

COVID-19 CASES

AS OF TUESDAY 4/7/2020, 6:00PM HST

Statistics regarding daily new cases and active cases of the nine countries that has the highest number of total cases, Austria, South Korea, and Australia.

Source: <https://www.worldometers.info/coronavirus/>

Statistics regarding daily new cases are also included for Cyprus and Hawaii.

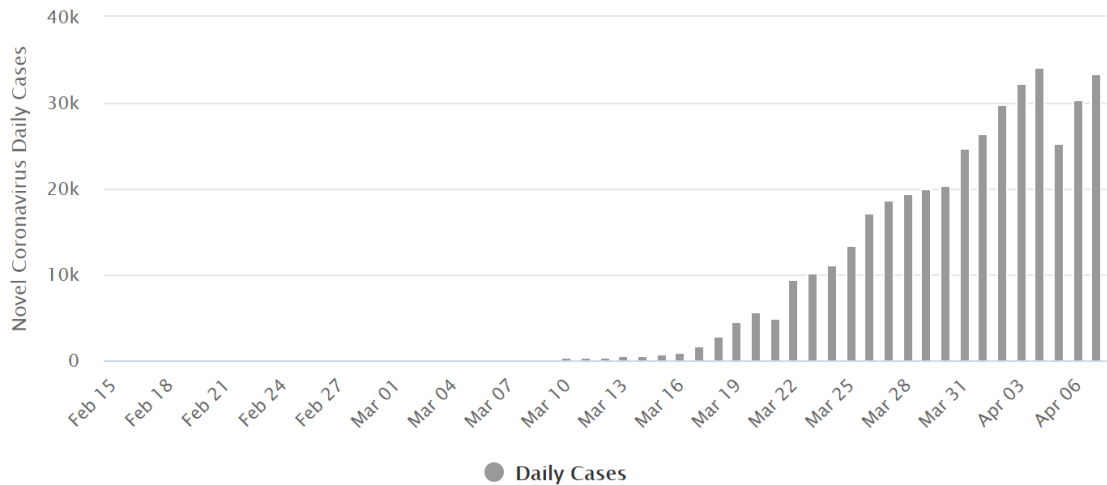
Source: <https://www.financialmirror.com/category/cyprus/>

Source: <https://health.hawaii.gov/news/covid-19-updates/>

Daily New Cases in the United States

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

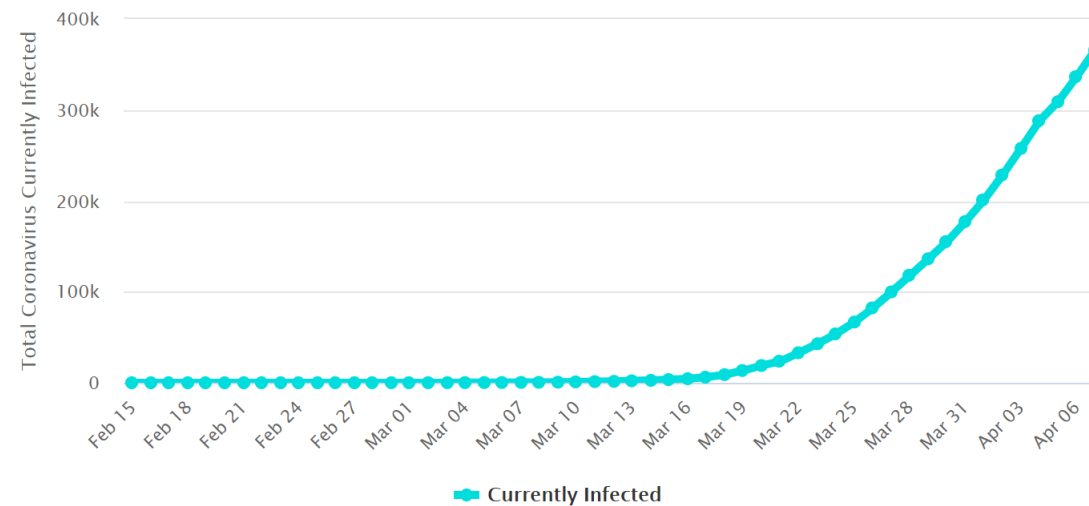


I. USA

Active Cases in the United States

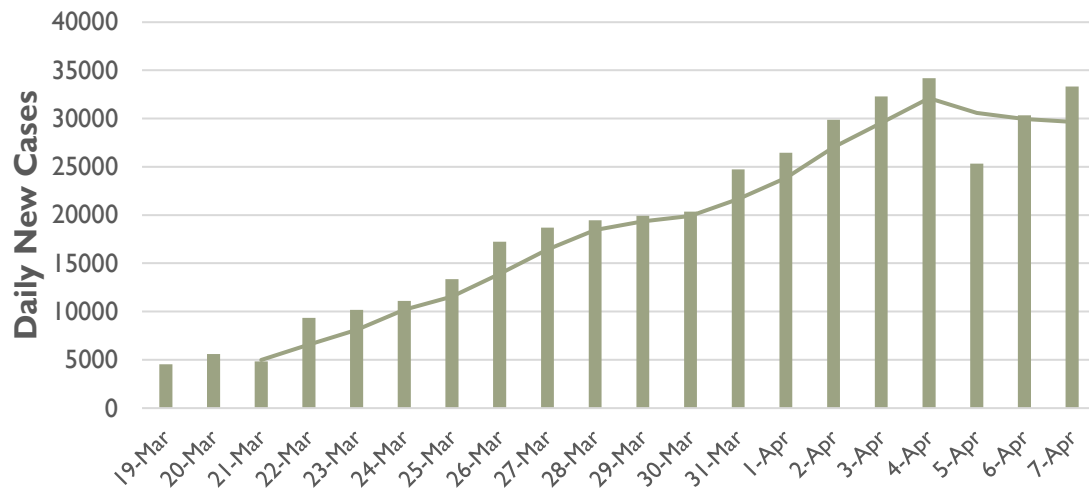
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

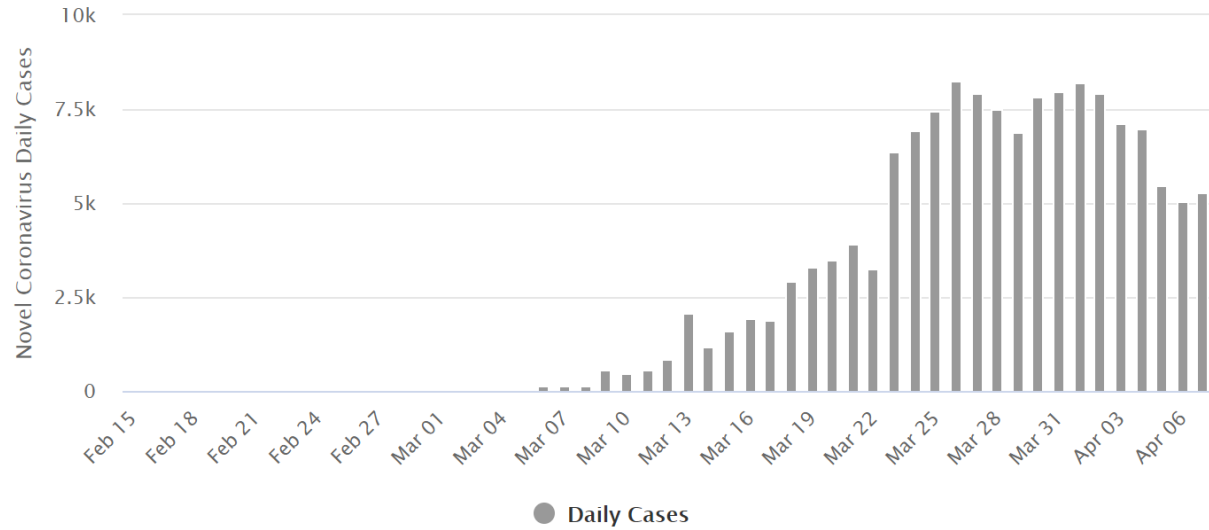
USA 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Spain

Daily New Cases

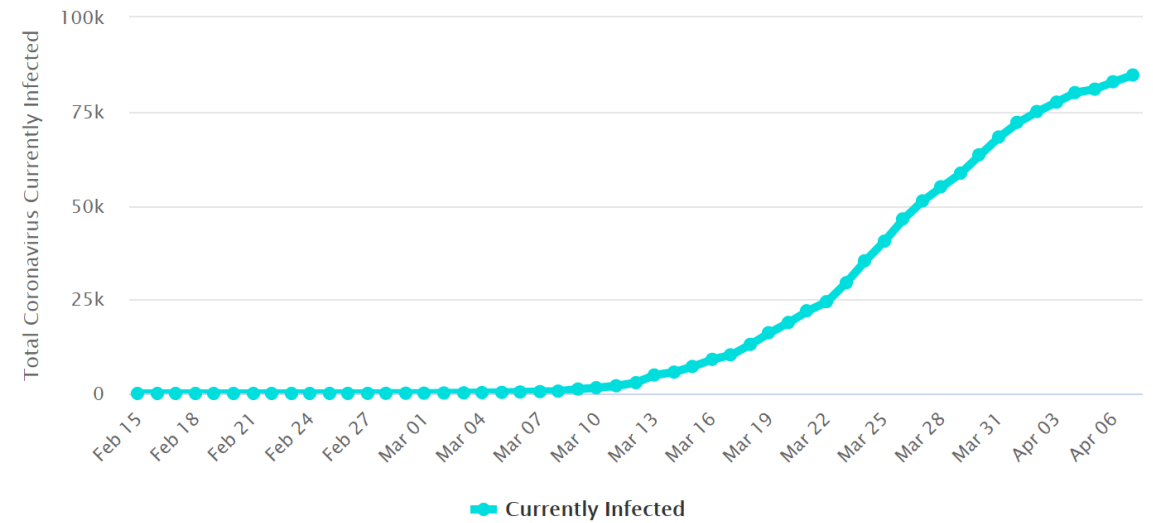
Cases per Day
Data as of 0:00 GMT+0



2. Spain

Active Cases in Spain

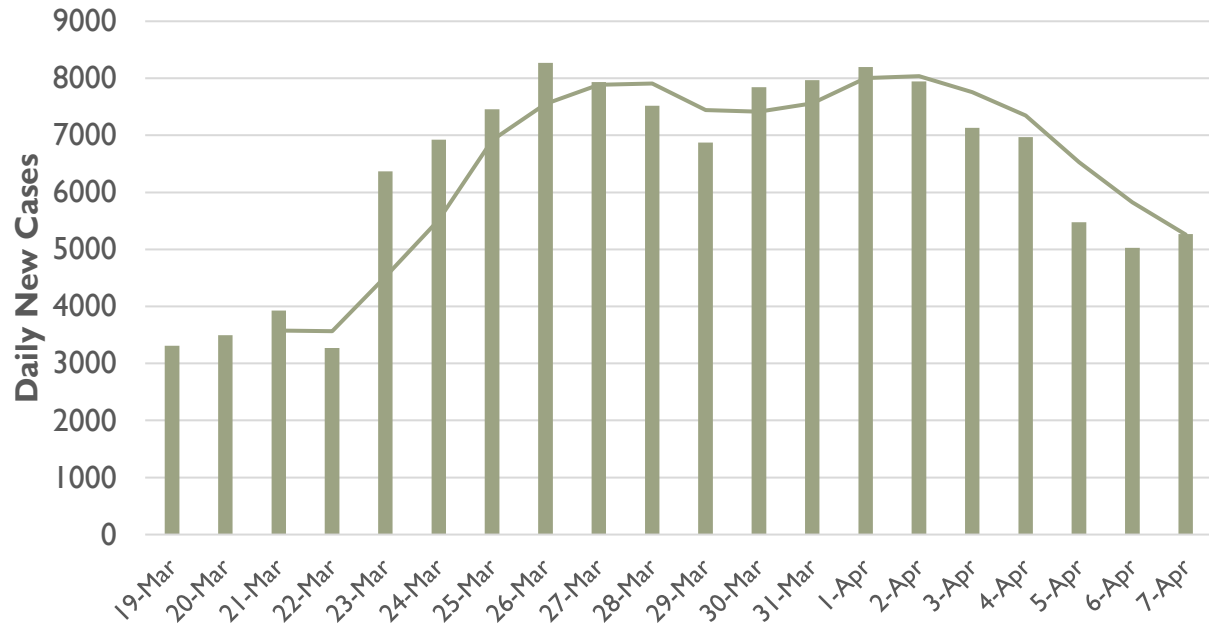
Active Cases
(Number of Infected People)



Trendlines for Spain

3-Day Moving Average Trendline

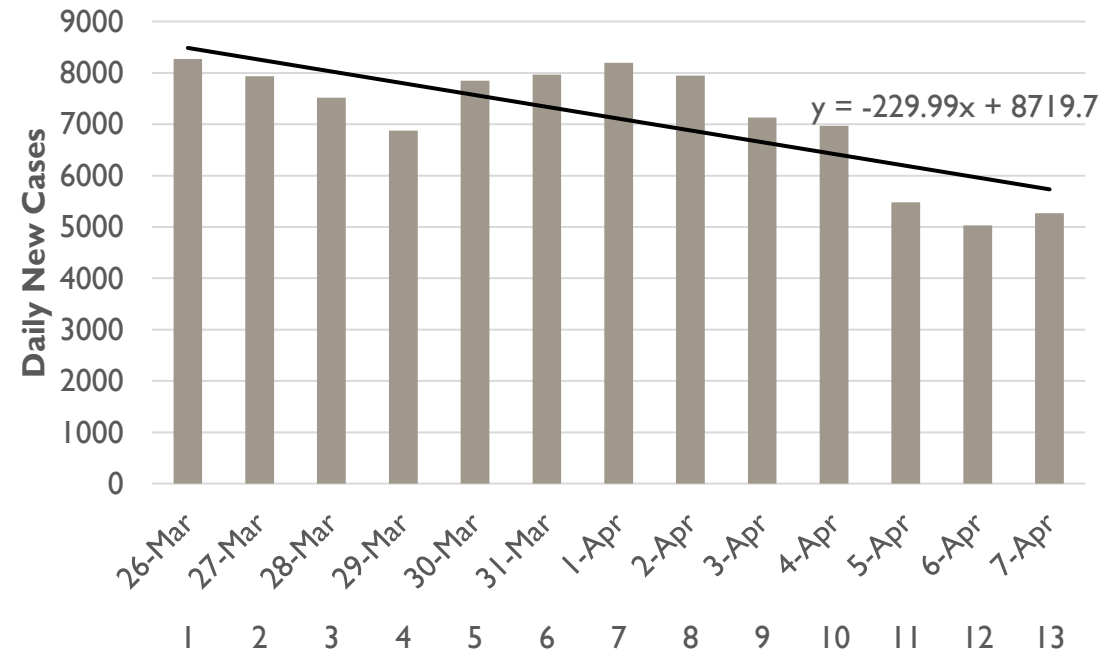
Spain — 3 per. Mov. Avg. (Daily New Cases)



Spain Bar Chart of Daily New Cases from Peak till Today

Linear Trendline

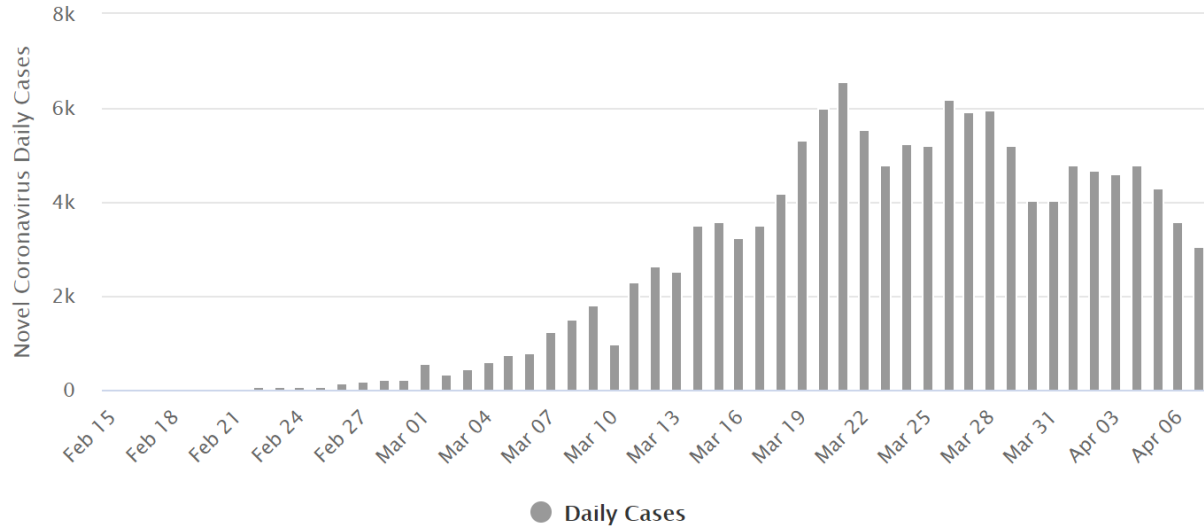
when $y = 0$; $x = 38$
(May 3)



