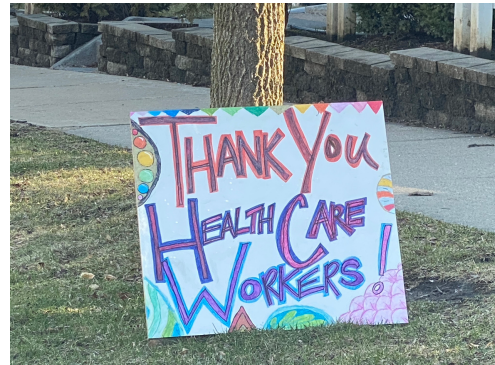
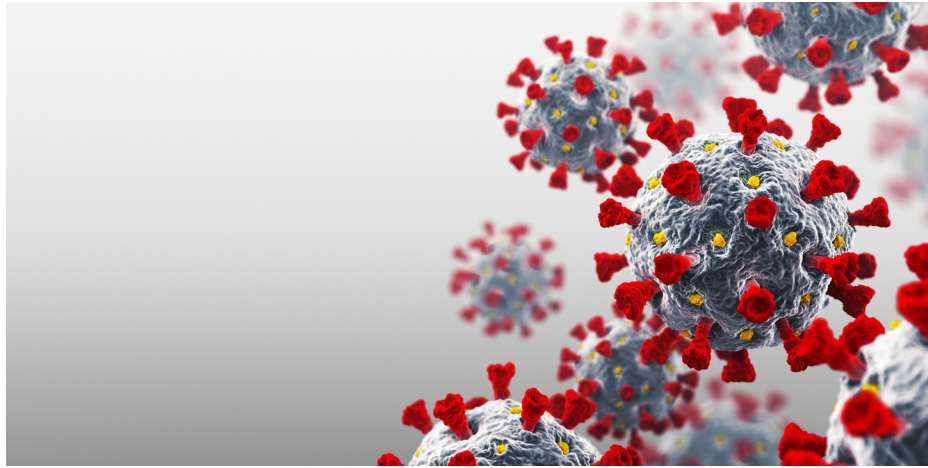
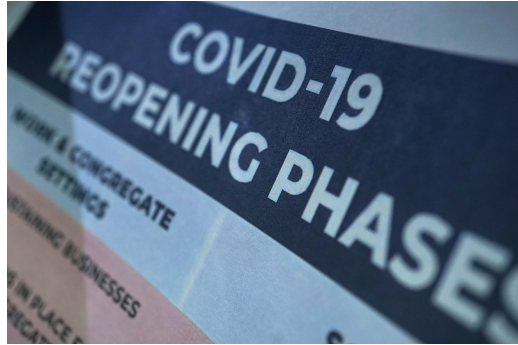




