

COVID-19 CASES

AS OF SUNDAY 4/5/2020, 6:00PM HST

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

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

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

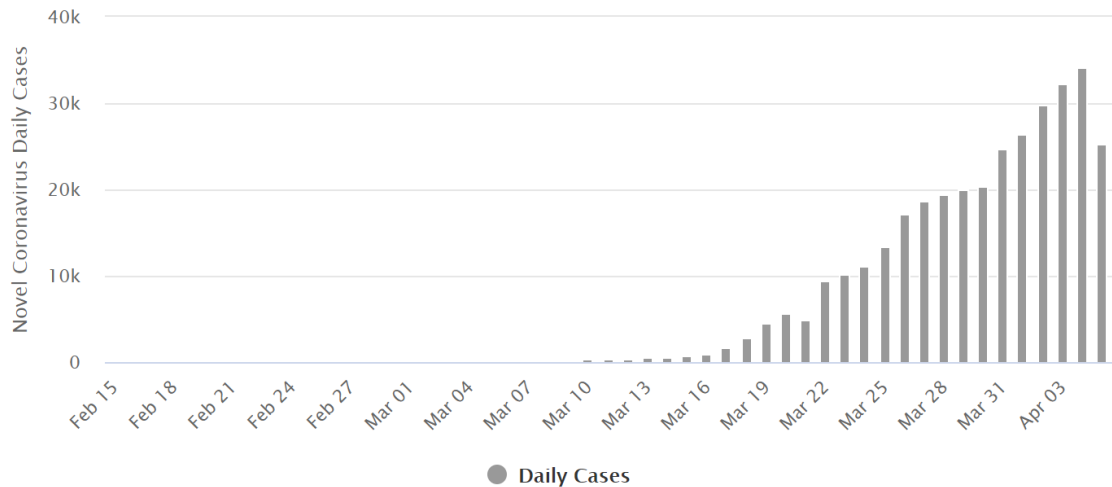
Source: <https://www.financialmirror.com/category/cyprus/>

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

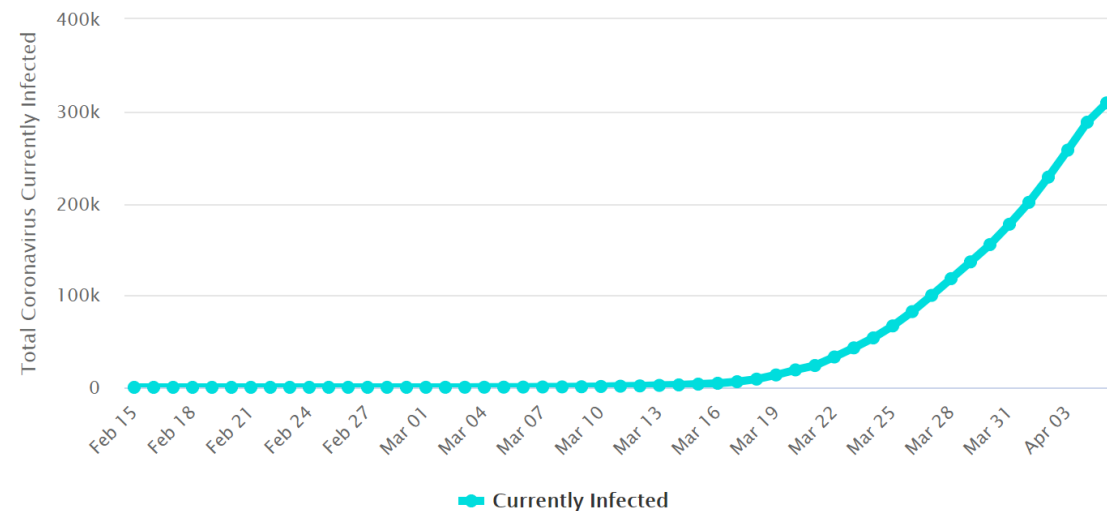


I. USA

Active Cases in the United States

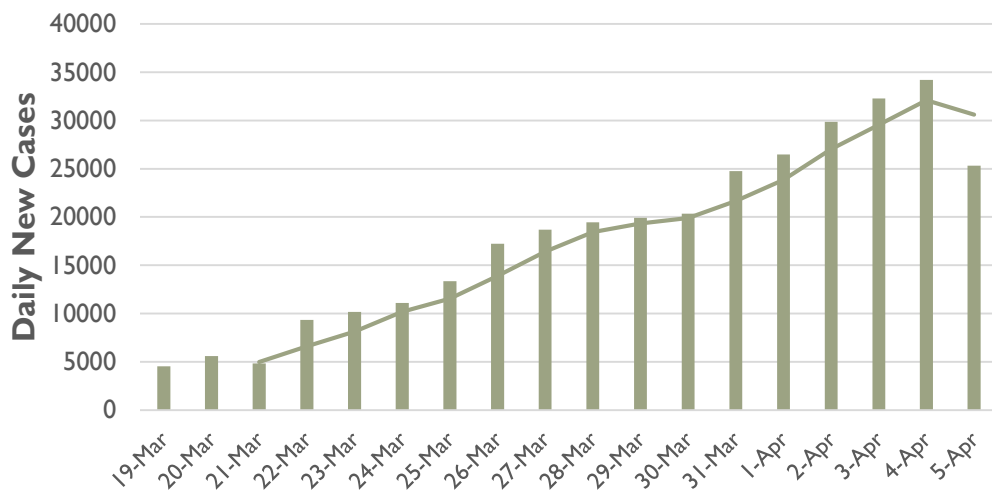
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

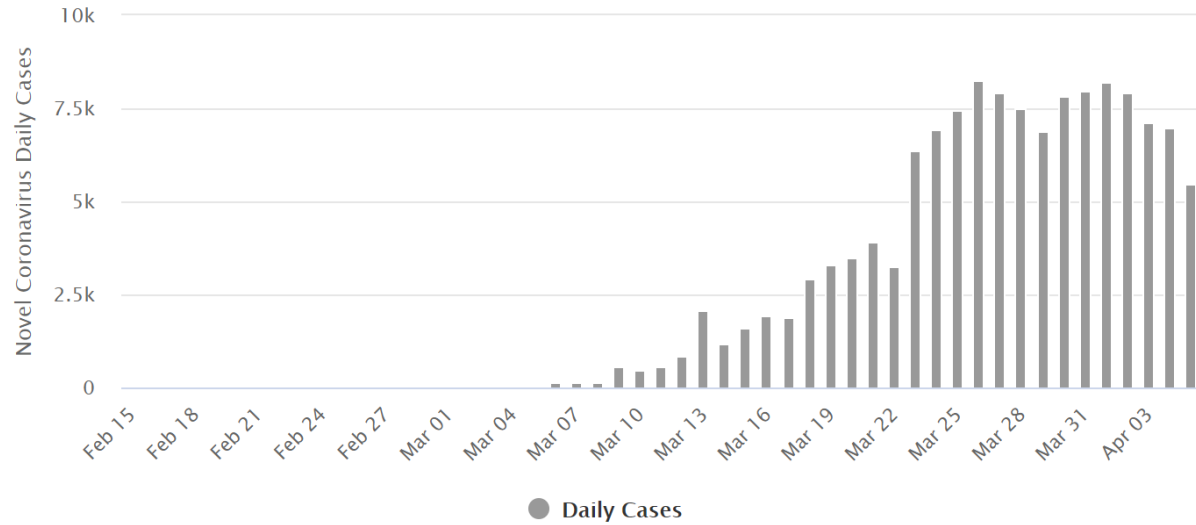
USA 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Spain

Daily New Cases

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

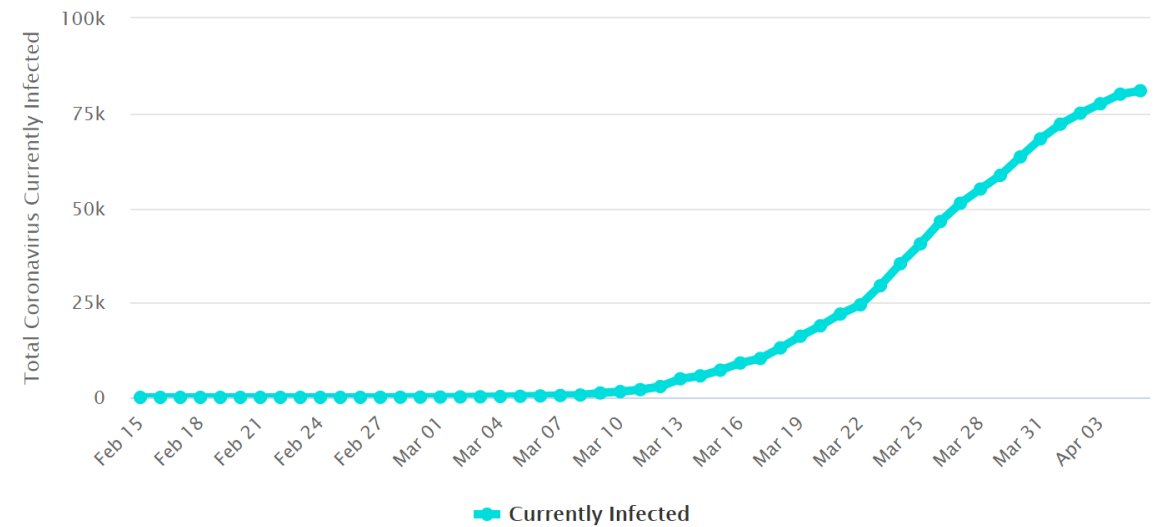


2. Spain

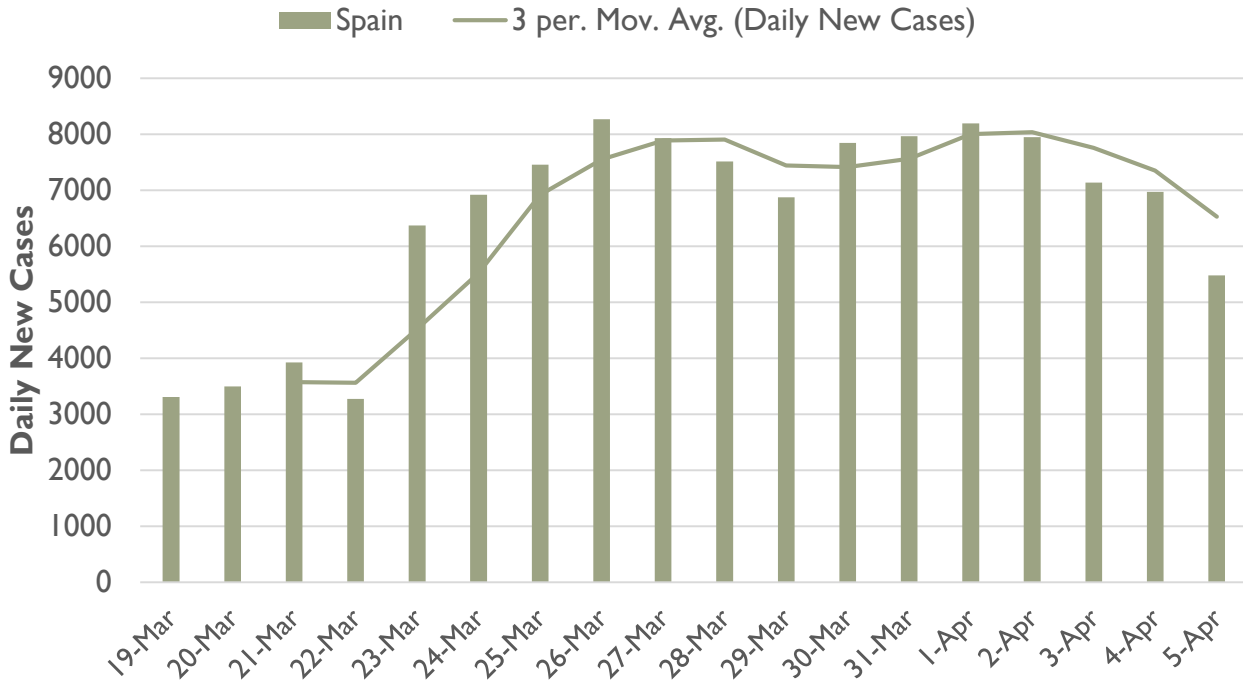
Active Cases in Spain

Active Cases

(Number of Infected People)