Daily New Cases in Italy

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

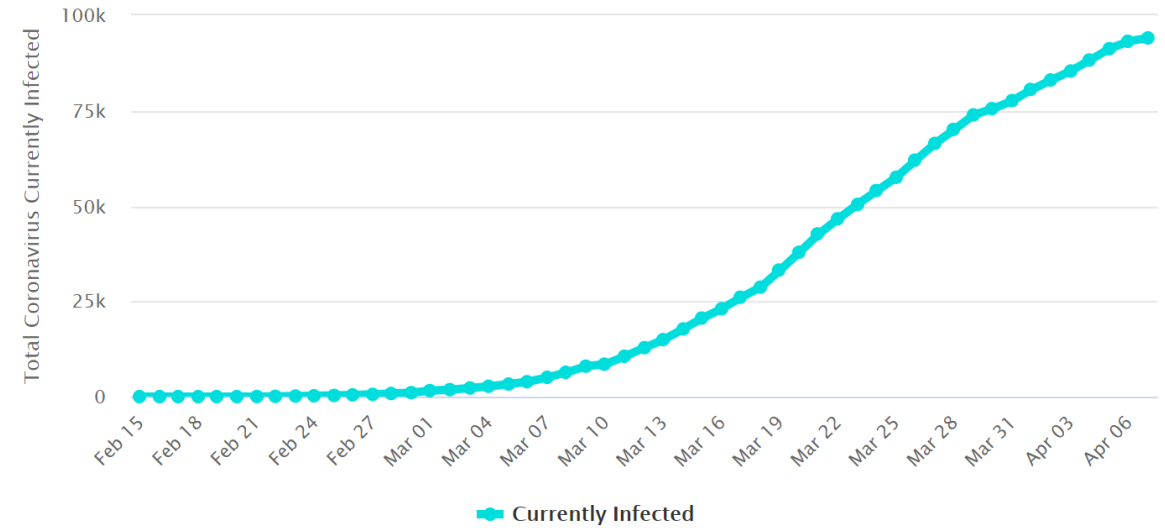


3. Italy

Active Cases in Italy

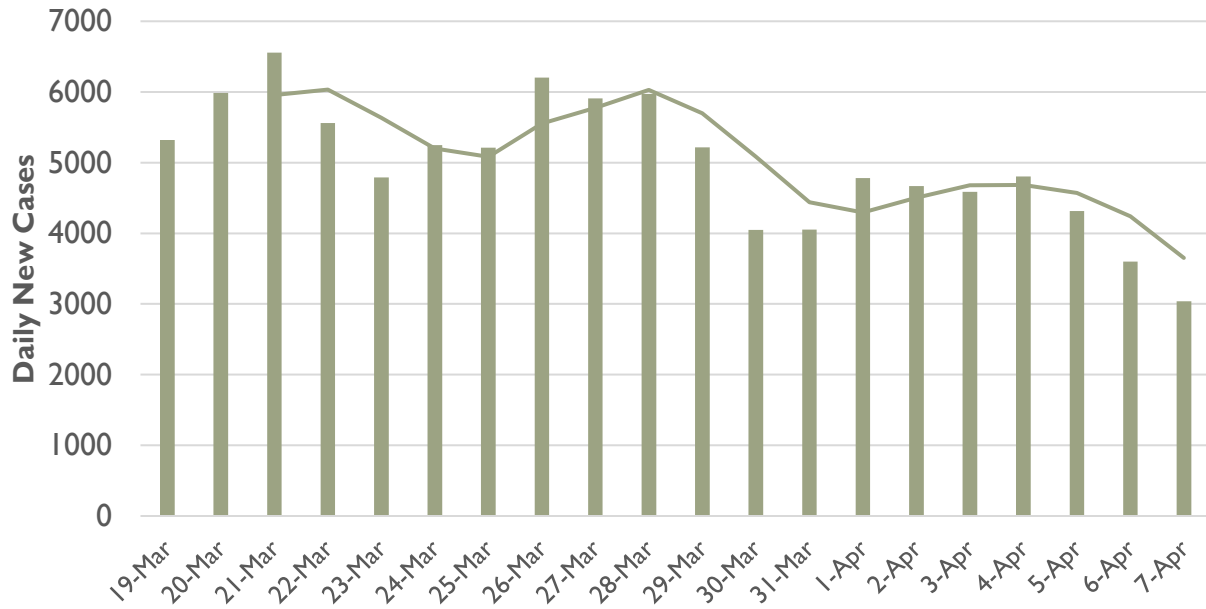
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

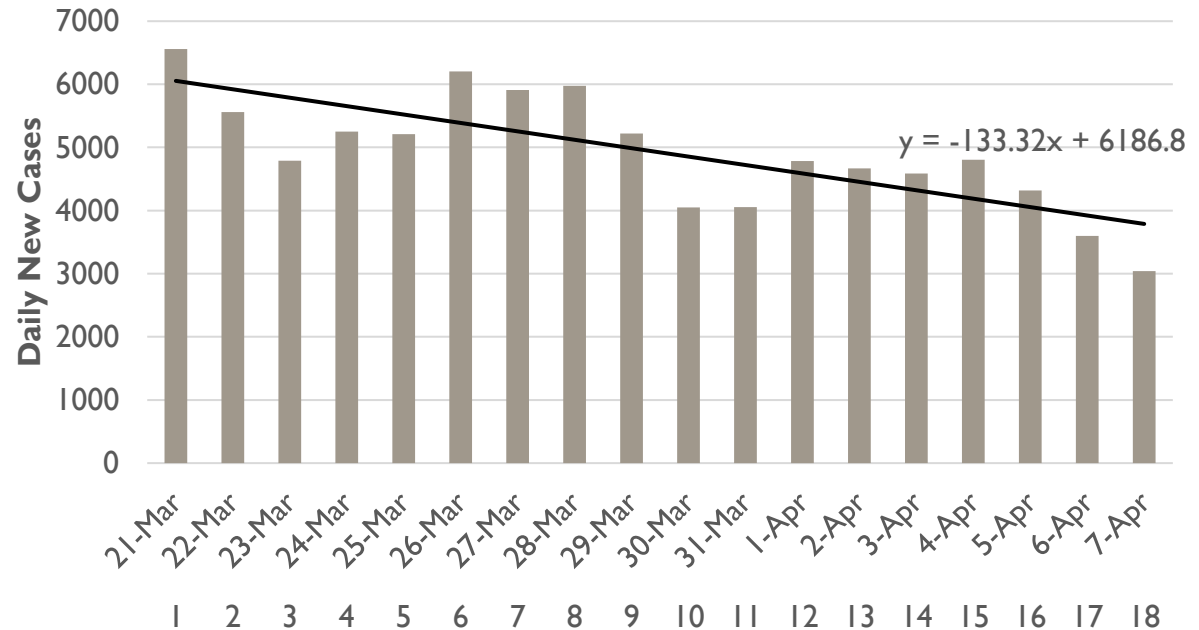
Italy 3 per. Mov. Avg. (Daily New Cases)



Trendlines for Italy

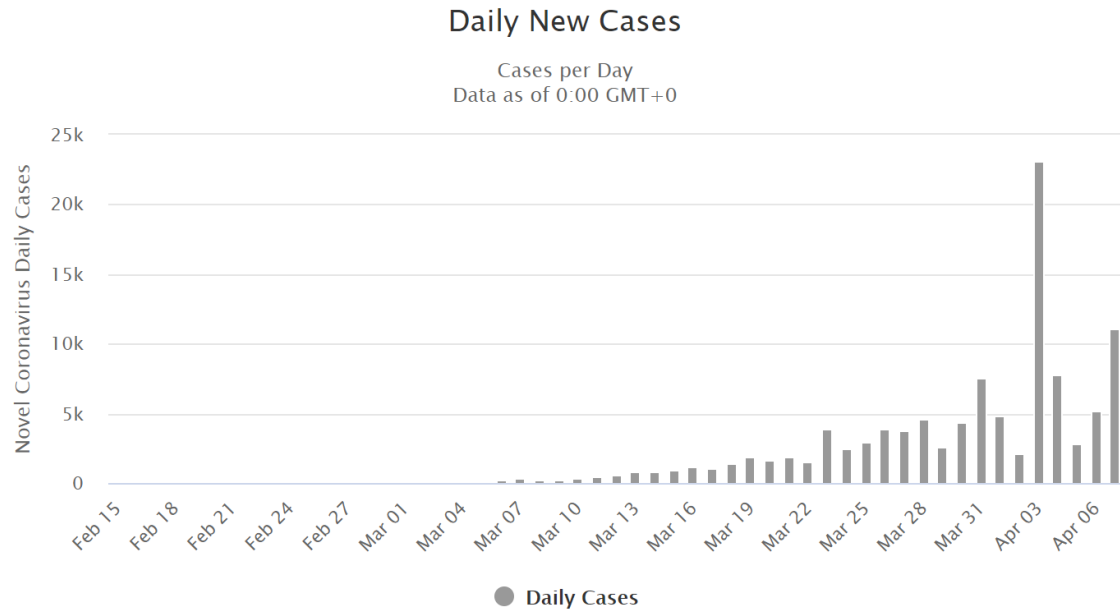
Italy Bar Chart of Daily New Cases from Peak till Today

Linear Trendline
when $y = 0$; $x = 46$
(May 6)

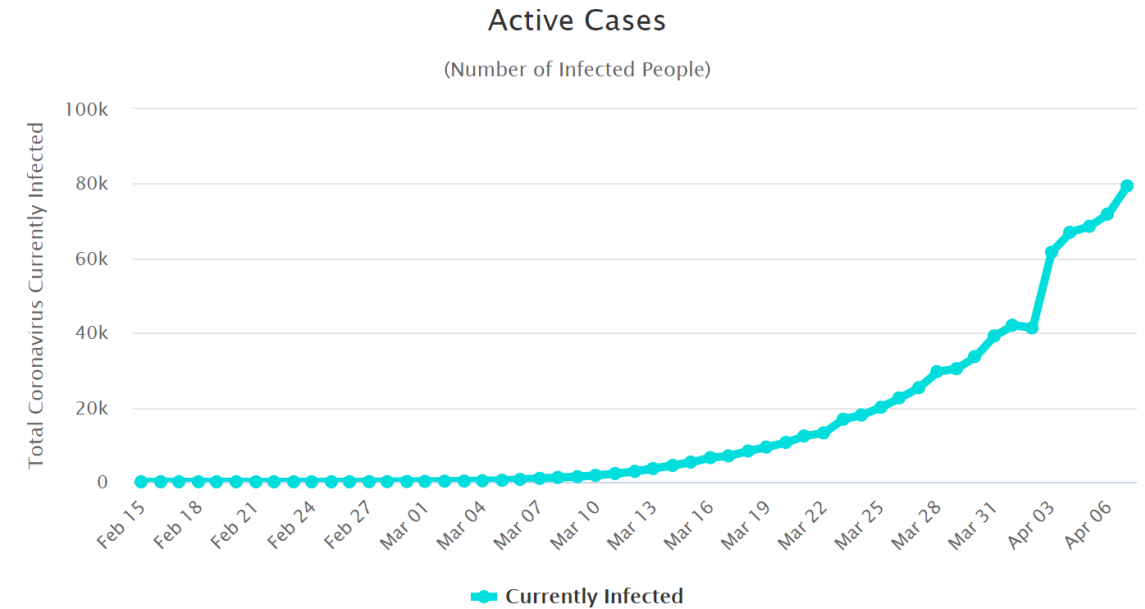


4. France

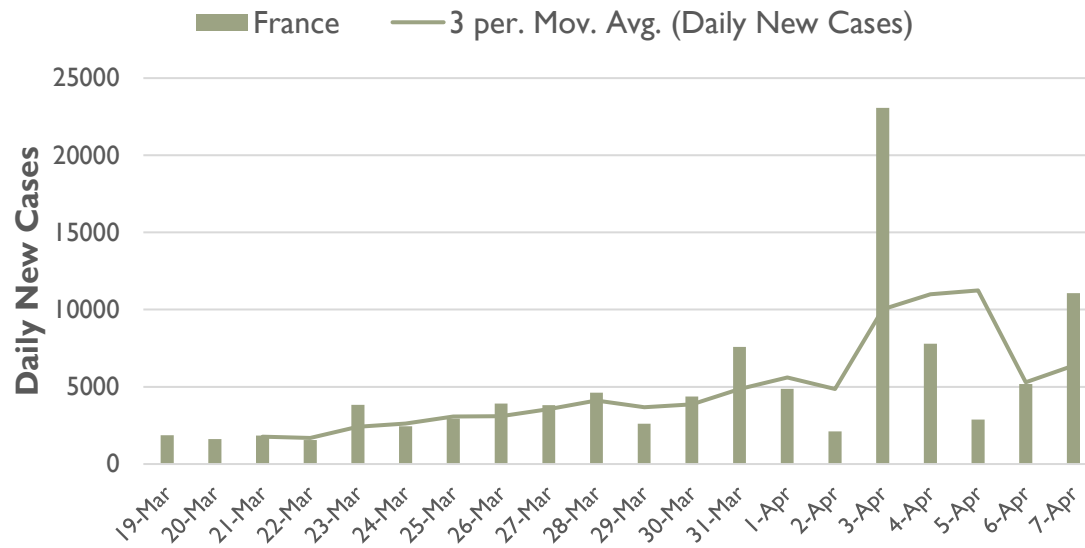
Daily New Cases in France



Active Cases in France



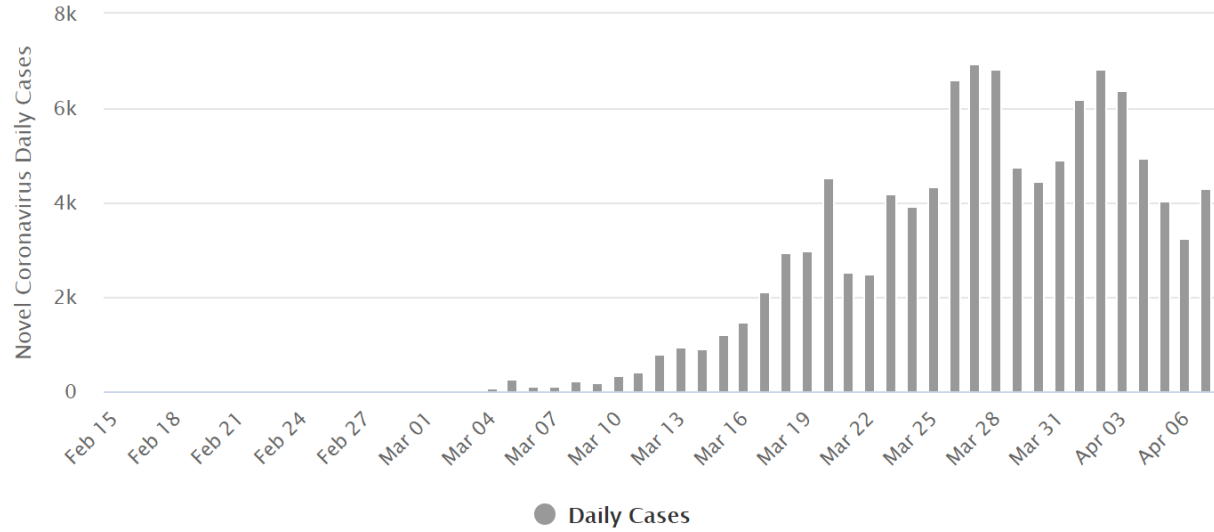
3-Day Moving Average Trendline



Daily New Cases in Germany

Daily New Cases

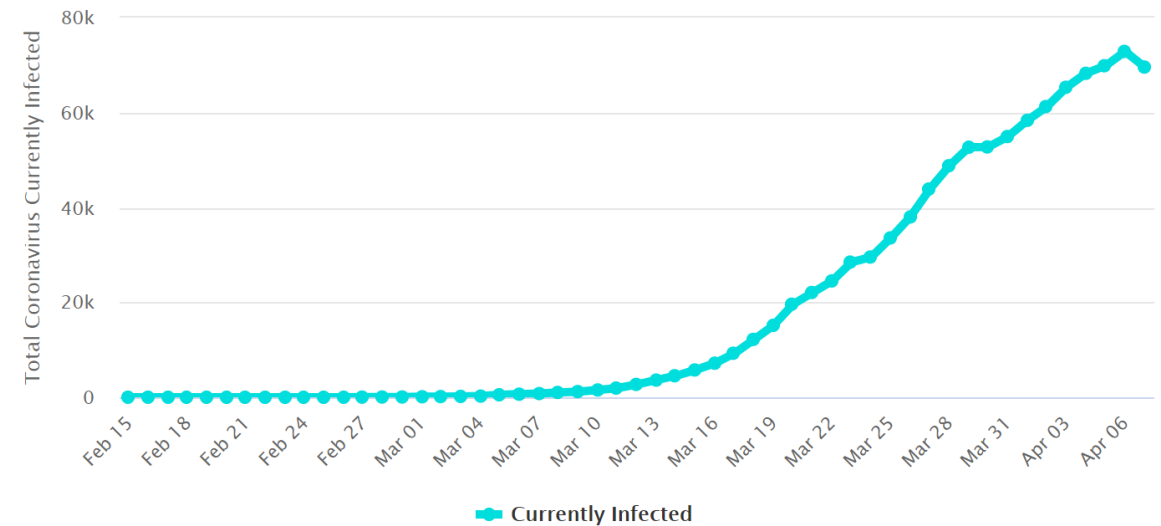
Cases per Day
Data as of 0:00 GMT+0



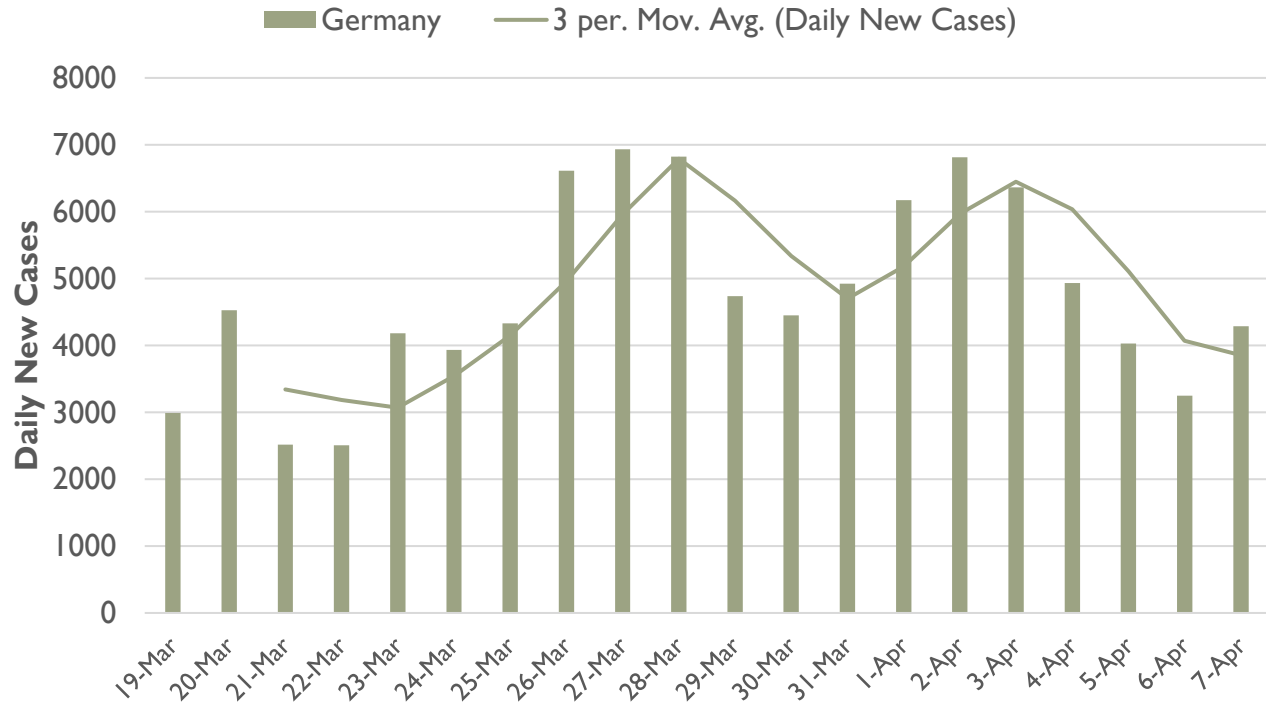
5. Germany

Active Cases in Germany

Active Cases
(Number of Infected People)

