

# RUPRI Center for Rural Health Policy Analysis

## Rural Data Brief

Brief No. 2020-2

JUNE 2022

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

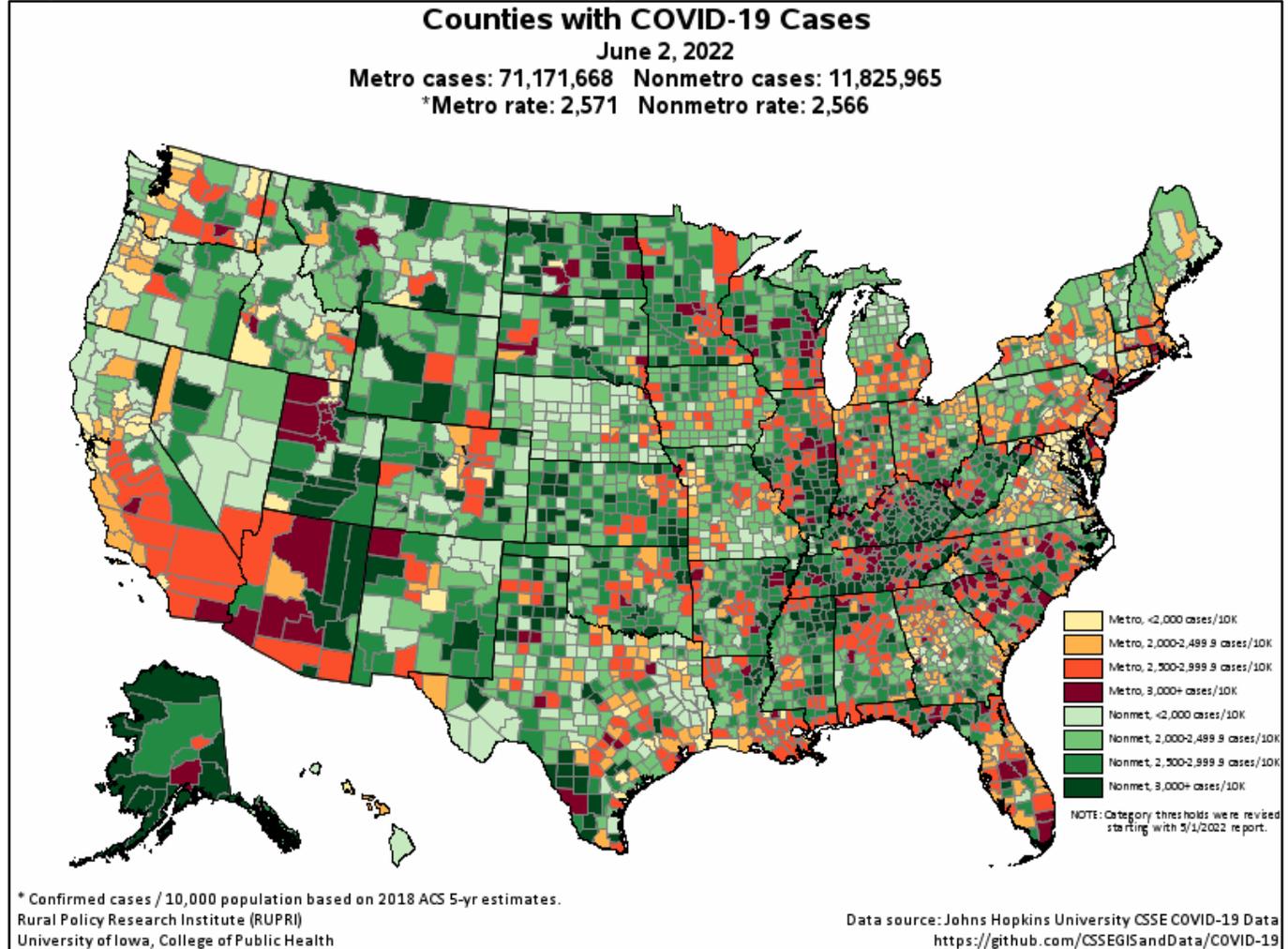
### Confirmed COVID-19 Cases, Metropolitan and Nonmetropolitan Counties

Fred Ullrich, BA; and Keith Mueller, PhD

#### Report

Early COVID-19 focus was on major metropolitan areas, but rural areas of the United States have also been hit hard by the pandemic. As of June 2, 2022, there were a total of 82,997,633 cases and 991,527 deaths identified in counties, with 11,825,965 cases and 180,040 deaths (about 14.3 percent of cases and 18.2 percent of deaths) reported in non-metropolitan counties (data obtained from the Johns Hopkins University COVID-19 Data Repository\*).

#### Map 1. Counties with confirmed COVID-19 Cases



#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.