COVID-19 Report

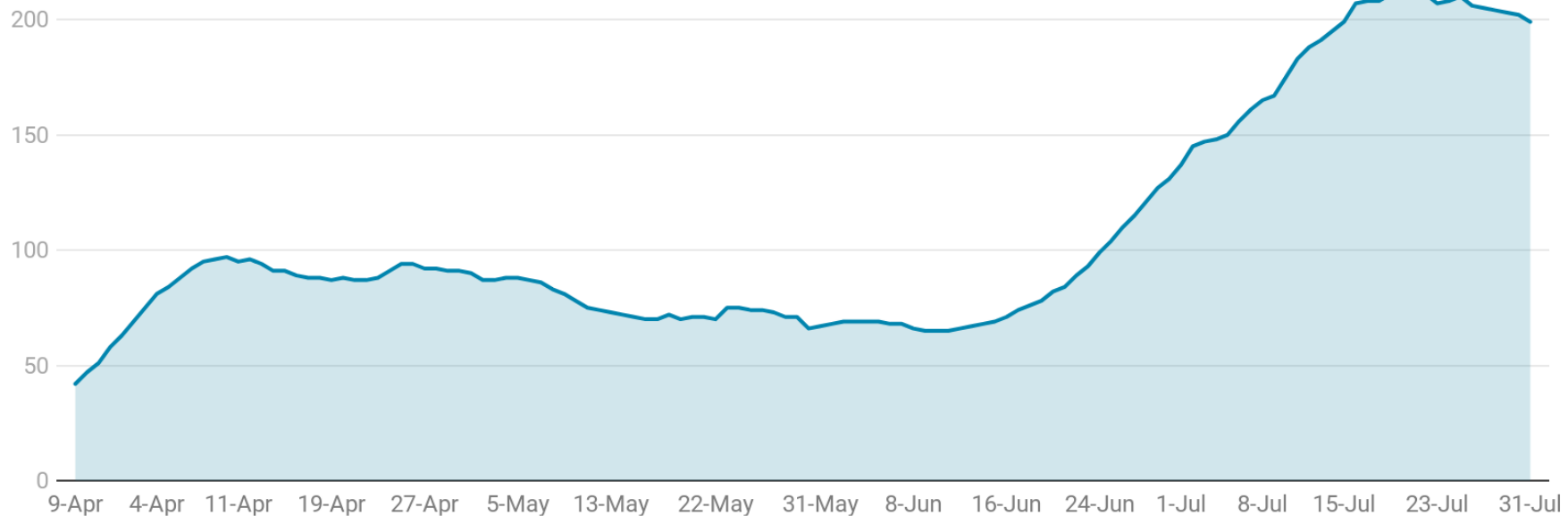
Issue # 122

Saturday, August 1, 2020

-
- Friday was a challenging day in the United States:
 - New cases were the highest reported in a week
 - Test volume was the lowest since July 13
 - The test-positive rate was the highest since July 11
 - More deaths were reported on Friday than on Thursday. The trend (trailing 7-day moving average) was up for the 4th consecutive day
 - Other trends, however, remain favorable:
 - New cases are down 6% on a week-over-week basis
 - The rate of new daily infections per capita fell to its lowest rate since July 15 (measured on a trailing 7-day moving average basis). It has now been 12 days since this rate peaked
 - Hospital COVID-19 census declined on Friday, and for the 6th time in the past 8 days. This census is now at its lowest point since July 13
 - Less than 2% of active cases are currently in the hospital. Two weeks ago, this rate was 3%
 - ER visits (%) for COVID-19-like illnesses declined again on Tuesday (latest data available), continuing a 3-week long trend. This rate is now as low as it has been since June 19
 - Trends at the state-level are more mixed:
 - Only 5 states reported their highest rate of new infections to-date yesterday: Alaska, Hawaii, Missouri, Montana and Oklahoma
 - Two states that are at least two months removed from their peak rate are, nonetheless, risking returning to their peak: Maryland and Virginia
 - In contrast, several states, despite recording a peak rate in the past several weeks, have already seen their rates drop by more than 15%: Arizona, California, Florida, Idaho, Iowa, Kansas, Louisiana, South Carolina, Texas and Utah
 - Half the states saw their rates increase in the past week; half saw them decline
 - Of the 11 states with rates >250 per day per million, however, eight saw their rates decline this past week. Montana, Oklahoma and Tennessee are of the most concern, as they each have rates >250 and saw these rates increase this past week
 - In today's report, we examined the large central and fringe metro areas with high new infection rates (>250 per day per million):
 - Twenty large central metro areas exceeded this level (31% of all such metro areas), led by Miami-Dade, FL. Eight of these twenty are in Florida or Texas
 - Seventy-seven large fringe metro areas exceeded this level (31% of all such metro areas), led by Tunica, MS. The five highest rates are each in Florida and Mississippi: Tunica and Benton, MS; Broward, Osceola and Baker, FL

New Infections Per 1 Million Population - United States

Trailing 7-Day Moving Average, As of July 31



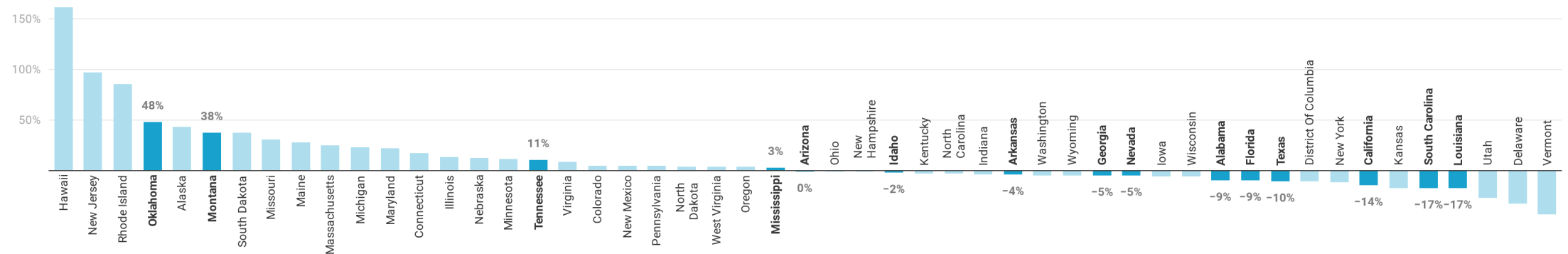
Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Oklahoma, Montana and Tennessee have rates > 250 per million each day and have seen this rate increase in the past week

Week-Over-Week Change in New Infection Rate

Trailing 7-Day Moving Average, July 31 v. July 24



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

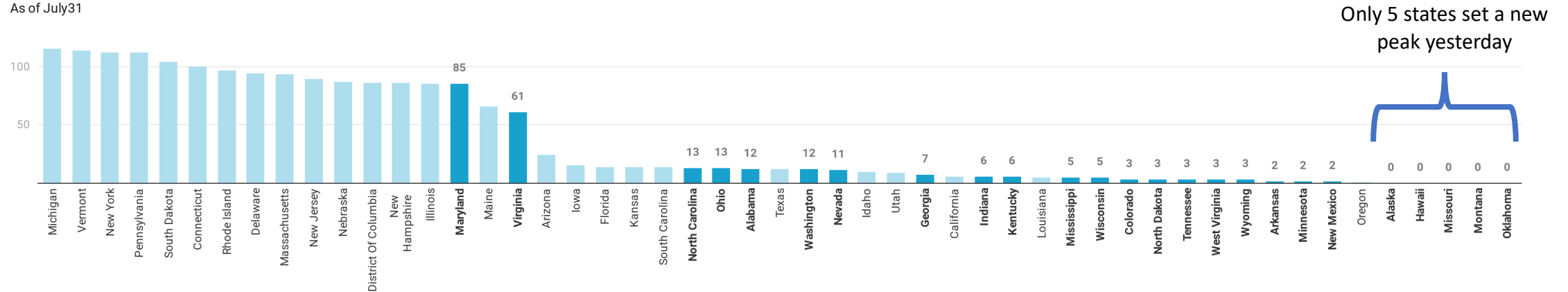
Highlighted states have a new daily infection rate > 250 million (trailing 7-day moving average)

