

COVID-19 Cases are Clustered in Large Urban Hubs, but Rural Areas Surrounding those Hubs are Also Increasingly Affected

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Confirmed cases of COVID-19 are not evenly distributed across the U.S. Thus far, confirmed cases are mainly clustered in the Mid-Atlantic region, Florida, along the West Coast, and in large central cities throughout the middle of the U.S. Given larger populations, it is no surprise that there are more cases in the most urban parts of the U.S., particularly those with large airport hubs, but some nonmetropolitan counties are also being affected (Figure 1). Dense populations and heavy traffic contribute in important ways to the spread of infectious diseases, including COVID-19. Physical distancing can help flatten the curve of this pandemic.

Even though there are fewer confirmed cases in rural areas right now, COVID-19 cases will soon begin increasing in rural areas. [Mortality rates could be higher in rural areas](#) given their older and sicker population composition and their more limited capacity for treating cases.

It is important to point out that these figures represent only *confirmed* positive tests. The actual rate of infection is much higher than shown in these maps, but access to testing in the U.S. has been abysmal. Thus far, [testing rates have been particularly low in the south](#), which is concerning given the much higher rates of chronic health conditions in the south.

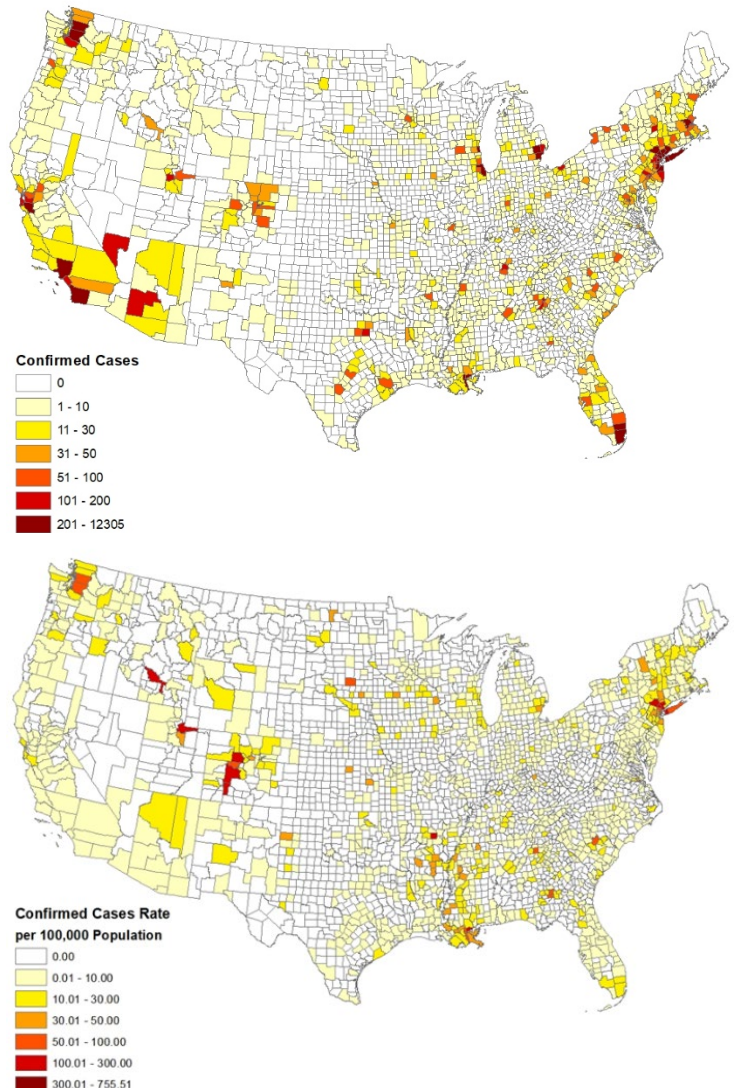


Figure 1. Confirmed Total COVID-19 Cases and Case Rates (cases per 100,000 pop.) by County

Note: The maps represent cases as of 03/23/20. Cases are increasing daily; *Data Sources:* USDA Economic Research Service Rural-Urban Continuum Codes, 2013; Novel coronavirus case counts are from JHU CSSE (<https://github.com/CSSEGISandData/COVID-19>)