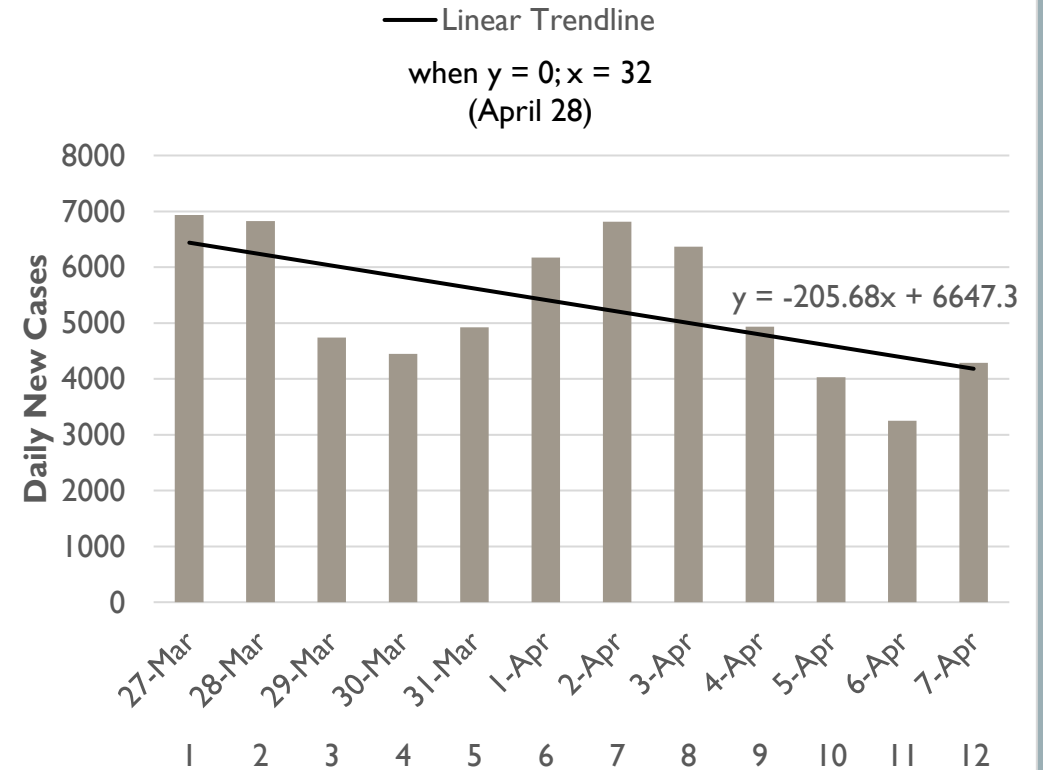


3-Day Moving Average Trendline



Trendlines for Germany

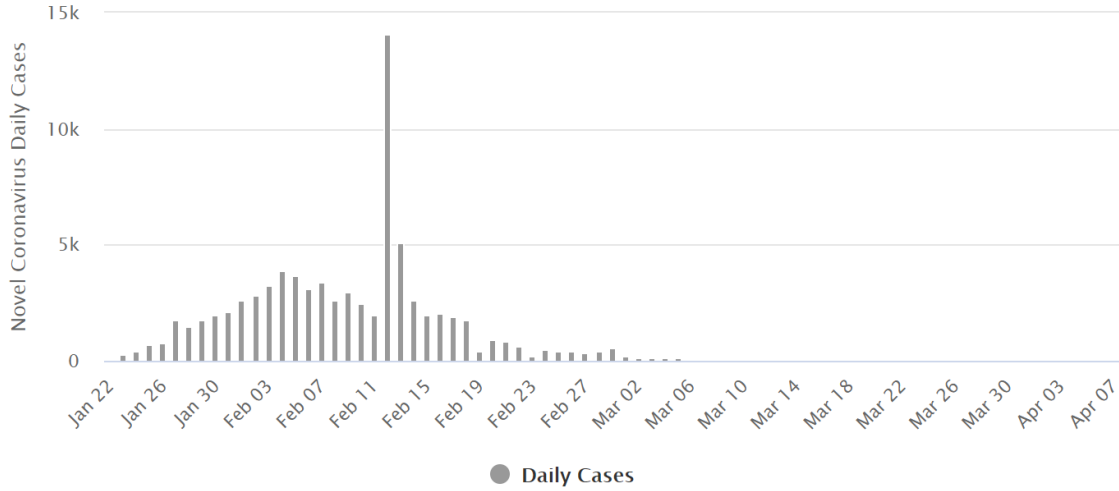
Germany Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in China

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

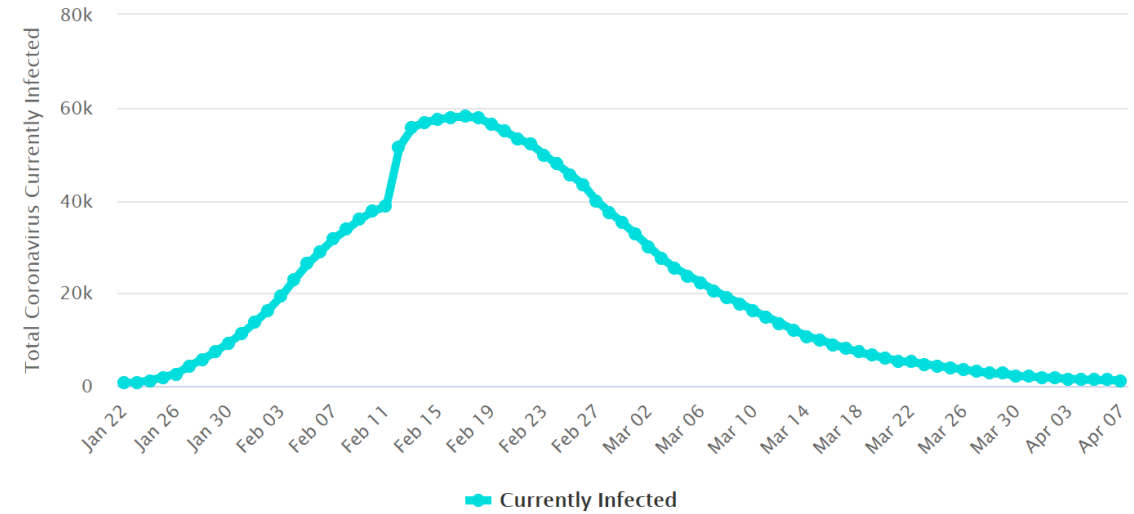


6. China

Active Cases in China

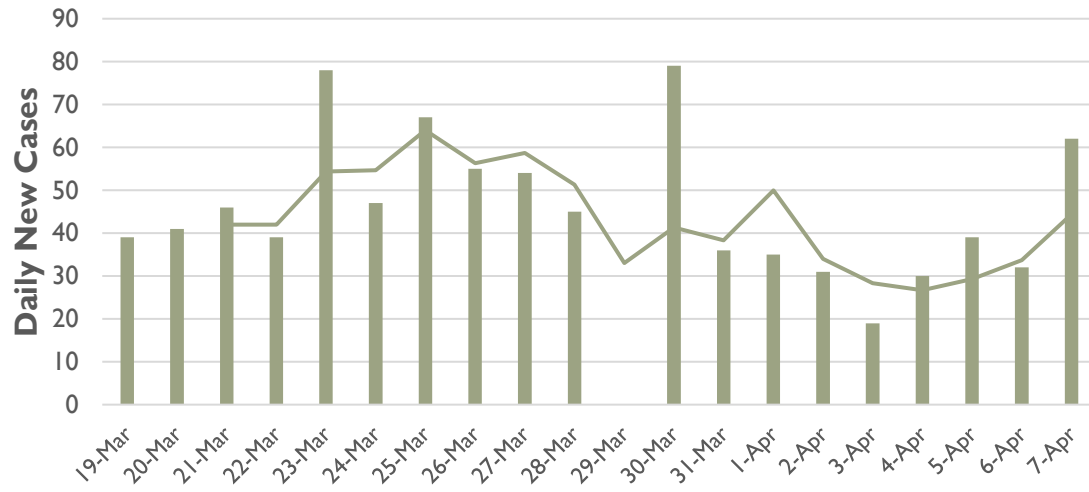
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

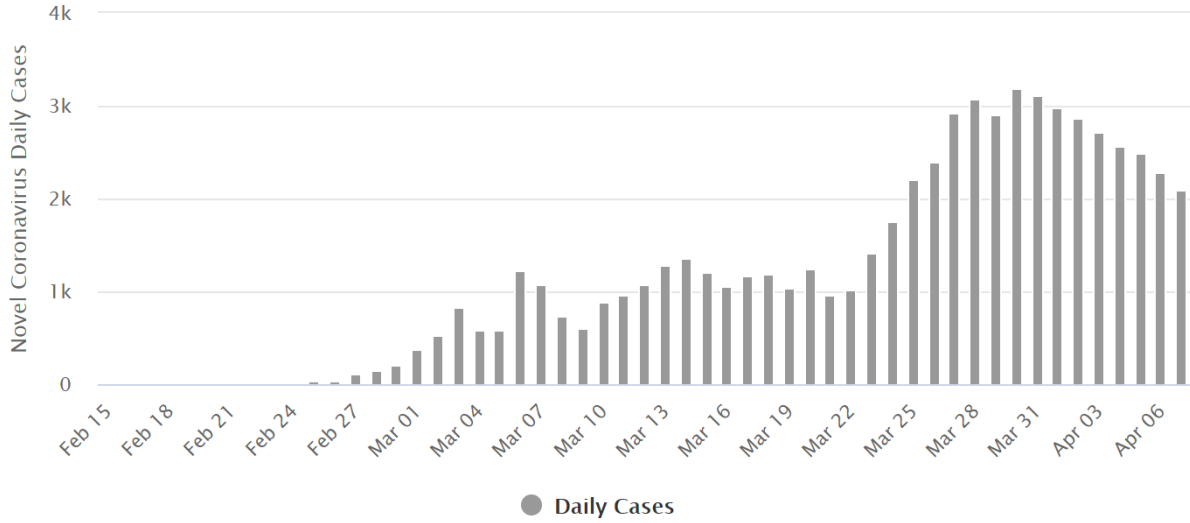
China 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Iran

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

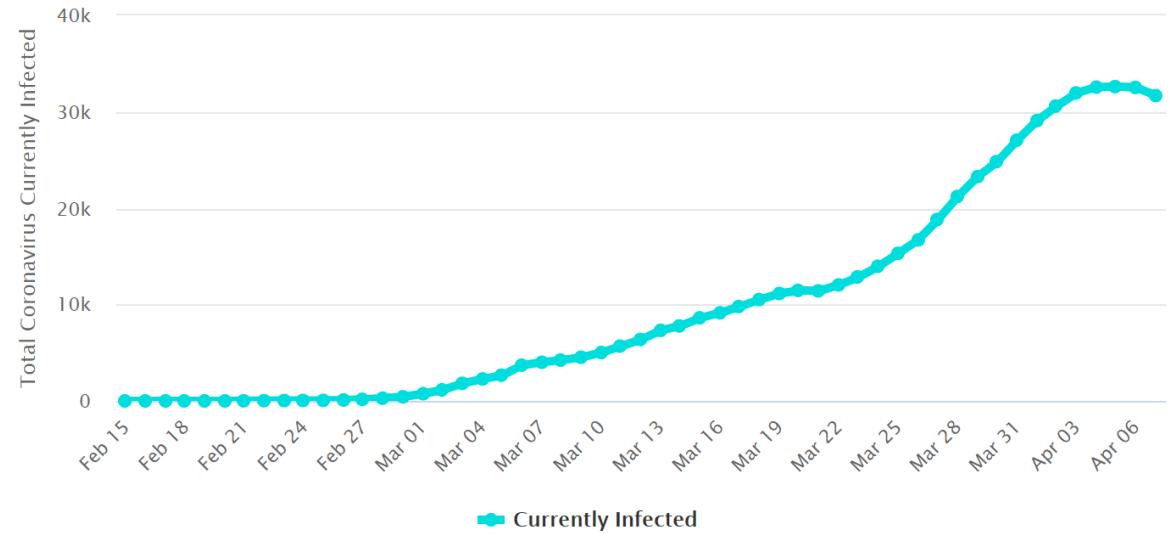


7. Iran

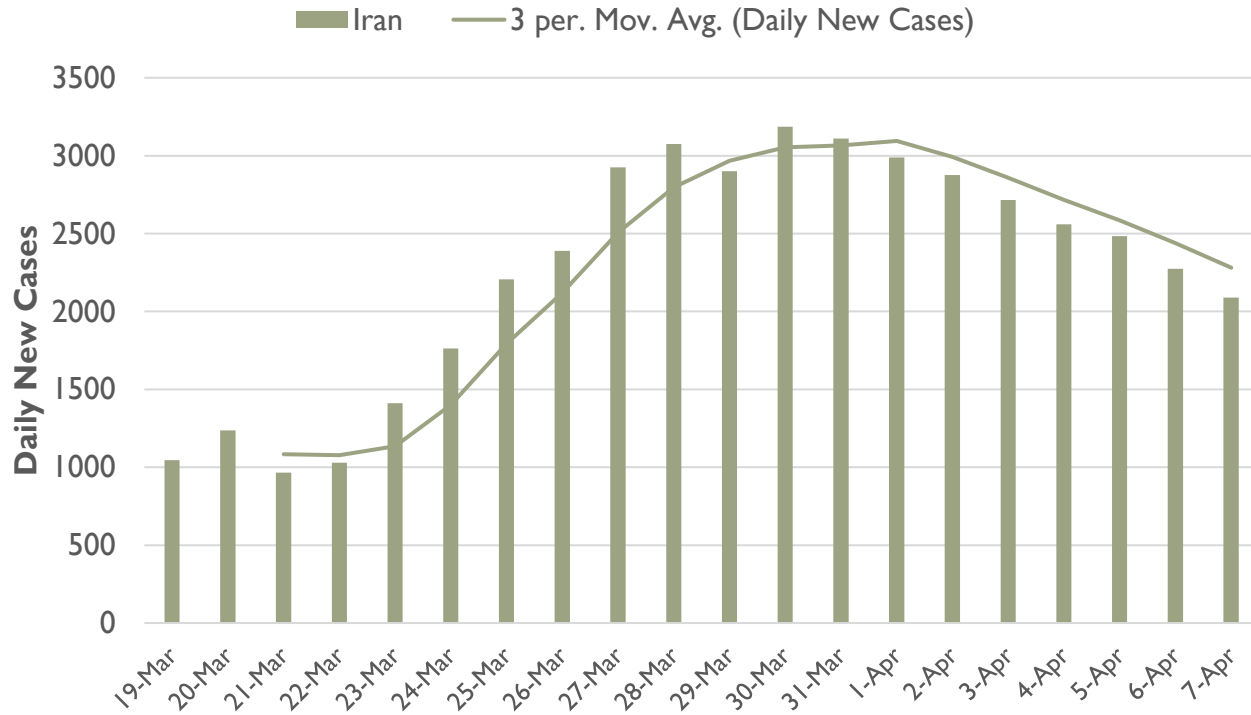
Active Cases in Iran

Active Cases

(Number of Infected People)

