RUPRI Center for Rural Health Policy Analysis
Rural Data Update

May 27, 2020 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 May 10, 2020, and May 23, 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 USAFacts.org[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

	Metropolitan (n = 1,166)		Nonmetropolitan (n = 641)		Noncore (n = 1,335)	
No cases reported	59	(5.1%)	75	(11.7%)	475	(35.6%)
Decreasing, notable[b]	230	(19.7%)	113	(17.6%)	132	(9.9%)
Decreasing, not notable	115	(9.9%)	22	(3.4%)	9	(0.7%)
Same number, both weeks[c]	306	(26.2%)	244	(38.1%)	526	(39.4%)
Increasing, not notable	106	(9.1%)	14	(2.2%)	11	(0.8%)
Increasing, notable	350	(30.0%)	173	(27.0%)	182	(13.6%)

Table 2. 14-day trends[a] in newly confirmed COVID-19 cases, in counties with any cases, by county geography

	Metropolitan (n = 1,107 of 1,166)		Nonmetropolitan (n = 566 of 641)		Noncore (n = 860 of 1,335)	
Any decrease	345	(31.2%)	135	(23.9%)	141	(16.4%)
Notable decrease[b]	230	(20.8%)	113	(20.0%)	132	(15.3%)
Same number, both weeks[c]	306	(27.6%)	244	(43.1%)	526	(61.2%)
Any increase	456	(41.2%)	187	(33.0%)	193	(22.4%)
Notable increase[b]	350	(31.6%)	173	(30.6%)	182	(21.2%)
Increase of 100% or more	172	(15.5%)	121	(21.4%)	144	(16.7%)

[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.

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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.

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Figure 1.

