RUPRI Center for Rural Health Policy Analysis
Rural Data Update

Brief No. 2020-6 FEBRUARY 2021 http://www.public-health.uiowa.edu/rupri/

County-Level 14-Day COVID-19 Case Trajectories

Fred Ullrich, BA; and Keith Mueller, PhD

Background

This document updates maps and tables for the Rural Data Brief "County-Level 14-Day COVID-19 Case Trajectories" (https://rupri health.org/publications/policybriefs/2020/County COVID Trajectories.pdf). This data brief looks at the new case counts in every US county between January 31, 2021, and February 13, 2021, to quantitatively evaluate 14-day trends in metropolitan, nonmetropolitan, and noncore counties. Previous versions of this document can be found at: https://rupri health.org/publications/policybriefs/2020/COVID_Projects.html

Data on confirmed COVID-19 cases were obtained from the Johns Hopkins University COVID-19 Data Repository[1]. 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 Codes[2].

Table 1. 14-day trends[a] in newly confirmed COVID-19 cases, by county geography: 1/31/2021 – 2/13/2021

	Metropolitan (n = 1,166)		Nonmetropolitan (n = 641)		Noncore (n = 1,335)	
No cases reported	8	(0.7%)	6	(0.9%)	36	(2.7%)
Decreasing, notable[b]	512	(43.9%)	310	(48.4%)	606	(45.4%)
Decreasing, not notable	384	(32.9%)	132	(20.6%)	122	(9.1%)
Same number, both weeks[c]	53	(4.5%)	58	(9.0%)	288	(21.6%)
Increasing, not notable	116	(9.9%)	58	(9.0%)	50	(3.7%)
Increasing, notable	93	(8.0%)	77	(12.0%)	233	(17.5%)

[a]Comparison 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.
[c]Includes counties with an absolute change in count of two or fewer.

RHRC Rural Health Research & Policy Centers
Funded by the Federal Office of Rural Health Policy
www.ruralhealthresearch.org

This project was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement/grant #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.

RUPRI RURAL POLICY RESEARCH INSTITUTE

RUPRI Center for Rural Health Policy Analysis, University of Iowa College of Public Health, Department of Health Management and Policy, 145 Riverside Dr., Iowa City, IA 52242-2007, (319) 384-3830
http://www.public-health.uiowa.edu/rupri
E-mail: cph-rupri-inquiries@uiowa.edu

Table 2. 14-day trends[a] in newly confirmed COVID-19 cases, in counties with any cases, by county geography: 1/31/2021 – 2/13/2021

	Metropolitan (n = 1,158 of 1,166)		Nonmetropolitan (n = 635 of 641)		Noncore (n = 1,299 of 1,335)	
Any decrease	896	(77.4%)	442	(69.6%)	728	(56.0%)
Notable decrease[b]	512	(44.2%)	310	(48.8%)	606	(46.7%)
Same number, both weeks[c]	53	(4.6%)	58	(9.1%)	288	(22.2%)
Any increase	209	(18.0%)	135	(21.3%)	283	(21.8%)
Notable increase[b]	93	(8.0%)	77	(12.1%)	233	(17.9%)
Increase of 100% or more	31	(2.7%)	23	(3.6%)	107	(8.2%)

[a]Comparison 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.
[c]Includes counties with an absolute change in count of two or fewer.

Figure 1.

