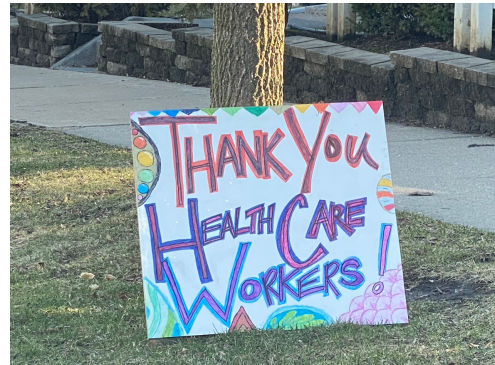
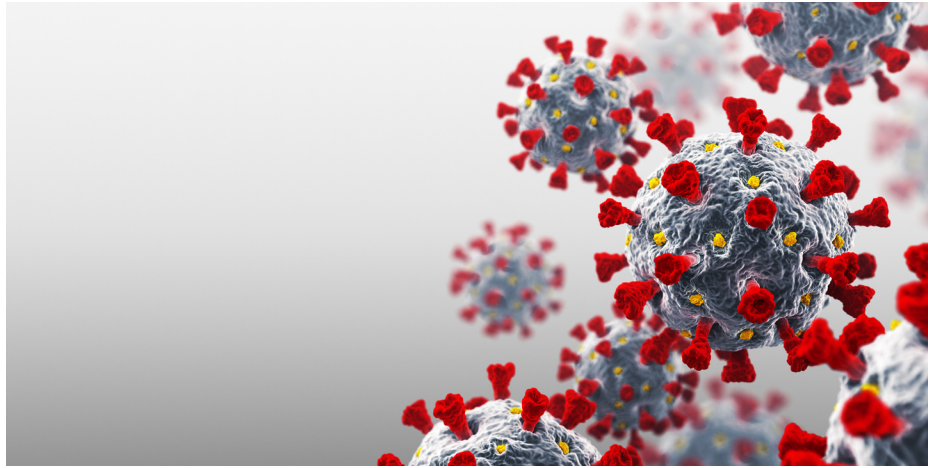
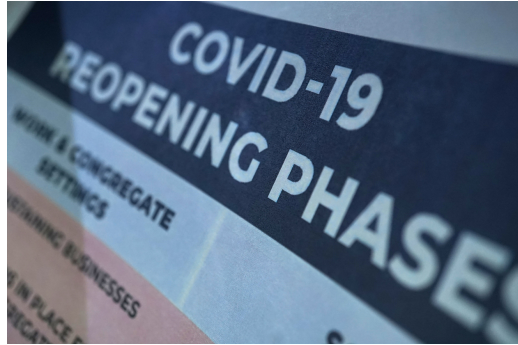