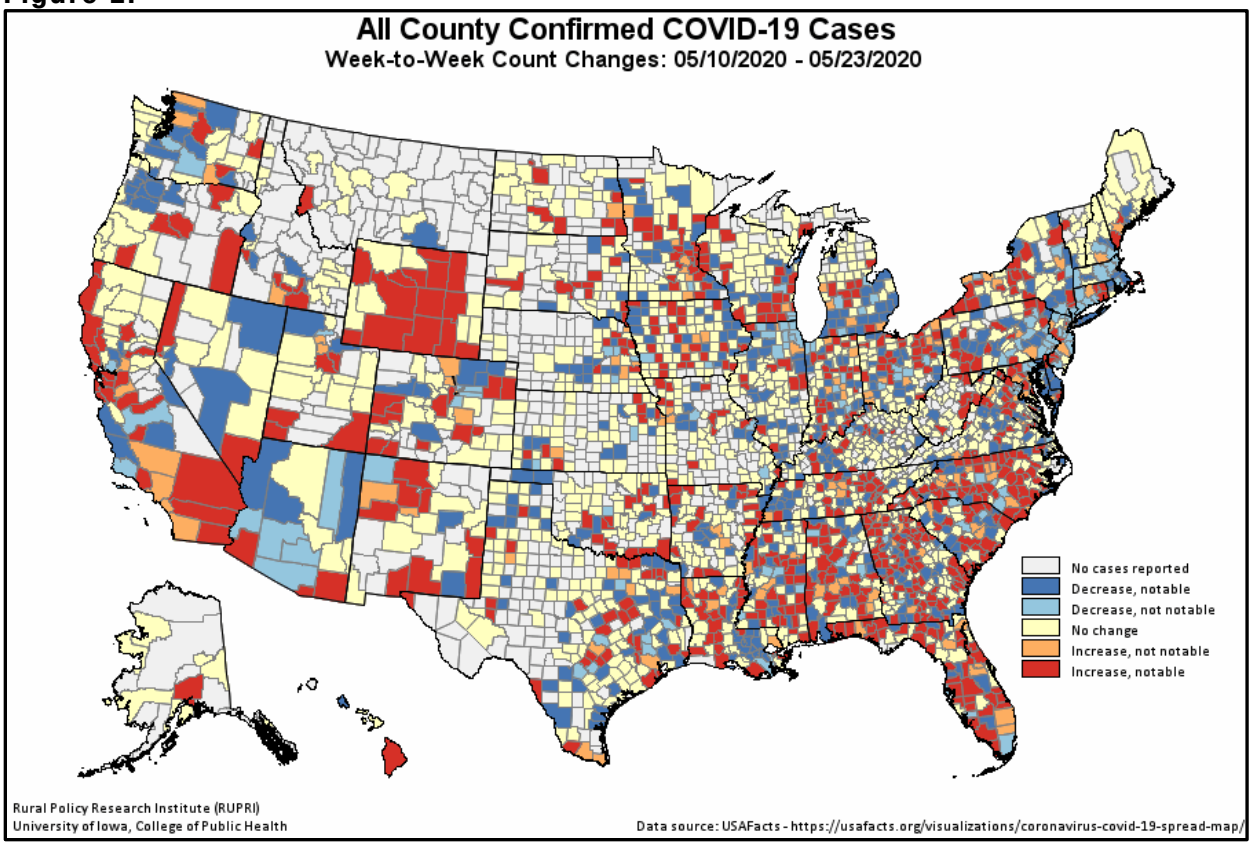


Figure 2.

