

COVID-19 Cases

As of Friday 4/10/2020, 6:00PM HST

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

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

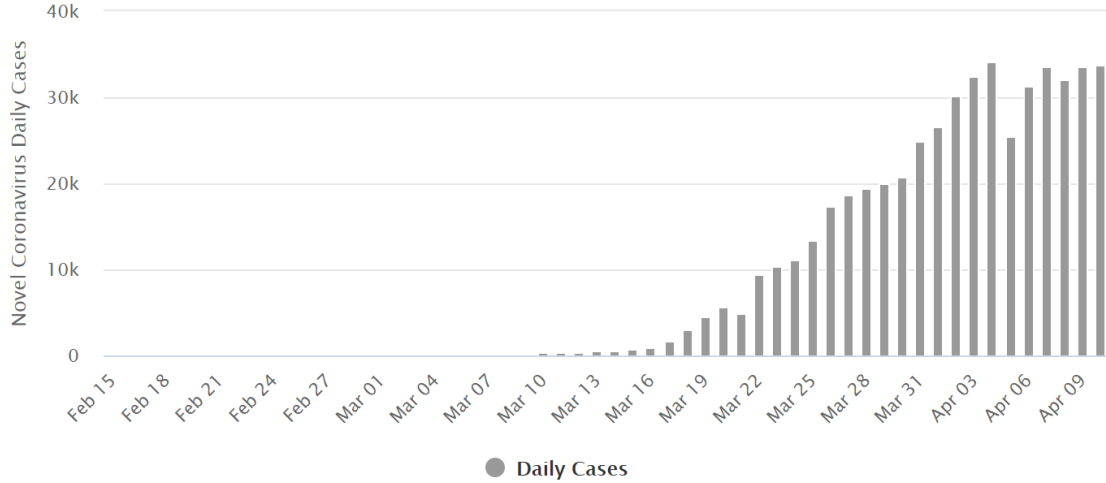
Statistics regarding daily new cases are also included for Hawaii.

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

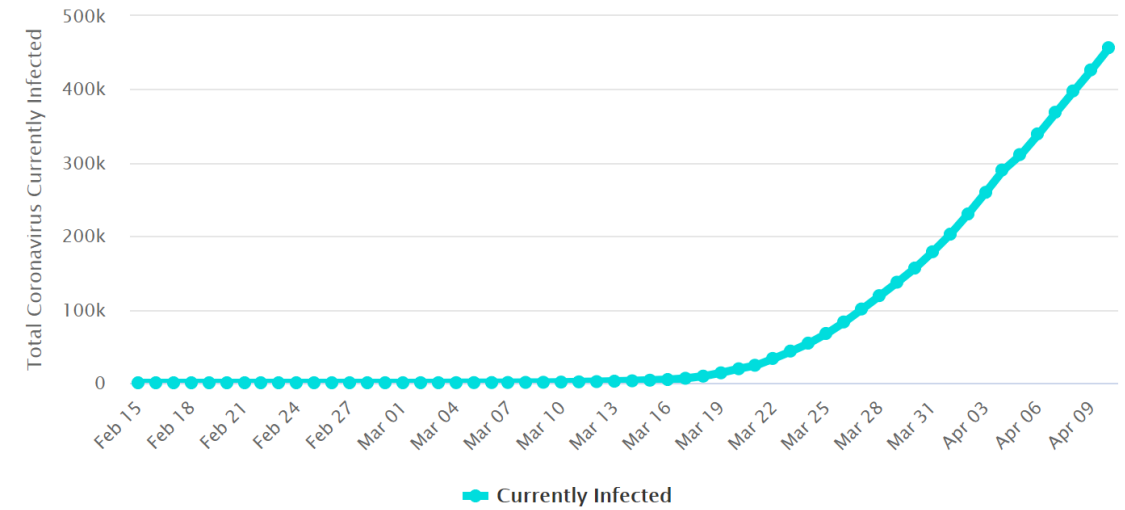


1. USA

Active Cases in the United States

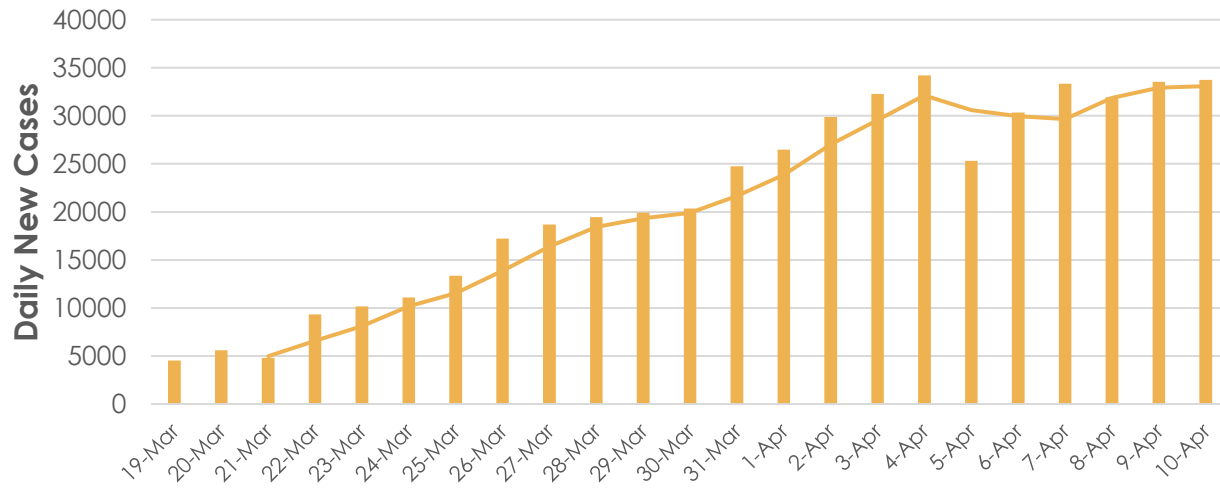
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

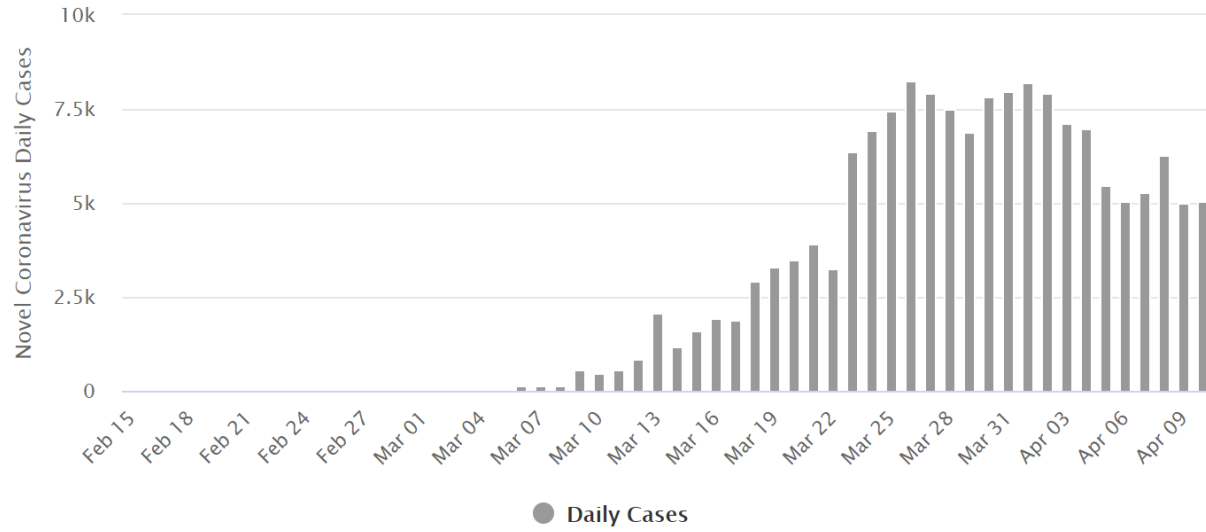
USA 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Spain

Daily New Cases

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

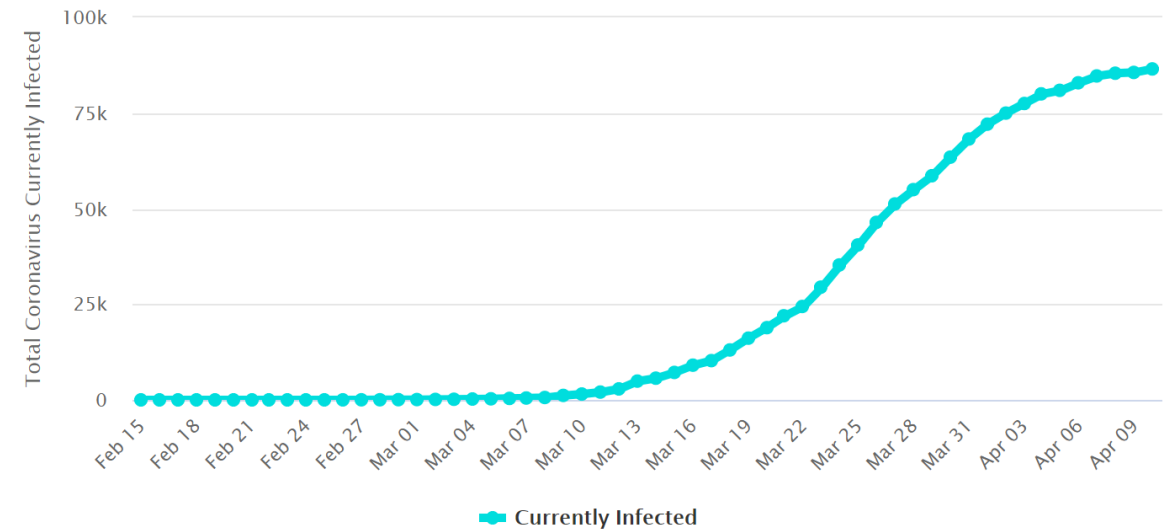


2. Spain

Active Cases in Spain

Active Cases

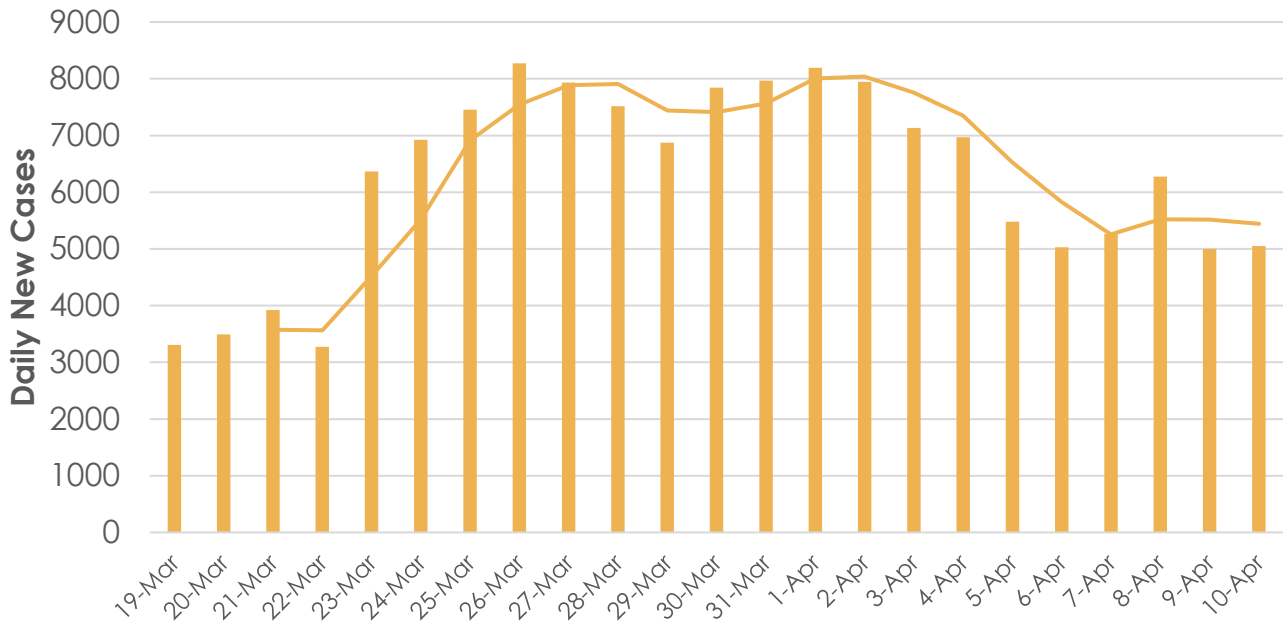
(Number of Infected People)



Trendlines for Spain

3-Day Moving Average Trendline

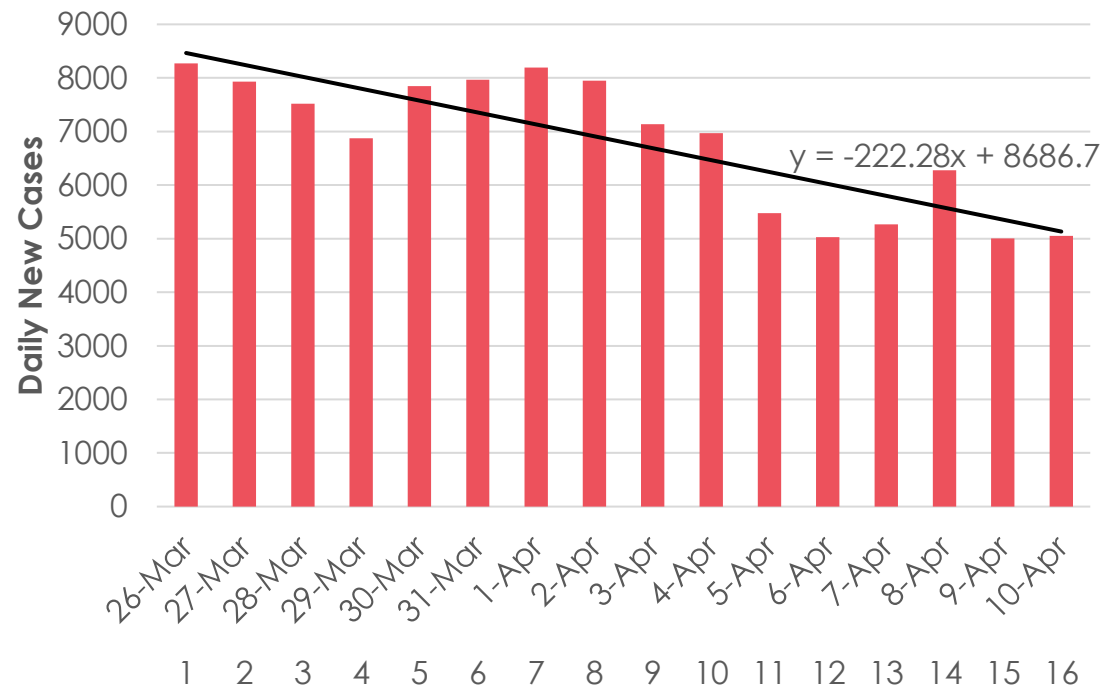
Spain 3 per. Mov. Avg. (Daily New Cases)



Spain Bar Chart of Daily New Cases from Peak till Today

Linear Trendline

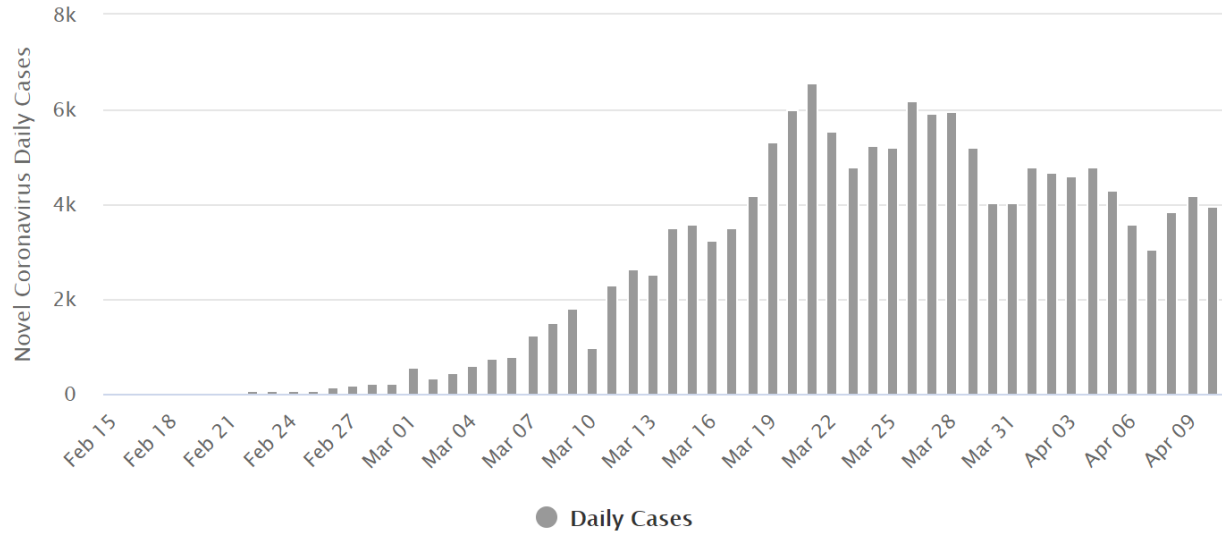
when $y = 0$; $x = 39$
(May 04)



