

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 December 20, 2020, and January 2, 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: 12/20/2020 – 1/2/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	7 (0.6%)	5 (0.8%)	26 (1.9%)
Decreasing, notable ^b	111 (9.5%)	100 (15.6%)	283 (21.2%)
Decreasing, not notable	292 (25.0%)	144 (22.5%)	181 (13.6%)
Same number, both weeks ^c	46 (3.9%)	45 (7.0%)	238 (17.8%)
Increasing, not notable	357 (30.6%)	134 (20.9%)	153 (11.5%)
Increasing, notable	353 (30.3%)	213 (33.2%)	454 (34.0%)

^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.



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Table 2. 14-day trends^a in newly confirmed COVID-19 cases, in counties with any cases, by county geography: 12/20/2020 – 1/2/2021

	Metropolitan (n = 1,159 of 1,166)		Nonmetropolitan (n = 636 of 641)		Noncore (n = 1,309 of 1,335)	
Any decrease	403	(34.8%)	244	(38.4%)	464	(35.4%)
Notable decrease ^b	111	(9.6%)	100	(15.7%)	283	(21.6%)
Same number, both weeks ^c	46	(4.0%)	45	(7.1%)	238	(18.2%)
Any increase	710	(61.3%)	347	(54.6%)	607	(46.4%)
Notable increase ^b	353	(30.5%)	213	(33.5%)	454	(34.7%)
Increase of 100% or more	42	(3.6%)	37	(5.8%)	134	(10.2%)

^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.

Figure 1.

