PCR test ¹⁸ .	Data set of laboratory-confirmed COVID-19-associated hospitalizations in children (people younger than 18 years) and adults used to estimate age-specific hospitalization rates on a weekly basis and describe characteristics of people hospitalized with COVID-19.	National Vital Statistics System data includes national-level mortality data with detailed demographic data	Data set of laboratory test results
Method of Reporting	Either aggregate case count or detailed line level	Cases are identified by reviewing hospital, laboratory, and admission databases and infection control logs for patients hospitalized with a documented positive SARS-CoV-2 test.	Either aggregate case count or detailed line level	Either line level or aggregate positive and negative laboratory test results
Strengths	Utilizes a standard case report form that includes important demographic	Population-based and represents 10% of the U.S. population (32 million people)	Death counts for earlier weeks are continually revised and updated death	Test result data allow for tracking infection rates over time, by location, and identifying

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¹⁸ Stokes EK, Zambrano LD, Anderson KN, et al. Coronavirus Disease 2019 Case Surveillance — United States, January 22–May 30, 2020. MMWR Morb Mortal Wkly Rep 2020;69:759–765. DOI: http://dx.doi.org/10.15585/mmwr.mm6924e2

	variables such as race/ethnicity		certificate data are received regularly.	groups of individuals at
	Completeness of Race/ethnicity data reported by states is	93.6% completeness for race/ethnicity.	received regularly.	higher risk for infection.
Limitations	improving. Case report form requires additional time to complete by clinician or health department Case report forms are not completed by clinicians or health departments for every case Extent and level and completeness varies While reporting of cases is required, reporting of demographic data is not currently mandated	COVID-NET hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. As data are received each week, prior case counts and rates are updated accordingly	It can take several weeks for death records to be submitted coded, and tabulated. States report at different rates. Race/ethnicity is usually completed by funeral director Race/ethnicity requires information from family member or close contact to deceased 20-30% of the data is missing critical information such as race/ethnicity at a given point in time. Data may be updated at a later date.	Data streams from commercial, hospital, and public health labs are incomplete. Diagnostic test data are compiled from a number of sources, and not all tests are directly reported to CDC. Currently no breakdown of race/ethnicity for testing data reported to CDC.
Additional information	More information about case reporting can be found here.	More information about COVID-NET can be found here.	Data are provisional and updated on an ongoing basis. It takes extra time to code COVID-19 deaths. While 80% of deaths are electronically processed and coded within minutes, most deaths from COVID-19 must be coded by a person, which takes an average of 7 days. More information about NVSS mortality data for COVID-19 can be found here and	All laboratories will be required to report specific demographic data, including race/ethnicity, on COVID tests to HHS per guidance issued by HHS on June 4, 2020. beginning on August 1, 2020. This new requirement originates from an authority established by Section 18115 of the CARES Act More information about laboratory

	information about	testing can be found
	the death data	<u>here</u> .
	quality is also	
	available.	

Appendix B: Case and Death Count by Jurisdiction Table

This table shows COVID-19 cases and deaths reported by U.S. States, the District of Columbia, New York City and other U.S.-affiliated jurisdictions through CDC aggregate data. Confirmed and probable cases and deaths are provided when available, and when not available, this is designated by N/A (not available). New York State's case and death counts do not include New York City's counts as it is a separate reporting jurisdiction. Total case counts are reported by all jurisdictions. Case counts and deaths for some jurisdictions appear significantly lower than aggregate data estimates reported to CDC daily by phone. This data can be found here 19.