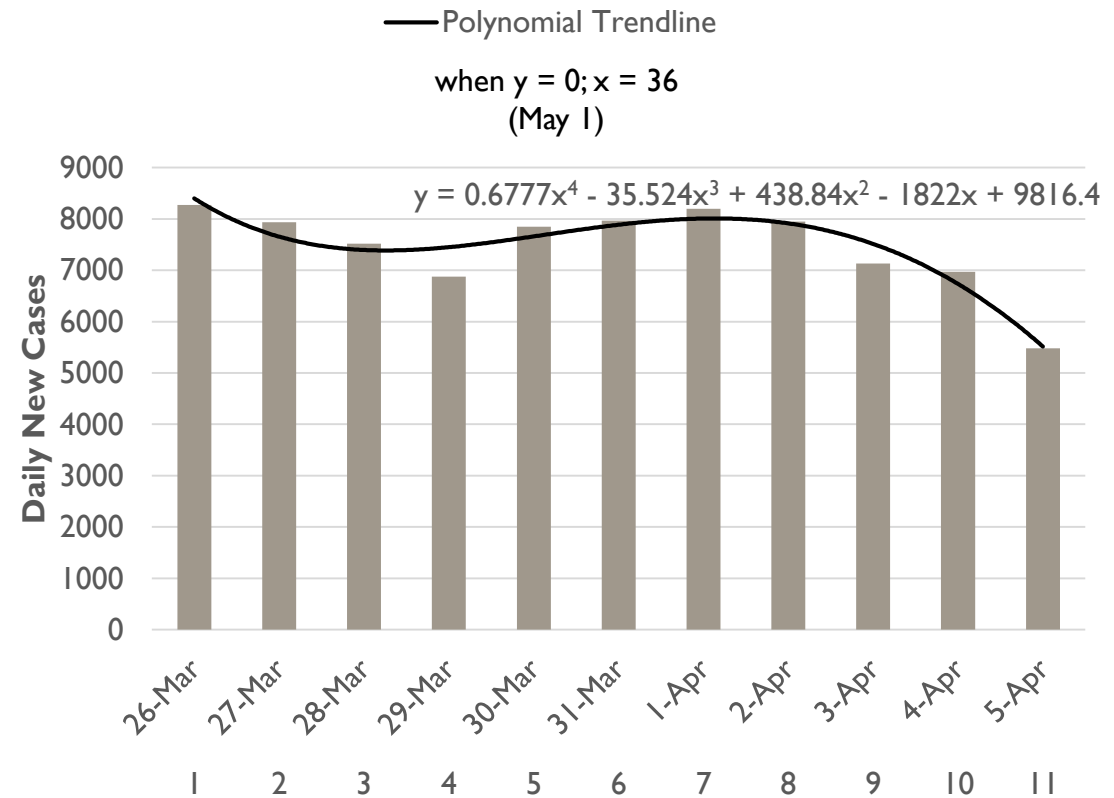


3-Day Moving Average Trendline



Trendlines for Spain

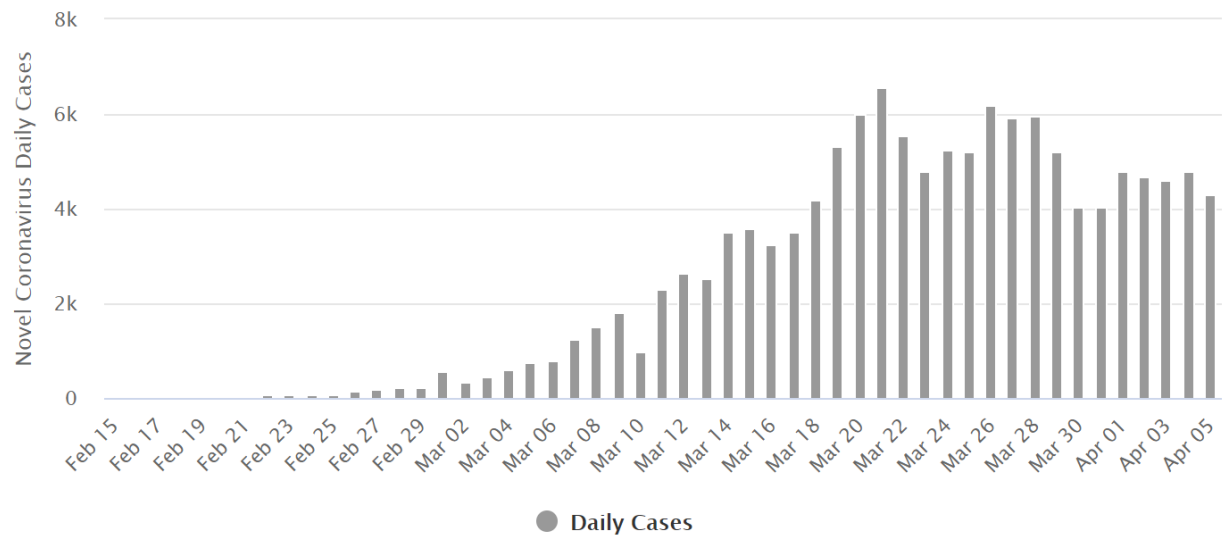
Spain Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in Italy

Daily New Cases

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

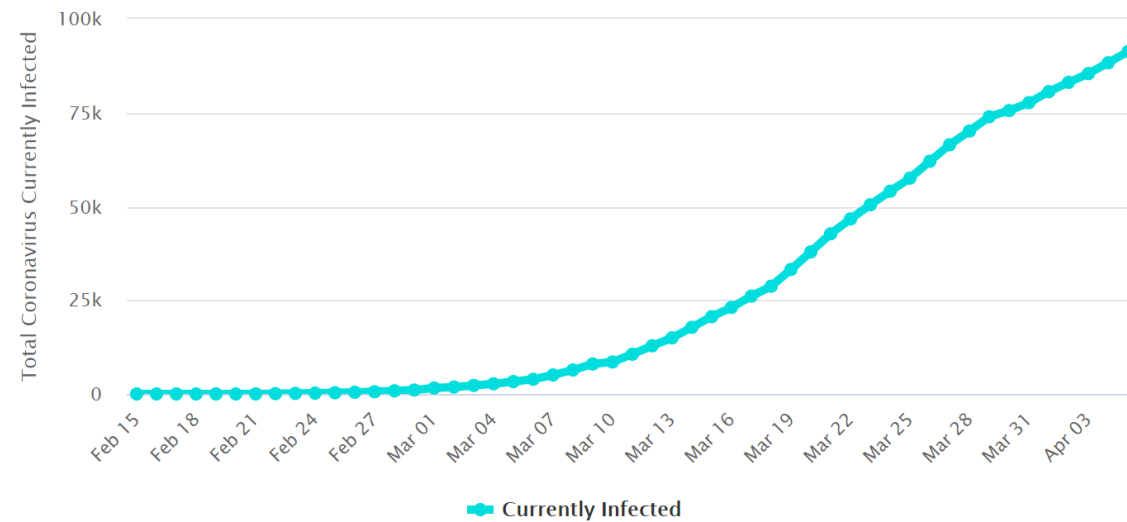


3. Italy

Active Cases in Italy

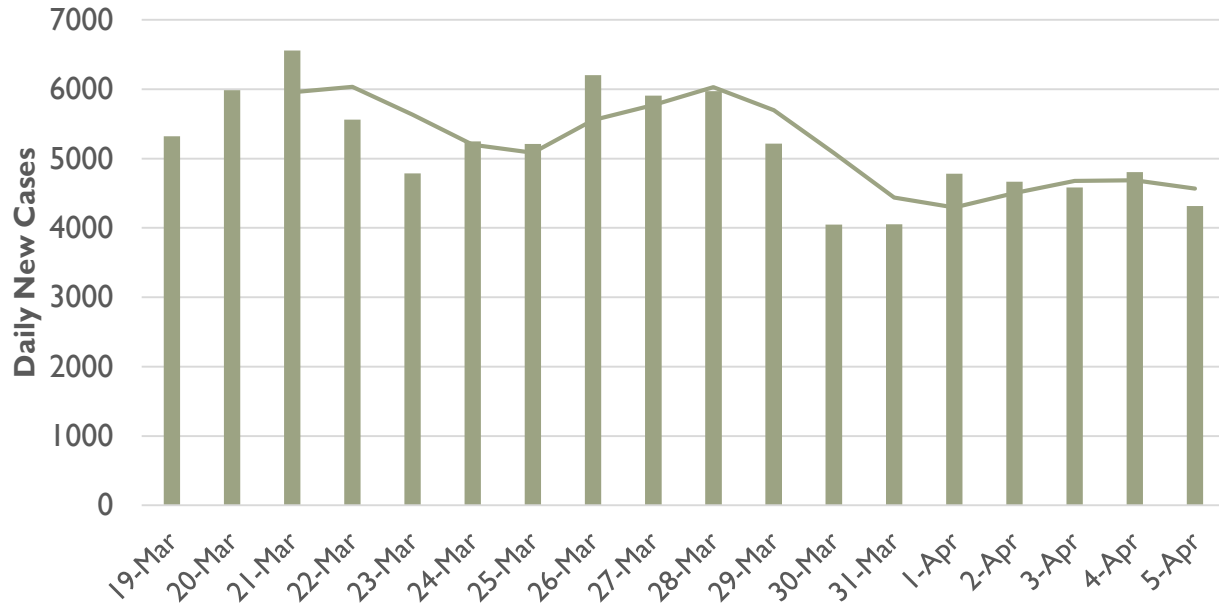
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

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

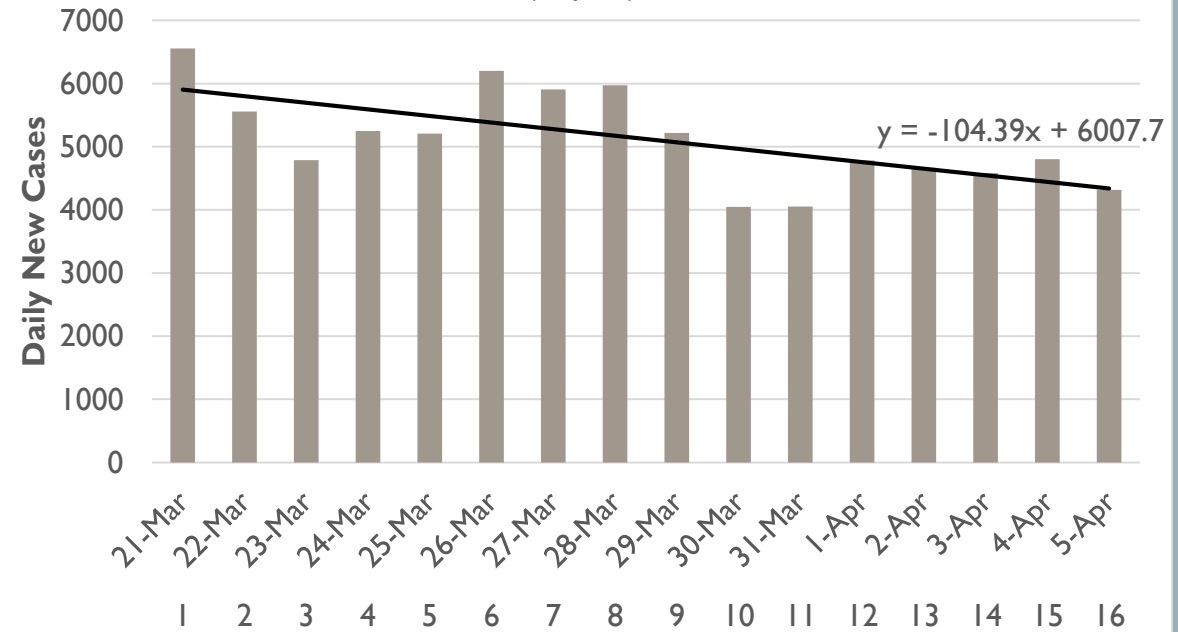


Trendlines for Italy

Italy Bar Chart of Daily New Cases from Peak till Today

Linear Trendline

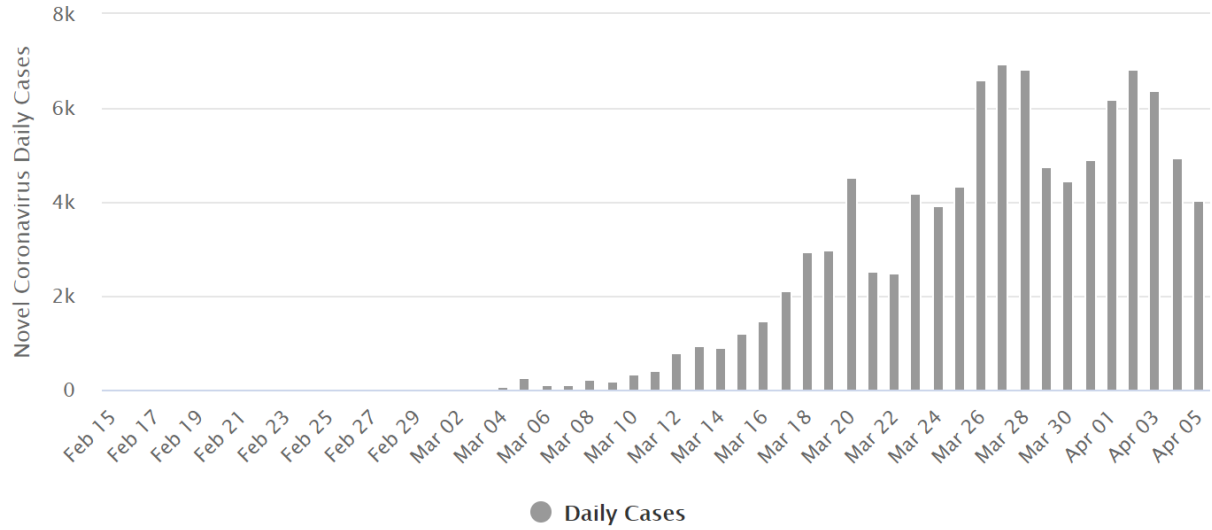
when $y = 0$; $x = 58$
(May 18)



