RUPRI Center for Rural Health Policy Analysis Rural Data Update

October 19, 2020

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://ruprihealth.org/publications/policybriefs/2020/County-COVID Trajectories.pdf). This data brief looks at the new case counts in every US county between October 4, 2020, and October 17, 2020, 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: 10/4/2020 – 10/17/2020

	Metropolitan (n = 1,166)		Nonmetropolitan (n = 641)		Noncore (n = 1,335)	
No cases reported	10	(0.9%)	8	(1.2%)	45	(3.4%)
Decreasing, notable ^b	131	(11.2%)	108	(16.8%)	255	(19.1%)
Decreasing, not notable	187	(16.0%)	88	(13.7%)	108	(8.1%)
Same number, both weeks ^c	108	(9.3%)	90	(14.0%)	324	(24.3%)
Increasing, not notable	256	(22.0%)	73	(11.4%)	74	(5.5%)
Increasing, notable	474	(40.7%)	274	(42.7%)	529	(39.6%)

^aComparison of number of new cases in first week of 14-day period with new cases in second week.



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

#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 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

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.

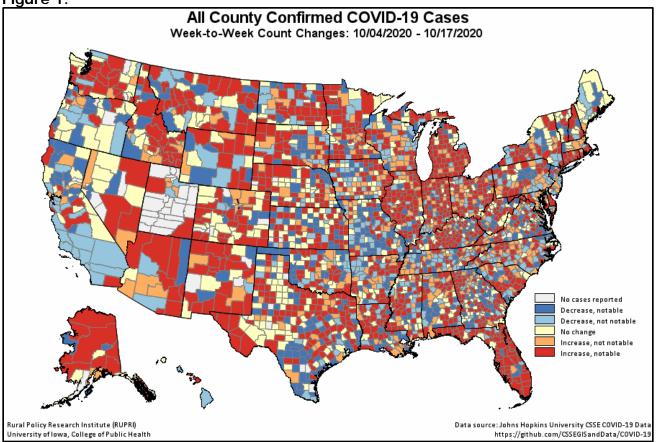
Table 2. 14-day trends in newly confirmed COVID-19 cases, in counties with any cases, by

county geography: 10/4/2020 - 10/17/2020

	Metropolitan		Nonmetropolitan		Noncore	
	(n = 1,15)	6 of 1,166)	(n = 63)	33 of 641)	(n = 1,2)	290 of 1,335)
Any decrease	318	(27.5%)	196	(31.0%)	363	(28.1%)
Notable decrease ^b	131	(11.3%)	108	(17.1%)	255	(19.8%)
Same number, both weeks ^c	108	(9.3%)	90	(14.2%)	324	(25.1%)
Any increase	730	(63.1%)	347	(54.8%)	603	(46.7%)
Notable increase ^b	474	(41.0%)	274	(43.3%)	529	(41.0%)
Increase of 100% or more	100	(8.7%)	82	(13.0%)	236	(18.3%)

^aComparison of number of new cases in first week of 14-day period with new cases in second week.

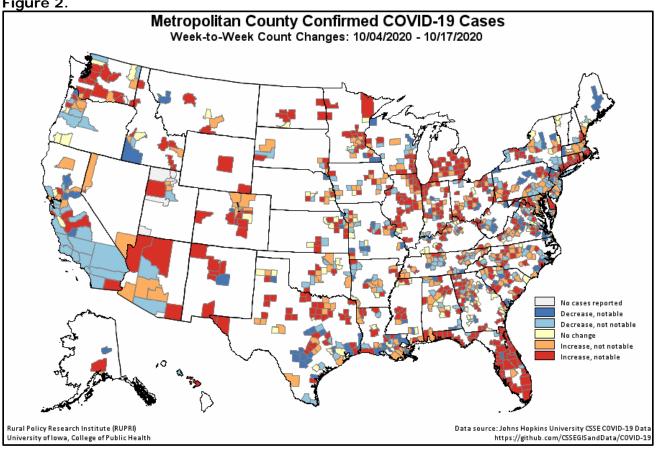
Figure 1.



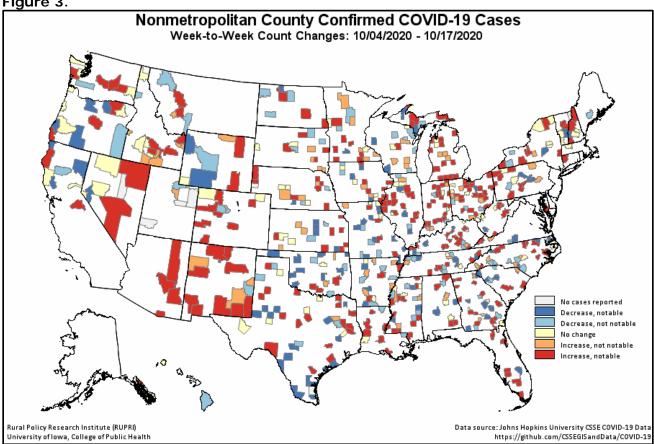
^b"Notable" trends indicate weekly changes in new cases exceeding (either increasing or decreasing) 25 percent.

^cIncludes counties with an absolute change in count of two or fewer.

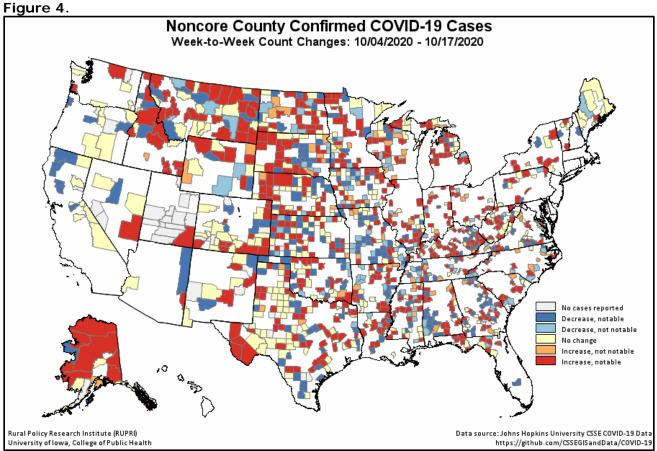
Figure 2.











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