Supplemental Online Content

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eTable 1. Selected City-Level Sociodemographic Characteristics for the US and the 30 Largest US Cities

eTable 2. Age-Adjusted All-Cause Mortality Rates and Measures of Disparities Over 3 Time Periods (2010-2012, 2013-2015, and 2016-2018)

This supplemental material has been provided by the authors to give readers additional information about their work.
eTable 1. Selected City-Level Sociodemographic Characteristics for the US and the 30 Largest US Cities

| City, State        | Population   | Percent NH White | Percent NH Black | Percent Other<sup>1</sup> | Percent ≥65 Years | Median Age (in years) | Percent Male |
|--------------------|--------------|------------------|------------------|--------------------------|------------------|-----------------------|--------------|
| United States      | 318,558,162  | 61               | 12               | 27                       | 15               | 38                    | 49           |
| Austin, TX         | 907,779      | 49               | 7                | 44                       | 8                | 32                    | 51           |
| Baltimore, MD      | 621,000      | 28               | 63               | 9                        | 12               | 35                    | 47           |
| Boston, MA         | 658,279      | 45               | 23               | 32                       | 11               | 32                    | 48           |
| Charlotte, NC      | 808,834      | 43               | 35               | 22                       | 10               | 34                    | 48           |
| Chicago, IL        | 2,714,017    | 32               | 31               | 37                       | 11               | 34                    | 49           |
| Columbus, OH       | 837,038      | 58               | 28               | 14                       | 9                | 32                    | 49           |
| Dallas, TX         | 1,278,433    | 29               | 24               | 47                       | 10               | 33                    | 50           |
| Denver, CO         | 663,303      | 53               | 9                | 38                       | 11               | 34                    | 50           |
| Detroit, MI        | 683,443      | 10               | 79               | 11                       | 13               | 35                    | 47           |
| El Paso, TX        | 678,058      | 14               | 3                | 83                       | 12               | 33                    | 49           |
| Fort Worth, TX     | 815,930      | 41               | 19               | 40                       | 9                | 32                    | 49           |
| Houston, TX        | 2,240,582    | 25               | 22               | 53                       | 10               | 33                    | 50           |
| Indianapolis, IN   | 846,674      | 57               | 28               | 15                       | 11               | 34                    | 48           |
| Jacksonville, FL   | 856,616      | 53               | 30               | 17                       | 13               | 36                    | 48           |
| Las Vegas, NV      | 613,295      | 46               | 11               | 43                       | 14               | 37                    | 50           |
| Los Angeles, CA    | 3,918,872    | 29               | 9                | 62                       | 12               | 35                    | 50           |
| Louisville, KY     | 611,573      | 67               | 23               | 10                       | 14               | 37                    | 48           |
| Memphis, TN        | 655,857      | 27               | 63               | 10                       | 11               | 34                    | 48           |
| Nashville, TN      | 643,771      | 56               | 28               | 16                       | 11               | 34                    | 48           |
| New York, NY       | 8,461,961    | 32               | 22               | 46                       | 13               | 36                    | 48           |
| Oklahoma City, OK  | 620,015      | 55               | 14               | 31                       | 12               | 34                    | 49           |
| Philadelphia, PA   | 1,559,938    | 35               | 42               | 23                       | 13               | 34                    | 47           |
| Phoenix, AZ        | 1,555,324    | 44               | 7                | 49                       | 10               | 33                    | 50           |
| Portland, OR       | 620,589      | 72               | 6                | 22                       | 12               | 37                    | 49           |
| San Antonio, TX    | 1,439,358    | 26               | 7                | 67                       | 11               | 33                    | 49           |
| San Diego, CA      | 1,374,812    | 43               | 6                | 51                       | 12               | 34                    | 50           |
| San Francisco, CA  | 850,282      | 41               | 5                | 54                       | 14               | 38                    | 51           |
| San Jose, CA       | 1,009,363    | 27               | 3                | 70                       | 11               | 36                    | 50           |
| Seattle, WA        | 668,849      | 66               | 7                | 27                       | 12               | 36                    | 50           |
| Washington, DC     | 659,009      | 36               | 47               | 17                       | 11               | 34                    | 47           |

Abbreviations: NH, non-Hispanic; HS, high school
Source: American Community Survey, Demographic and Housing Estimates, 2016. Downloaded from https://data.census.gov/cedsci, Table DP05.

