

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 August 22, 2021, and September 4, 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: 8/22/2021 – 9/4/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	14 (1.2%)	19 (3.0%)	72 (5.4%)
Decreasing, notable ^b	81 (6.9%)	50 (7.8%)	170 (12.7%)
Decreasing, not notable	264 (22.6%)	111 (17.3%)	188 (14.1%)
Same number, both weeks ^c	52 (4.5%)	42 (6.6%)	194 (14.5%)
Increasing, not notable	390 (33.4%)	175 (27.3%)	188 (14.1%)
Increasing, notable	365 (31.3%)	244 (38.1%)	523 (39.2%)

^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: 8/22/2021 – 9/4/2021

	Metropolitan (n = 1,152 of 1,166)	Nonmetropolitan (n = 622 of 641)	Noncore (n = 1,263 of 1,335)
Any decrease	345 (29.9%)	161 (25.9%)	358 (28.3%)
Notable decrease ^b	81 (7.0%)	50 (8.0%)	170 (13.5%)
Same number, both weeks ^c	52 (4.5%)	42 (6.8%)	194 (15.4%)
Any increase	755 (65.5%)	419 (67.4%)	711 (56.3%)
Notable increase ^b	365 (31.7%)	244 (39.2%)	523 (41.4%)
Increase of 100% or more	37 (3.2%)	38 (6.1%)	151 (12.0%)

^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.

