

RUPRI Center for Rural Health Policy Analysis

Rural Data Update

Brief No. 2020-6

MAY 2021

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

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 April 18, 2021, and May 1, 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: 4/18/2021 – 5/1/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	3 (0.3%)	4 (0.6%)	78 (5.8%)
Decreasing, notable ^b	299 (25.6%)	166 (25.9%)	353 (26.4%)
Decreasing, not notable	347 (29.8%)	98 (15.3%)	61 (4.6%)
Same number, both weeks ^c	134 (11.5%)	144 (22.5%)	497 (37.2%)
Increasing, not notable	172 (14.8%)	64 (10.0%)	30 (2.2%)
Increasing, notable	211 (18.1%)	165 (25.7%)	316 (23.7%)

^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.



Funded by the Federal Office of Rural Health Policy
www.ruralhealthresearch.org

#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.



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Table 2. 14-day trends^a in newly confirmed COVID-19 cases, in counties with any cases, by county geography: 4/18/2021 – 5/1/2021

	Metropolitan (n = 1,163 of 1,166)	Nonmetropolitan (n = 637 of 641)	Noncore (n = 1,257 of 1,335)
Any decrease	646 (55.5%)	264 (41.4%)	414 (32.9%)
Notable decrease ^b	299 (25.7%)	166 (26.1%)	353 (28.1%)
Same number, both weeks ^c	134 (11.5%)	144 (22.6%)	497 (39.5%)
Any increase	383 (32.9%)	229 (35.9%)	346 (27.5%)
Notable increase ^b	211 (18.1%)	165 (25.9%)	316 (25.1%)
Increase of 100% or more	56 (4.8%)	53 (8.3%)	186 (14.8%)

^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.

Figure 1.

