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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 March 3, 2021, and March 20, 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: 3/7/2021 – 3/20/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	9 (0.8%)	8 (1.2%)	64 (4.8%)
Decreasing, notable ^b	257 (22.0%)	212 (33.1%)	412 (30.9%)
Decreasing, not notable	233 (20.0%)	72 (11.2%)	55 (4.1%)
Same number, both weeks ^c	123 (10.5%)	110 (17.2%)	453 (33.9%)
Increasing, not notable	243 (20.8%)	67 (10.5%)	33 (2.5%)
Increasing, notable	301 (25.8%)	172 (26.8%)	318 (23.8%)

^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: 3/7/2021 – 3/20/2021

	Metropolitan (n = 1,157 of 1,166)	Nonmetropolitan (n = 633 of 641)	Noncore (n = 1,271 of 1,335)
Any decrease	490 (42.4%)	284 (44.9%)	467 (36.7%)
Notable decrease ^b	257 (22.2%)	212 (33.5%)	412 (32.4%)
Same number, both weeks ^c	123 (10.6%)	110 (17.4%)	453 (35.6%)
Any increase	544 (47.0%)	239 (37.8%)	351 (27.6%)
Notable increase ^b	301 (26.0%)	172 (27.2%)	318 (25.0%)
Increase of 100% or more	73 (6.3%)	52 (8.2%)	171 (13.5%)

^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.