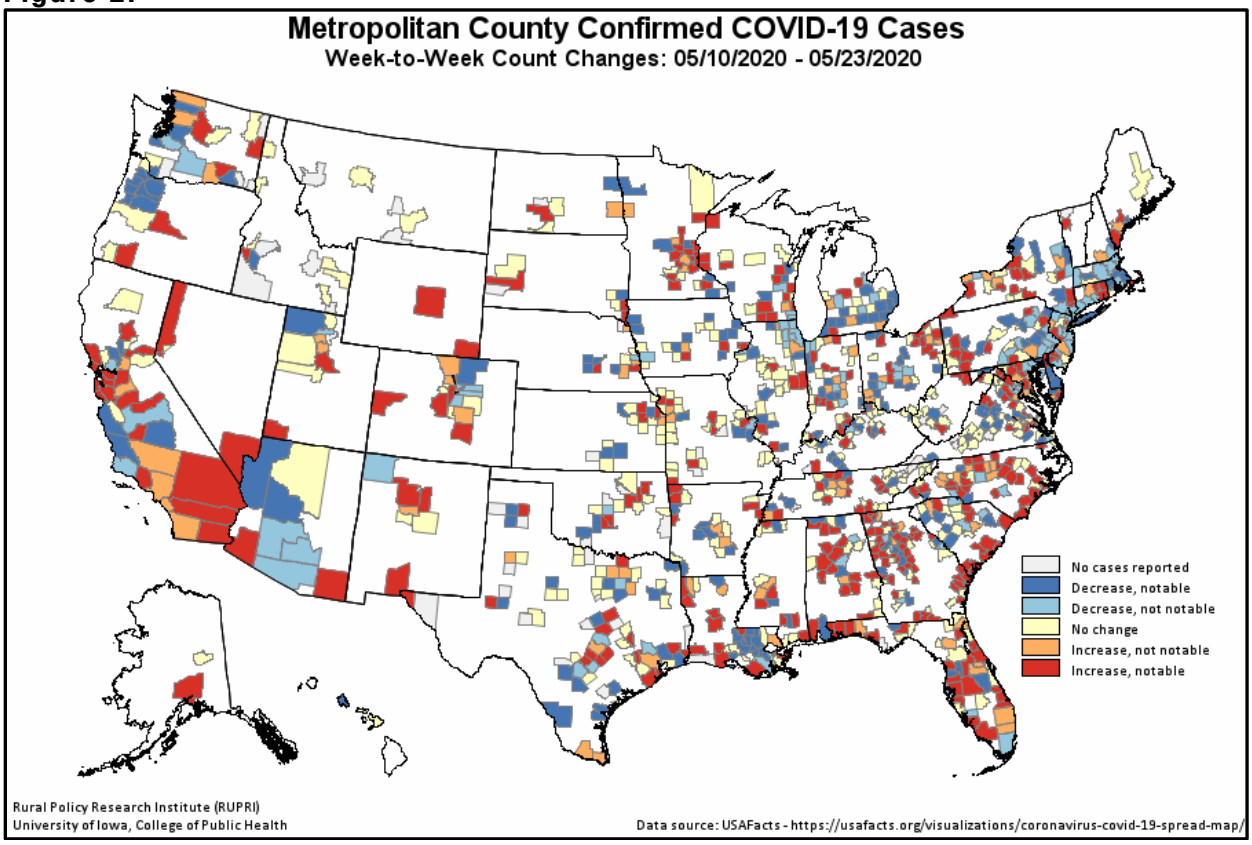


Figure 3.