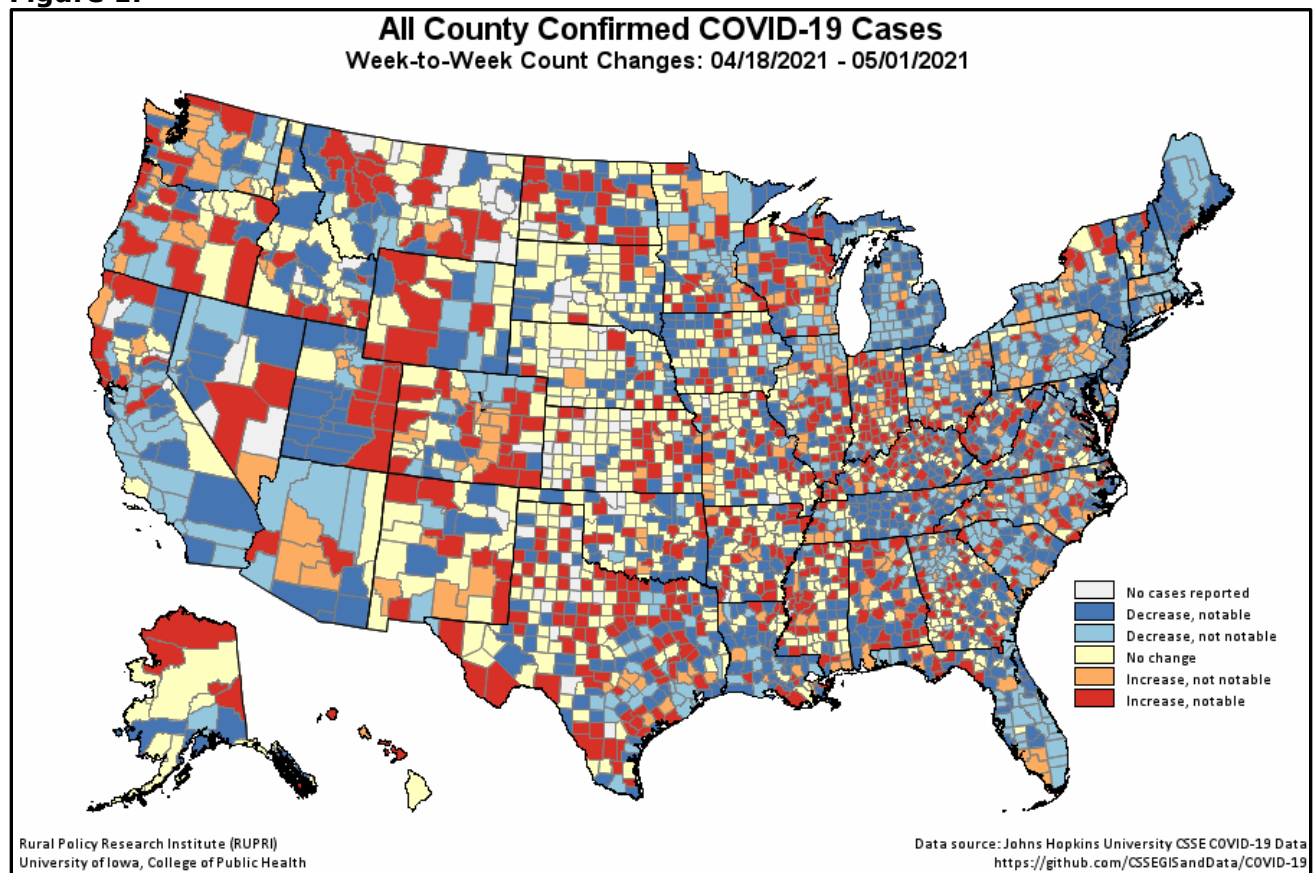


Figure 2.