# COVID-19 Report

Issue # 142

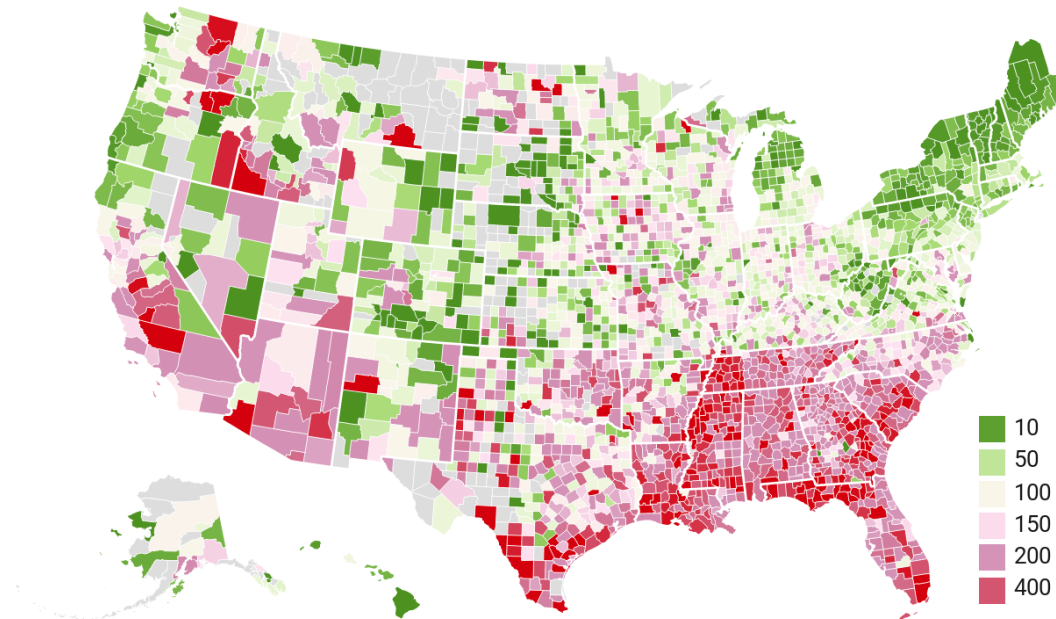
Friday, August 21, 2020

## Today's Highlights

- From mid-June through mid-July, the United States experienced an accelerating infection spread, largely driven by outbreaks in heavily-populated Arizona, California, Florida and Texas. Yesterday continued a month-long retreat:
  - **New cases were down yesterday 15.1% on a week-over-week basis**
  - These new cases were the fewest on a Thursday - typically the highest or second-highest day of the week for cases - since June 25
  - **On a trailing 7-day average basis, new infections per capita yesterday were the lowest since July 1.** This rate has been trending down since the third week of July
- Nine states - Alabama, Florida, Georgia, Idaho, Mississippi, Nevada, North Dakota, Tennessee and Texas - report new infections/million >200 for the past week. Nonetheless, the rates for all except North Dakota are significantly lower than their peak
- Stress on the healthcare system has been easing for at least the past month:
  - **ICU census of COVID-19 patients fell by more than 8% yesterday alone and more than 23% since July 29**
  - **Florida and Texas, which currently have more COVID-19 inpatients than any state except California, saw at least 1,000 fewer inpatients yesterday than a week ago;** California saw 212 fewer inpatients
  - COVID-19-like illnesses accounted for the smallest % of ER visits yesterday of any day since June 14. This % is less than 1/2 what it was in early June
- Deaths also appear to be trending down
  - Deaths reported yesterday were the fewest for a Thursday in five weeks
  - **The 7-day average daily deaths as of yesterday were the fewest since July 27**
- Testing provides a less-encouraging perspective:
  - Test volume yesterday was the lowest for any day since July 11
  - **On a week-over week basis, test volume declined 7%**
  - The test-positive rate increased yesterday from Wednesday's rate; The long-term trend for this rate, however, continues downward
  - **Twelve states reported test-positive rates >10% for the past week; eleven of these reported an increase in this rate from the prior week.** Only Texas among these states reported a declining rate
  - Mississippi reports the highest rate - 27.4%
  - Eighteen states report a rate <5%
- In today's report, we look closer at infection rates by metro area:
  - **Rates remain highest in metro areas in the Southeast; these rates, however, have eased during the month of August**
  - There does not appear to be any significant difference in infection spread between urban and rural areas
  - **Among metro metro counties, 4 of the highest 7 infection rates for the past week are found in Georgia;** 14 of the top 15 are in the Southeast or Texas (the other is in California)
  - **Among Large areas, Dallas and Miami-Dade report the highest infection rates for the past week;** the rate in Miami-Dade, however, has dropped markedly in the past few weeks

## New Daily Infections Per Million Population

Trailing 7-Day Moving Average, As of August 1

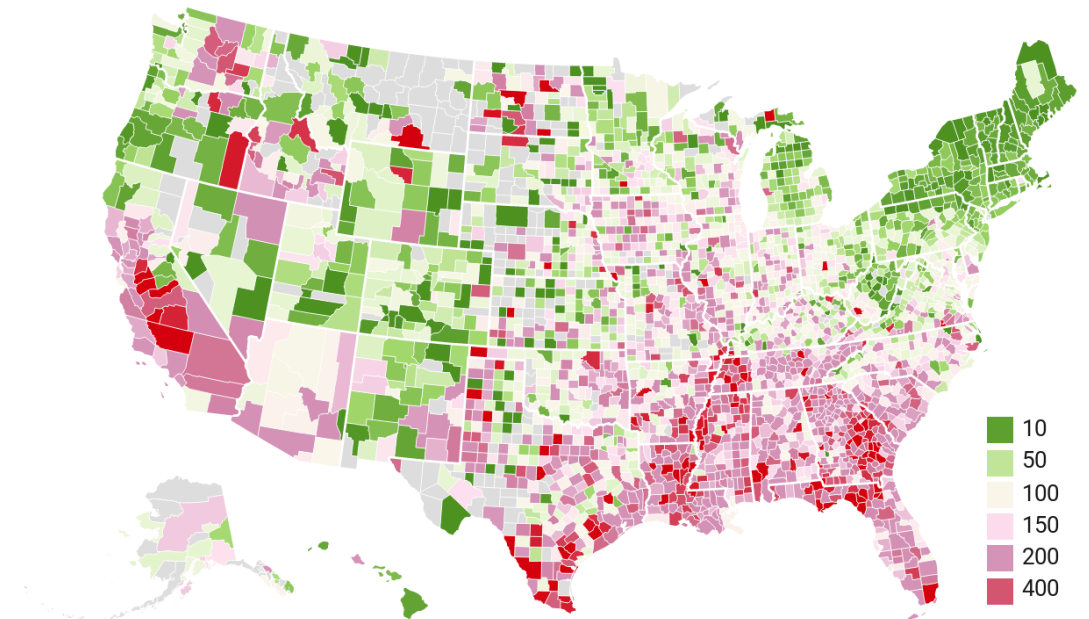


Health Industry Advisor LLC analysis

Map: Health Industry Advisor LLC • Source: New York Times • Created with Datawrapper

