

RUPRI Center for Rural Health Policy Analysis

Rural Data Update

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County-Level 14-Day COVID-19 Case Trajectories

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Background

This document updates maps and tables for the Rural Data Brief “County-Level 14-Day COVID-19 Case Trajectories” (https://ruprihealth.org/publications/policybriefs/2020/County_COVID_Trajectories.pdf). This data brief looks at the new case counts in every US county between September 5, 2021, and September 18, 2021, to quantitatively evaluate 14-day trends in metropolitan, nonmetropolitan, and noncore counties. Previous versions of this document can be found at:

https://ruprihealth.org/publications/policybriefs/2020/COVID_Projects.html

Data on confirmed COVID-19 cases were obtained from the Johns Hopkins University COVID-19 Data Repository¹. The number of cases in each county was aggregated for each week in the two-week period, and the totals for each week were compared. To minimize the impact of counties with very minor real variation in weekly counts, those with a change in case count of two or fewer (either increase or decrease) were coded as “Same number, both weeks.” Counties that saw more than a 25 percent increase or decrease in number of cases between the weeks were labelled “notable” (including counties that went from 3 or more to none [notable decrease] and counties that went from none to 3 or more [notable increase]). Counties in the 50 states and the District of Columbia were classified as metropolitan, nonmetropolitan, or noncore based on Urban Influence Codes².

Table 1. 14-day trends^a in newly confirmed COVID-19 cases, by county geography: 9/5/2021 – 9/18/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	15 (1.3%)	19 (3.0%)	72 (5.4%)
Decreasing, notable ^b	160 (13.7%)	71 (11.1%)	225 (16.9%)
Decreasing, not notable	306 (26.2%)	160 (25.0%)	198 (14.8%)
Same number, both weeks ^c	53 (4.5%)	42 (6.6%)	203 (15.2%)
Increasing, not notable	385 (33.0%)	170 (26.5%)	205 (15.4%)
Increasing, notable	247 (21.2%)	179 (27.9%)	432 (32.4%)

^aComparison of number of new cases in first week of 14-day period with new cases in second week.

^b“Notable” trends indicate weekly changes in new cases exceeding (either increasing or decreasing) 25 percent.

^cIncludes counties with an absolute change in count of two or fewer.



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Table 2. 14-day trends^a in newly confirmed COVID-19 cases, in counties with any cases, by county geography: 9/5/2021 – 9/18/2021

	Metropolitan (n = 1,151 of 1,166)	Nonmetropolitan (n = 622 of 641)	Noncore (n = 1,263 of 1,335)
<i>Any decrease</i>	466 (40.5%)	231 (37.1%)	423 (33.5%)
Notable decrease ^b	160 (13.9%)	71 (11.4%)	225 (17.8%)
Same number, both weeks ^c	53 (4.6%)	42 (6.8%)	203 (16.1%)
<i>Any increase</i>	632 (54.9%)	349 (56.1%)	637 (50.4%)
Notable increase ^b	247 (21.5%)	179 (28.8%)	432 (34.2%)
Increase of 100% or more	15 (1.3%)	16 (2.6%)	121 (9.6%)

^aComparison of number of new cases in first week of 14-day period with new cases in second week.

^b"Notable" trends indicate weekly changes in new cases exceeding (either increasing or decreasing) 25 percent.

^cIncludes counties with an absolute change in count of two or fewer.

Figure 1.