Daily New Cases in Italy

Daily New Cases

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

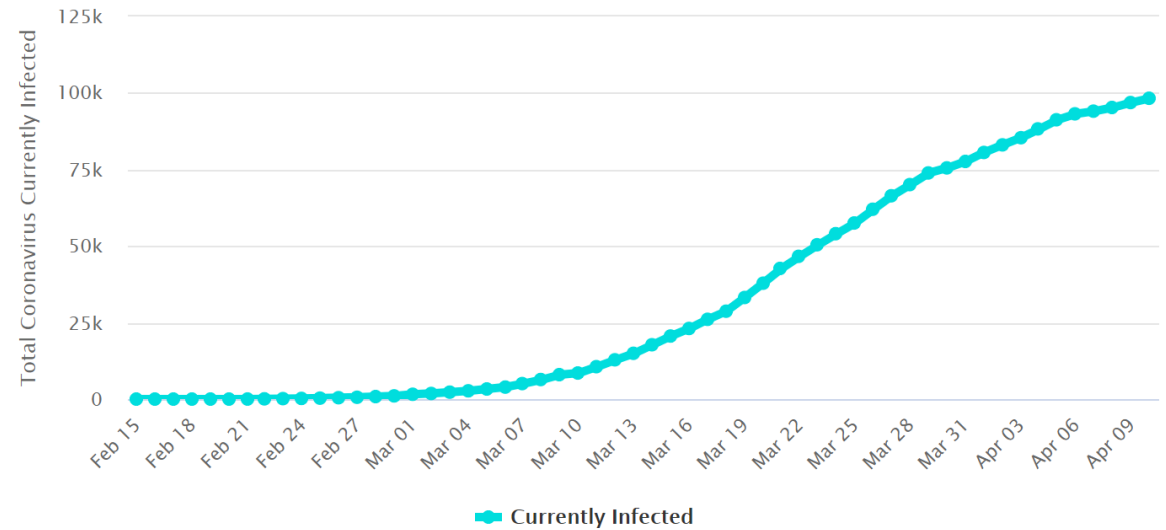


3. Italy

Active Cases in Italy

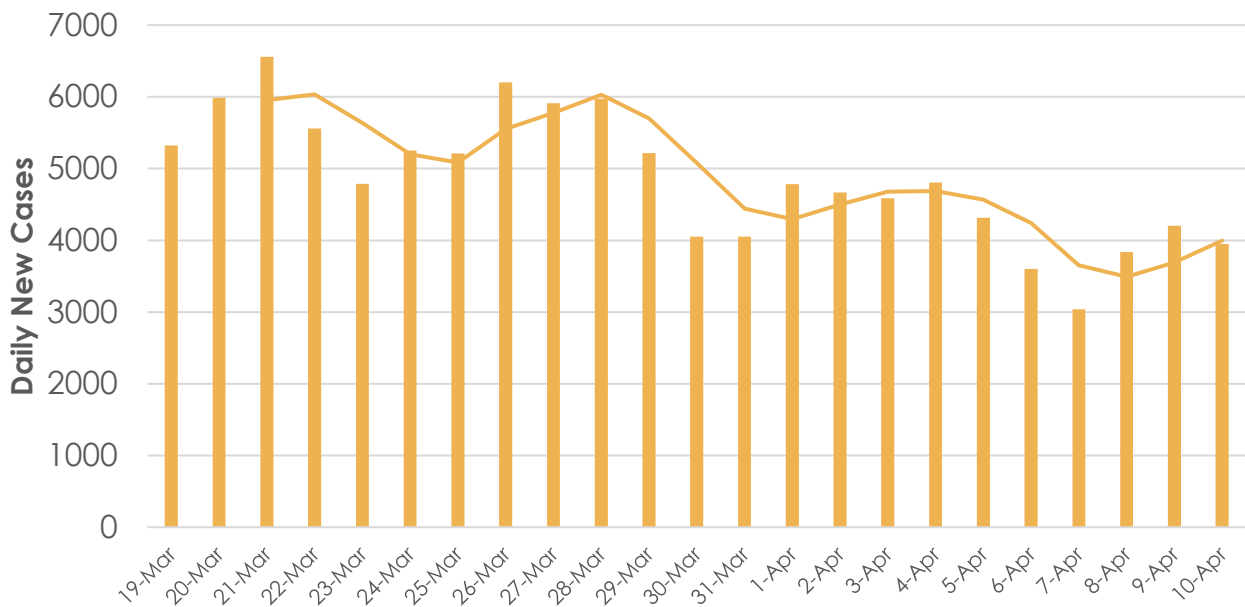
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

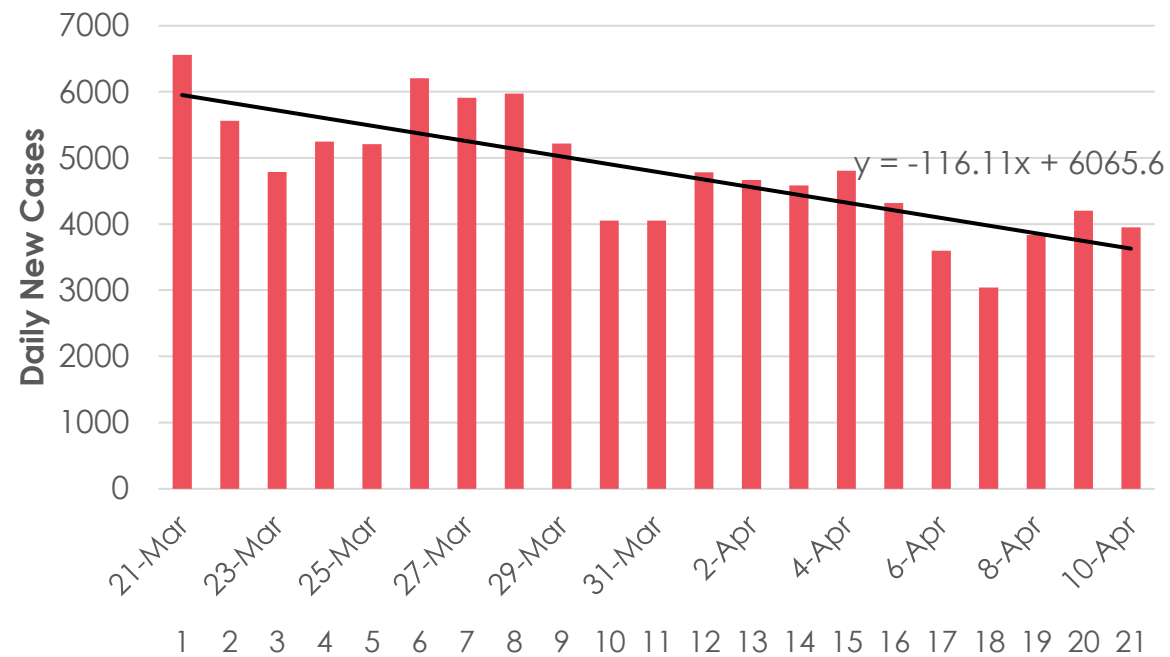
Italy 3 per. Mov. Avg. (Daily New Cases)



Trendlines for Italy

Italy Bar Chart of Daily New Cases from Peak till Today

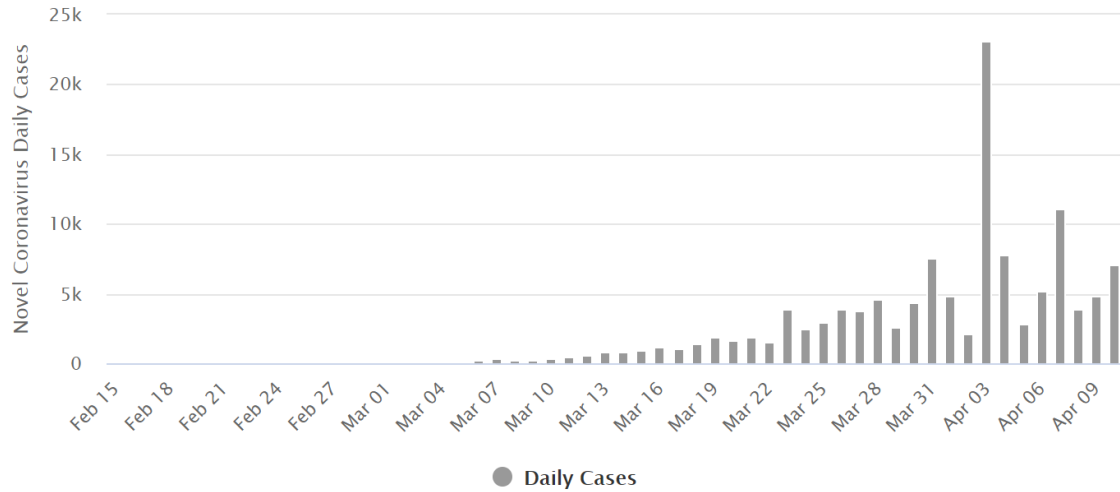
Linear Trendline
when $y = 0$; $x = 52$
(May 12)



Daily New Cases in France

Daily New Cases

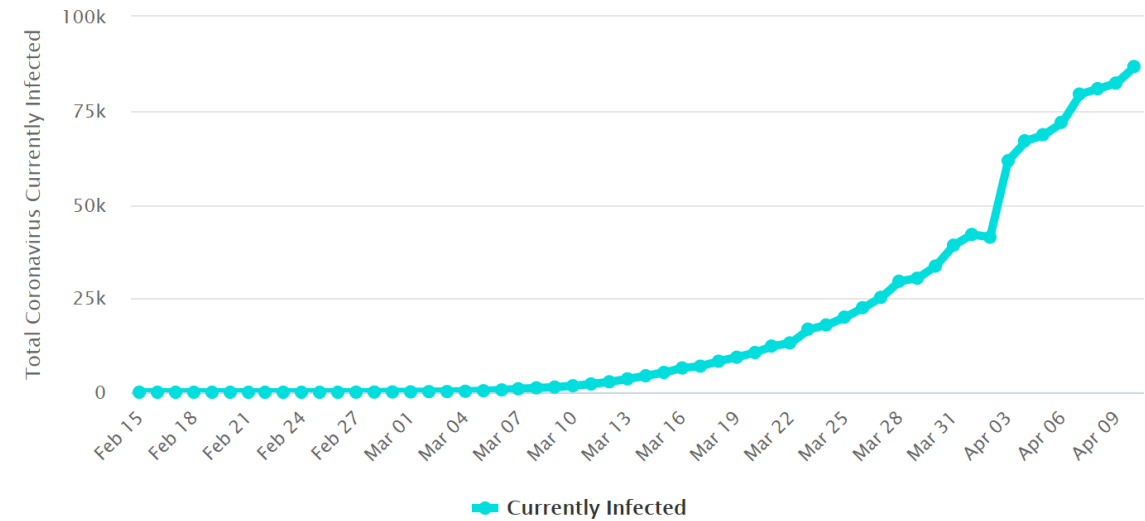
Cases per Day
Data as of 0:00 GMT+0



4. France

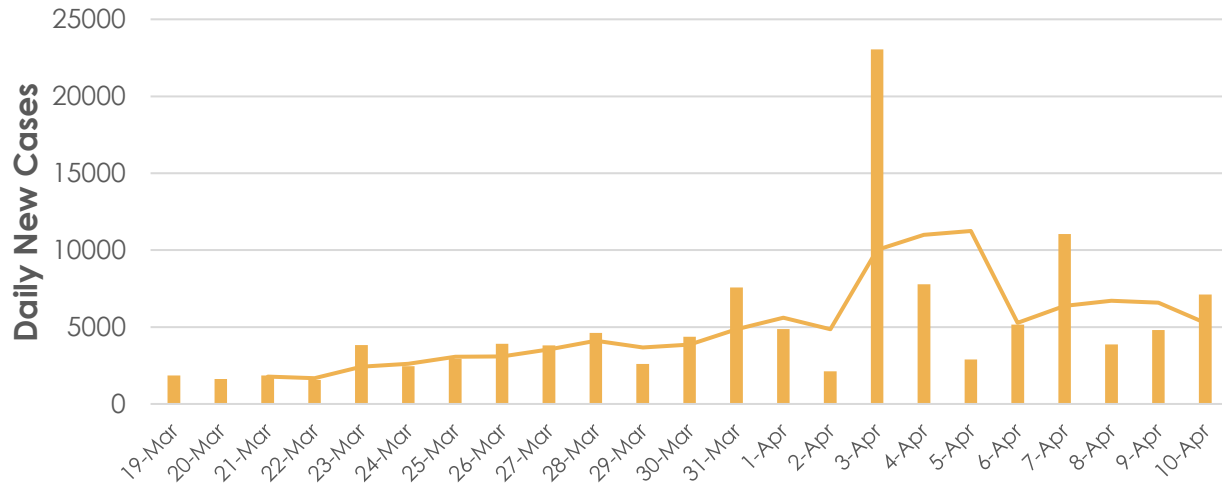
Active Cases in France

Active Cases
(Number of Infected People)