<sup>1</sup>“Other” category includes all individuals not classified as NH Black or NH White. It was calculated by subtracting the Black and White population estimates from the total population estimates for the U.S. and each city.
| Location                  | 2010-2012 |                  |                  |                  |                  | Rate Ratio CI | Excess Black Deaths |
|---------------------------|-----------|------------------|------------------|------------------|----------------|---------------------|----------------------|
|                           | Total Mortality Rate | NH Black Mortality Rate | NH White Mortality Rate | Other Mortality Rate | B:W Rate Ratio |                       |                      |
| United States             | 769       | 972              | 778              | 556              | 1.25           | (1.247-1.252)     | 67257               |
| Austin, TX                | 740       | 997              | 735              | 660              | 1.36           | (1.28-1.44)       | 141                 |
| Baltimore, MD             | 1018      | 1114             | 929              | 357              | 1.20           | (1.16-1.24)       | 735                 |
| Boston, MA                | 686       | 827              | 733              | 391              | 1.13           | (1.08-1.18)       | 133                 |
| Charlotte, NC             | 757       | 975              | 694              | 475              | 1.40           | (1.35-1.46)       | 498                 |
| Chicago, IL               | 780       | 1027             | 693              | 540              | 1.48           | (1.46-1.51)       | 3010                |
| Columbus, OH              | 900       | 937              | 918              | 411              | 1.02           | (0.99-1.06)       | 106                 |
| Dallas, TX                | 802       | 1053             | 770              | 542              | 1.37           | (1.33-1.41)       | 800                 |
| Denver, CO                | 770       | 974              | 740              | 759              | 1.32           | (1.25-1.39)       | 139                 |
| Detroit, MI               | 1012      | 1055             | 957              | 601              | 1.10           | (1.06-1.15)       | 583                 |
| El Paso, TX               | 768       | 921              | 841              | 741              | 1.10           | (0.98-1.22)       | 17                  |
| Fort Worth, TX            | 869       | 1105             | 877              | 645              | 1.26           | (1.21-1.31)       | 248                 |
| Houston, TX               | 860       | 1157             | 812              | 698              | 1.43           | (1.40-1.46)       | 1560                |
| Indianapolis, IN          | 895       | 1028             | 886              | 322              | 1.16           | (1.13-1.20)       | 303                 |
| Jacksonville, FL          | 900       | 1032             | 890              | 549              | 1.16           | (1.12-1.20)       | 310                 |
| Las Vegas, NV             | 1422      | 1660             | 1550             | 979              | 1.07           | (1.03-1.12)       | 64                  |
| Los Angeles, CA           | 647       | 1113             | 636              | 530              | 1.75           | (1.71-1.78)       | 1781                |
| Louisville, KY            | 880       | 1046             | 872              | 302              | 1.20           | (1.16-1.24)       | 232                 |
| Memphis, TN               | 948       | 1139             | 768              | 324              | 1.48           | (1.44-1.53)       | 1200                |
| Nashville, TN             | 866       | 1039             | 851              | 348              | 1.22           | (1.17-1.27)       | 251                 |
| New York, NY              | 633       | 784              | 601              | 562              | 1.31           | (1.29-1.32)       | 3392                |
| Oklahoma City, OK         | 844       | 1079             | 850              | 643              | 1.27           | (1.21-1.33)       | 158                 |
| Philadelphia, PA          | 918       | 1060             | 857              | 648              | 1.24           | (1.21-1.26)       | 1303                |
| Phoenix, AZ               | 734       | 951              | 742              | 659              | 1.28           | (1.21-1.35)       | 139                 |
| Portland, OR              | 874       | 1048             | 900              | 579              | 1.16           | (1.09-1.25)       | 51                  |
| San Antonio, TX           | 877       | 1080             | 912              | 825              | 1.18           | (1.13-1.24)       | 140                 |
| San Diego, CA             | 618       | 899              | 635              | 531              | 1.42           | (1.35-1.49)       | 199                 |
| San Francisco, CA         | 591       | 1130             | 647              | 481              | 1.75           | (1.66-1.83)       | 280                 |
| San Jose, CA              | 599       | 896              | 700              | 494              | 1.28           | (1.17-1.40)       | 46                  |
| Seattle, WA               | 677       | 989              | 685              | 517              | 1.44           | (1.36-1.53)       | 140                 |
| Washington, DC            | 792       | 1007             | 504              | 426              | 2.00           | (1.92-2.08)       | 1703                |
| 30 Cities Combined        | 762       | 990              | 752              | 587              | 1.32           | (1.311-1.324)     | 19744               |
| US Minus 30 Cities        | 770       | 968              | 780              | 547              | 1.24           | (1.237-1.244)     | 48642               |
| Location           | Total Mortality Rate | NH Black Mortality Rate | NH White Mortality Rate | Other Mortality Rate | B:W Rate Ratio | Rate Ratio CI       | Excess Black Deaths |