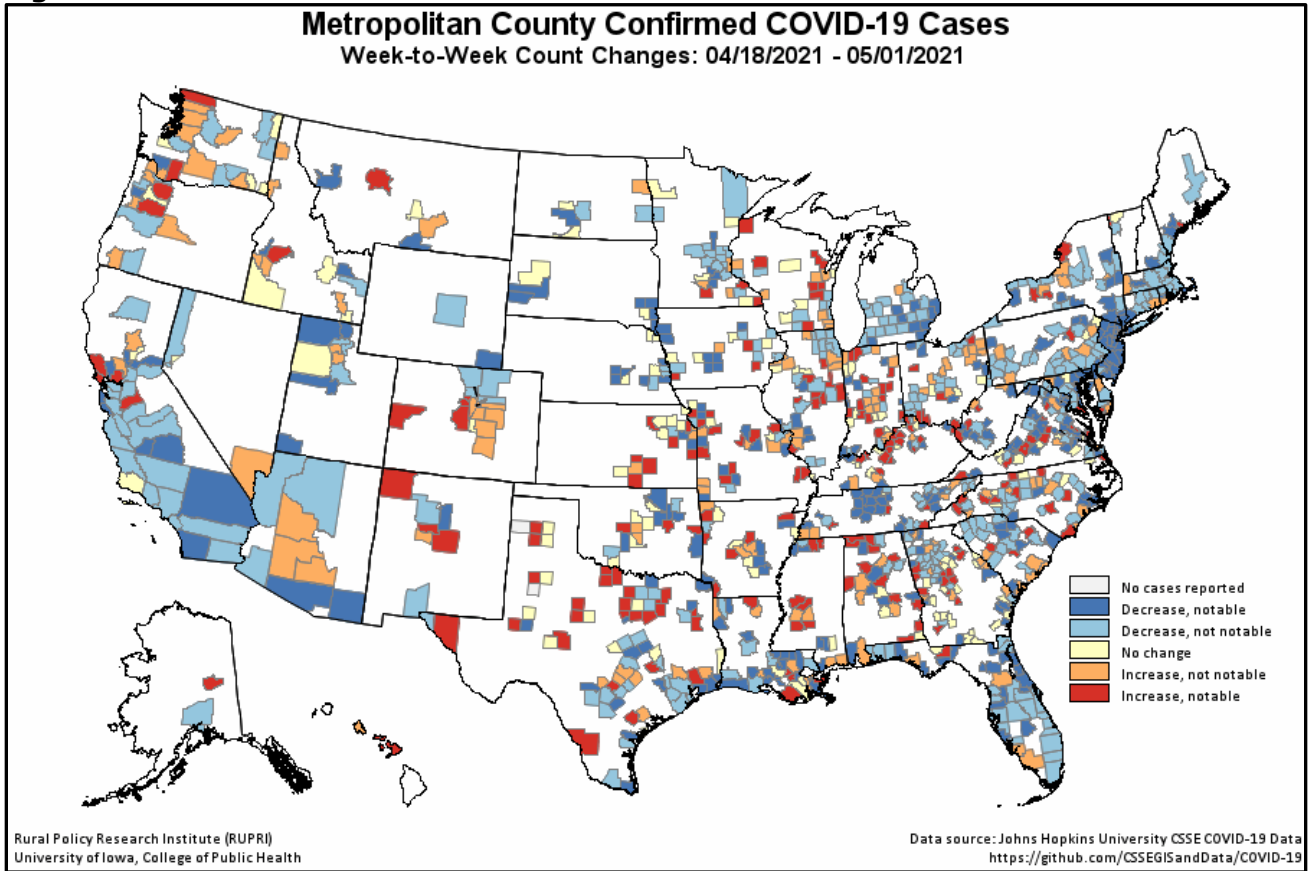


Figure 3.