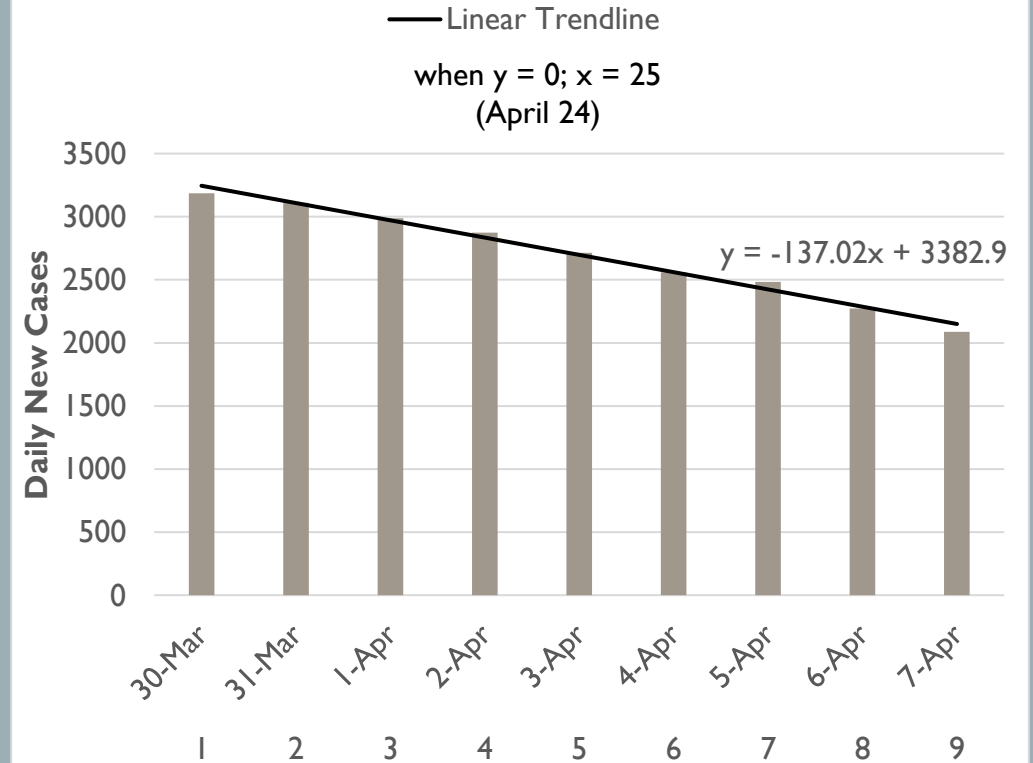


3-Day Moving Average Trendline

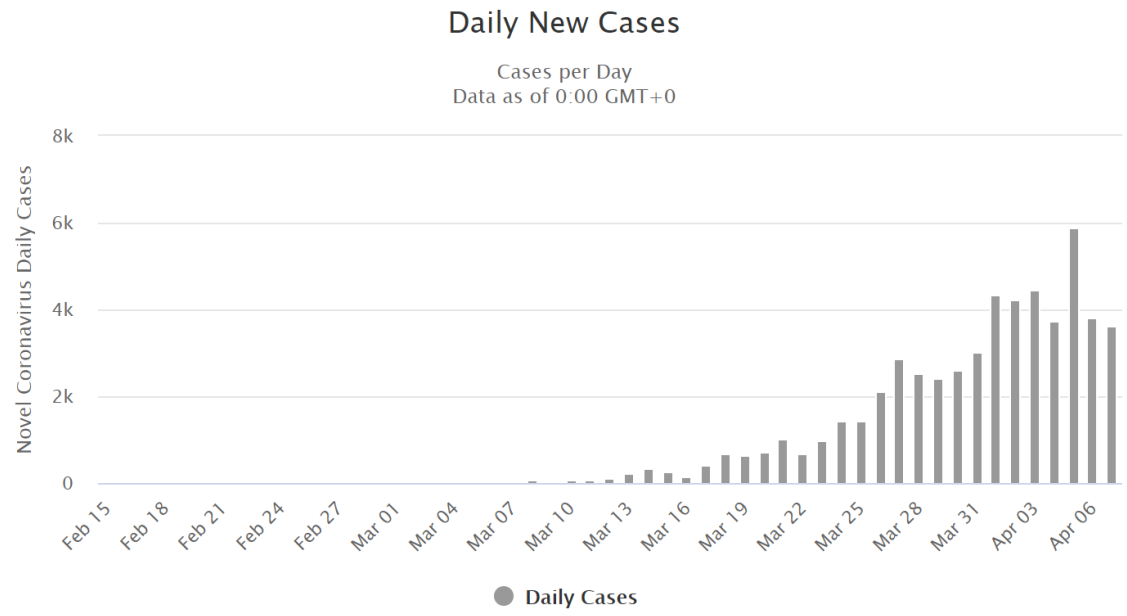


Trendlines for Iran

Iran Bar Chart of Daily New Cases from Peak Till Today

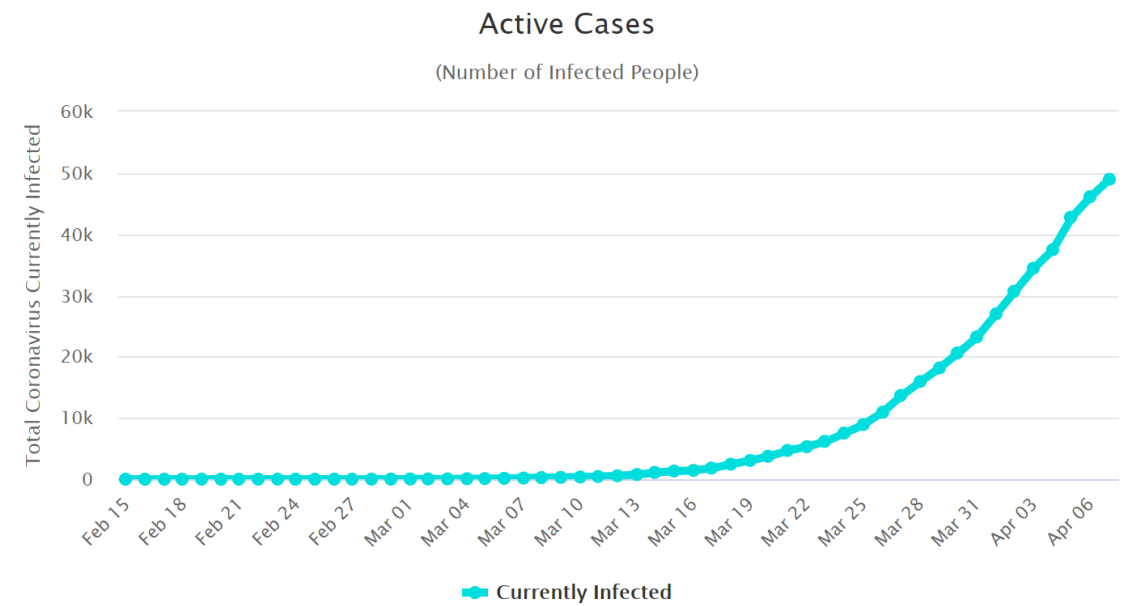


Daily New Cases in the United Kingdom

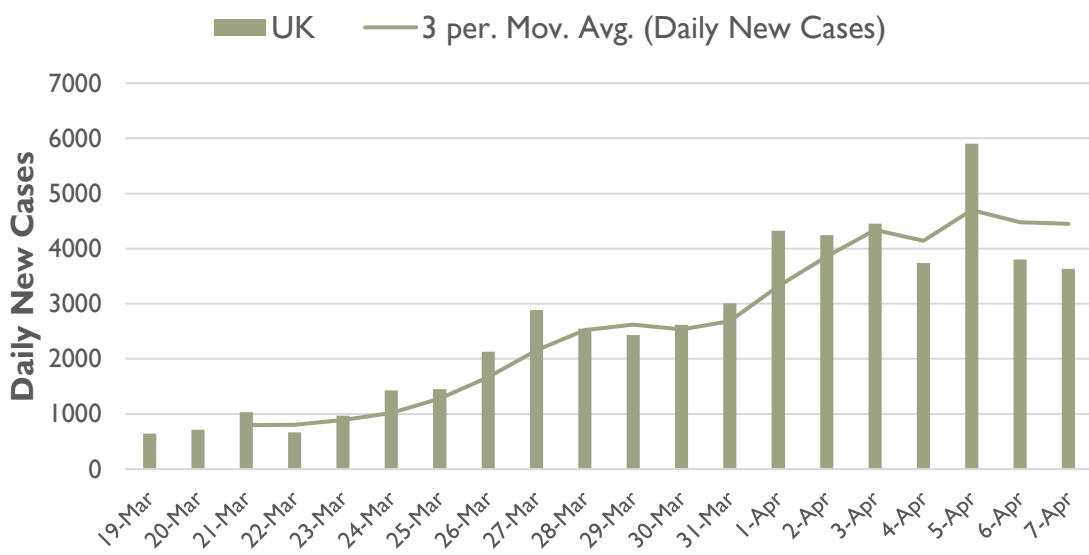


8. UK

Active Cases in the United Kingdom



3-Day Moving Average Trendline

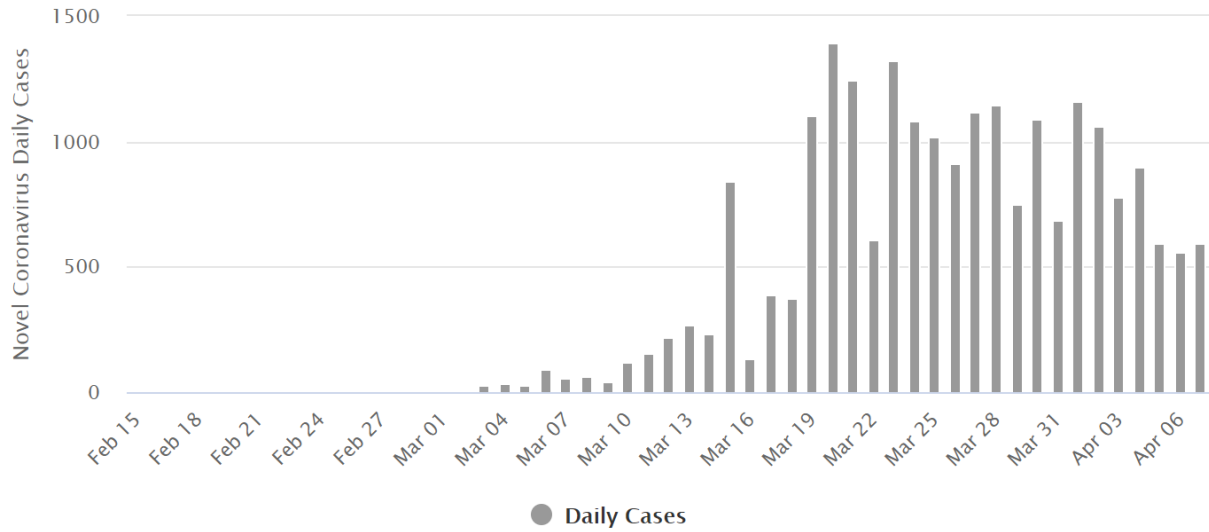


Currently Infected

Daily New Cases in Switzerland

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

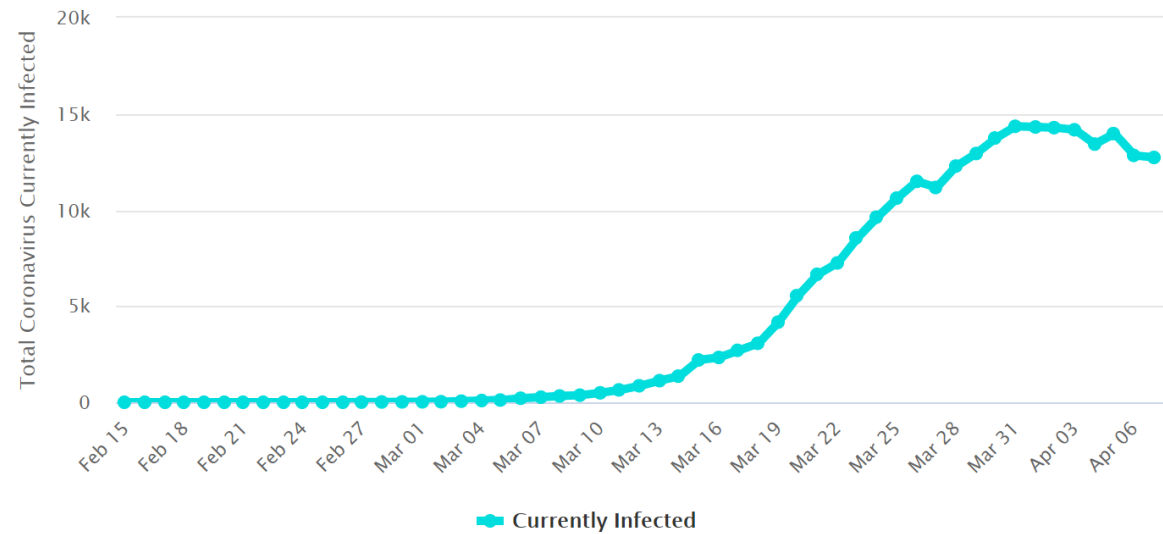


9. Switzerland

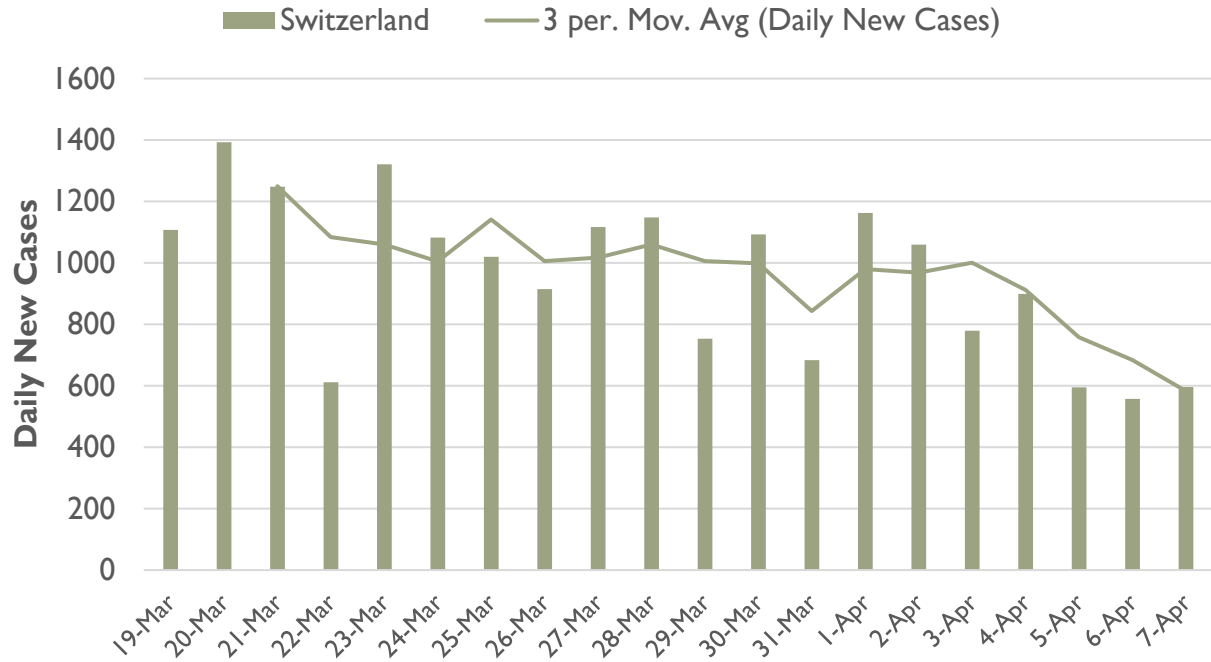
Active Cases in Switzerland

Active Cases

(Number of Infected People)

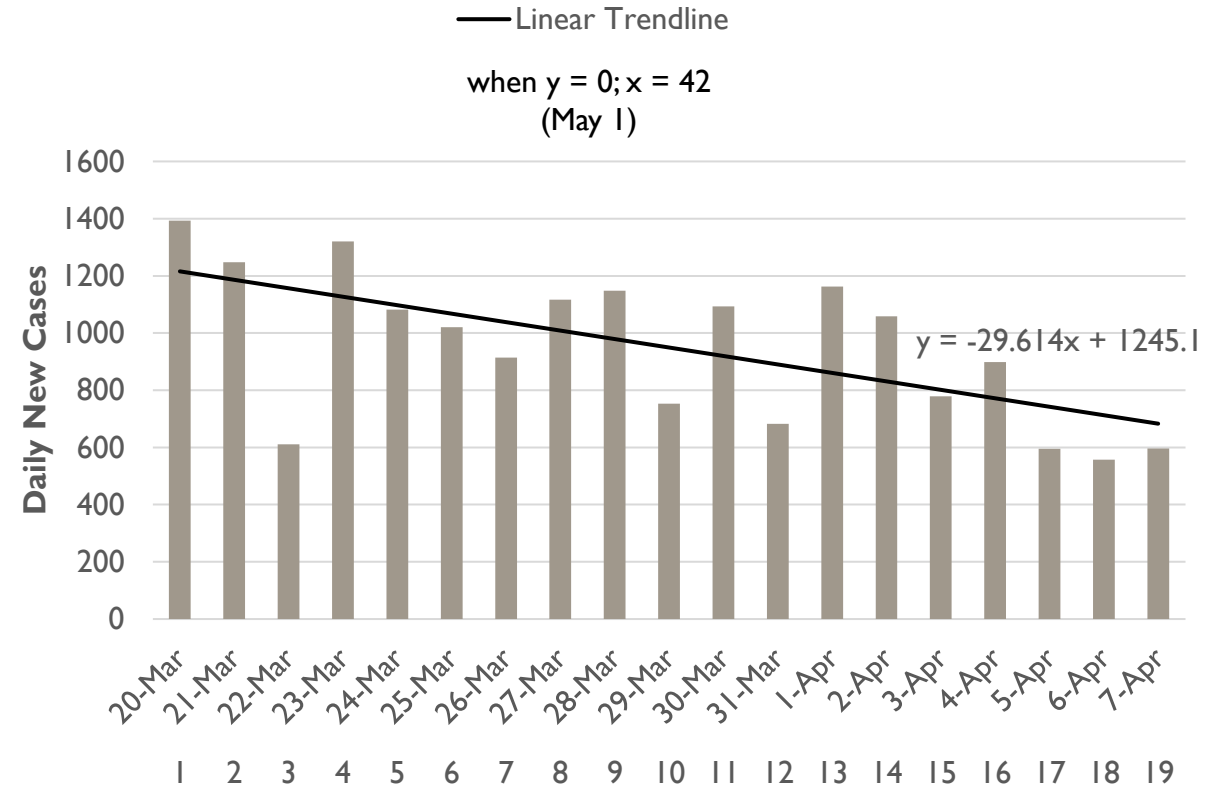


3-Day Moving Average Trendline



Trendlines for Switzerland

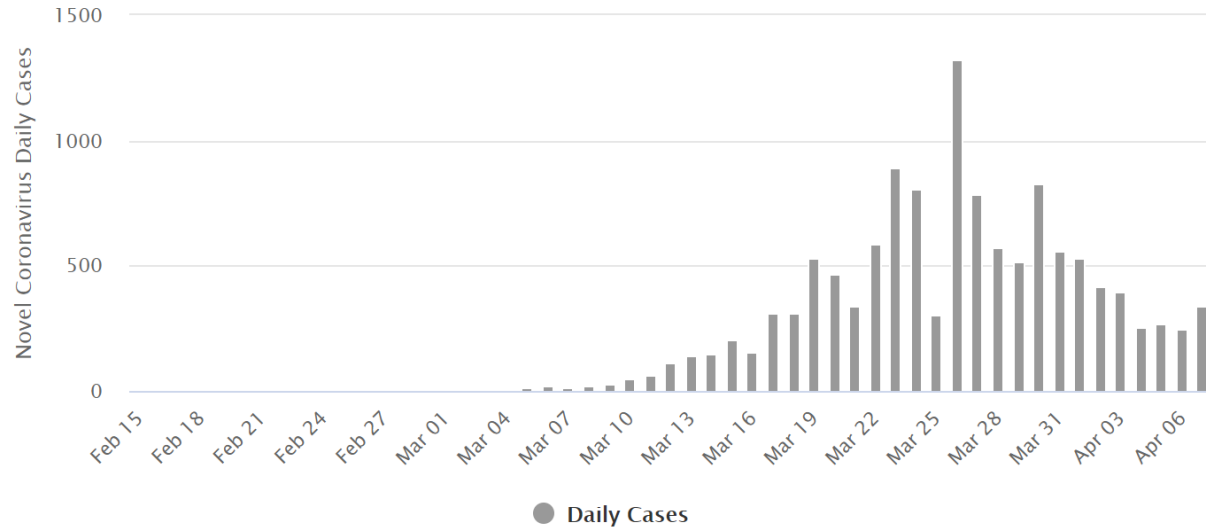
Switzerland Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in Austria

