

Measure	Desired Change	Yesterday in the U.S.
No. of Tests	Increase	Up 6.7% (Cumulative)
Positive Test Rate	Decline	Up slightly 19.4% (from 19.1%)
No. of Cases	Plateau	Up 7.7%, rate continues to slow
% of Deaths Per Case	Decline	Up to 3.6% (v. 3.4%)
No. of Deaths / 1M Pop.	Plateau	Up to 50.4 (from 44.7)
Recoveries : Deaths	Increase (>1:1)	Steady at 1.55

We are tracking the hardest-hit countries - the twenty countries with the most confirmed cases as of April 8. These countries account for 89.1% of all confirmed coronavirus cases in the world.

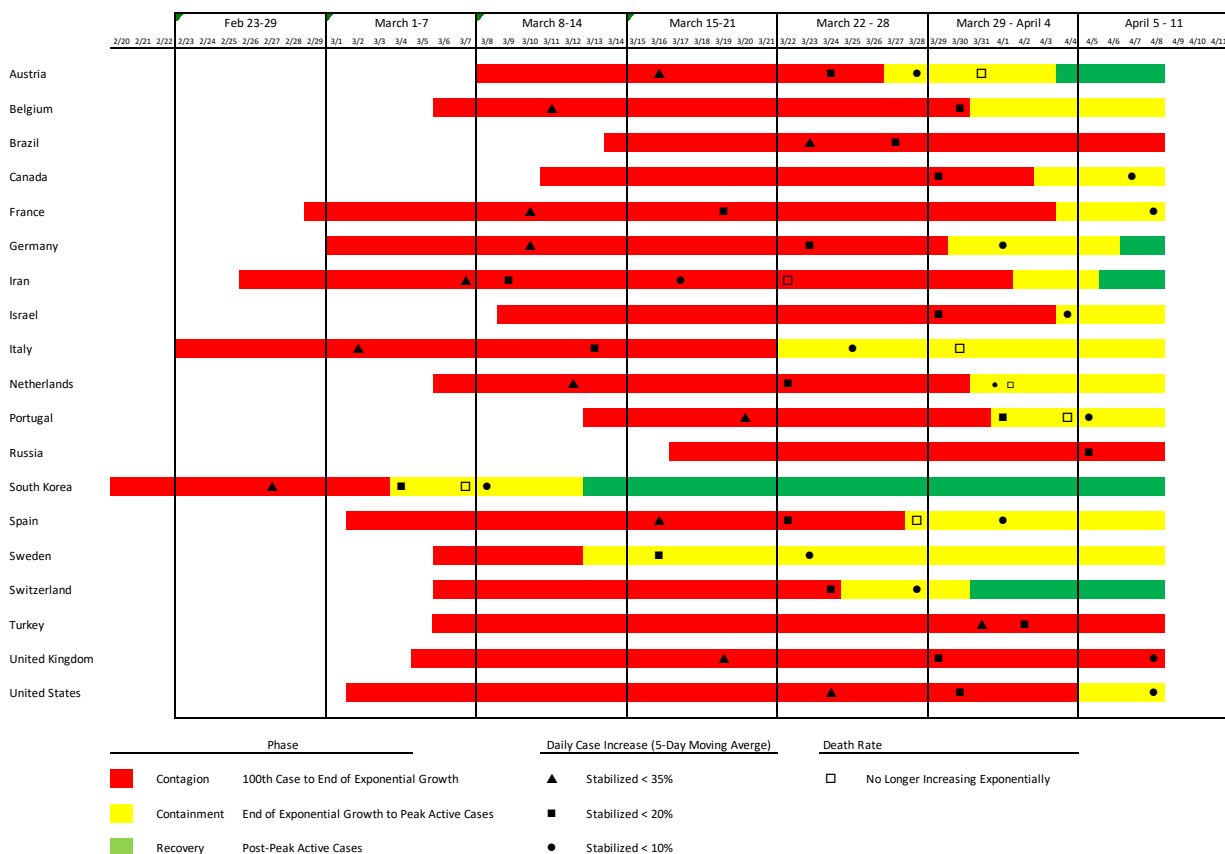
- With 150,000 new tests in the U.S. yesterday, testing is nearly 240,000 to-date. This represents 7,109 tests per 1 million population. By comparison to other countries with the highest number of confirmed cases, Switzerland's rate is 20,625 per 1 million; Germany 15,730; Austria 14,422; Italy 14,114; Portugal 13,766; Israel 13,557; South Korea 9,310; Canada 9,812; Belgium 7,269; and, Spain 7,593. Rates in Brazil, France, Iran, Netherlands, Russia, Sweden, Turkey and the United Kingdom are lower than in the U.S. (China's data are not available.)