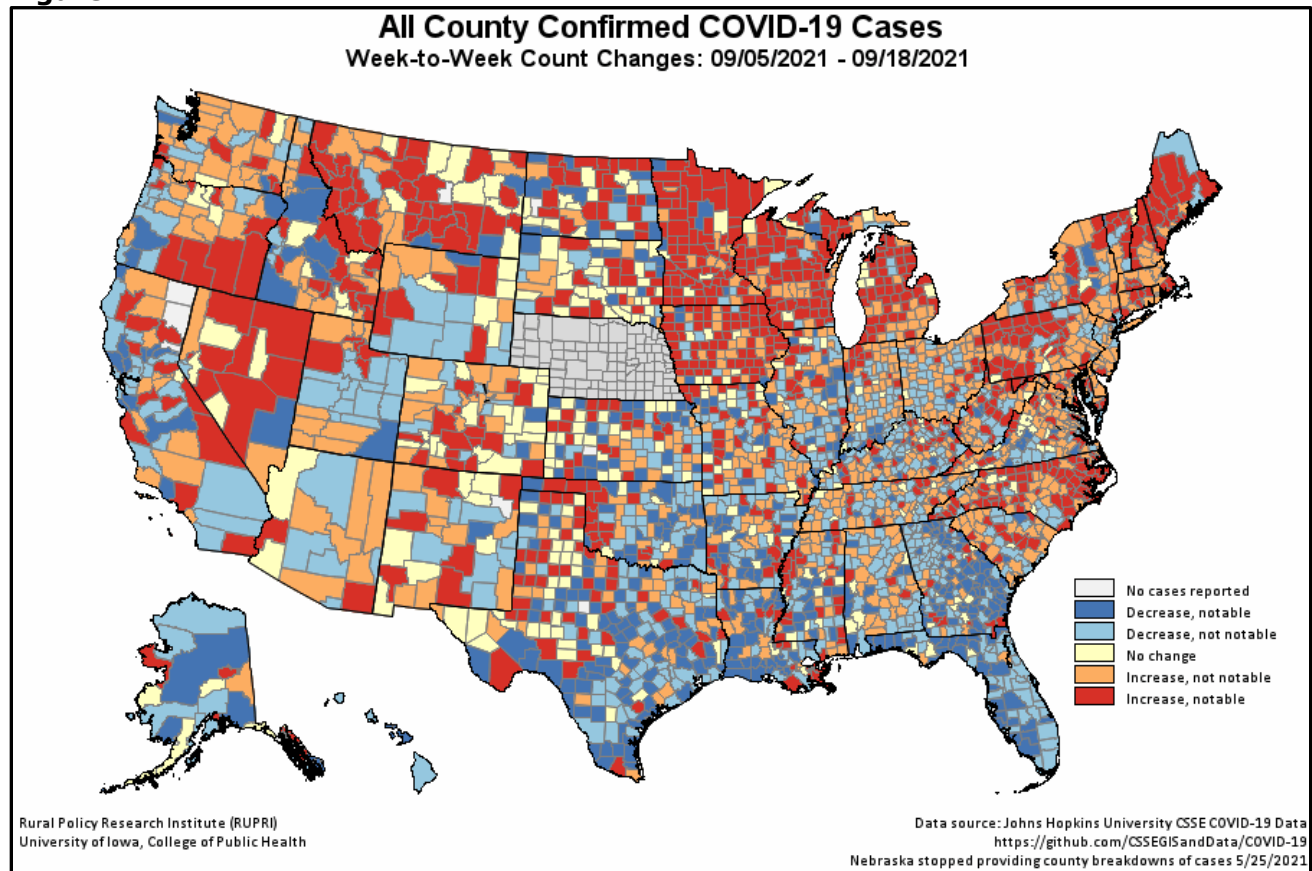


Figure 2.