## New Daily Infections Per Million Population

Trailing 7-Day Moving Average, As of August 20



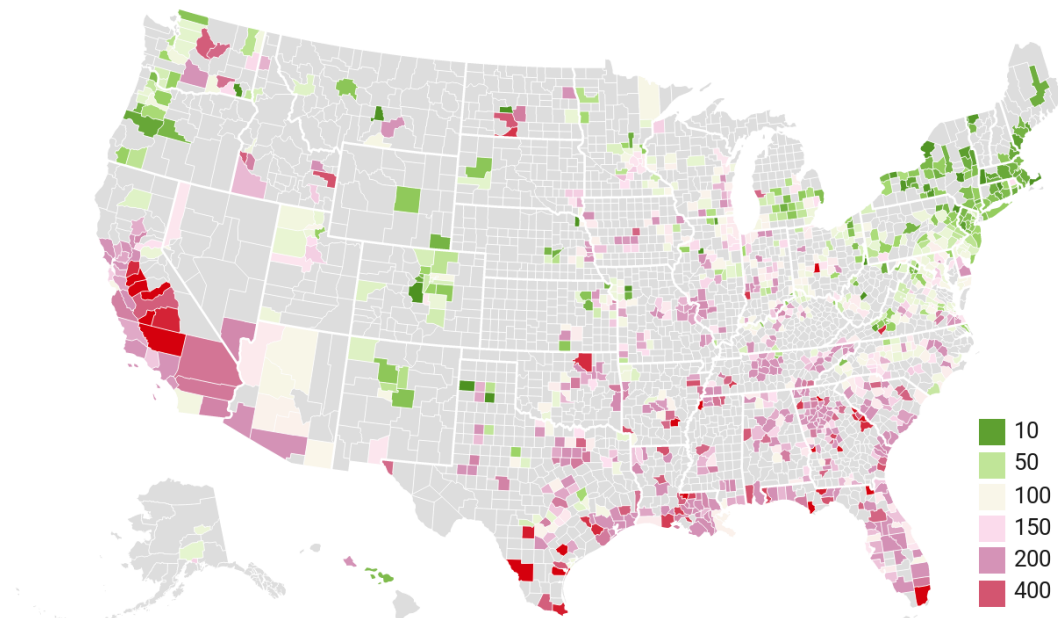
Health Industry Advisor LLC analysis

Map: Health Industry Advisor LLC • Source: New York Times • Created with Datawrapper

## Urban v Rural: High infection rates are impervious to community size; geographical experience is similar for dense and sparsely-populated areas

