

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 27, 2020, and January 9, 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: 12/27/2020 – 1/9/2021

	Metropolitan (n = 1,166)	Nonmetropolitan (n = 641)	Noncore (n = 1,335)
No cases reported	8 (0.7%)	4 (0.6%)	27 (2.0%)
Decreasing, notable ^b	41 (3.5%)	43 (6.7%)	189 (14.2%)
Decreasing, not notable	161 (13.8%)	100 (15.6%)	144 (10.8%)
Same number, both weeks ^c	37 (3.2%)	36 (5.6%)	182 (13.6%)
Increasing, not notable	444 (38.1%)	184 (28.7%)	207 (15.5%)
Increasing, notable	475 (40.7%)	274 (42.7%)	586 (43.9%)

^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.



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Table 2. 14-day trends^a in newly confirmed COVID-19 cases, in counties with any cases, by county geography: 12/27/2020 – 1/9/2021

	Metropolitan (n = 1,158 of 1,166)		Nonmetropolitan (n = 637 of 641)		Noncore (n = 1,308 of 1,335)	
Any decrease	202	(17.4%)	143	(22.4%)	333	(25.5%)
Notable decrease ^b	41	(3.5%)	43	(6.8%)	189	(14.4%)
Same number, both weeks ^c	37	(3.2%)	36	(5.7%)	182	(13.9%)
Any increase	919	(79.4%)	458	(71.9%)	793	(60.6%)
Notable increase ^b	475	(41.0%)	274	(43.0%)	586	(44.8%)
Increase of 100% or more	58	(5.0%)	49	(7.7%)	213	(16.3%)

^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.