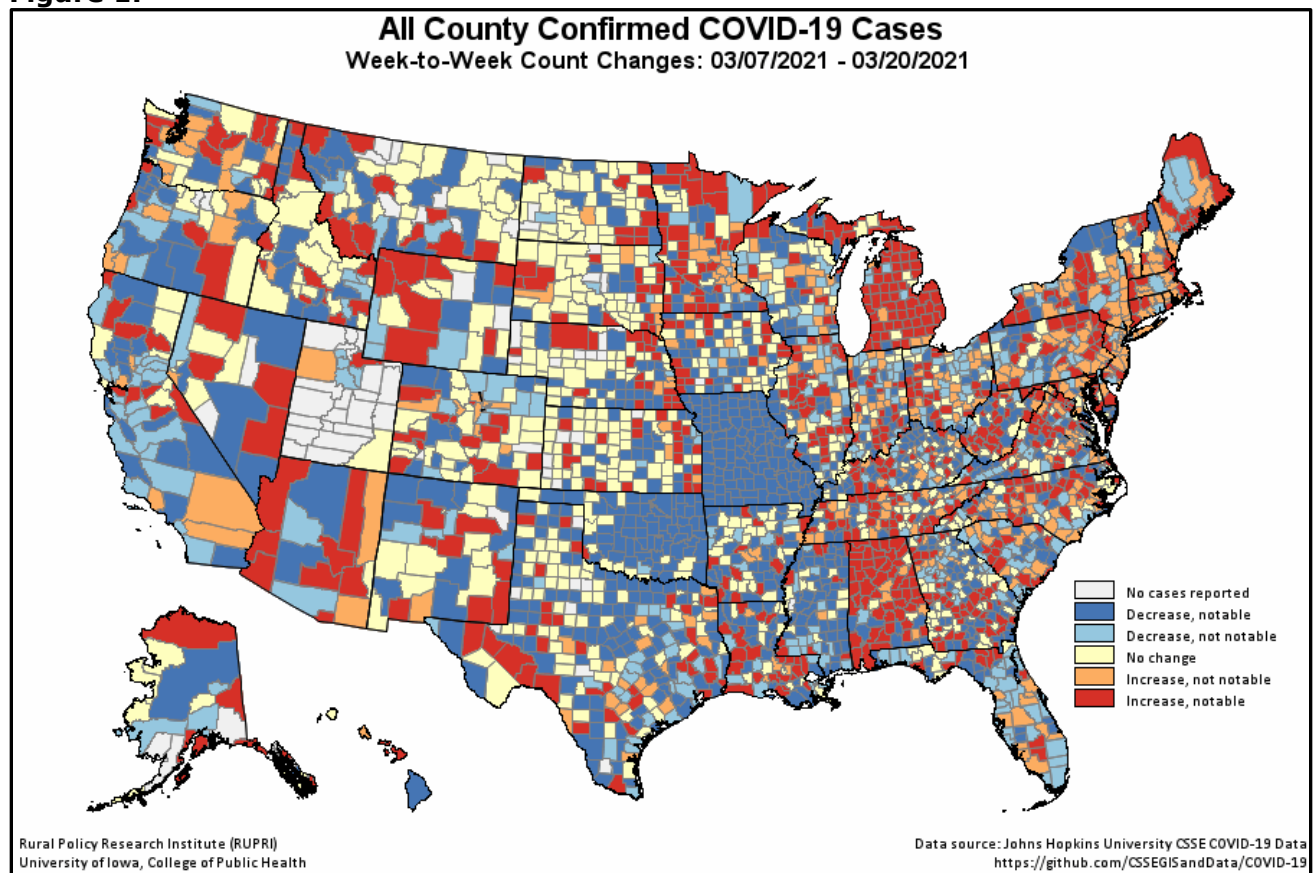


Figure 2.