Only four states set a new high for daily infections per capita yesterday

Maryland and Virginia are close to peak infection rates set months ago. In contrast, Arizona, California, Florida, Idaho, Iowa, Kansas, Louisiana, South Carolina, Texas and Utah have seen rates decline by more than 15% from recent peak levels

Days Since Peak New Infections Per Capita

As of July 31



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

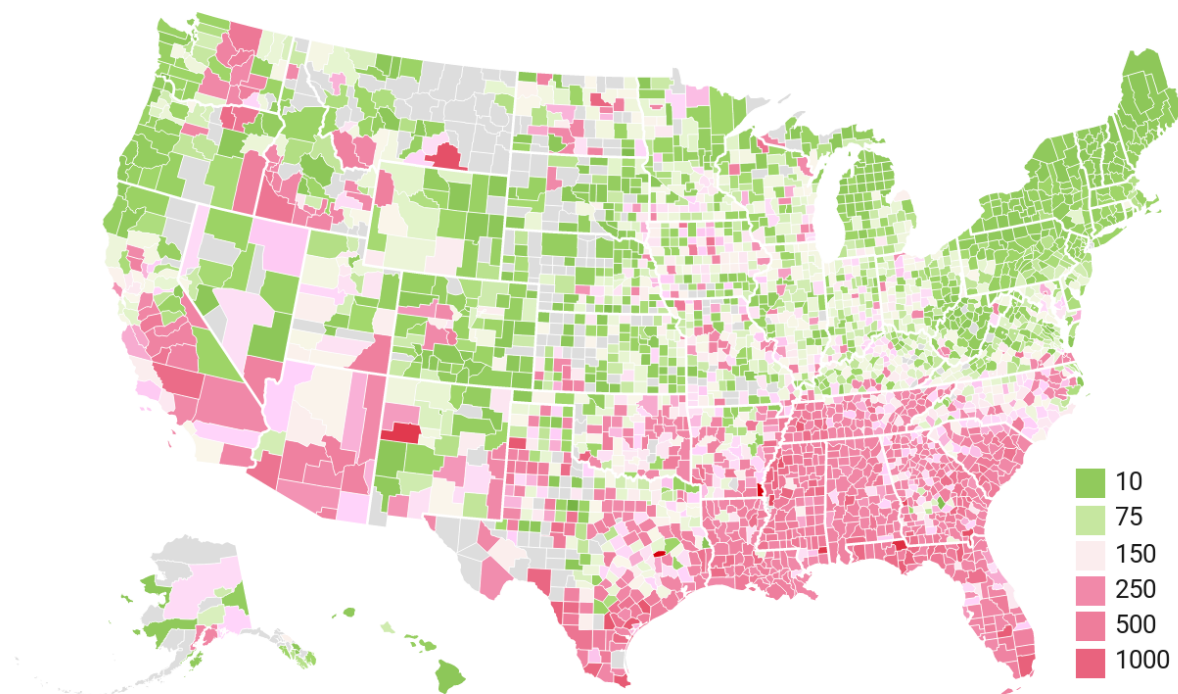
Highlighted states have a new daily infection rate $\geq 85\%$ of their peak level (trailing 7-day moving average)

County-By-County

New Infection rates remain highest in the Southeast, southeastern Texas, southern California and southern Arizona