The rates for the 5 U.S. states with the most confirmed cases are: New York 19,958; New Jersey 11,296; Michigan 5,309; California 4,176; and Massachusetts 13,903.

- Deaths in the U.S. have been nearly 2,000 each of the past three days, and the rate shows no indication yet of falling off its exponential trend. At a 3.6% death rate of confirmed cases, however, the U.S. rate remains lower than that for 10 of the hardest-hit countries. The rate in the United Kingdom is now the highest among these countries, at 12.3%; Italy's is 11.3%, Netherlands, 11.0%, France 10.4%; and, Belgium and Spain, 10.1%.
- Cases continue to increase less rapidly in most of the countries hardest hit by the coronavirus, except for Russia and Brazil. Eight (8) countries - Austria, China, France, Germany, Iran, Spain, South Korea and Switzerland - are at or near their peak in active cases. Fifteen, including the United States, have seemed to break the exponential growth trend in cases.
- Cases in the U.S. states also are growing more slowly with each passing day. Average daily case increases, on a 5-day moving average basis, are below 10% in 36 states. Twenty one states - Alaska, California, Colorado, Florida, Hawaii, Idaho, Maine, Michigan, Minnesota, Missouri, Montana, New Hampshire, New York, North Dakota, Ohio, Oklahoma, Oregon, Tennessee, Washington, Wisconsin and Wyoming - are no longer experiencing exponential growth in confirmed cases.
- Thirteen states are at or near their peak in active cases - Alaska, Arkansas, Hawaii, Maine, Minnesota, Missouri, Montana, New Hampshire, North Dakota, Oklahoma, Tennessee, Washington and Wyoming.

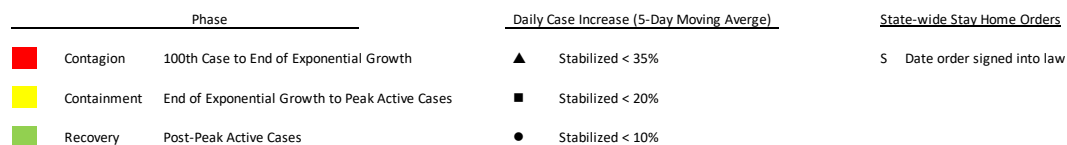
The graphic illustrates in color when the country first recorded 100 total cases ("contagion" phase); when growth stopped following an exponential pattern ("containment" phase); and, when peak total cases were recorded ("recovery" phase). It uses symbols to indicate when average daily case growth rates fell (and was sustained) below certain benchmarks, as well as when deaths stopped growing exponentially.

A similar chart for selected U.S. states and New York City is provided on the next two pages.



Information throughout the Dashboard is provided as a courtesy, based on data from the above-named sources. HIA has no responsibility for the accuracy and updating of any data. Sources: worldometers.info; covidtracking.com Graphics depict data as of April 8, 2020.

Please note: Due to data limitations, it is more difficult to discern when cases cease to grow exponentially at the State level. Thus, the determination of when to depict the containment phase on the chart below (yellow shading) was made on the basis of the state's timing of posting case growth rates $<10\%$; whether active cases appear to be plateauing; and, a visual interpretation of the state's logarithmic chart of total and new cases. **We have added a designation ("S") indicating the date that a state-wide stay home order was executed.**



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Phase

- Contagion 100th Case to End of Exponential Growth
- Containment End of Exponential Growth to Peak Active Cases
- Recovery Post-Peak Active Cases

Daily Case Increase (5-Day Moving Average)