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

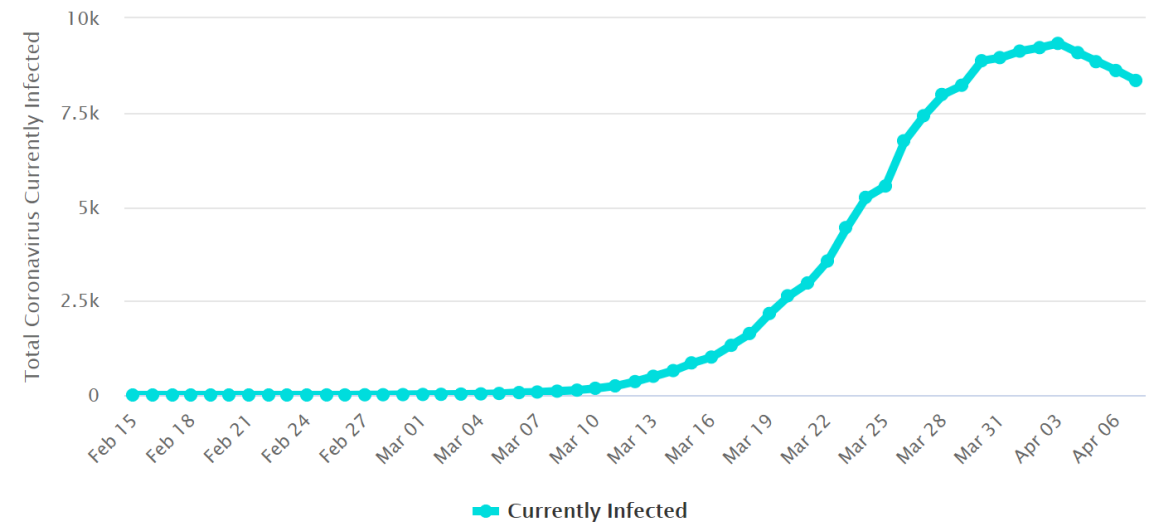


Austria

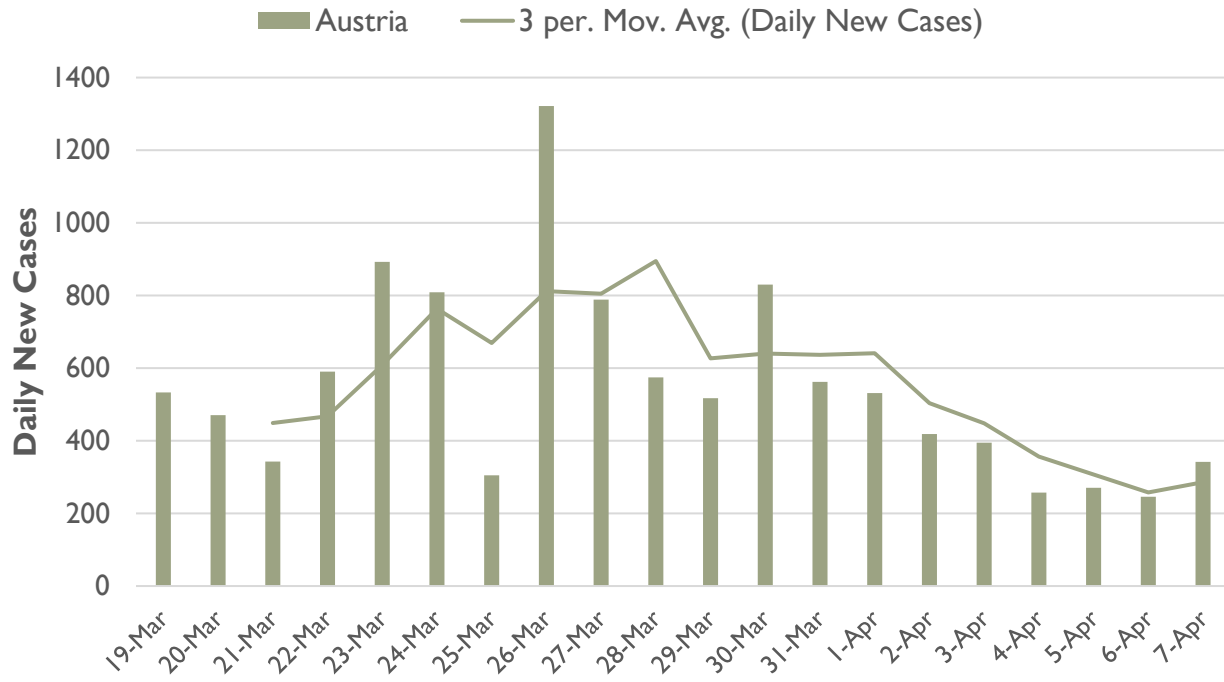
Active Cases in Austria

Active Cases

(Number of Infected People)

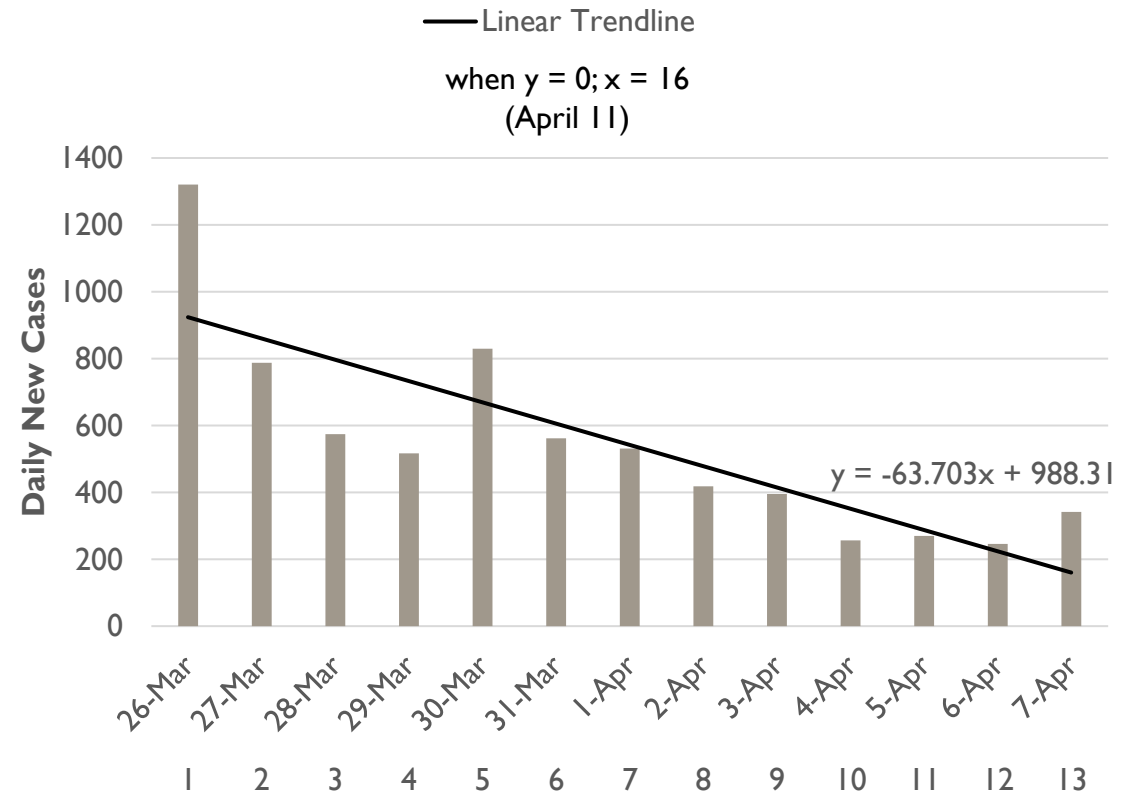


3-Day Moving Average Trendline



Trendlines for Austria

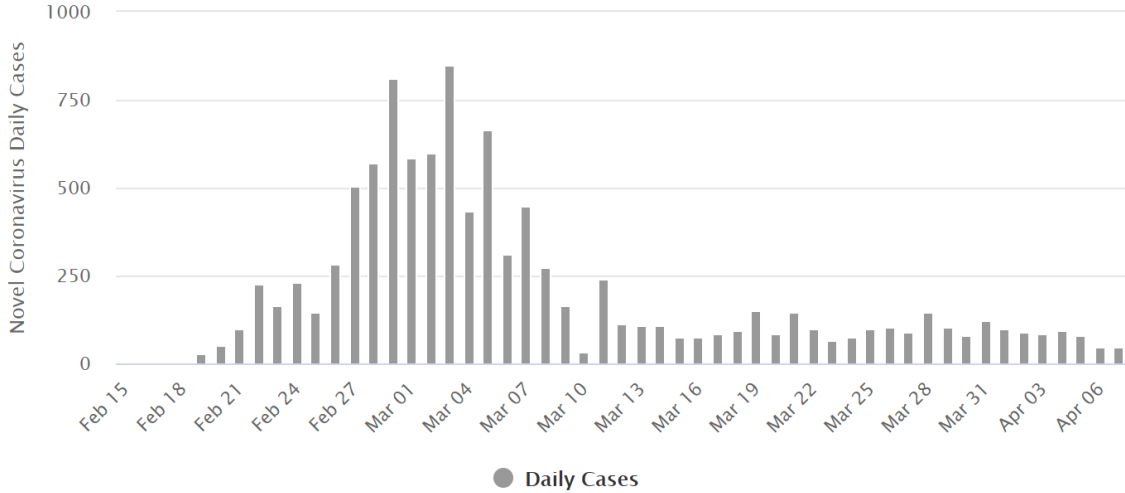
Austria Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in South Korea

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

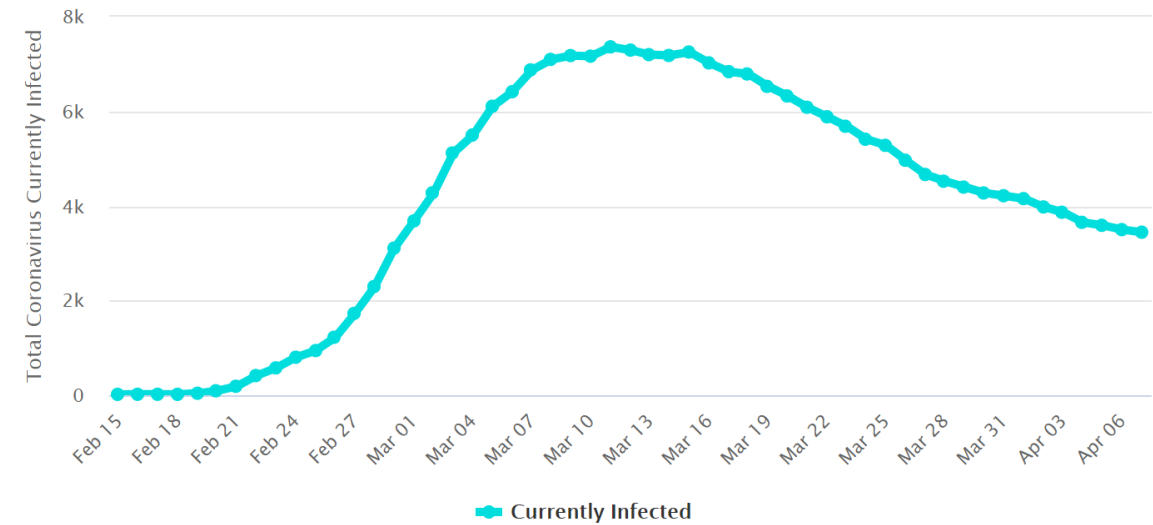


South Korea

Active Cases in South Korea

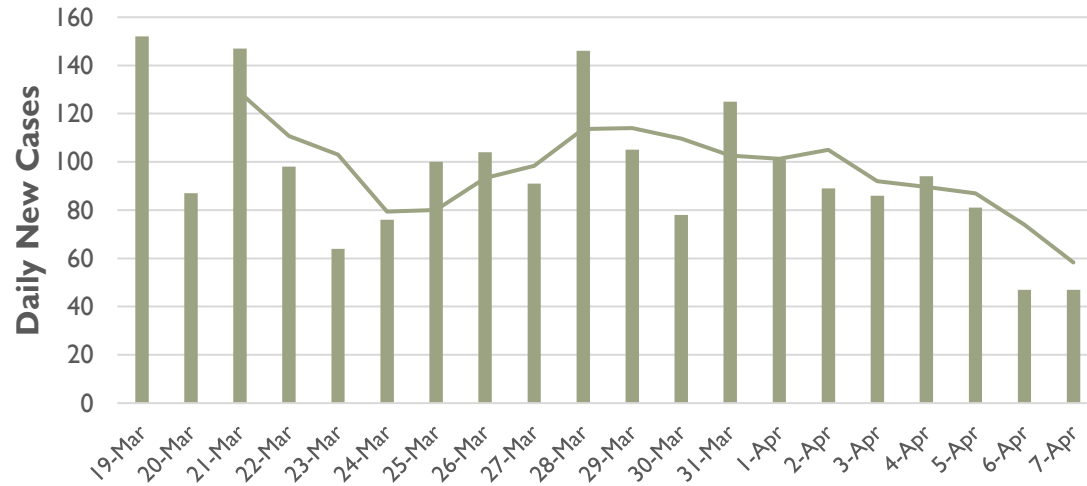
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

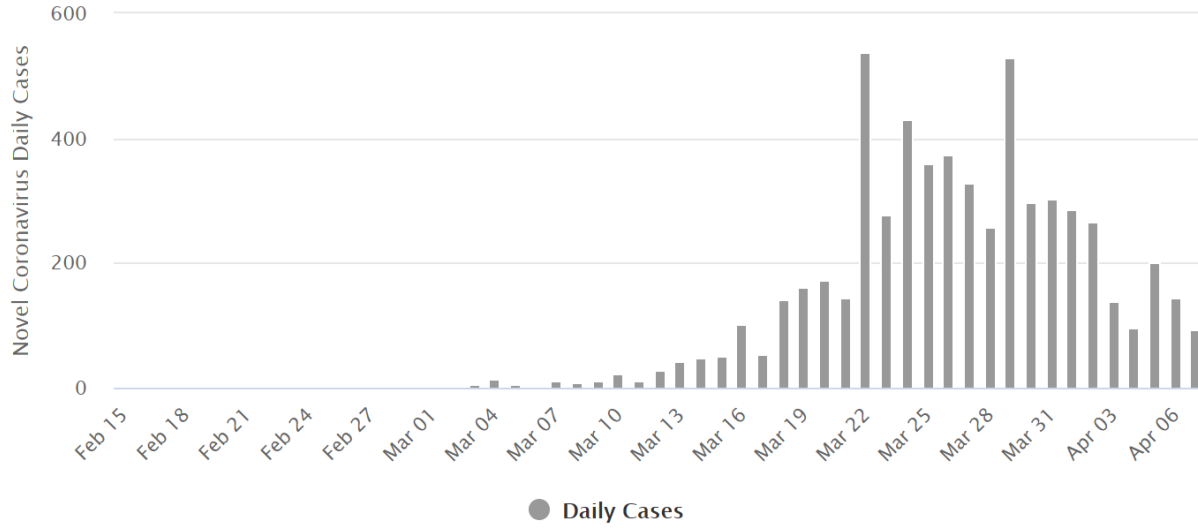
S Korea 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Australia