Daily New Cases in Germany

Daily New Cases

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

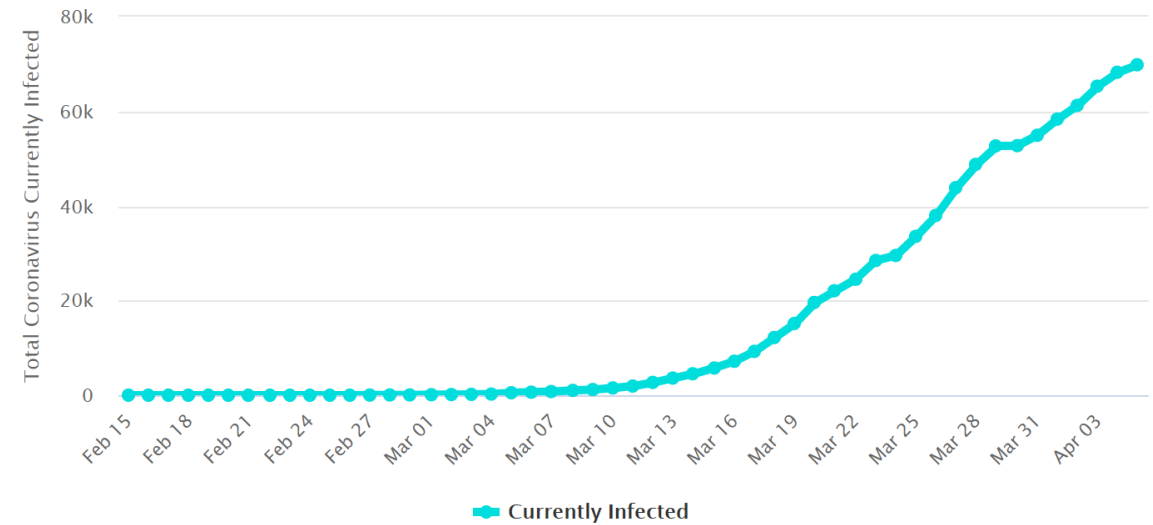


4. Germany

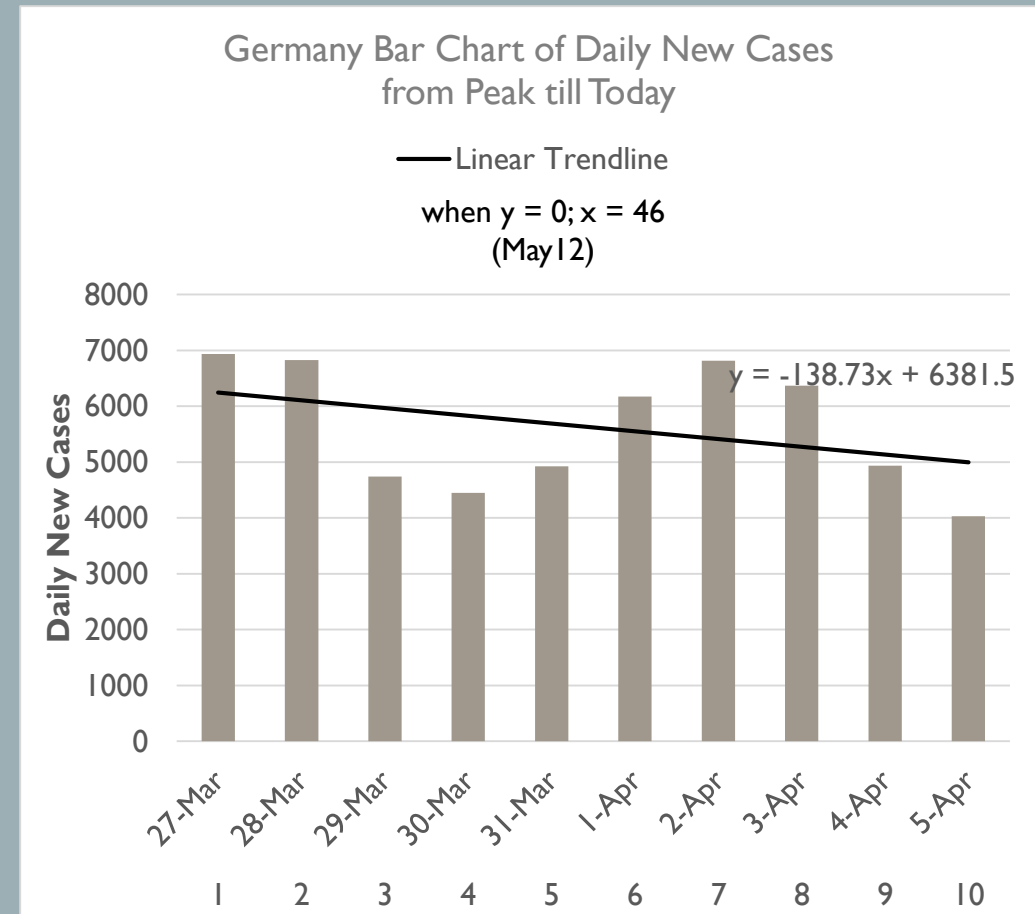
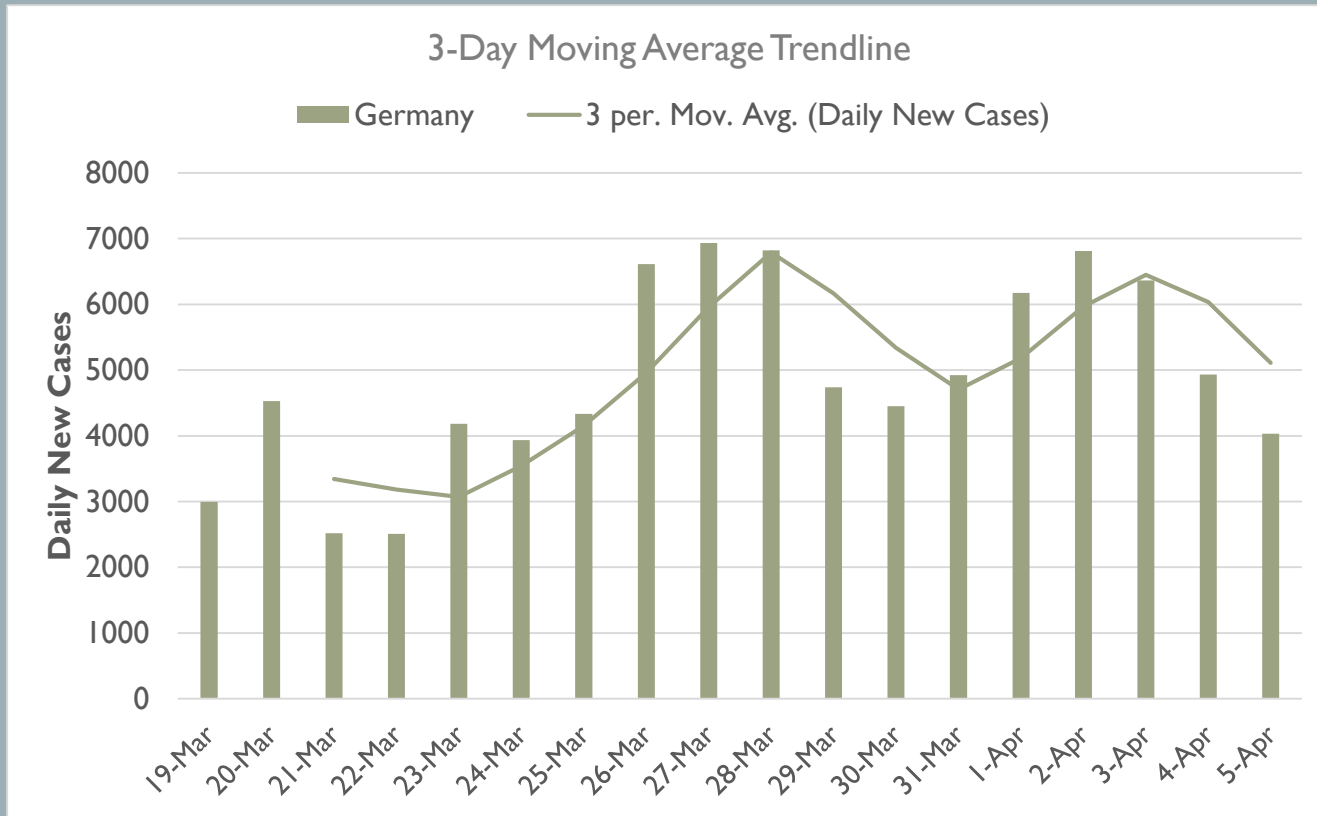
Active Cases in Germany

Active Cases

(Number of Infected People)



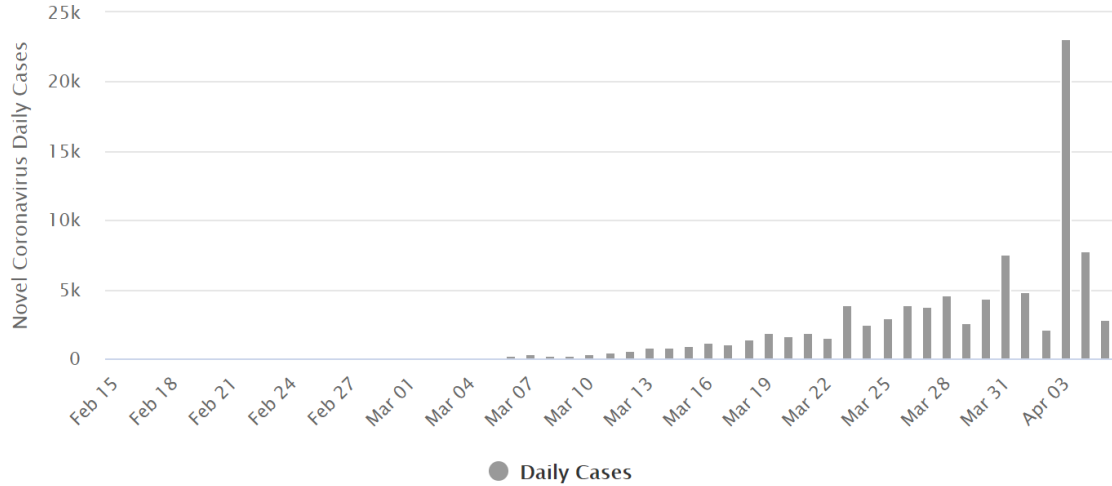
Trendlines for Germany



Daily New Cases in France

Daily New Cases

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

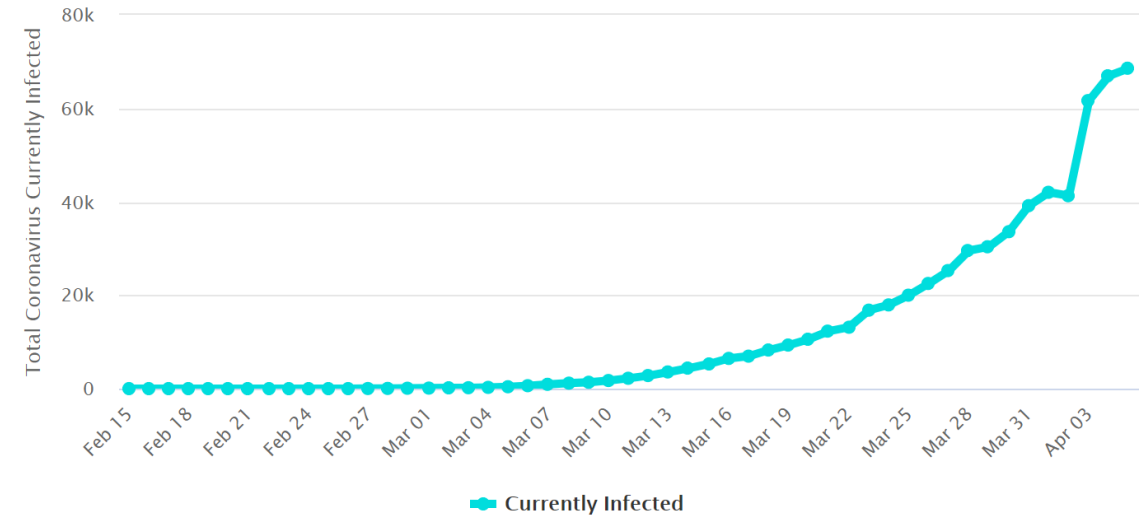


5. France

Active Cases in France

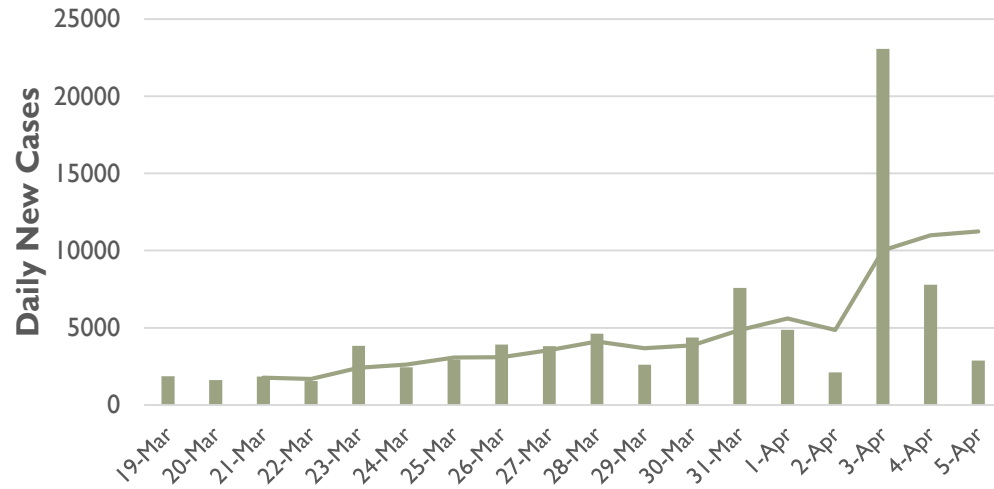
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

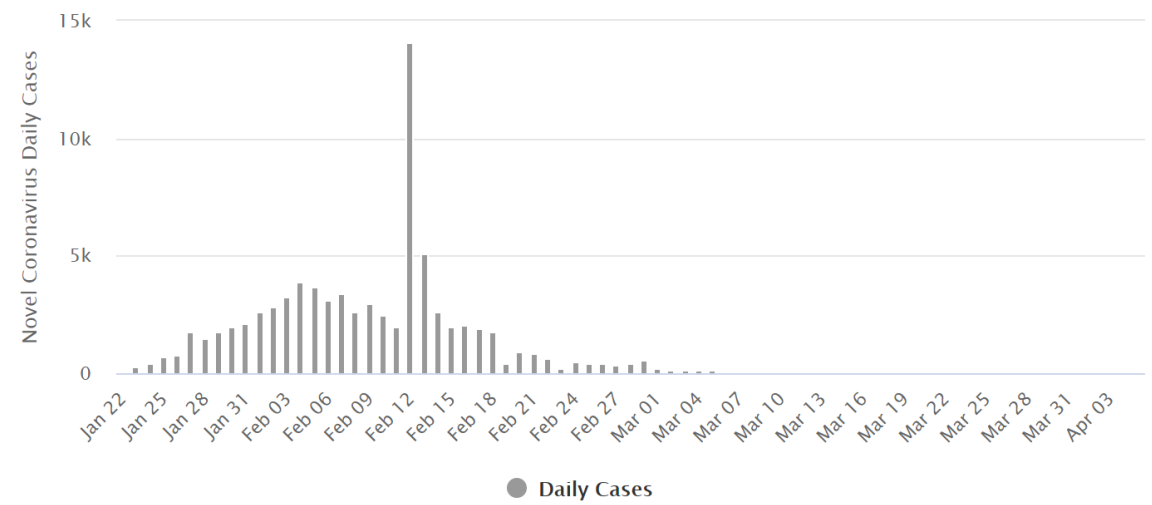
France 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in China

Daily New Cases

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

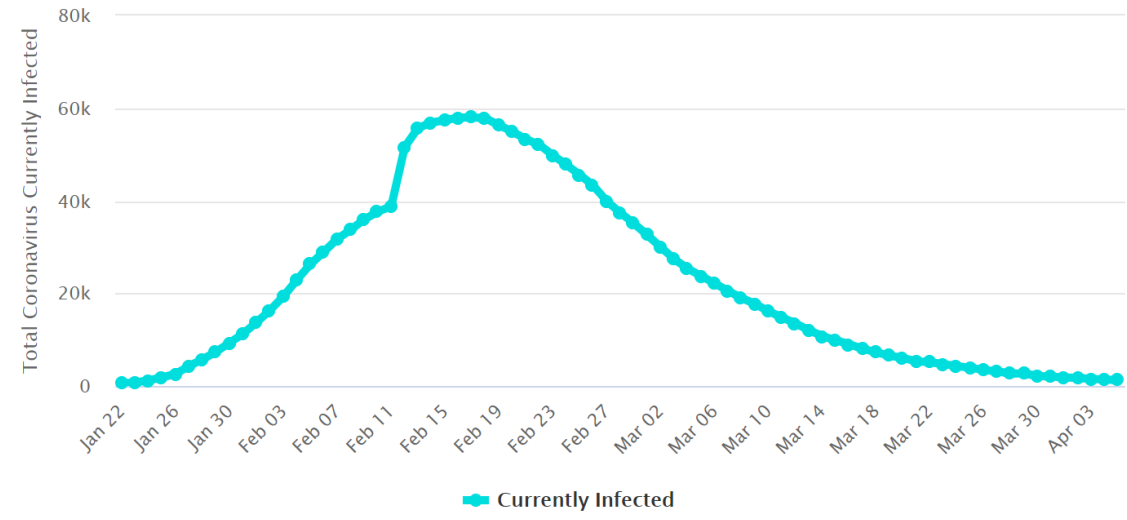


6. China

Active Cases in China

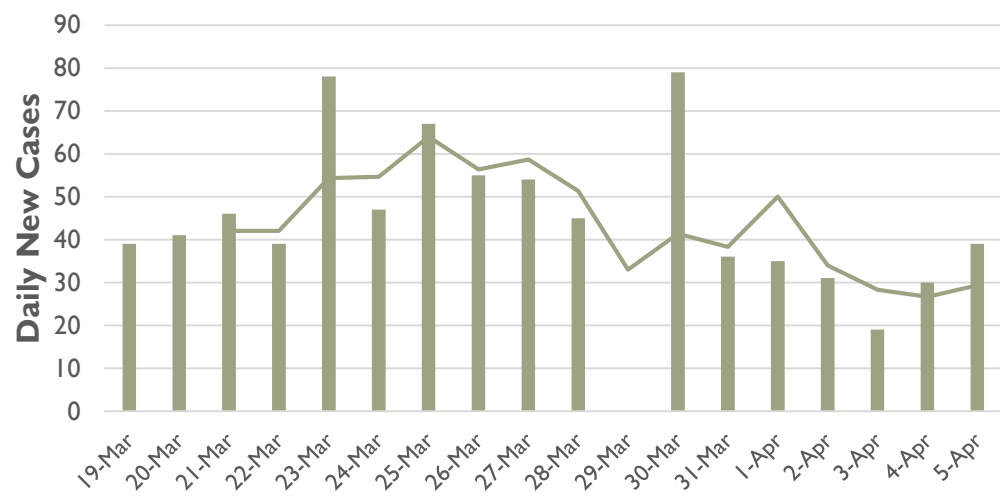
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