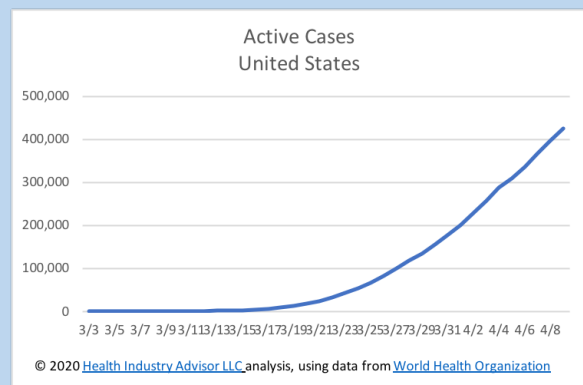
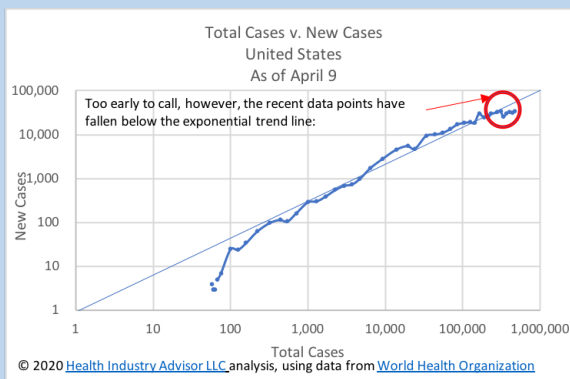
- ▲ Stabilized < 35%
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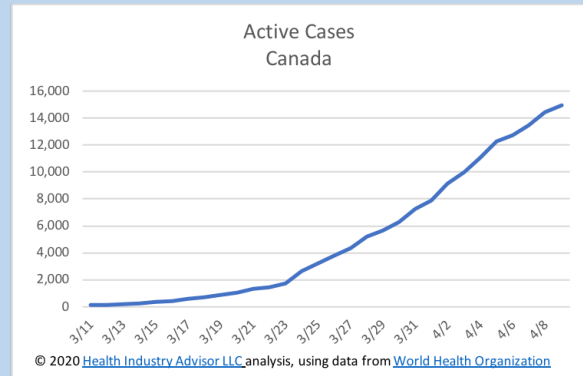
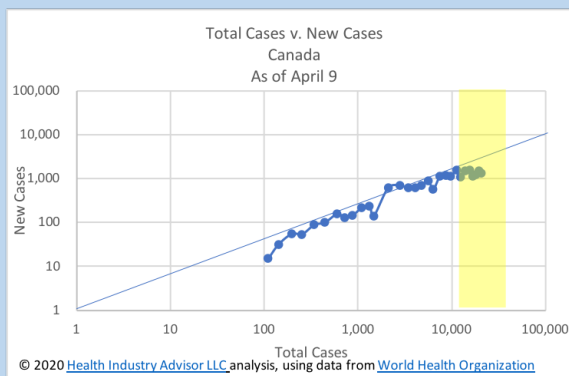
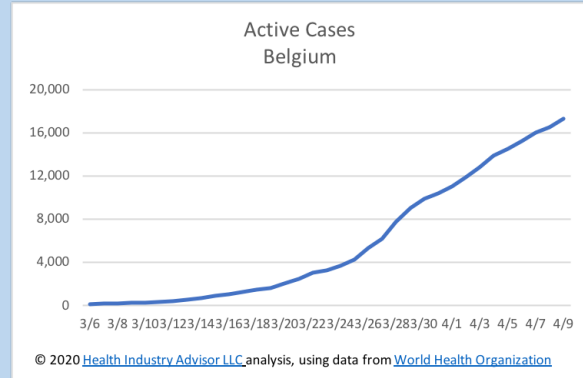
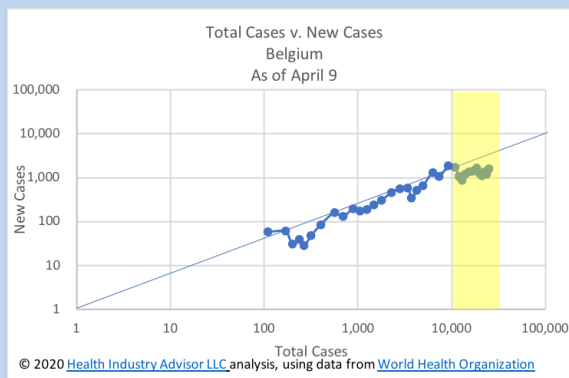
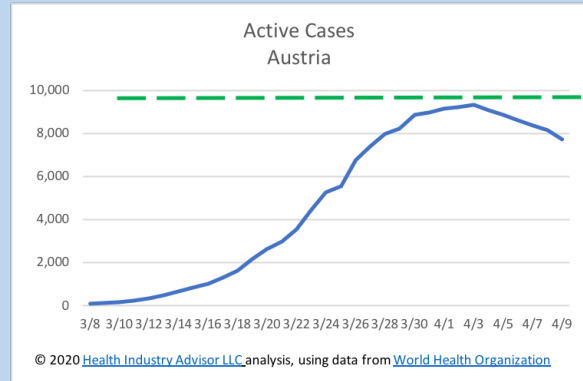
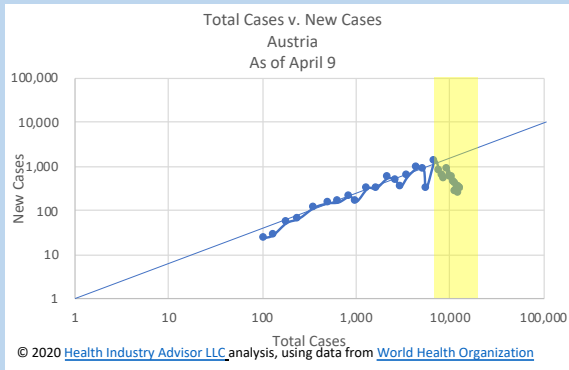
State-wide Stay Home Orders