Daily New Cases

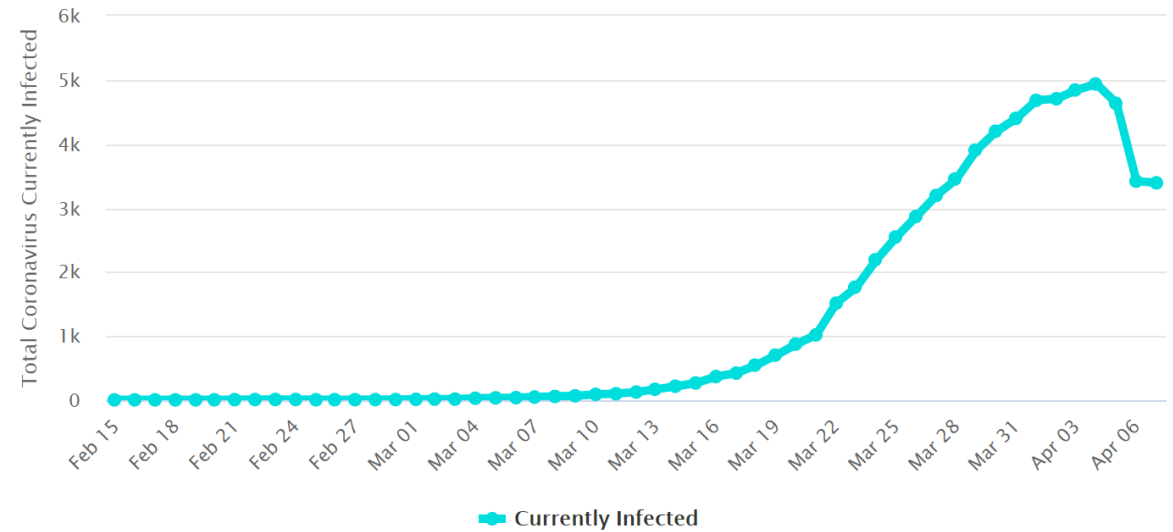
Cases per Day
Data as of 0:00 GMT+0



Australia

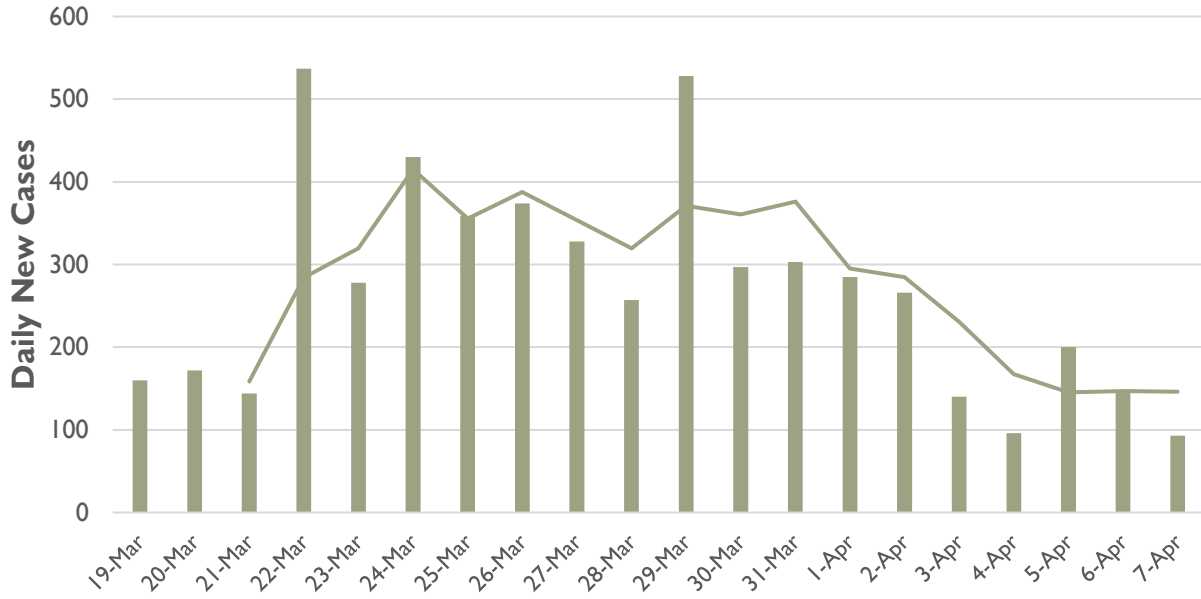
Active Cases in Australia

Active Cases
(Number of Infected People)



3-Day Moving Average Trendline

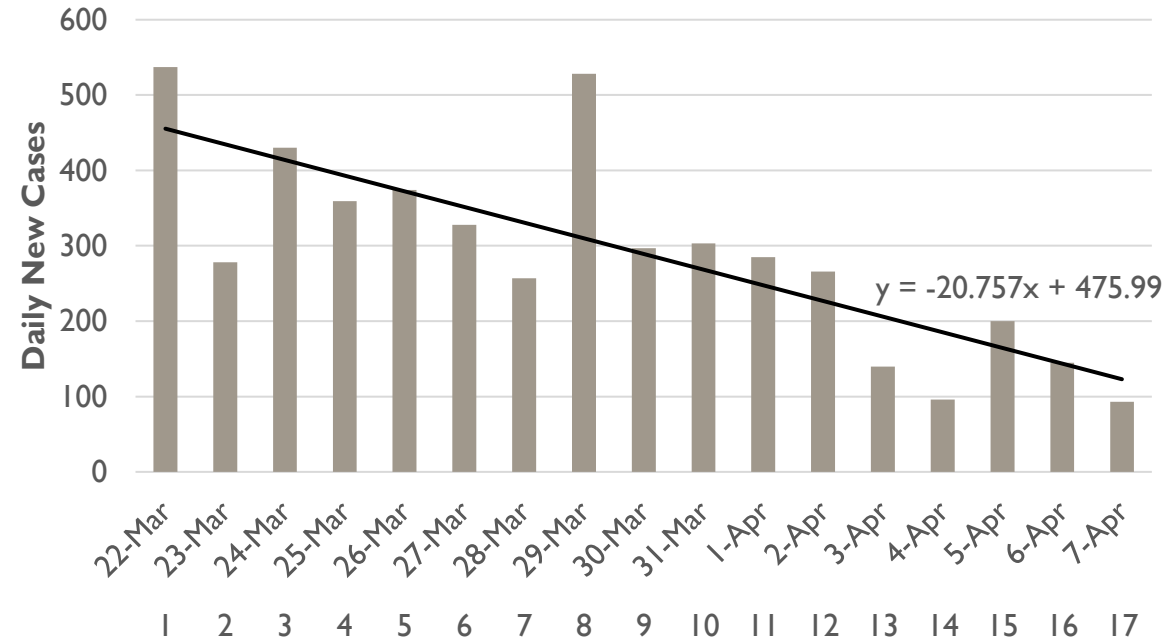
Australia 3 per. Mov. Avg. (Daily New Cases)



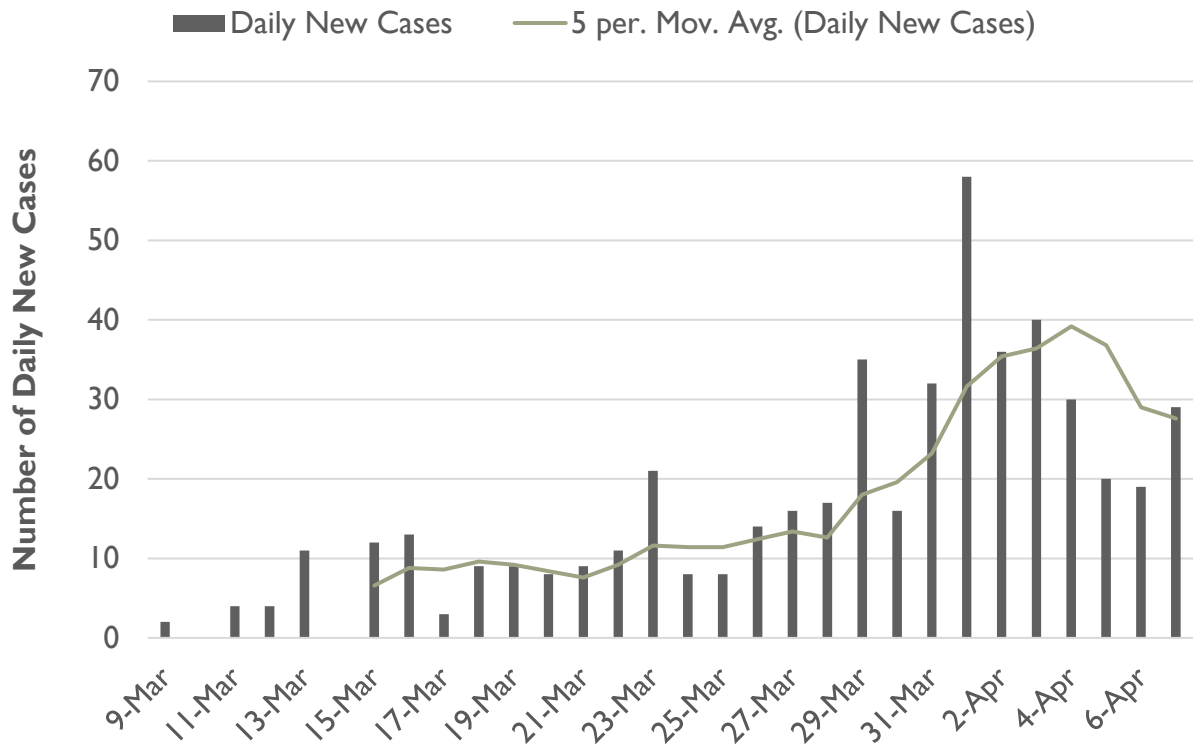
Trendlines for Australia

Australia Bar Chart of Daily New Cases from Peak till Today

Linear Trendline
when $y = 0$; $x = 23$
(April 14)



Daily New Cases in Cyprus

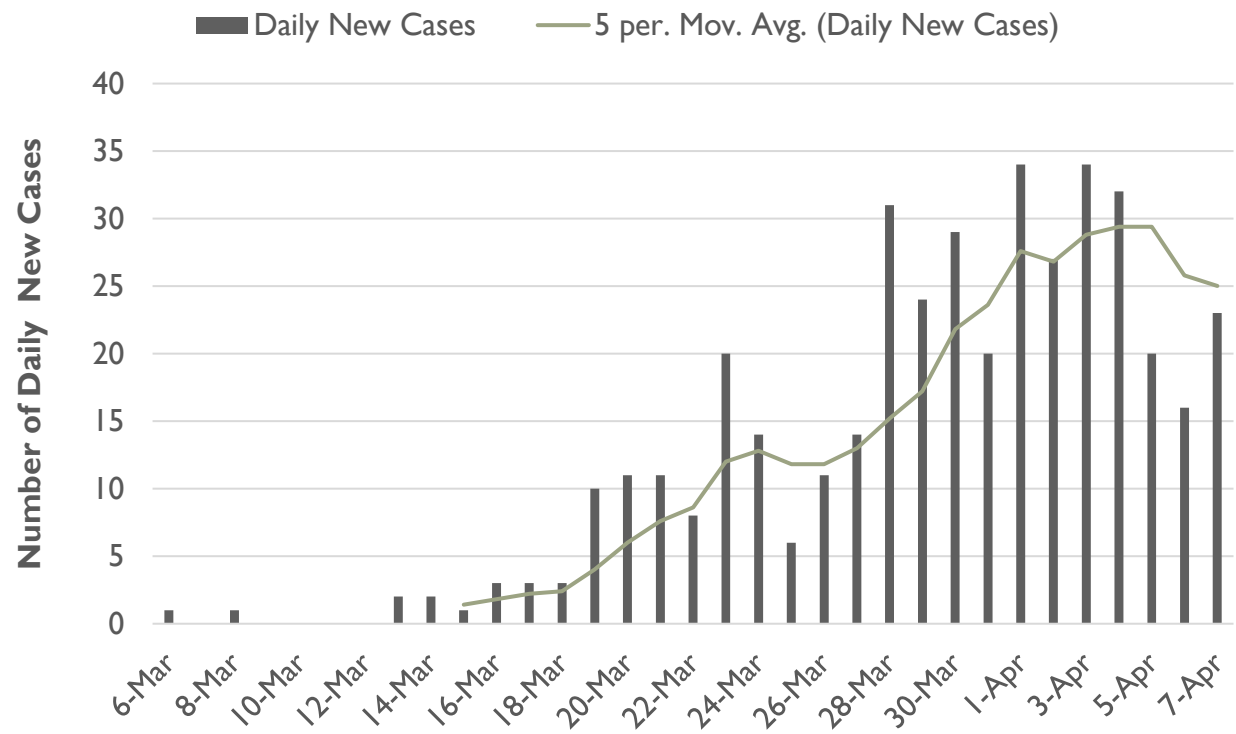


Cyprus

Correlation, r (Between Cyprus and Hawaii) = 0.782
 r is significant at $\alpha = 5\%$

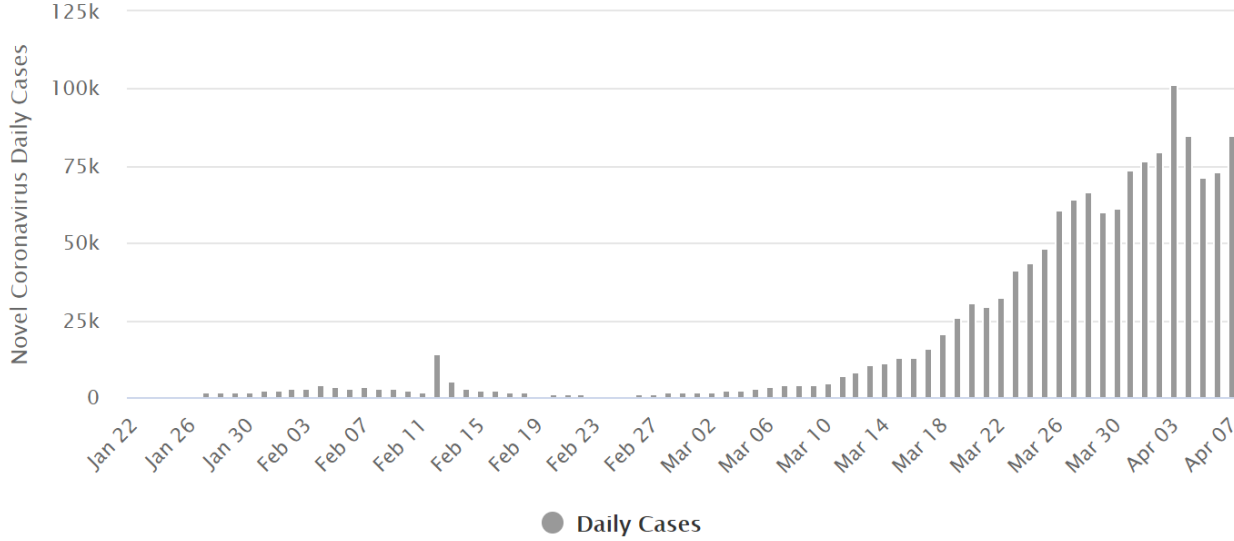
Hawaii

Daily New Cases in Hawaii



Daily New Cases

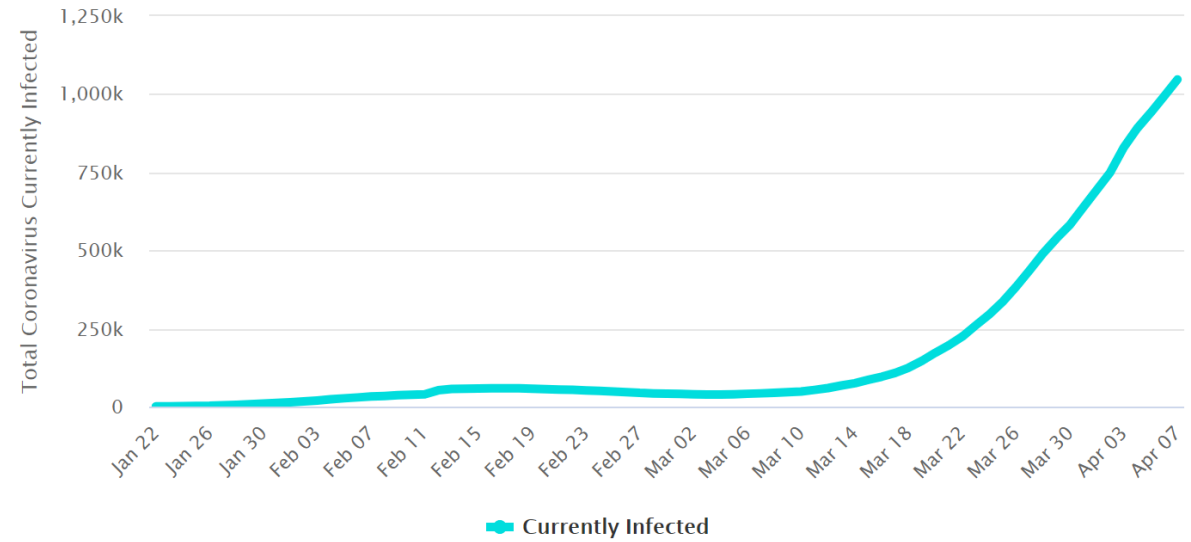
Cases per Day
Data as of 0:00 GMT+0



Worldwide

Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

Worldwide 3 per. Mov. Avg. (Daily New Cases)

