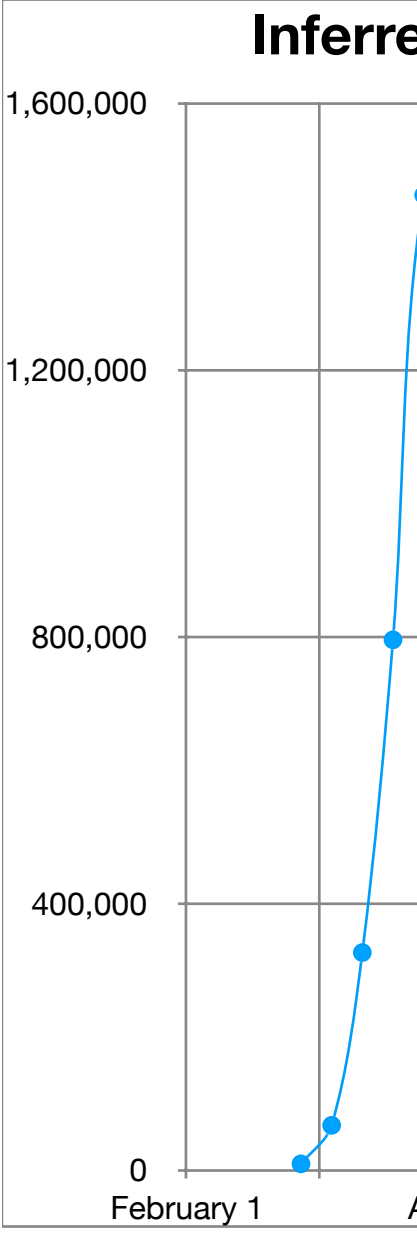
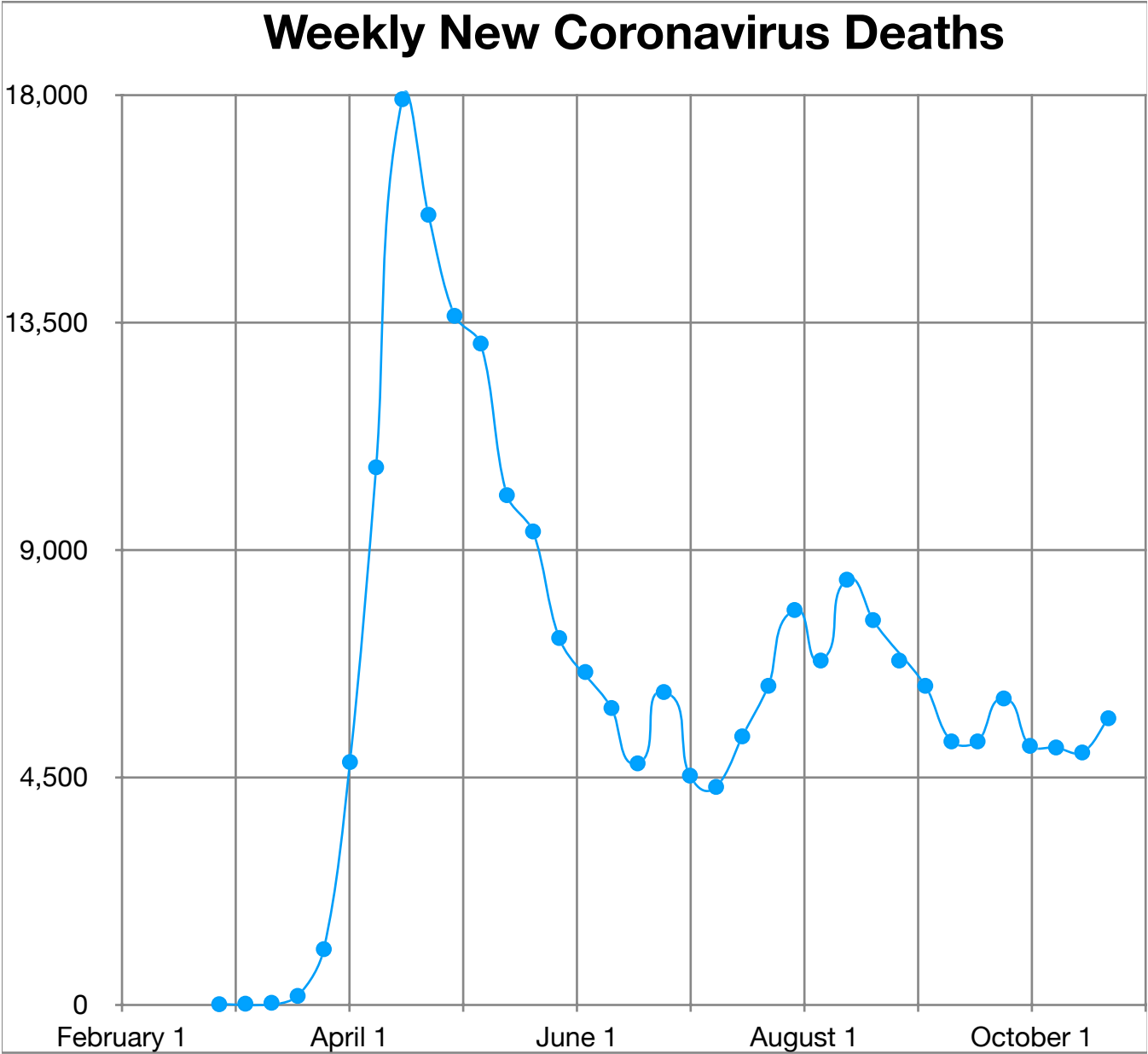


# Coronavirus Extrapolations: 2020-12-17

| Date       | New Deaths | New Inferred Cases | New Confirmed Cases | New Inferred/<br>New Confirmed | Tests per Case | Weekly R (Past 3 Weeks) | Weekly R (One Week) |  | Date       | Deaths  |
|------------|------------|--------------------|---------------------|--------------------------------|----------------|-------------------------|---------------------|--|------------|---------|
| 2021-01-07 | 25,114     |                    |                     |                                |                |                         |                     |  | 2021-01-07 | 388,615 |
| 2020-12-31 | 24,787     |                    |                     |                                |                |                         |                     |  | 2020-12-31 | 363,501 |
| 2020-12-24 | 20,614     |                    |                     |                                |                |                         |                     |  | 2020-12-24 | 338,714 |
| 2020-12-17 | 18,400     | 3,761,760          | 1,567,400           | 2.4                            |                |                         |                     |  | 2020-12-17 | 318,100 |
| 2020-12-10 | 16,871     | 3,712,800          | 1,547,000           | 2.4                            |                |                         |                     |  | 2020-12-10 | 299,700 |
| 2020-12-03 | 13,274     | 3,087,658          | 1,286,524           | 2.4                            | 8              | 1.16                    | 1.12                |  | 2020-12-03 | 282,829 |
| 2020-11-26 | 11,222     | 2,756,093          | 1,177,964           | 2.3                            | 8              | 1.18                    | 1.09                |  | 2020-11-26 | 269,555 |
| 2020-11-19 | 9,788      | 2,526,353          | 1,188,693           | 2.1                            | 9              | 1.20                    | 1.27                |  | 2020-11-19 | 258,333 |
| 2020-11-12 | 7,563      | 1,987,044          | 955,969             | 2.1                            | 9              | 1.21                    | 1.18                |  | 2020-11-12 | 248,545 |
| 2020-11-05 | 6,805      | 1,679,187          | 713,250             | 2.4                            | 12             | 1.18                    | 1.15                |  | 2020-11-05 | 240,982 |
| 2020-10-29 | 5,796      | 1,463,897          | 545,400             | 2.7                            | 14             | 1.19                    | 1.29                |  | 2020-10-29 | 234,177 |
| 2020-10-22 | 5,658      | 1,130,463          | 442,600             | 2.6                            | 14             | 1.10                    | 1.11                |  | 2020-10-22 | 228,381 |
| 2020-10-15 | 4,981      | 1,016,448          | 381,200             | 2.7                            | 20             | 1.11                    | 1.18                |  | 2020-10-15 | 222,723 |
| 2020-10-08 | 5,080      | 865,007            | 329,800             | 2.6                            | 24             | 1.05                    | 1.03                |  | 2020-10-08 | 217,742 |
| 2020-10-01 | 5,112      | 843,559            | 301,700             | 2.8                            | 23             | 1.04                    | 1.14                |  | 2020-10-01 | 212,662 |
| 2020-09-24 | 6,050      | 741,725            | 382,100             | 1.9                            | 22             | 0.94                    | 0.98                |  | 2020-09-24 | 207,550 |