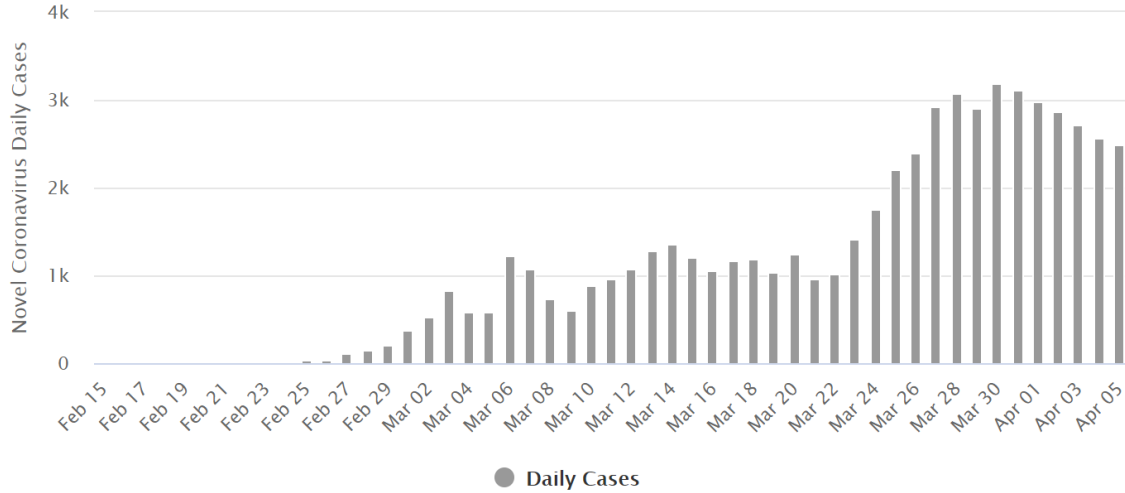
China 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Iran

Daily New Cases

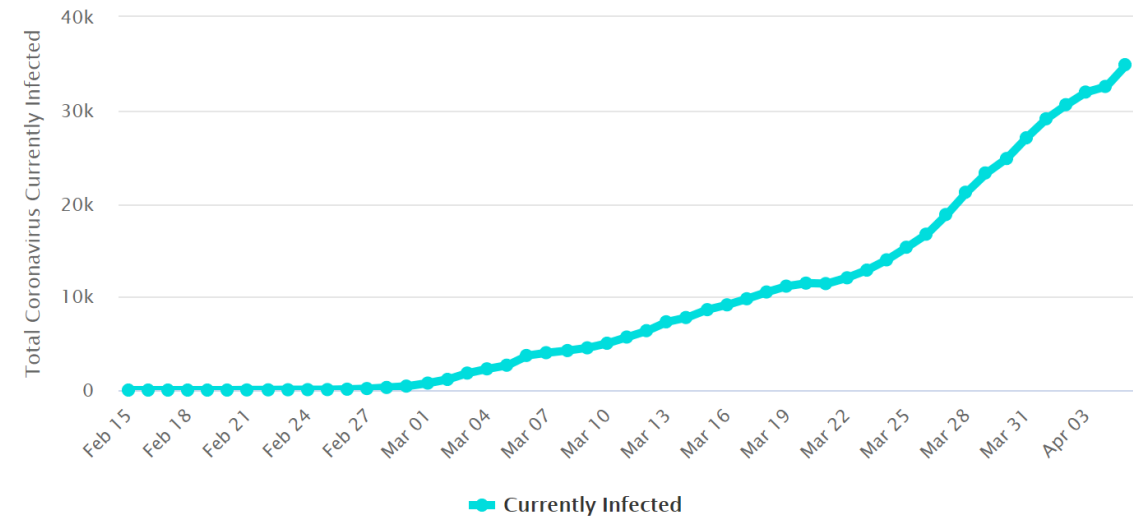
Cases per Day
Data as of 0:00 GMT+0



7. Iran

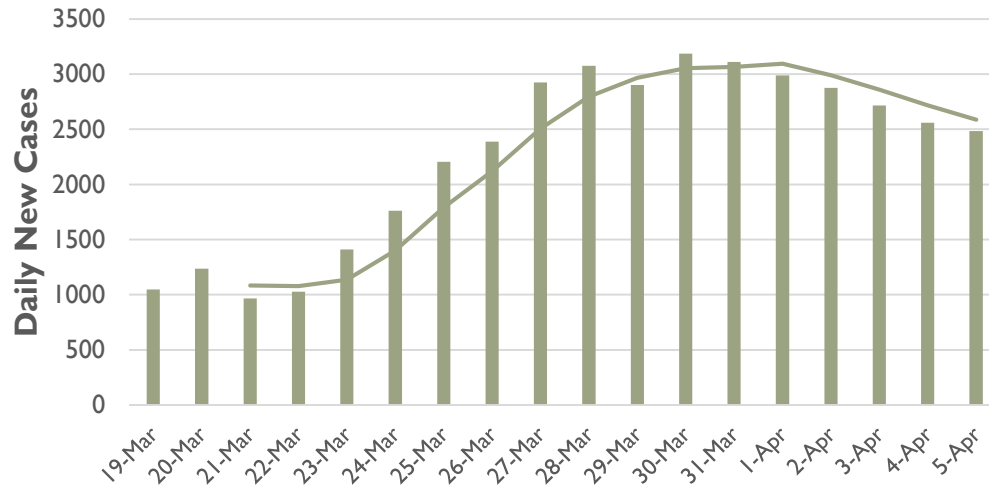
Active Cases in Iran

Active Cases
(Number of Infected People)



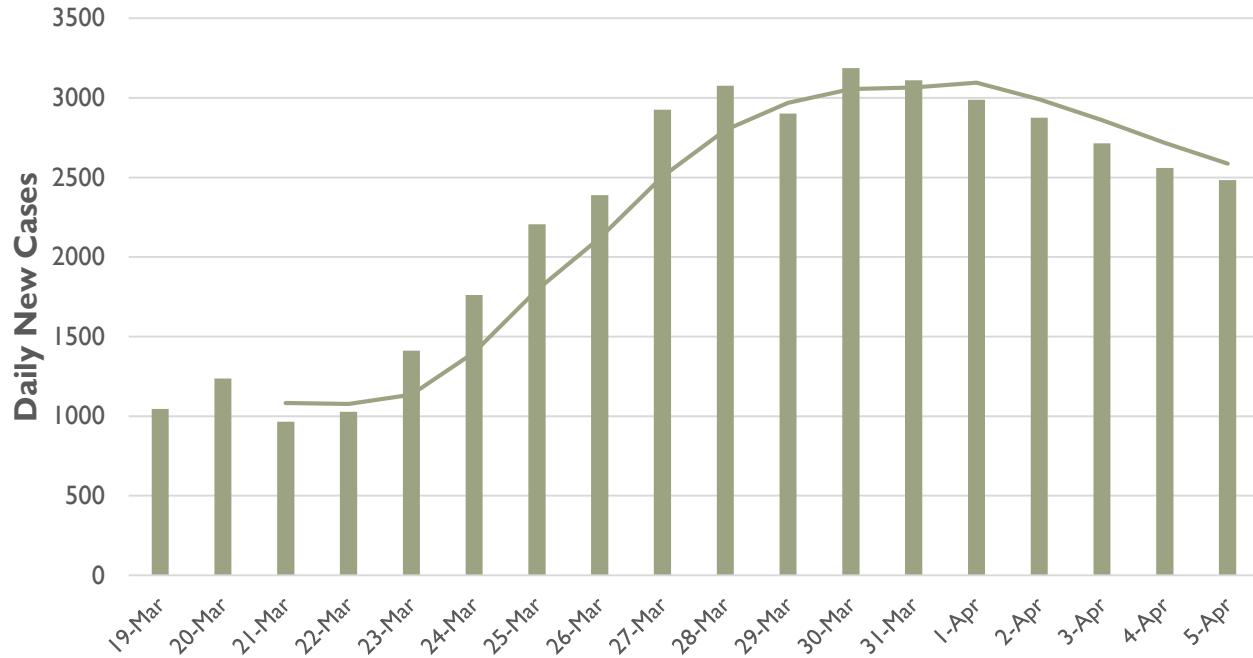
3-Day Moving Average Trendline

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



3-Day Moving Average Trendline

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

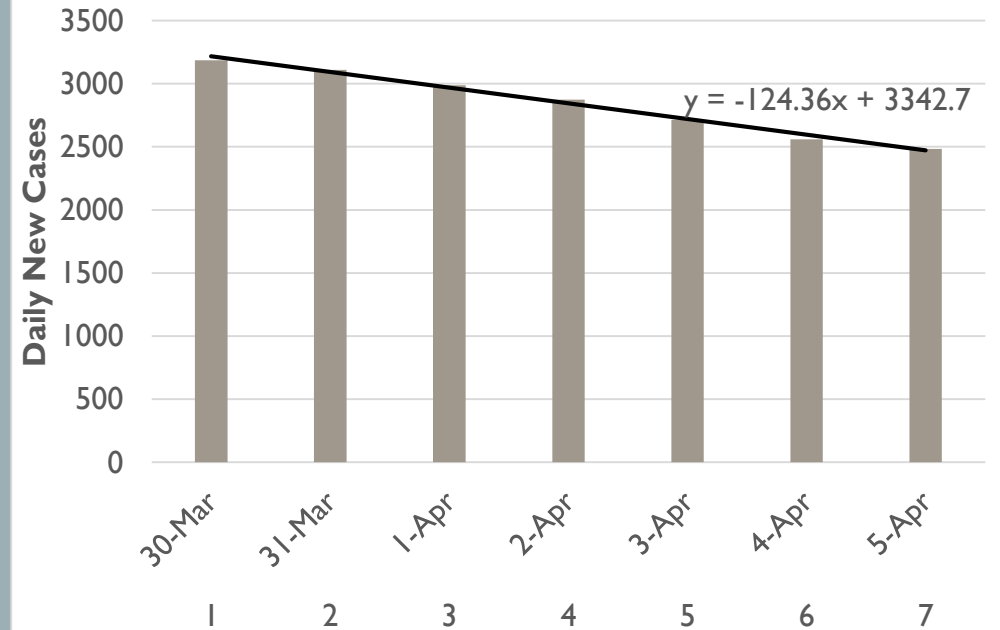


Trendlines for Iran

Iran Bar Chart of Daily New Cases from Peak Till Today

Linear Trendline

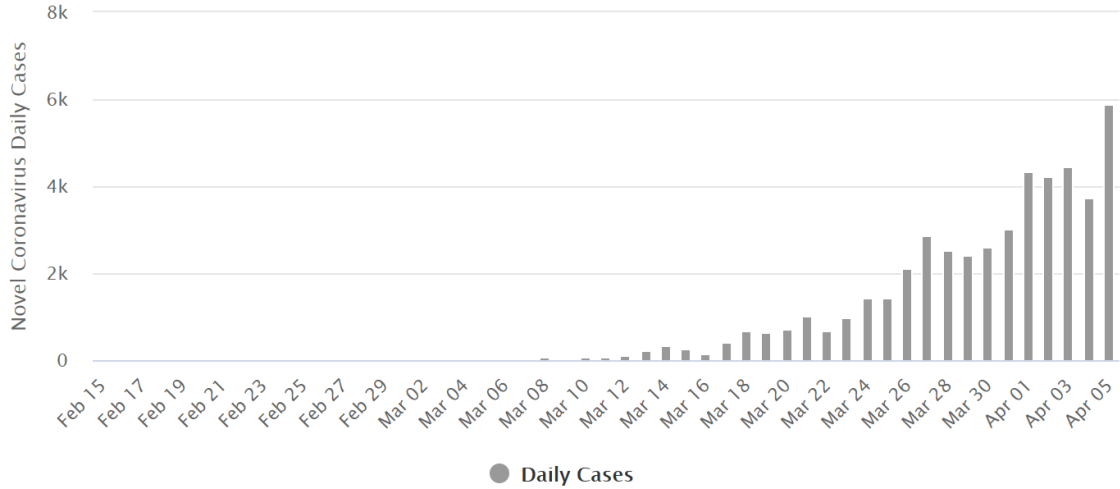
when $y = 0$; $x = 27$
(April 26)