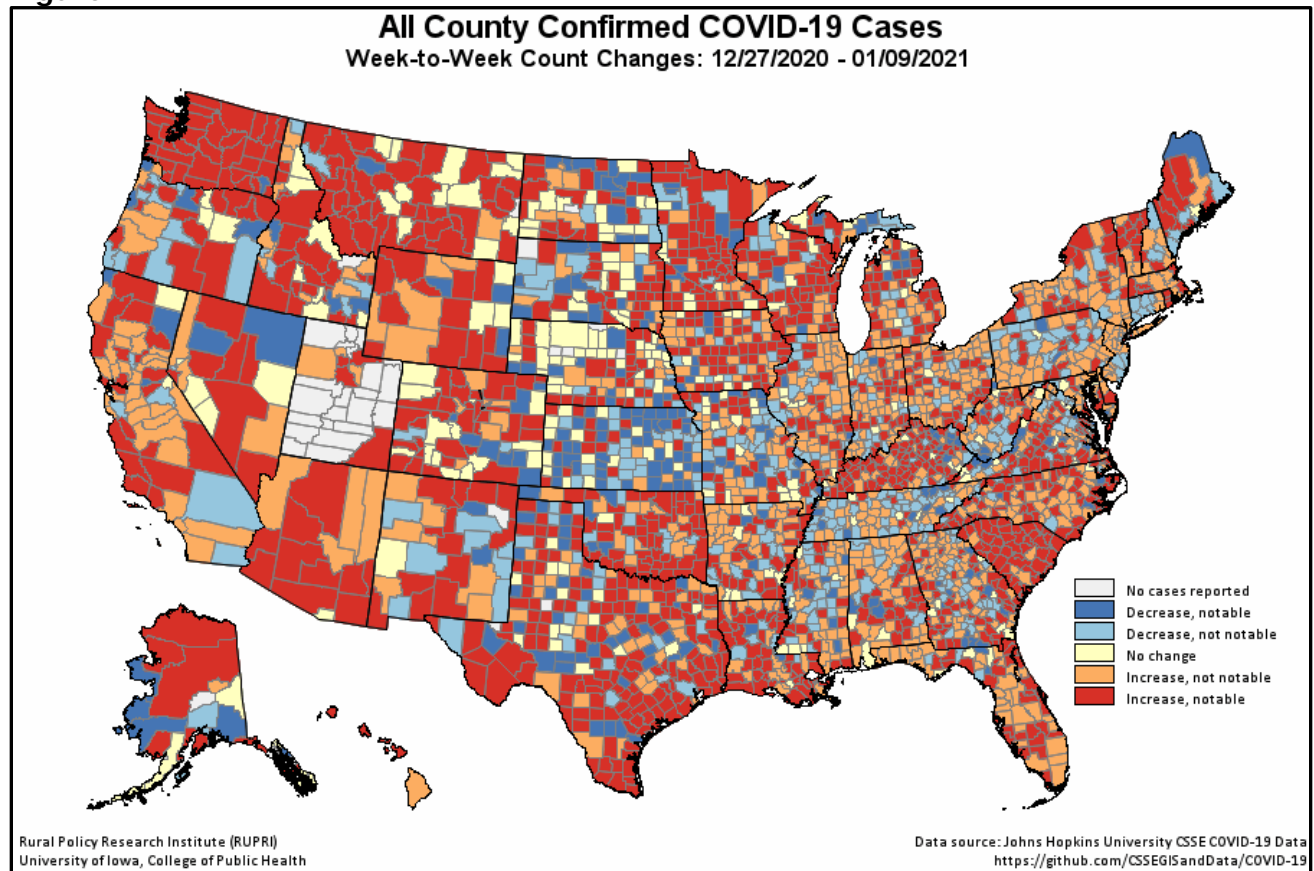


Figure 2.