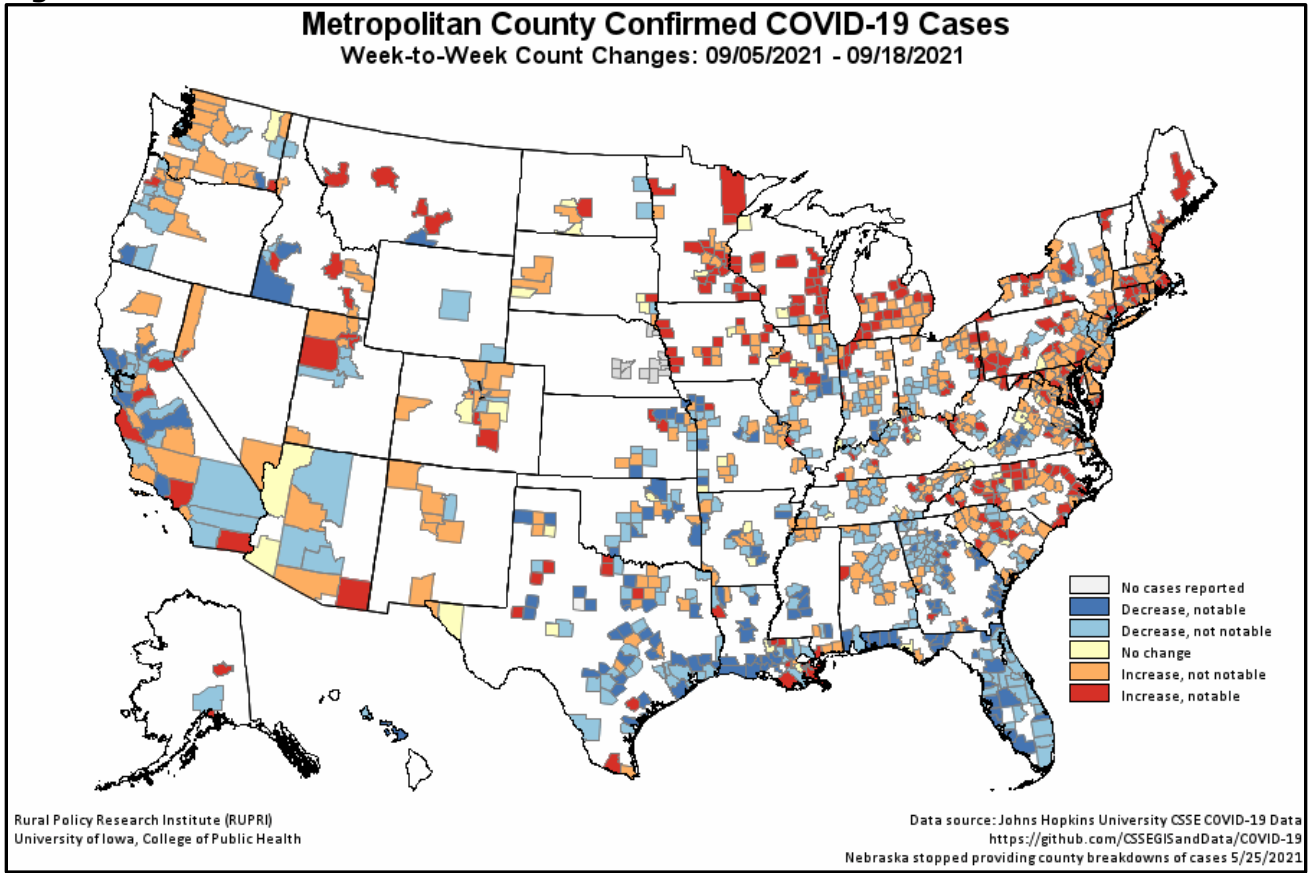


Figure 3.