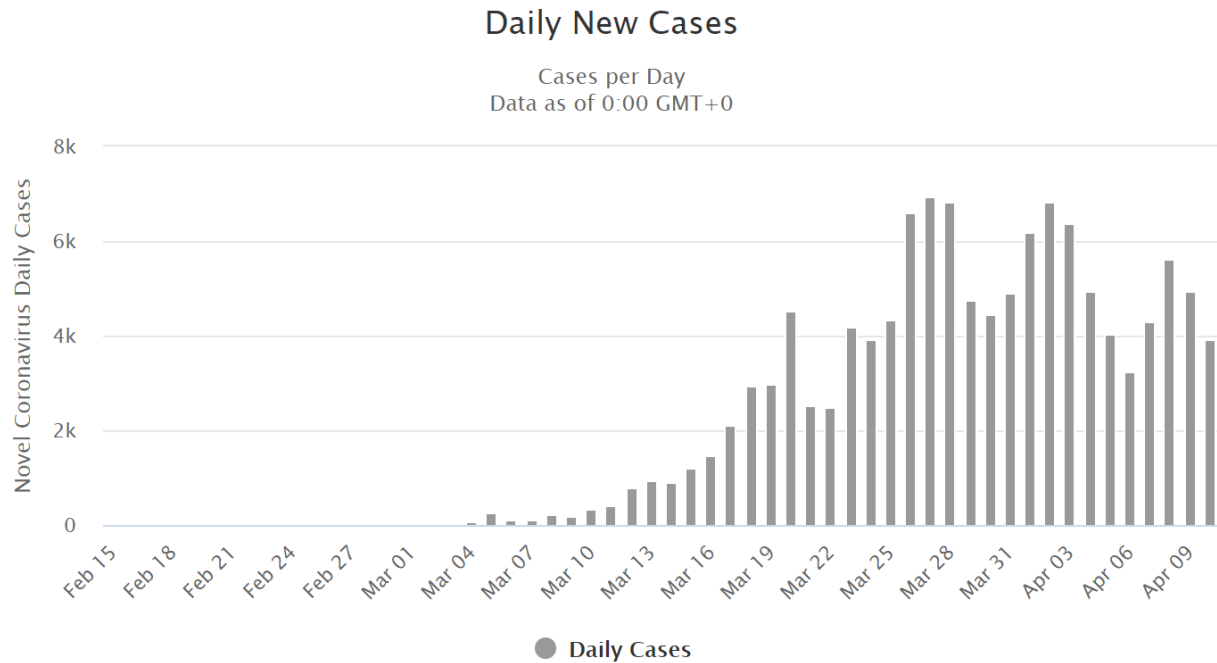


3-Day Moving Average Trendline

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

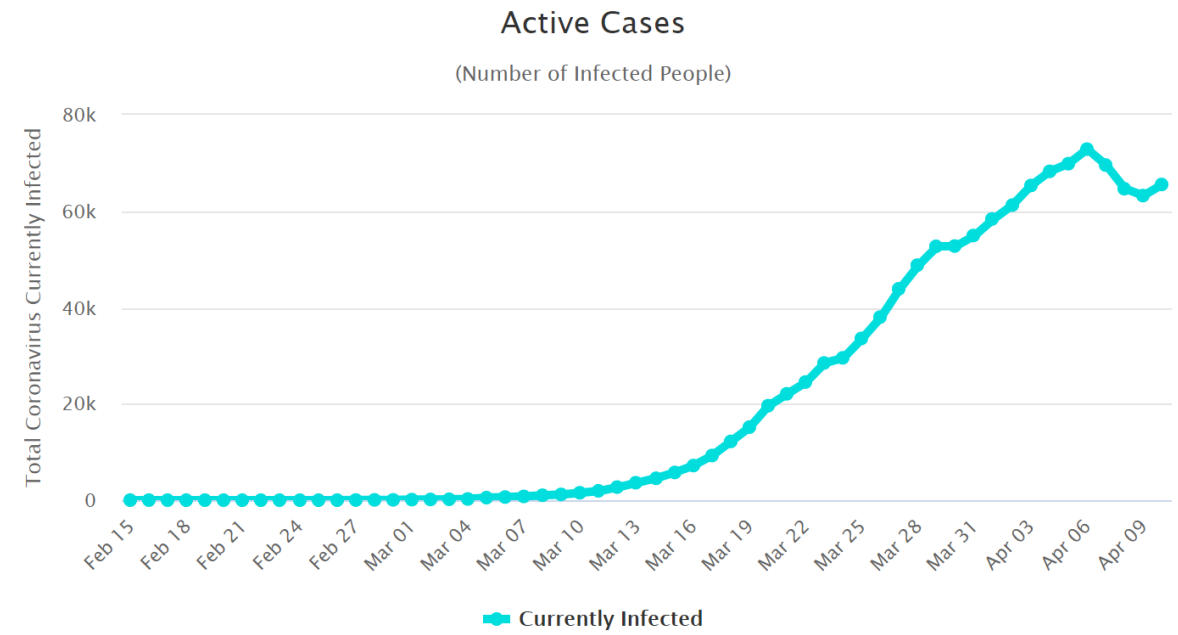


Daily New Cases in Germany



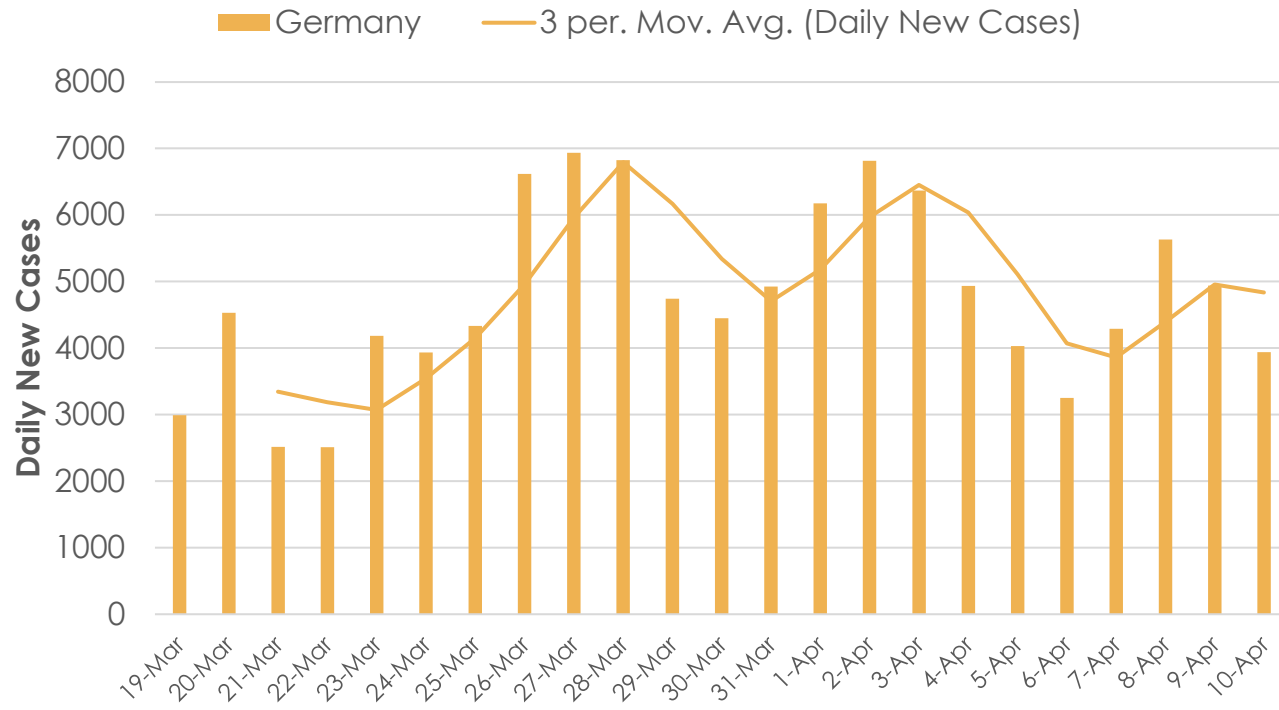
5. Germany

Active Cases in Germany

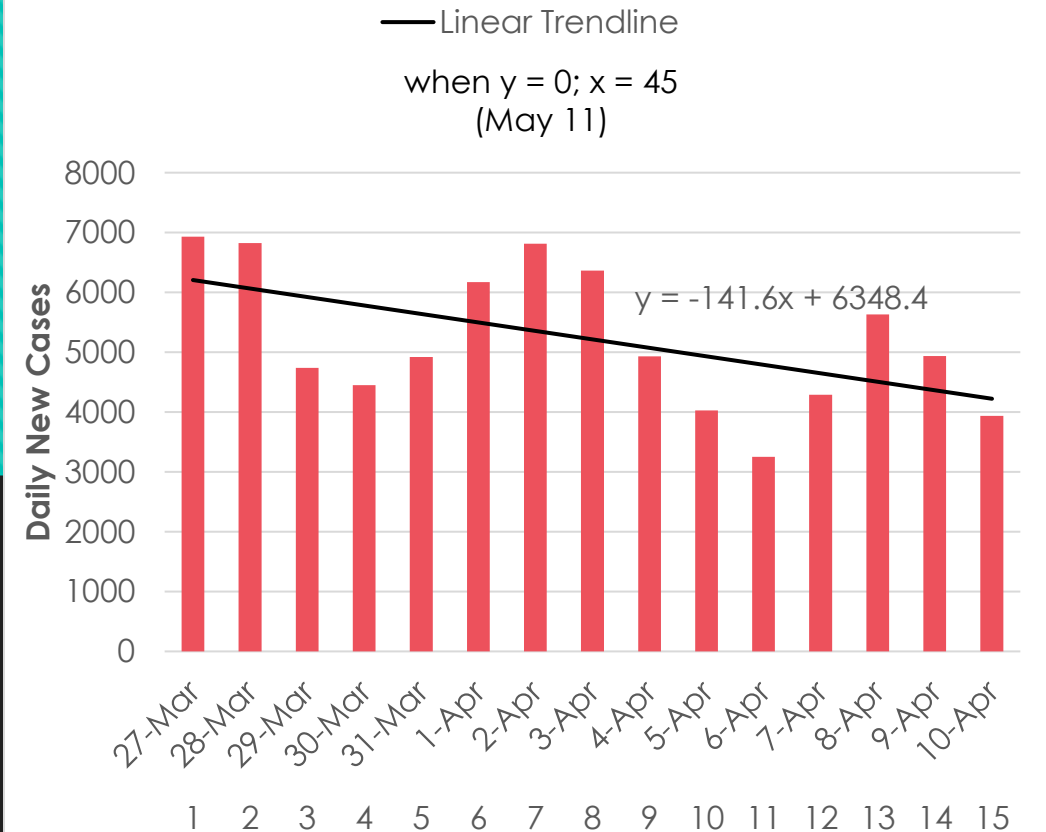


Trendlines for Germany

3-Day Moving Average Trendline



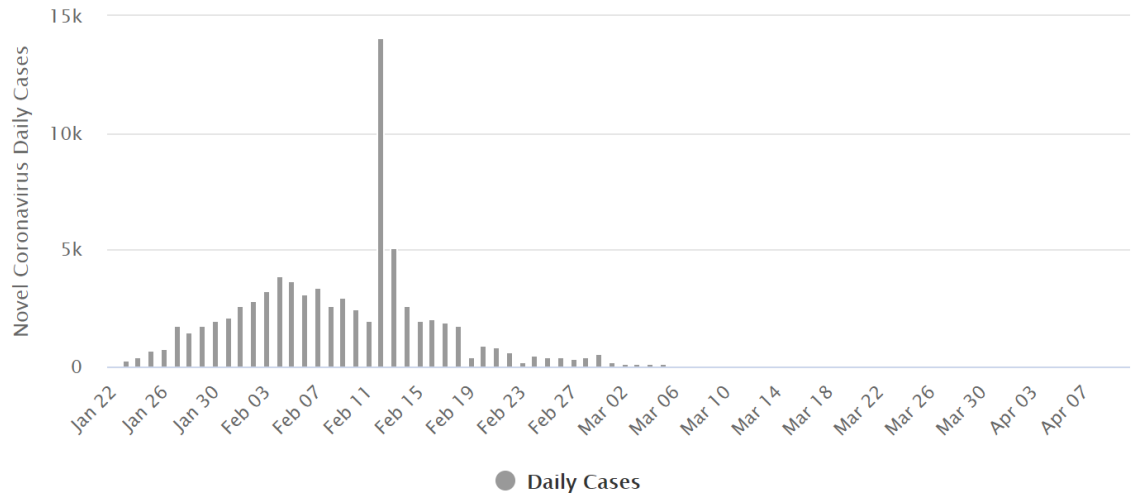
Germany Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in China

Daily New Cases

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

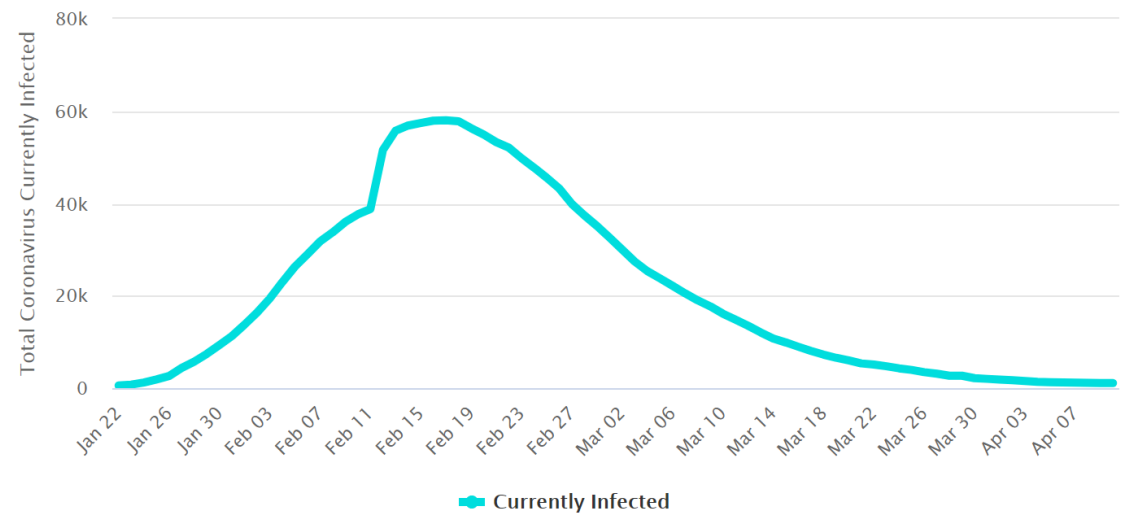


6. China

Active Cases in China

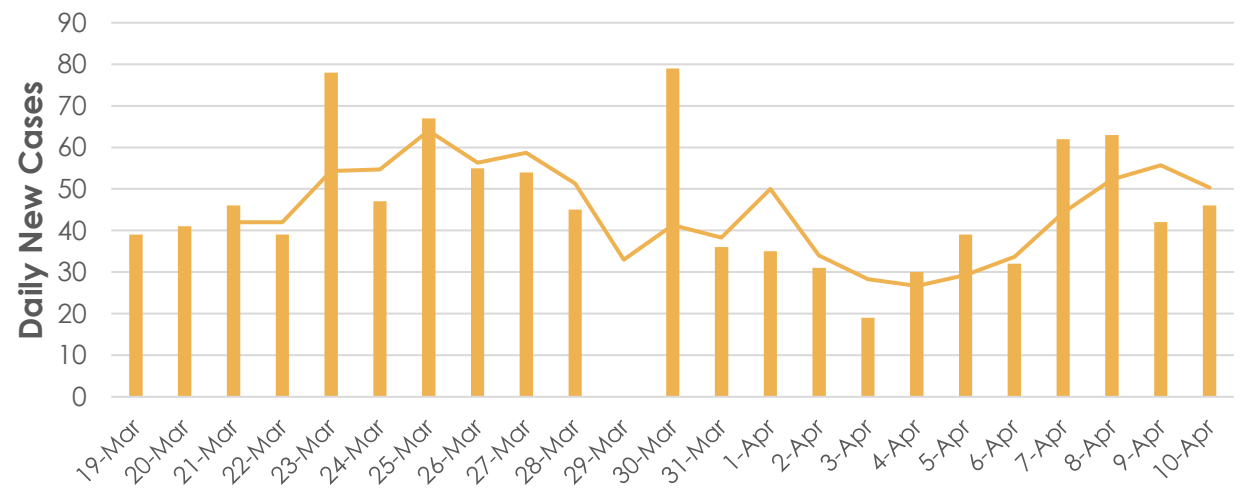
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

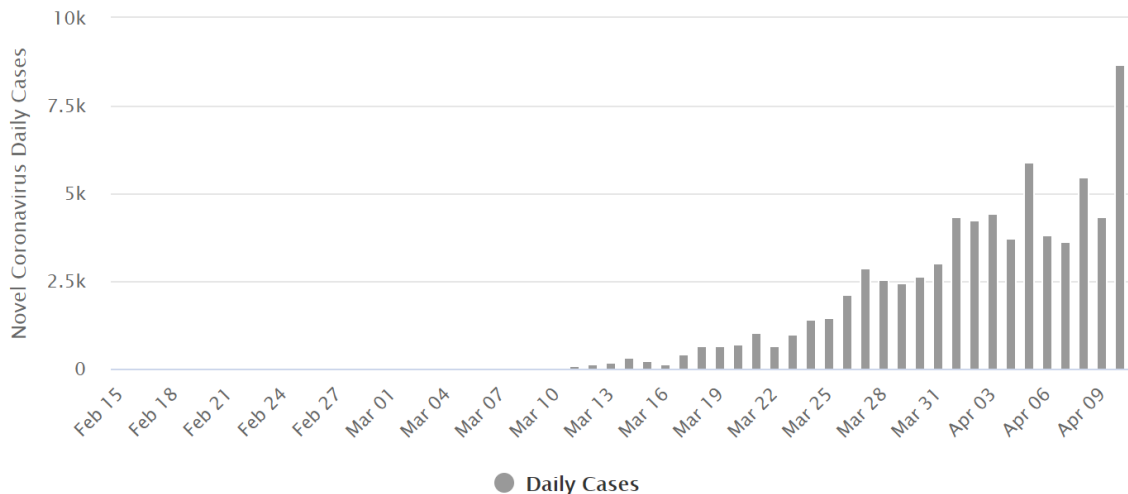
China 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in the United Kingdom

Daily New Cases

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

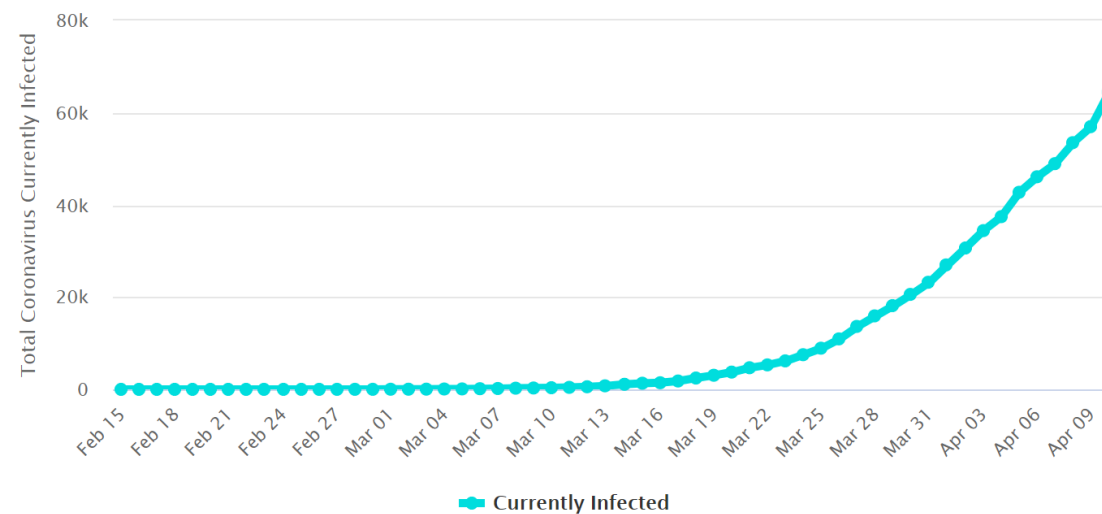


7. UK

Active Cases in the United Kingdom

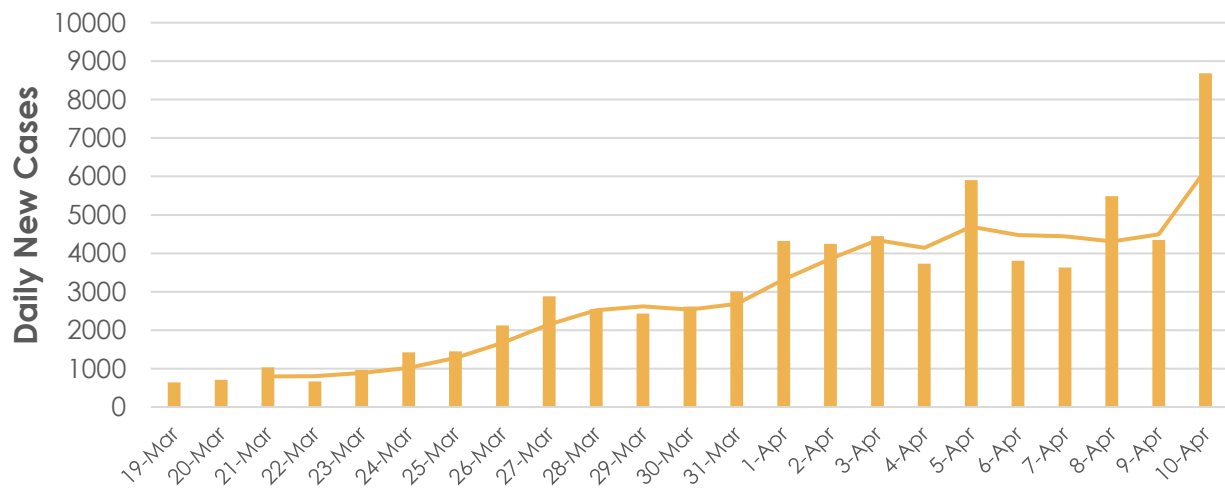
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

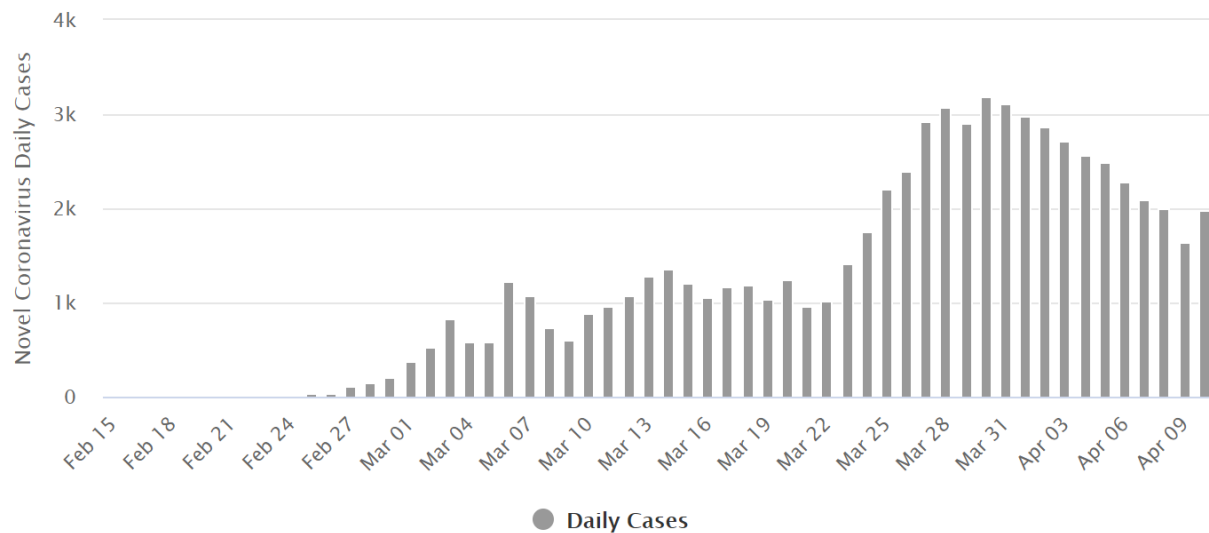
UK 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Iran