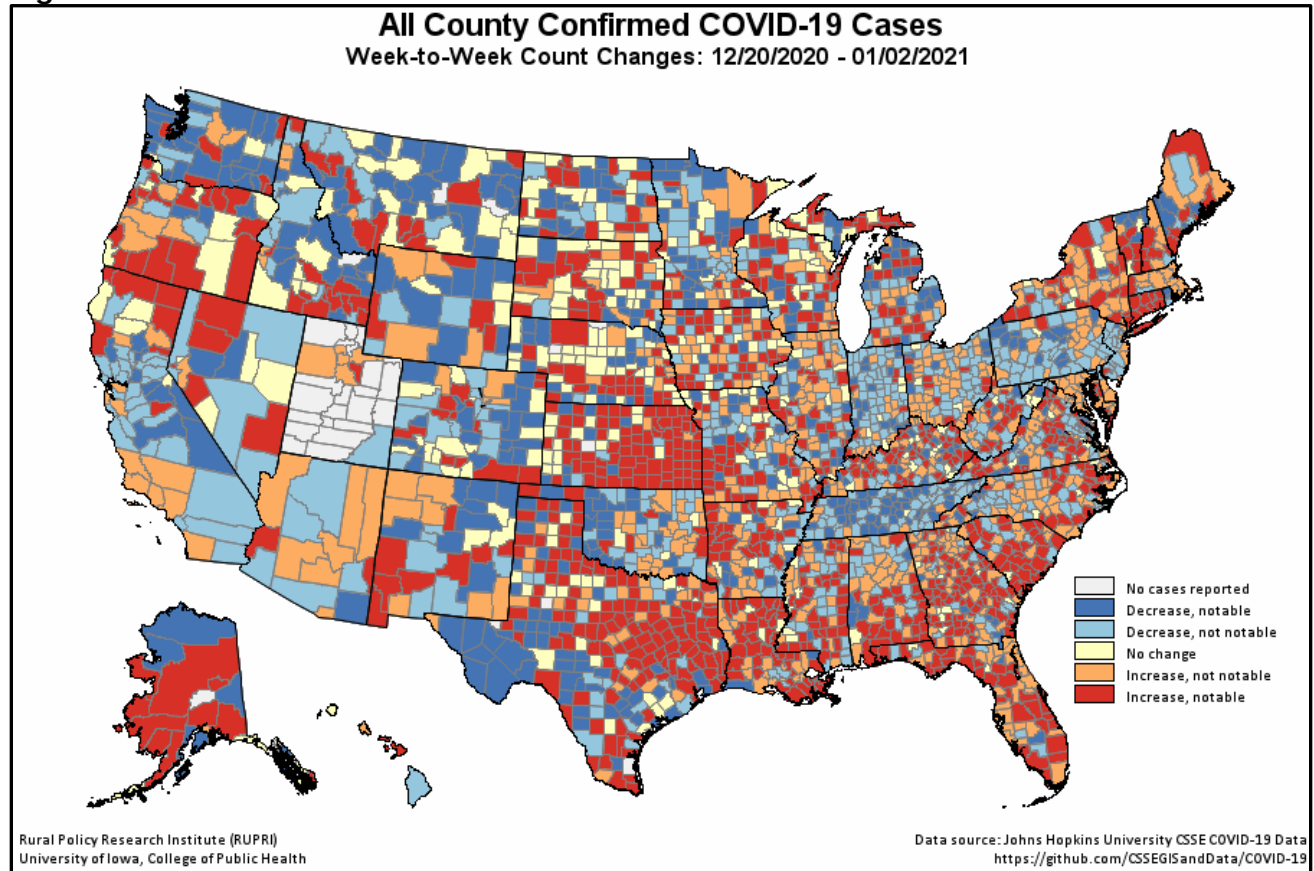


Figure 2.

