# **Covid-19 Community Explorer**

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## The best and worst-performing counties in the U.S.

#### **Key findings for September 2021:**

Community Profile One is the best performing of the county profiles on average. Its vaccination rate is the highest (at 60.50%, more than ten percentage points higher than the following highest profile at 49.35%), and its case rate is the lowest (11,251 cases per 100,000) as is its death rate (171 deaths per 100,000). Community Profile One represents 38 percent of the U.S. population and is the most ethnically diverse community with the highest income level. It is a highly educated cohort that resides in large metro areas.

Community Profile Three is arguably the worst performing of the county profiles on average. It has the highest average number of deaths and cases per 100,000 people (330 and 15,824 respectively). While its average vaccination rate is higher than Community Profile Four, it is higher by less than two percentage points (41.15% versus 39.67%). Community Profile Three represents 12 percent of the U.S. population and has the largest Black population, with the lowest income of all the profiles. These counties are primarily concentrated in the Southeast.

Community Profile Eight demonstrates the most variation of the county profiles, containing several counties among the best and the worst performers. Of the 76 counties that appear in the best ten percent of counties along one metric while simultaneously appearing in the worst ten percent of counties along with another metric, 32 (42%) are in this profile. Community Profile Eight represents 3 percent of the U.S. population and is the most rural cohort, consisting of an older White population with limited access to healthy food. The counties are mostly in the north part of the West, Midwest, and Northeast regions.

#### For the best performing counties -Top 10%

- **By vaccination rate**<sup>1</sup>: close to three quarters of the 277 counties with the highest vaccination rate are within Profiles Two (34%), Eight (20%), or One (20%), that is mostly White counties in metro areas and in rural areas and large metro areas that are more ethnically diverse and highly populated. <sup>2</sup>
  - New York has the largest number of highly vaccinated counties, 26 in total, and an average vaccination rate of 57.18% statewide (64.76% within these 26 counties).
- By number of cases per 100,000: close to 70% of the 315 counties with the least number of cases per 100,000 are within Profiles Eight (43%) and Two (24%).
  - Virginia has the largest number of counties or county-equivalents<sup>3</sup> with low case rates, 35 total, with an average case rate of 11,124 cases per 100,000 statewide (7,851 cases per 100,000 within these 35 county equivalents).
- **By number of deaths per 100,000**: 35 counties have no recorded deaths from Covid-19; most of them (30) within Profile Eight.
  - 35 counties within the U.S. have no recorded deaths; Alaska and Nebraska each contain eight of these counties
  - Alaska is the state with the most counties with low death rates (26); it has an average death rate of 61 deaths per 100,000 statewide (54 deaths per 100,000 for these 26 counties).
- Overall, the population of the 59 counties that perform the best on all three Covid-19 metrics is split between Profiles Eight (40%), Two (25%), and One (20%).
  - All four of Hawaii's counties are among the best performing 10% of counties by all three Covid-19 metrics, as are 11 of Maine's 16 counties; this makes Maine the state with the highest number of high performing counties and Hawaii the state with the highest percentage of its counties being considered high performing.

 $<sup>^1</sup>$  Due to incompleteness of the data, vaccination rates for Vermont counties has been excluded along with Georgia, West Virginia, and Virginia.

<sup>&</sup>lt;sup>2</sup> Community Profile Two represents 25 percent of the US population and consists of highly educated, economically prosperous, mostly White counties in metro areas. Community Profile Eight represents 3 percent of the US population and is the most rural cohort, consisting of an older White population with the most limited access to healthy food. The counties are mostly in the north part of the West, Midwest, and Northeast regions. Community Profile One represents 38 percent of the US population and is the most ethnically diverse community with the highest income level. It is a highly educated cohort that resides in large metro areas.

<sup>&</sup>lt;sup>3</sup> Five of the 35 Virginia counties in the bottom decile by case rate are actually independent cities; VA has 38 independent cities that are considered county equivalents.