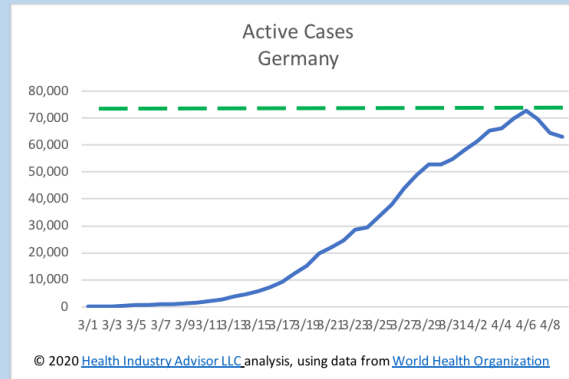
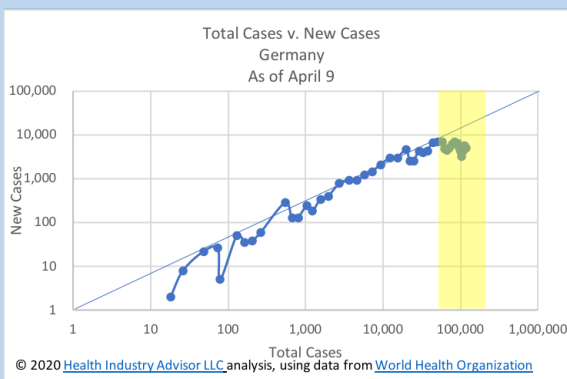
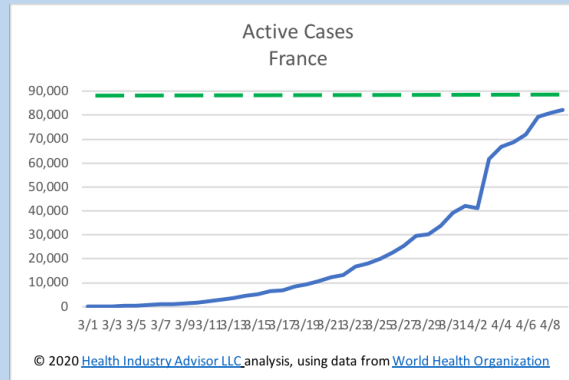
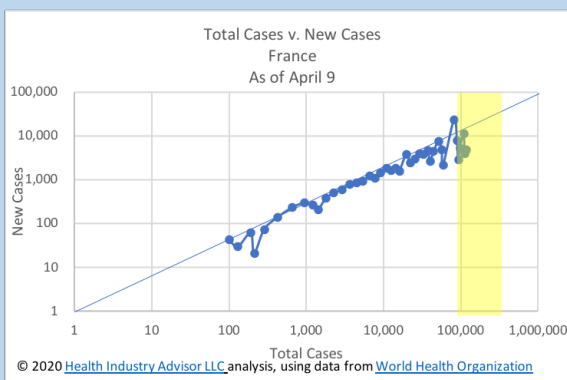
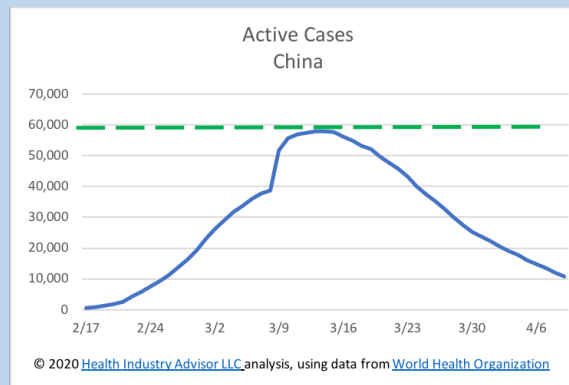
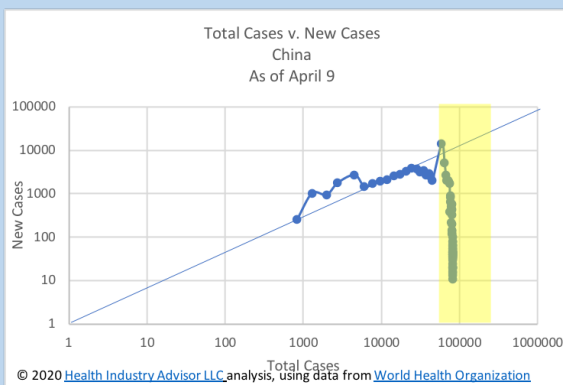
- S Date order signed into law

