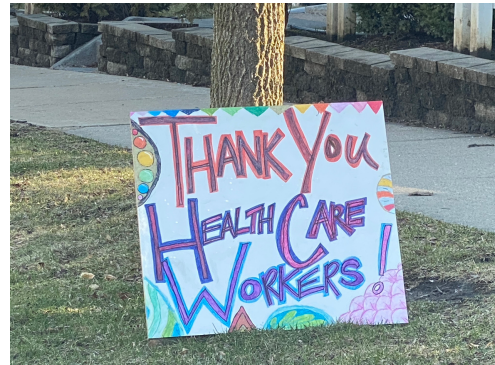
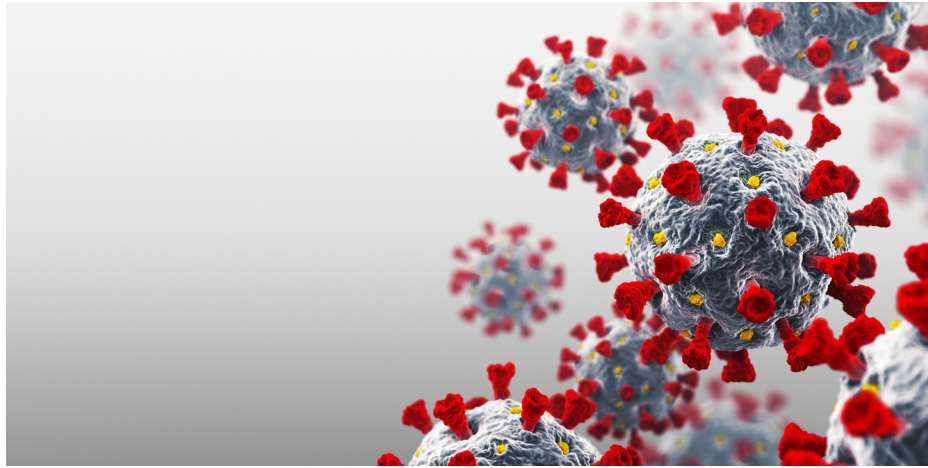
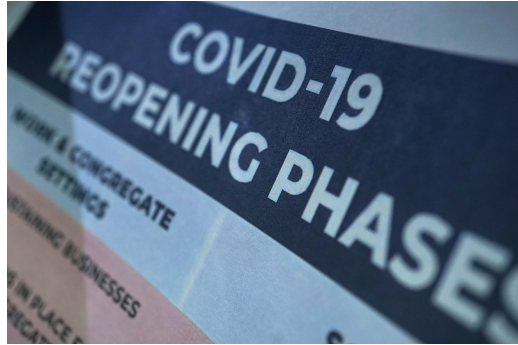




COVID-19 Report

Issue # 132

Tuesday, August 11, 2020

- Vaccines
 - **Russia's health regulator approved the Gamaleya vaccine for use - without having gone through Phase III clinical trials**
 - ReiThera announced a Phase I trial
 - CanSinoBIO announced that it launched a Phase III trial in India; its vaccine is already approved for use in China as a "special use drug"
 - According to a Gallup poll conducted from July 20-August 2, **35% of adults in the U.S. would be unwilling to take a vaccine**. Reluctance is highest among middle-aged people
- New Cases and Infection Rates
 - New cases are down 8.8% week-over-week, although the rate of decline is slowing
 - Are we letting down our guard? **New infections per capita in the U.S. have plateaued in the past few days-** at too high a level
 - Eleven states have rates > 200 / million / day (trailing 7-day moving average); However, only Arkansas, Idaho and Louisiana showed material increases in this rate on a week-over-week basis
 - This **rate declined significantly week-over-week in Alaska, Arizona, Florida, Mississippi, Nevada and South Carolina**
 - Only four states have experienced their highest rate to-date within the past week; These and three other states are within 10% of their peak rate
 - The United States is one of only twenty countries with rates >100; of these, however, it is one of only six that experienced a declining rate on a week-over-week basis
- Healthcare Resources
 - COVID-19 patients in the hospital have declined 18.5% since peaking on July 23
 - South Dakota, Wisconsin and Hawaii are notable exceptions, as each show large % increases on a week-over-week basis
 - ICU patients have similarly declined since peaking on July 29; **ICU COVID-19 census is down ~40% since mid-April** (even with eight more states currently reporting these data)
- Deaths with COVID-19
 - **Daily deaths continued their steady decline; Over the past 5 days, the 7-day average has declined by 20.5%**
 - Deaths per case are down to 3.16%
- Testing
 - Test volume appears to have stabilized over the past few days, following a nine-day decline
 - The United States is one of only twenty-two countries worldwide that are currently testing above the minimum suggested by Harvard scientists
 - **Test-positive % yesterday was its lowest since June 21; on 7-day average basis, it is at its lowest since July 1**

Russia approves its Gamaleya vaccine for use without Phase III testing

Pre-Clinical –

Vaccines not yet in clinical trial

135+

August 10th updates in red

Phase I –

Vaccines testing safety and dosage

19

- Medigen – announced a September Phase I launch
- **ReiThera – launches a Phase I trial**

Phase II –

Vaccines in expanded safety trials

12

- Noravax –announced strong preliminary results
- Zydus Caila – launched a Phase II trial

Phase III –

Vaccines in large-scale efficacy tests

- **CanSinoBIO -Launched in Saudi Arabia**
- Moderna/National Institutes of Health
- BioNTech/Pfizer/Fosun Pharma
- AstraZeneca/University of Oxford
- Sinopharm
- Sinovac Biotech
- Murdoch Children’s Research Institute

Phase IV –

Vaccine approved for limited use

2

- CanSinoBIO/China’s Academy of Military Medical Sciences
- **Gamaleya Research Institute – Russian health regulator approves for use**

* - Source: “Coronavirus Vaccine Tracker”, New York Times, Updated August 6, 2020
<https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>

New cases were up on yesterday, following the typical pattern for Mondays; Week-over-week, new cases are down 8.8%, although this rate of decline is diminishing