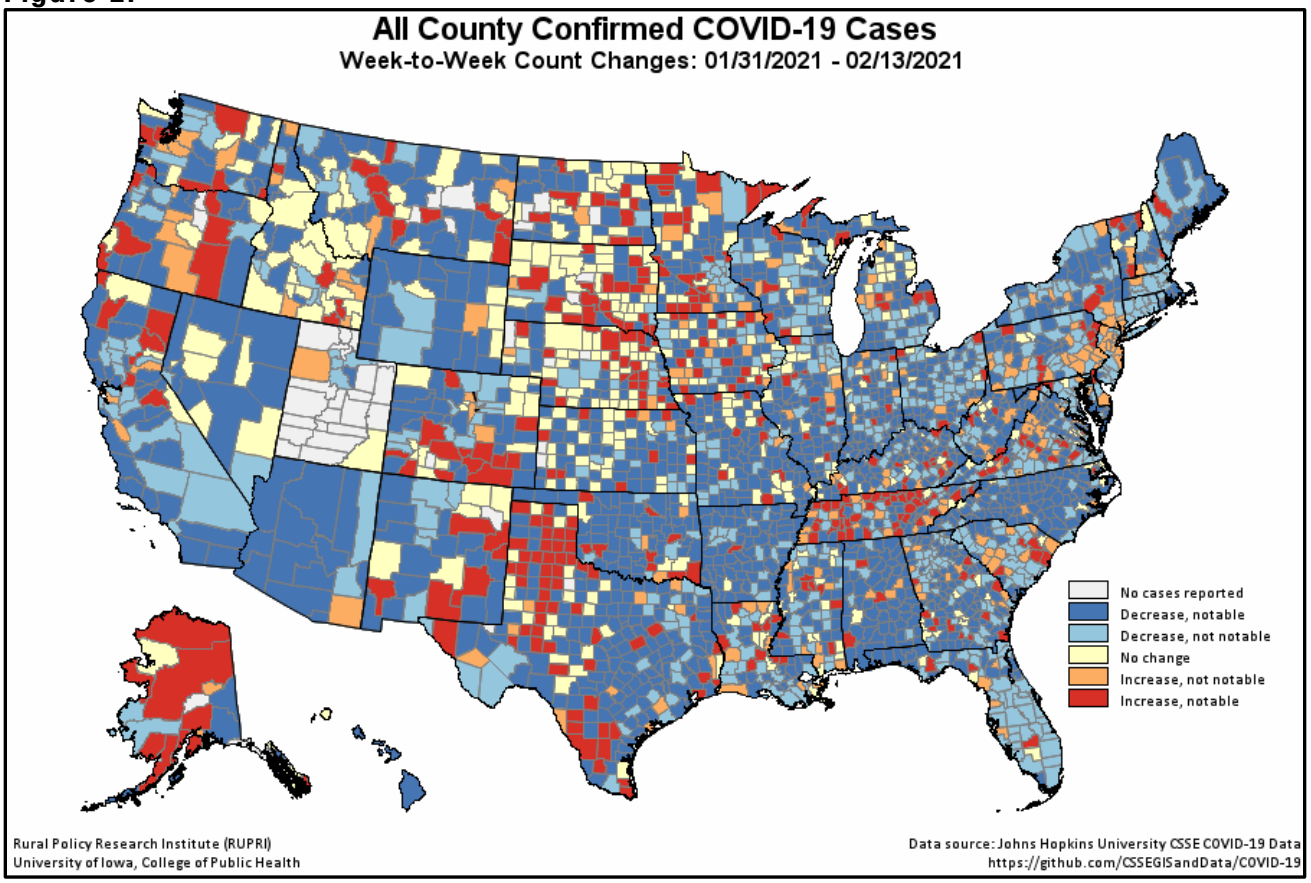


Figure 2.