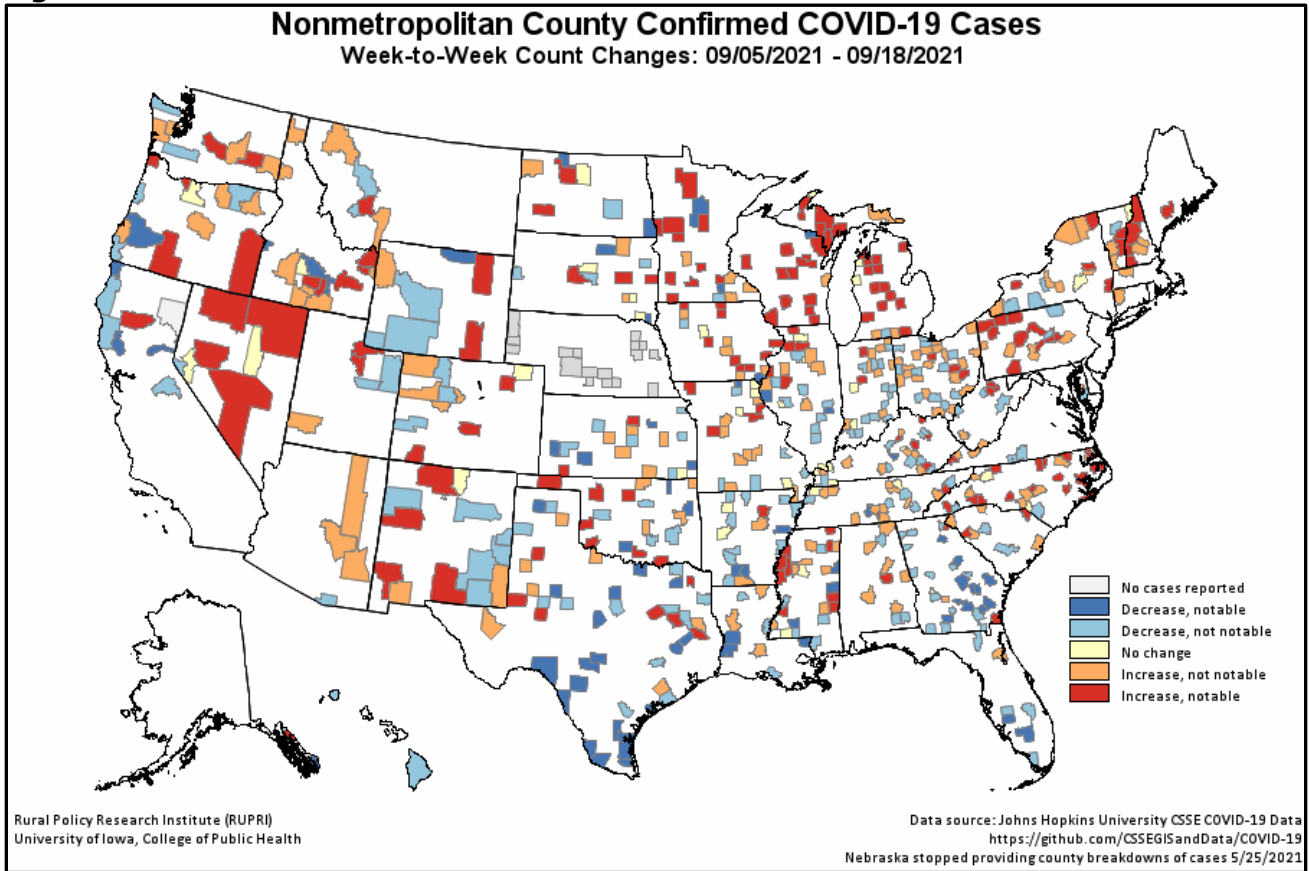
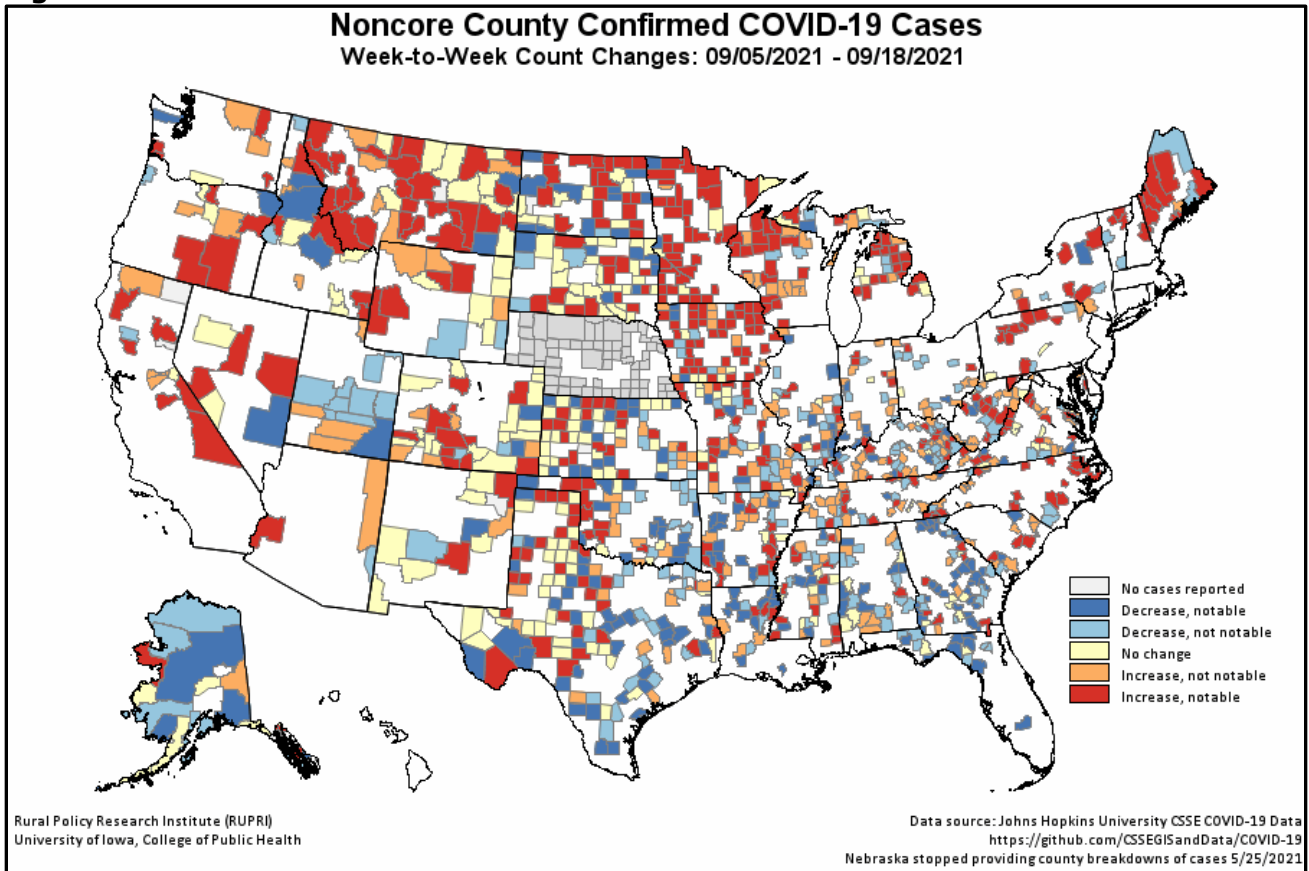


Figure 4.



¹ COVID-19 case and death data for this ongoing report were previously obtained from [USAFacts.org](https://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](https://github.com/CSSEGISandData/COVID-19). 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.

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 case and mortality data on 5/25/2021. Therefore, total cases/deaths for metropolitan and nonmetropolitan counts are undercounts.

² U.S. Department of Agriculture, Economic Research Service (2019). "Urban Influence Codes." Retrieved May 20, 2020 from <https://www.ers.usda.gov/data-products/urban-influence-codes/>.