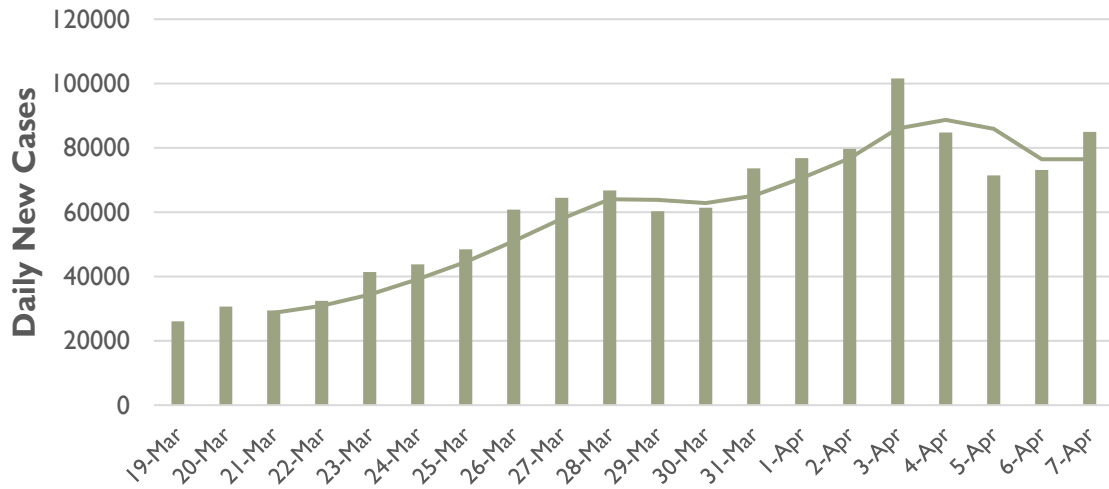


Table 1.a

GROWTH IN NEW CASES SINCE THE DAY BEFORE

| | 3/19 | 3/20 | 3/21 | 3/22 | 3/23 | 3/24 | 3/25 | 3/26 | 3/27 | 3/28 | 3/29 | 3/30 | 3/31 | 4/1 | 4/2 | 4/3 | 4/4 | 4/5 | 4/6 | 4/7 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| USA | 1.591 | 1.235 | 0.862 | 1.936 | 1.089 | 1.091 | 1.204 | 1.290 | 1.085 | 1.041 | 1.024 | 1.022 | 1.216 | 1.070 | 1.128 | 1.081 | 1.059 | 0.740 | 1.198 | 1.099 |
| Spain | 1.124 | 1.056 | 1.123 | 0.834 | 1.946 | 1.087 | 1.077 | 1.109 | 0.959 | 0.947 | 0.915 | 1.141 | 1.015 | 1.029 | 0.970 | 0.898 | 0.977 | 0.786 | 0.918 | 1.047 |
| Italy | 1.265 | 1.125 | 1.095 | 0.848 | 0.861 | 1.096 | 0.993 | 1.191 | 0.953 | 1.011 | 0.873 | 0.776 | 1.001 | 1.180 | 0.976 | 0.982 | 1.048 | 0.898 | 0.834 | 0.844 |
| France | 1.325 | 0.869 | 1.142 | 0.844 | 2.462 | 0.638 | 1.196 | 1.339 | 0.971 | 1.211 | 0.564 | 1.684 | 1.732 | 0.641 | 0.435 | 10.898 | 0.338 | 0.371 | 1.792 | 2.139 |
| Germany | 1.011 | 1.513 | 0.556 | 0.997 | 1.667 | 0.941 | 1.101 | 1.527 | 1.048 | 0.984 | 0.695 | 0.939 | 1.106 | 1.254 | 1.104 | 0.934 | 0.775 | 0.817 | 0.807 | 1.319 |
| China | 1.15 | 1.051 | 1.122 | 0.848 | 2.000 | 0.603 | 1.426 | 0.821 | 0.982 | 0.833 | 0.000 | --- | 0.456 | 0.972 | 0.886 | 0.613 | 1.579 | 1.300 | 0.821 | 1.938 |
| Iran | 0.878 | 1.183 | 0.781 | 1.064 | 1.373 | 1.249 | 1.252 | 1.083 | 1.225 | 1.051 | 0.943 | 1.098 | 0.976 | 0.961 | 0.962 | 0.944 | 0.943 | 0.970 | 0.916 | 0.919 |
| UK | 0.951 | 1.110 | 1.450 | 0.643 | 1.454 | 1.476 | 1.018 | 1.466 | 1.355 | 0.882 | 0.956 | 1.076 | 1.149 | 1.437 | 0.981 | 1.049 | 0.839 | 1.580 | 0.644 | 0.956 |
| Switzerland | 2.968 | 1.258 | 0.896 | 0.490 | 2.162 | 0.819 | 0.943 | 0.896 | 1.222 | 1.028 | 0.656 | 1.452 | 0.625 | 1.703 | 0.911 | 0.736 | 1.154 | 0.662 | 0.936 | 1.070 |
| Austria | 1.697 | 0.882 | 0.730 | 1.720 | 1.512 | 0.907 | 0.377 | 4.331 | 0.597 | 0.728 | 0.901 | 1.605 | 0.677 | 0.945 | 0.787 | 0.945 | 0.651 | 1.051 | 0.911 | 1.390 |
| S Korea | 1.634 | 0.572 | 1.690 | 0.667 | 0.653 | 1.188 | 1.316 | 1.040 | 0.875 | 1.604 | 0.719 | 0.743 | 1.603 | 0.808 | 0.881 | 0.966 | 1.093 | 0.862 | 0.580 | 1.000 |
| Australia | 1.135 | 1.075 | 0.837 | 3.729 | 0.518 | 1.547 | 0.835 | 1.042 | 0.877 | 0.784 | 2.054 | 0.563 | 1.020 | 0.941 | 0.933 | 0.526 | 0.686 | 2.083 | 0.725 | 0.641 |
| Cyprus | 1.000 | 0.889 | 1.125 | 1.222 | 1.909 | 0.381 | 1.000 | 1.750 | 1.143 | 1.063 | 2.059 | 0.457 | 2.000 | 1.813 | 0.621 | 1.111 | 0.750 | 0.667 | 0.950 | 1.526 |
| Hawaii | 3.333 | 1.100 | 1.000 | 0.727 | 2.500 | 0.700 | 0.429 | 1.833 | 1.273 | 2.214 | 0.774 | 1.208 | 0.690 | 1.700 | 0.794 | 1.259 | 0.941 | 0.625 | 0.800 | 1.438 |
| Worldwide | 1.271 | 1.174 | 0.960 | 1.102 | 1.275 | 1.058 | 1.107 | 1.254 | 1.061 | 1.035 | 0.903 | 1.019 | 1.199 | 1.043 | 1.037 | 1.274 | 0.835 | 0.842 | 1.024 | 1.161 |

Table I.b**AVERAGE GROWTH OF LAST FIVE DAYS**

| | 3/23-27 | 3/24-28 | 3/25-29 | 3/26-30 | 3/27-31 | 3/28-4/1 | 3/29-4/2 | 3/30-4/3 | 3/31-4/4 | 4/1-4/5 | 4/2-4/6 | 4/3-4/7 |
|-------------|---------|---------|---------|---------|---------|----------|----------|----------|----------|---------|---------|---------|
| USA | 1.152 | 1.142 | 1.129 | 1.092 | 1.077 | 1.074 | 1.092 | 1.103 | 1.111 | 1.016 | 1.041 | 1.035 |
| Spain | 1.236 | 1.036 | 1.002 | 1.014 | 0.996 | 1.009 | 1.014 | 1.011 | 0.978 | 0.932 | 0.910 | 0.925 |
| Italy | 1.019 | 1.049 | 1.004 | 0.961 | 0.923 | 0.968 | 0.961 | 0.983 | 1.037 | 1.017 | 0.948 | 0.921 |
| France | 1.321 | 1.071 | 1.056 | 1.154 | 1.232 | 1.166 | 1.011 | 3.078 | 2.809 | 2.537 | 2.767 | 3.107 |
| Germany | 1.257 | 1.120 | 1.071 | 1.039 | 0.954 | 0.996 | 1.019 | 1.067 | 1.035 | 0.977 | 0.887 | 0.930 |
| China | 1.166 | 0.933 | 0.812 | 0.659 | 0.568 | 0.565 | 0.578 | 0.732 | 0.901 | 1.070 | 1.040 | 1.250 |
| Iran | 1.236 | 1.172 | 1.111 | 1.080 | 1.059 | 1.006 | 0.988 | 0.988 | 0.957 | 0.956 | 0.947 | 0.938 |
| UK | 1.354 | 1.239 | 1.135 | 1.147 | 1.084 | 1.100 | 1.120 | 1.138 | 1.091 | 1.177 | 1.019 | 1.014 |
| Switzerland | 1.208 | 0.982 | 0.949 | 1.051 | 0.996 | 1.093 | 1.069 | 1.085 | 1.026 | 1.033 | 0.880 | 0.912 |
| Austria | 1.545 | 1.388 | 1.387 | 1.632 | 0.902 | 0.971 | 0.983 | 0.992 | 0.801 | 0.876 | 0.869 | 0.990 |
| S Korea | 1.014 | 1.205 | 1.111 | 0.996 | 1.109 | 1.095 | 0.951 | 1.000 | 1.070 | 0.922 | 0.876 | 0.900 |
| Australia | 0.964 | 1.017 | 1.118 | 1.064 | 1.060 | 1.072 | 1.102 | 0.797 | 0.821 | 1.034 | 0.991 | 0.932 |
| Cyprus | 1.237 | 1.067 | 1.403 | 1.294 | 1.344 | 1.478 | 1.390 | 1.200 | 1.259 | 0.992 | 0.820 | 1.001 |
| Hawaii | 1.347 | 1.290 | 1.305 | 1.461 | 1.232 | 1.317 | 1.033 | 1.130 | 1.077 | 1.064 | 0.884 | 1.013 |
| Worldwide | 1.151 | 1.103 | 1.072 | 1.054 | 1.043 | 1.040 | 1.040 | 1.115 | 1.078 | 1.006 | 1.003 | 1.027 |

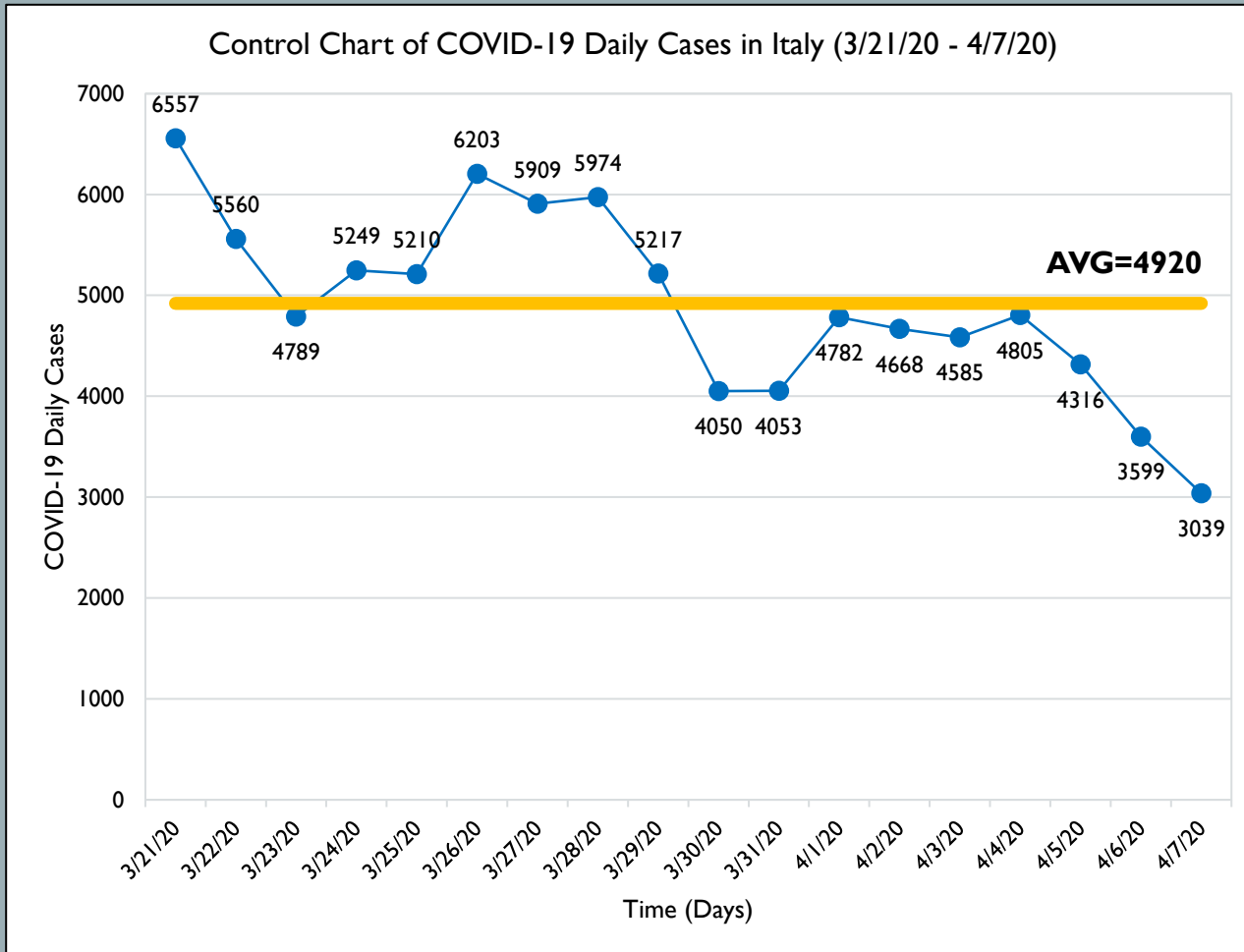
Table 2

RATIO OF THE AVERAGE NEW CASES OF RECENT THREE DAYS TO MAX DAILY PEAK

| | 3/22 | 3/23 | 3/24 | 3/25 | 3/26 | 3/27 | 3/28 | 3/29 | 3/30 | 3/31 | 4/1 | 4/2 | 4/3 | 4/4 | 4/5 | 4/6 | 4/7 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| USA | 0.701 | 0.796 | 0.921 | 0.865 | 0.806 | 0.879 | 0.949 | 0.972 | 0.978 | 0.876 | 0.901 | 0.905 | 0.915 | 0.939 | 0.895 | 0.876 | 0.867 |
| Spain | 0.908 | 0.710 | 0.798 | 0.927 | 0.913 | 0.954 | 0.956 | 0.900 | 0.896 | 0.914 | 0.968 | 0.972 | 0.938 | 0.889 | 0.789 | 0.704 | 0.636 |
| Italy | 0.920 | 0.859 | 0.793 | 0.775 | 0.847 | 0.881 | 0.919 | 0.869 | 0.775 | 0.677 | 0.655 | 0.686 | 0.713 | 0.715 | 0.697 | 0.647 | 0.557 |
| France | 0.900 | 0.629 | 0.681 | 0.800 | 0.790 | 0.906 | 0.892 | 0.797 | 0.838 | 0.640 | 0.740 | 0.640 | 0.434 | 0.476 | 0.488 | 0.229 | 0.276 |
| Germany | 0.703 | 0.678 | 0.782 | 0.917 | 0.750 | 0.860 | 0.979 | 0.889 | 0.770 | 0.679 | 0.747 | 0.861 | 0.930 | 0.871 | 0.737 | 0.587 | 0.556 |
| China | 0.003 | 0.004 | 0.004 | 0.005 | 0.004 | 0.004 | 0.004 | 0.002 | 0.003 | 0.003 | 0.004 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 |
| Iran | 0.789 | 0.804 | 0.795 | 0.813 | 0.887 | 0.857 | 0.909 | 0.965 | 0.959 | 0.962 | 0.971 | 0.939 | 0.897 | 0.853 | 0.812 | 0.766 | 0.716 |
| UK | 0.777 | 0.859 | 0.715 | 0.883 | 0.784 | 0.747 | 0.873 | 0.909 | 0.878 | 0.893 | 0.767 | 0.892 | 0.975 | 0.931 | 0.796 | 0.759 | 0.753 |
| Switzerland | 0.778 | 0.761 | 0.721 | 0.819 | 0.722 | 0.730 | 0.761 | 0.722 | 0.716 | 0.605 | 0.703 | 0.695 | 0.718 | 0.655 | 0.544 | 0.491 | 0.418 |
| Austria | 0.793 | 0.682 | 0.856 | 0.750 | 0.614 | 0.609 | 0.677 | 0.474 | 0.485 | 0.482 | 0.485 | 0.381 | 0.339 | 0.270 | 0.233 | 0.195 | 0.217 |
| S Korea | 0.130 | 0.121 | 0.093 | 0.094 | 0.110 | 0.116 | 0.134 | 0.134 | 0.129 | 0.121 | 0.119 | 0.123 | 0.108 | 0.105 | 0.102 | 0.087 | 0.069 |
| Australia | 0.529 | 0.595 | 0.773 | 0.662 | 0.722 | 0.659 | 0.595 | 0.691 | 0.672 | 0.700 | 0.549 | 0.530 | 0.429 | 0.312 | 0.271 | 0.274 | 0.272 |
| Cyprus | 0.718 | 0.651 | 0.635 | 0.587 | 0.476 | 0.603 | 0.746 | 0.648 | 0.648 | 0.790 | 0.609 | 0.724 | 0.770 | 0.609 | 0.517 | 0.397 | 0.391 |
| Hawaii | 0.909 | 0.650 | 0.700 | 0.667 | 0.517 | 0.517 | 0.602 | 0.742 | 0.903 | 0.785 | 0.814 | 0.794 | 0.931 | 0.912 | 0.843 | 0.667 | 0.578 |
| Worldwide | 0.950 | 0.832 | 0.896 | 0.919 | 0.839 | 0.898 | 0.959 | 0.956 | 0.941 | 0.884 | 0.919 | 0.963 | 0.847 | 0.873 | 0.846 | 0.753 | 0.753 |

COVID-19 CONTROL CHART ANALYSIS

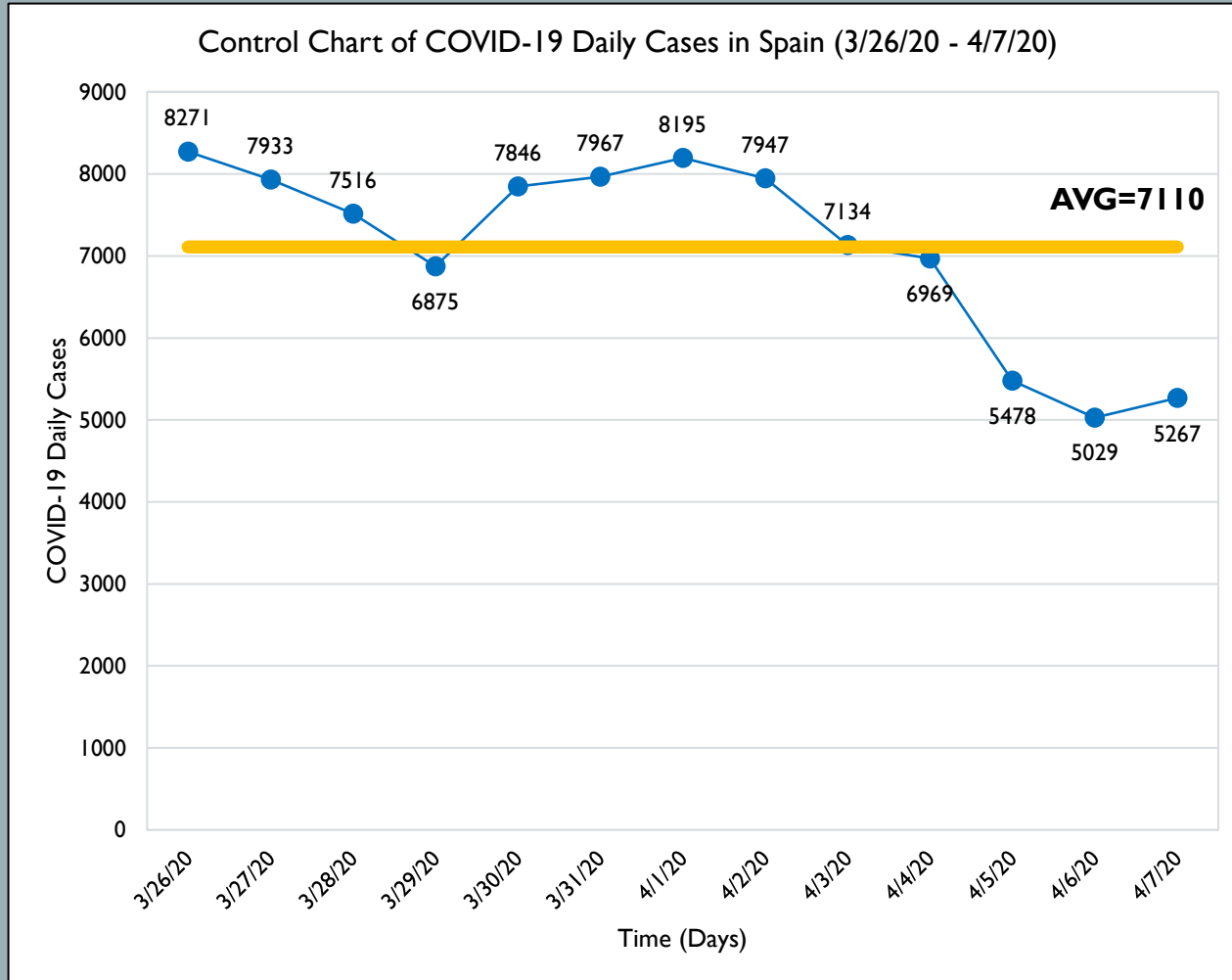
Italy



Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - The last three points (from 4/5/20 to 4/7/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Italy.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - The last five points (from 4/3/20 to 4/7/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Italy. A good 'out-of-control' sign. The linear trend line has a remarkable downward slope.
- Nine successive points are on one side of the centerline.
 - The last nine points (from 3/30/20 to 4/7/20) are all on one side (below) of the centerline. This good 'out-of-control' pattern suggests that the daily COVID-19 cases in Italy are stabilizing in a positive direction.