| 2020-09-17 | 5,200      | 755,370            | 237,700             | 3.2                            | 24             | 0.99                    | 1.00                |  | 2020-09-17 | 201,500 |
| 2020-09-10 | 5,200      | 758,808            | 258,100             | 2.9                            | 22             | 1.00                    | 0.85                |  | 2020-09-10 | 196,300 |
| 2020-09-03 | 6,300      | 896,174            | 287,300             | 3.1                            | 21             | 0.99                    | 1.17                |  | 2020-09-03 | 191,100 |
| 2020-08-27 | 6,800      | 768,347            | 299,500             | 2.6                            | 20             | 0.92                    | 1.00                |  | 2020-08-27 | 184,800 |
| 2020-08-20 | 7,600      | 766,058            | 331,400             | 2.3                            | 18             | 0.88                    | 0.83                |  | 2020-08-20 | 178,000 |
| 2020-08-13 | 8,400      | 924,803            | 406,000             | 2.3                            | 17             | 0.91                    | 0.93                |  | 2020-08-13 | 170,400 |
| 2020-08-06 | 6,800      | 993,952            | 375,000             | 2.7                            | 14             | 1.01                    | 0.90                |  | 2020-08-06 | 162,000 |
| 2020-07-30 | 7,800      | 1,105,242          | 462,000             | 2.4                            | 12             | 1.00                    | 0.91                |  | 2020-07-30 | 155,200 |
| 2020-07-23 | 6,300      | 1,214,180          | 478,000             | 2.5                            | 13             | 1.11                    | 1.24                |  | 2020-07-23 | 147,400 |
| 2020-07-16 | 5,300      | 975,810            | 475,000             | 2.1                            | 13             | 1.10                    | 0.88                |  | 2020-07-16 | 141,100 |
| 2020-07-09 | 4,300      | 1,109,697          | 382,800             | 2.9                            | 13             | 1.23                    | 1.25                |  | 2020-07-09 | 135,800 |
| 2020-07-02 | 4,523      | 887,149            | 331,600             | 2.7                            | 14             | 1.13                    | 1.20                |  | 2020-07-02 | 131,500 |
| 2020-06-25 | 6,177      | 737,304            | 243,600             | 3.0                            | 17             | 0.97                    | 1.25                |  | 2020-06-25 | 126,977 |
| 2020-06-18 | 4,766      | 589,632            | 172,299             | 3.4                            | 21             | 0.99                    | 0.97                |  | 2020-06-18 | 120,800 |
| 2020-06-11 | 5,861      | 609,742            | 165,650             | 3.7                            | 21             | 0.94                    | 0.75                |  | 2020-06-11 | 116,034 |
| 2020-06-04 | 6,573      | 816,185            | 159,051             | 5.1                            | 20             | 1.01                    | 1.33                |  | 2020-06-04 | 110,173 |
| 2020-05-28 | 7,246      | 615,092            | 144,103             | 4.3                            | 18             | 0.90                    | 0.84                |  | 2020-05-28 | 103,600 |
| 2020-05-21 | 9,354      | 735,864            | 180,897             | 4.1                            | 17             | 0.89                    | 0.92                |  | 2020-05-21 | 96,354  |