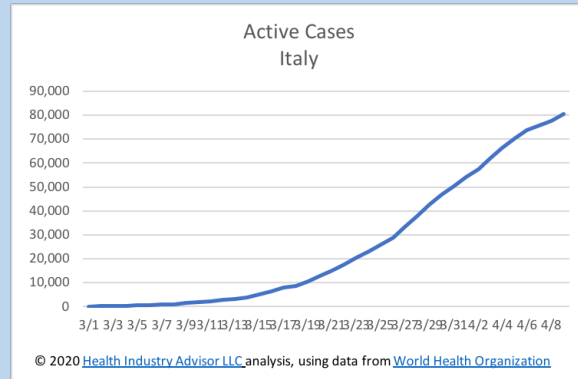
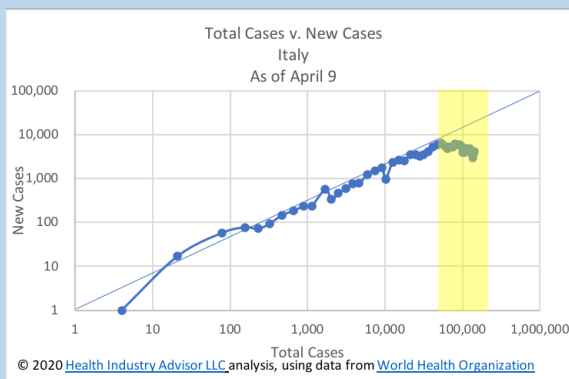
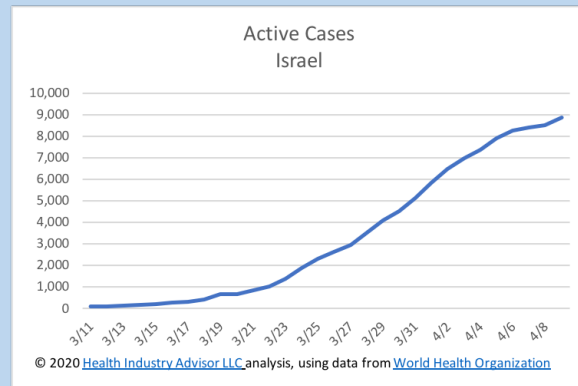
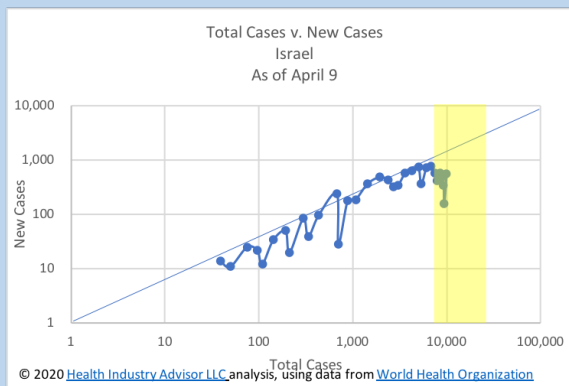
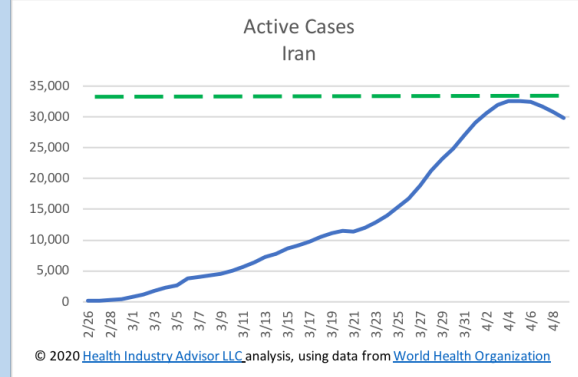
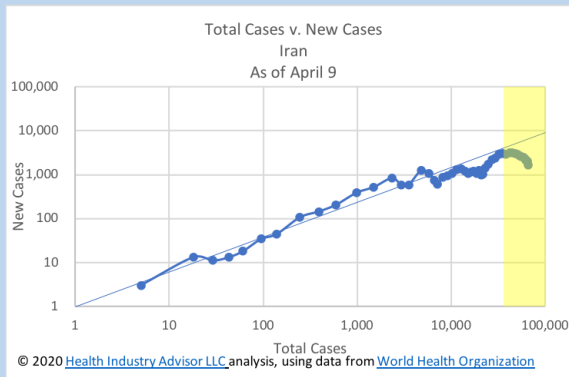
The following is an illustration of the logarithmic growth in cases in the U.S., alongside a graph of active cases. We are looking to observe when case cease to grow exponentially (i.e. "containment" of the virus), followed by a peak in active cases.