New Cases

Through August 10

Mondays Highlighted

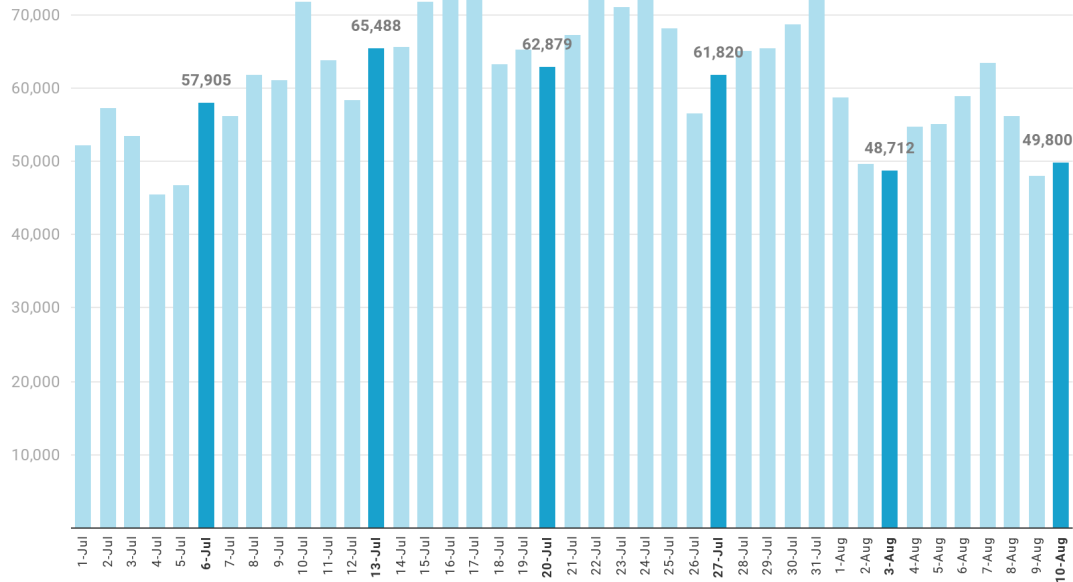
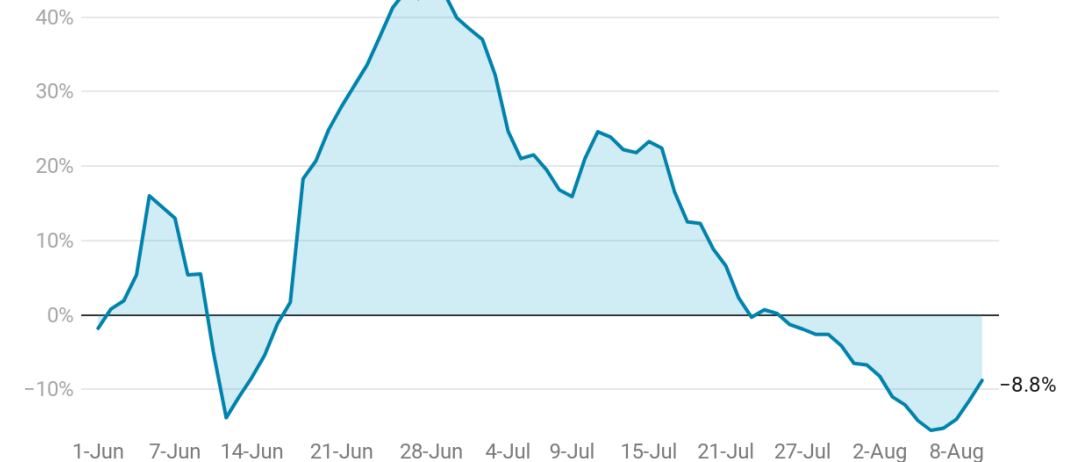


Chart: Health Industry Advisor LLC • Source: eorlometers.info • Created with Datawrapper

Note the daily pattern: new cases are typically low on Sunday, then increase each day through the week

Week-Over-Week Change In New Cases

Through August 10



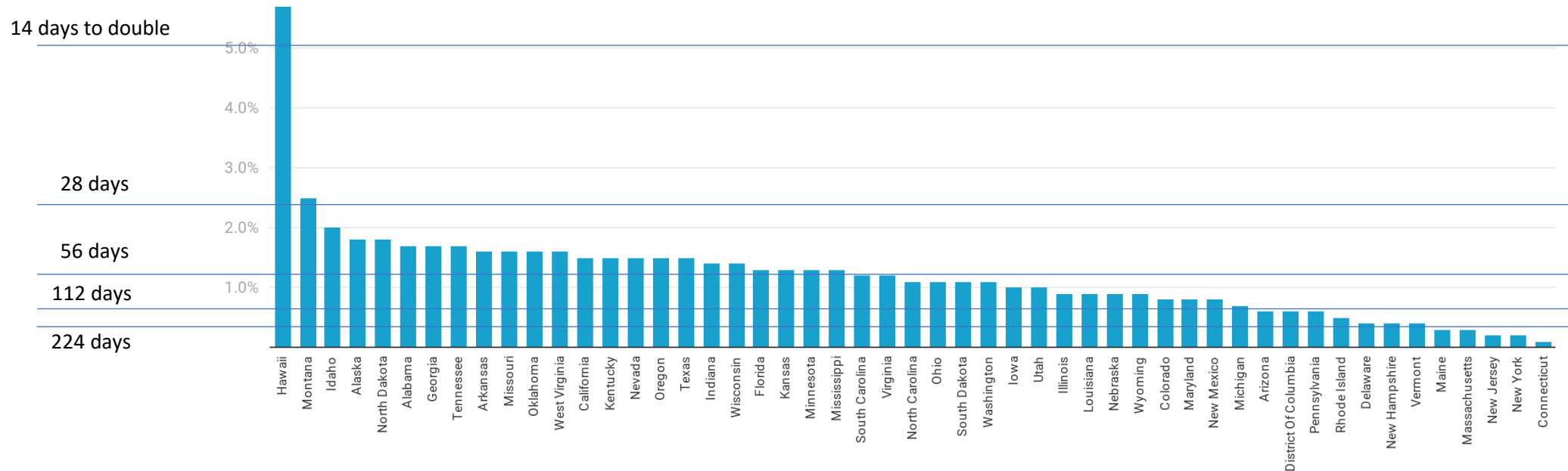
Health Industry Advisor LLC analysis

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

Case growth is slowing but, Hawaii remains the outlier. At current rates, cases are doubling every 12-13 days in Hawaii; every 510 days in Connecticut; 64 days for the United States overall

