## **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 April 25, 2021, and May 8, 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 Repository<sup>1</sup>. 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<sup>2</sup>.

Table 1. 14-day trends in newly confirmed COVID-19 cases, by county geography: 4/25/2021 - 5/8/2021

|                                      |     | Metropolitan<br>(n = 1,166) |     | Nonmetropolitan<br>(n = 641) |     | Noncore<br>(n = 1,335) |  |
|--------------------------------------|-----|-----------------------------|-----|------------------------------|-----|------------------------|--|
| No cases reported                    | 4   | (0.3%)                      | 6   | (0.9%)                       | 79  | (5.9%)                 |  |
| Decreasing, notable <sup>b</sup>     | 360 | (30.9%)                     | 209 | (32.6%)                      | 347 | (26.0%)                |  |
| Decreasing, not notable              | 357 | (30.6%)                     | 112 | (17.5%)                      | 60  | (4.5%)                 |  |
| Same number, both weeks <sup>c</sup> | 134 | (11.5%)                     | 134 | (20.9%)                      | 525 | (39.3%)                |  |
| Increasing, not notable              | 130 | (11.1%)                     | 49  | (7.6%)                       | 31  | (2.3%)                 |  |
| Increasing, notable                  | 181 | (15.5%)                     | 131 | (20.4%)                      | 293 | (21.9%)                |  |

<sup>&</sup>lt;sup>a</sup>Comparison of number of new cases in first week of 14-day period with new cases in second week.



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<sup>&</sup>lt;sup>bw</sup>Notable" trends indicate weekly changes in new cases exceeding (either increasing or decreasing) 25 percent.

<sup>&</sup>lt;sup>c</sup>Includes counties with an absolute change in count of two or fewer.

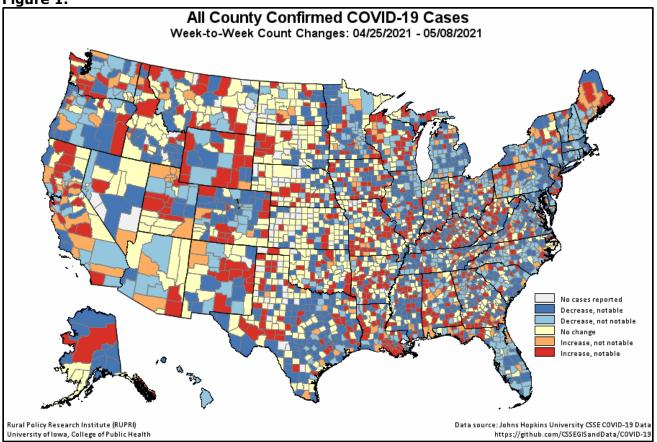
Table 2. 14-day trends<sup>a</sup> in newly confirmed COVID-19 cases, in counties with any cases, by

county geography: 4/25/2021 - 5/8/2021

|                                      | Metropolitan |             | Nonmetropolitan |           | Noncore   |              |
|--------------------------------------|--------------|-------------|-----------------|-----------|-----------|--------------|
|                                      | (n = 1,16)   | 2 of 1,166) | (n = 63)        | 5 of 641) | (n = 1,2) | 56 of 1,335) |
| Any decrease                         | 717          | (61.7%)     | 321             | (50.6%)   | 407       | (32.4%)      |
| Notable decrease <sup>b</sup>        | 360          | (31.0%)     | 209             | (32.9%)   | 347       | (27.6%)      |
| Same number, both weeks <sup>c</sup> | 134          | (11.5%)     | 134             | (21.1%)   | 525       | (41.8%)      |
| Any increase                         | 311          | (26.8%)     | 180             | (28.3%)   | 324       | (25.8%)      |
| Notable increase <sup>b</sup>        | 181          | (15.6%)     | 131             | (20.6%)   | 293       | (23.3%)      |
| Increase of 100% or more             | 46           | (4.0%)      | 49              | (7.7%)    | 184       | (14.6%)      |

