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 October 19, 2022, and November 1, 2022, 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 in newly confirmed COVID-19 cases, by county geography: $10/19/2022 - 11/1/2022^d$

| | Metropolitan (n = 1,166) | | Nonmetropolitan (n = 641) | | Noncore (n = 1,335) | |
|--------------------------------------|-----------------------------|---------|------------------------------|---------|------------------------|---------|
| No cases reported | 6 | (0.5%) | 8 | (1.2%) | 53 | (4.0%) |
| Decreasing, notable ^b | 261 | (22.4%) | 154 | (24.0%) | 316 | (23.7%) |
| Decreasing, not notable | 181 | (15.5%) | 70 | (10.9%) | 41 | (3.1%) |
| Same number, both weeks ^c | 165 | (14.2%) | 109 | (17.0%) | 453 | (33.9%) |
| Increasing, not notable | 218 | (18.7%) | 51 | (8.0%) | 22 | (1.6%) |
| Increasing, notable | 335 | (28.7%) | 249 | (38.8%) | 450 | (33.7%) |

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



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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.

^d Case reporting has become less reliable as surveillance has gotten less comprehensive and states have reduced the frequency of their reports. Counts are therefore under reported.

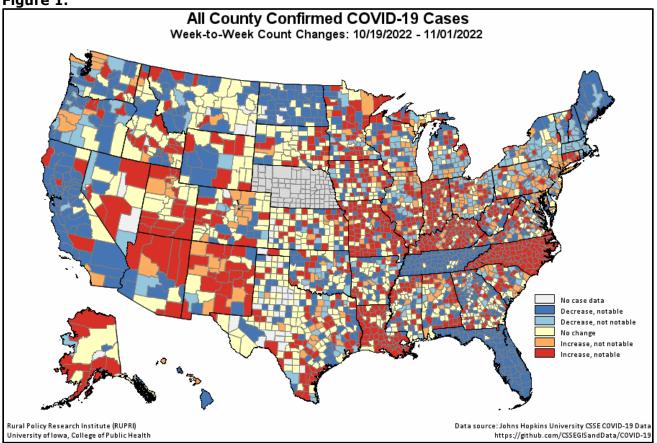
Table 2. 14-day trends^a in newly confirmed COVID-19 cases, in counties with any cases, by

county geography: 10/19/2022 - 11/1/2022^d

| | Metropolitan | | Nonmetropolitan | | Noncore | |
|--------------------------------------|--------------|-----------|-----------------|-----------|----------|-------------|
| | (n=1,160 | of 1,166) | (n=63 | 3 of 641) | (n=1,28) | 2 of 1,335) |
| Any decrease | 442 | (38.1%) | 224 | (35.4%) | 357 | (27.8%) |
| Notable decrease ^b | 261 | (22.5%) | 154 | (24.3%) | 316 | (24.6%) |
| Same number, both weeks ^c | 165 | (14.2%) | 109 | (17.2%) | 453 | (35.3%) |
| Any increase | 553 | (47.7%) | 300 | (47.4%) | 472 | (36.8%) |
| Notable increase ^b | 335 | (28.9%) | 249 | (39.3%) | 450 | (35.1%) |
| Increase of 100% or more | 91 | (7.8%) | 92 | (14.5%) | 226 | (17.6%) |

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

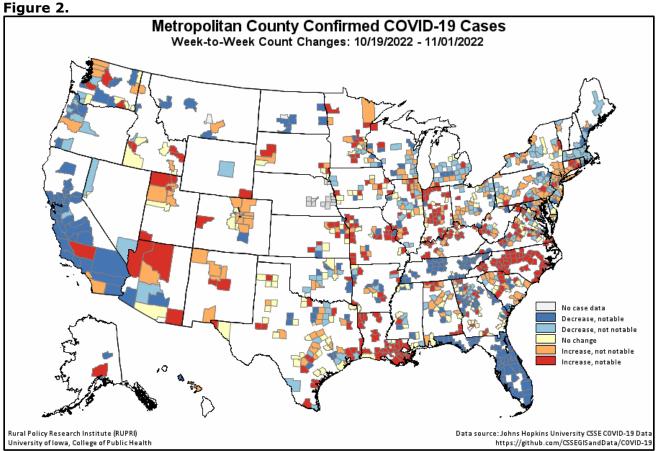
Figure 1.



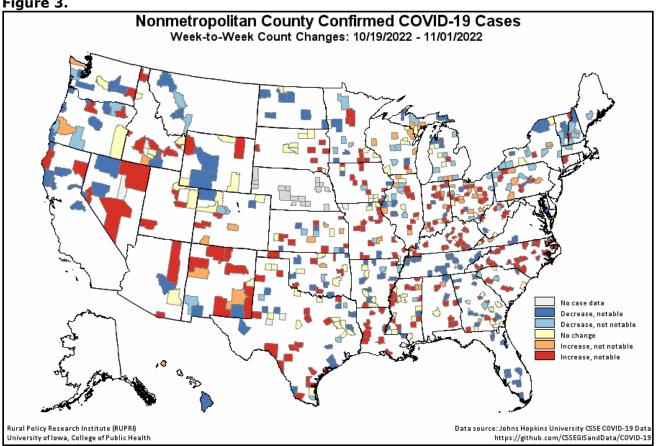
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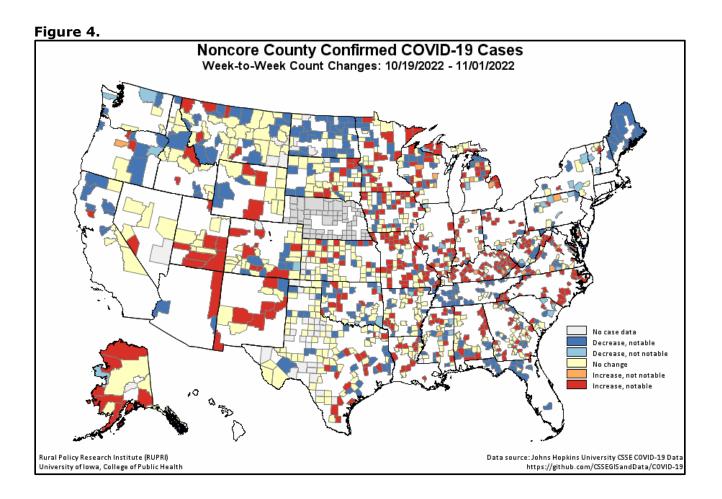
cIncludes counties with an absolute change in count of two or fewer.

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Additional changes were made to the report starting 4/26/2021 to better account for the Utah practice of providing aggregated incidence and mortality data for less populous counties.

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 <u>COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University</u>. 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/.