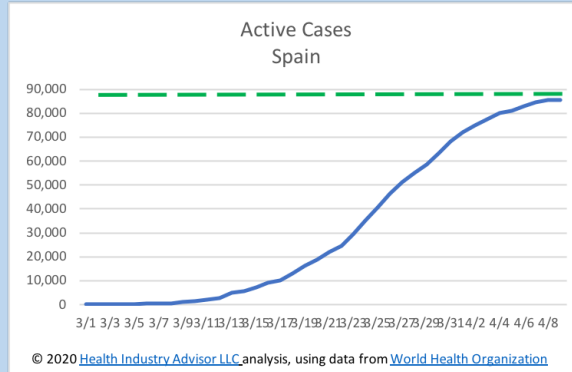
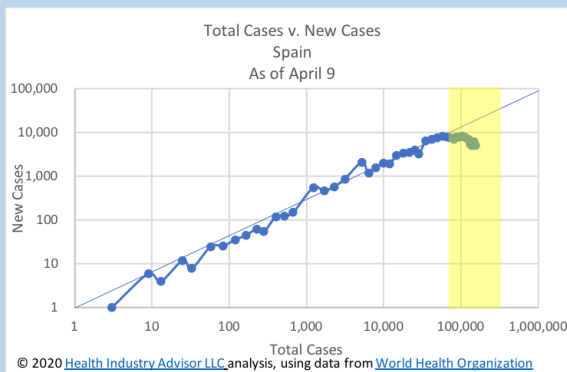
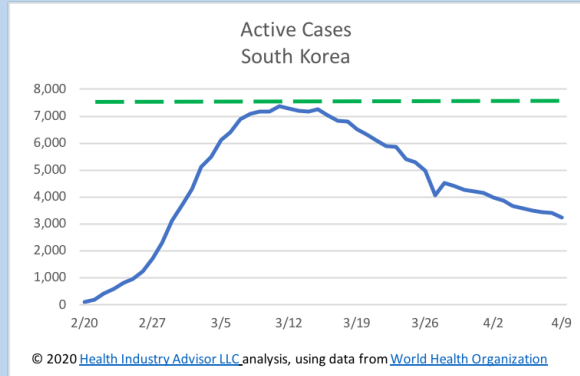
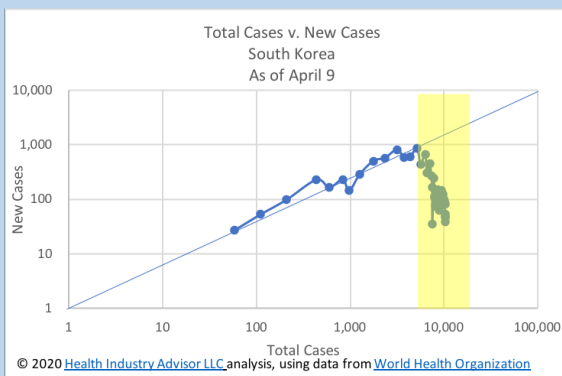
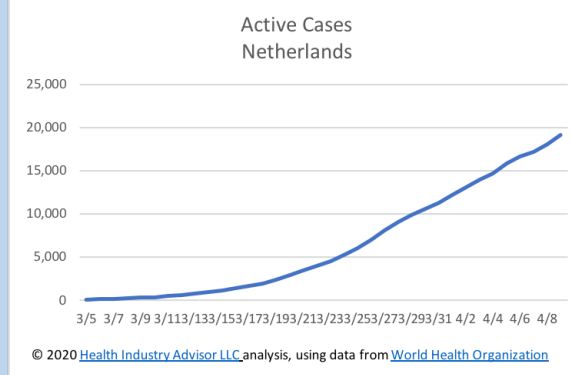
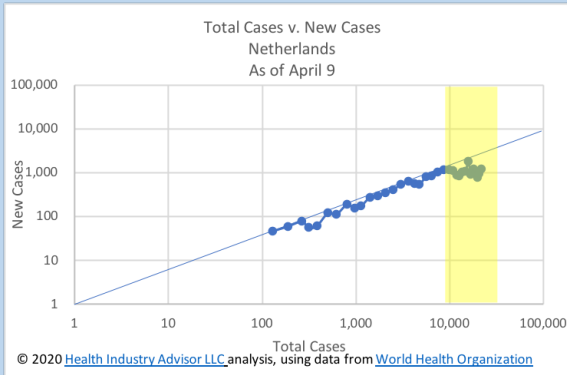
Following this page are similar graphs for selected countries that are showing evidence that cases are no longer growing exponentially. Note: on the country graphs that follow, the yellow-shaded areas are intended to highlight where case growth seems to have ceased growing exponentially. Where appropriate, on the graphs of active cases, we indicate with a dashed green line the approximate peak.