Daily New Cases in the United Kingdom

Daily New Cases

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

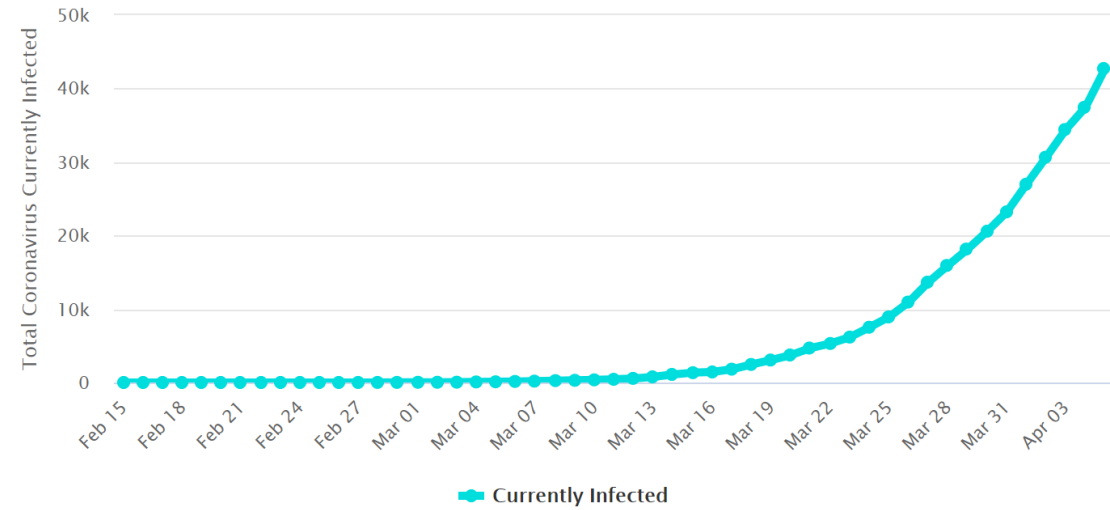


8. UK

Active Cases in the United Kingdom

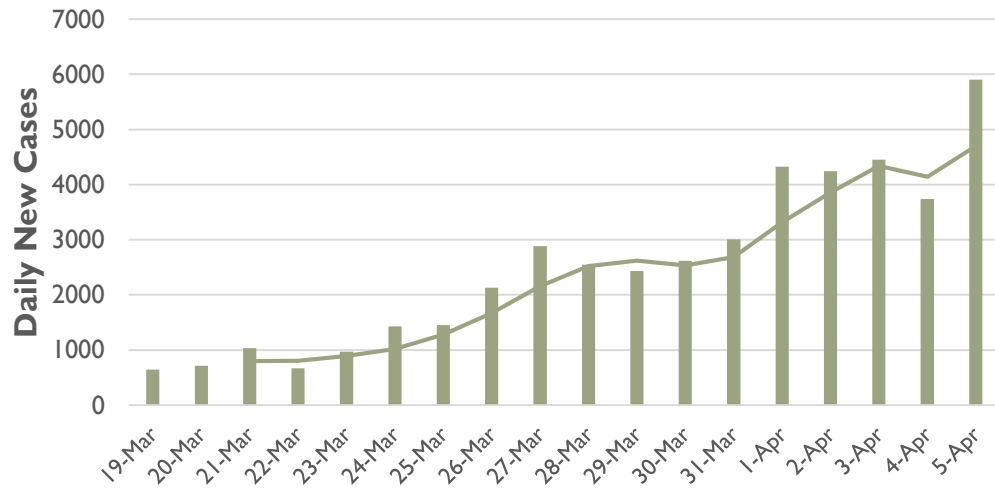
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

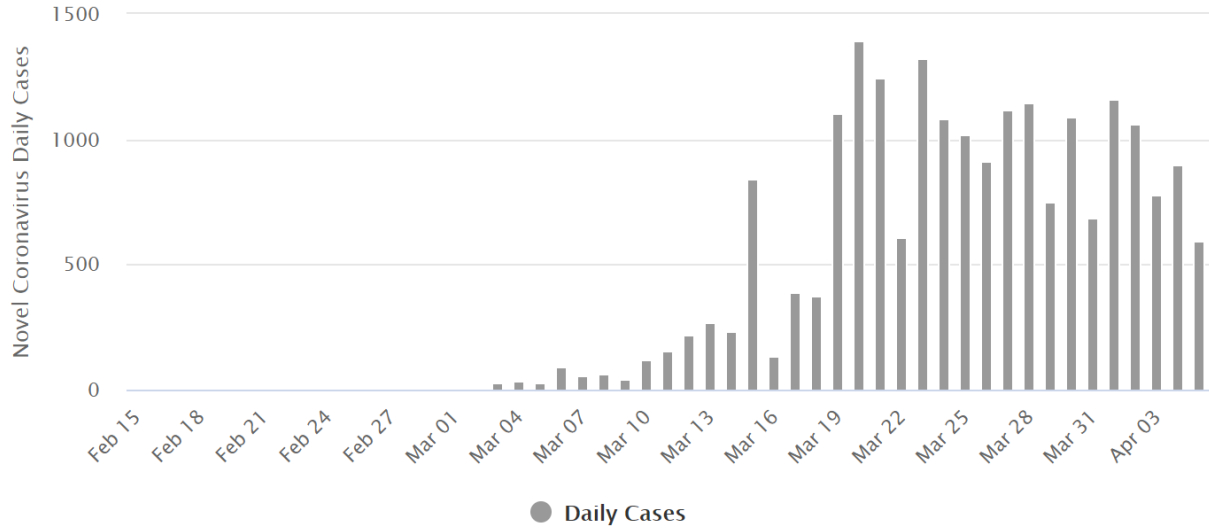
UK 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Switzerland

Daily New Cases

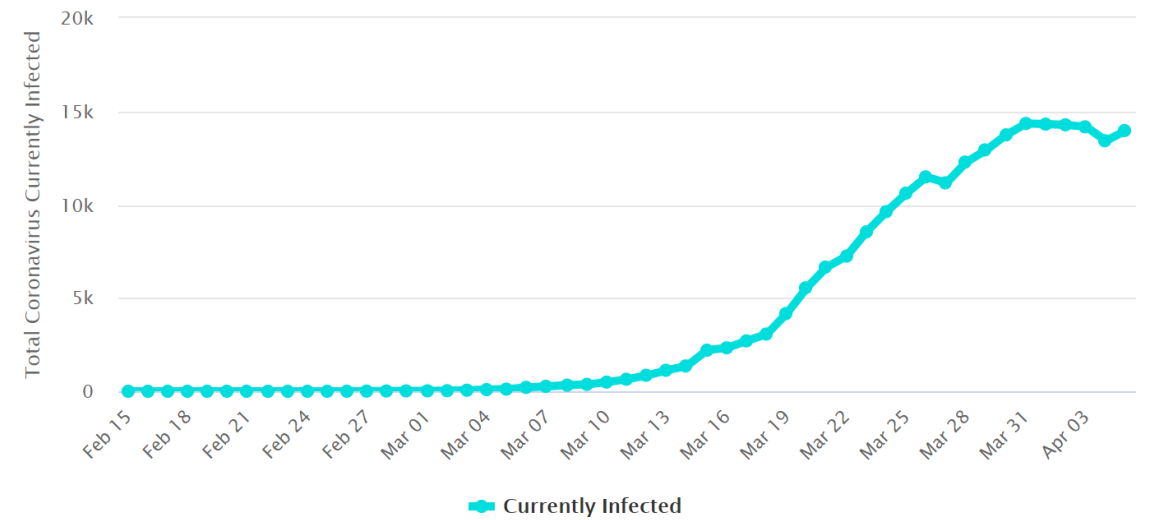
Cases per Day
Data as of 0:00 GMT+0



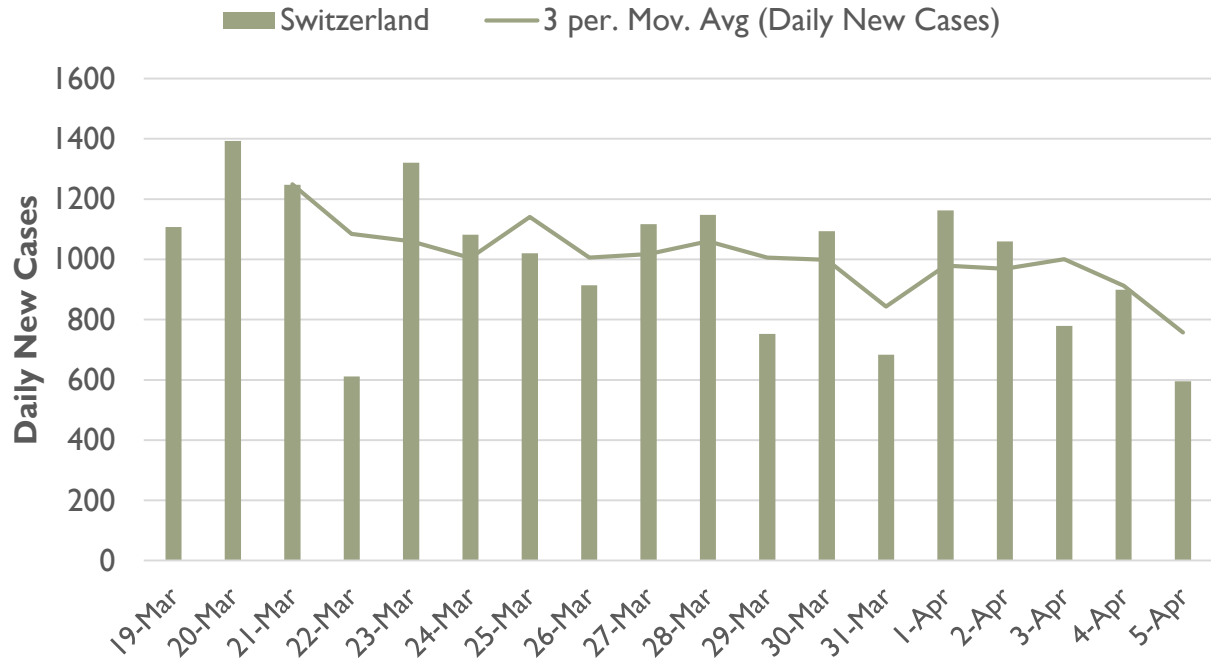
9. Switzerland

Active Cases in Switzerland

Active Cases
(Number of Infected People)