### New Daily Infections Per Million Population - Large Central, Large Fringe, Medium and Small Metro Areas

Trailing 7-Day Moving Average, As of August 20

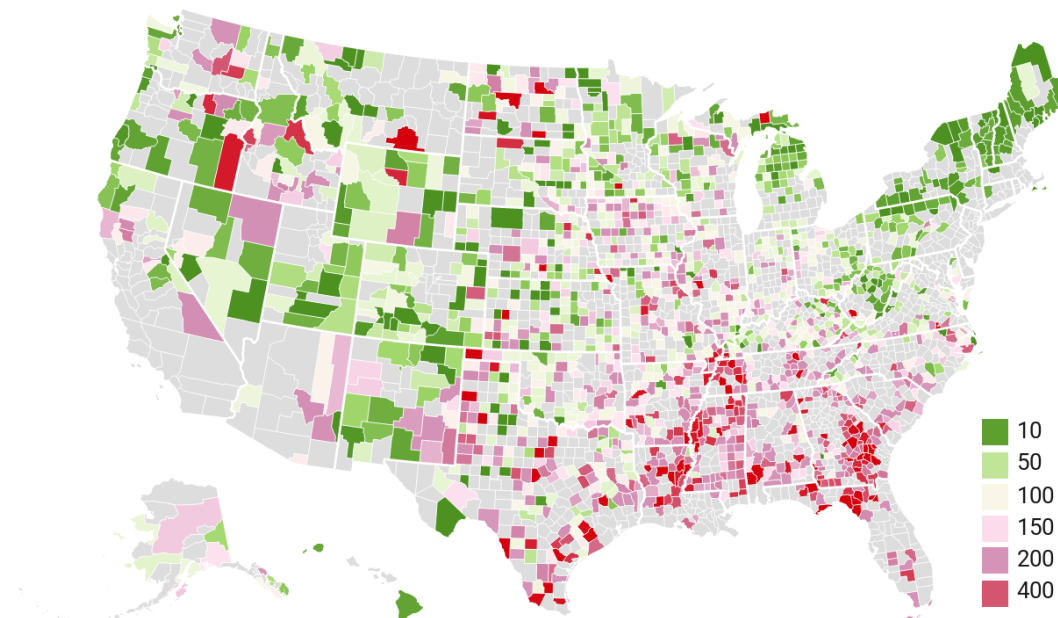


Health Industry Advisor LLC analysis

Map: Health Industry Advisor LLC • Source: New York Times • Created with Datawrapper

### New Daily Infections Per Million Population - Micropolitan and Non Core Areas

Trailing 7-Day Moving Average, As of August 20

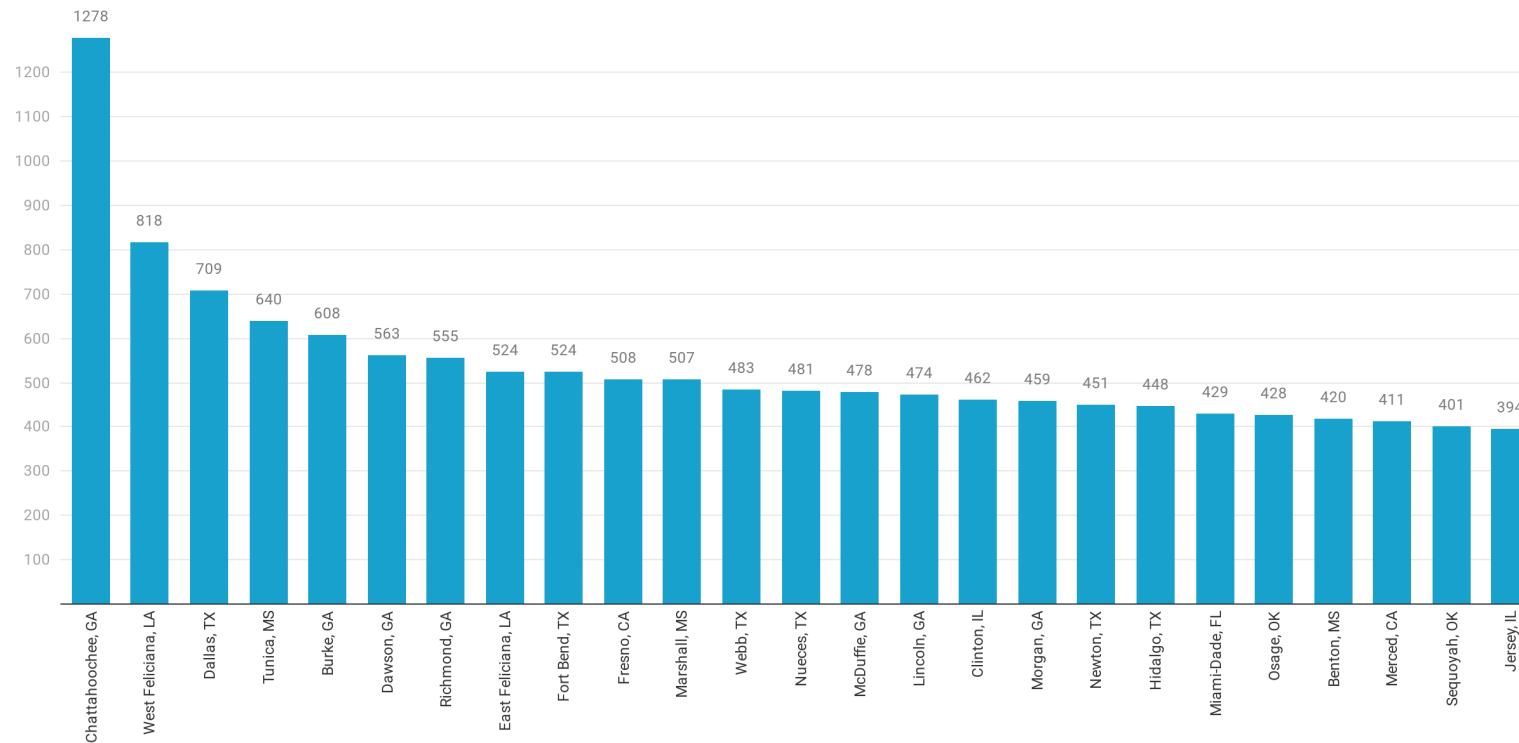


Health Industry Advisor LLC analysis

Map: Health Industry Advisor LLC • Source: New York Times • Created with Datawrapper

