

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 May 9, 2021, and May 22, 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: 5/9/2021 – 5/22/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	7 (0.6%)	11 (1.7%)	100 (7.5%)
Decreasing, notable ^b	514 (44.1%)	261 (40.7%)	399 (29.9%)
Decreasing, not notable	264 (22.6%)	79 (12.3%)	43 (3.2%)
Same number, both weeks ^c	166 (14.2%)	143 (22.3%)	547 (41.0%)
Increasing, not notable	79 (6.8%)	17 (2.7%)	22 (1.6%)
Increasing, notable	136 (11.7%)	130 (20.3%)	224 (16.8%)

^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: 5/9/2021 – 5/22/2021

	Metropolitan (n = 1,159 of 1,166)	Nonmetropolitan (n = 630 of 641)	Noncore (n = 1,235 of 1,335)
Any decrease	778 (67.1%)	340 (54.0%)	442 (35.8%)
Notable decrease ^b	514 (44.3%)	261 (41.4%)	399 (32.3%)
Same number, both weeks ^c	166 (14.3%)	143 (22.7%)	547 (44.3%)
Any increase	215 (18.6%)	147 (23.3%)	246 (19.9%)
Notable increase ^b	136 (11.7%)	130 (20.6%)	224 (18.1%)
Increase of 100% or more	51 (4.4%)	51 (8.1%)	135 (10.9%)

^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.