#### For the worst performing counties - bottom 10%

- By vaccination rate: more than 72% of the 285 counties with the worst vaccination rates is split between Profiles Four (28%), Eight (31%), and Three (14%)<sup>4</sup>, that is White and Black population with the lowest income level of all the profiles and rural areas.
  - Missouri is the state with the highest number of poorly performing counties by vaccination rate, with 36 counties in the bottom tenth; statewide, the average vaccination rate for Missouri counties is 35% (27% in those 36 counties).
  - Seven of Wyoming's 23 counties are in the bottom 10% by vaccination rate, making it the state with the highest proportion of its counties performing in the bottom tenth on vaccinations; statewide, the average county vaccination rate is 37% (27% in those seven counties).
  - The number of Texas counties with vaccination rates in the bottom 10% of counties fell from 38 at the end of August to only 26 at the end of September. The average vaccination rate for Texas counties is 41%, higher than the county averages in 13 other states.
- By number of cases per 100,000: almost 70% of the 313 worst performing counties in terms of cases per 100,00 are captured by Profiles Three (27%), Six (23%), and Four (20%)<sup>5</sup>
  - Tennessee has the largest number of counties with very high case rates and the state with the highest proportion of such counties. More than half of Tennessee counties (49 of 95) have case rates in the highest tenth, for an average of 18,623 cases per 100,000 across all counties in the state (20,328 cases per 100,000 on average in the worst 45 counties).
  - Of the 85 poorly performing counties in Profile Three, they are largely located in the South (with concentrations in Georgia, Louisiana, and Mississippi); of the 71 poorly performing counties within Profile Six, 33 (46%) are located in Texas.
  - o Only one of the worst-performing counties by case rate falls in Profile One, Miami-Dade county in Florida, with a case rate of 24,310 cases per 100,000.
- By number of deaths per 100,000: almost three-quarters of the worst-performing counties in terms of deaths per 100,000 are in Profiles Three (31%), Six (22%), and Eight (20%)
  - More than one-third of the worst-performing counties by death rate (approximately 37%) are located in only two states: Texas (20.77%) and Georgia (16.61%)
  - o 65 counties in Texas fall within the worst-performing tenth of counties by death rate; Texas' average county death rate is 352 deaths per 100,000 (in those 65 counties, the average death rate is 536 deaths per 100,000).
- Overall, four of the eight counties that can be considered among the worst-performing by vaccination, case, and death rates fall within community Profile Three.

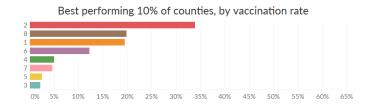
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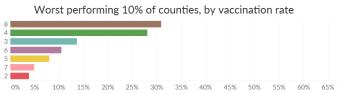
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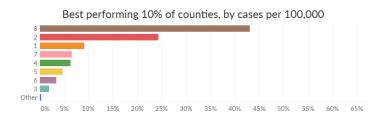
<sup>&</sup>lt;sup>4</sup> Community Profile Three represents 12 percent of the US population and has the largest Black population, whose income is the lowest income of all the profiles. These counties are primarily concentrated in the Southeast. Community Profile Four represents 7 percent of the US population and has the largest White population. This population reports the lowest income of all the profiles. It encompasses mostly rural counties in the East North Central and Northeast regions. Community Profile Eight represents 3 percent of the US population and is the most rural cohort, consisting of an older White population with the most limited access to healthy food. The counties are mostly in the north part of the West, Midwest, and Northeast regions.

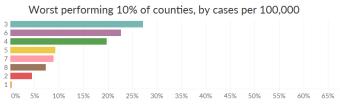
<sup>&</sup>lt;sup>5</sup> Community Profile Six represents 5 percent of the US population and is the youngest cohort of the profiles, with the largest Hispanic population, the least education level, access to healthy food, and health insurance. The counties are concentrated in the West and West South-Central regions.