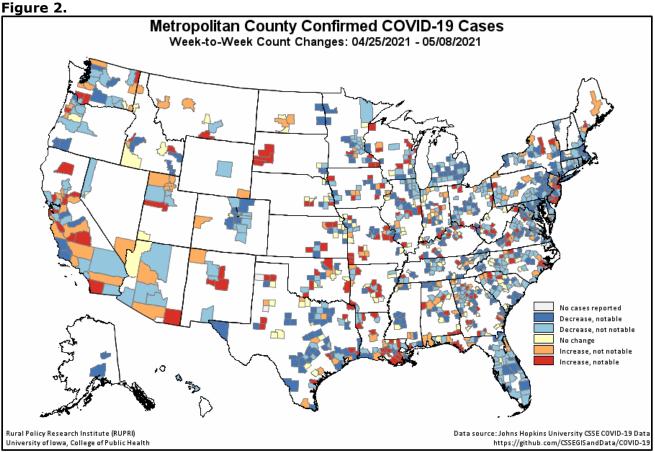
<sup>&</sup>lt;sup>a</sup>Comparison of number of new cases in first week of 14-day period with new cases in second week.

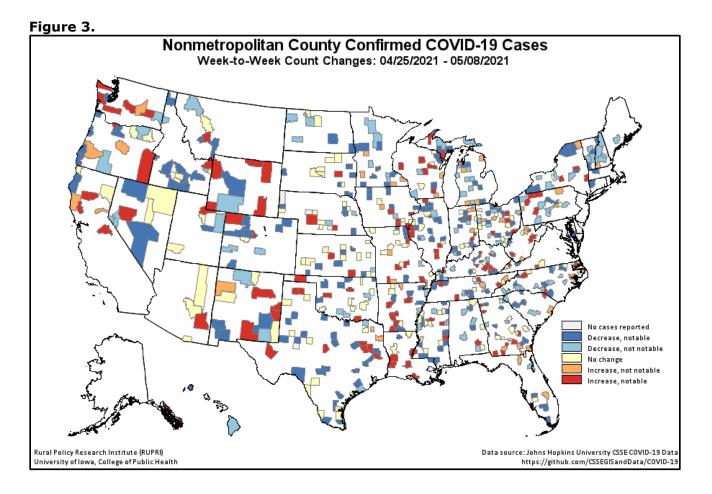
Figure 1.

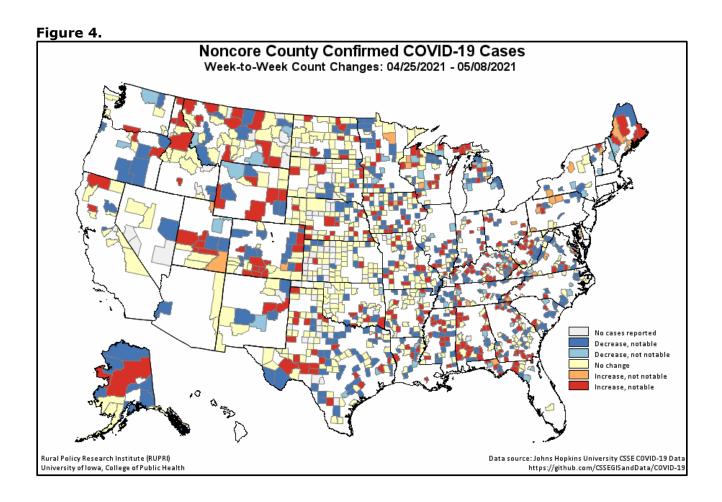


b"Notable" trends indicate weekly changes in new cases exceeding (either increasing or decreasing) 25 percent.

<sup>&</sup>lt;sup>c</sup>Includes counties with an absolute change in count of two or fewer.







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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Agriculture, Economic Research Service (2019). "Urban Influence Codes." Retrieved May 20, 2020 from <a href="https://www.ers.usda.gov/data-products/urban-influence-codes/">https://www.ers.usda.gov/data-products/urban-influence-codes/</a>.