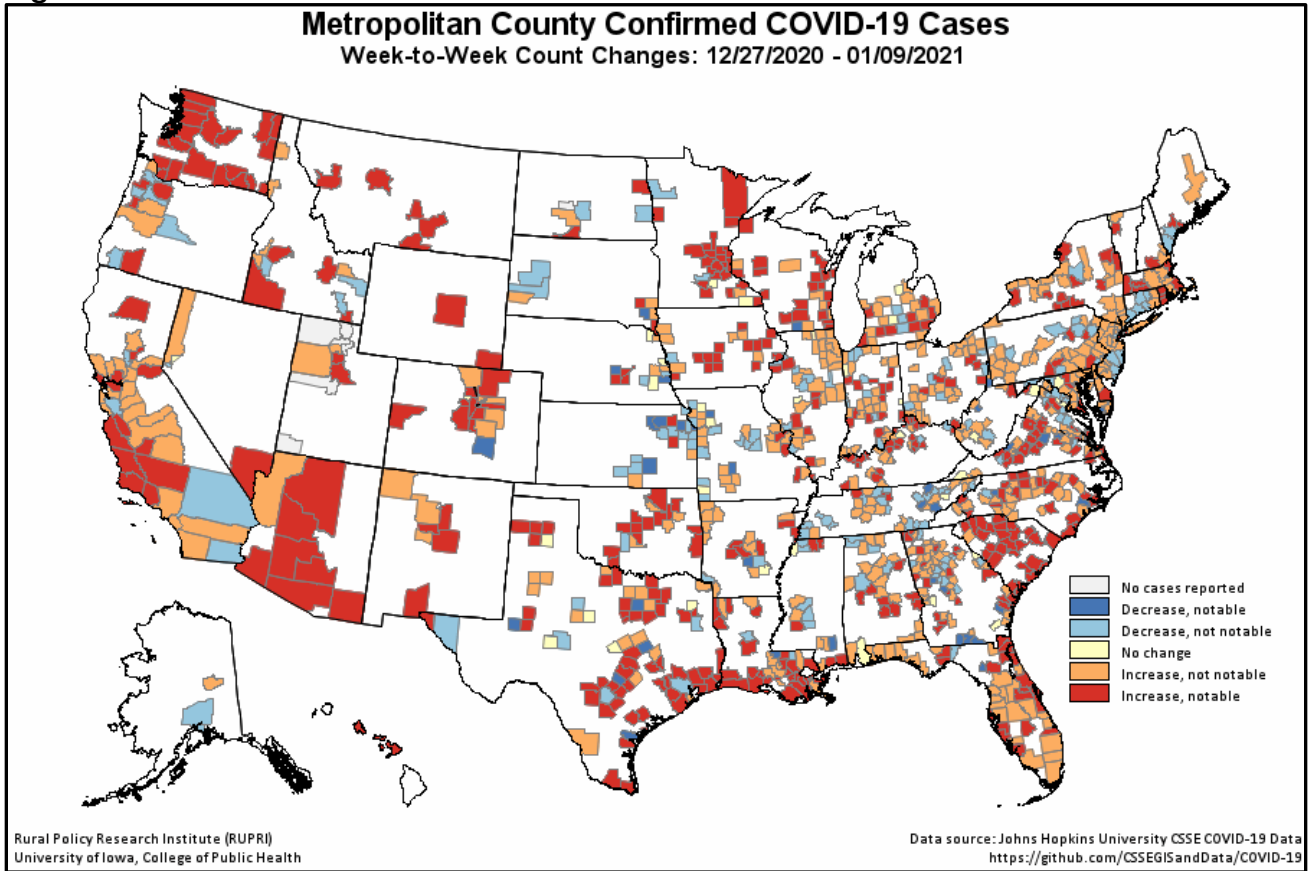


Figure 3.