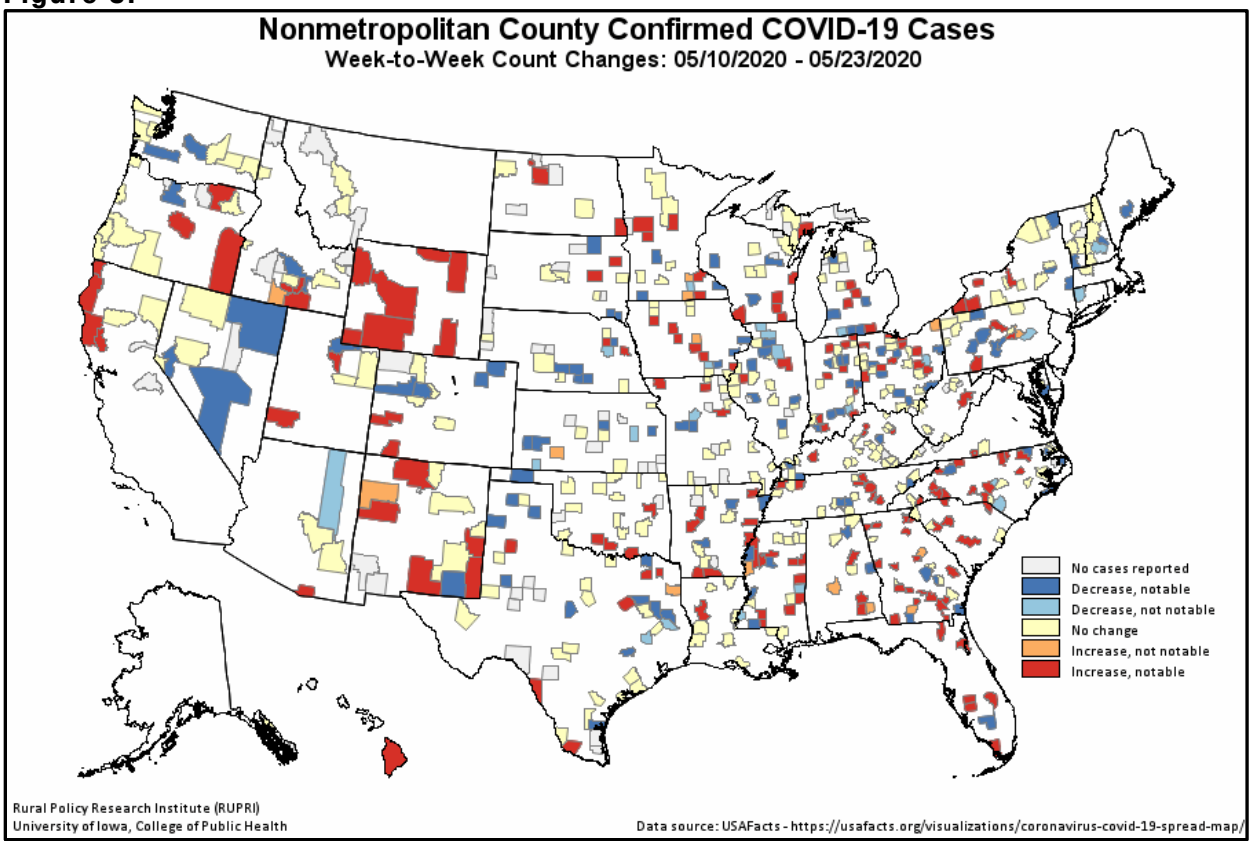
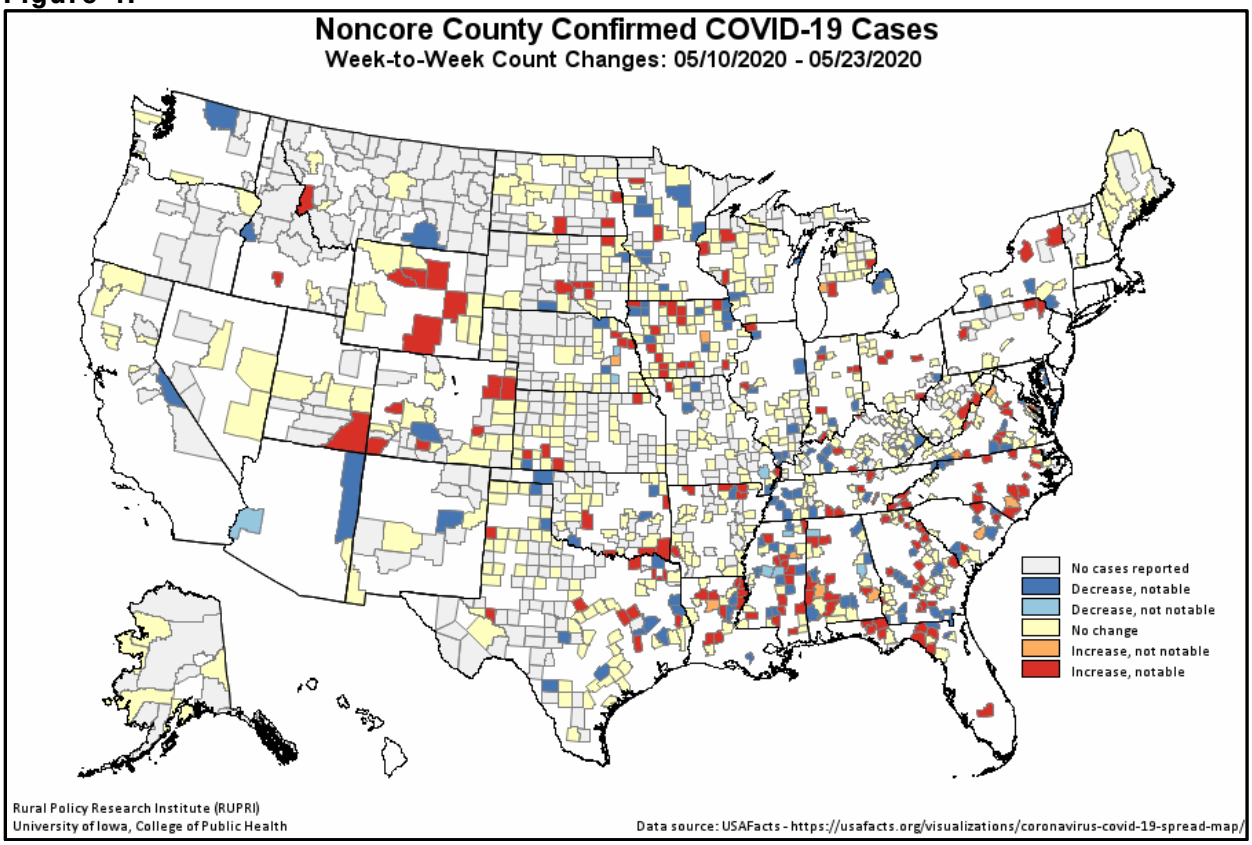


Figure 4.



[1] USAFacts.org (2020). "Coronavirus Locations: COVID-19 Map by County and State." Data retrieved from https://usafacts.org/visualizations/coronavirus-covid-19-spread-map/.
[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/.