Growth Rate in Total Cases

Trailing 5-Day Moving Average, Through August 10

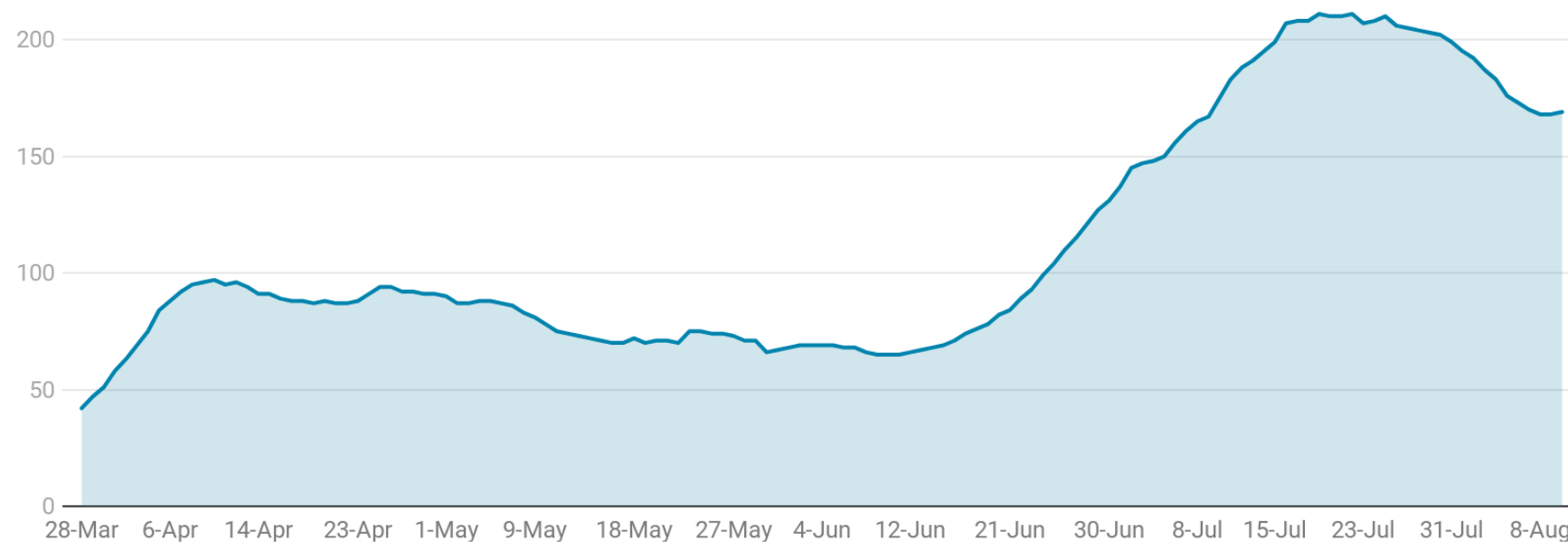


Health Industry Advisor LLC analysis

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

New Infections Per 1 Million Population - United States

Trailing 7-Day Moving Average, Through August 10



Health Industry Advisor LLC analysis

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

* - per million per day, trailing 7-day moving average

State-By-State

Eleven states had new daily infection rates* >200 for the past week; Of these, Arkansas, Idaho, Louisiana and Texas (barely) - had increasing rates v. the prior week. Note the significant rate declines in Alaska, Arizona, Florida, Mississippi, Nevada and South Carolina

New Daily Infections / Million Population

Trailing 7-Day Moving Average

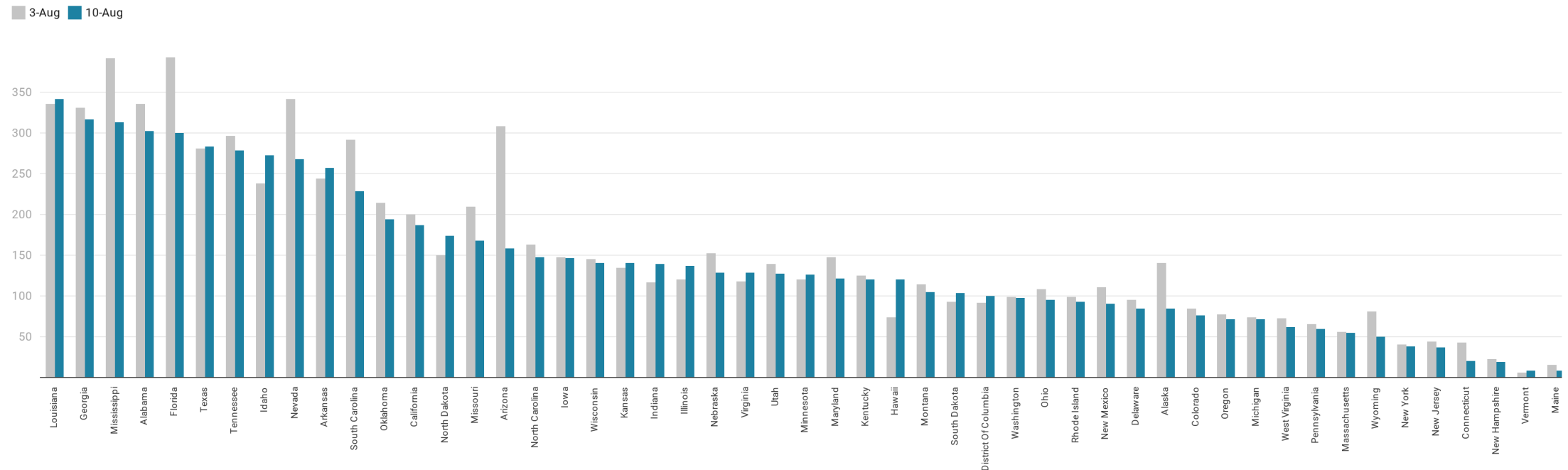


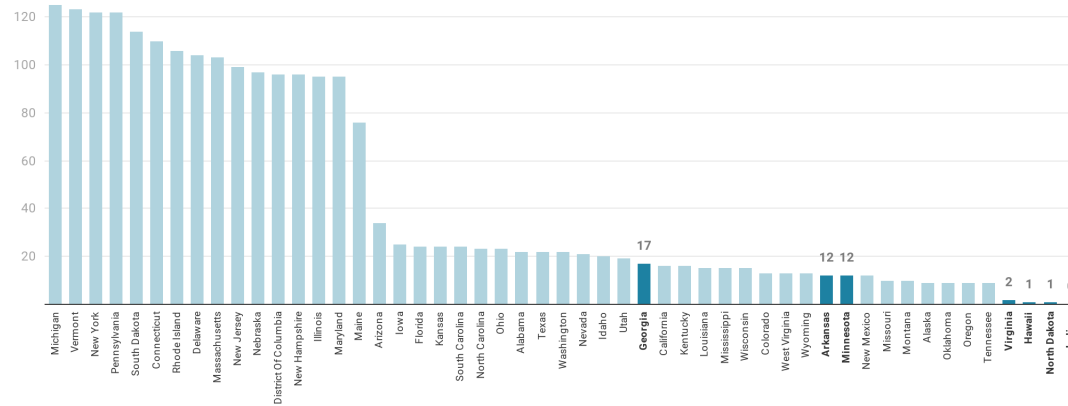
Chart: Health Industry Advisor LLC • Created with Datawrapper

per million per day, trailing 7-day moving average

Four states posted their highest new daily infection rate within the past week; Three others are within 10% of their peak