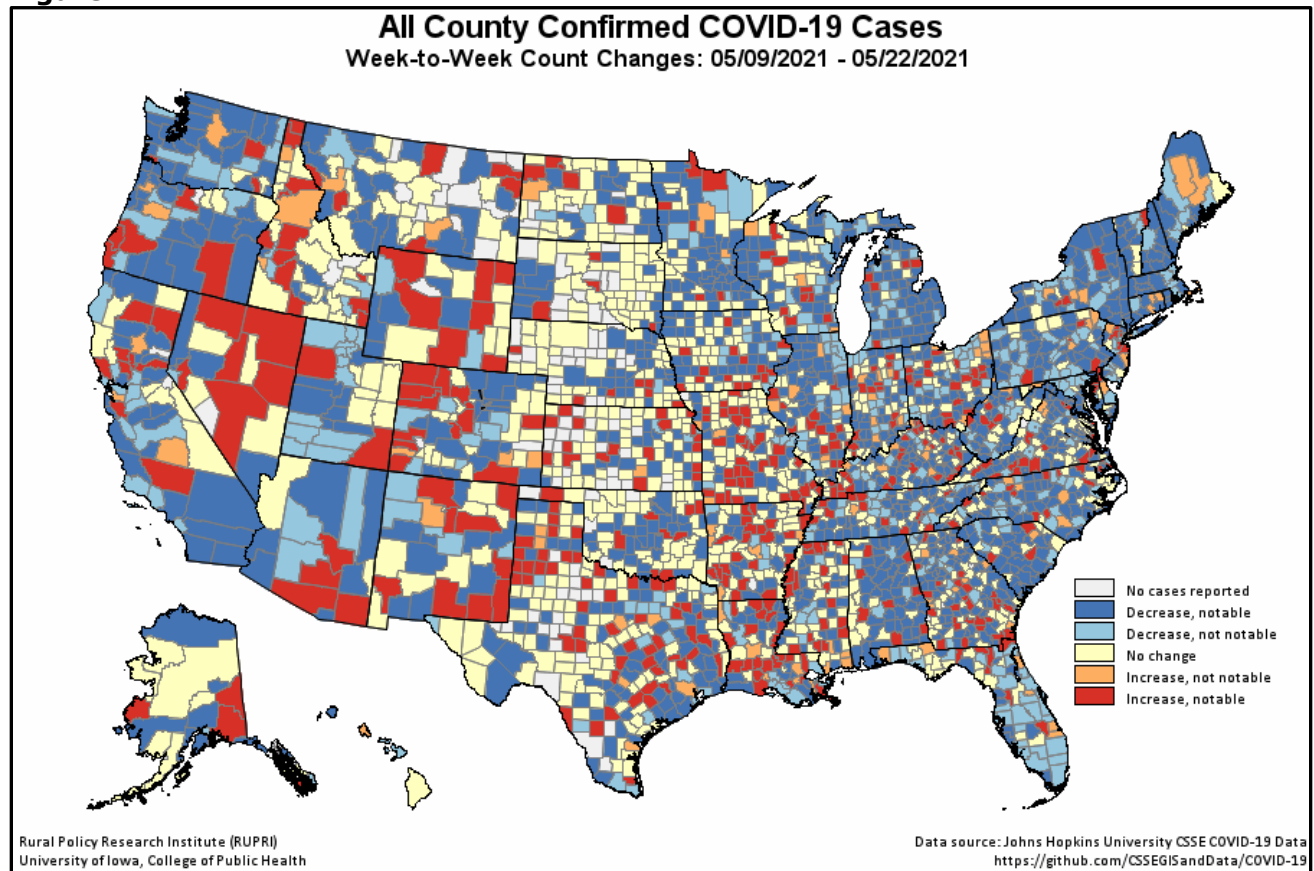


Figure 2.