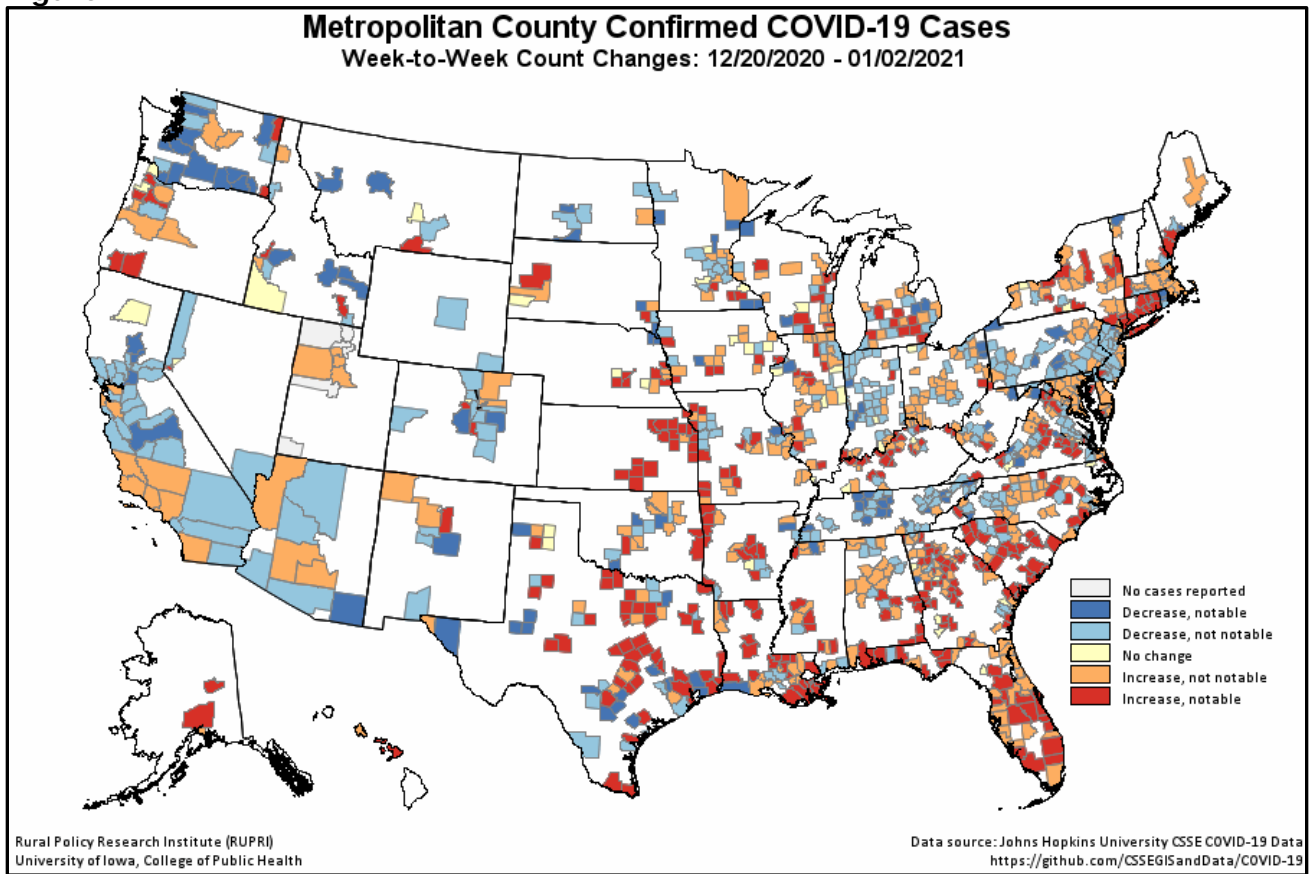


Figure 3.

