

# RUPRI Center for Rural Health Policy Analysis

## Rural Data Brief

Brief No. 2020-2

MARCH 2021

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

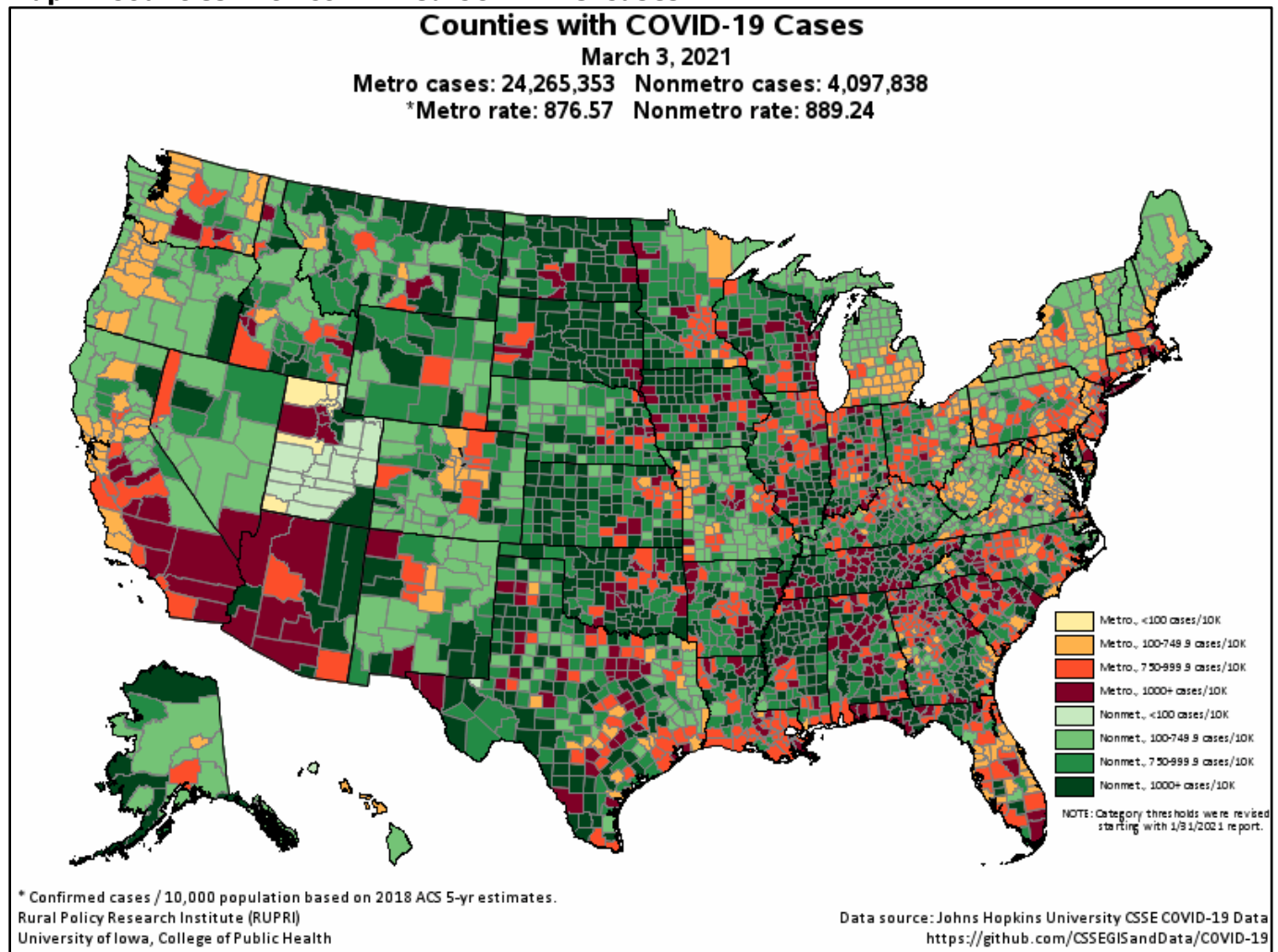
### Confirmed COVID-19 Cases, Metropolitan and Nonmetropolitan Counties

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 March 3, 2021, there were a total of 28,363,191 cases and 510,963 deaths identified in counties, with 4,097,838 cases and 80,883 deaths (about 14.5 percent of cases and 15.8 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



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 of metropolitan and nonmetropolitan 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**

	<b>Metropolitan</b>	<b>Nonmetropol.</b>
Counties (total)	1,166	1,976
Population (2010 census)	276,820,000	46,082,565
Counties w/ confirmed cases	1,159 (99.4%)	1,956 (99.0%)
Counties w/ deaths	1,158 (99.3%)	1,914 (96.9%)
Confirmed cases	24,265,353 (8.8%)	4,097,838 (8.9%)
Deaths	430,080 (0.2%)	80,883 (0.2%)
Cases/10K population	876.6	889.2
Deaths/10K population	15.54	17.55
Counties w/ 10+ cases/10K	1,159 (99.4%)	1,956 (99.0%)
Counties w/ 100+ cases/10K	1,159 (99.4%)	1,953 (98.8%)
Counties w/ 500+ cases/10K	1,082 (92.8%)	1,789 (90.5%)
Counties w/ 750+ cases/10K	816 (70.0%)	1,422 (72.0%)
Counties w/ 1+ deaths/10K	1,156 (99.1%)	1,904 (96.4%)
Counties w/ 10+ deaths/10K	864 (74.1%)	1,515 (76.7%)
Counties w/ 15+ deaths/10K	534 (45.8%)	1,168 (59.1%)

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.

## Map 2. Counties with COVID-19 Deaths