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 52242-2007, (319) 384-3830  
<http://www.public-health.uiowa.edu/rupri>  
E-mail: [cph-rupri-inquiries@uiowa.edu](mailto:cph-rupri-inquiries@uiowa.edu)



RURAL POLICY RESEARCH INSTITUTE

RUPRI Center for Rural Health Policy Analysis, University of Iowa College of Public Health, Department of Health Management and Policy, 145 Riverside Dr., Iowa City, IA 52242-2007, (319) 384-3830  
<http://www.public-health.uiowa.edu/rupri>  
E-mail: [cph-rupri-inquiries@uiowa.edu](mailto:cph-rupri-inquiries@uiowa.edu)

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/](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 and proportion of metropolitan and nonmetropolitan counties exceeding various case and death rate levels. 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**

	<b>Metropolitan</b>	<b>Nonmetropolitan</b>
Counties (total)	1,166	1,976
Population (2010 census)	276,820,000	46,082,565
Counties w/ confirmed cases	1,165 (99.9%)	1,972 (99.8%)
Counties w/ deaths	1,165 (99.9%)	1,960 (99.2%)
Confirmed cases	71,171,668 (25.7%)	11,825,965 (25.7%)
Deaths	811,487 (0.3%)	180,040 (0.4%)
Cases/10K population	2,571	2,566
Deaths/10K population	29.31	39.07
Counties w/ 1000+ cases/10K	1,161 (99.6%)	1,965 (99.4%)
Counties w/ 1500+ cases/10K	1,151 (98.7%)	1,916 (97.0%)
Counties w/ 2000+ cases/10K	1,022 (87.7%)	1,636 (82.8%)
Counties w/ 5+ deaths/10K	1,165 (99.9%)	1,947 (98.5%)
Counties w/ 10+ deaths/10K	1,148 (98.5%)	1,905 (96.4%)
Counties w/ 25+ deaths/10K	821 (70.4%)	1,623 (82.1%)
Counties w/ 50+ deaths/10K	102 (8.7%)	541 (27.4%)

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.

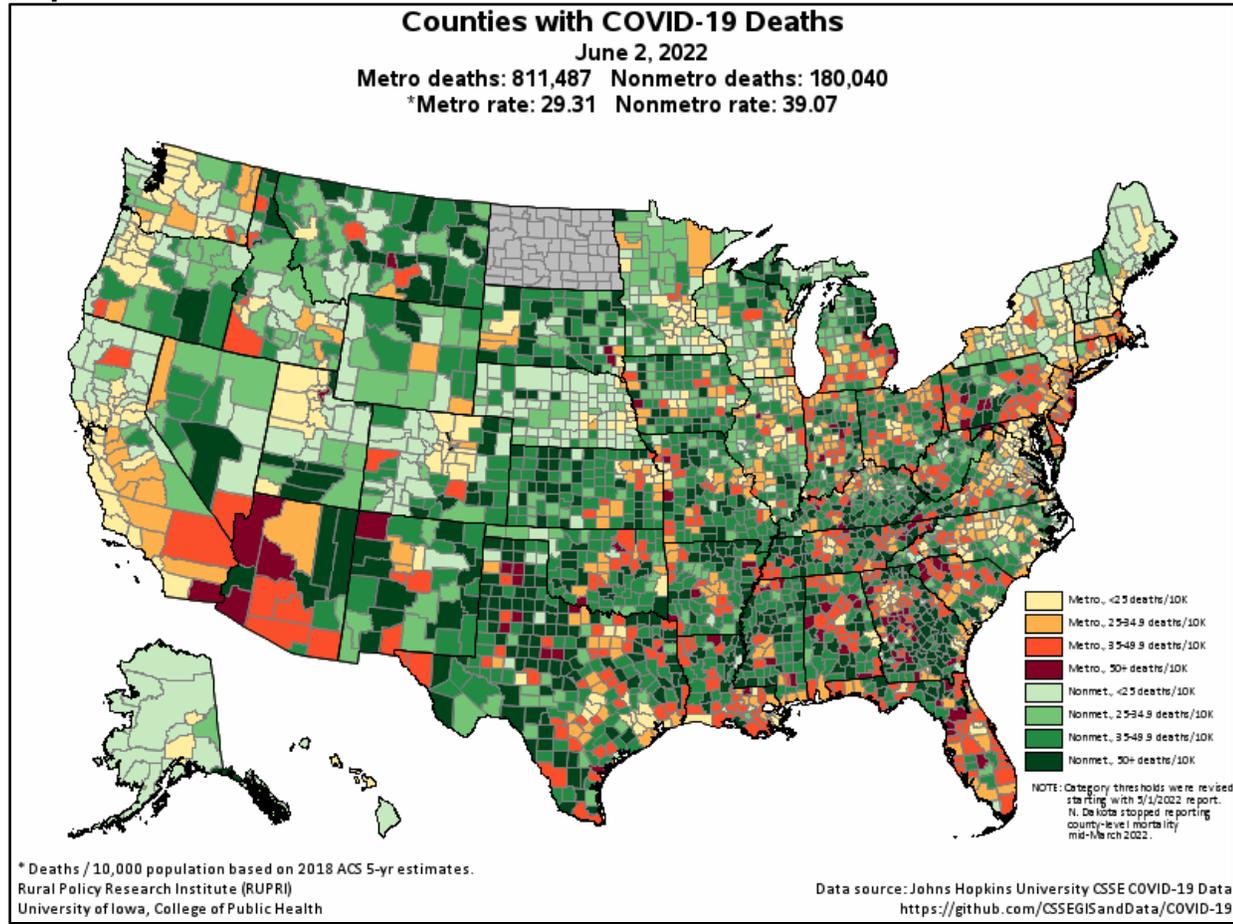
---

\*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](#). 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.

All data in this brief are based on county-level counts to facilitate metropolitan/nonmetropolitan reporting. Cases and deaths that could not be attributed to a county are excluded. North Dakota (mid-March 2022) stopped reporting county-level mortality data. This means that national figures are undercounts.

**Map 2. Counties with COVID-19 Deaths**



**Map 3. State Metropolitan/Nonmetropolitan COVID-19 One-week Case Rates**