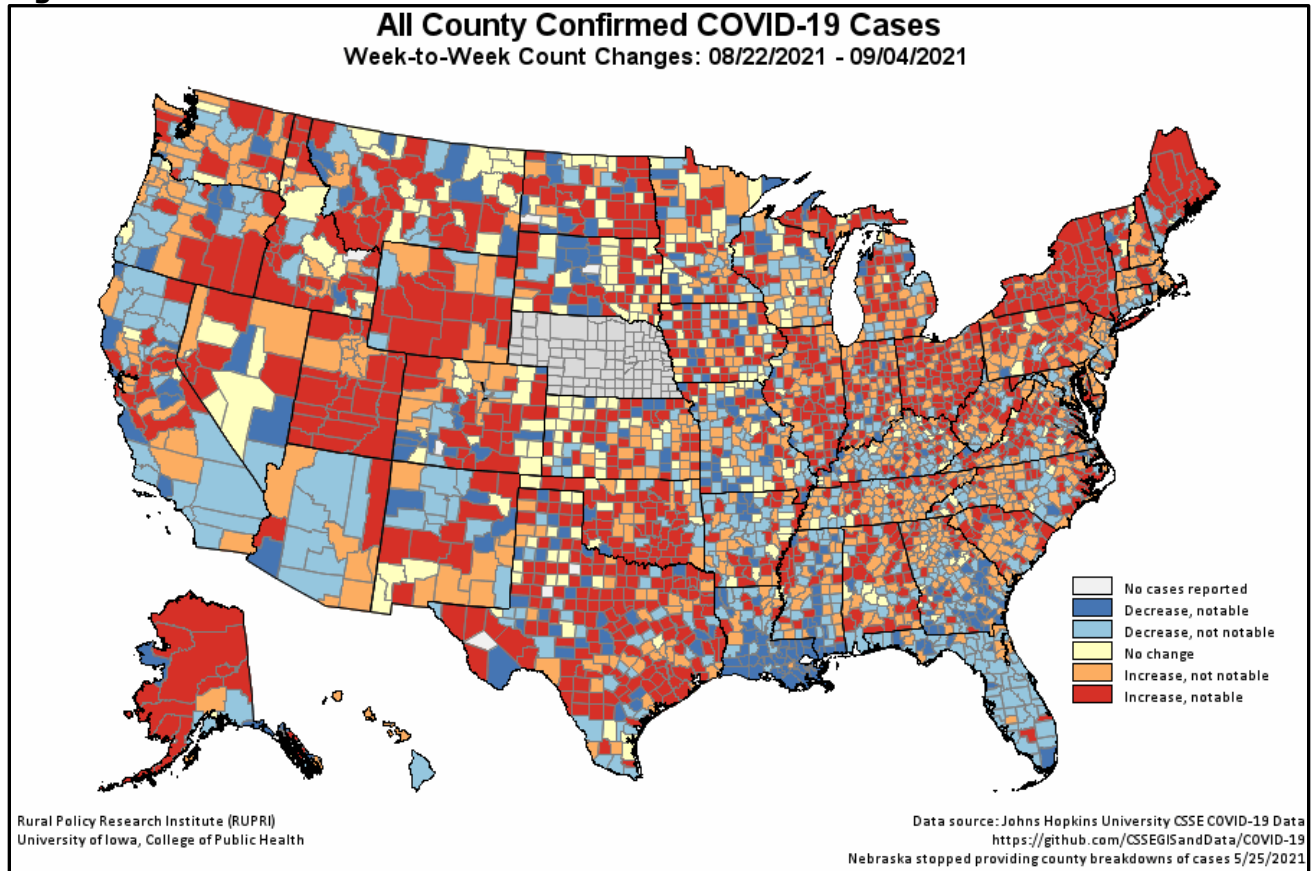


Figure 2.