| 2020-05-14 | 10,072     | 799,206            | 147,377             | 5.4                            | 14             | 0.91                    | 0.94                |  | 2020-05-14 | 87,000  |
| 2020-05-07 | 13,072     | 848,879            | 197,600             | 4.3                            | 10             | 0.86                    | 0.81                |  | 2020-05-07 | 76,928  |
| 2020-04-30 | 13,620     | 1,049,853          | 208,581             | 5.0                            | 8              | 0.93                    | 0.98                |  | 2020-04-30 | 63,856  |
| 2020-04-23 | 15,619     | 1,076,246          | 246,778             | 4.4                            | 6              | 0.92                    | 0.81                |  | 2020-04-23 | 50,236  |
| 2020-04-16 | 17,905     | 1,320,829          | 207,532             | 6.4                            | 5              | 0.97                    | 1.02                |  | 2020-04-16 | 34,617  |
| 2020-04-09 | 10,624     | 1,291,871          | 215,411             | 6.0                            | 5              | 1.18                    | 0.94                |  | 2020-04-09 | 16,712  |

|            |   |           |         |         |    |      |      |  |            |       |
|------------|---|-----------|---------|---------|----|------|------|--|------------|-------|
| 2020-04-02 | 4,792   | 1,380,004 | 147,527 | 9.4     | 5  | 1.62 | 0.94 |  | 2020-04-02 | 6,088 |
| 2020-03-26 | 1,090   | 1,461,827 | 59,779  | 24.5    | 7  | 2.80 | 1.84 |  | 2020-03-26 | 1,296 |
| 2020-03-19 | 165   | 794,929   | 8,103   | 98.1    | 12 | 4.45 | 2.44 |  | 2020-03-19 | 206   |
| 2020-03-12 | 29  | 325,891   | 1,153   | 282.6   |    | 6.14 | 4.88 |  | 2020-03-12 | 41    |
| 2020-03-05 | 11  | 66,823    | 100     | 668.2   |    | 5.21 | 7.39 |  | 2020-03-05 | 12    |
| 2020-02-27 | 1   | 9,046     | 44      | 205.6   |    |      | 6.41 |  | 2020-02-27 | 1     |
| 2020-02-20 |   | 1,411     | 1       | 1,410.8 |    |      | 2.99 |  | 2020-02-20 |       |
| 2020-02-13 |   | 471       | 2       |         |    |      |      |  | 2020-02-13 |       |
| 2020-02-06 |   | 37        | 7       |         |    |      |      |  | 2020-02-06 |       |
| 2020-01-30 |   |           | 4       |         |    |      |      |  | 2020-01-30 |       |
|            |   |           |         |         |    |      |      |  |            |       |
|            |   |           |         |         |    |      |      |  |            |       |
|            | <a href="https://www.icloud.com/numbers/0padta9WRXNKrK-CmBCgoWKpA">https://www.icloud.com/numbers/0padta9WRXNKrK-CmBCgoWKpA</a> |           |         |         |    |      |      |  |            |       |



| Inferred Cases: Deaths Lagged 3 | Confirmed Cases | Inferred Cases/ Confirmed Cases |  |          |          |  | Deaths/ Confirmed Cases Lagged 3 |        |
|---------------------------------|-----------------|---------------------------------|--|----------|----------|--|----------------------------------|--------|
|                                 |                 |                                 |  | 0.006670 | 0.000003 |  |                                  | 0      |
|                                 |                 |                                 |  | 0.006670 | 0.000004 |  |                                  | 0      |
|                                 |                 |                                 |  | 0.006671 | 0.000005 |  |                                  | 0      |