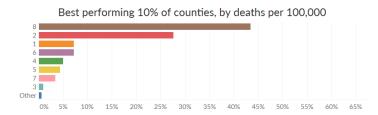
## Best and Worst Performing Counties Based on Three Covid-19 Measures

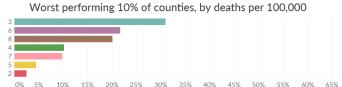






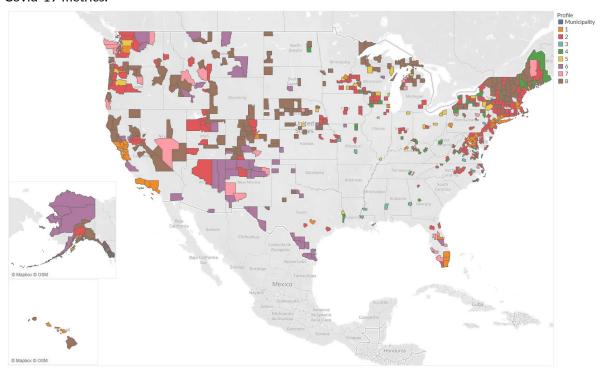




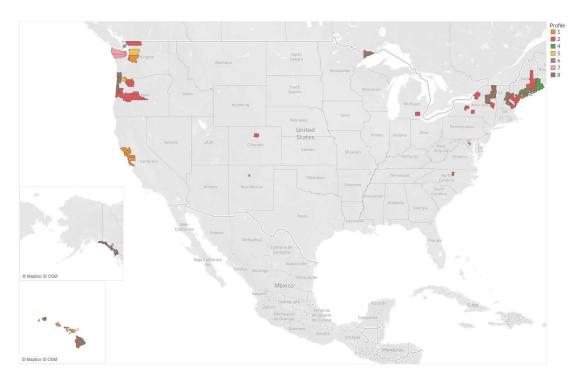


#### Where are the Best Performing Counties?<sup>6</sup>

The following map shows the 613 counties that fall within the best performing 10% of counties by at least one of the three Covid-19 metrics:



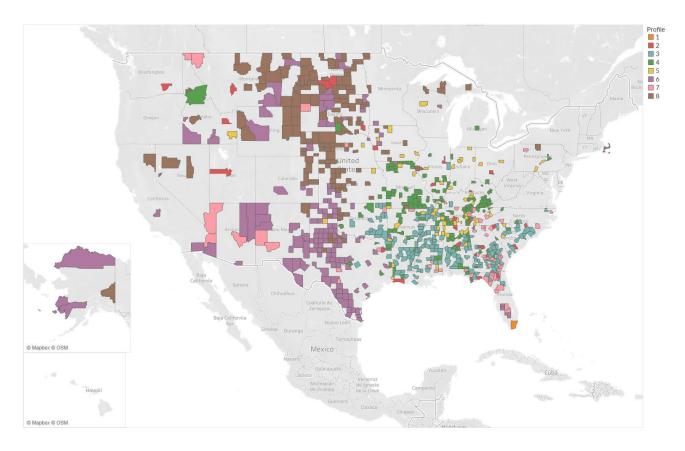
The following map shows the 59 counties that fall within the best performing 10% of counties by each of the three Covid-19 metrics:



<sup>&</sup>lt;sup>6</sup> 26 county-equivalents in Alaska appear among the best performing counties, even as recent reporting has emphasized the severity of the crisis in that state. This is attributable to the very small population size of most of Alaska's counties, rendering population adjusted death and case rates less reliable, as well as the relative scarcity of health infrastructure in the geographically vast state (Alaska's landmass is more than twice the size of the next largest state, Texas, however the latter's population is almost 40 times the size of Alaska's).

## Where are the Worst Performing Counties?

The following map shows the 755 counties that fall within the worst performing tenth of counties along at least one of the three Covid-19 metrics:



The following map shows the eight counties that fall in the worst performing tenth of counties by all three Covid-19 metrics:



	Average Vaccination Rate	Average Deaths per 100,000	Average Cases per 100,000
Profile 1	60.49%	171	11,251
Profile 2	49.35%	172	12,747
Profile 3	41.15%	330	15,824
Profile 4	39.67%	254	14,508
Profile 5	42.58%	241	14,542
Profile 6	42.91%	310	15,640
Profile 7	43.06%	282	14,196
Profile 8	43.10%	210	12,235
Total	43.71%	246	13,949