Days Since Peak New Infection Rate

Trailing 7-Day Moving Average, As of August 10



Health Industry Advisor LLC analysis

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

New Daily Infections / Million

% of YTD Peak, Trailing 7-Day Moving Average, As of August 10

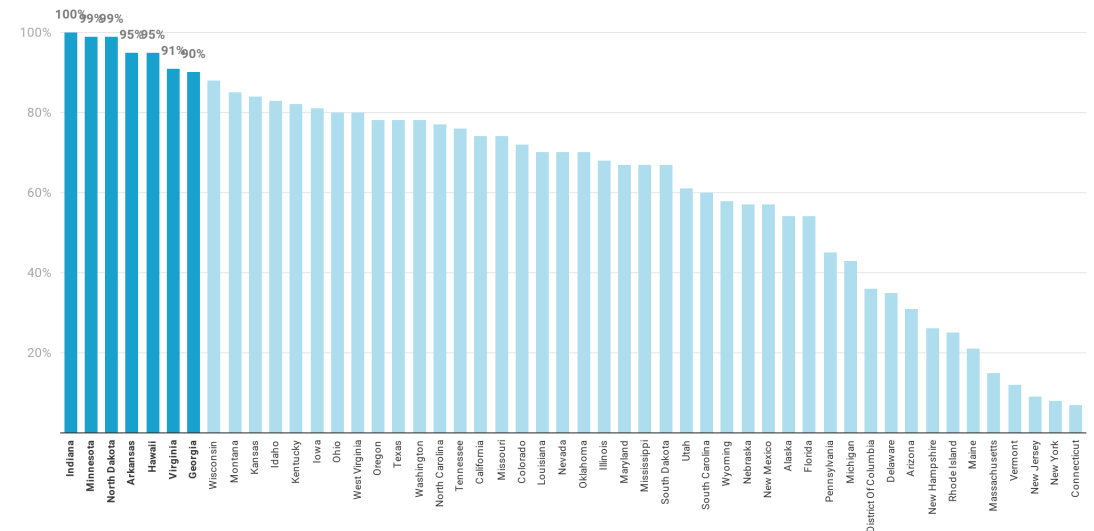
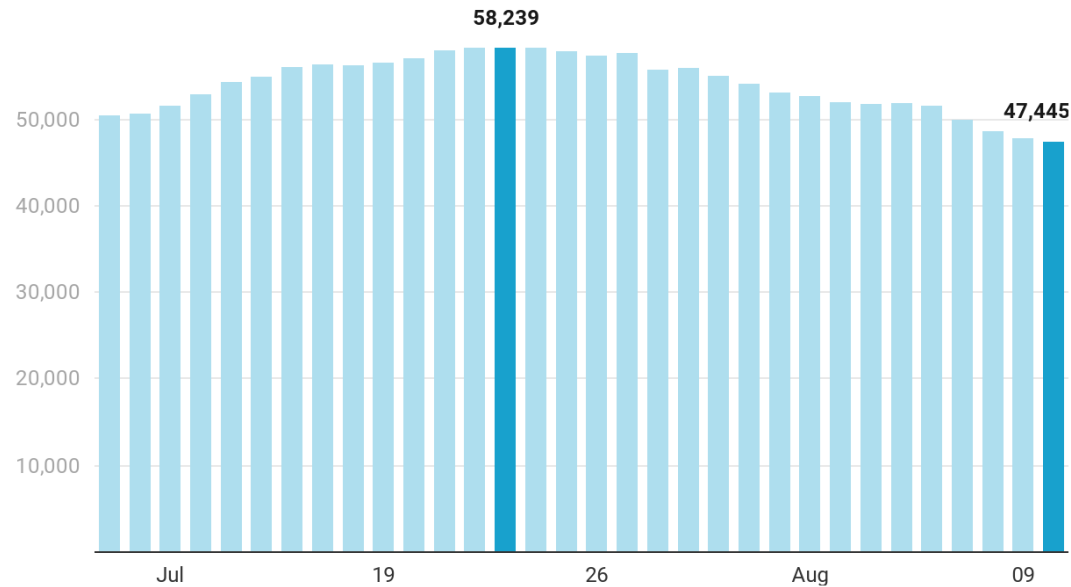


Chart: Health Industry Advisor LLC • Created with Datawrapper

COVID-19 census was lowest since Florida started reporting on July 10; Down 18.5% from peak; Twenty states, however, led by South Dakota and Wisconsin, are seeing more patients than last week

Hospital Census: COVID-19 Patients

As of August 10



Florida data first available on July 10

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

Week-Over-Week Change in COVID-19 Hospital Census

As of August 4

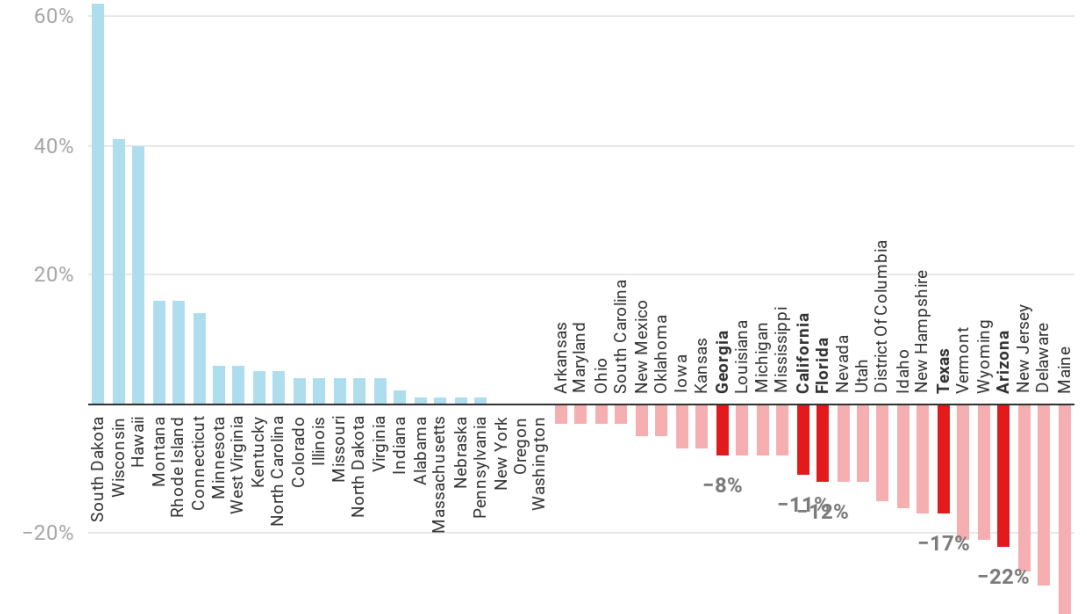


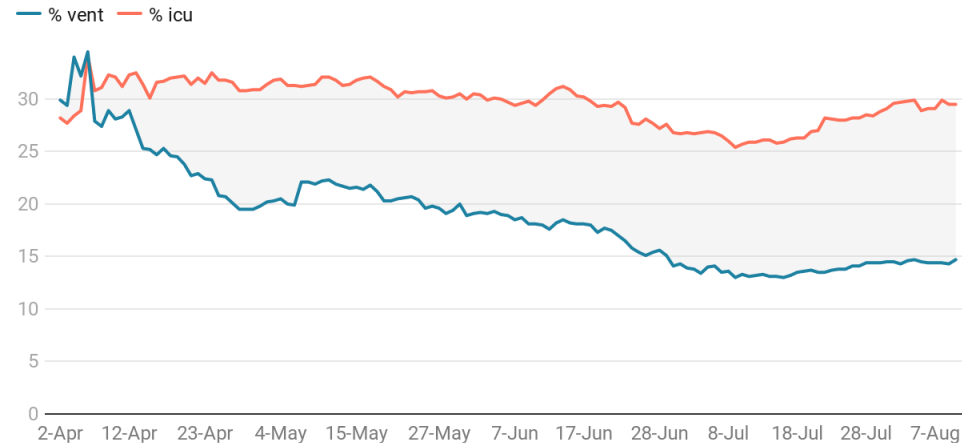
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid tracking Project • Created with Datawrapper