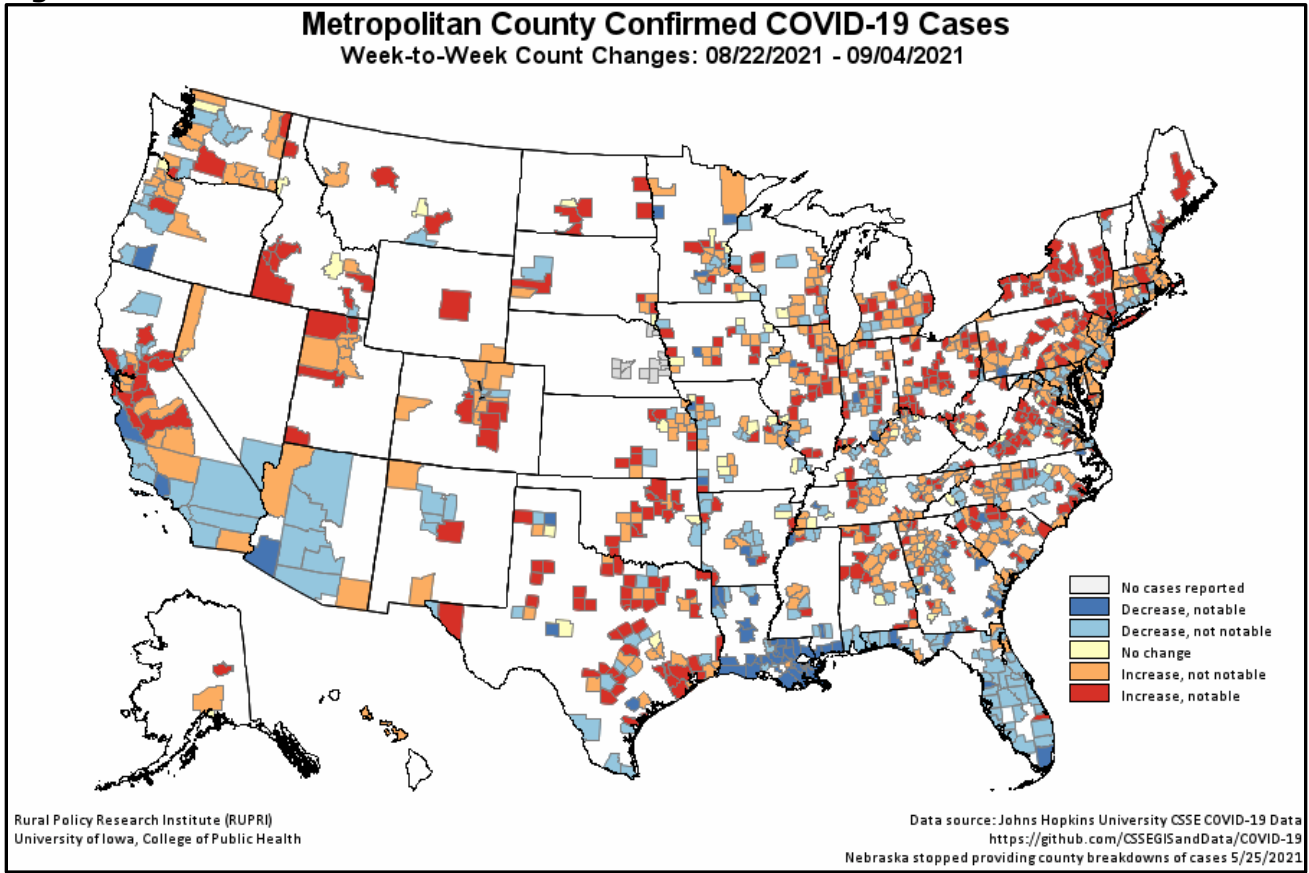


Figure 3.