New Daily Infections / Million Population

Trailing 7-Day Moving Average, As of July 31

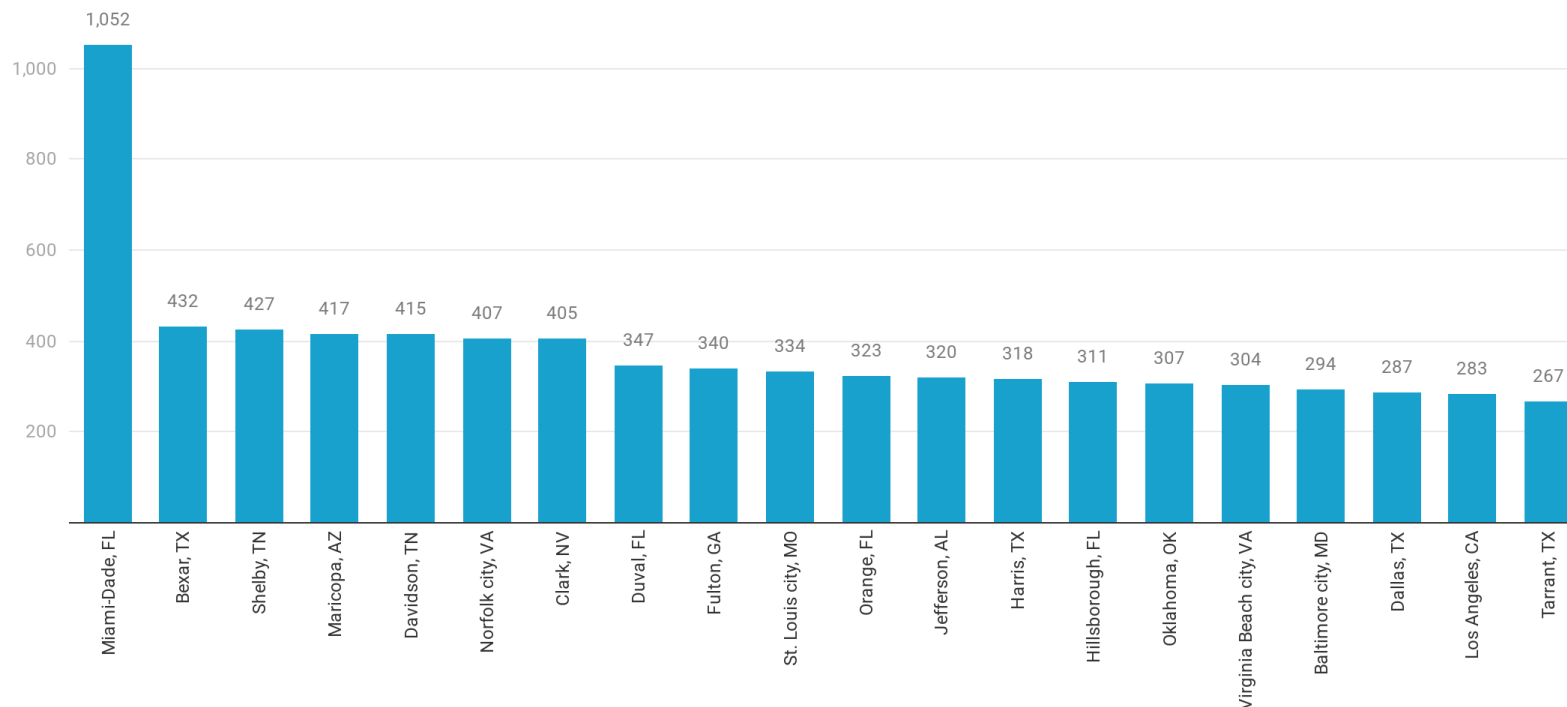


Map: Health Industry Advisor LLC • Created with Datawrapper

Twenty large central metro areas (31%) have new daily infections rates > 250 per million, 8 of these are in Florida and Texas

New Infections / 1 Million

Trailing 7-Day Moving Average, As of July 31

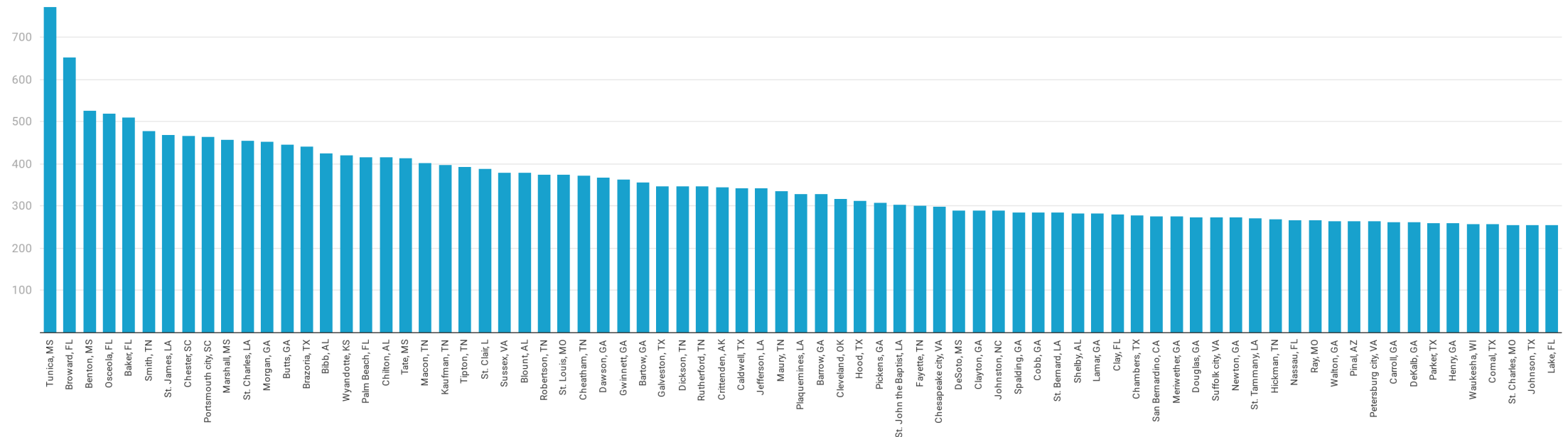


Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

New Infections / 1 Million

Large Fringe Metro Areas, Trailing 7-Day Moving Average, As of July 31



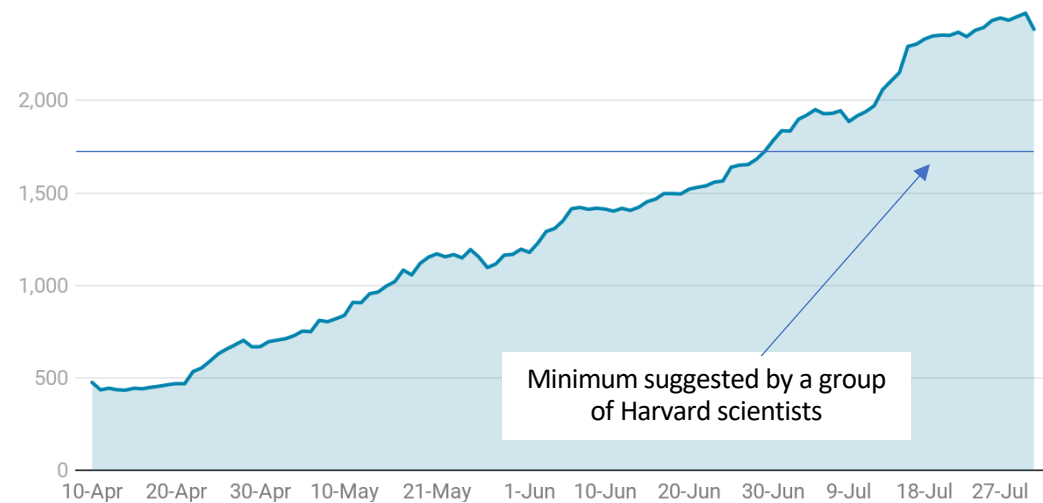
Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Fewest tests reported on Friday since July 13 and is down slightly week-over-week; test-positive rate was highest since July 11 yet, still lower week-over-week

Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of July 31

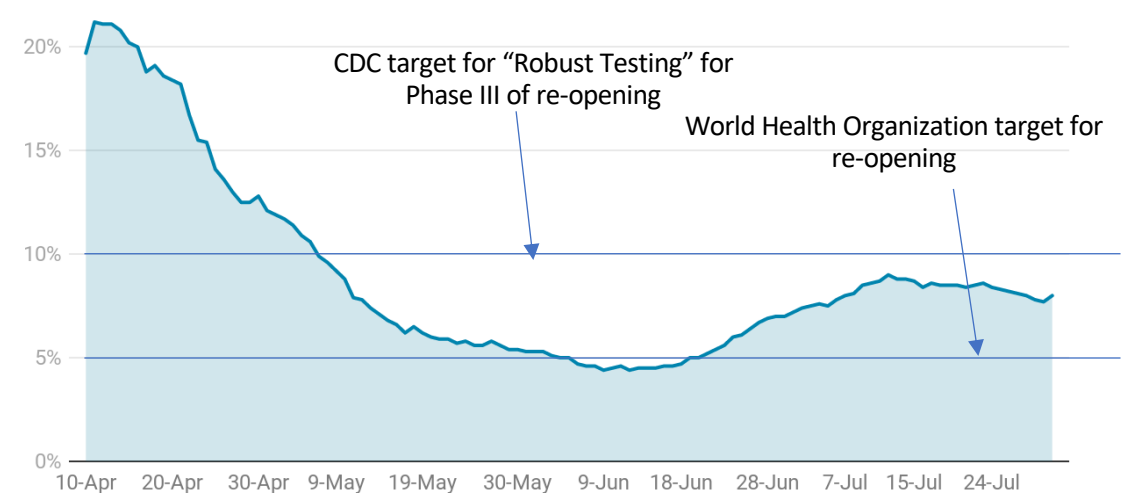


Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Test-Positive Rate - United States

Trailing 7-Day Moving Average, As of July 31



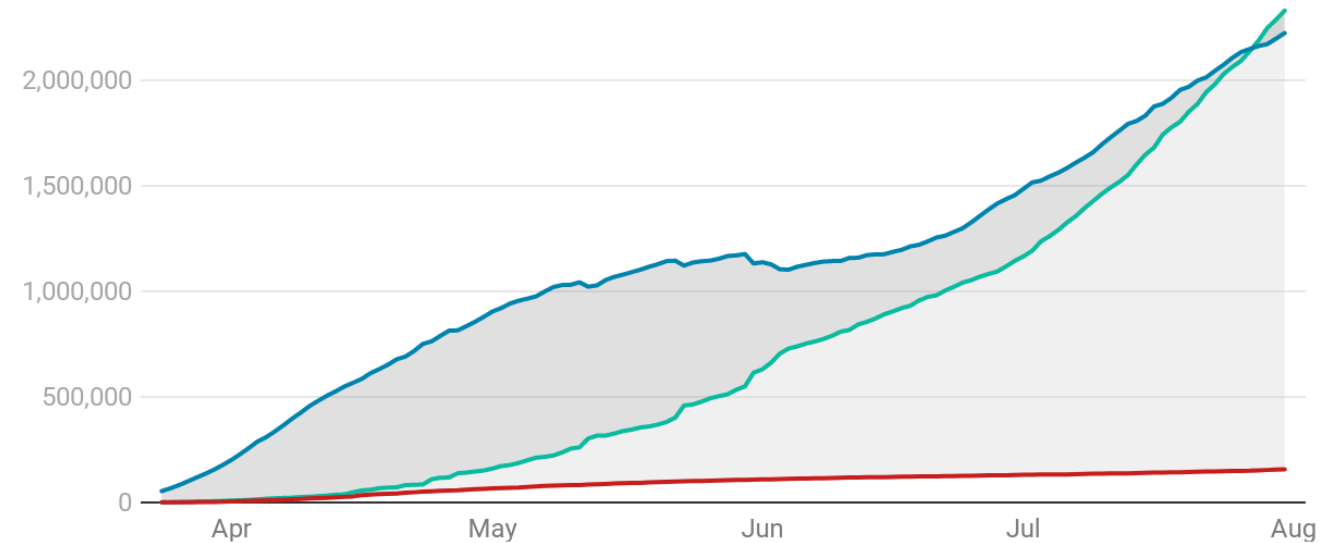
Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Active Cases v. Recoveries & Deaths