Daily New Cases

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

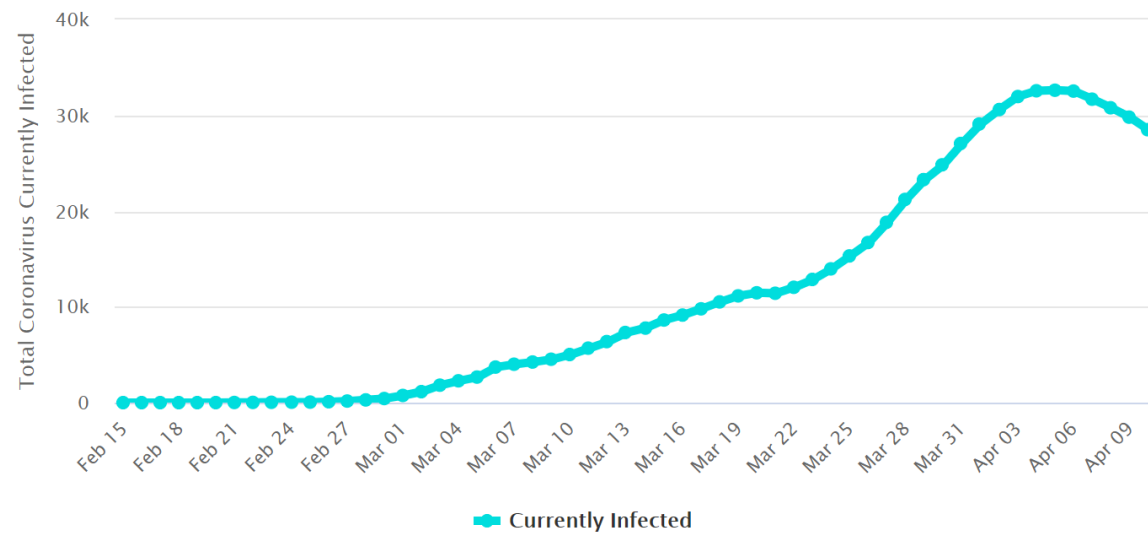


8. Iran

Active Cases in Iran

Active Cases

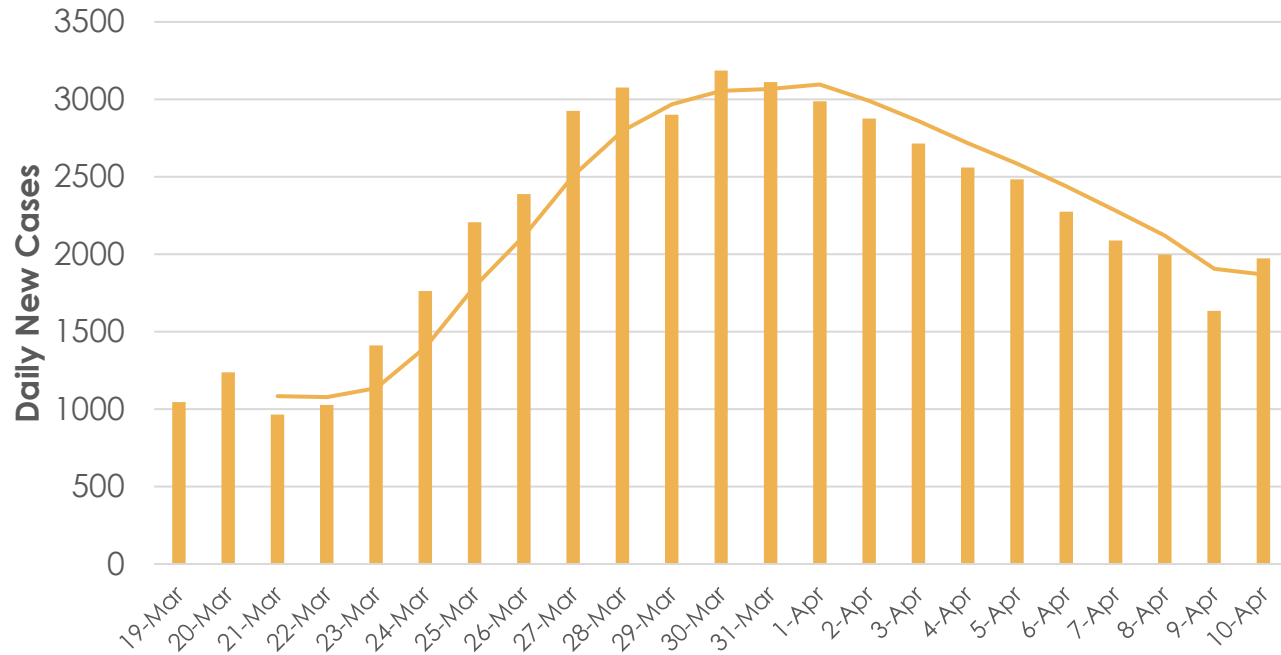
(Number of Infected People)



Trendlines for Iran

3-Day Moving Average Trendline

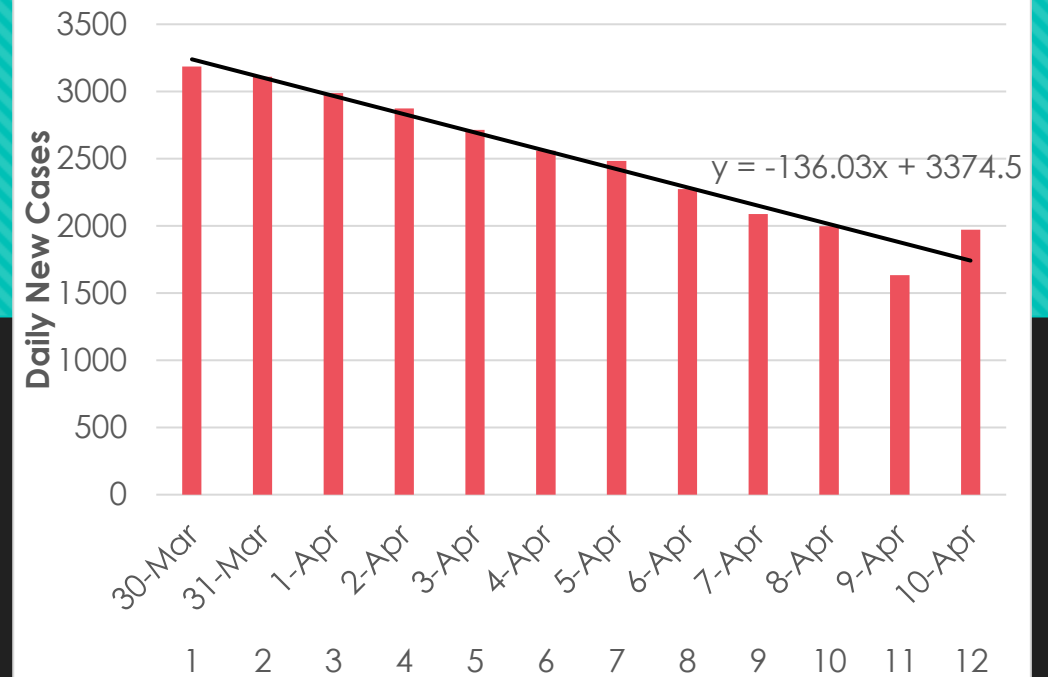
Iran 3 per. Mov. Avg. (Daily New Cases)



Iran Bar Chart of Daily New Cases from Peak Till Today

Linear Trendline

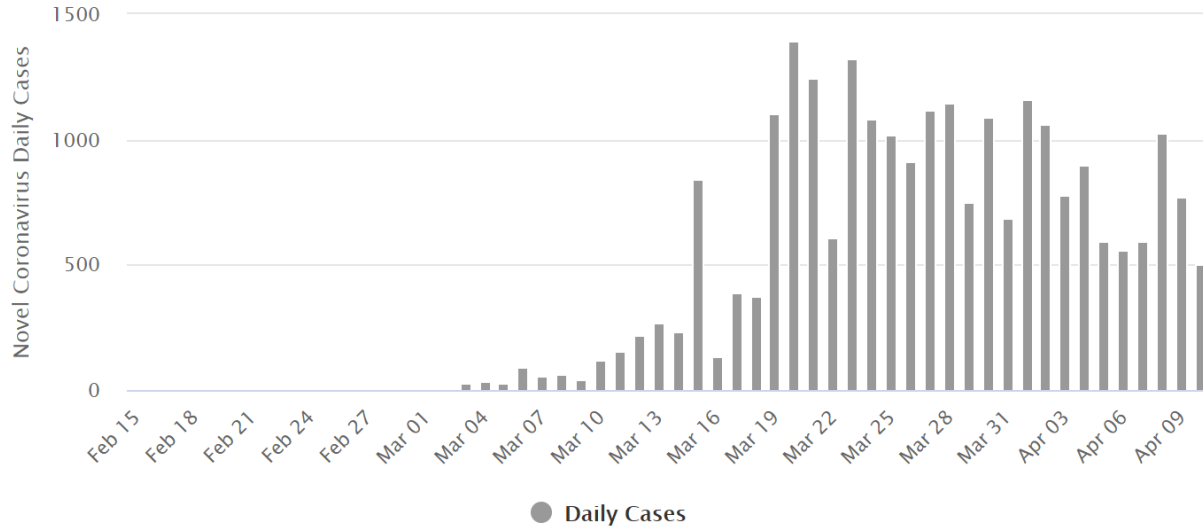
when $y = 0$; $x = 25$
(April 24)



Daily New Cases in Switzerland

Daily New Cases

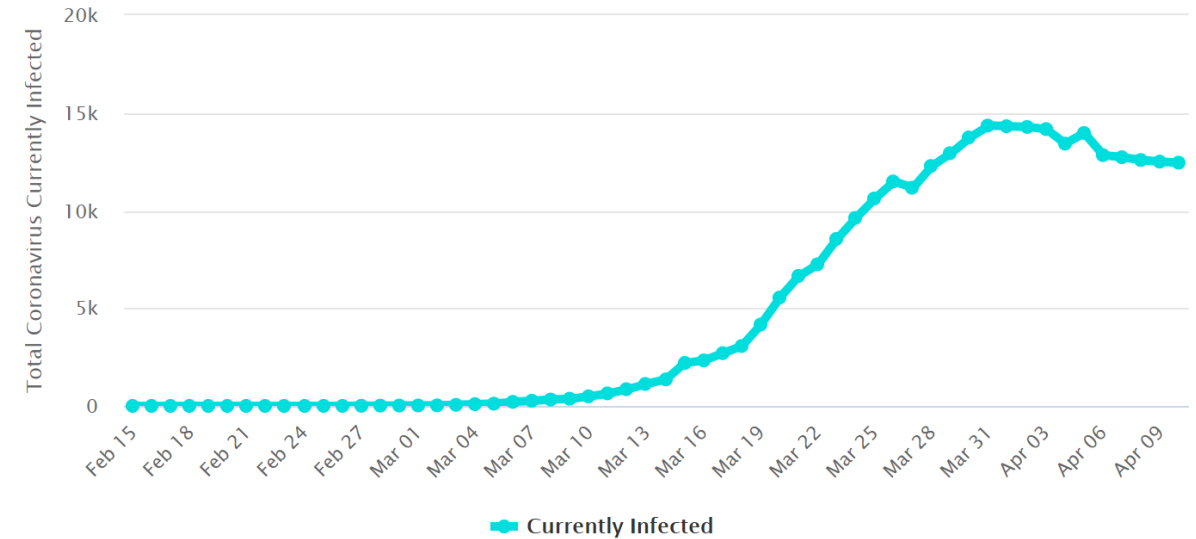
Cases per Day
Data as of 0:00 GMT+0



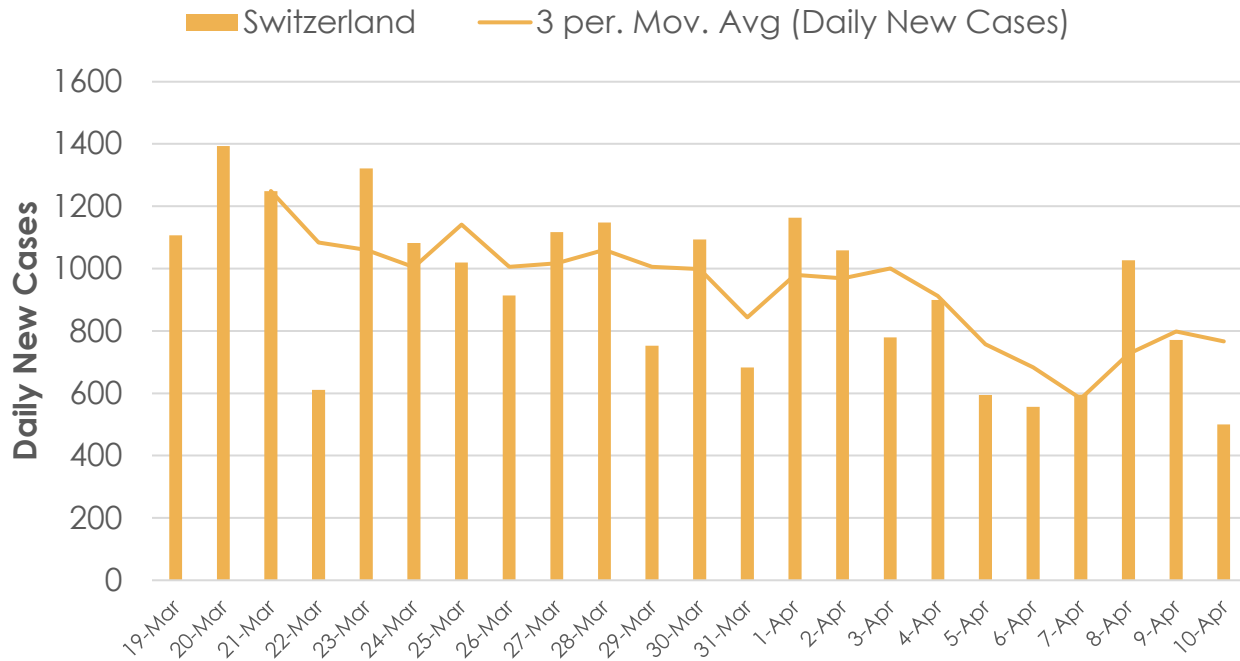
9. Switzerland

Active Cases in Switzerland

Active Cases
(Number of Infected People)

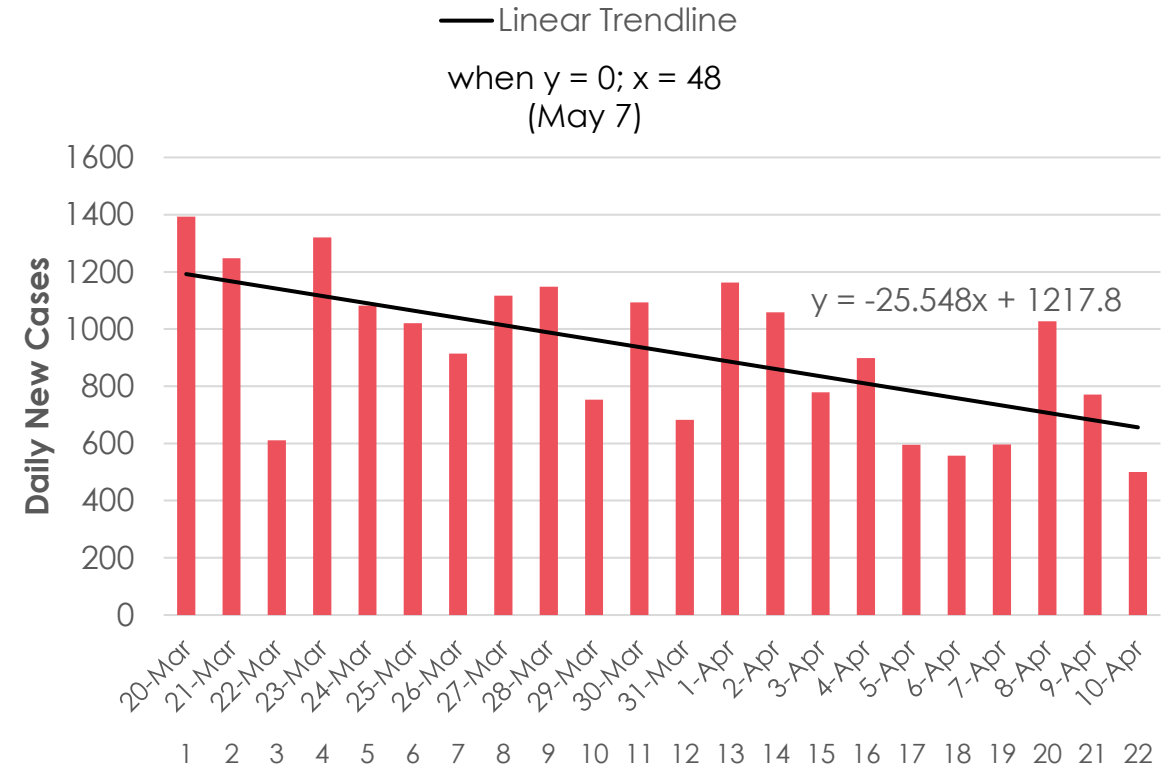


3-Day Moving Average Trendline



Trendlines for Switzerland

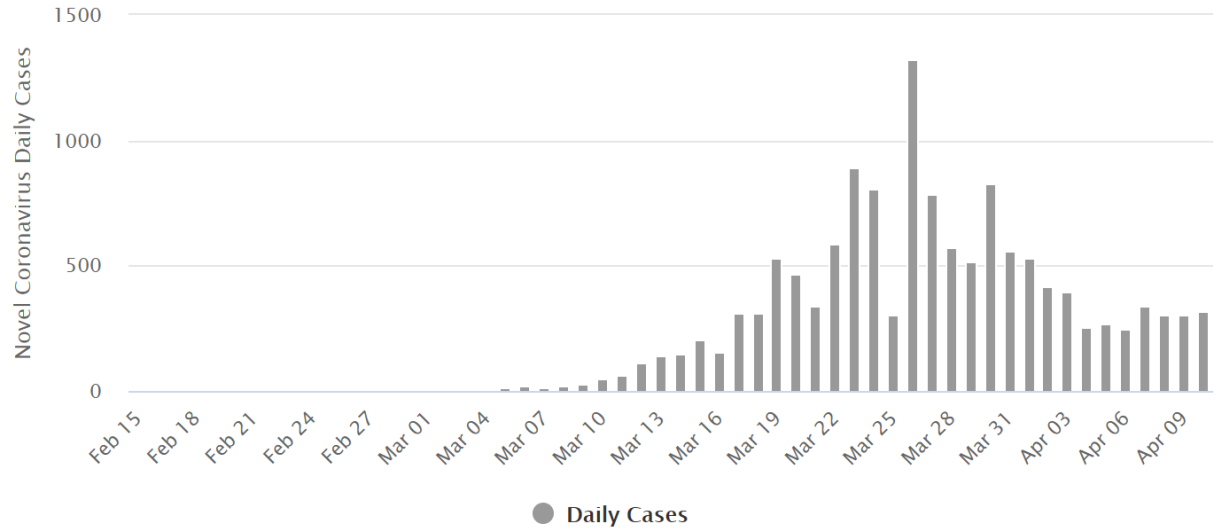
Switzerland Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in Austria