ER Visits for COVID-19 are Declining

ICU COVID-19 Census Also Down

Severity of Hospitalized Patients

% of patients on ventilators and in the ICU, As of August 10

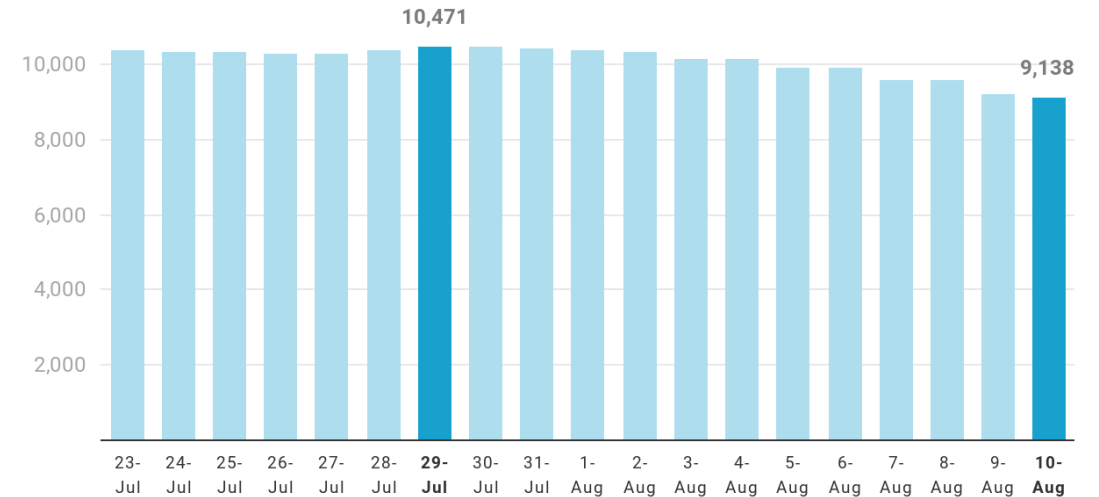


Health Industry Advisor LLC analysis

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

ICU Census

As of August 10



Not all state report these data

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

Daily deaths down 20.5% over past 5 days, on a 7-day average basis
Deaths per case down to 3.16%

Deaths Recorded With Coronavirus in the U.S.