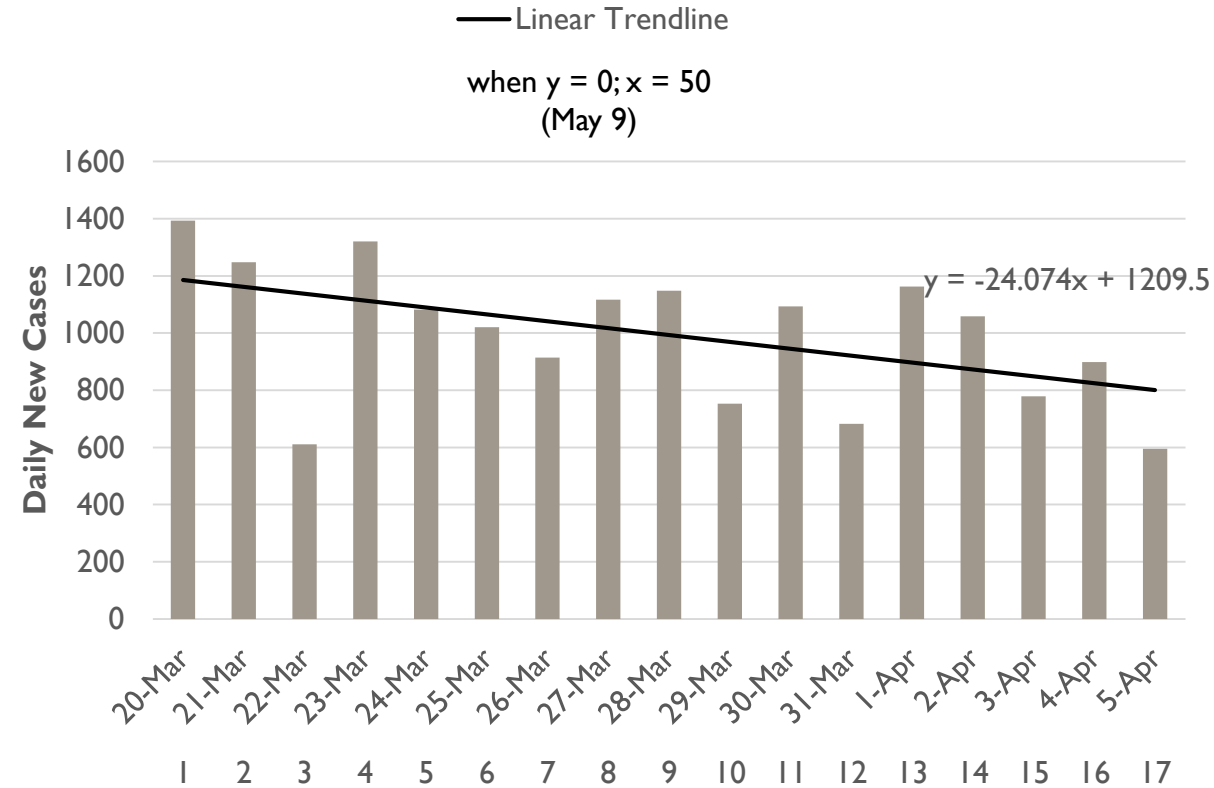


3-Day Moving Average Trendline

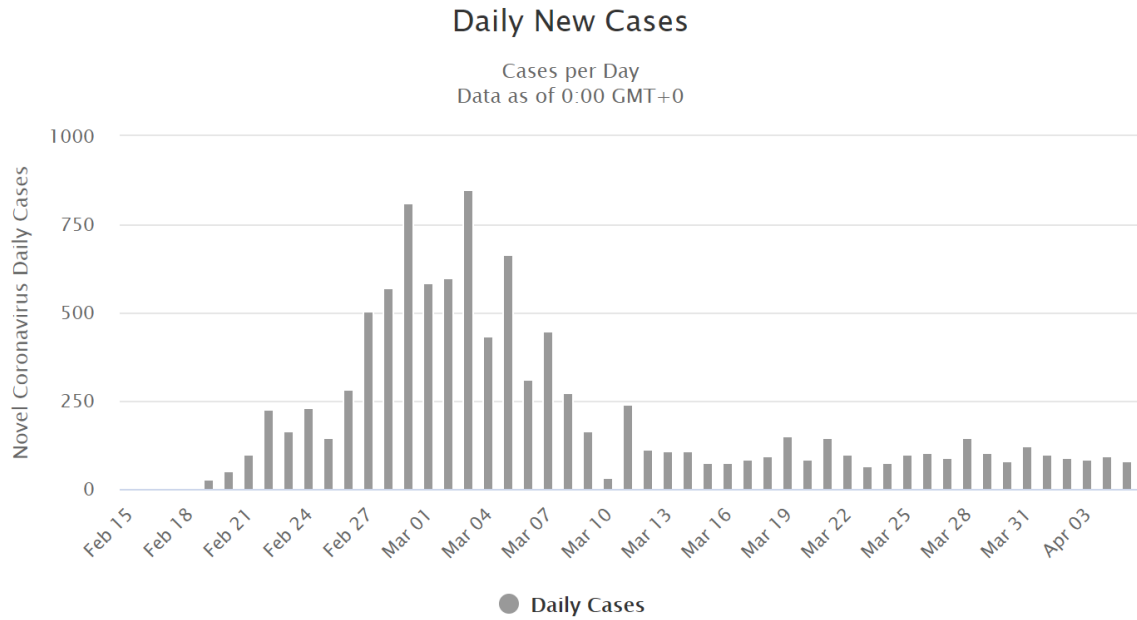


Trendlines for Switzerland

Switzerland Bar Chart of Daily New Cases from Peak till Today

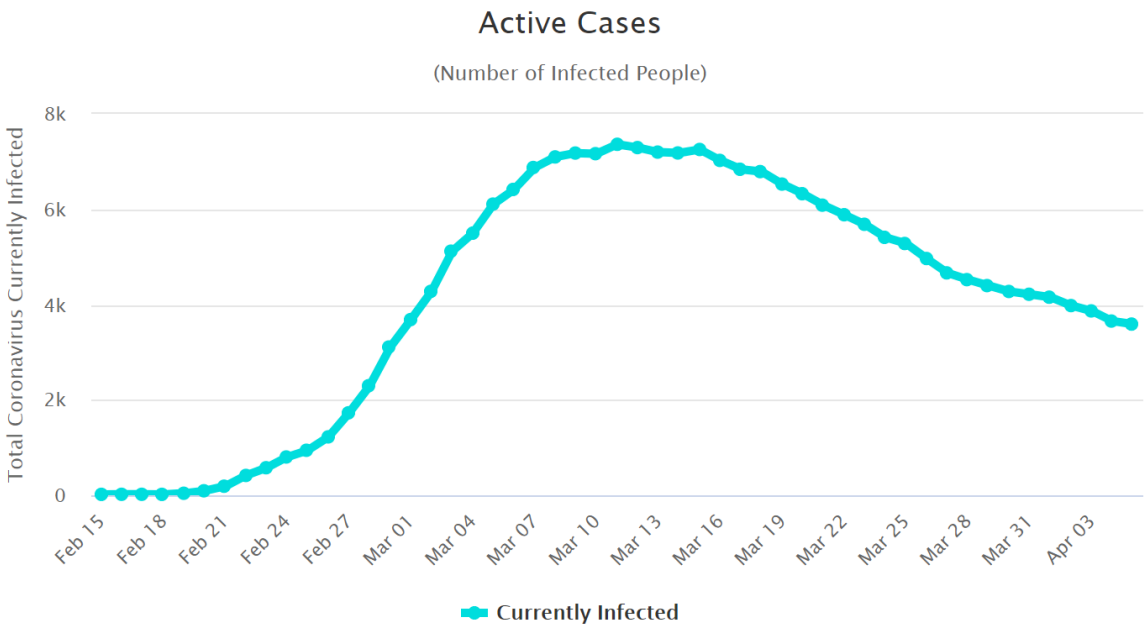


Daily New Cases in South Korea

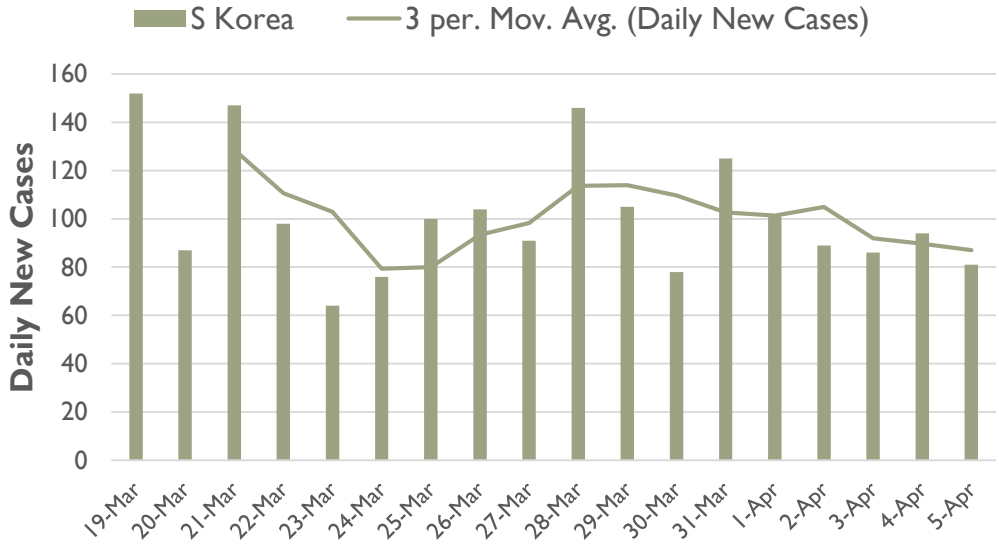


South Korea

Active Cases in South Korea



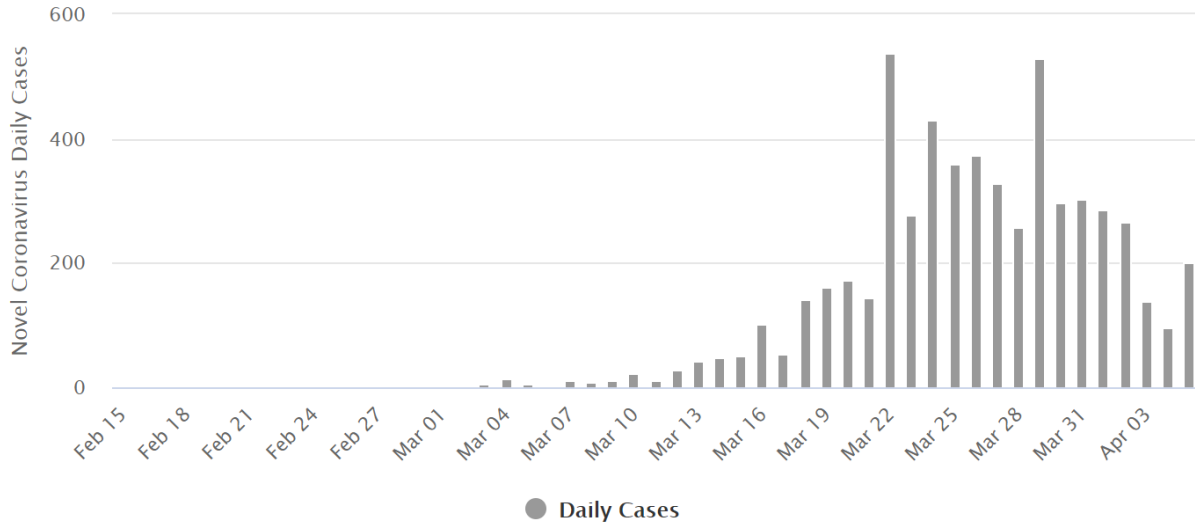
3-Day Moving Average Trendline



Daily New Cases in Australia

Daily New Cases

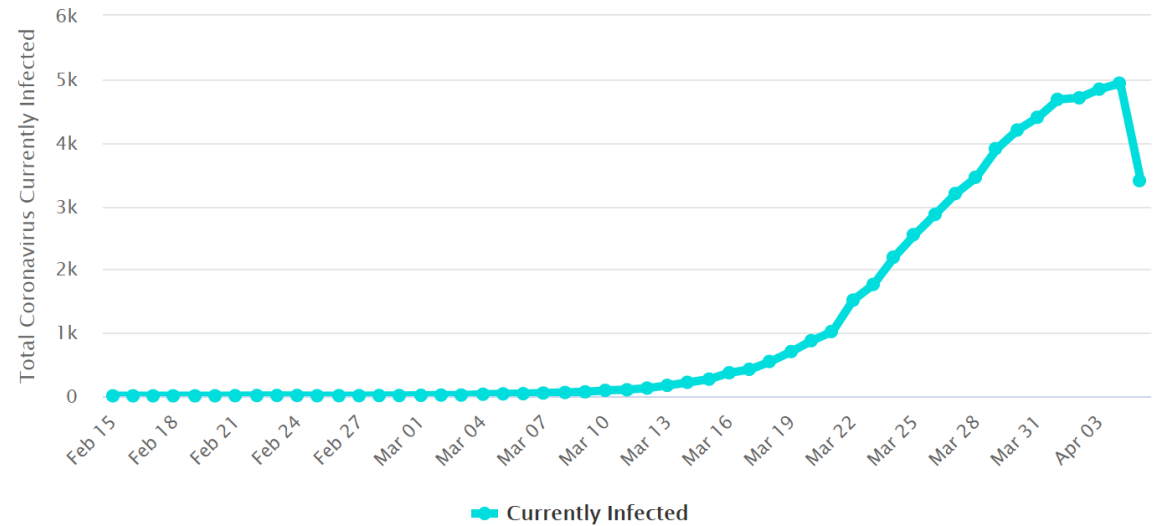
Cases per Day
Data as of 0:00 GMT+0



Australia

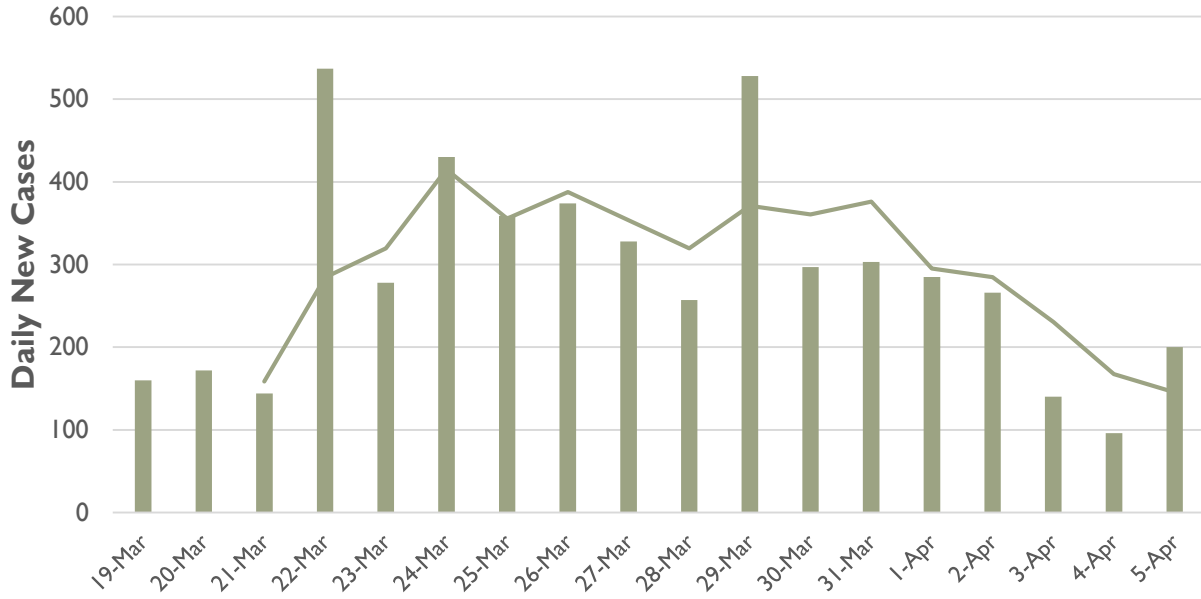
Active Cases in Australia

Active Cases
(Number of Infected People)



3-Day Moving Average Trendline

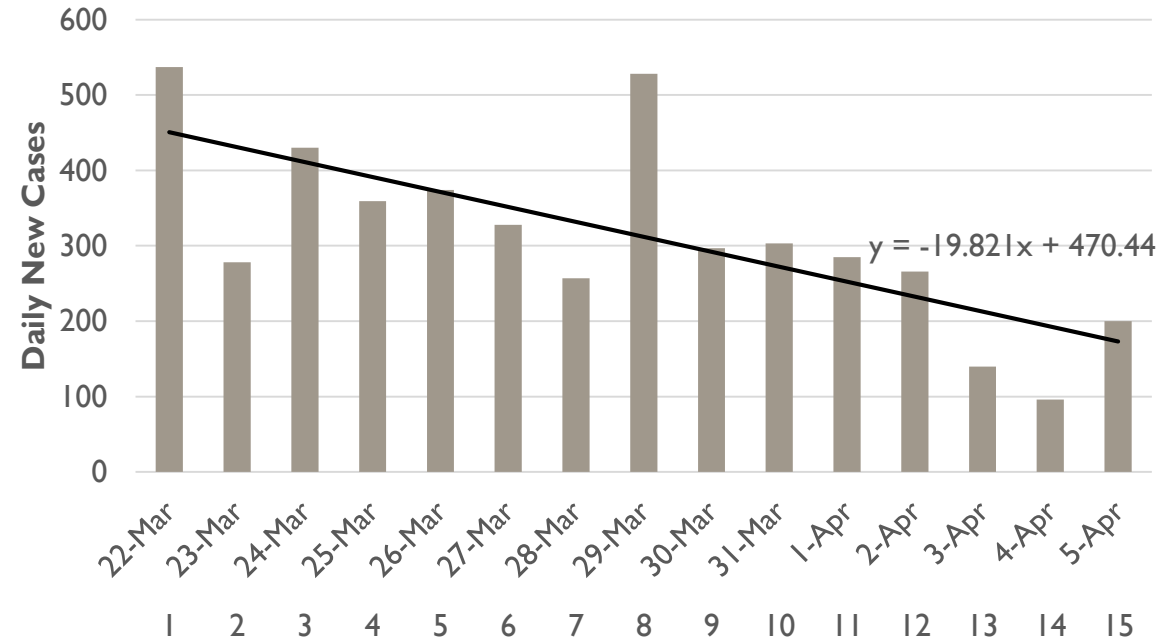
Australia 3 per. Mov. Avg. (Daily New Cases)



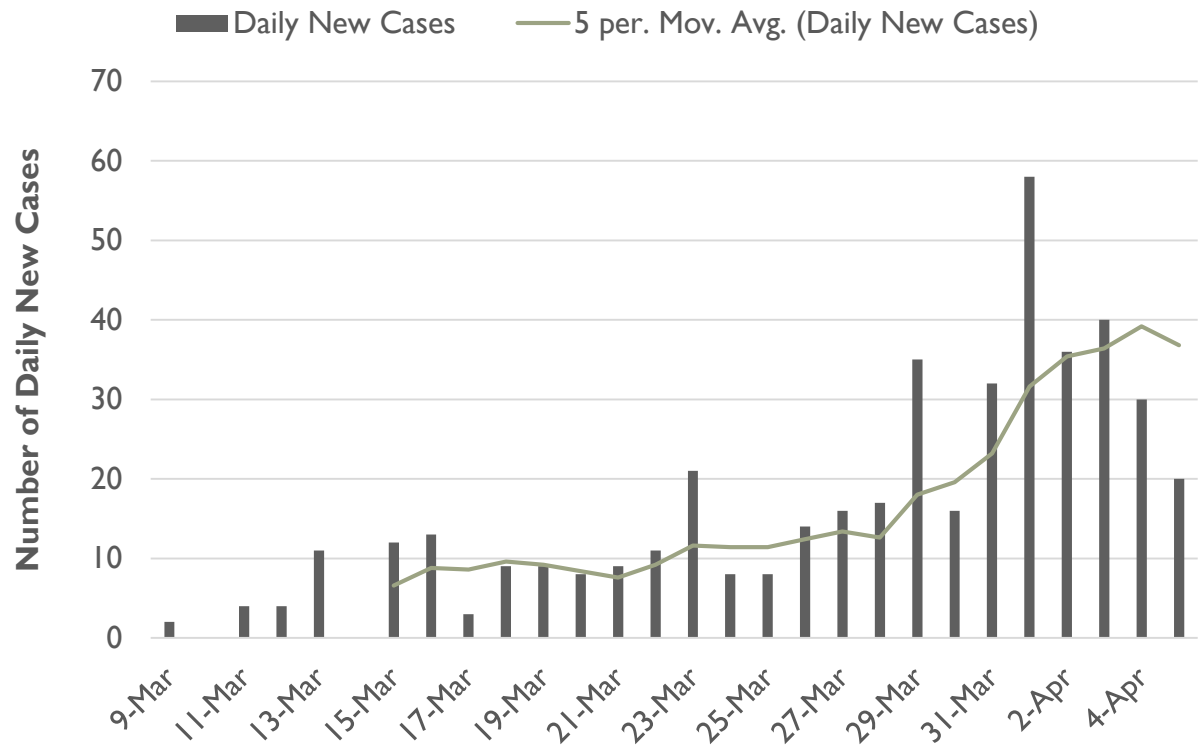
Trendlines for Australia

Australia Bar Chart of Daily New Cases from Peak till Today

Linear Trendline
when $y = 0$; $x = 24$
(April 15)