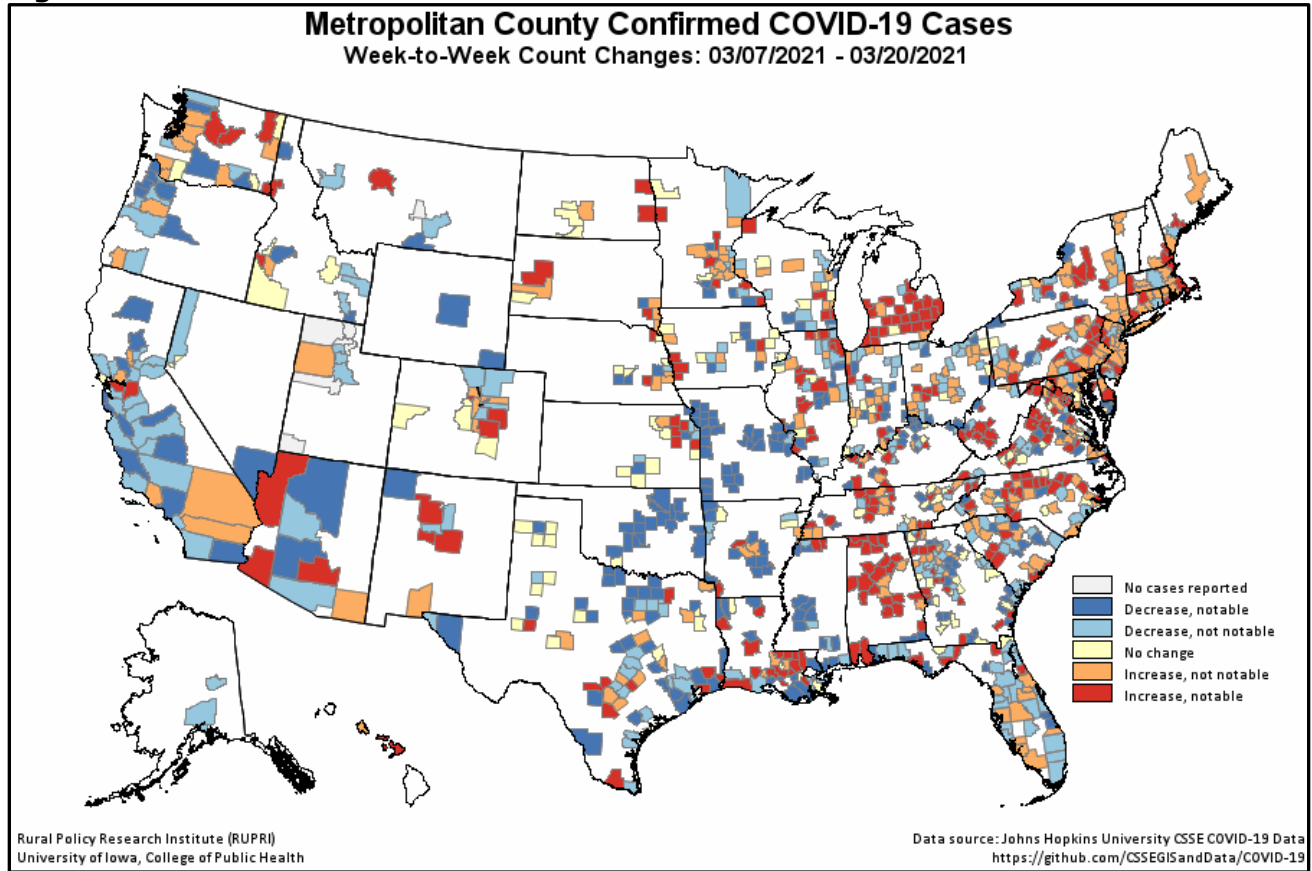


Figure 3.

