Confirmed COVID-19 Cases, Metropolitan and Nonmetropolitan Counties

Fred Ullrich, BA; and Keith Mueller, PhD

Report

Much of the COVID-19 focus has been on major metropolitan areas, but rural areas of the United States are not free of exposure. As of November 21, 2021, there were a total of 47,206,059 cases and 735,564 deaths identified in counties, with 7,362,559 cases and 129,765 deaths (about 15.6 percent of cases and 17.6 percent of deaths) reported in nonmetropolitan counties (data obtained from the Johns Hopkins University COVID-19 Data Repository*).

Map 1. Counties with confirmed COVID-19 Cases

Counts with COVID-19 Cases

November 21, 2021

Metro cases: 39,843,500  Nonmetro cases: 7,362,559

Metro rate: 1,439  Nonmetro rate: 1,598

*Confirmed cases / 10,000 population based on 2018 ACS 5-year estimates.
Rural Health Research & Policy Centers
RUPRI Center for Rural Health Policy Analysis
University of Iowa College of Public Health

This project was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement/grant #1U1GRH07633 and #U1C RH20419. The information, conclusions and opinions expressed in this policy brief are those of the authors and no endorsement by FORHP, HRSA, HHS is intended or should be inferred.

Data source: Johns Hopkins University CSSE COVID-19 Data
https://github.com/CSSEGISandData/COVID-19

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http://www.public-health.uiowa.edu/rupri/

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But as many experts have pointed out, the rate of growth in cases is very different depending on location. Further, the stress on the health care delivery system is proportionate – a small number of cases creates stress for low capacity systems just as a large volume of cases creates stress for larger capacity systems.

Note that this document reports on confirmed COVID-19 cases and those numbers will be affected by the availability and utilization of testing resources. Recent and updated maps, and the “progression” of cases throughout the country, can be seen on the animated map on the RUPRI Health web site: http://ruprihealth.org/publications/policybriefs/2020/COVID History/

Map 1 (above) displays the rates of confirmed COVID-19 cases in metropolitan and nonmetropolitan counties. Table 1 shows metropolitan and nonmetropolitan county confirmed case and death counts. It also depicts the rate of cases and deaths per 10,000 population (based on the 2018 American Community Survey 5-year estimates). Finally, it shows the number of metropolitan and metropolitan counties with a rate of cases exceeding 10 per 10,000 population and a rate of death exceeding 1 per 10,000 population. Map 2 displays the rates of COVID-19 deaths in metropolitan and nonmetropolitan counties.

Table 1. Metropolitan and Nonmetropolitan Counties. Confirmed cases, deaths, and rates

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan</th>
<th>Nonmetropol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counties (total)</td>
<td>1,166</td>
<td>1,976</td>
</tr>
<tr>
<td>Population (2010 census)</td>
<td>276,820,000</td>
<td>46,082,565</td>
</tr>
<tr>
<td>Counties w/ confirmed cases</td>
<td>1,165 (99.9%)</td>
<td>1,972 (99.8%)</td>
</tr>
<tr>
<td>Counties w/ deaths</td>
<td>1,165 (99.9%)</td>
<td>1,948 (98.6%)</td>
</tr>
<tr>
<td>Confirmed cases</td>
<td>39,843,500 (14.4%)</td>
<td>7,362,559 (16.0%)</td>
</tr>
<tr>
<td>Deaths</td>
<td>605,799 (0.2%)</td>
<td>129,765 (0.3%)</td>
</tr>
<tr>
<td>Cases/10K population</td>
<td>1,439</td>
<td>1,598</td>
</tr>
<tr>
<td>Deaths/10K population</td>
<td>21.88</td>
<td>28.16</td>
</tr>
<tr>
<td>Counties w/ 500+ cases/10K</td>
<td>1,163 (99.7%)</td>
<td>1,965 (99.4%)</td>
</tr>
<tr>
<td>Counties w/ 1000+ cases/10K</td>
<td>1,072 (91.9%)</td>
<td>1,857 (94.0%)</td>
</tr>
<tr>
<td>Counties w/ 1500+ cases/10K</td>
<td>634 (54.4%)</td>
<td>1,240 (62.8%)</td>
</tr>
<tr>
<td>Counties w/ 2000+ cases/10K</td>
<td>67 (5.7%)</td>
<td>239 (12.1%)</td>
</tr>
<tr>
<td>Counties w/ 5+ deaths/10K</td>
<td>1,159 (99.4%)</td>
<td>1,915 (96.9%)</td>
</tr>
<tr>
<td>Counties w/ 10+ deaths/10K</td>
<td>1,076 (92.3%)</td>
<td>1,824 (92.3%)</td>
</tr>
<tr>
<td>Counties w/ 25+ deaths/10K</td>
<td>469 (40.2%)</td>
<td>1,195 (60.5%)</td>
</tr>
</tbody>
</table>

Data sources: COVID-19 case and death data from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University. Population data from the 2018 American Community Survey 5-yr estimates.

*COVID-19 case and death data for this ongoing report were previously obtained from USAFacts.org. Reports after 8/15/2020 use data from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University. While both sources employ similar approaches and resources to produce their data, the Johns Hopkins data is released in a more timely fashion making it more suitable for use in these reports. Similarly, previous reports had used population data from the U.S. 2010 decennial Census. Current reports utilize data from the Census Bureau’s 2018 American Community Survey 5-year population estimates.

Additional changes were made to the report starting 4/26/2021 to better account for the Utah practice of providing aggregated incidence and mortality data for less populous counties.

Nebraska stopped reporting county-level mortality data on 5/25/2021. Florida stopped reporting county-level mortality data on 6/3/2021. This means that total metropolitan and nonmetropolitan counts are undercounts.
Map 2. Counties with COVID-19 Deaths

Counties with COVID-19 Deaths
November 21, 2021
Metro deaths: 605,799 Nonmetro deaths: 129,765
Metro rate: 21.88 Nonmetro rate: 28.16

*Deaths/10,000 population based on 2018 ACS 5-year estimates.
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Data source: Johns Hopkins University CSSE COVID-19 Data
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Map 3. State Metropolitan/Nonmetropolitan COVID-19 One-week Case Rates

Metropolitan/Nonmetropolitan COVID-19 Cases

New cases for week ending: November 21, 2021

* Cases / 10,000 population based on 2018 ACS 5-year estimates.

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