### New Daily Infections / Million Population - Large Central, Large Fringe and Medium Metros

Trailing 7-Day Moving Average, As of August 20

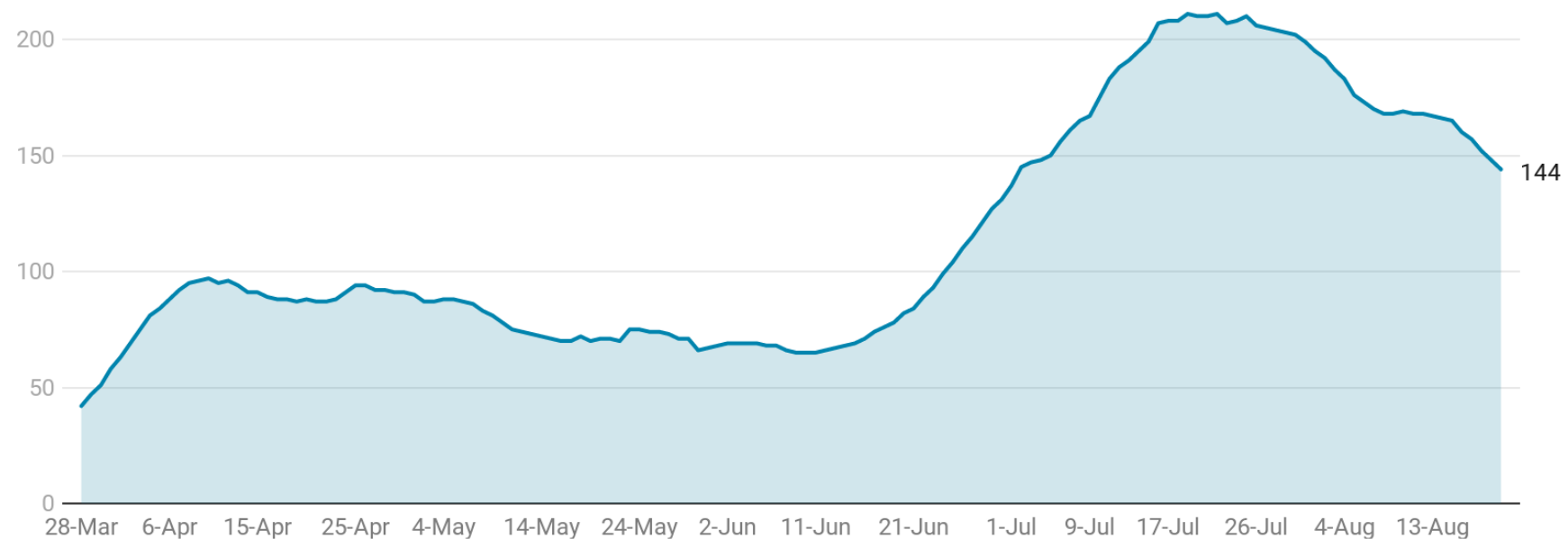


Health Industry Advisor LLC analysis

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 20



*Health Industry Advisor LLC analysis*

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

ng average

Most states have come down markedly from their peak infection rates – even those states with the highest current rates. Hawaii, Iowa, Kansas, North Dakota and Wyoming, however, are near their peak