|--------------------|----------------------|-------------------------|-------------------------|---------------------|----------------|---------------------|---------------------|
| United States      | 761                  | 953                     | 774                     | 548                 | 1.23           | (1.228-1.234)       | 67392               |
| Austin, TX         | 721                  | 982                     | 723                     | 636                 | 1.36           | (1.29-1.44)         | 156                 |
| Baltimore, MD      | 1081                 | 1137                    | 1048                    | 445                 | 1.08           | (1.05-1.12)         | 417                 |
| Boston, MA         | 660                  | 736                     | 726                     | 405                 | 1.01           | (0.97-1.06)         | 29                  |
| Charlotte, NC      | 731                  | 948                     | 665                     | 489                 | 1.42           | (1.37-1.48)         | 578                 |
| Chicago, IL        | 765                  | 1024                    | 676                     | 538                 | 1.52           | (1.49-1.54)         | 3144                |
| Columbus, OH       | 883                  | 946                     | 901                     | 371                 | 1.05           | (1.02-1.09)         | 136                 |
| Dallas, TX         | 819                  | 1094                    | 777                     | 580                 | 1.41           | (1.37-1.45)         | 936                 |
| Denver, CO         | 749                  | 965                     | 729                     | 696                 | 1.32           | (1.26-1.39)         | 145                 |
| Detroit, MI        | 949                  | 991                     | 912                     | 519                 | 1.09           | (1.04-1.14)         | 518                 |
| El Paso, TX        | 744                  | 780                     | 821                     | 722                 | 0.95           | (0.85-1.06)         | -2                  |
| Fort Worth, TX     | 853                  | 1077                    | 884                     | 576                 | 1.22           | (1.17-1.27)         | 244                 |
| Houston, TX        | 905                  | 1189                    | 863                     | 770                 | 1.38           | (1.35-1.41)         | 1578                |
| Indianapolis, IN   | 898                  | 1050                    | 887                     | 393                 | 1.18           | (1.15-1.22)         | 354                 |
| Jacksonville, FL   | 875                  | 997                     | 877                     | 518                 | 1.14           | (1.10-1.17)         | 282                 |
| Las Vegas, NV      | 1403                 | 1656                    | 1536                    | 994                 | 1.08           | (1.04-1.12)         | 73                  |
| Los Angeles, CA    | 625                  | 1095                    | 621                     | 516                 | 1.76           | (1.73-1.80)         | 1804                |
| Louisville, KY     | 883                  | 1044                    | 875                     | 378                 | 1.19           | (1.15-1.24)         | 253                 |
| Memphis, TN        | 962                  | 1117                    | 795                     | 525                 | 1.40           | (1.36-1.45)         | 1135                |
| Nashville, TN      | 865                  | 1051                    | 843                     | 514                 | 1.25           | (1.20-1.29)         | 284                 |
| New York, NY       | 608                  | 746                     | 583                     | 540                 | 1.28           | (1.26-1.29)         | 3180                |
| Oklahoma City, OK  | 841                  | 1115                    | 852                     | 532                 | 1.31           | (1.25-1.37)         | 208                 |
| Philadelphia, PA   | 877                  | 1000                    | 830                     | 658                 | 1.20           | (1.18-1.23)         | 1134                |
| Phoenix, AZ        | 711                  | 884                     | 717                     | 661                 | 1.23           | (1.17-1.30)         | 135                 |
| Portland, OR       | 879                  | 1175                    | 901                     | 601                 | 1.30           | (1.22-1.39)         | 87                  |
| San Antonio, TX    | 880                  | 1093                    | 907                     | 832                 | 1.21           | (1.16-1.26)         | 169                 |
| San Diego, CA      | 605                  | 878                     | 635                     | 510                 | 1.38           | (1.32-1.45)         | 194                 |
| San Francisco, CA  | 559                  | 1086                    | 599                     | 468                 | 1.82           | (1.73-1.91)         | 284                 |
| San Jose, CA       | 565                  | 917                     | 662                     | 471                 | 1.39           | (1.27-1.51)         | 64                  |
| Seattle, WA        | 651                  | 1025                    | 652                     | 516                 | 1.57           | (1.48-1.67)         | 168                 |
| Washington, DC     | 767                  | 983                     | 484                     | 468                 | 2.03           | (1.95-2.12)         | 1764                |
| 30 Cities Combined | 747                  | 969                     | 743                     | 579                 | 1.30           | (1.297-1.310)       | 19579               |
| US Minus 30 Cities | 763                  | 950                     | 777                     | 540                 | 1.22           | (1.220-1.226)       | 49379               |