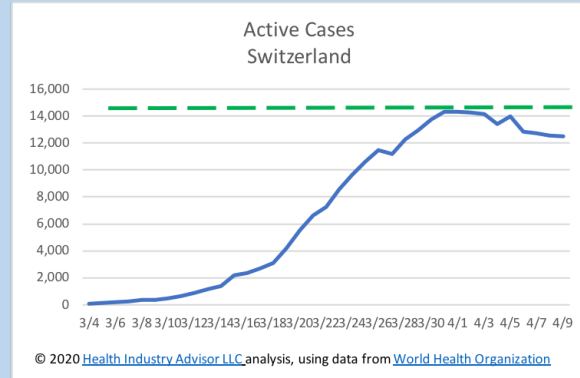
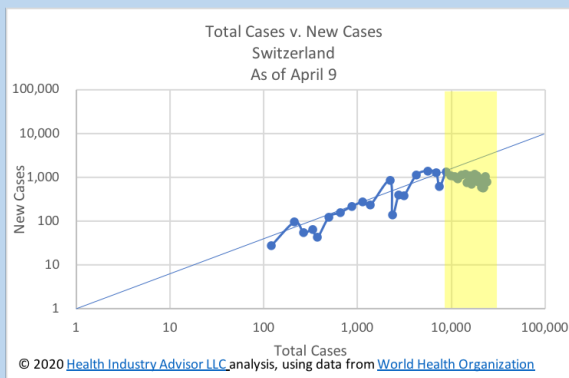
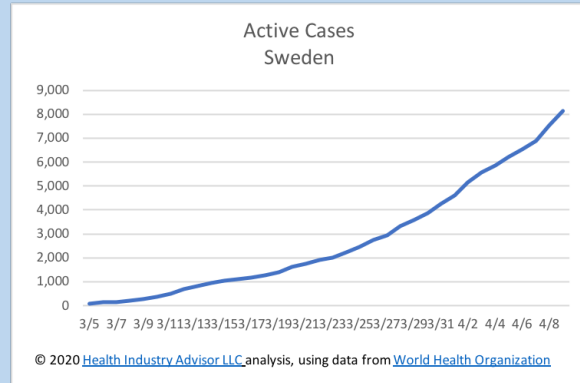
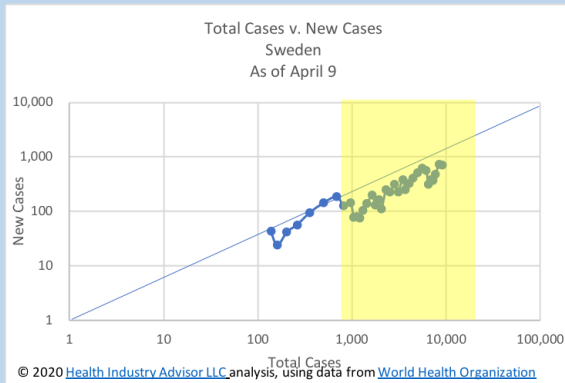