Daily New Cases

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

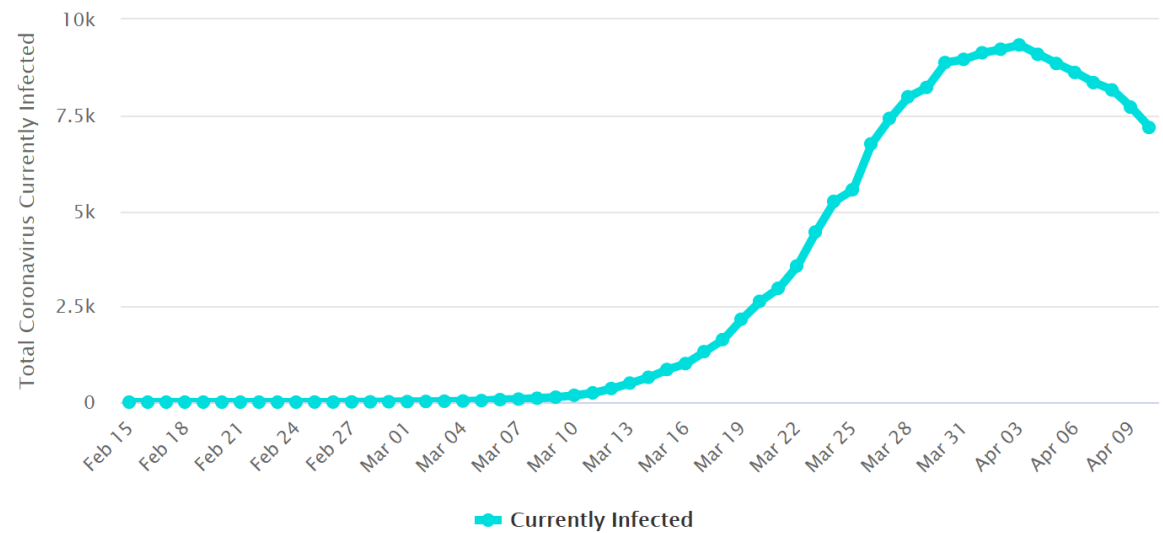


Austria

Active Cases in Austria

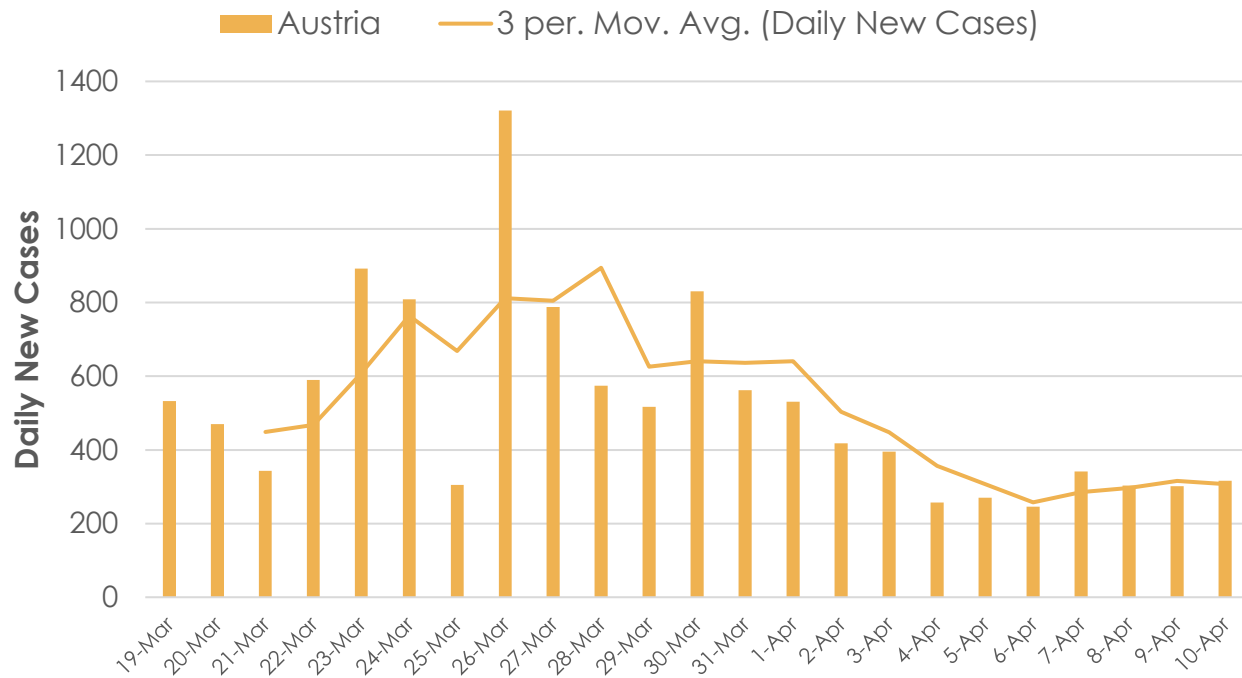
Active Cases

(Number of Infected People)

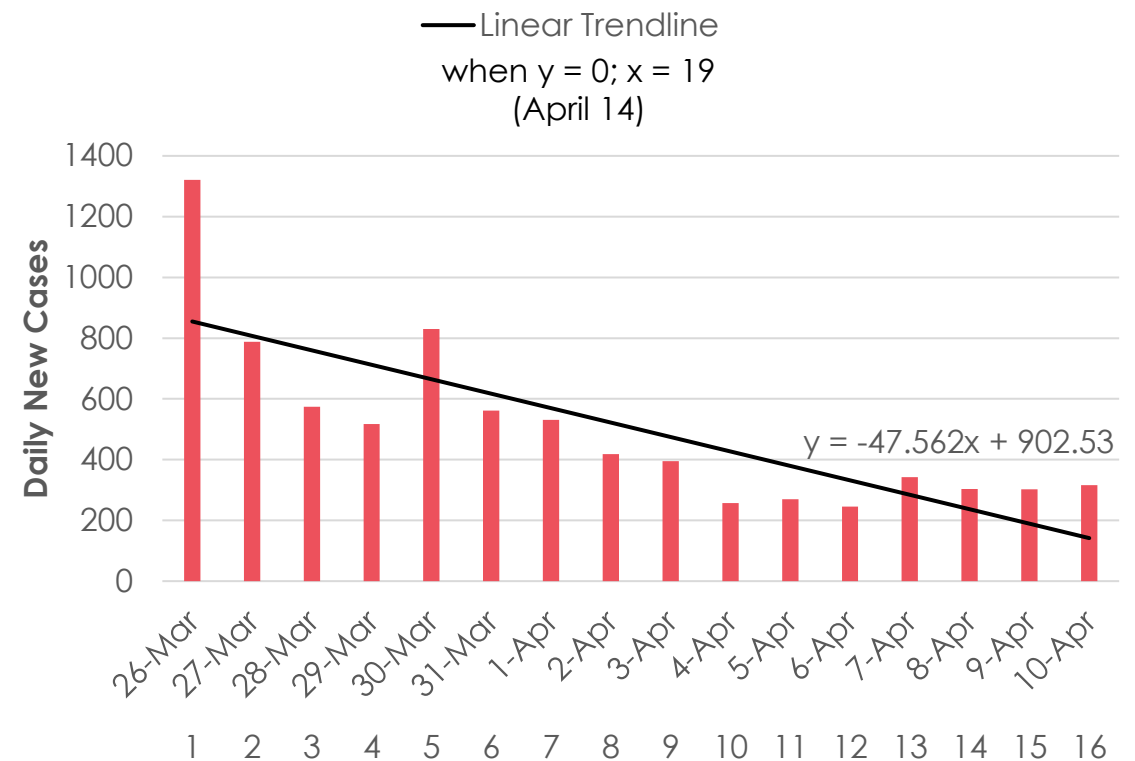


Trendlines for Austria

3-Day Moving Average Trendline



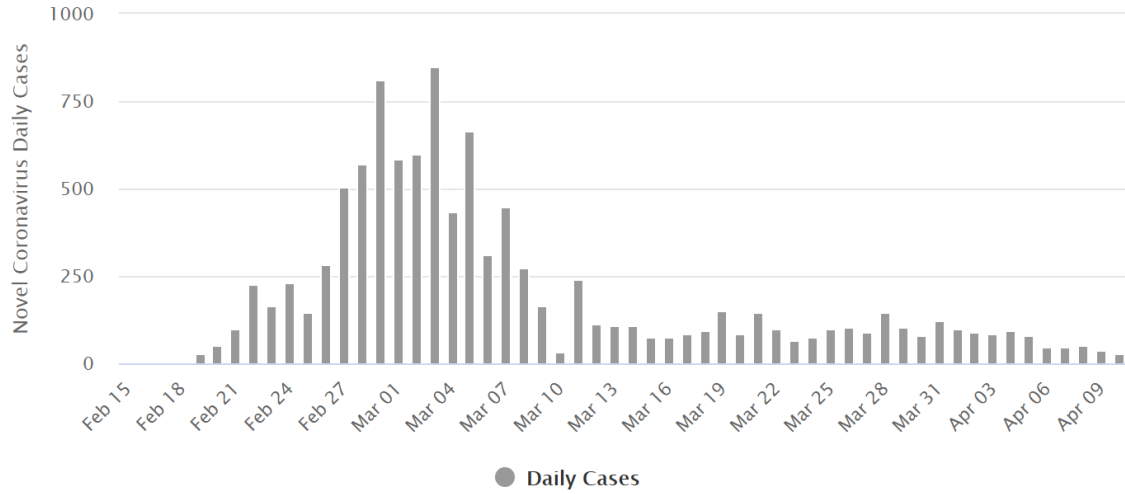
Austria Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in South Korea

Daily New Cases

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

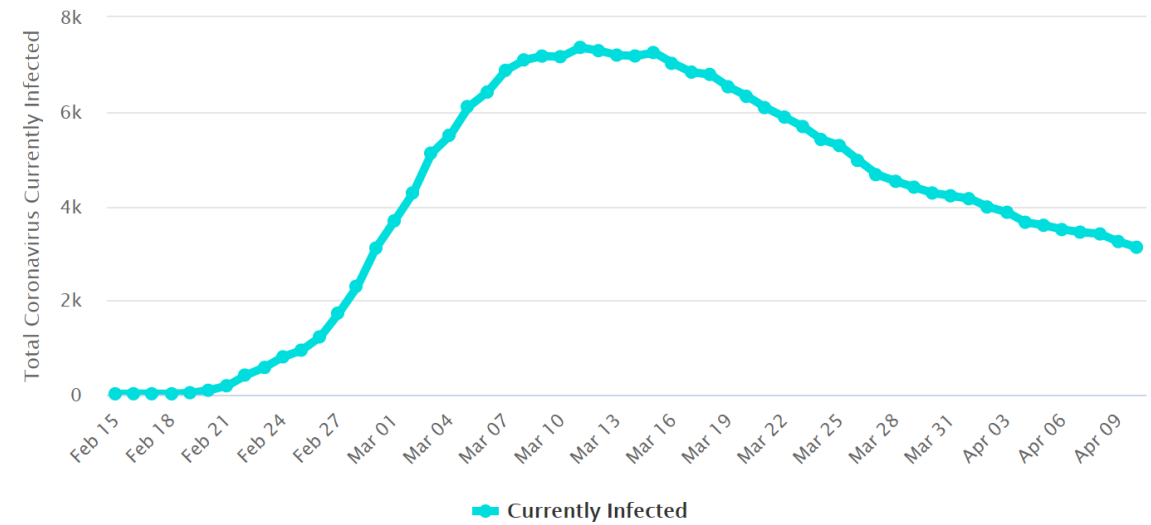


South Korea

Active Cases in South Korea

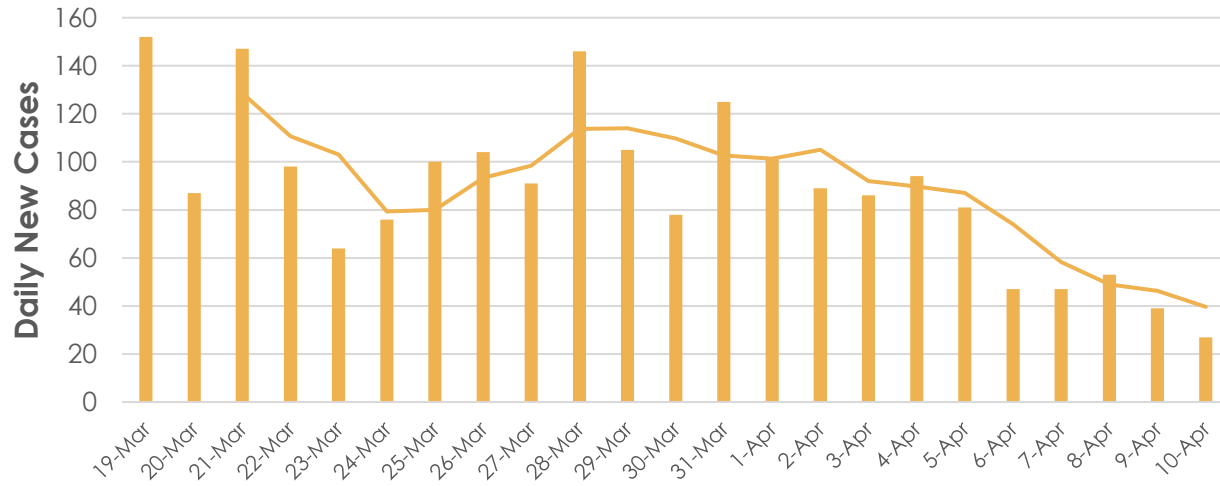
Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

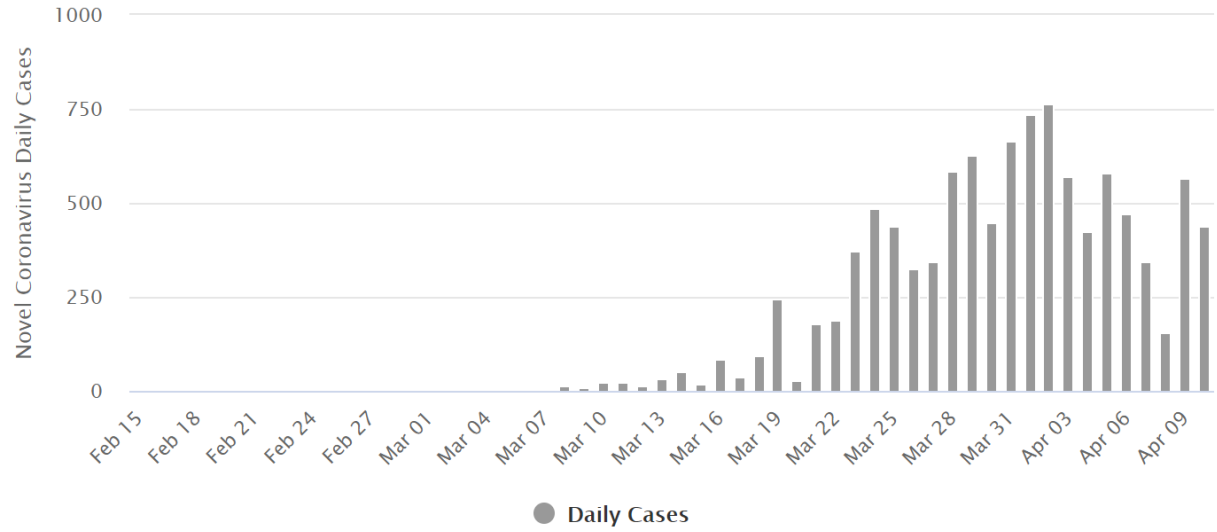
S Korea 3 per. Mov. Avg. (Daily New Cases)



Daily New Cases in Israel

Daily New Cases

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

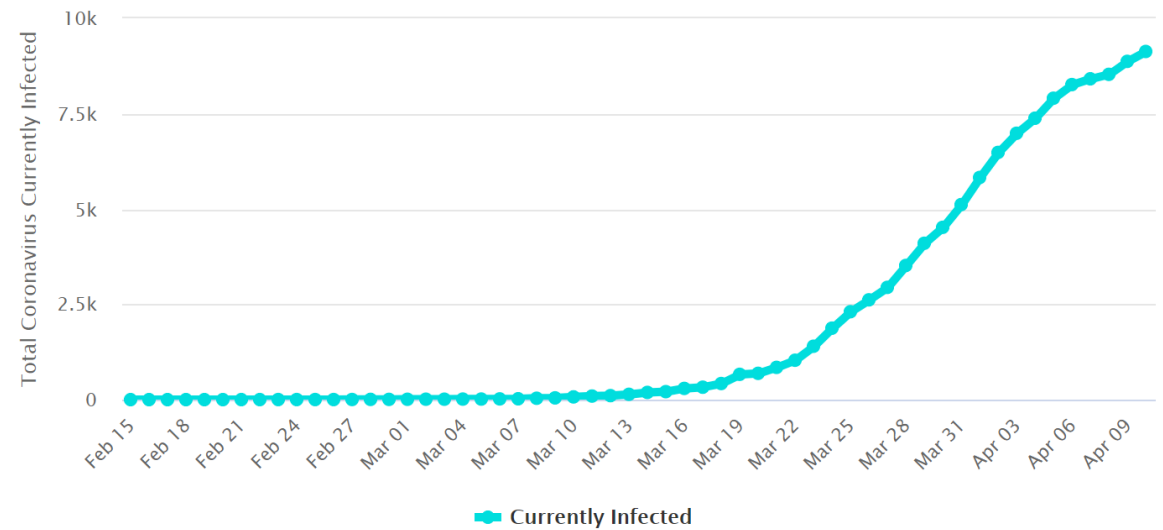


Israel

Active Cases in Israel

Active Cases

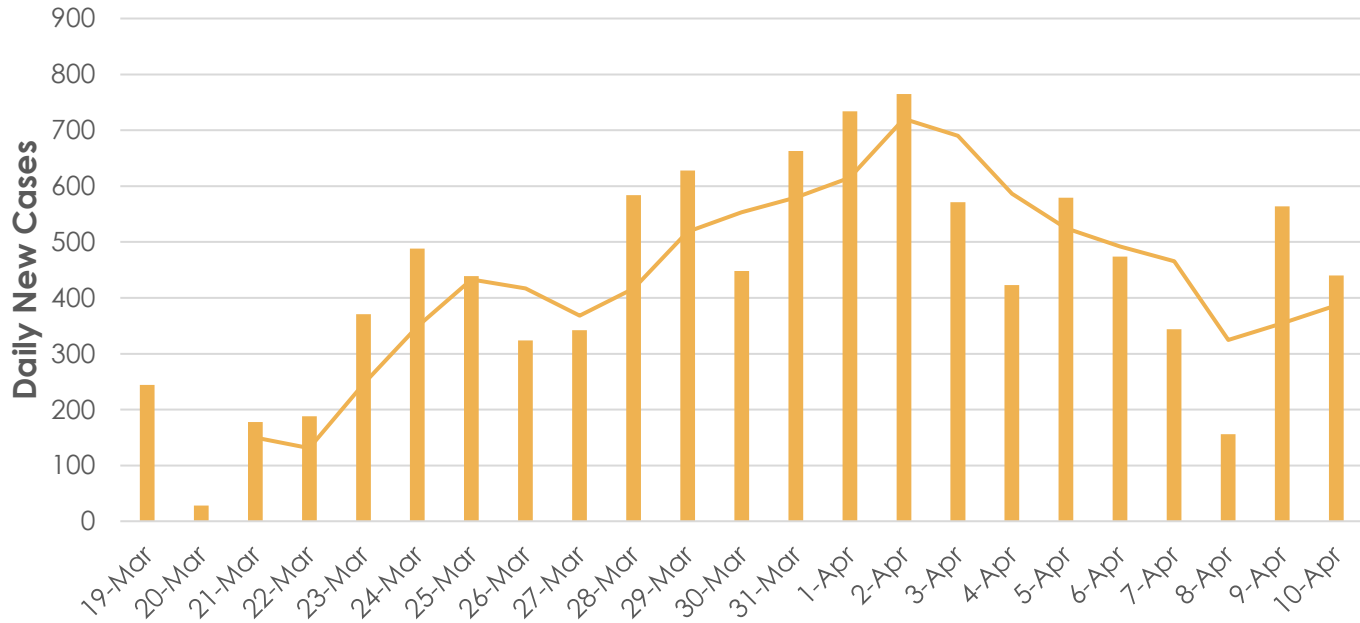
(Number of Infected People)