| Location                | 2016-2018 |
|-------------------------|-----------|
|                         | Total Mortality Rate | NH Black Mortality Rate | NH White Mortality Rate | Other Mortality Rate | B:W Rate Ratio | Rate Ratio CI | Excess Black Deaths |
| United States           | 759        | 960               | 777                  | 539                  | 1.24           | (1.233-1.238) | 74402            |
| Austin, TX              | 687        | 980               | 698                  | 563                  | 1.40           | (1.33-1.48)   | 181              |
| Baltimore, MD           | 993        | 1107              | 870                  | 343                  | 1.27           | (1.23-1.31)   | 1003             |
| Boston, MA              | 632        | 735               | 666                  | 450                  | 1.10           | (1.06-1.15)   | 119              |
| Charlotte, NC           | 729        | 931               | 678                  | 385                  | 1.37           | (1.33-1.42)   | 622              |
| Chicago, IL             | 756        | 1065              | 644                  | 523                  | 1.65           | (1.62-1.68)   | 3804             |
| Columbus, OH            | 858        | 975               | 870                  | 323                  | 1.12           | (1.08-1.16)   | 279              |
| Dallas, TX              | 795        | 1092              | 736                  | 590                  | 1.48           | (1.44-1.52)   | 1121             |
| Denver, CO              | 715        | 918               | 689                  | 683                  | 1.33           | (1.27-1.40)   | 147              |
| Detroit, MI             | 984        | 1048              | 795                  | 670                  | 1.32           | (1.26-1.38)   | 1575             |
| El Paso, TX             | 735        | 894               | 847                  | 704                  | 1.05           | (0.95-1.18)   | 6                |
| Fort Worth, TX          | 823        | 1103              | 831                  | 588                  | 1.33           | (1.28-1.38)   | 336              |
| Houston, TX             | 895        | 1226              | 850                  | 734                  | 1.44           | (1.41-1.47)   | 1866             |
| Indianapolis, IN        | 911        | 1068              | 896                  | 451                  | 1.19           | (1.16-1.23)   | 413              |
| Jacksonville, FL        | 894        | 985               | 926                  | 499                  | 1.06           | (1.03-1.09)   | 185              |
| Las Vegas, NV           | 1342       | 1718              | 1462                 | 924                  | 1.18           | (1.13-1.22)   | 196              |
| Los Angeles, CA         | 619        | 1102              | 605                  | 522                  | 1.82           | (1.78-1.86)   | 1962             |
| Louisville, KY          | 910        | 1069              | 902                  | 425                  | 1.19           | (1.15-1.23)   | 283              |
| Memphis, TN             | 951        | 1086              | 786                  | 475                  | 1.38           | (1.34-1.43)   | 1166             |
| Nashville, TN           | 868        | 1041              | 849                  | 470                  | 1.23           | (1.18-1.27)   | 317              |
| New York, NY            | 570        | 718               | 542                  | 504                  | 1.33           | (1.31-1.34)   | 3569             |
| Oklahoma City, OK       | 813        | 1114              | 811                  | 535                  | 1.37           | (1.31-1.44)   | 247              |
| Philadelphia, PA        | 870        | 1013              | 827                  | 597                  | 1.22           | (1.20-1.25)   | 1307             |
| Phoenix, AZ             | 686        | 938               | 694                  | 612                  | 1.35           | (1.29-1.42)   | 207              |
| Portland, OR            | 837        | 1209              | 849                  | 618                  | 1.42           | (1.34-1.52)   | 121              |
| San Antonio, TX         | 866        | 1105              | 918                  | 802                  | 1.20           | (1.16-1.25)   | 178              |
| San Diego, CA           | 592        | 857               | 622                  | 499                  | 1.38           | (1.32-1.45)   | 192              |
| San Francisco, CA       | 537        | 1102              | 573                  | 455                  | 1.92           | (1.83-2.03)   | 294              |
| San Jose, CA            | 549        | 856               | 654                  | 455                  | 1.31           | (1.20-1.42)   | 58               |
| Seattle, WA             | 588        | 945               | 587                  | 484                  | 1.61           | (1.52-1.71)   | 165              |
| Washington, DC          | 733        | 993               | 428                  | 402                  | 2.32           | (2.22-2.42)   | 2024             |
| 30 Cities Combined      | 724        | 971               | 717                  | 558                  | 1.35           | (1.34-1.361)  | 23064            |
| US Minus 30 Cities      | 764        | 959               | 782                  | 533                  | 1.23           | (1.223-1.229) | 54827            |

Abbreviations: NH, non-Hispanic; B:W, Black:White; CI, confidence interval

Notes: Mortality rates are shown per 100,000 population. The "Other" race/ethnic group includes all individuals other than those in the NH Black or NH White categories. Excess deaths represent the average number of additional Black deaths that occurred annually due to the higher Black mortality rate compared to the White rate. It is a weighted calculation, so the numbers for each city will not add up to the total for 30 cities combined, for example.