| 51,258,727                      | 17,649,600      | 2.9                             |  | 0.006672 | 0.000005 |  |                                  | 0      |
| 47,496,967                      | 16,082,200      | 3.0                             |  | 0.006673 | 0.000007 |  |                                  | 21,333 |
| 43,784,167                      | 14,535,200      | 3.0                             |  | 0.006675 | 0.000008 |  | 0.017946                         | 17,156 |
| 40,696,509                      | 13,248,676      | 3.1                             |  | 0.006676 | 0.000009 |  | 0.017946                         | 12,800 |
| 37,940,416                      | 12,070,712      | 3.1                             |  | 0.006678 | 0.000011 |  | 0.017946                         |        |
| 35,414,063                      | 10,882,019      | 3.3                             |  | 0.006680 | 0.000014 |  | 0.017088                         |        |
| 33,427,019                      | 9,926,050       | 3.4                             |  | 0.006683 | 0.000016 |  | 0.017852                         |        |
| 31,747,832                      | 9,212,800       | 3.4                             |  | 0.006686 | 0.000020 |  | 0.017574                         |        |
| 30,283,935                      | 8,667,400       | 3.5                             |  | 0.006690 | 0.000024 |  | 0.018754                         |        |
| 29,153,472                      | 8,224,800       | 3.5                             |  | 0.006695 | 0.000028 |  | 0.013036                         |        |
| 28,137,024                      | 7,843,600       | 3.6                             |  | 0.006701 | 0.000034 |  | 0.021371                         |        |
| 27,272,017                      | 7,513,800       | 3.6                             |  | 0.006707 | 0.000041 |  | 0.019806                         |        |
| 26,428,459                      | 7,212,100       | 3.7                             |  | 0.006715 | 0.000049 |  | 0.021058                         |        |
| 25,686,734                      | 6,830,000       | 3.8                             |  | 0.006725 | 0.000059 |  | 0.017362                         |        |
| 24,931,363                      | 6,592,300       | 3.8                             |  | 0.006737 | 0.000070 |  | 0.015691                         |        |
| 24,172,555                      | 6,334,200       | 3.8                             |  | 0.006751 | 0.000084 |  | 0.015517                         |        |
| 23,276,381                      | 6,046,900       | 3.8                             |  | 0.006768 | 0.000101 |  | 0.018133                         |        |
| 22,508,033                      | 5,747,400       | 3.9                             |  | 0.006788 | 0.000121 |  | 0.016450                         |        |
| 21,741,975                      | 5,416,000       | 4.0                             |  | 0.006812 | 0.000146 |  | 0.017573                         |        |
| 20,817,171                      | 5,010,000       | 4.2                             |  | 0.006841 | 0.000175 |  | 0.014316                         |        |
| 19,823,220                      | 4,635,000       | 4.3                             |  | 0.006876 | 0.000210 |  | 0.020376                         |        |
| 18,717,977                      | 4,173,000       | 4.5                             |  | 0.006918 | 0.000252 |  | 0.018999                         |        |