Daily New Cases in Cyprus

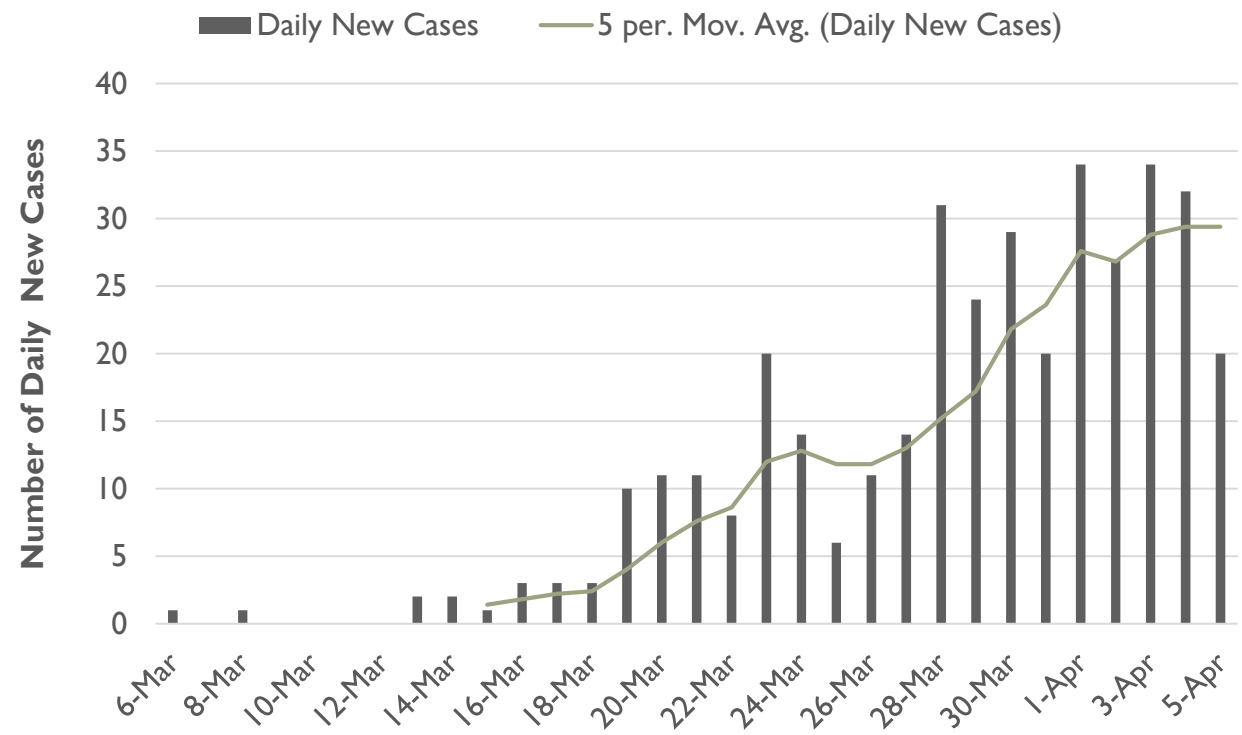


Cyprus

Correlation, r (Between Cyprus and Hawaii) = 0.780
 r is significant at $\alpha = 5\%$

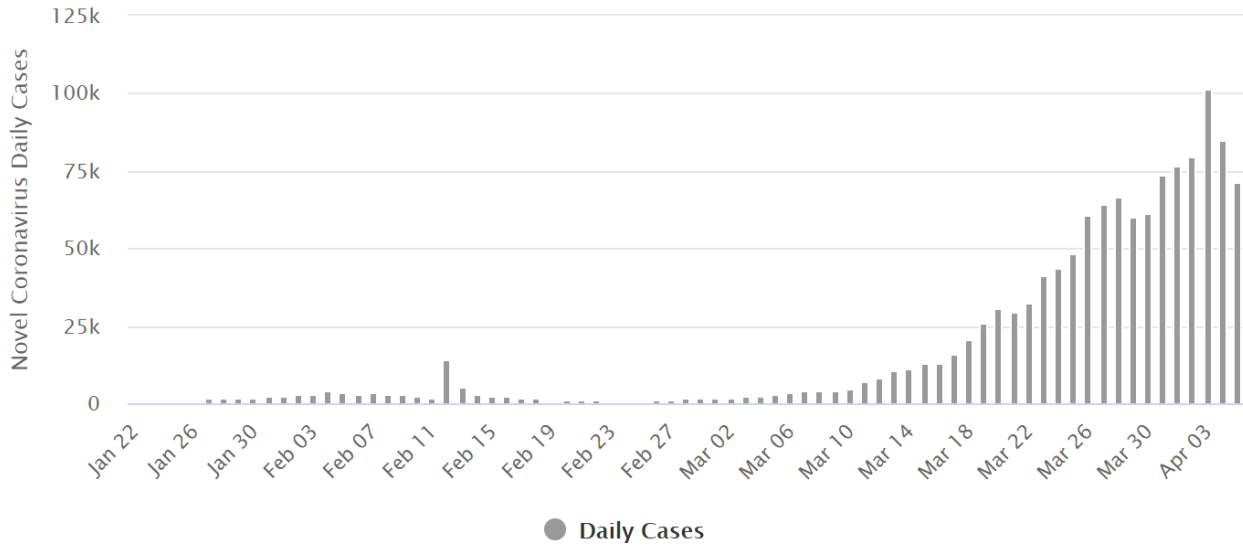
Hawaii

Daily New Cases in Hawaii



Daily New Cases

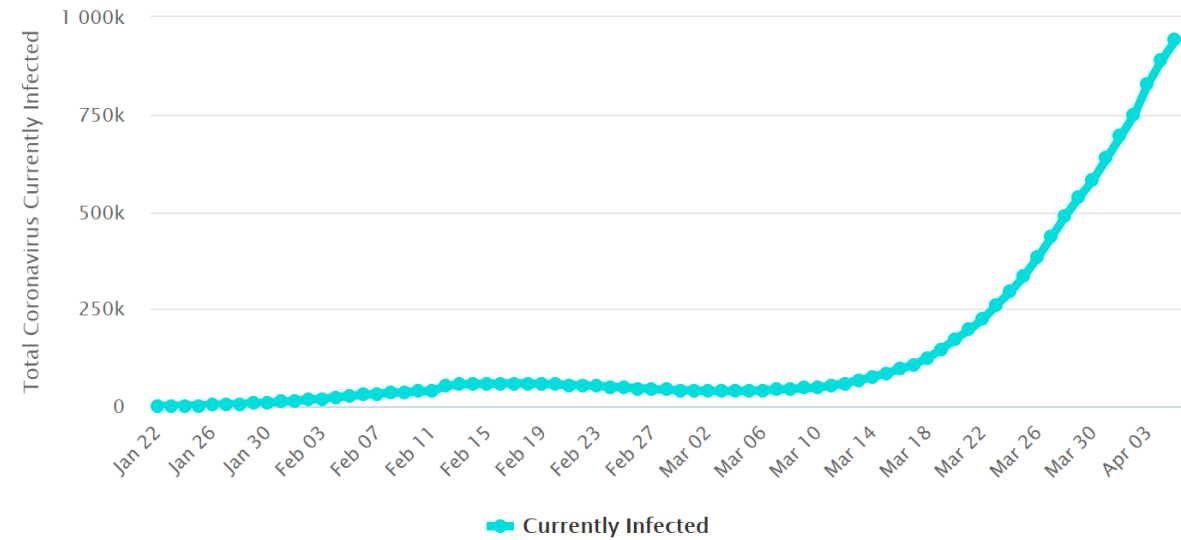
Cases per Day
Data as of 0:00 GMT+0



Worldwide

Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

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

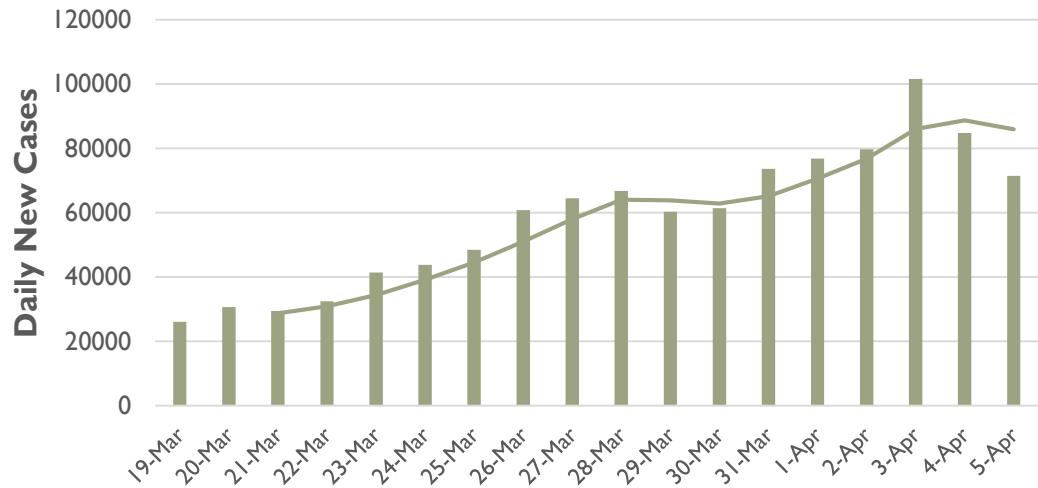


Table 1.a

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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Table 1.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
USA	1.152	1.142	1.129	1.092	1.077	1.074	1.092	1.103	1.111	1.016
Spain	1.236	1.036	1.002	1.014	0.996	1.009	1.014	1.011	0.978	0.932
Italy	1.019	1.049	1.004	0.961	0.923	0.968	0.961	0.983	1.037	1.017
Germany	1.257	1.120	1.071	1.039	0.954	0.996	1.019	1.067	1.035	0.977
France	1.321	1.071	1.056	1.154	1.232	1.166	1.011	3.078	2.809	2.537
China	1.166	0.933	0.812	0.659	0.568	0.565	0.578	0.732	0.901	1.070
Iran	1.236	1.172	1.111	1.080	1.059	1.006	0.988	0.988	0.957	0.956
UK	1.354	1.239	1.135	1.147	1.084	1.100	1.120	1.138	1.091	1.177
Switzerland	1.208	0.982	0.949	1.051	0.996	1.093	1.069	1.085	1.026	1.033
S Korea	1.014	1.205	1.111	0.996	1.109	1.095	0.951	1.000	1.070	0.922
Australia	0.964	1.017	1.118	1.064	1.060	1.072	1.102	0.797	0.821	1.034
Cyprus	1.237	1.067	1.403	1.294	1.344	1.478	1.390	1.200	1.259	0.992
Hawaii	1.347	1.290	1.305	1.461	1.232	1.317	1.033	1.130	1.077	1.064
Worldwide	1.151	1.103	1.072	1.054	1.043	1.040	1.040	1.115	1.078	1.006

Table 2

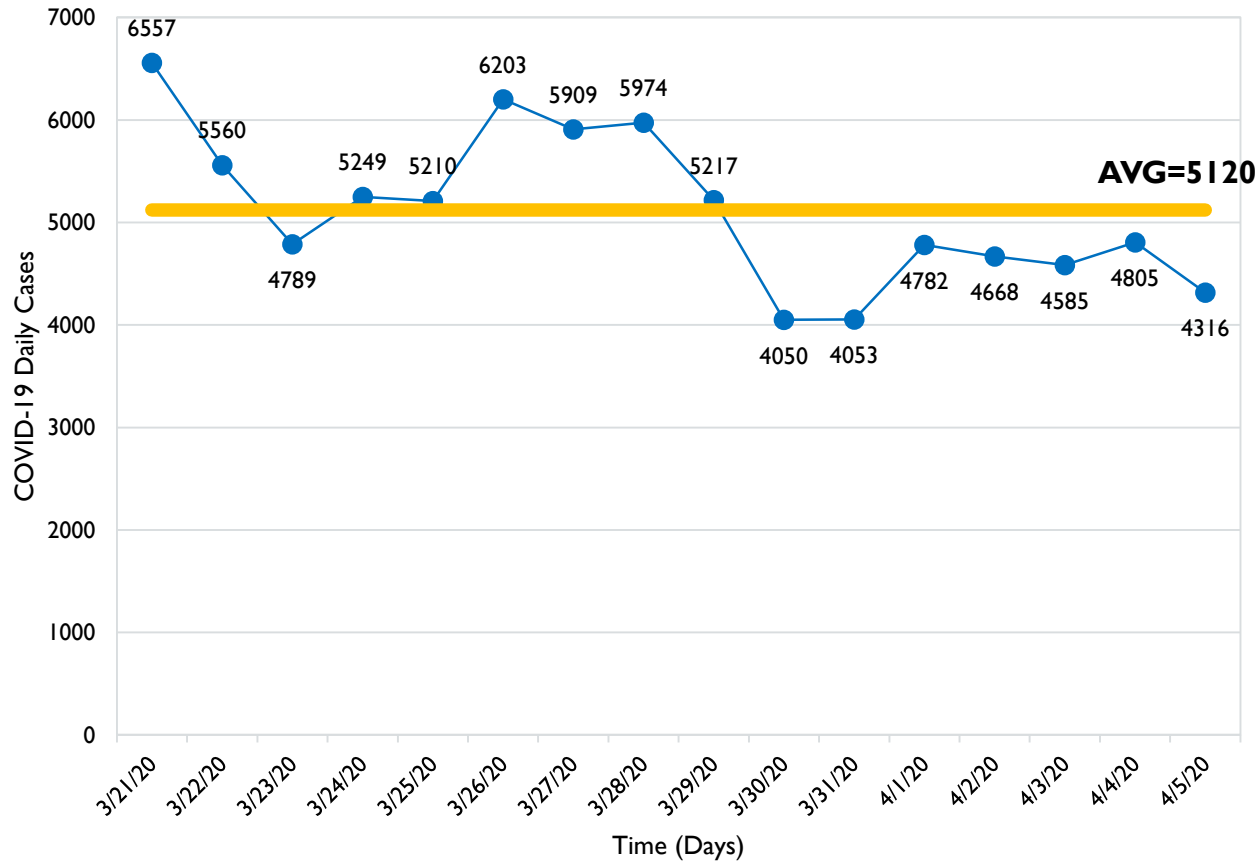
RATIO OF THE AVERAGE NEW CASES OF RECENT THREE DAYS TO MAX DAILY PEAK

	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
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
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
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
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
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
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
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
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
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	1.273
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
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
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
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
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