## New Infections / Million - Current v. Peak Rate

Trailing 7-Day Moving Average

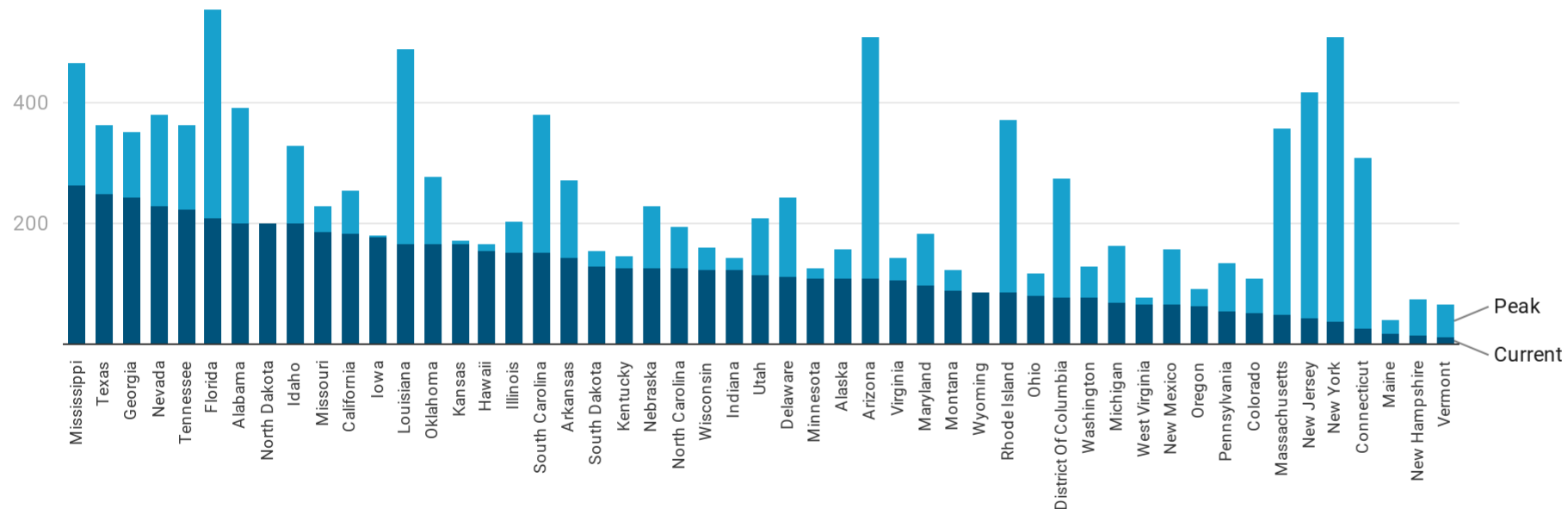
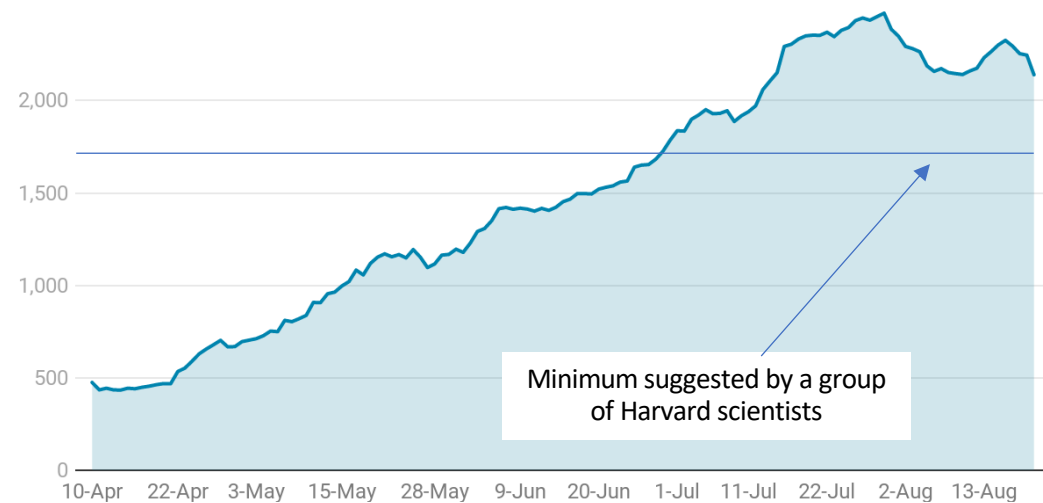


Chart: Health Industry Advisor LLC • Created with Datawrapper

Testing refers to tests for active infection, as reported via state health agencies; does not reflect antibody testing for prior infection

## Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of August 20

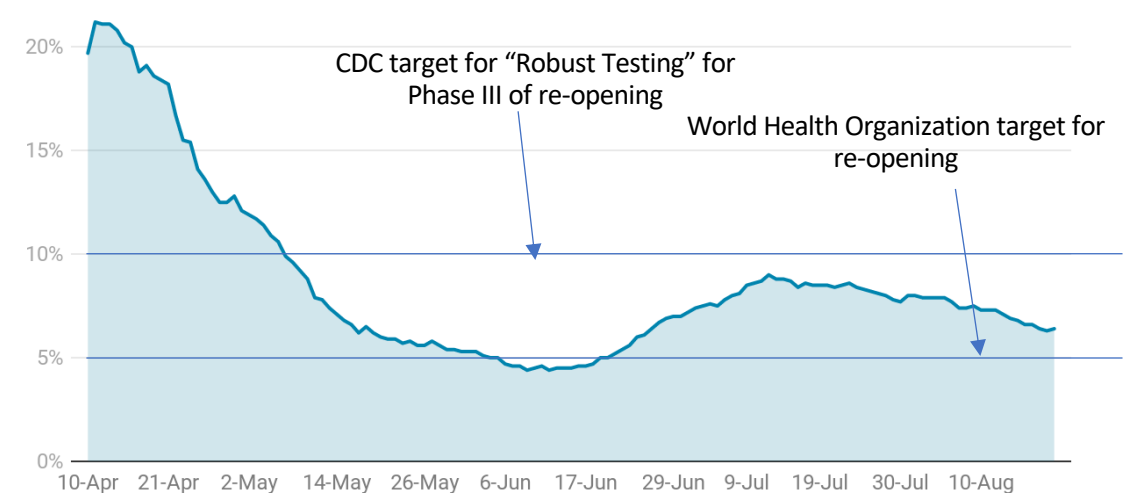


Health Industry Advisor LLC analysis

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 20



Health Industry Advisor LLC analysis

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

Note: On August 11, North Carolina made a significant adjustment, removing 220,000 tests from their YTD totals. We manually removed this negative adjustment from the August 11 data to better reflect actual testing for that date

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

Several states, led by Mississippi, Nevada, Idaho Florida and Kansas have high and increasing test-positive rates

### Test-Positive Rate

Trailing 7-Day Moving Average, As of August 20

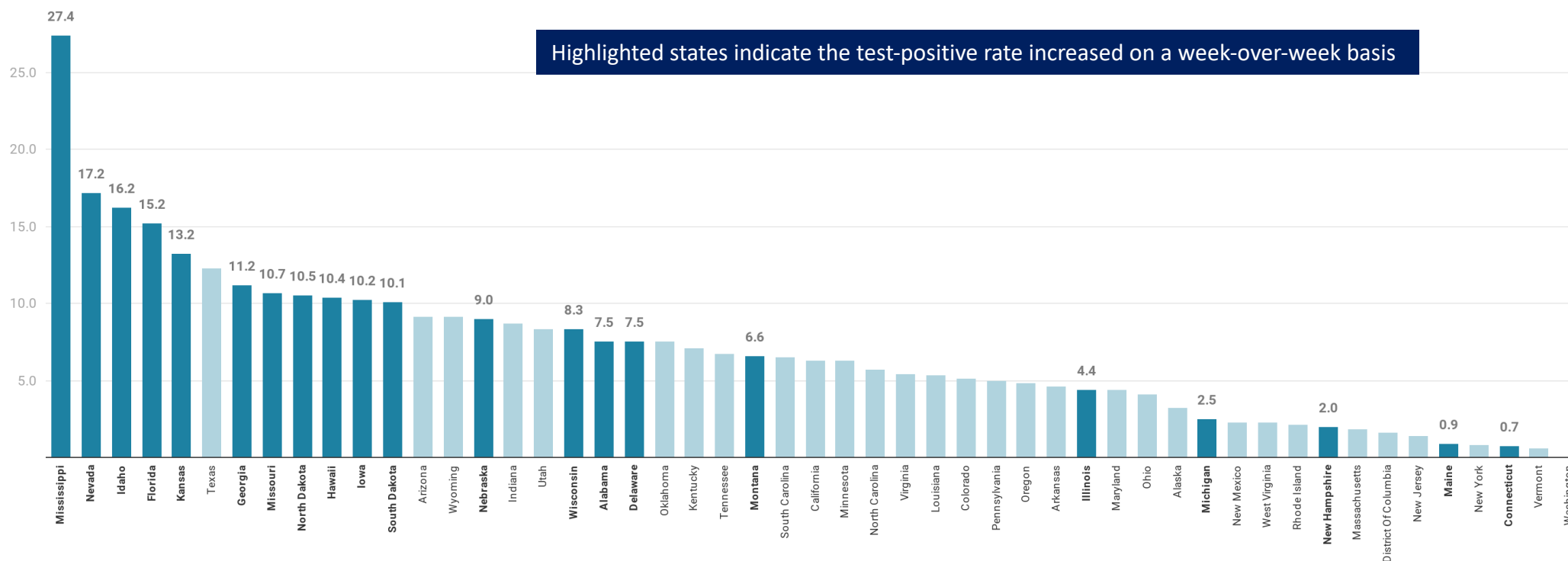
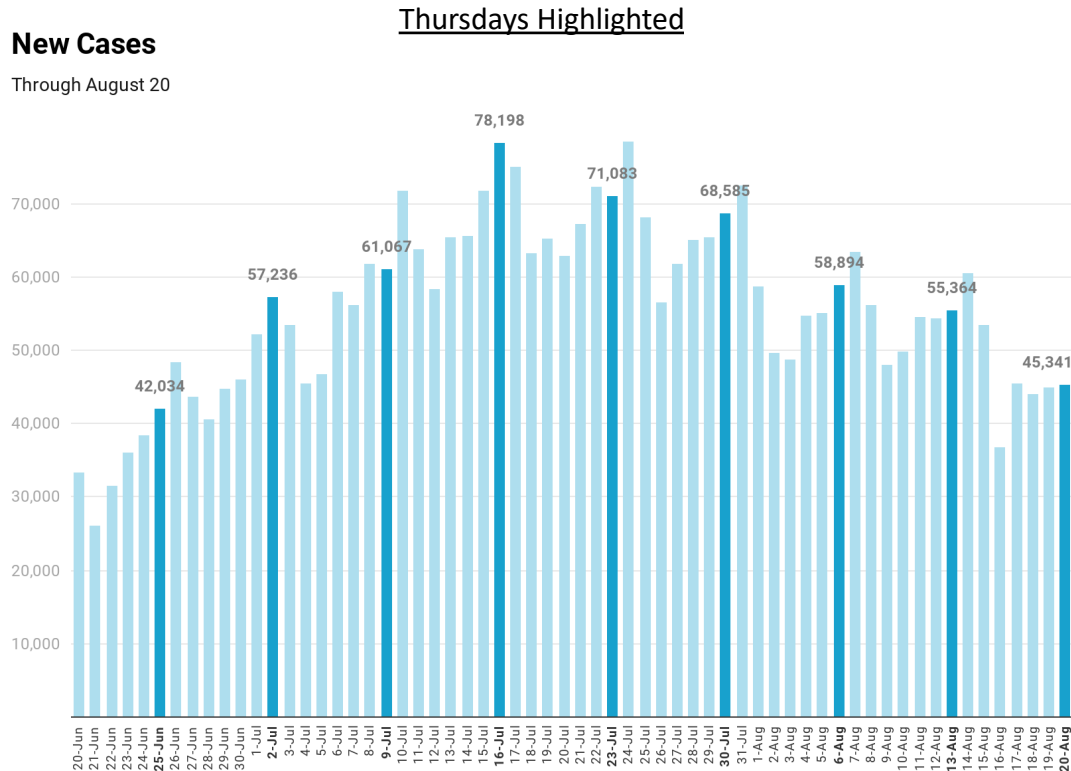