As of July 31

— Active Cases — Recoveries — Deaths



Health Industry Advisor LLC analysis

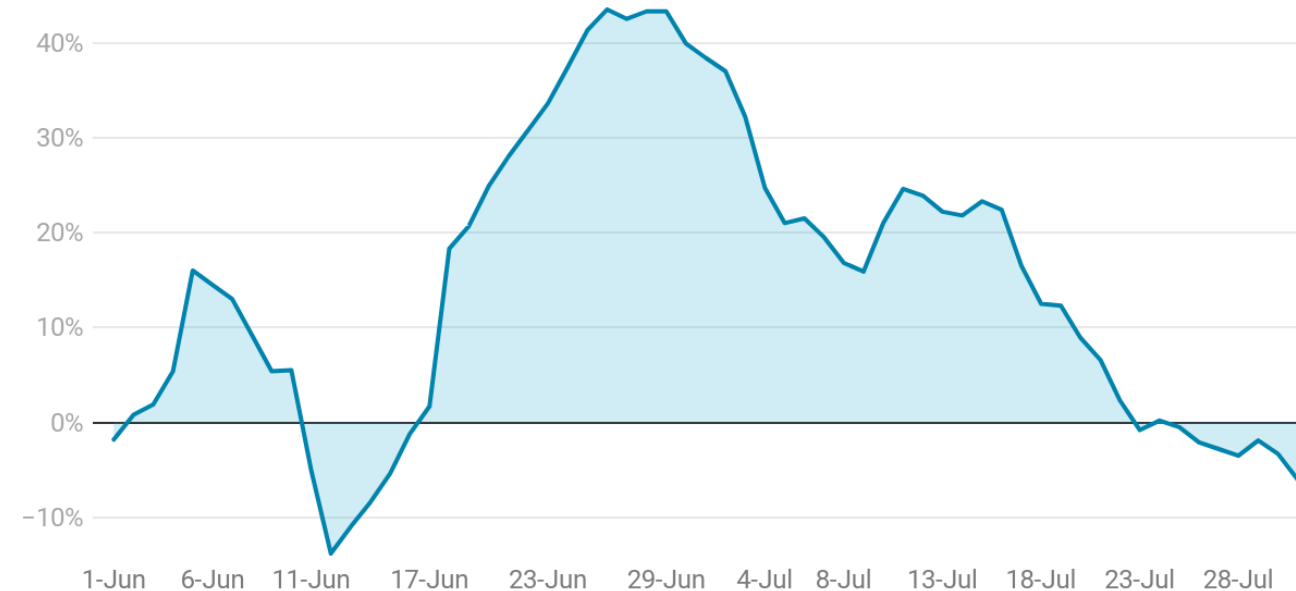
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

United States

Leading Indicator: After weeks of slower growth, new cases have now declined 6% on a week-over-week basis

Week-Over-Week Change In New Cases

United States, As of July 31



Health Industry Advisor LLC analysis

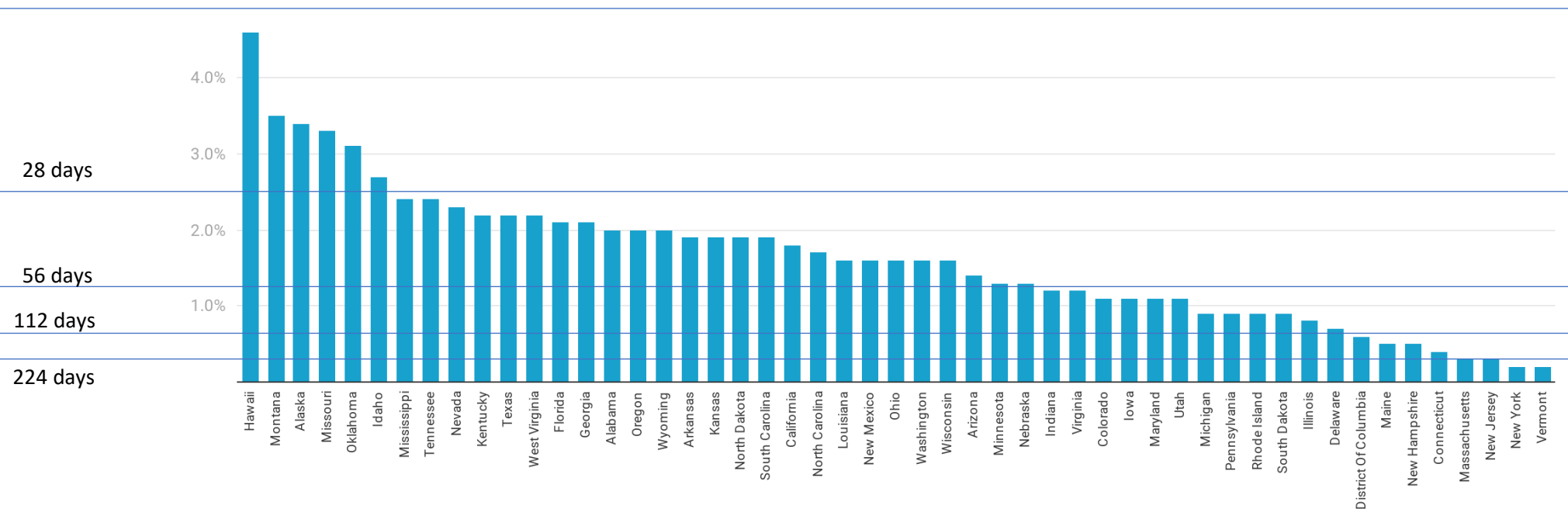
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