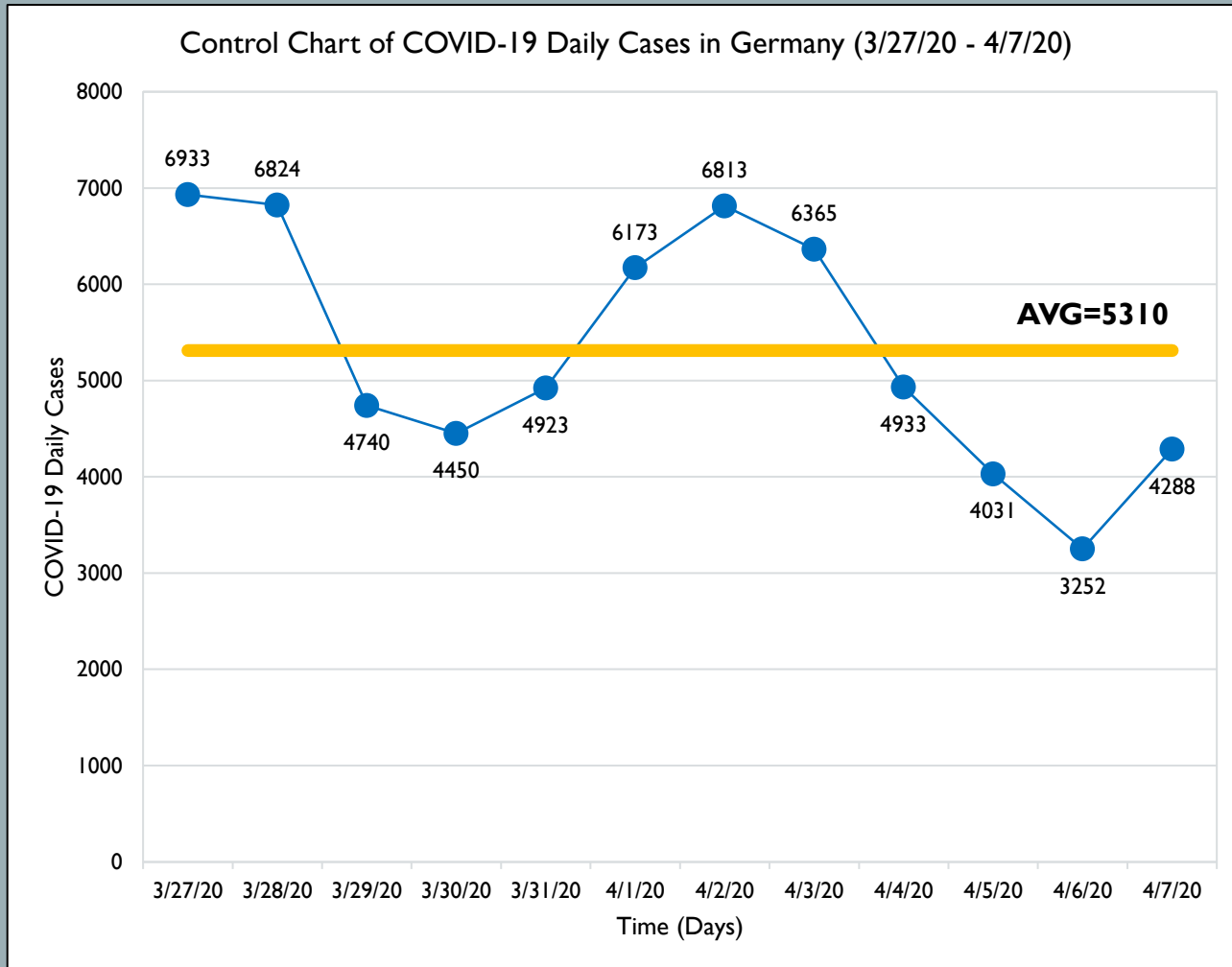
Spain



Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - The last three points (from 4/5/20 to 4/7/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Spain. Also, the regressed trend line from 3/26/20 has a downward slope.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - The last four points (from 4/4/20 to 4/7/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Spain. A good 'out-of-control' sign. The linear trend line has a downward slope.
- There are six consecutive points, increasing or decreasing.
 - Six consecutive points (from 4/1/20 to 4/6/20) are decreasing, which indicates that the daily cases are trending in a downward direction. A good 'out-of-control' sign.

Germany

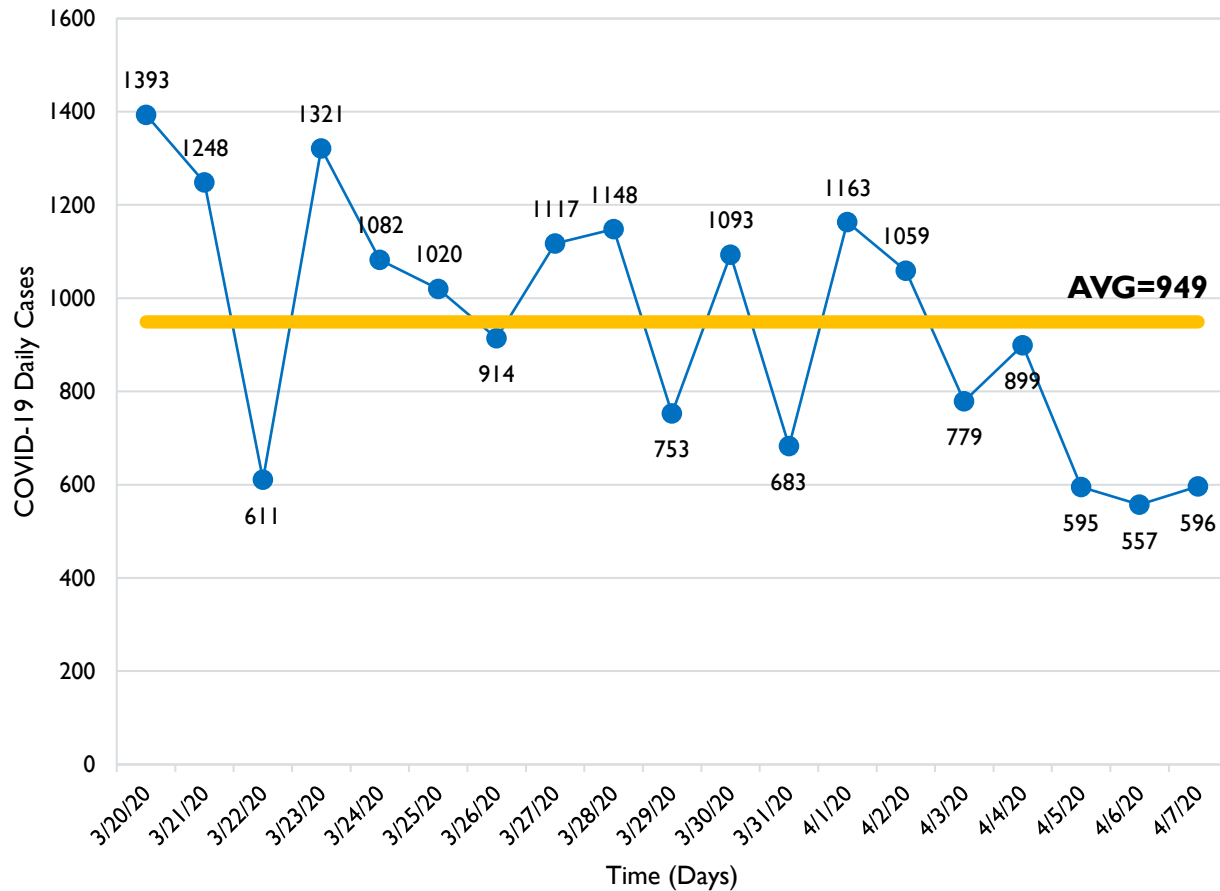


Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - The last three points (from 4/5/20 to 4/7/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Germany. Also, a linear trend line with a downward slope can be observed from 3/27/20.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - The last four points (from 4/4/20 to 4/7/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Germany. A good 'out-of-control' sign.

Switzerland

Control Chart of COVID-19 Daily Cases in Switzerland (3/20/20 - 4/7/20)

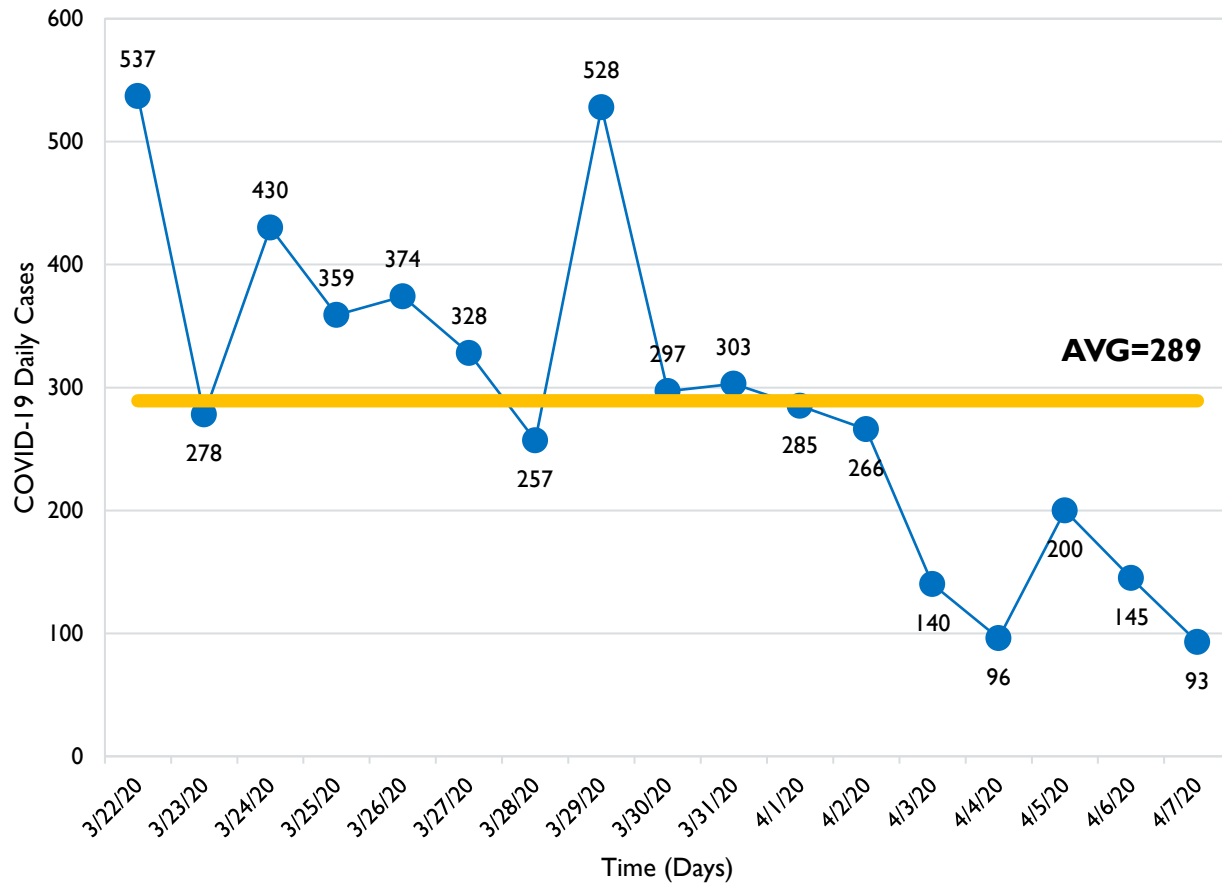


Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - The last three points (from 4/5/20 to 4/7/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Switzerland.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - The last five points (from 4/3/20 to 4/7/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Switzerland. A good 'out-of-control' sign.

Australia

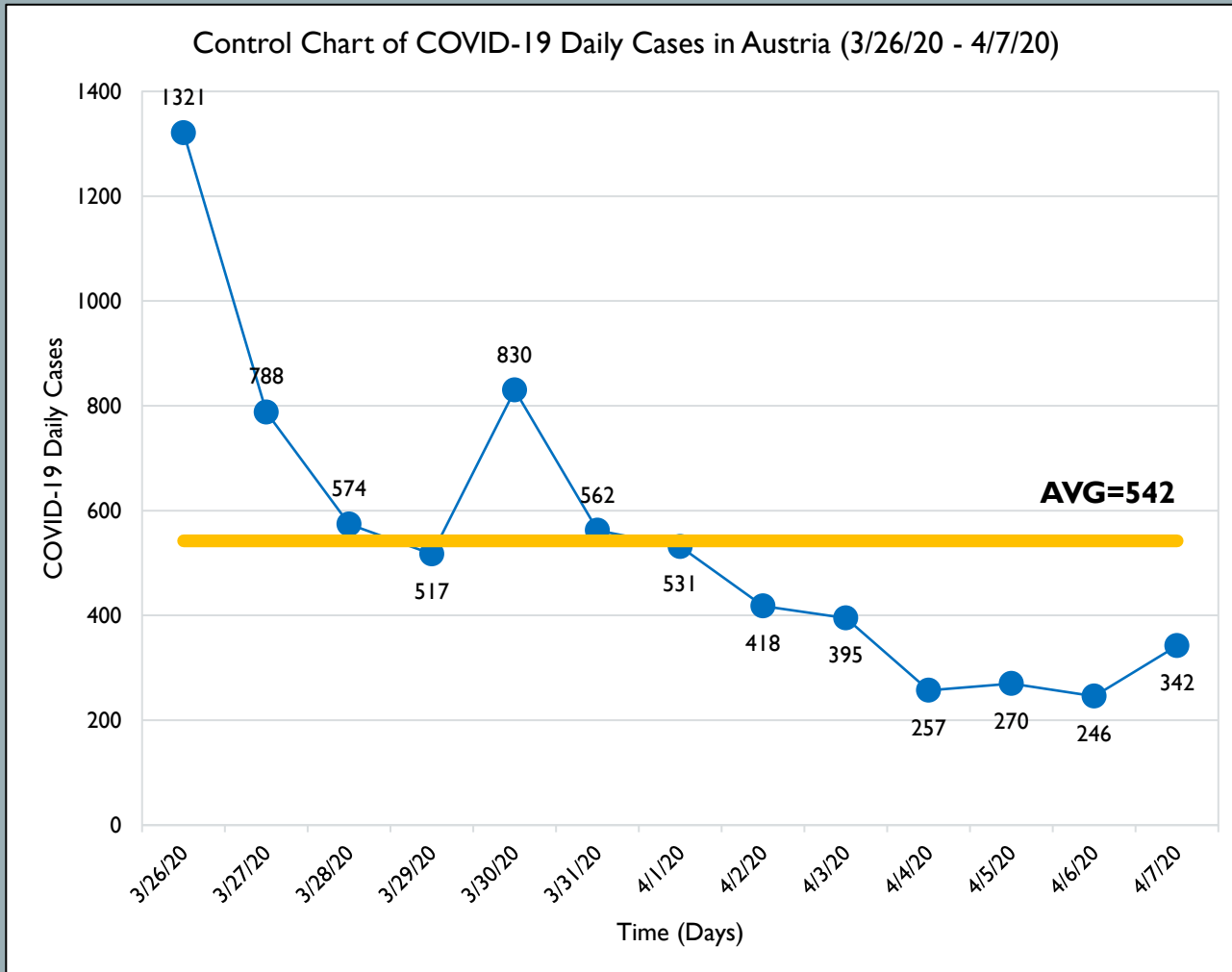
Control Chart of COVID-19 Daily Cases in Australia (3/22/20 - 4/7/20)



Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - The last three points (from 4/5/20 to 4/7/20) are below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Australia. This is a good pattern. Also, the linear trend line has a downward slope.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - The last five points (from 4/3/20 to 4/7/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Australia. A good 'out-of-control' sign.

Austria



Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - The last three points (from 4/5/20 to 4/7/20) are below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Austria. This is a good 'out-of-control' pattern.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - The last five points (from 4/3/20 to 4/7/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Austria. A good 'out-of-control' sign. Also, a linear trend line with a downward slope can be observed from 3/26/20.