| 17,503,797                      | 3,695,000       | 4.7                             |  | 0.006969 | 0.000302 |  | 0.021757                         |        |
| 16,527,987                      | 3,220,000       | 5.1                             |  | 0.007029 | 0.000362 |  | 0.024957                         |        |
| 15,418,290                      | 2,837,200       | 5.4                             |  | 0.007101 | 0.000435 |  | 0.027305                         |        |
| 14,531,142                      | 2,505,600       | 5.8                             |  | 0.007188 | 0.000522 |  | 0.038837                         |        |
| 13,793,838                      | 2,262,000       | 6.1                             |  | 0.007293 | 0.000626 |  | 0.033074                         |        |
| 13,204,206                      | 2,089,701       | 6.3                             |  | 0.007418 | 0.000751 |  | 0.032400                         |        |
| 12,594,464                      | 1,924,051       | 6.5                             |  | 0.007568 | 0.000901 |  | 0.044600                         |        |
| 11,778,279                      | 1,765,000       | 6.7                             |  | 0.007748 | 0.001082 |  | 0.036670                         |        |
| 11,163,187                      | 1,620,897       | 6.9                             |  | 0.007965 | 0.001298 |  | 0.044846                         |        |
| 10,427,323                      | 1,440,000       | 7.2                             |  | 0.008224 | 0.001558 |  | 0.040814                         |        |
| 9,628,117                       | 1,292,623       | 7.4                             |  | 0.008536 | 0.001869 |  | 0.062988                         |        |
| 8,779,238                       | 1,095,023       | 8.0                             |  | 0.008910 | 0.002243 |  | 0.063228                         |        |
| 7,729,386                       | 886,442         | 8.7                             |  | 0.009358 | 0.002692 |  | 0.105872                         |        |
| 6,653,140                       | 639,664         | 10.4                            |  | 0.009897 | 0.003230 |  | 0.299520                         |        |
| 5,332,311                       | 432,132         | 12.3                            |  | 0.010543 | 0.003876 |  | 1.311119                         |        |

|           |         |       |  |          |          |  |           |  |
|-----------|---------|-------|--|----------|----------|--|-----------|--|
| 4,040,439 | 216,721 | 18.6  |  | 0.011318 | 0.004651 |  | 4.156114  |  |
| 2,660,435 | 69,194  | 38.4  |  | 0.012248 | 0.005582 |  | 10.900000 |  |
| 1,198,608 | 9,415   | 127.3 |  | 0.013365 | 0.006698 |  | 3.750000  |  |
| 403,678   | 1,312   | 307.7 |  | 0.014704 | 0.008038 |  | 29.000000 |  |
| 77,788    | 159     | 489.2 |  | 0.016312 | 0.009645 |  | 5.500000  |  |
| 10,965    | 59      | 185.9 |  | 0.018241 | 0.011574 |  | 0.142857  |  |
| 1,920     | 15      | 128.0 |  | 0.020556 | 0.013889 |  |           |  |
| 509       | 14      | 36.4  |  | 0.023334 | 0.016667 |  |           |  |
| 37        | 12      | 3.1   |  | 0.026667 | 0.020000 |  |           |  |
|           | 5       | 0.0   |  |          | 0.833333 |  |           |  |
|           | 1       | 0.0   |  |          |          |  |           |  |
|           |         |       |  |          |          |  |           |  |
|           |         |       |  |          |          |  |           |  |