At current rates, cases are doubling every 15-16 days in Hawaii; every 396 days in New York; 47 for the United States overall

Growth Rate in Total Cases

Trailing 5-Day Moving Average, As of July 31

14 days to double



Health Industry Advisor LLC analysis

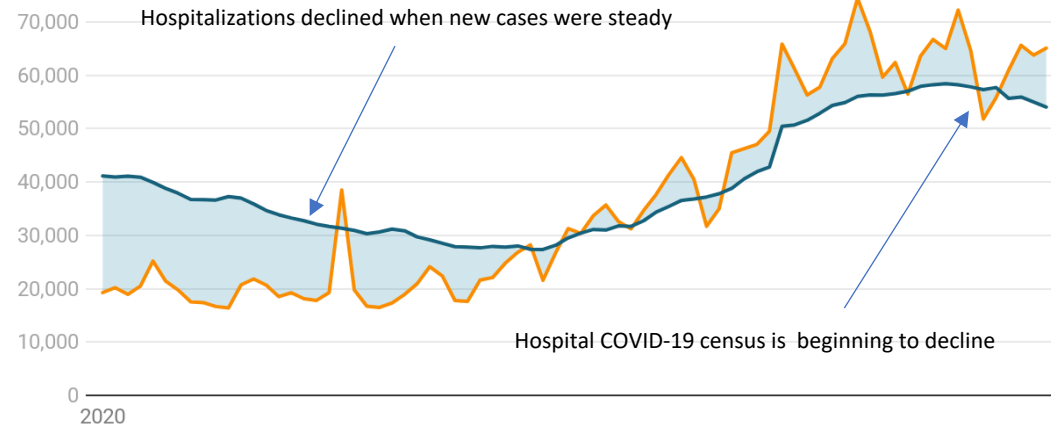
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

COVID-19 stress on hospital beds is easing somewhat

Hospitalizations v. New Cases

As of July 31

— Hospitalizations — New Cases



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

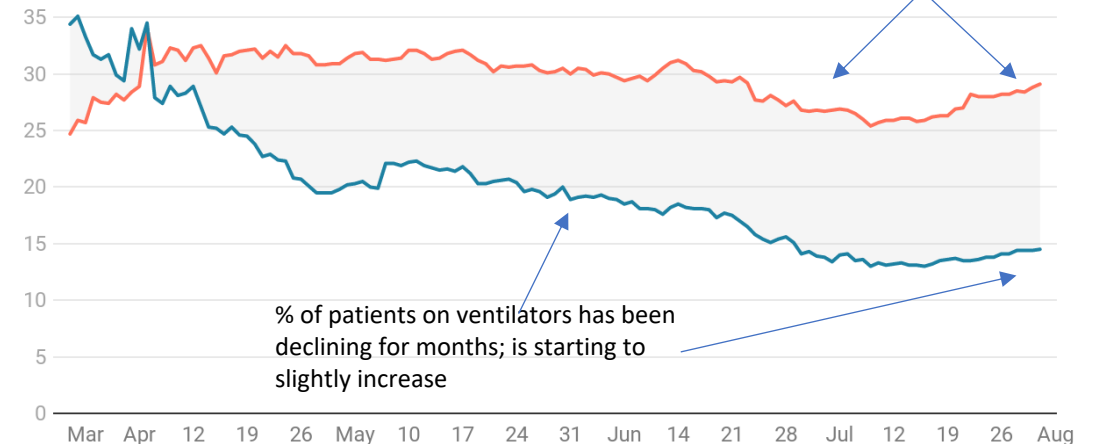
Data excludes Alabama, Alaska, Hawaii, Idaho, Kansas, Nebraska and Tennessee – data either not reported or not consistently reported

Yet, more patients require ICU care

Severity of Hospitalized Patients

% of patients on ventilators and in the ICU, As of July 31

— % vent — % icu



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

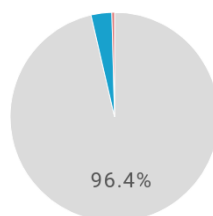
Rate of hospitalization of active cases has declined over the past few weeks, as has the % of ER Visits for COVID-Like Illnesses. Less than 2% of active cases are in the hospital; less than 0.5% in the ICU