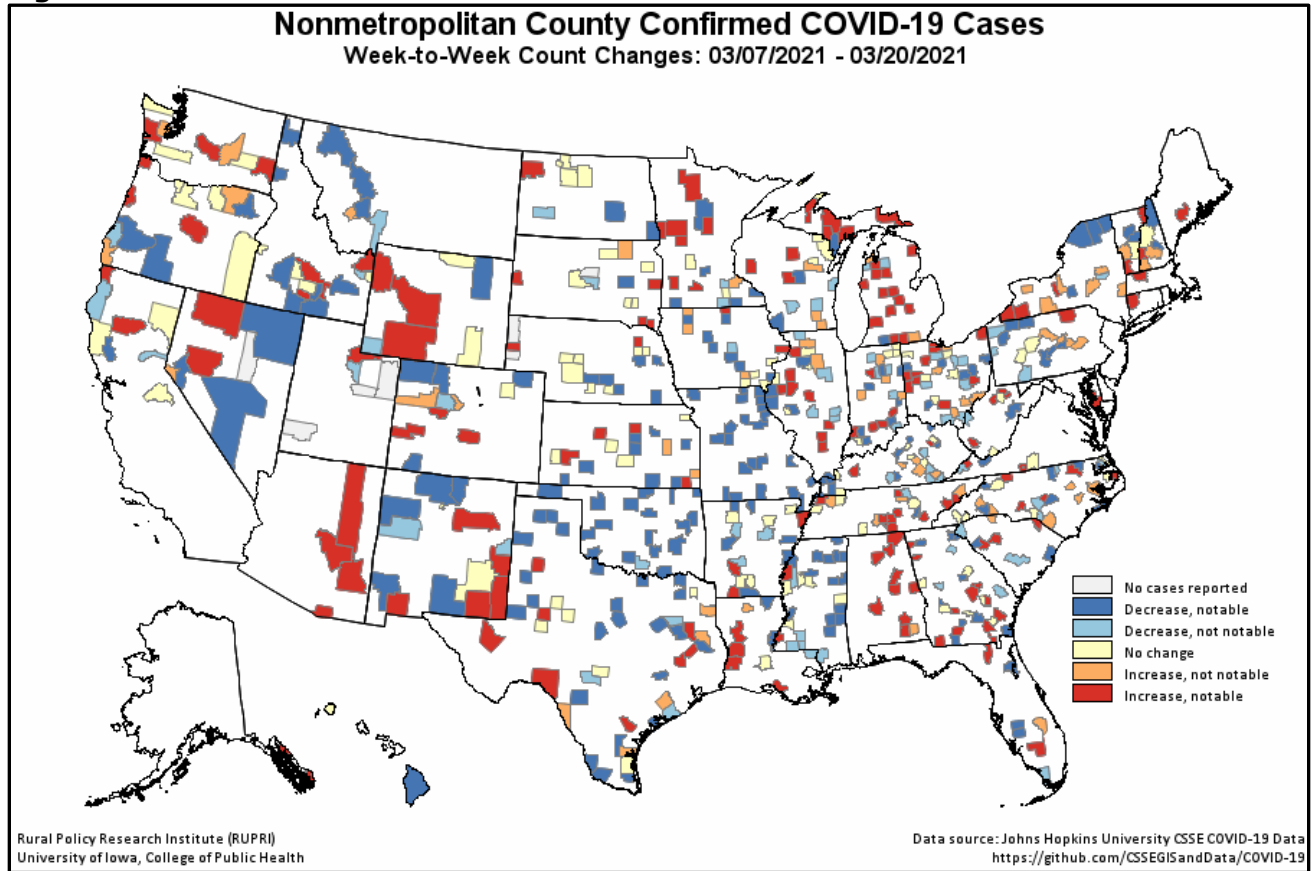
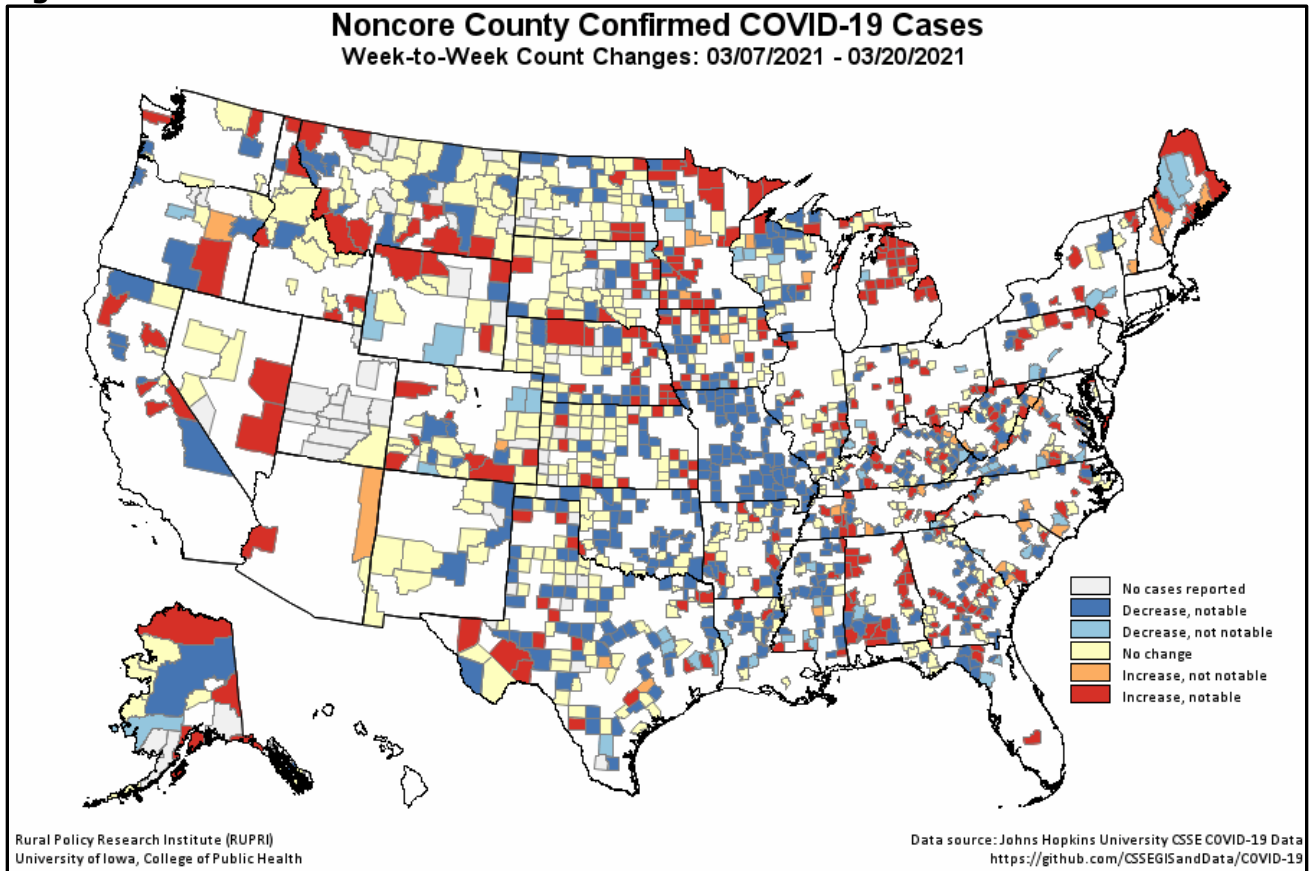


Figure 4.



¹ COVID-19 case and death data for this ongoing report were previously obtained from [USA Facts.org](https://datafairs.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.

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/>.