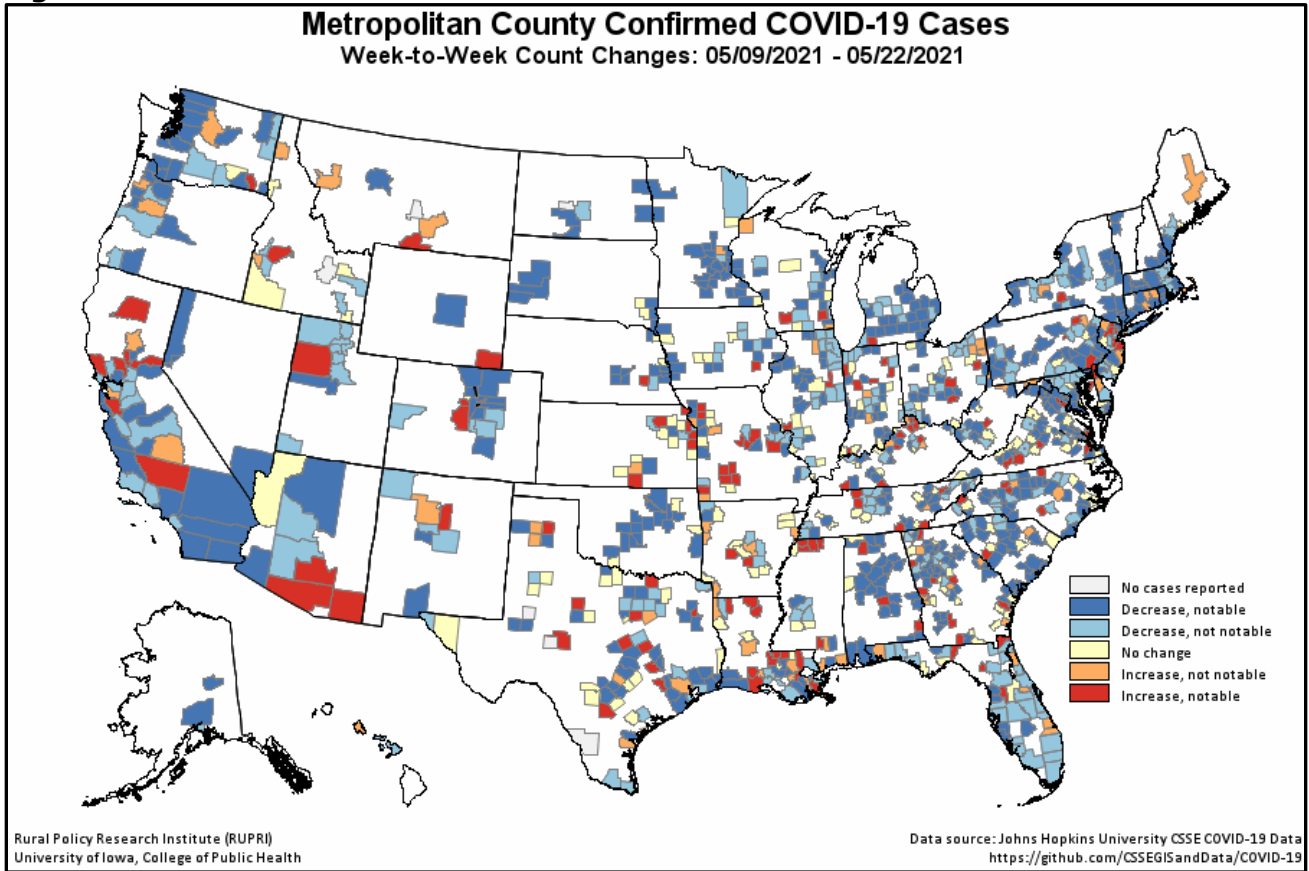


Figure 3.