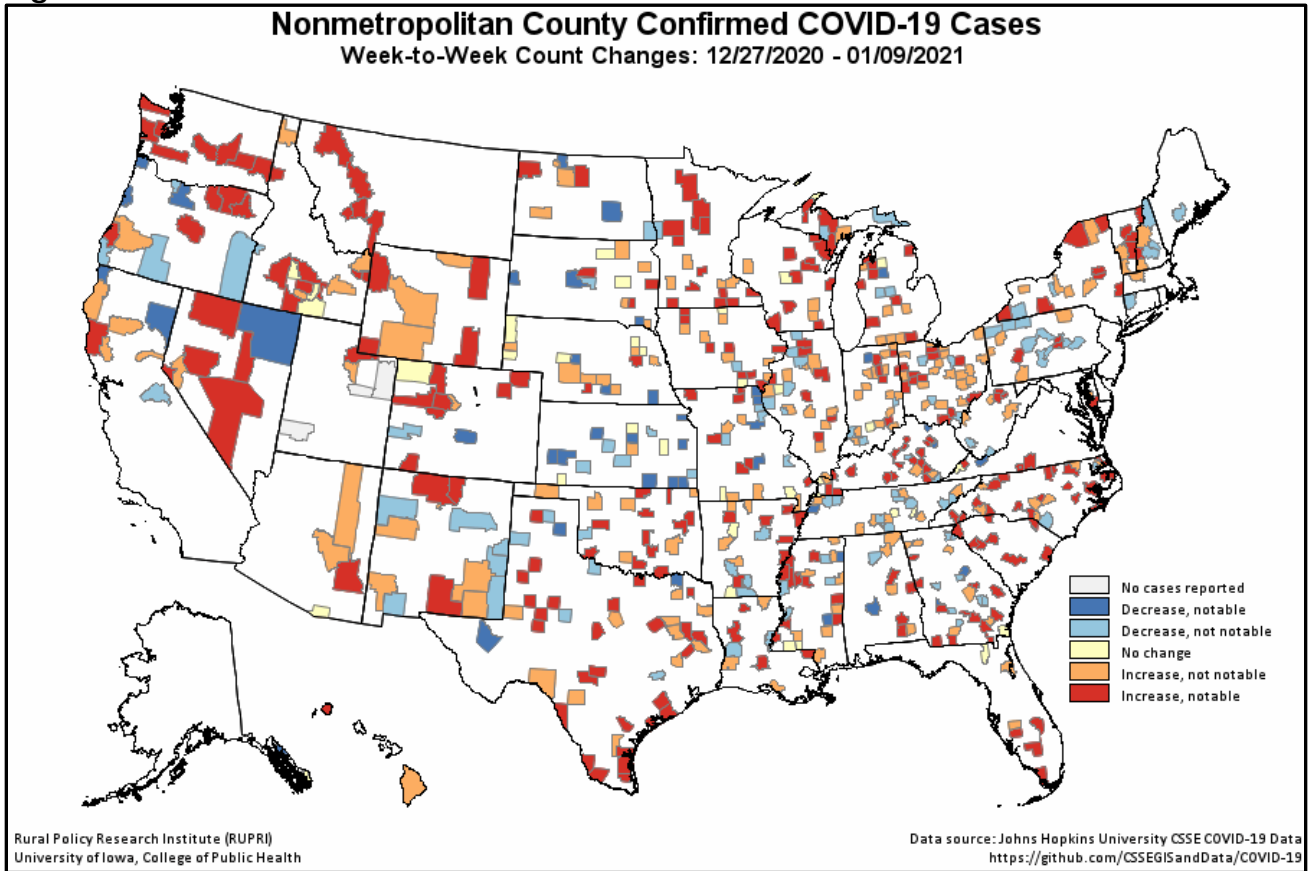
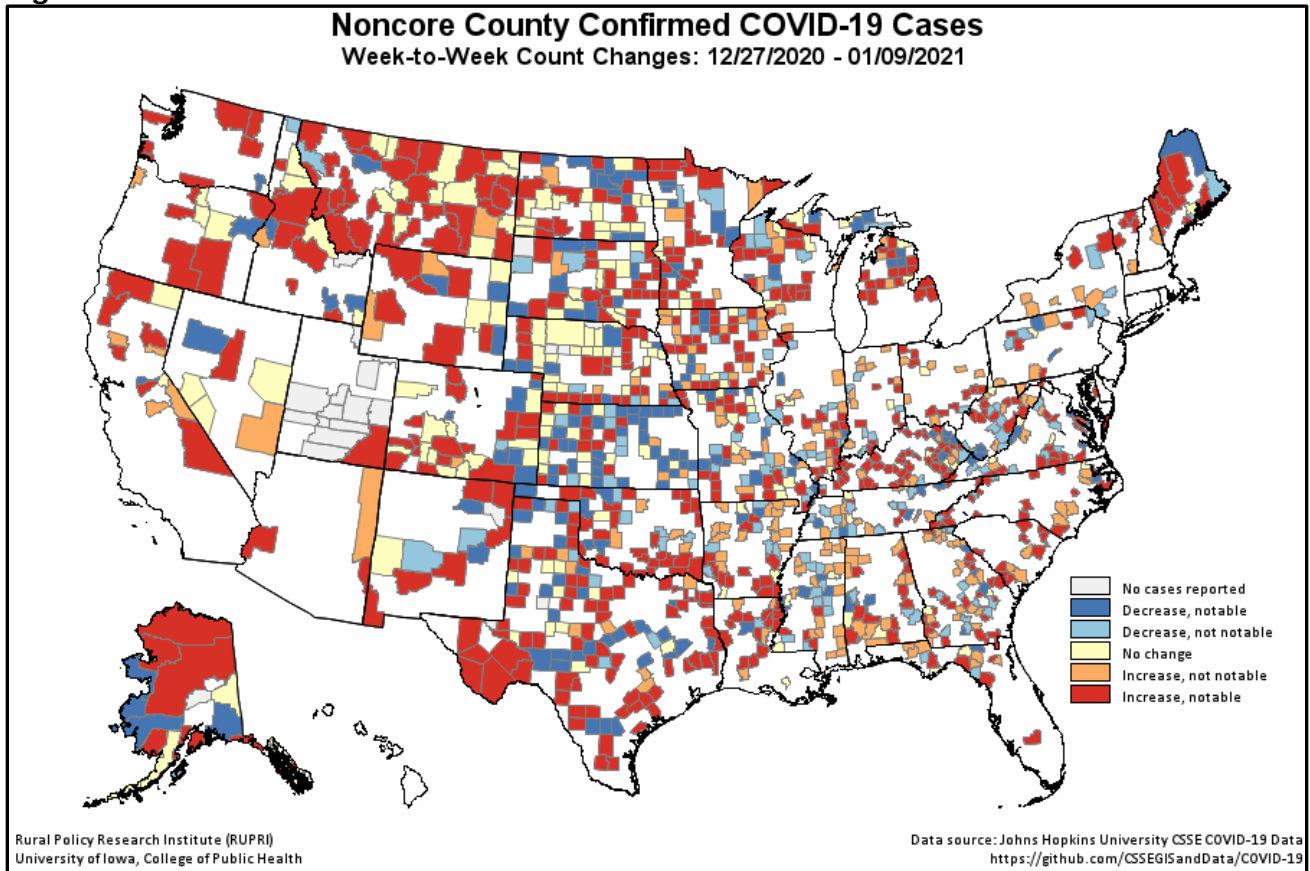


Figure 4.



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

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/>.