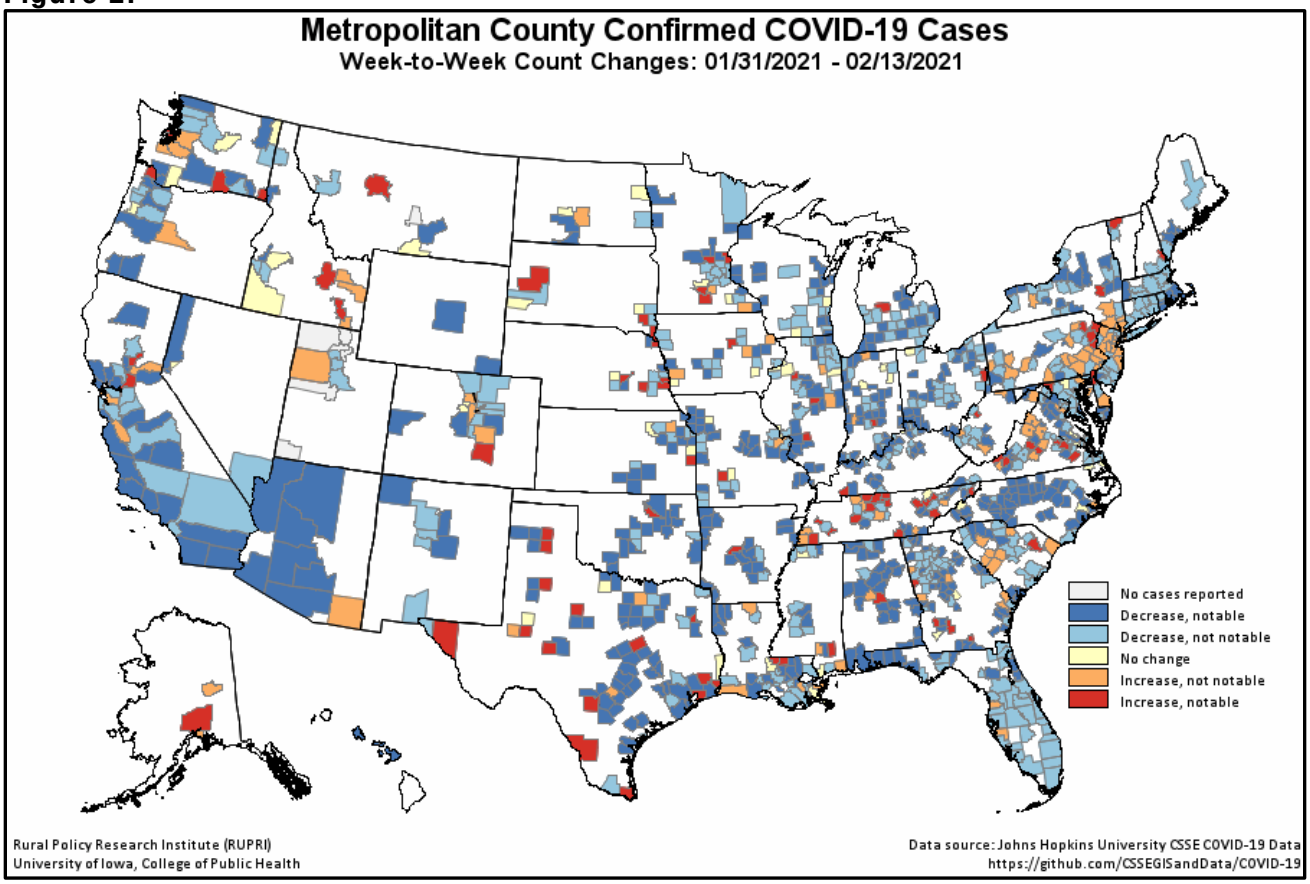


Figure 3.