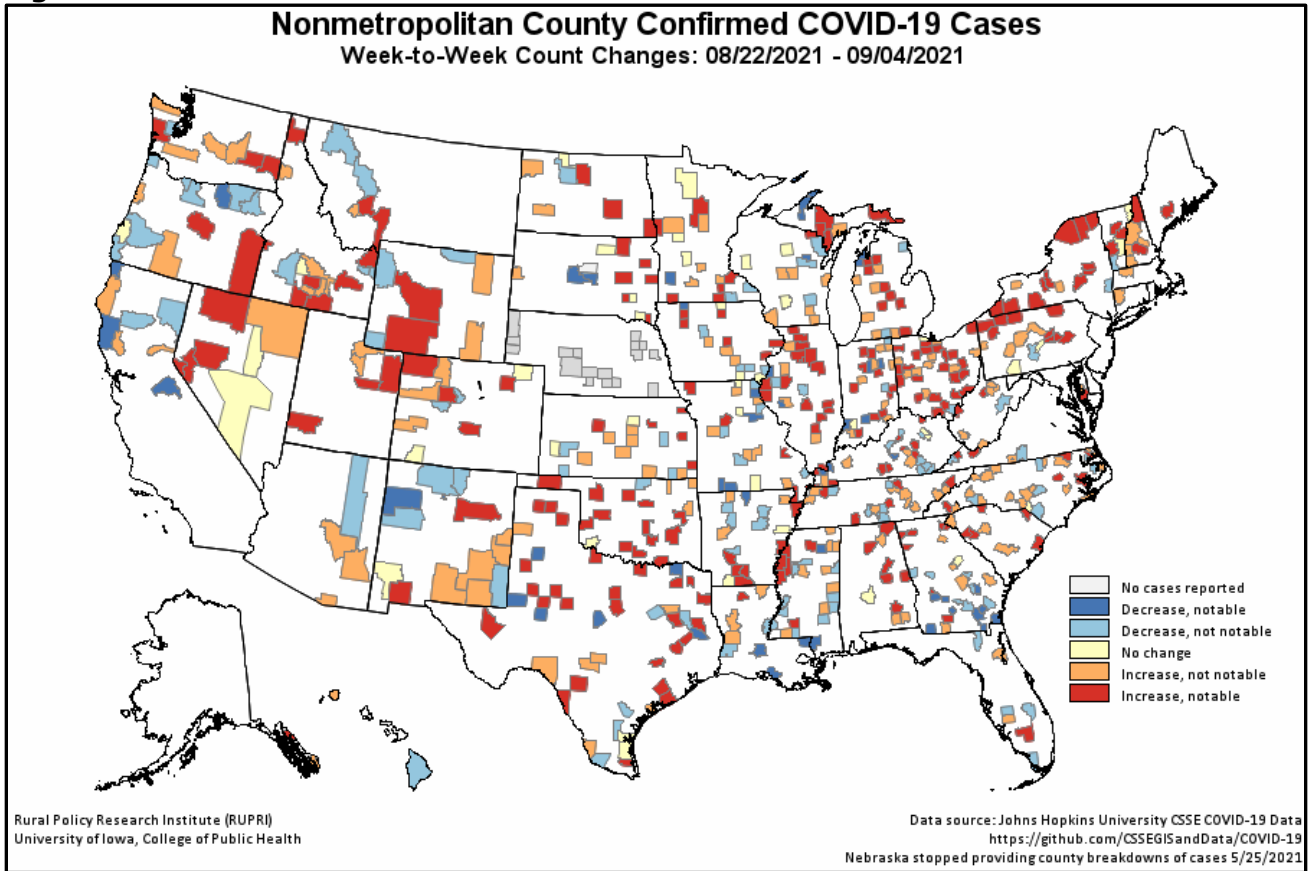
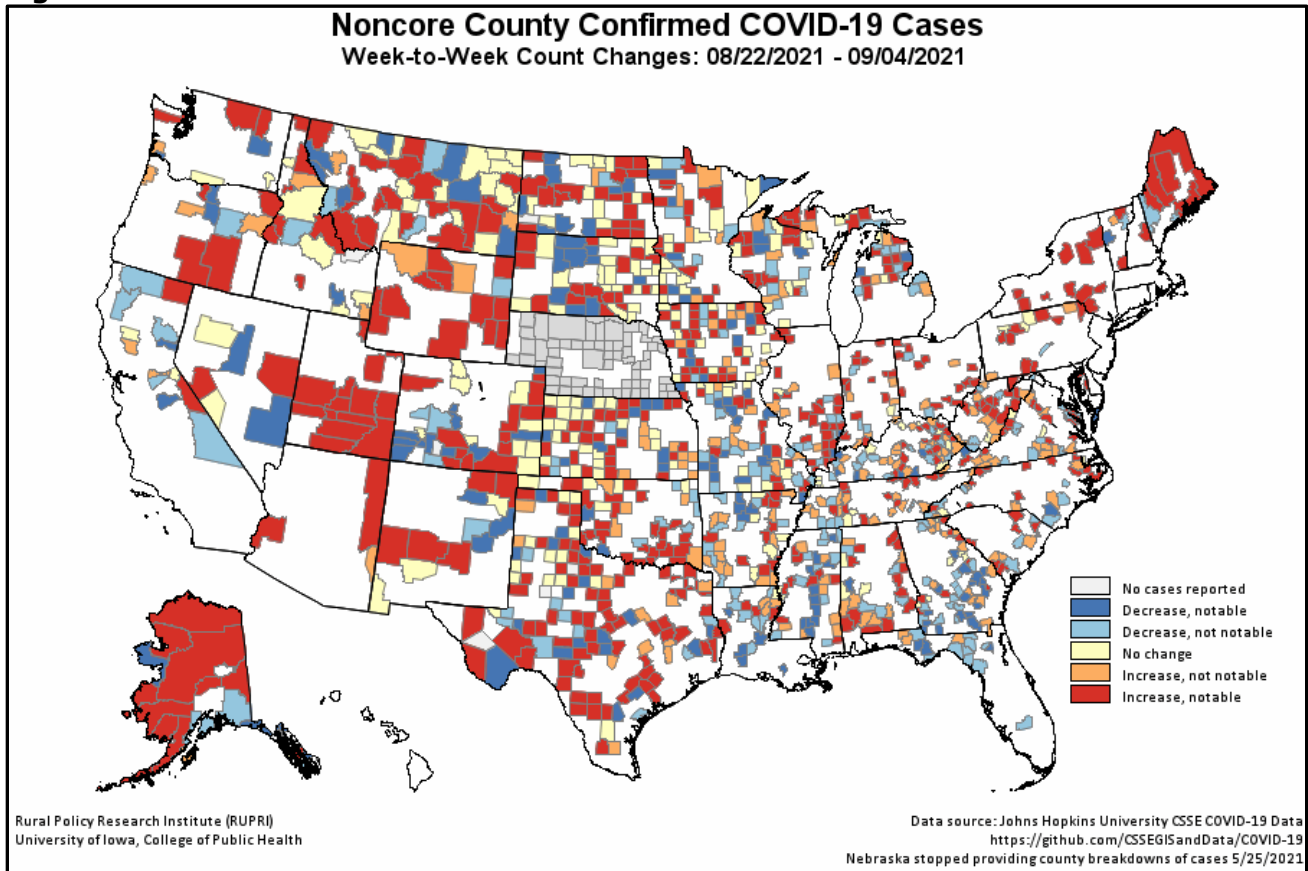


Figure 4.



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/>.