Trendlines for Israel

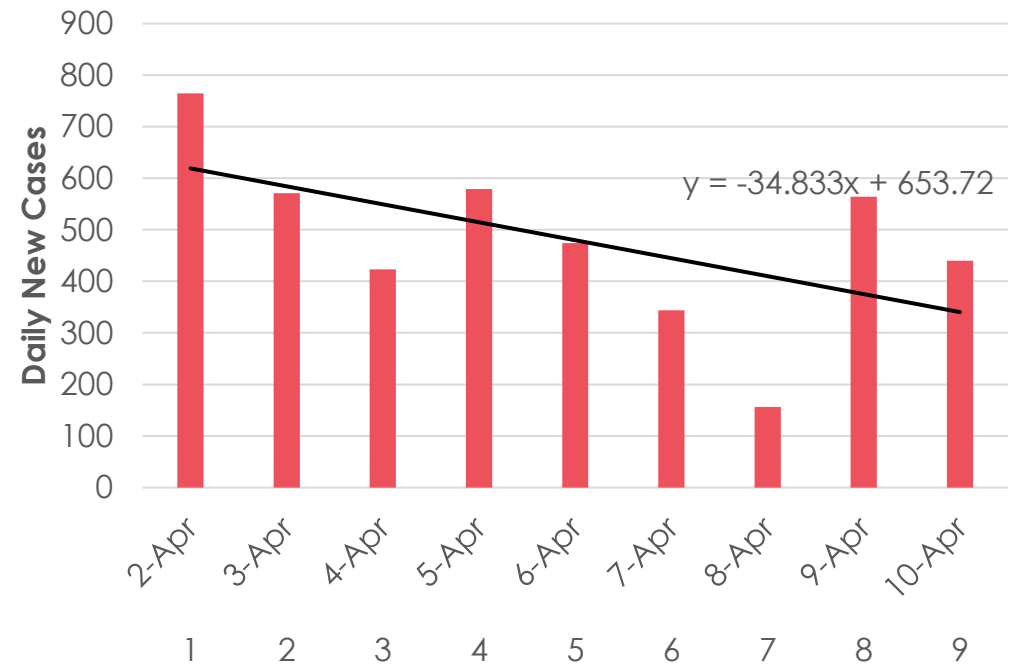
3-Day Moving Average Trendline

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



Israel Bar Chart of Daily New Cases from Peak till Today

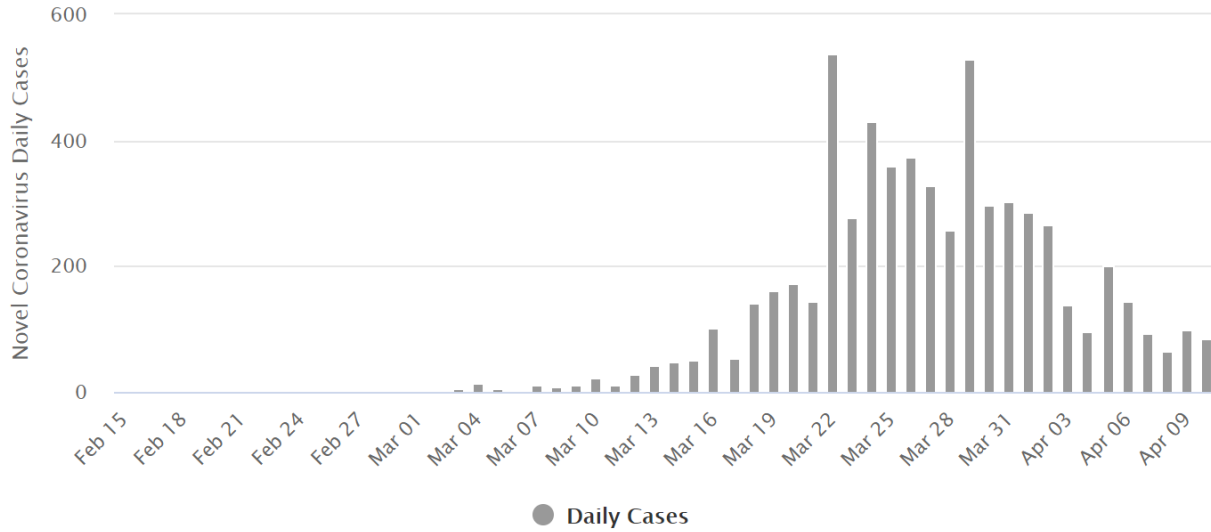
Linear Trendline
when $y = 0$; $x = 19$
(April 21)



Daily New Cases in Australia

Daily New Cases

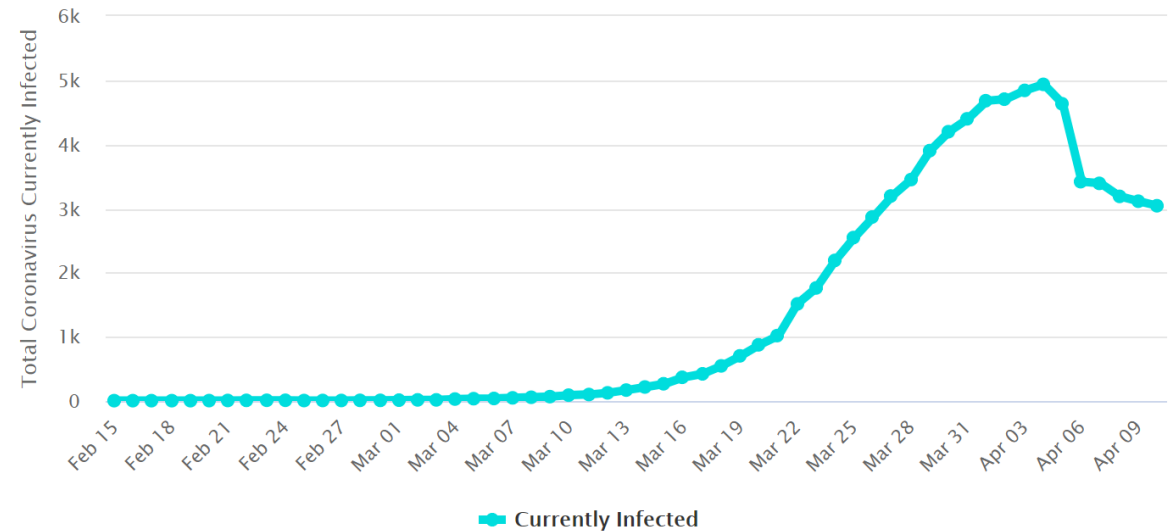
Cases per Day
Data as of 0:00 GMT+0



Australia

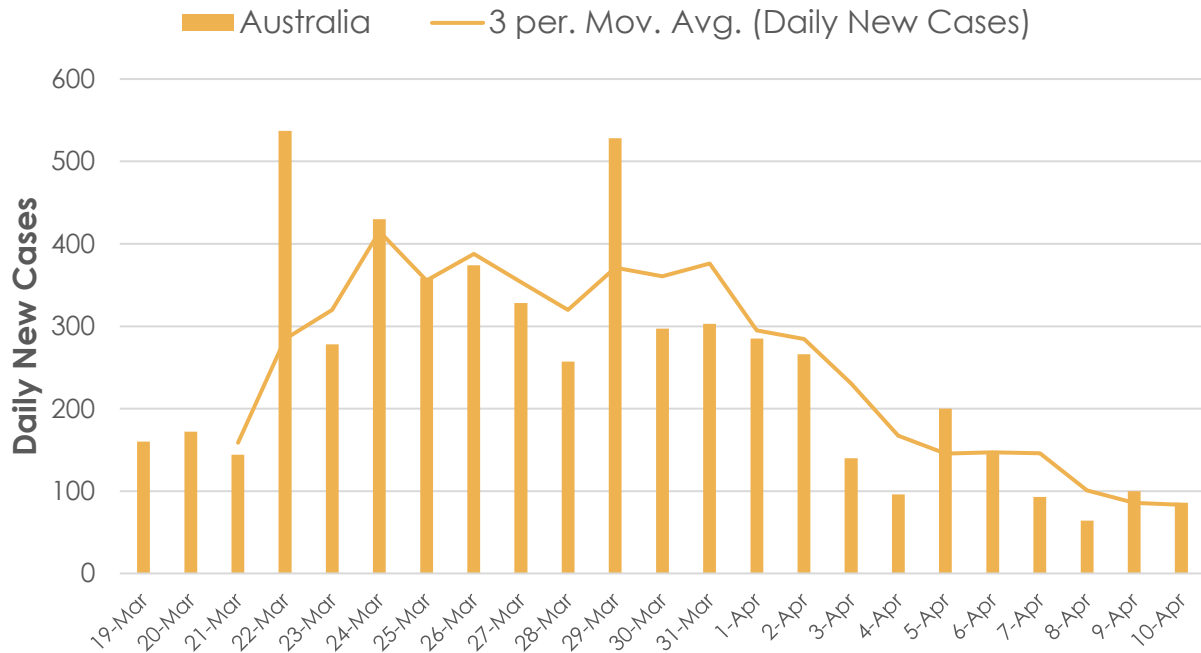
Active Cases in Australia

Active Cases
(Number of Infected People)

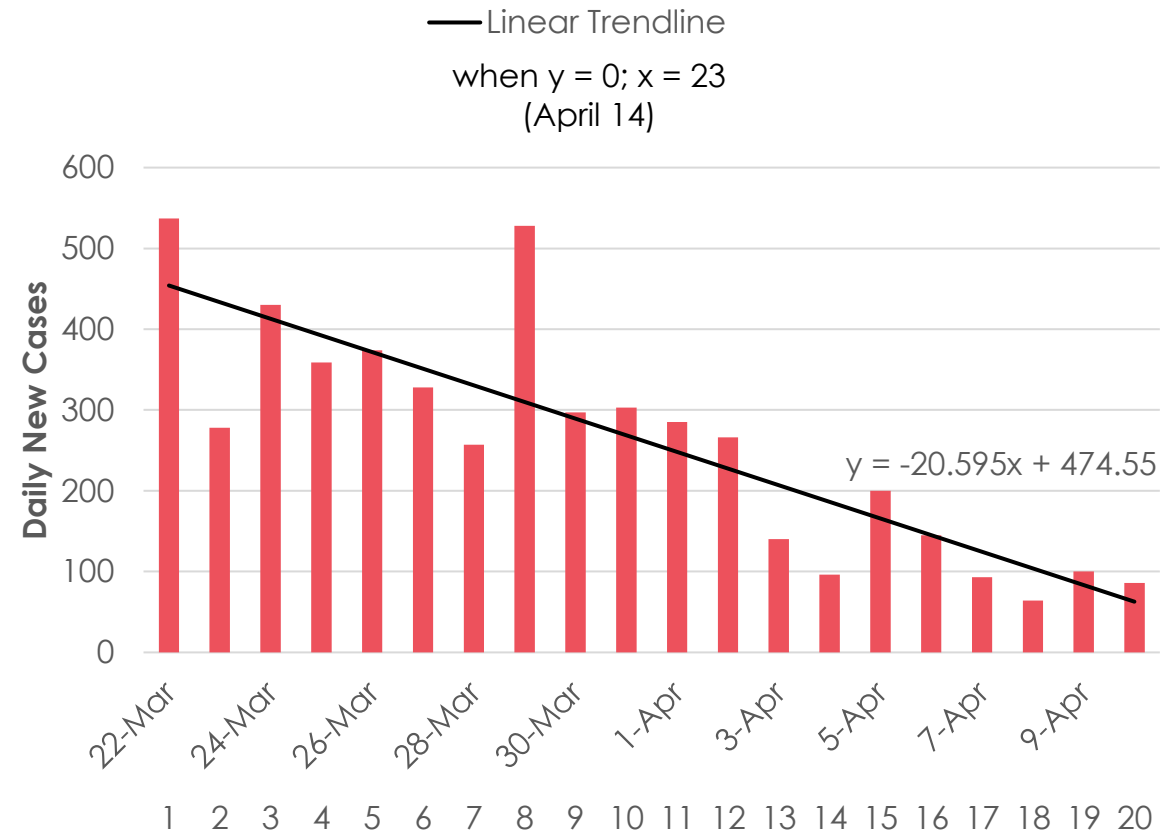


Trendlines for Australia

3-Day Moving Average Trendline

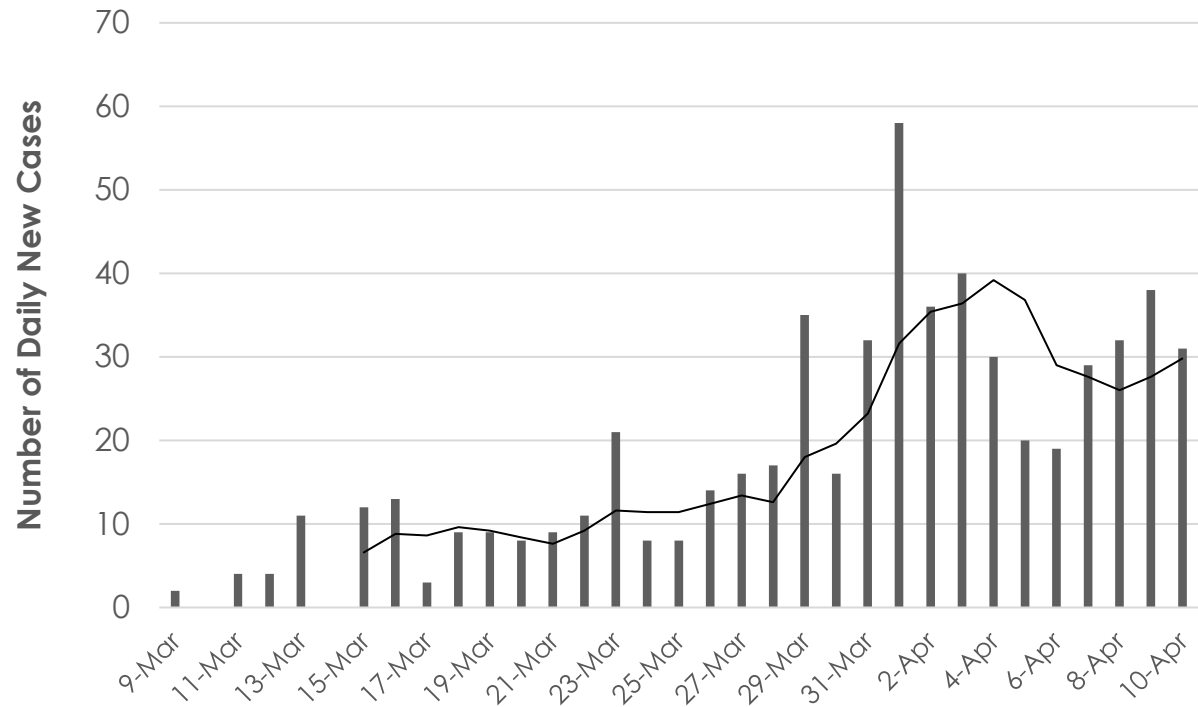


Australia Bar Chart of Daily New Cases from Peak till Today



Daily New Cases in Cyprus

— 5 per. Mov. Avg. (Daily New Cases)