Trailing 7-Day Moving Average, As of August 10

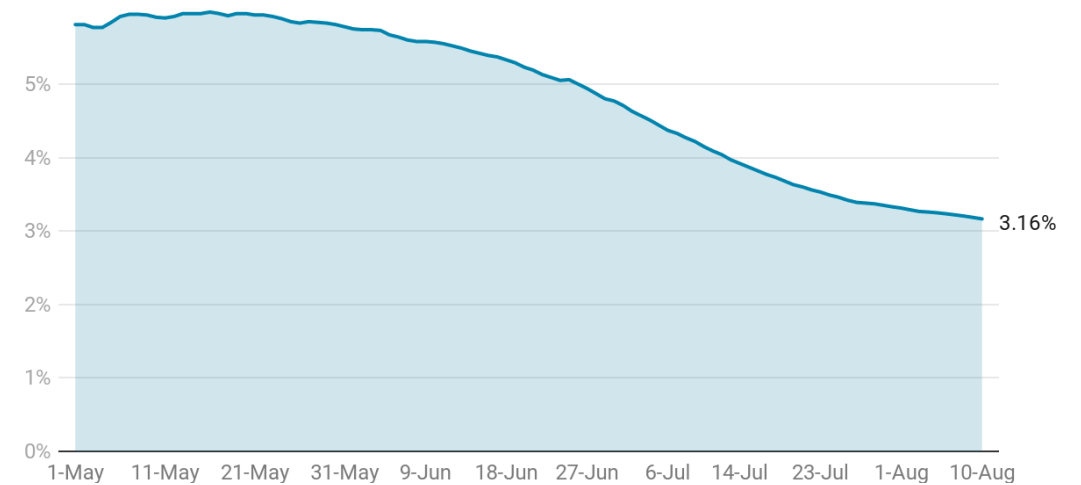


Health Industry Advisor LLC analysis

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

Deaths Per Case

As of August 10

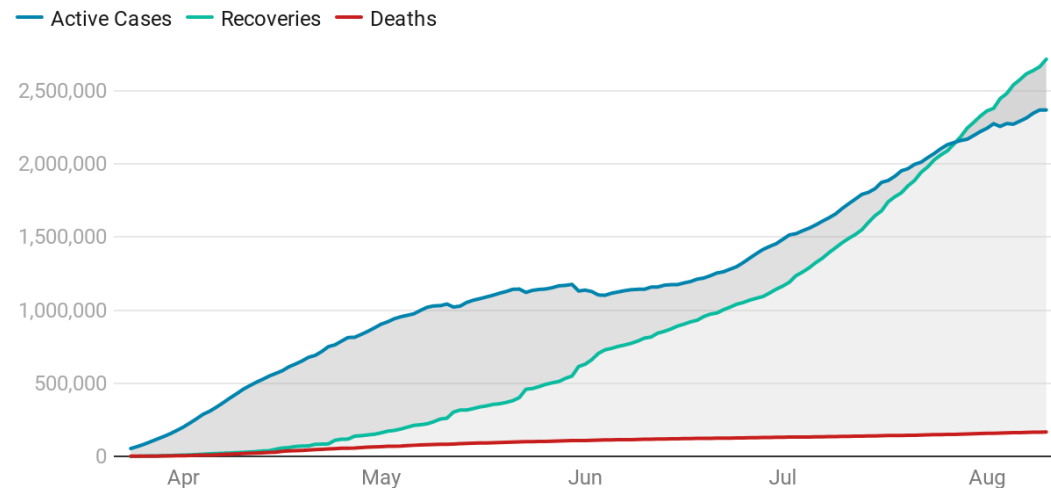


Health Industry Advisor LLC analysis

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

Active Cases v. Recoveries & Deaths

Through August 10

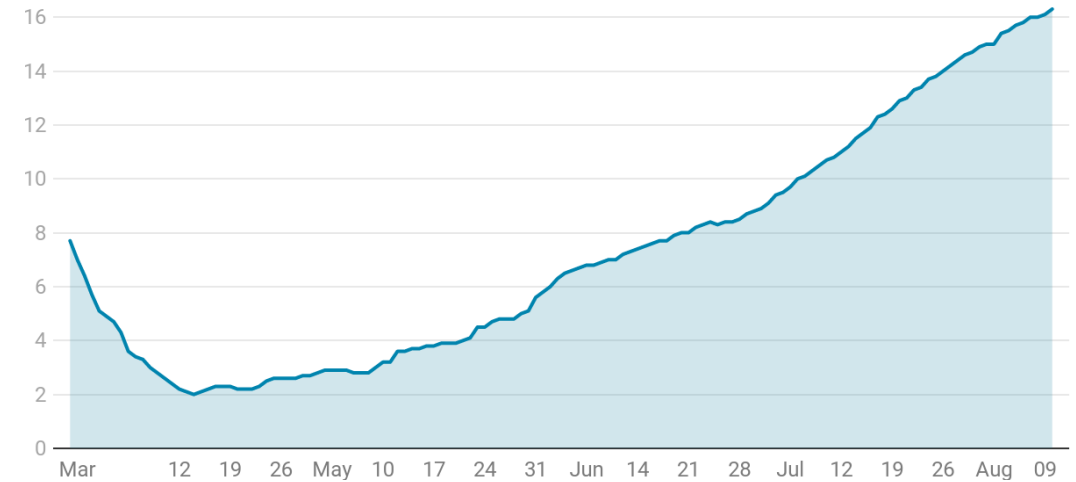


Health Industry Advisor LLC analysis

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

Recoveries: Deaths - United States

As of August 10

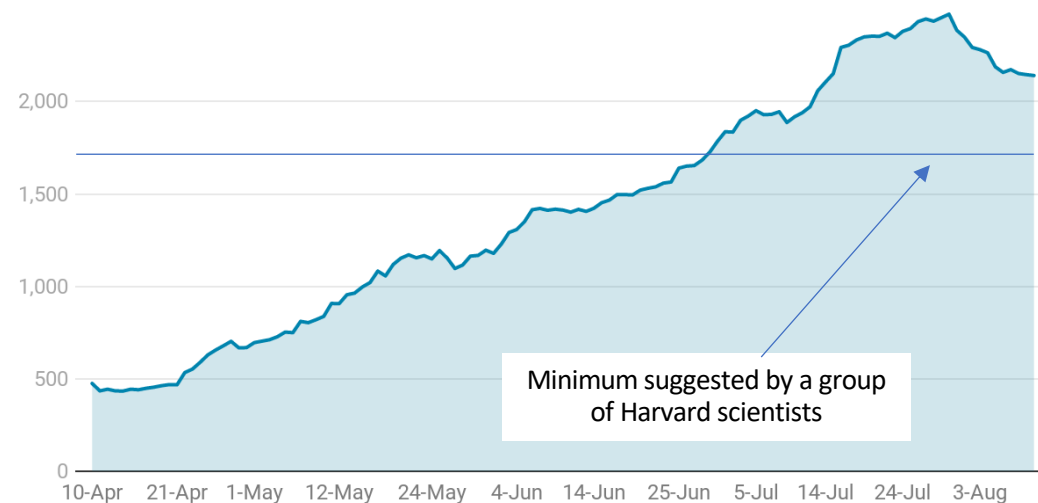


Health Industry Advisor LLC analysis

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

Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of August 10

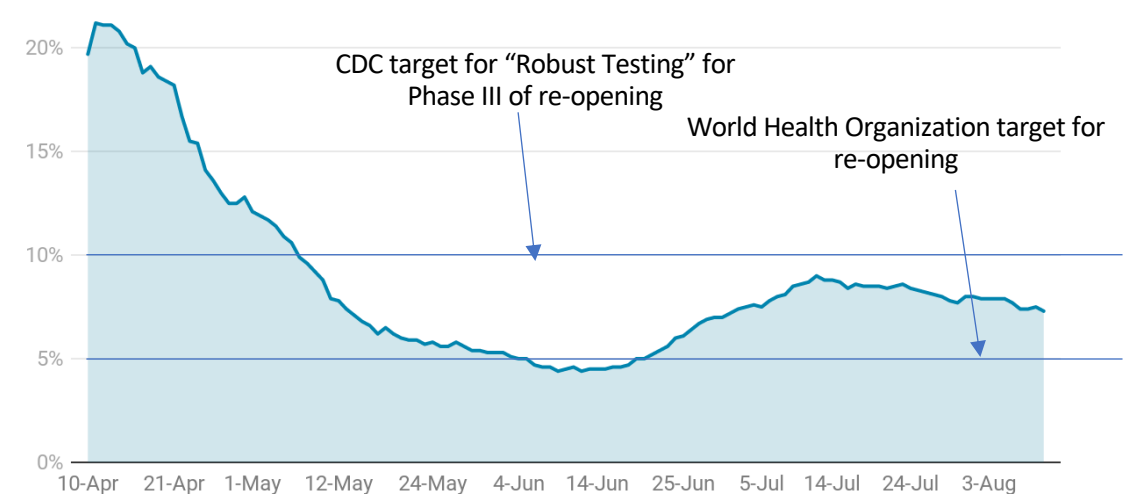


Health Industry Advisor LLC analysis

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 August 10



Health Industry Advisor LLC analysis

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

Note: Due to a computer glitch, Washington has only reported positive results since August 1. Therefore, test volumes from that point forward are slightly understated

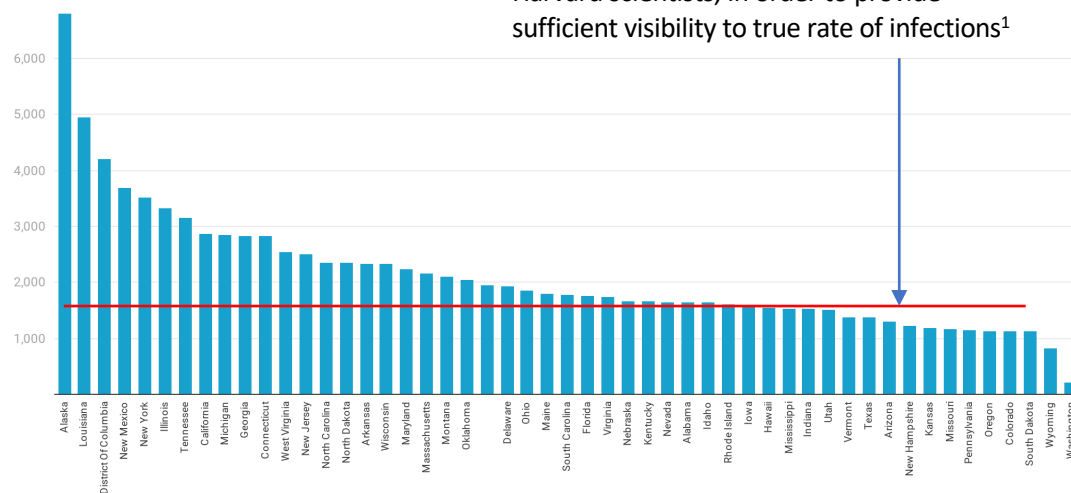
Note: Due to a computer glitch, Washington has only reported positive results since August 1. Therefore, test-positive rates from that point forward are slightly overstated by ~0.1%

State-By-State

Most states are testing at or above the minimum level suggested by a group of Harvard scientists; Twelve states, however, have test-positive rates above recommended levels

Daily Tests Per 1 Million Population

Trailing 7-Day Moving Average, As of August 10



Health Industry Advisor LLC analysis

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

1 – source: (source: <https://www.kff.org/coronavirus-policy-watch/what-testing-capacity-do-we-need/>)

