Supplemental Appendix Table A.4: US COVID-19 cases per 100 000 person-years, rate differences, and rate ratios by county characteristics\* as of May 5, 2020 (3 142 counties, 1 189 798 cases, 322 903 030 population)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | Number of counties | Number of cases | Population† | Cases per 100,000 person-years | (95% CI) |   | Rate difference per 100,000 person-years | (95% CI) |   | Rate ratio | (95% CI) |   |
| % poverty (categories) |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4.9% | 41 |  15 827 | 4 495 932 | 1 236.3 | (1 217.1 | , 1 255.6) |  0.0 | (reference) | 1.00 | (reference) |  |
| 5-9.9% | 558 |  341 580 | 71 157 744 | 1 685.9 | (1 680.2 | , 1 691.5) |  449.5 |  (429.5 |  , 469.6) | 1.36 | (1.34 | , 1.39) |
| 10-14.9% | 1 023 |  332 241 | 108 820 591 | 1 072.3 | (1 068.6 | , 1 075.9) | - 164.1 | (- 183.7 | , - 144.5) | 0.87 | (0.85 | , 0.88) |
| 15-19.9% | 860 |  318 994 | 101 961 251 | 1 098.8 | (1 095.0 | , 1 102.6) | - 137.6 | (- 157.2 | , - 117.9) | 0.89 | (0.87 | , 0.90) |
| 20-100% | 659 |  181 111 | 36 428 205 | 1 746.1 | (1 738.0 | , 1 754.1) |  509.7 |  (488.9 | , 530.6) | 1.41 | (1.39 | , 1.44) |
| Missing county |  |  45 |  |  |  |  |  |  |  |  |  |  |
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| Index of Concentration at the Extremes (high income white households versus low income black households) |

 |
| Q1: [-0.522,0.114]‡ | 974 |  268 863 | 61 949 063 | 1 524.2 | (1 518.5 | , 1 530.0) | - 467.2 | (- 475.7 | , - 458.6) | 0.77 | (0.76 | , 0.77) |
| Q2: (0.114,0.159] | 701 |  200 568 | 64 942 197 | 1 084.7 | (1 079.9 | , 1 089.4) | - 906.7 | (- 914.7 | , - 898.8) | 0.54 | (0.54 | , 0.55) |
| Q3: (0.159,0.205] | 696 |  152 042 | 65 113 354 |  820.1 |  (815.9 | , 824.2) | -1 171.3 | (-1 178.9 | , -1 163.7) | 0.41 | (0.41 | , 0.41) |
| Q4: (0.205,0.283] | 515 |  192 155 | 64 525 801 | 1 045.9 | (1 041.2 | , 1 050.5) | - 945.5 | (- 953.4 | , - 937.6) | 0.53 | (0.52 | , 0.53) |
| Q5: (0.283,0.536] | 255 |  376 125 | 66 333 308 | 1 991.4 | (1 985.0 | , 1 997.8) |  0.0 | (reference) | 1.00 | (reference) |  |
| Missing county |  |  45 |  |  |  |  |  |  |  |  |  |  |
| % crowding (quintiles) |  |  |  |  |  |  |  |  |  |  |  |  |
| Q1: [0%, 1.47%] | 1 089 |  147 803 | 65 389 574 |  793.8 |  (789.8 |  , 797.9) |  0.0 | (reference) | 1.00 | (reference) |  |
| Q2: (1.47%, 2.12%] | 709 |  186 486 | 64 425 866 | 1 016.6 | (1 012.0 | , 1 021.2) |  222.7 |  (216.6 |  , 228.9) | 1.28 | (1.27 | , 1.29) |
| Q3: (2.12%, 3.06%] | 656 |  275 221 | 63 510 499 | 1 521.9 | (1 516.2 | , 1 527.6) |  728.1 |  (721.1 |  , 735.1) | 1.92 | (1.91 | , 1.93) |
| Q4: (3.06%, 4.91%] | 443 |  271 655 | 65 654 959 | 1 453.1 | (1 447.7 | , 1 458.6) |  659.3 |  (652.5 |  , 666.1) | 1.83 | (1.82 | , 1.84) |
| Q5: (4.91%, 49.3%] | 244 |  308 612 | 63 913 934 | 1 695.8 | (1 689.8 | , 1 701.8) |  902.0 |  (894.7 |  , 909.2) | 2.14 | (2.12 | , 2.15) |
| Missing county |  |  21 |  |  |  |  |  |  |  |  |  |  |
| % percent population of color |  |  |  |  |  |  |  |  |  |  |  |
| Q1: [0%, 17.2%] | 1 636 |  93 880 | 65 219 939 |  505.5 |  (502.3 |  , 508.8) |  0.0 | (reference) | 1.00 | (reference) |  |
| (17.2%, 30.2%] | 549 |  192 462 | 65 166 967 | 1 037.2 | (1 032.6 | , 1 041.9) |  531.7 |  (526.0 | , 537.3) | 2.05 | (2.04 | , 2.07) |
| (30.2%, 44.3%] | 468 |  309 302 | 69 376 152 | 1 565.8 | (1 560.3 | , 1 571.3) | 1 060.2 | (1 053.8 | , 1 066.6) | 3.10 | (3.07 | , 3.12) |
| (44.3%, 61%] | 280 |  283 520 | 60 922 155 | 1 634.4 | (1 628.4 | , 1 640.4) | 1 128.9 | (1 122.1 | , 1 135.7) | 3.23 | (3.21 | , 3.26) |
| (61%, 100%] | 209 |  310 613 | 62 217 817 | 1 753.3 | (1 747.2 | , 1 759.5) | 1 247.8 | (1 240.8 | , 1 254.8) | 3.47 | (3.44 | , 3.49) |
| Missing county |  |  21 |  |  |  |  |  |  |  |  |  |  |

\* Quintile cutpoints defined on the distribution of all US counties.

† Population totals can vary due to counties with missing area-based socioeconomic measures.

‡ [*a,b*] indicates interval where value *x* is *a*≤*x*≤*b*; (*a,b*] indicates interval where value *x* is *a*<*x*≤*b*.