Maps: Yue Sun

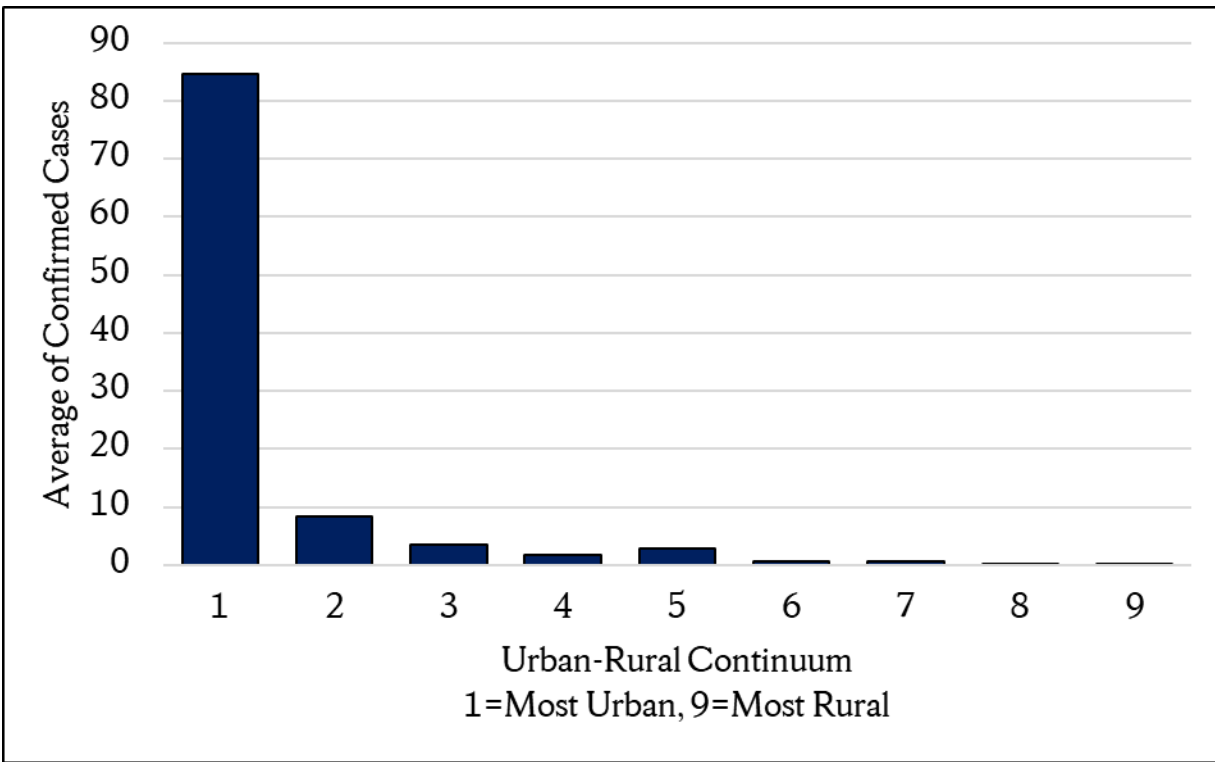


Figure 2. COVID-19 Cases are Currently Concentrated in the Most Urban Counties

Data Sources: USDA Economic Research Service Rural-Urban Continuum Codes, 2013; Novel Coronavirus (COVID-19) cases, provided by JHU CSSE (<https://github.com/CSSEGISandData/COVID-19>)

Notes: RUCC, 1=Large metro counties - metro areas of 1 million population or more, 2=Medium metro counties - metro areas of 250,000 to 1 million population, 3=Small metro counties - metro areas of fewer than 250,000 population, 4=Nonmetro county with urban population of 20,000 or more, adjacent to a metro area, 5=Nonmetro county with urban population of 20,000 or more, not adjacent to a metro area, 6=Nonmetro county with urban population of 2,500 to 19,999, adjacent to a metro area, 7=Nonmetro county with urban population of 2,500 to 19,999, not adjacent to a metro area, 8=Nonmetro county with urban population less than 2,500, adjacent to a metro area, 9=Nonmetro county with urban population less than 2,500 not adjacent to a metro area.

Figure: Yue Sun

About the Author

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The mission of the Lerner Center for Public Health Promotion at Syracuse University is to improve population health through applied research and evaluation, education, engaged service, and advocating for evidence-based policy and practice change.