2- Minnesota made an adjustment to tests counts this week, rendering this value meaningless

Test-Positive Rate

Trailing 7-Day Moving Average, As of August 10

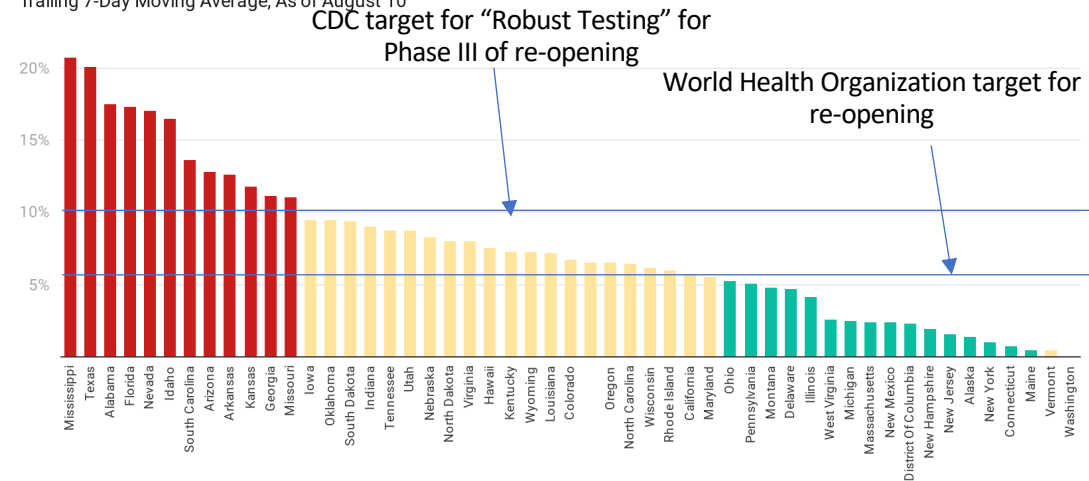


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Projects • Created with Datawrapper

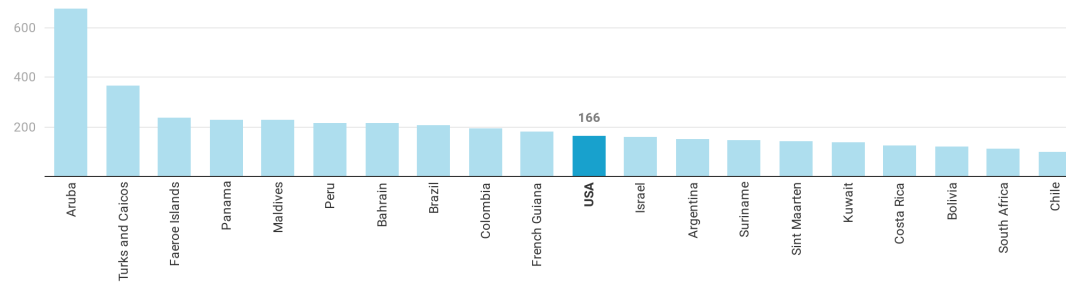
Note: Due to a computer glitch, Washington has only reported positive results since August 1

United States ranked 11th in the world, and twenty countries had new rates infection rates* > 100 for the past week; The U.S. was one of six of these countries for which this rate declined versus the prior week

Island nations leading in new infections rates over past week

New Daily Infections / Million Population

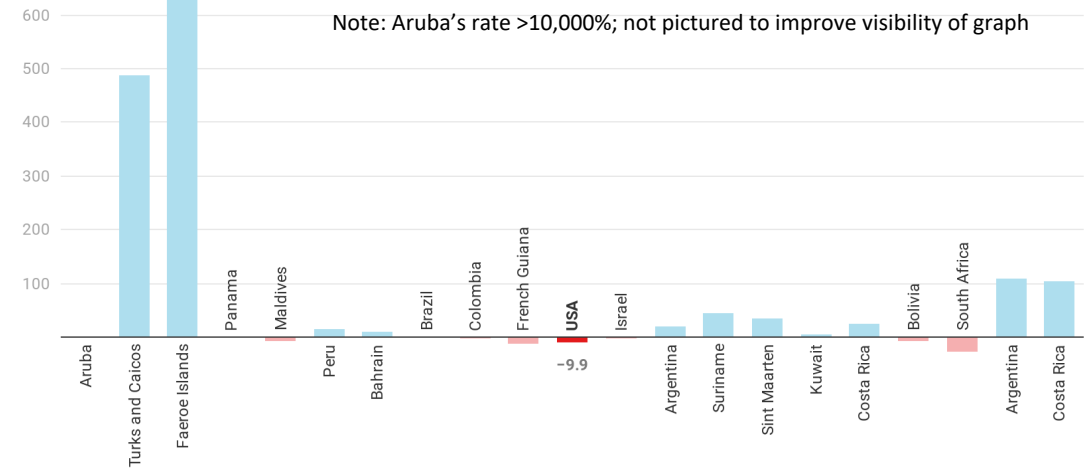
Trailing 7-Day Moving Average, As of August 10



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

Week-Over-Week Change in New Daily Infections / Million Population

Trailing 7-Day Moving Average, August 10 v. August 3



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

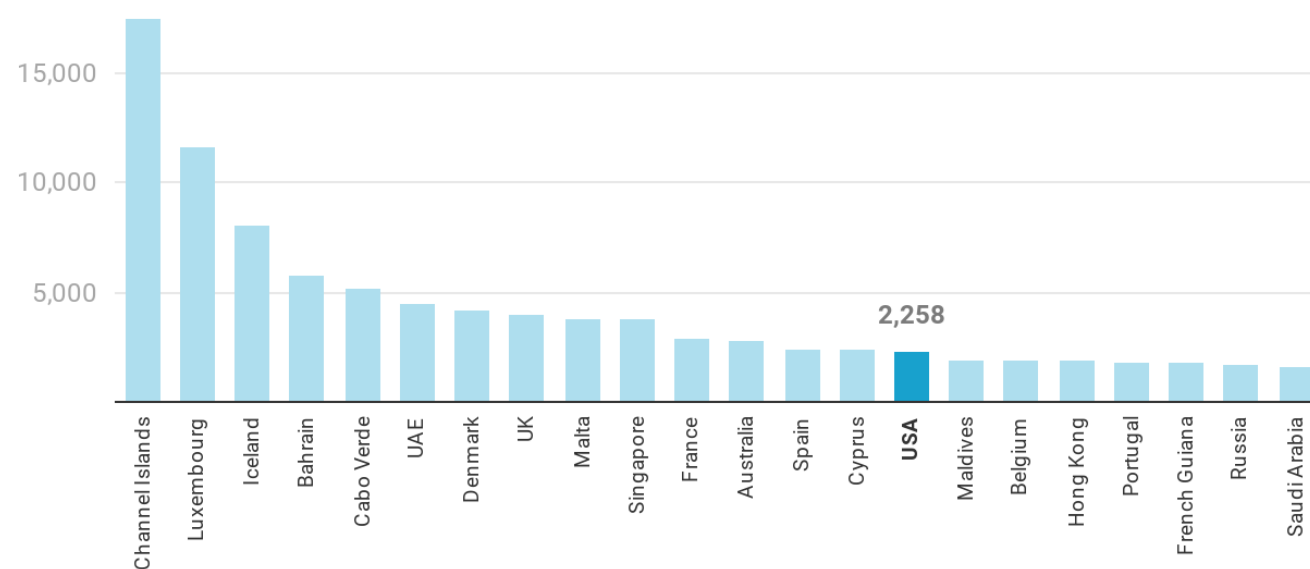
* - per million per day, trailing 7-day moving average