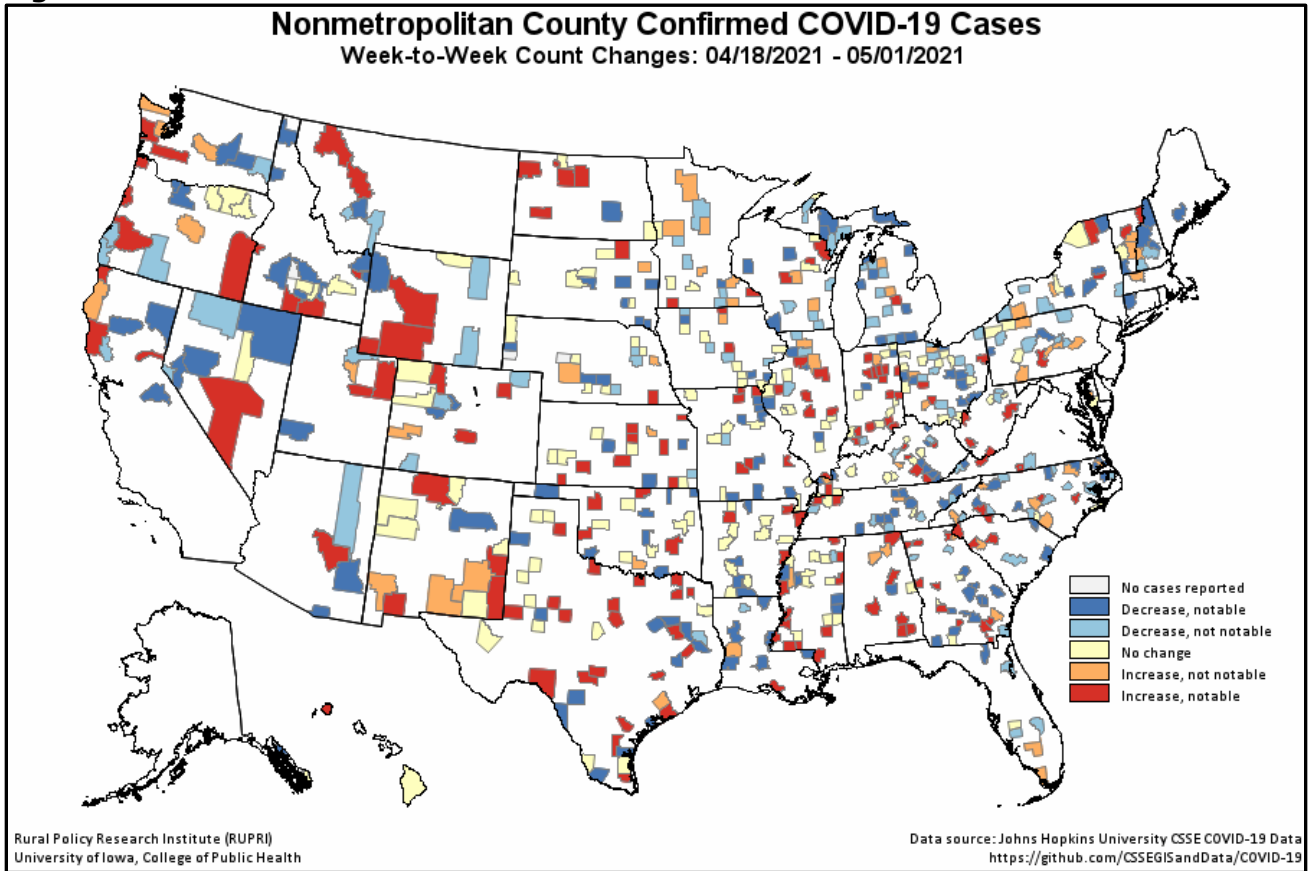
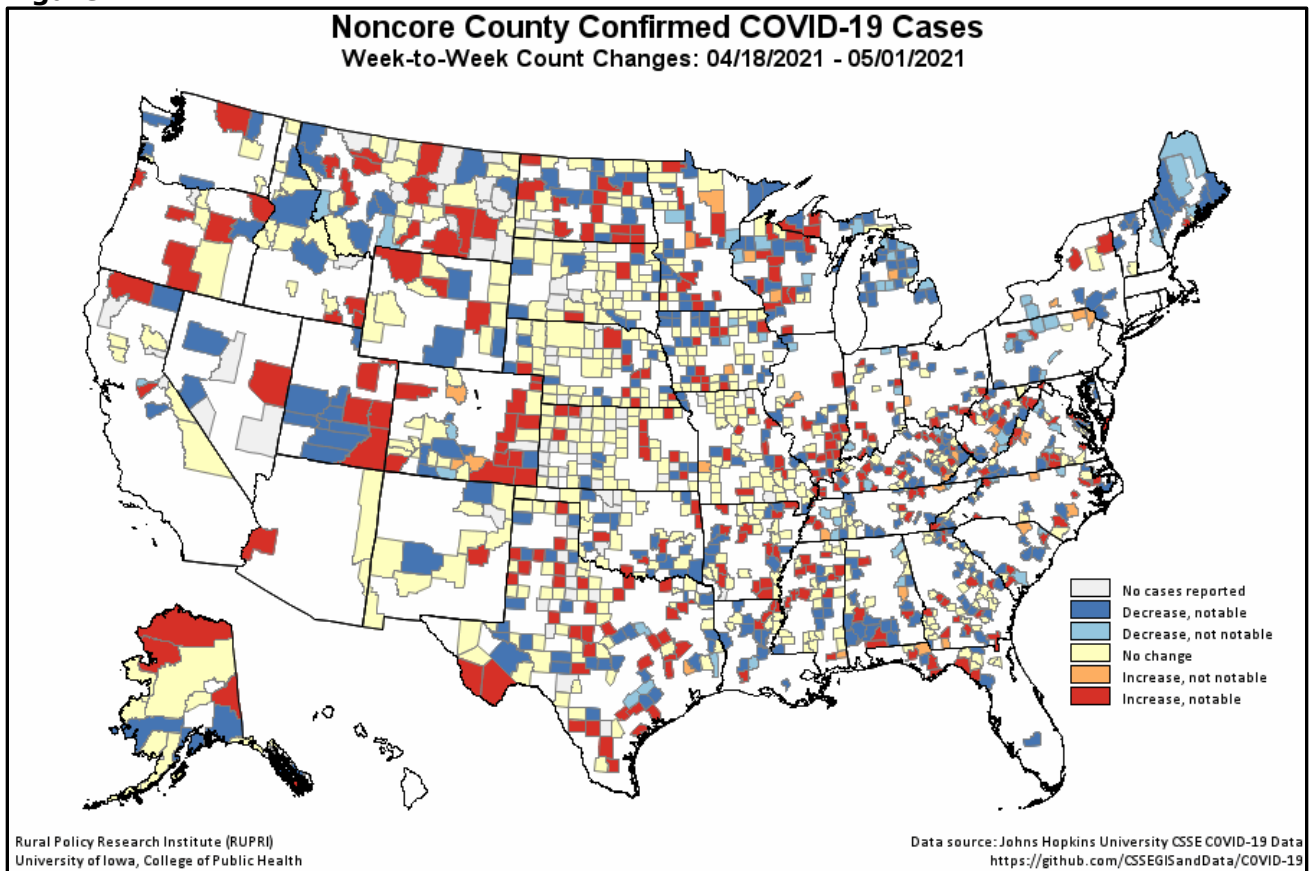


Figure 4.



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/>.