T2-32-42	A 1-1	Total	Confirmed		Total	Confirmed	
Jurisdiction	Abbrev	Cases	Cases	Cases	Deaths	Deaths	Deaths
Alabama	AL	103,851	99,926	3,925	1,847	1,781	66
Alaska	AK	3,821	N/A	N/A	26	N/A	N/A
American Samoa	AS	0	N/A	N/A	0	N/A	N/A
Arizona	AZ	188,737	187,362	1,375	4,199	3,951	248
Arkansas	AR	50,411	N/A	N/A	566	N/A	N/A
California	CA	574,411	N/A	N/A	10,468	N/A	N/A
Colorado	CO	51,441	48,008	3,433	1,875	1,533	342
Connecticut	CT	50,684	48,690	1,994	4,444	3,561	883
Delaware	DE	15,699	14,700	999	591	521	70
District of Columbia	DC	12,896	N/A	N/A	593	N/A	N/A
Florida	FL	536,981	N/A	N/A	8,553	N/A	N/A
Georgia	GA	222,588	N/A	N/A	4,351	N/A	N/A
Guam	GU	449	N/A	N/A	5	N/A	N/A
Hawaii	HI	3523	N/A	N/A	34	N/A	N/A
Idaho	ID	25,595	23,950	1,645	246	221	25
Illinois	IL	198,248	196,948	1,300	7,866	7,657	209
Indiana	IN	75,862	N/A	N/A	3,069	2,863	206
Iowa	IA	49,329	N/A	N/A	940	N/A	N/A
Kansas	KS	31,730	30,975	755	387	N/A	N/A
Kentucky	KY	35,793	33,379	2,414	783	778	5
Louisiana	LA	133,125	N/A	N/A	4,313	4,195	118
Maine	ME	4,069	3,661	408	126	N/A	N/A
Marshall Islands	RMI	0	0	0	0	0	0
Maryland	MD	97,384	N/A	N/A	3,612	3,474	138

¹⁹ https://www.cdc.gov/covid-data-tracker/index.html#cases

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Massachusetts	MA	121,707	112,969	8,738	8,751	8,529	222
Michigan	MI	98,213	88,756	9,457	6,533	6,264	269
Micronesia	FSM	0	0	0	0	0	0
Minnesota	MN	61,839	N/A	N/A	1,707	1,666	41
Mississippi	MS	68,293	66,939	1,354	1,944	1,879	65
Missouri	МО	60,935	N/A	N/A	1,312	N/A	N/A
Montana	MT	5,289	5,289	0	79	79	0
Nebraska	NE	29,030	N/A	N/A	351	N/A	N/A
Nevada	NV	57,745	N/A	N/A	1,009	N/A	N/A
New Hampshire	NH	6,861	N/A	N/A	419	N/A	N/A
New Jersey	NJ	185,475	N/A	N/A	15,890	14,037	1853
New Mexico	NM	22,643	N/A	N/A	693	N/A	N/A
New York (excluding		,					
NYC)	NY	193,660	N/A	N/A	8,885	N/A	N/A
New York City	NYC	229,927	225,284	4,643	23,602	18,970	4,632
North Carolina	NC	137,895	N/A	N/A	2,204	N/A	N/A
North Dakota	ND	7,970	N/A	N/A	120	N/A	N/A
Northern Marianas	MP	49	49	0	2	2	0
Ohio	ОН	102,826	97,373	5,453	3,708	3,435	273
Oklahoma	OK	47,908	44,724	3,184	618	618	0
Oregon	OR	21,774	20,643	1,131	368	360	8
Pennsylvania	PA	120,281	116,925	3,356	7,352	N/A	N/A
Puerto Rico	PR	24,074	10,169	13,905	295	174	121
Palau	PW	0	N/A	N/A	0	N/A	N/A
Rhode Island	RI	20,053	N/A	N/A	1,016	N/A	N/A
South Carolina	SC	102,130	101,360	770	2,098	2,012	86
South Dakota	SD	9,713	N/A	N/A	146	144	2
Tennessee	TN	124,915	123,006	1,909	1,271	1,232	39
Texas	TX	500,620	N/A	N/A	8,710	N/A	N/A
US Virgin Islands	VI	639	N/A	N/A	9	N/A	N/A
Utah	UT	45,399	45,029	370	350	350	0
Vermont	VT	1,478	N/A	N/A	58	N/A	N/A
Virginia	VA	102,521	98,374	4,147	2,352	2,238	114
Washington	WA	64,151	N/A	N/A	1,716	N/A	N/A
West Virginia	WV	7,875	7,713	162	147	N/A	N/A
Wisconsin	WI	66,123	61,785	4,338	1,013	1,006	7
Wyoming	WY	3,073	2,584	489	29	29	0
TOTAL	-	5,119,711	1,916,570	8,1654	163,651	93,559	10,042

Data source: Data are based on aggregate counts of COVID-19 cases and deaths reported by state and territorial jurisdictions to the Centers for Disease Control and Prevention (CDC) from January 21 through August 11, 2020.