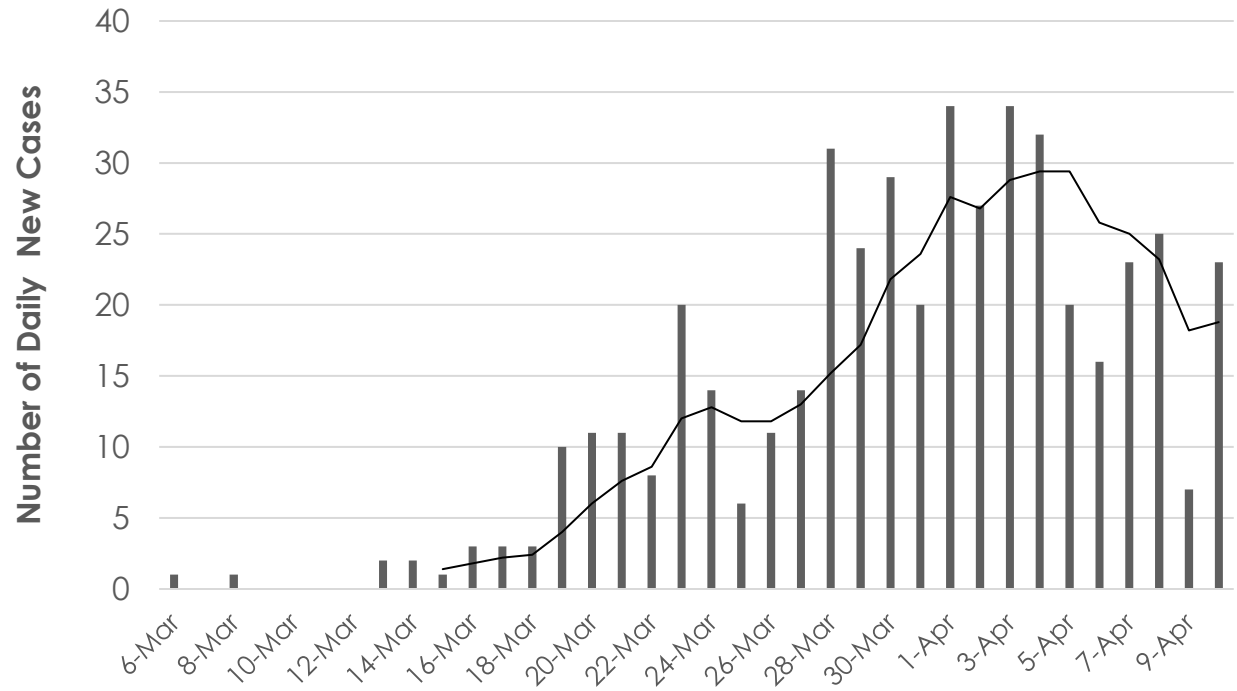


Cyprus

Correlation, r (Between Cyprus and Hawaii) = 0.653
 r is significant at $\alpha = 5\%$

Daily New Cases in Hawaii

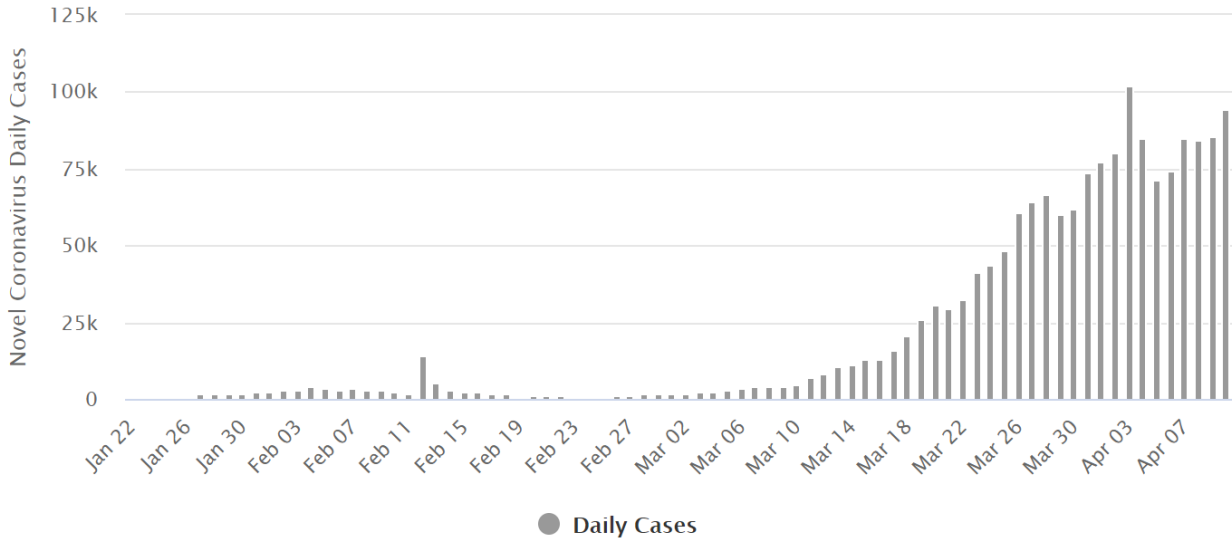
— 5 per. Mov. Avg. (Daily New Cases)



Hawaii

Daily New Cases

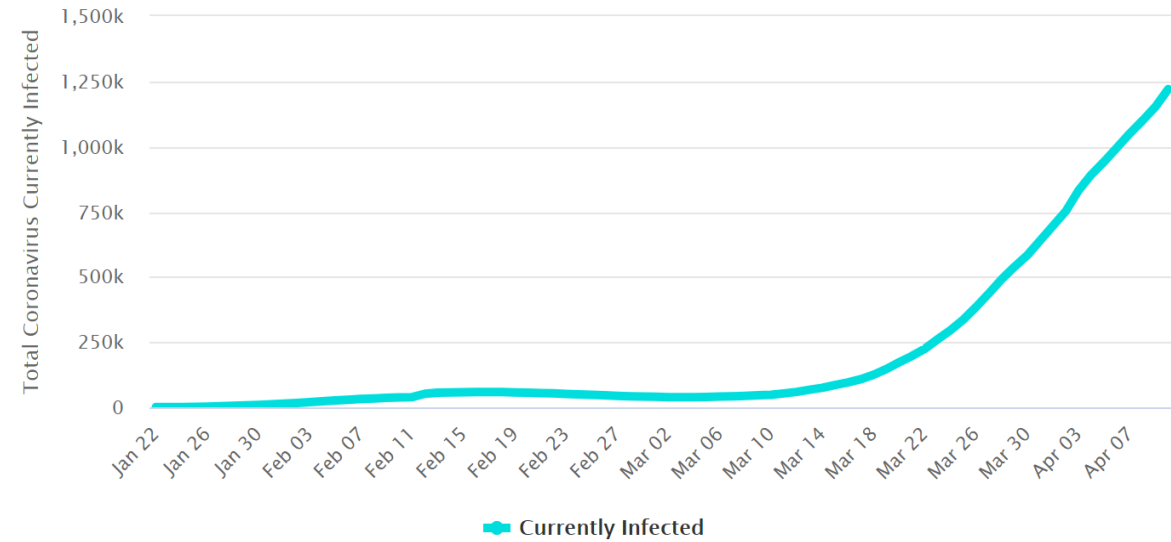
Cases per Day
Data as of 0:00 GMT+0



Worldwide

Active Cases

(Number of Infected People)



3-Day Moving Average Trendline

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

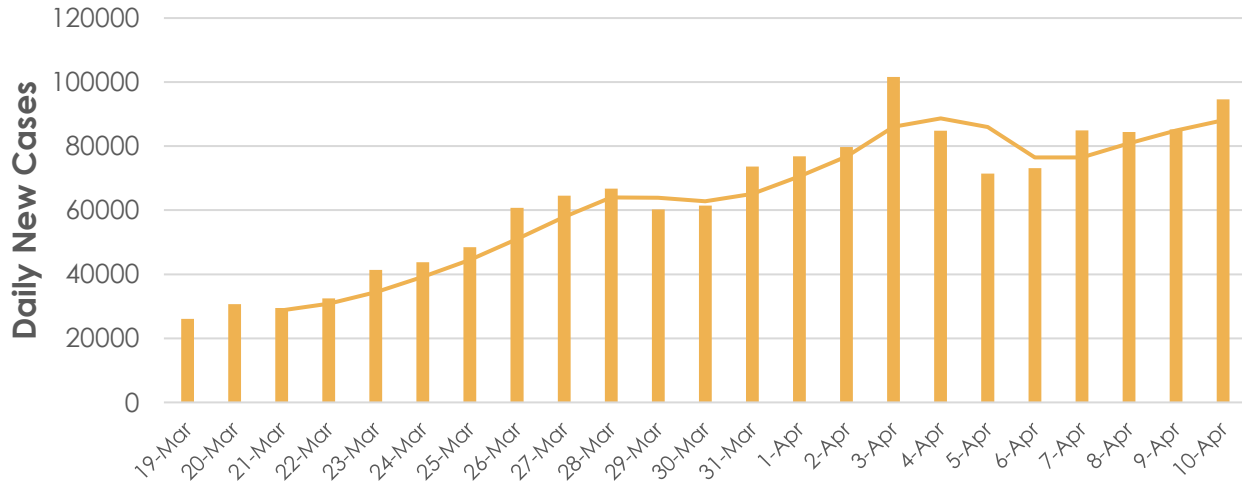


Table 1.a

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	4/8	4/9	4/10
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	0.958	1.050	1.006
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	1.192	0.797	1.010
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	1.262	1.096	0.940
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	10.89 8	0.338	0.371	1.792	2.139	0.351	1.237	1.484
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	1.314	0.877	0.797
China	1.147	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	1.016	0.667	1.095
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	1.511	0.791	1.998
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	0.956	0.818	1.207
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	1.723	0.751	0.649
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	0.886	0.997	1.046
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	1.128	0.736	0.692
Israel	2.542	0.115	6.357	1.056	1.973	1.315	0.900	0.738	1.056	1.708	1.075	0.713	1.480	1.107	1.042	0.746	0.741	1.369	0.819	0.726	0.453	3.615	0.780
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	0.688	1.563	0.860
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	1.103	1.188	0.816
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	1.087	0.280	3.286
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	0.993	1.010	1.111

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	4/2-4/6	4/3-4/7	4/4-4/8	4/5-4/9	4/6-4/10
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	1.011	1.009	1.062
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	0.984	0.948	0.993
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	0.977	0.987	0.995
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	0.998	1.178	1.400
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	1.006	1.027	1.023
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	1.331	1.148	1.107
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	1.106	1.096	1.180
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	0.941	0.916	0.963
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	1.109	1.028	1.026
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	0.978	1.047	1.046
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	0.933	0.861	0.827
Israel	1.196	1.143	1.095	1.058	1.206	1.217	1.084	1.018	1.023	1.001	0.943	0.880	0.821	1.396	1.279
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	0.965	1.140	0.895
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	0.999	1.087	1.117
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	0.978	0.846	1.378
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	0.971	1.006	1.060

Table 2

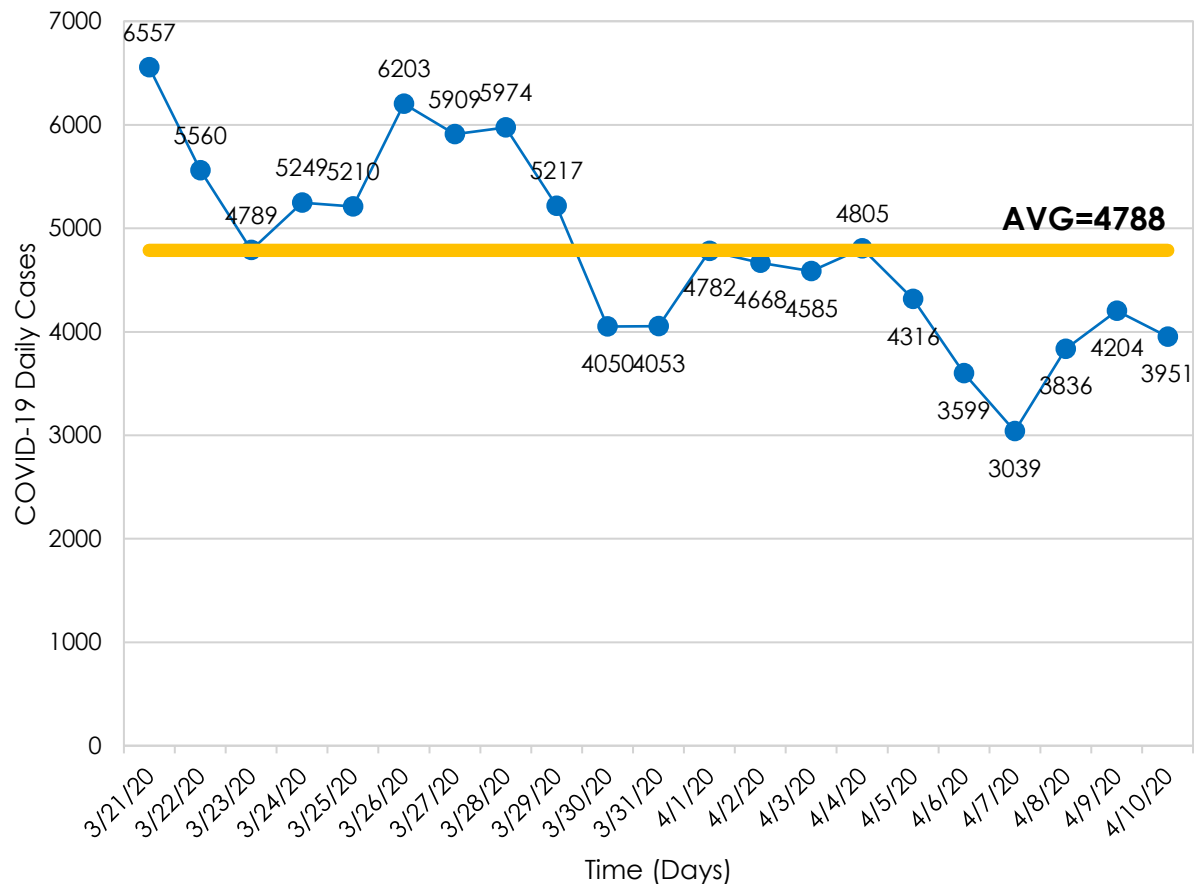
RATIO OF THE AVERAGE NEW CASES OF RECENT THREE DAYS TO MAX DAILY PEAK

	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	4/8	4/9	4/10
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	0.932	0.963	0.967
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	0.668	0.667	0.658
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	0.532	0.563	0.610
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	0.291	0.285	0.228
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	0.633	0.714	0.698
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	0.004	0.004	0.004
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	0.730	0.761	0.711
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	0.665	0.598	0.586
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	0.522	0.573	0.550
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	0.225	0.239	0.232
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	0.058	0.054	0.047
Israel	0.538	0.662	0.715	0.887	0.855	0.755	0.713	0.825	0.881	0.874	0.838	0.942	0.902	0.766	0.685	0.643	0.609	0.424	0.464	0.505
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	0.187	0.160	0.155
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	0.460	0.569	0.580
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	0.627	0.539	0.539
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	0.796	0.836	0.867

COVID-19 'MODIFIED' Control Chart Analysis

Italy

'Modified' Control Chart of COVID-19 Daily Cases in Italy (3/21/20 - 4/10/20)

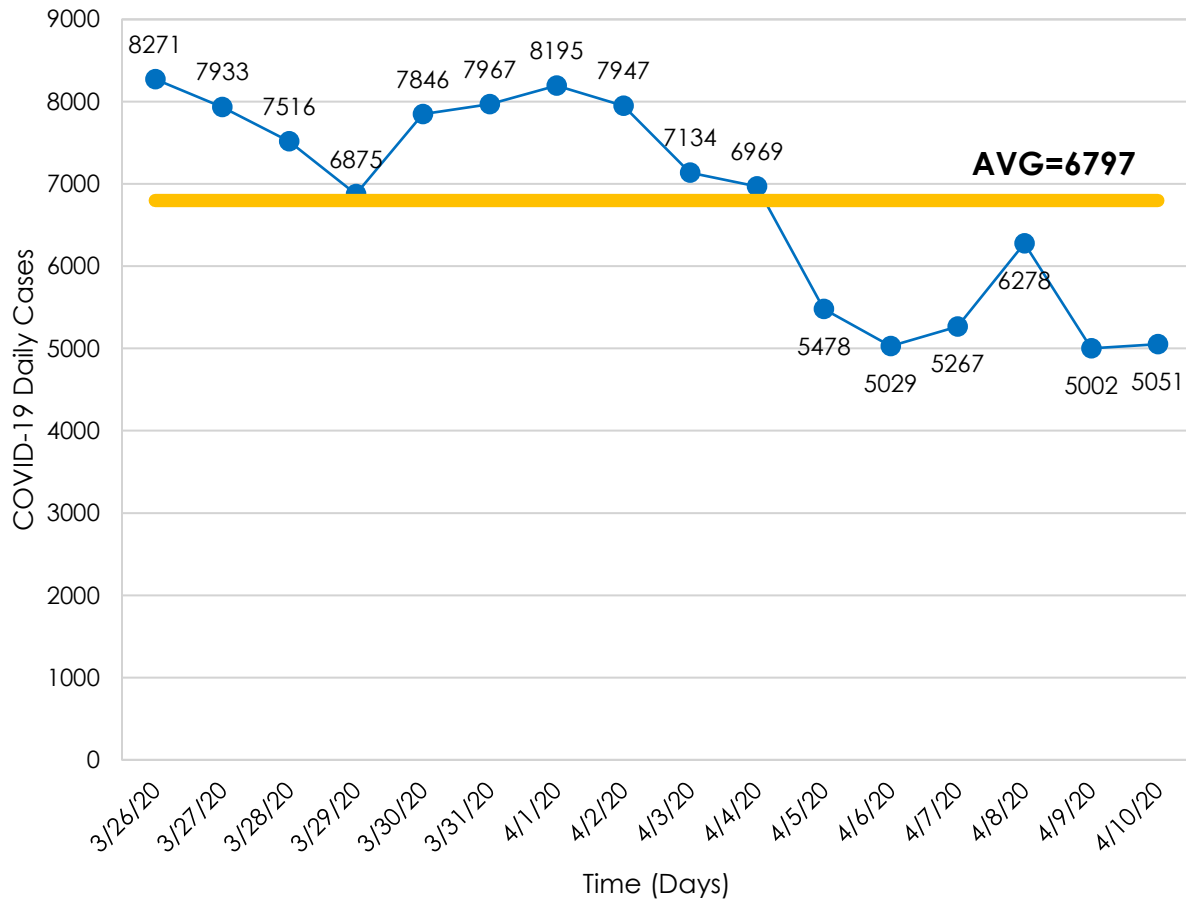


'Modified' Control Chart Analysis:

- 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 4/8/20 to 4/10/20) 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 4/6/20 to 4/10/20) 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.
- Nine successive points are on one side of the centerline.
 - The nine consecutive points (from 3/21/20 to 3/29/20) are all on one side (above) of the centerline. This was not a good 'out-of-control' pattern.