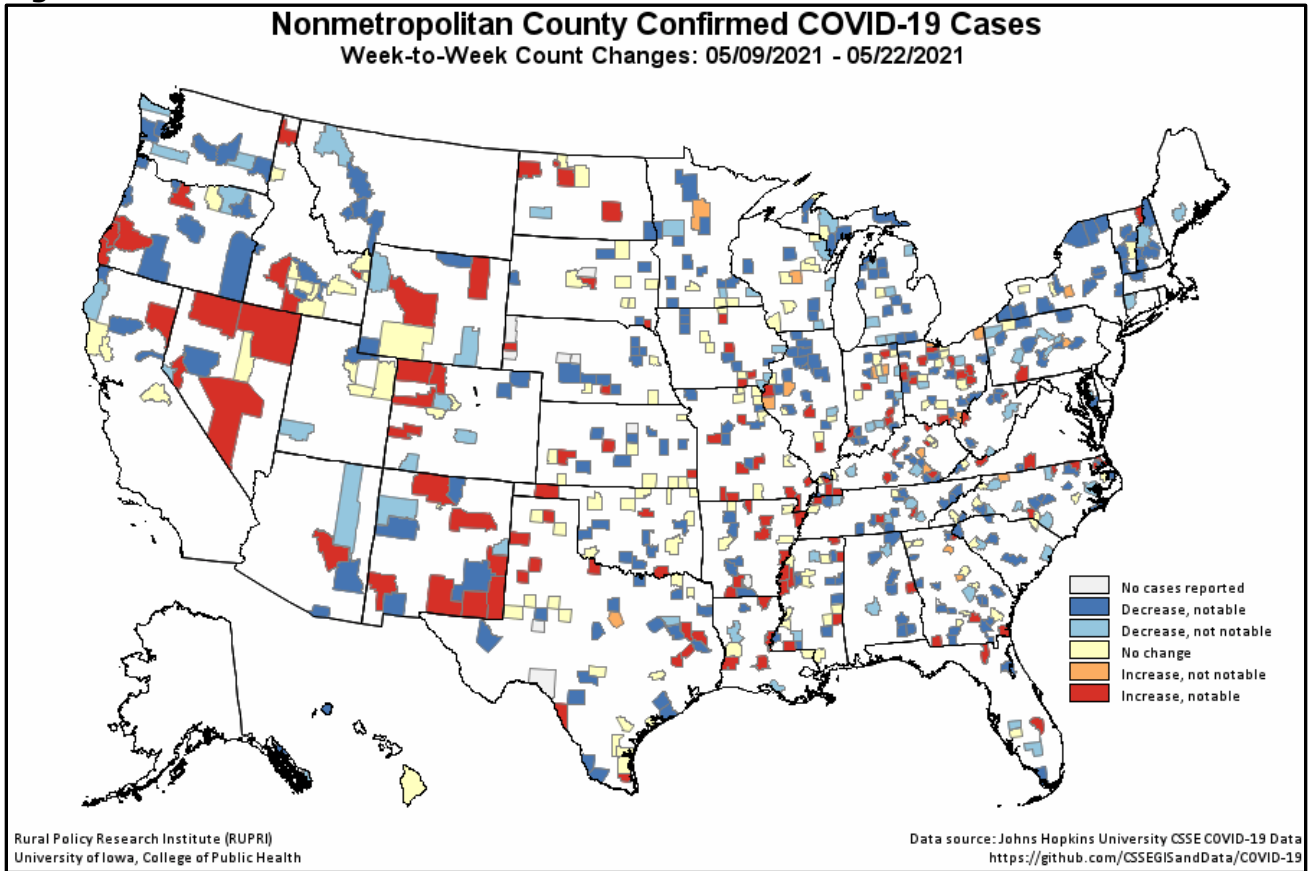
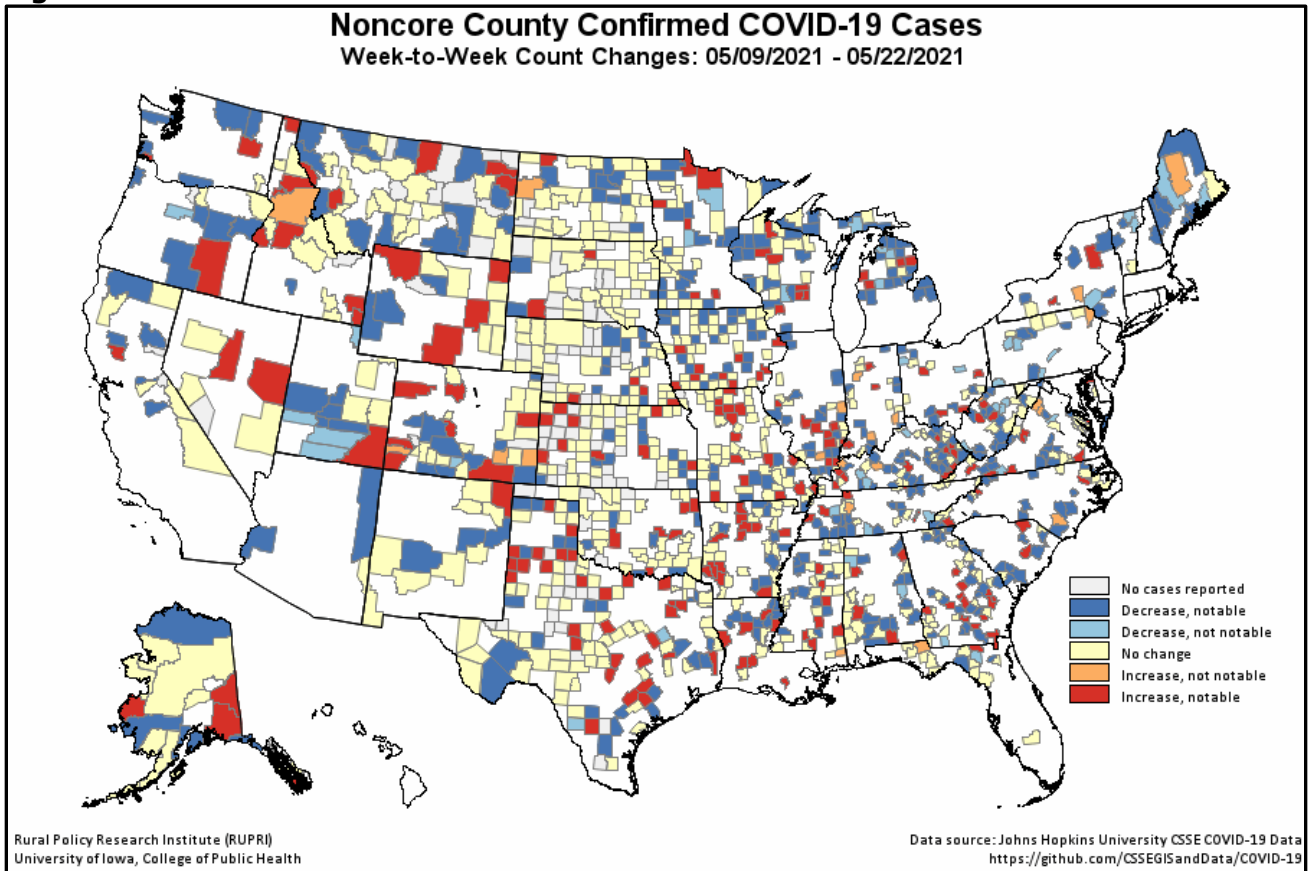


Figure 4.



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.

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/>.