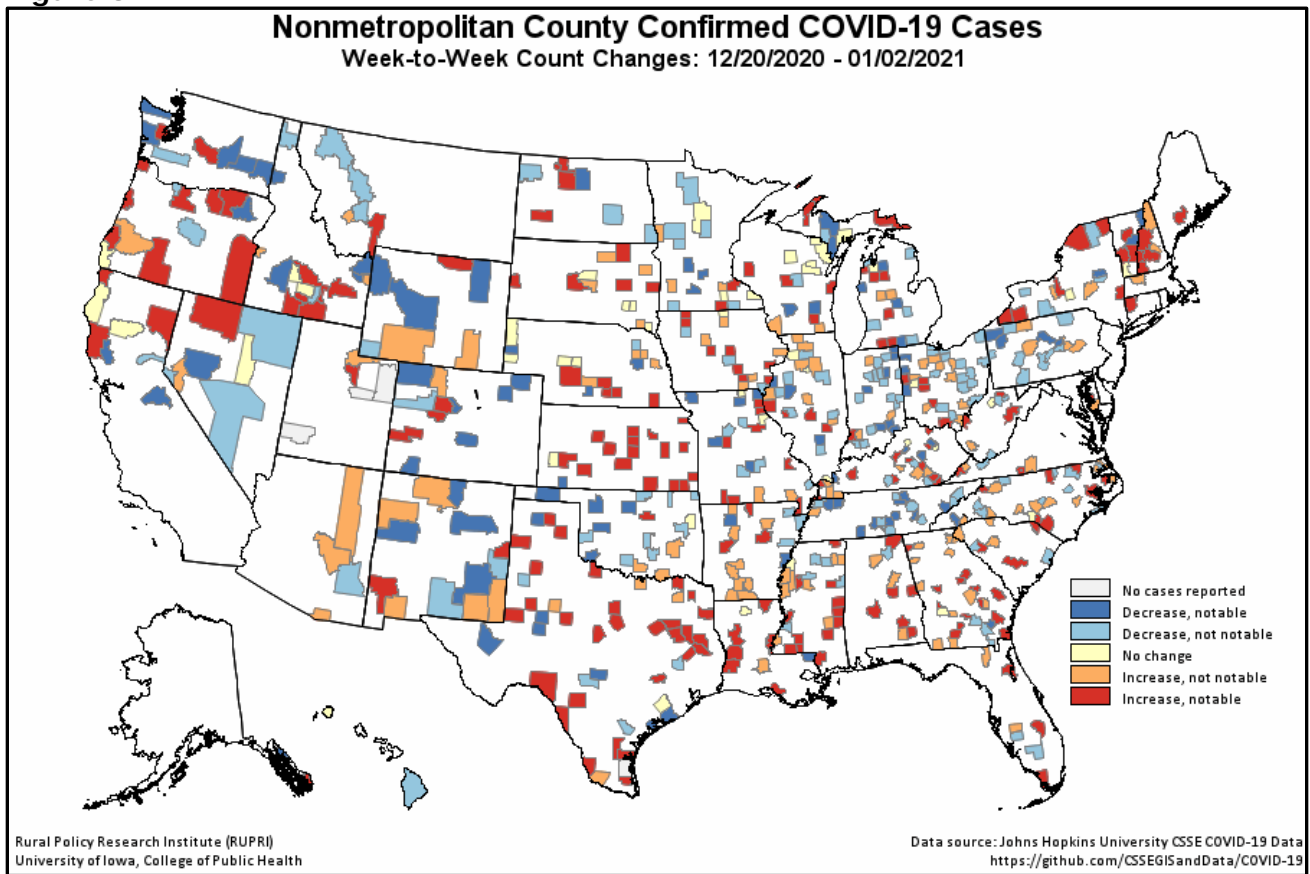
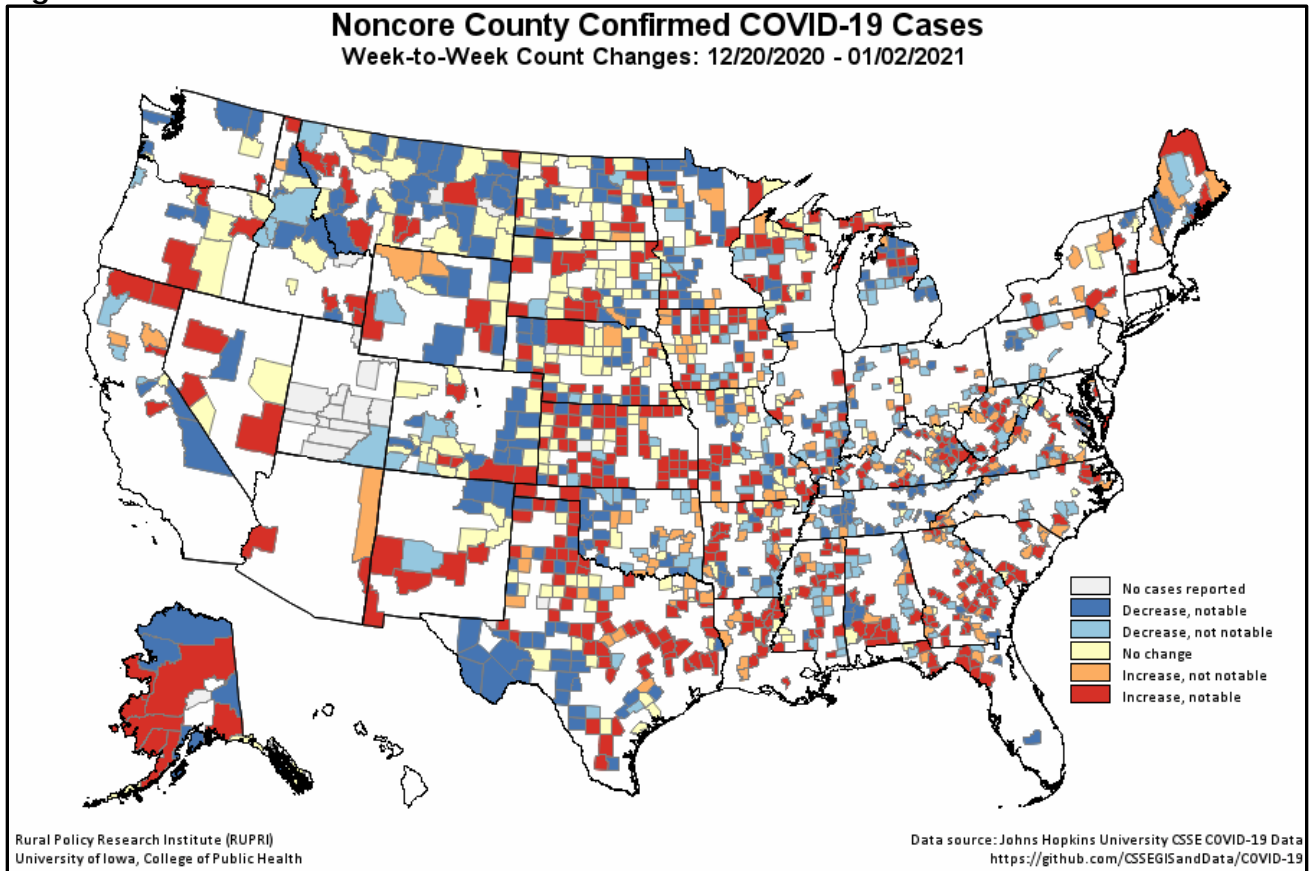


Figure 4.



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/>.