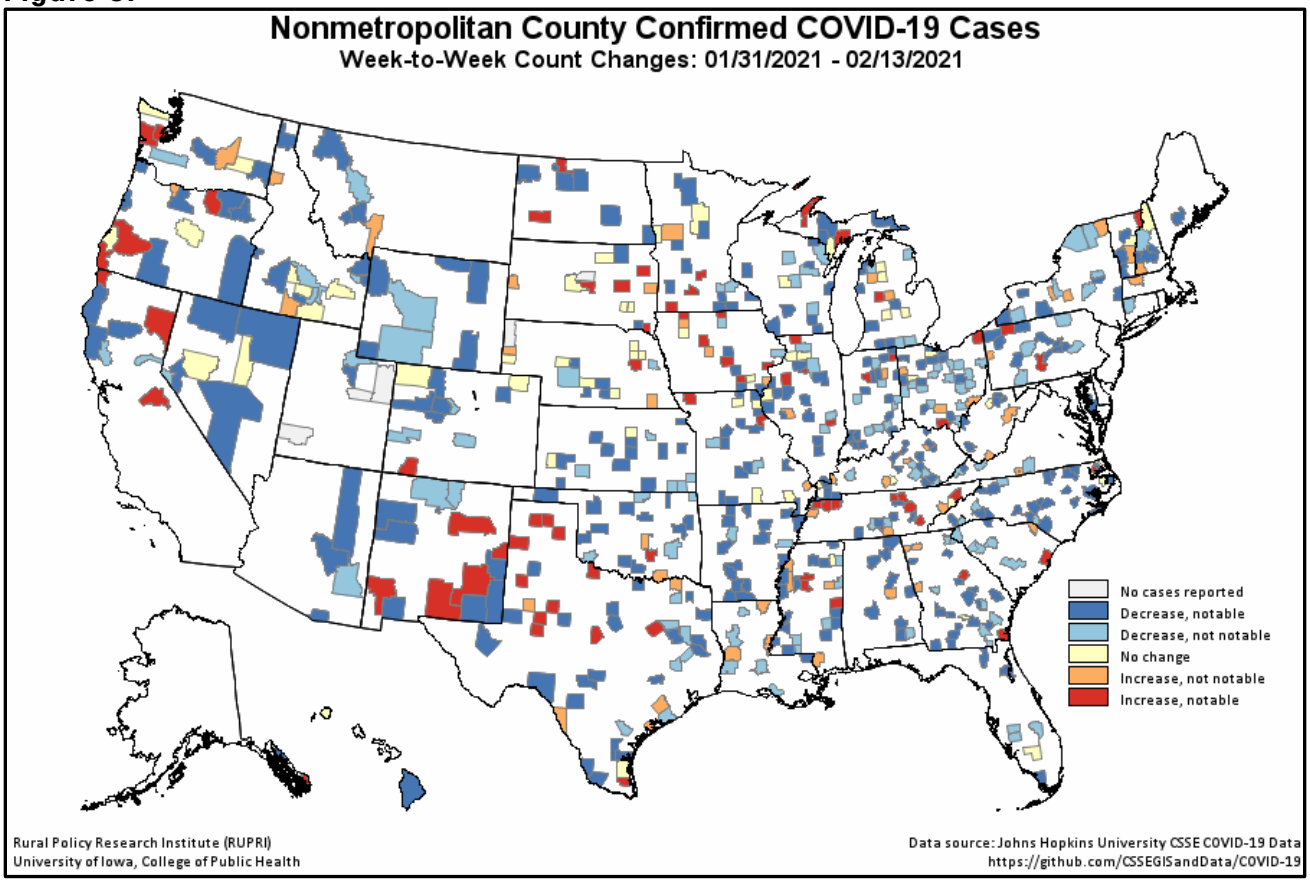
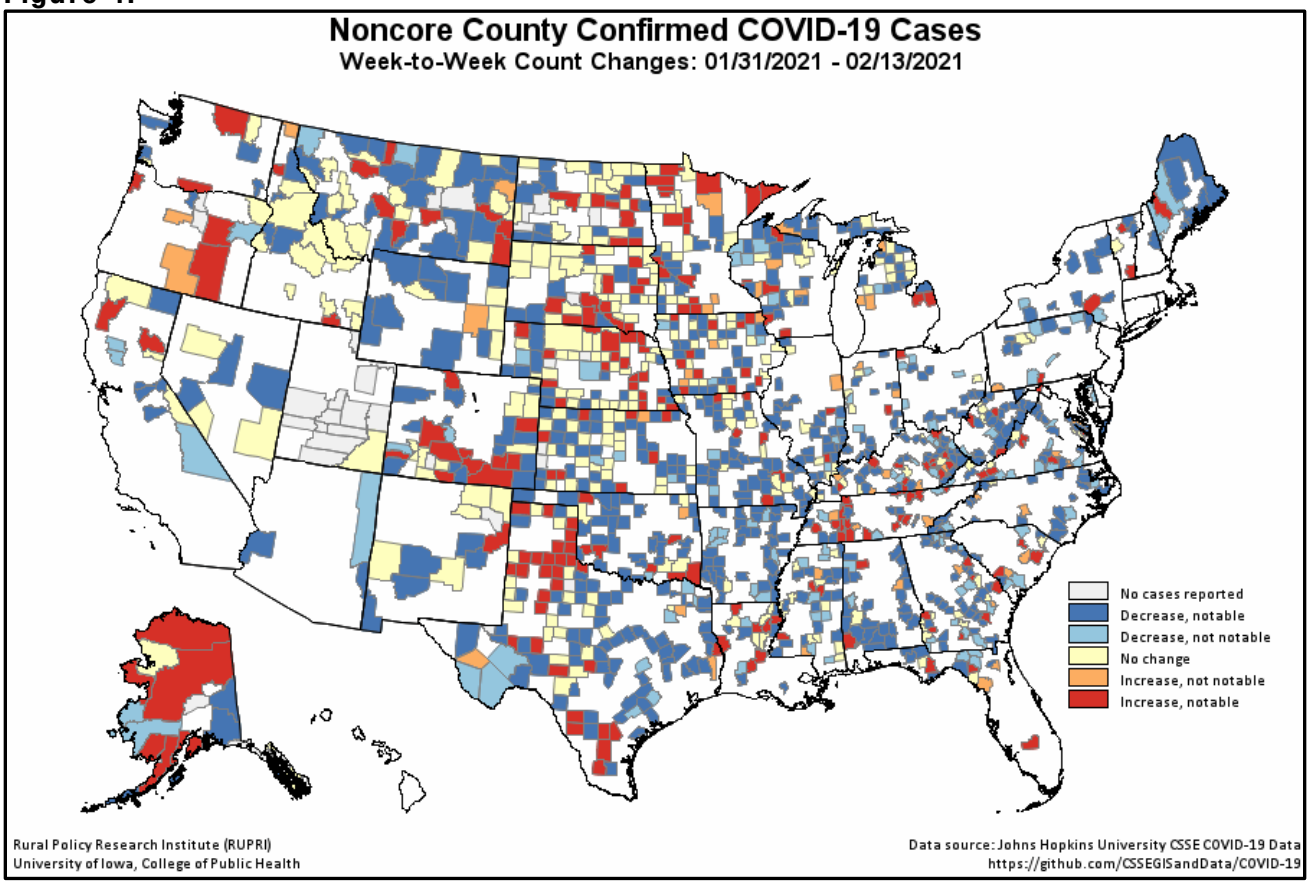


Figure 4.



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