The vast majority of cases are being managed outside of the hospital

Distribution of Active Cases

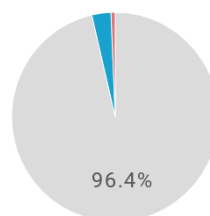
As of July 31

Non-Hospital
Hospital
ICU



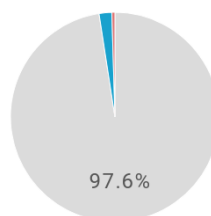
17-Jul

Hospital:
3.2%



24-Jul

Hospital:
3.0%



31-Jul

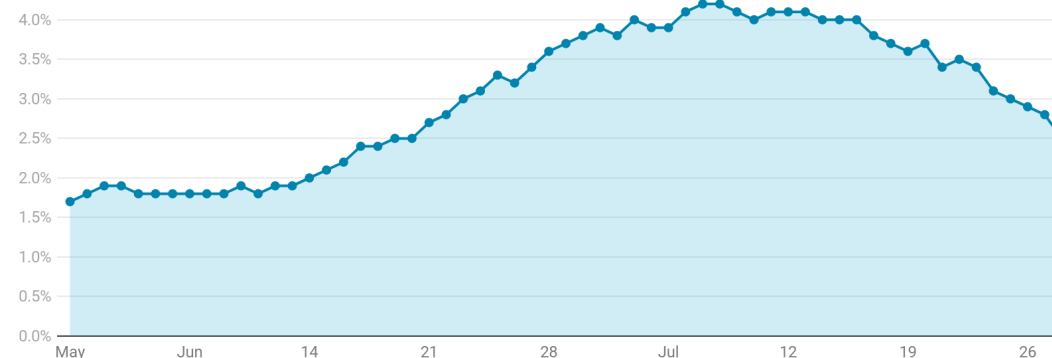
Hospital:
2.0%

Chart: Health Industry Advisor LLC • Created with Datawrapper

Stress on ERs from COVID-19 cases is diminishing

% of Emergency Department Visits for COVID-Like Illness

As of July 28

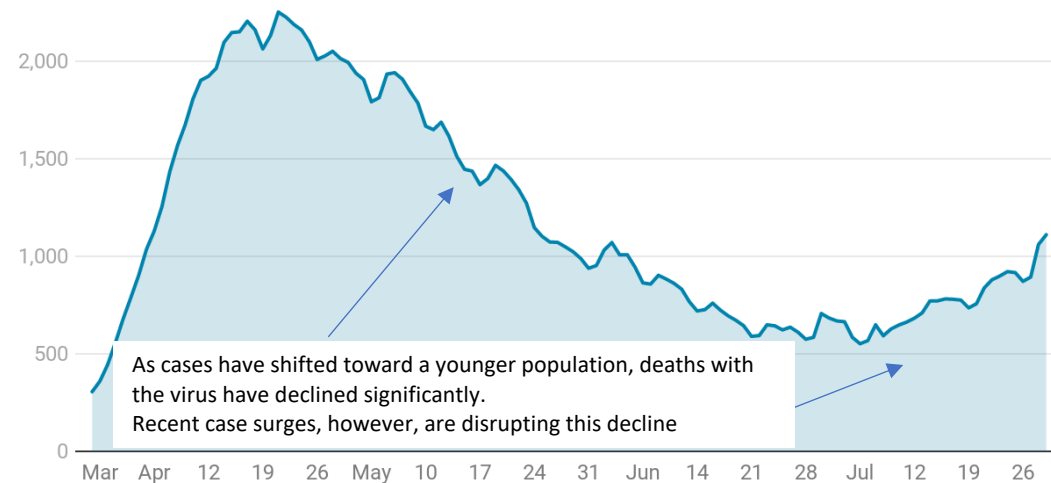


Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: Centers for Disease Control • Created with Datawrapper

Deaths Recorded With Coronavirus in the U.S.

Trailing 7-Day Moving Average, As of July 31

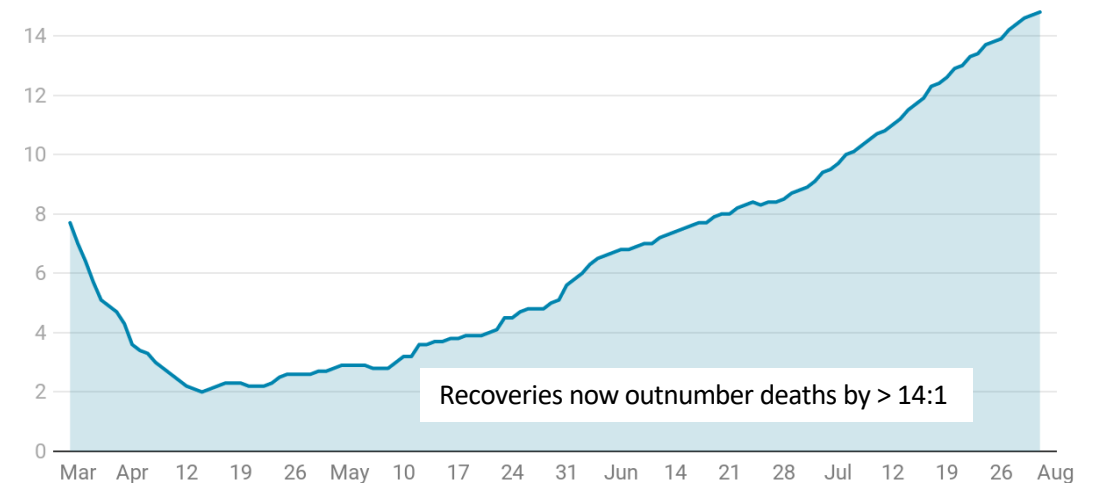


Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Recoveries: Deaths - United States

As of July 31



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

The following data sources are accessed on a daily or weekly basis:

- The Atlantic's Covid Tracking Project: <https://covidtracking.com>
- Worldometers.info: <https://www.worldometers.info/coronavirus/>
- Centers for Disease Control, National, Regional, and State Level Outpatient Illness and Viral Surveillance
<https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>
- Centers for Disease Control, COVID-19 Laboratory-Confirmed Hospitalizations
https://gis.cdc.gov/grasp/COVIDNet/COVID19_5.html
- Centers for Disease Control, COVID Data Tracker <https://www.cdc.gov/covid-data-tracker/index.html#mobility>
- Institute for Health Metrics and Evaluation, COVID-19 estimate downloads <http://www.healthdata.org/covid/data-downloads>
- New York Times, Covid-19 data <https://github.com/nytimes/covid-19-data>
- COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University
<https://github.com/CSSEGISandData/COVID-19>