Countries With A Minimum of 1,000 Cases

United States among twenty-two countries currently testing above the minimum suggested level current testing rate

Daily Tests Per 1 Million Population

Trailing 7-Day Moving Average, As of August 10



Among 165 Countries with a minimum of 500 COVID-19 cases

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

* Among countries with a minimum of 500 COVID-19 cases

Worldwide

United States ranks 8th in the world in total cases per capita

Total Cases / 1 Million Population

As of August 10

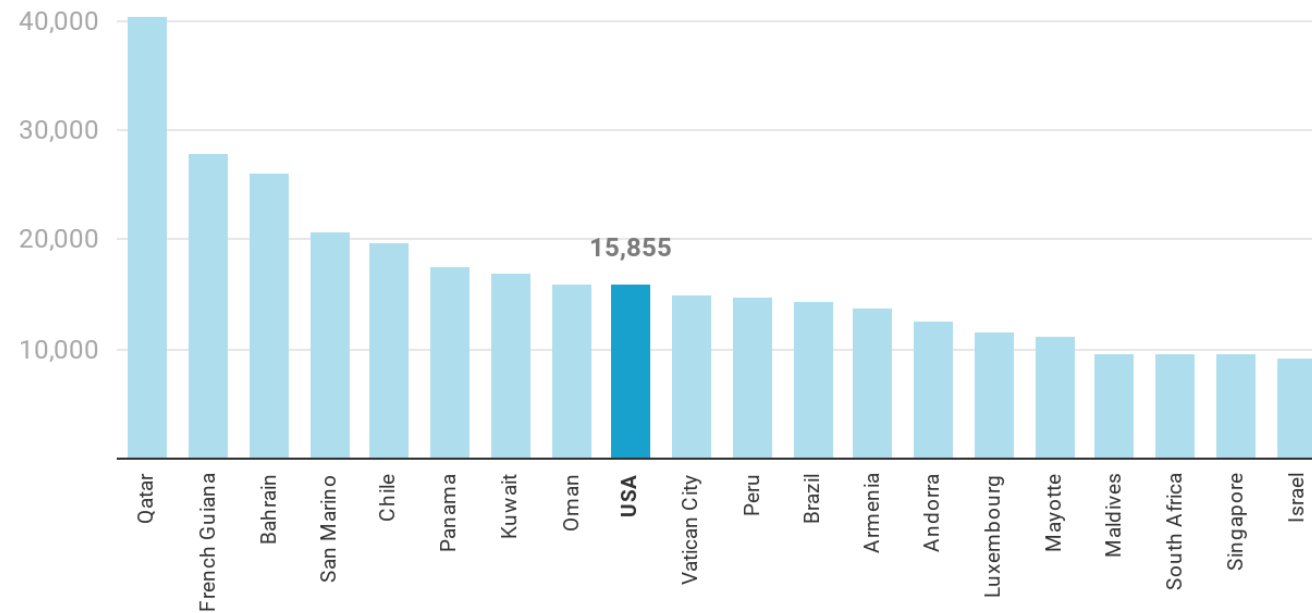


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

* Among countries with a minimum of 1,000 COVID-19 cases

Deaths Per Case

As of August 10

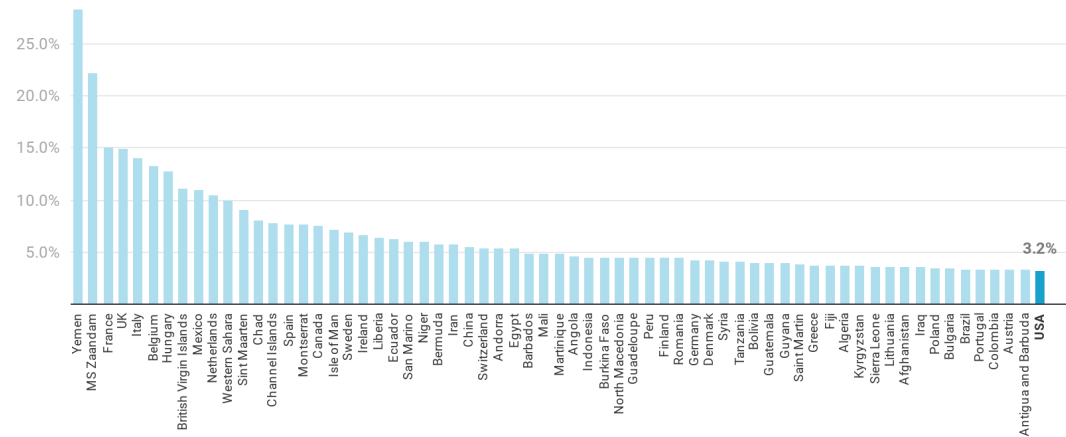


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Deaths/ Million Population

As of August 10

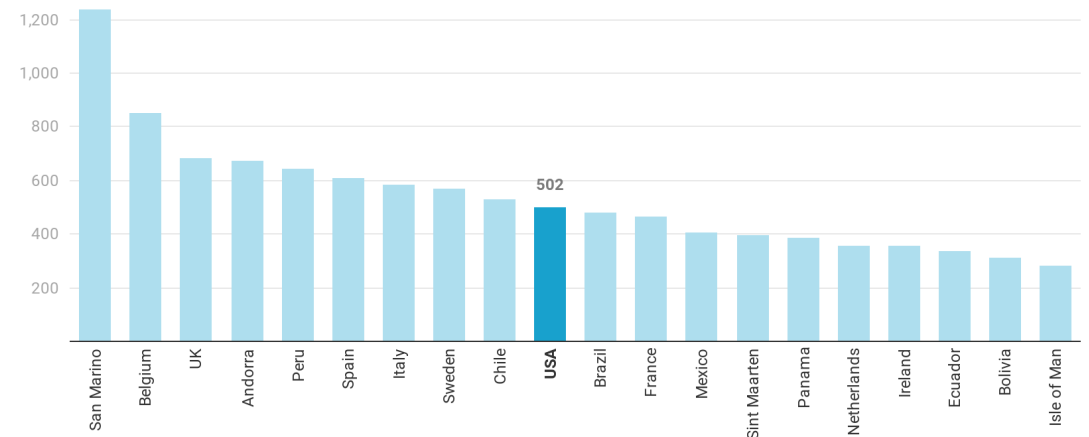


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

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>