Spain

'Modified' Control Chart of COVID-19 Daily Cases in Spain (3/26/20 - 4/10/20)

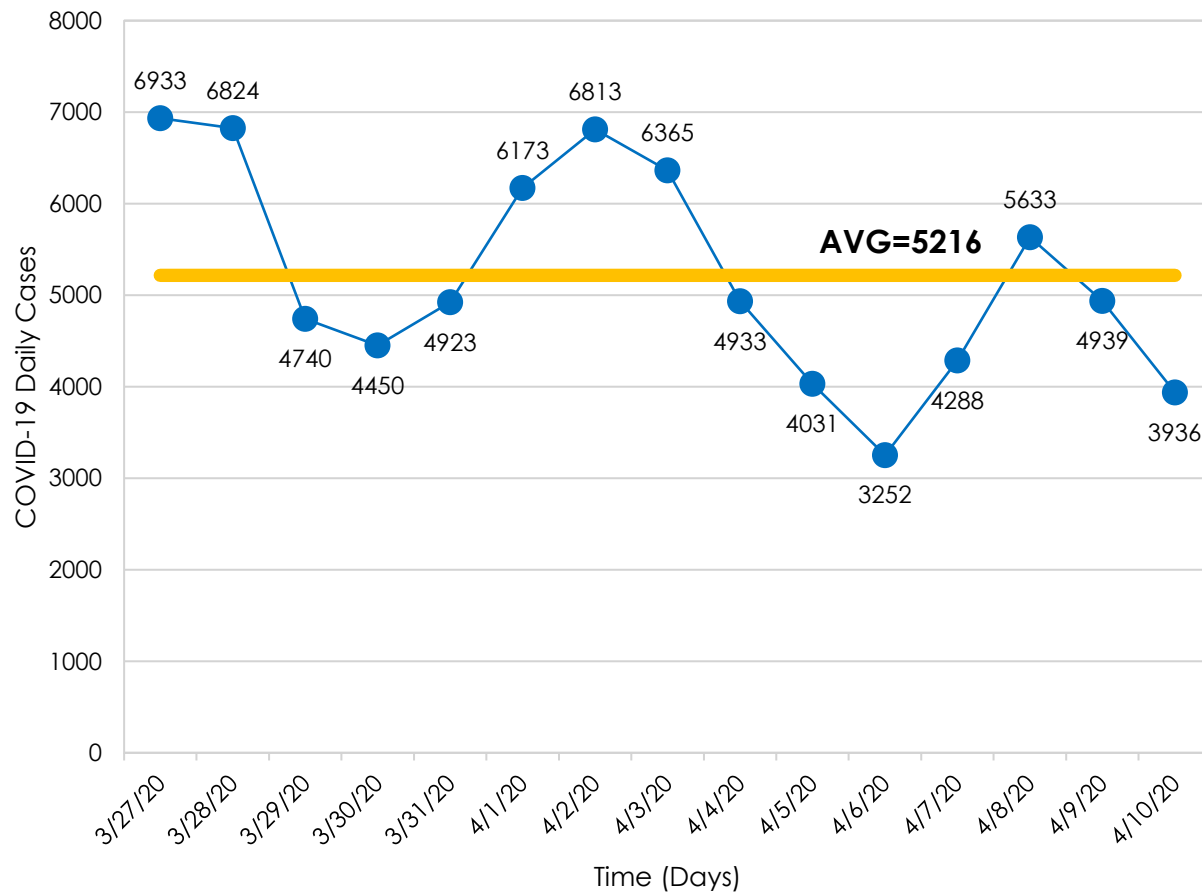


'Modified' Control Chart Analysis:

- 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 4/8/20 to 4/10/20) 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 five points (from 4/6/20 to 4/10/20) 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.
- Nine successive points are on one side of the centerline.
 - The nine consecutive points (from 3/26/20 to 4/3/20) are all on one side (above) of the centerline. This was not a good 'out-of-control' pattern.

Germany

'Modified' Control Chart of COVID-19 Daily Cases in Germany (3/27/20 - 4/10/20)

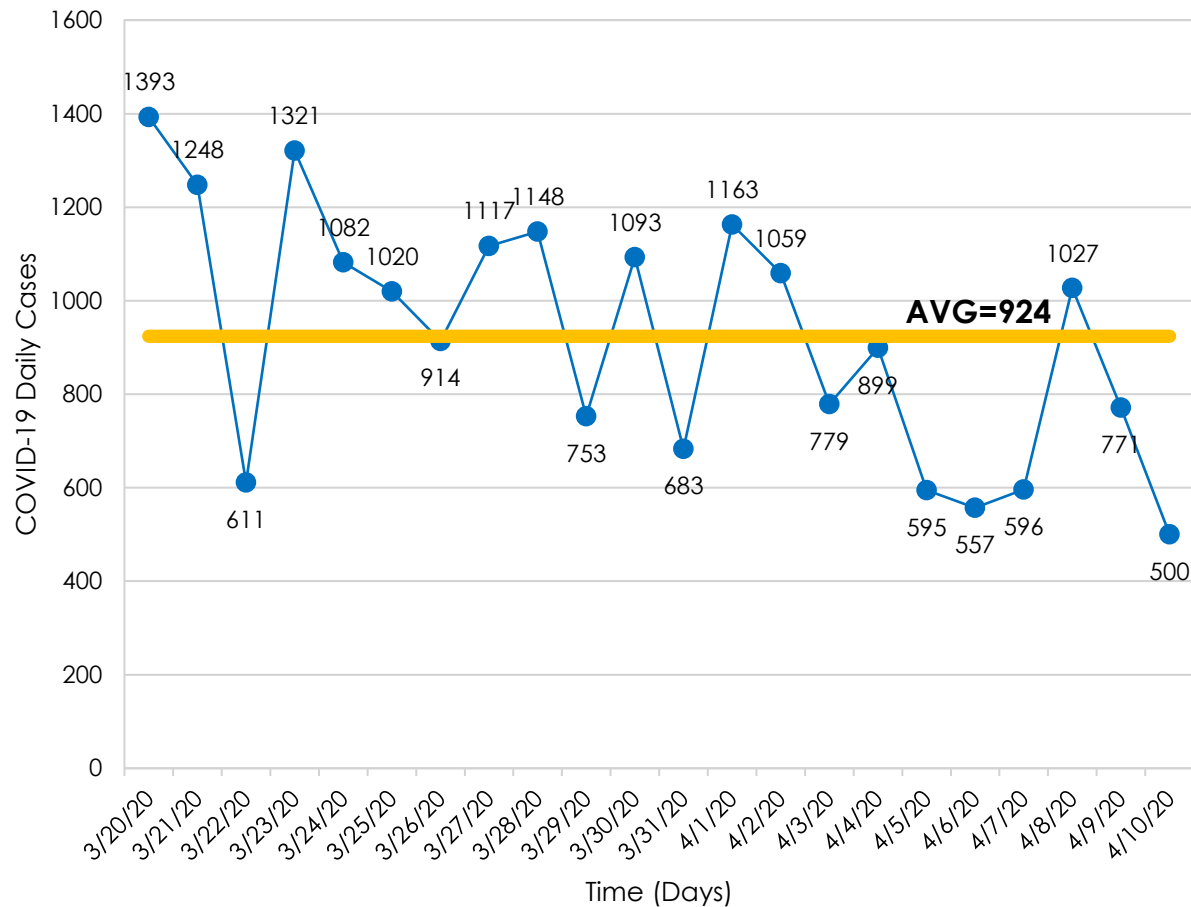


'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - Two points (4/9/20 - 4/10/20) 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.
 - Four points (4/6/20 - 4/7/20 and 4/9/20-4/10/20) 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

'Modified' Control Chart of COVID-19 Daily Cases in Switzerland (3/20/20 - 4/10/20)

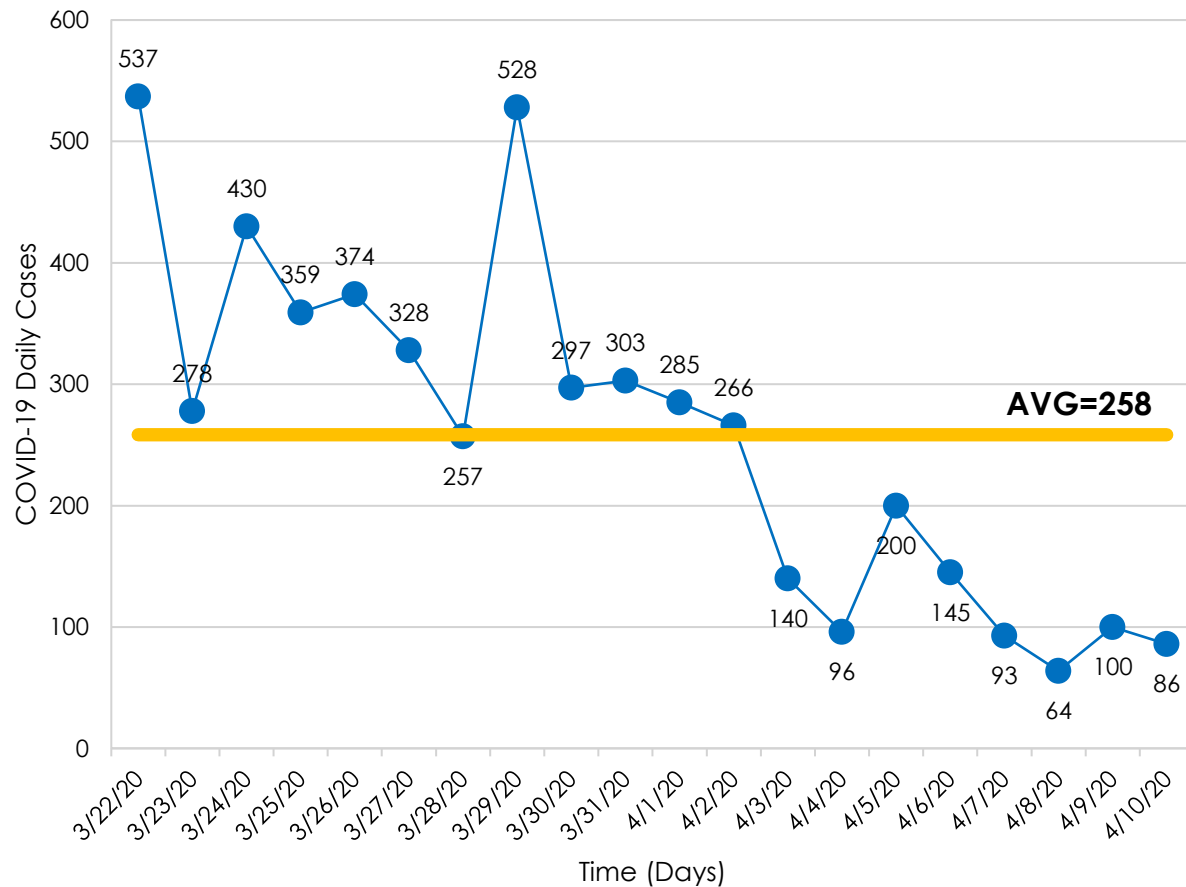


'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - Two points (4/9/20 and 4/10/20) 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 (4/6/20 - 4/7/20 and 4/9/20 - 4/10/20) 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

'Modified' Control Chart of COVID-19 Daily Cases in Australia (3/22/20 - 4/10/20)

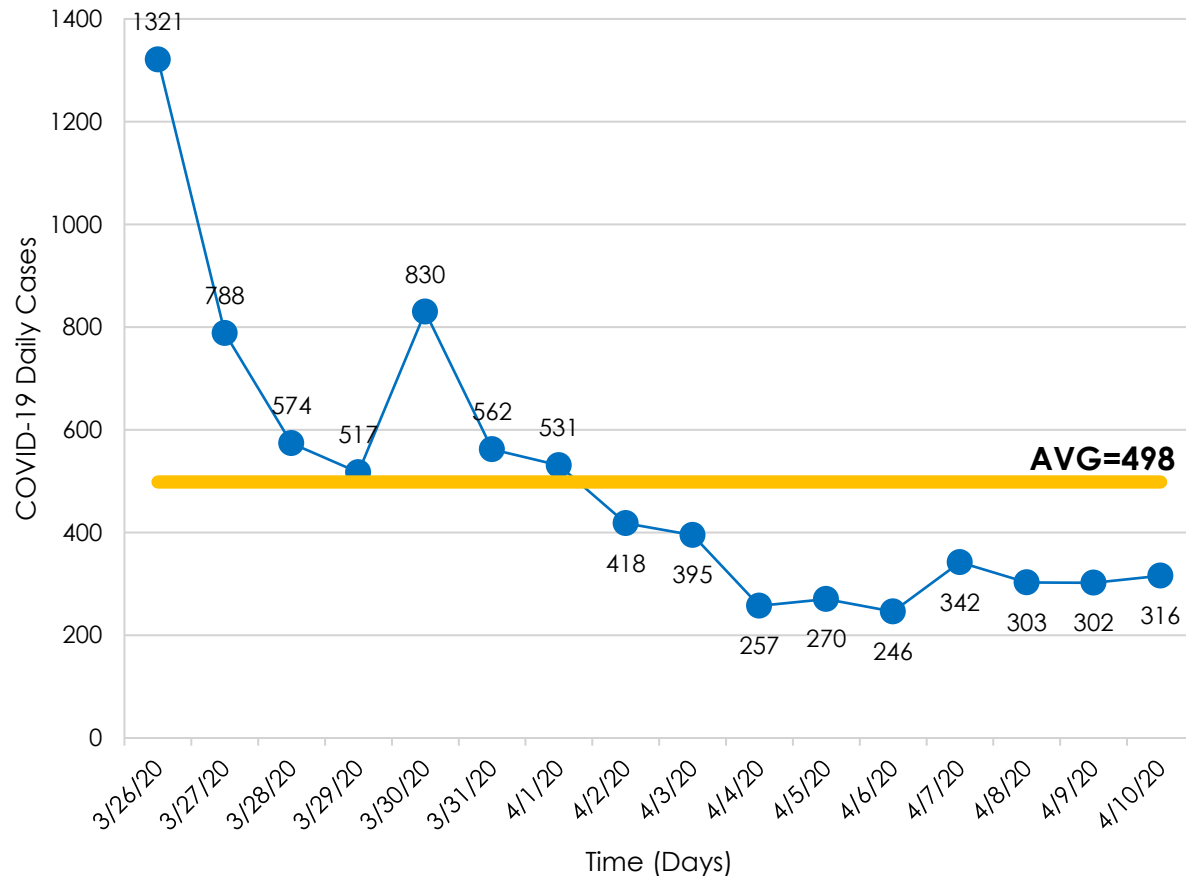


'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - Two points (4/8/20 and 4/10/20) are below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Israel. This is a good 'out-of-control' pattern. Also, a linear trend line with a downward slope can be observed from 4/2/20.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - Four points (4/6/20 – 4/8/20 and 4/10/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Israel. A good 'out-of-control' sign.

Austria

'Modified' Control Chart of COVID-19 Daily Cases in Austria (3/26/20 - 4/10/20)

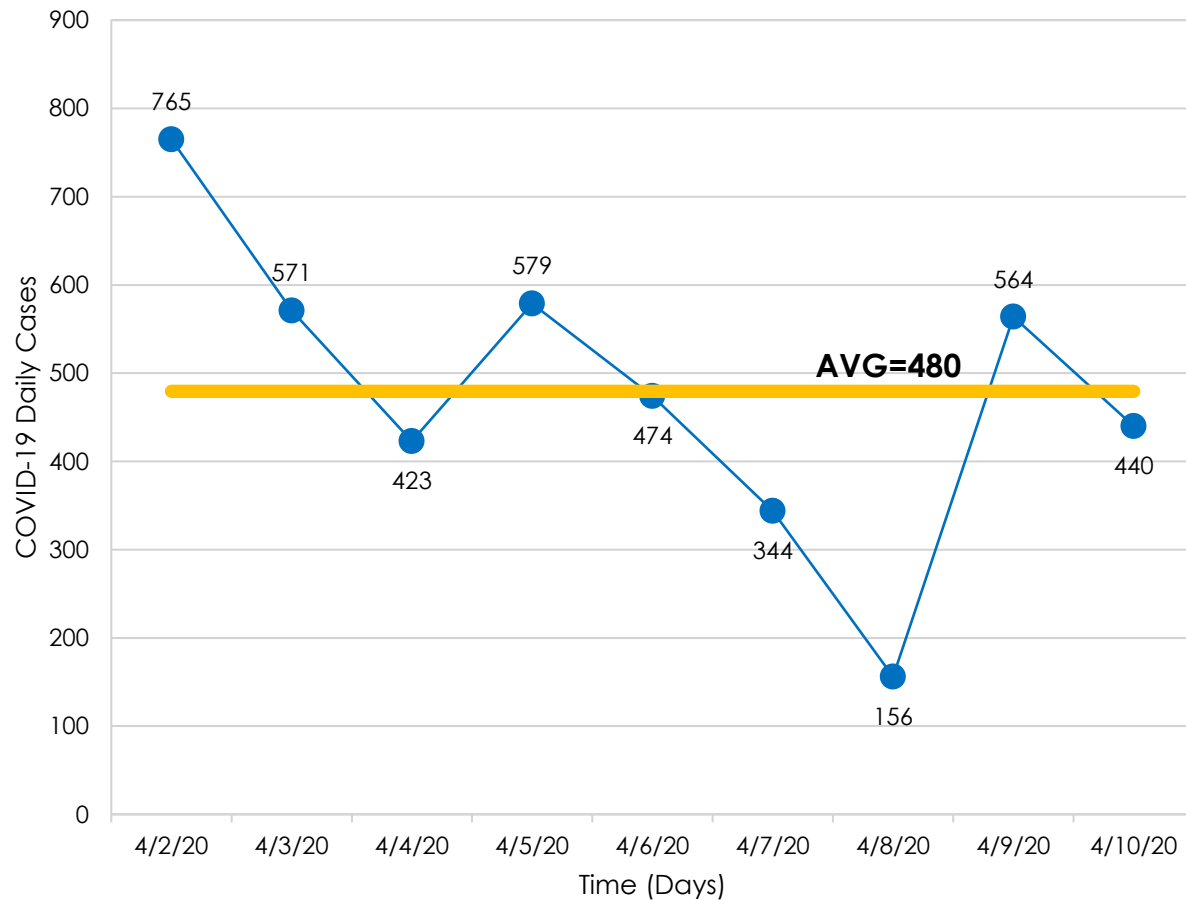


'Modified' Control Chart Analysis:

- 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 4/8/20 to 4/10/20) 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 4/6/20 to 4/10/20) 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.
- Nine successive points are on one side of the centerline.
 - The last nine points (from 4/2/20 to 4/10/20) are all on one side (below) of the centerline. This good 'out-of-control' pattern suggests that the daily COVID-19 cases in Austria are stabilizing in a positive direction.

Israel

'Modified' Control Chart of COVID-19 Daily Cases in Israel (4/2/20 - 4/10/20)



'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
 - Two points (4/8/20 and 4/10/20) are below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Israel. This is a good 'out-of-control' pattern. Also, a linear trend line with a downward slope can be observed from 4/2/20.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
 - Four points (4/6/20 – 4/8/20 and 4/10/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Israel. A good 'out-of-control' sign.