COVID-19 CONTROL CHART ANALYSIS

Italy

Control Chart of COVID-19 Daily Cases in Italy (3/21/20 - 4/5/20)

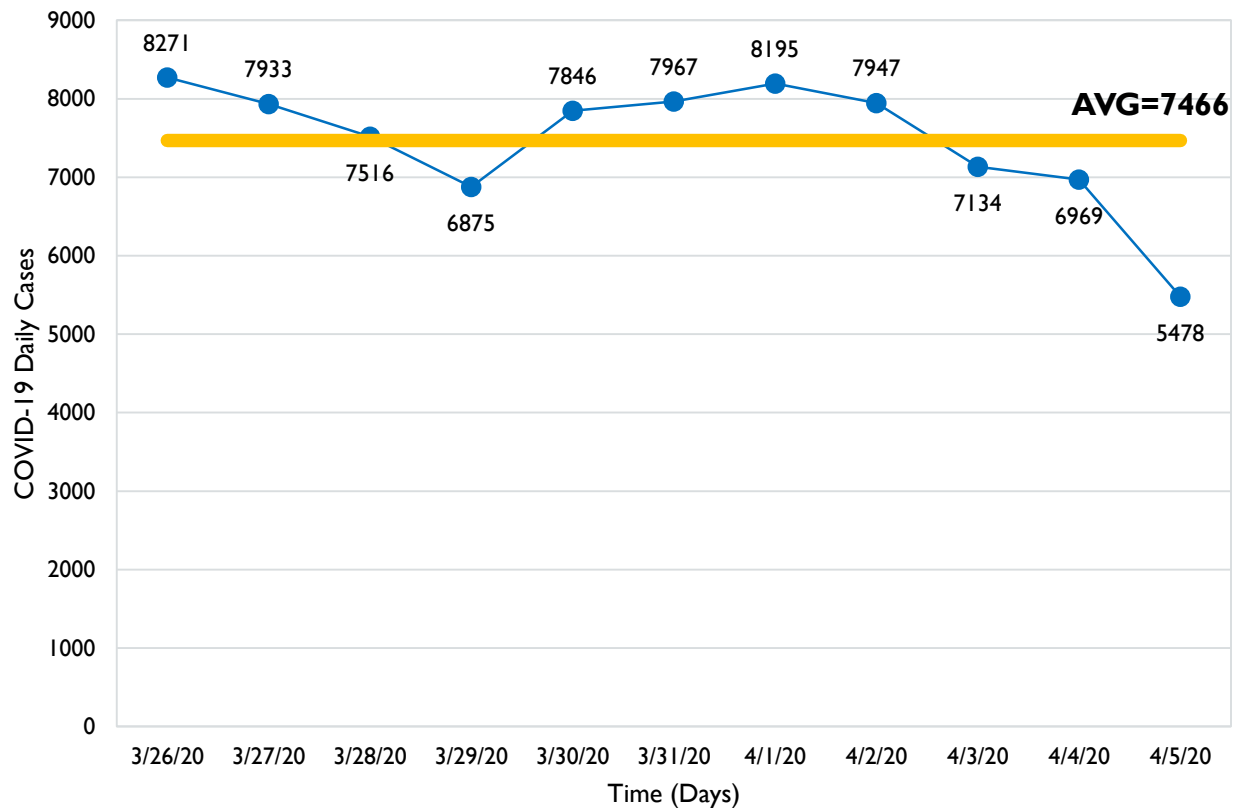


Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
- 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 4/1/20 to 4/5/20) 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 downward slope.

Spain

Control Chart of COVID-19 Daily Cases in Spain (3/26/20 - 4/5/20)

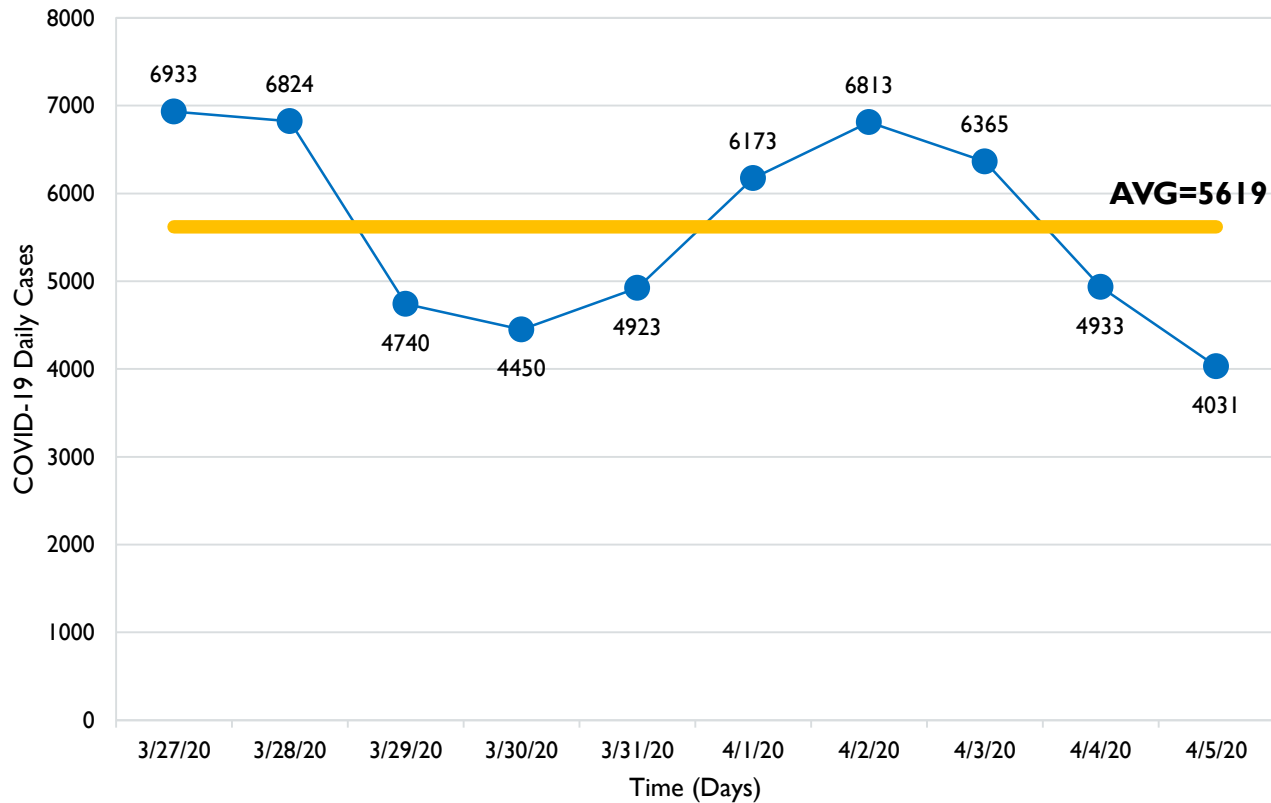


Control Chart Analysis:

- 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 4/3/20 to 4/5/20) 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.
 - Four points (from 3/30/20 to 4/2/20) are above the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Spain (not a good sign).

Germany

Control Chart of COVID-19 Daily Cases in Germany (3/27/20 - 4/5/20)

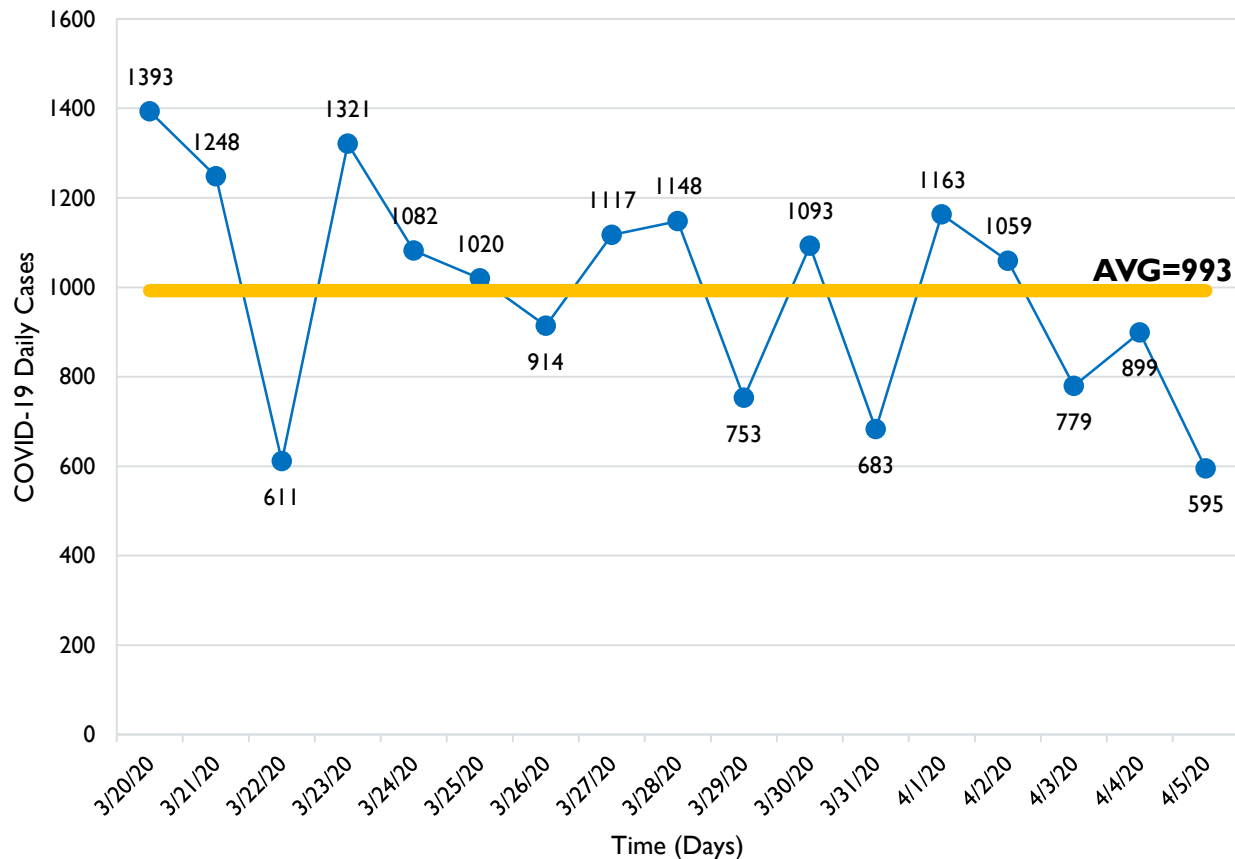


Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - There is an 'out-of-control' pattern in both directions. However, a linear trend line with a downward slope can be observed from 3/27/20.

Switzerland

Control Chart of COVID-19 Daily Cases in Switzerland (3/20/20 - 4/5/20)

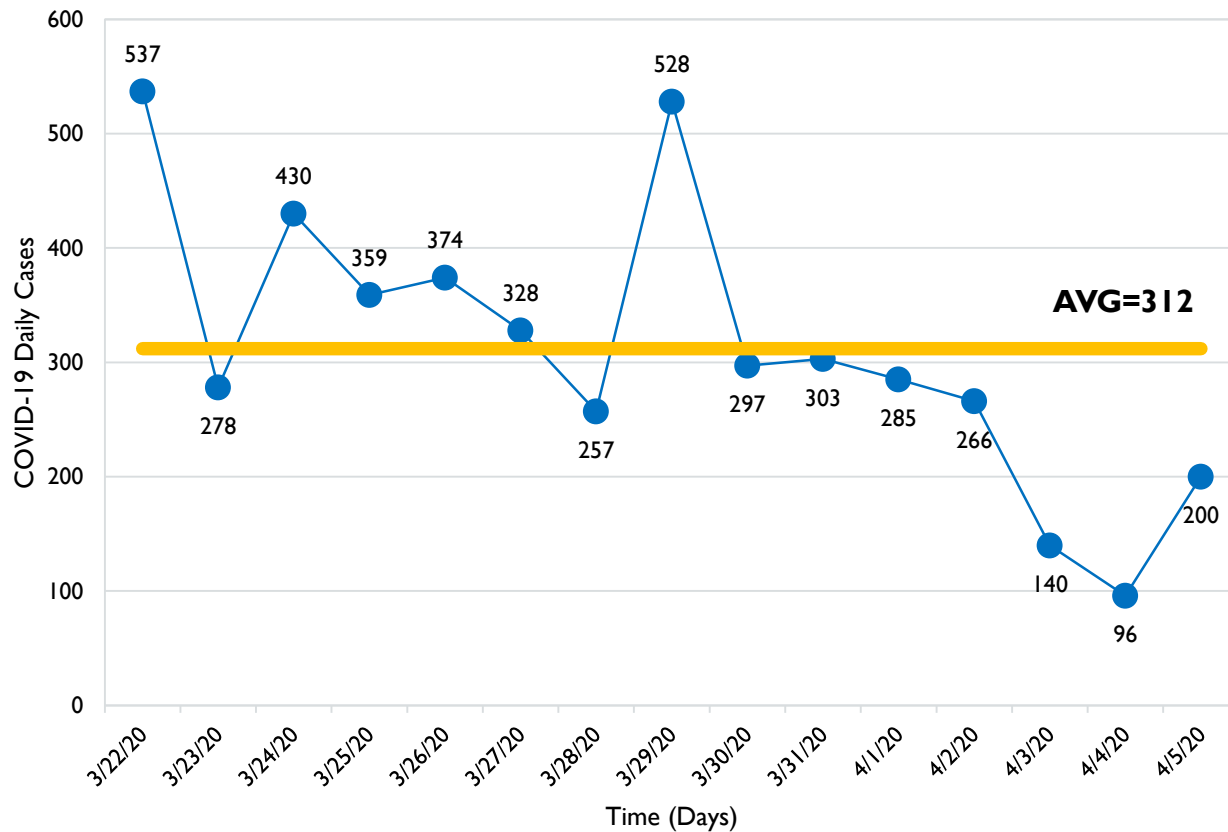


Control Chart Analysis:

- 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 4/3/20 to 4/5/20) 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.
 - Four points (from 3/20/20 to 3/24/20) are above the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Switzerland (not good). However, the linear trend line has a visible downward slope.

Australia

Control Chart of COVID-19 Daily Cases in Australia (3/22/20 - 4/5/20)



Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - Three points (from 4/2/20 to 4/4/20) 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 remarkable 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 days (from 4/1/20 to 4/5/20) are all below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Australia.