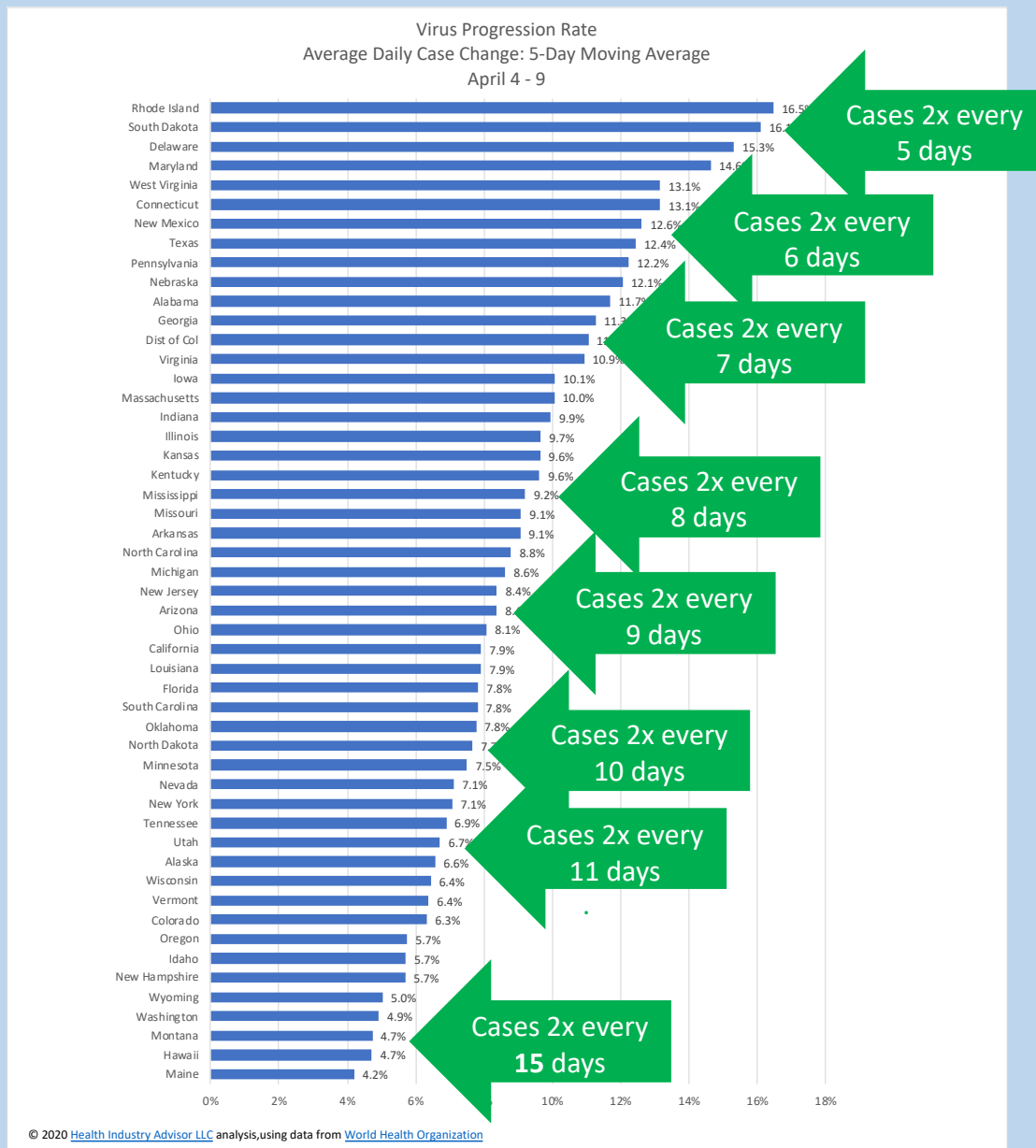








Growth is slowing across the U.S.:



On these 2 pages, we provide graphs depicting those states nearing or past the peak in active cases.