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Projects • Created with Datawrapper

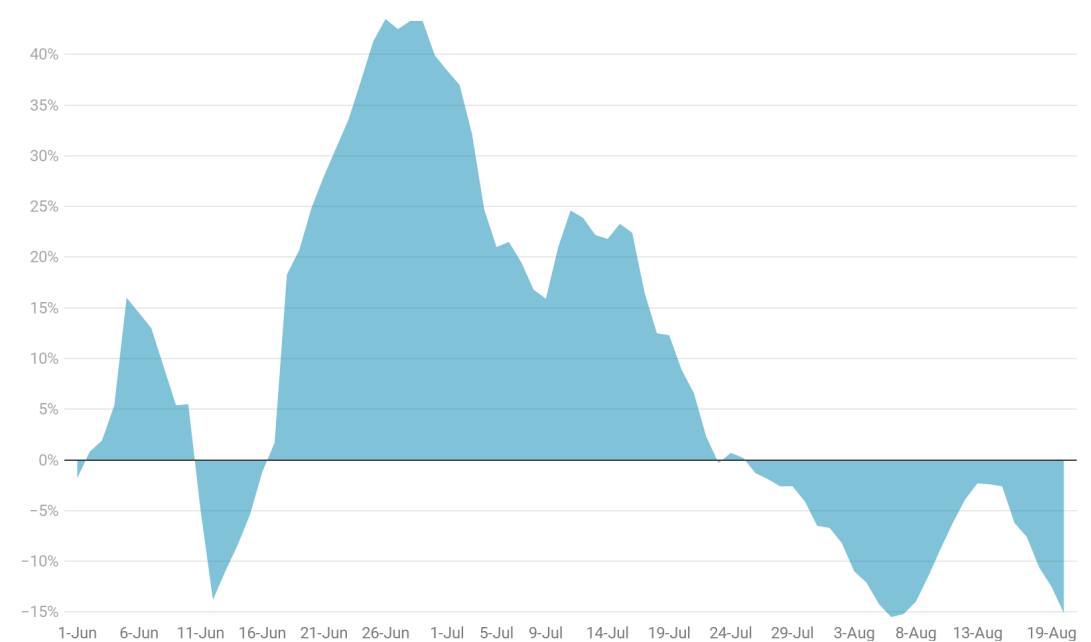
## New Cases

Through August 20



## Week-Over-Week Change In New Cases

Through August 20



Note the daily pattern: new cases are typically low on Sunday, then increase each day through the week. While we have been noting *this for the past few weeks*, researchers from MIT, Boston University and Harvard Medical School confirmed this in a report published by CIDRAP on August 17

Health Industry Advisor LLC analysis

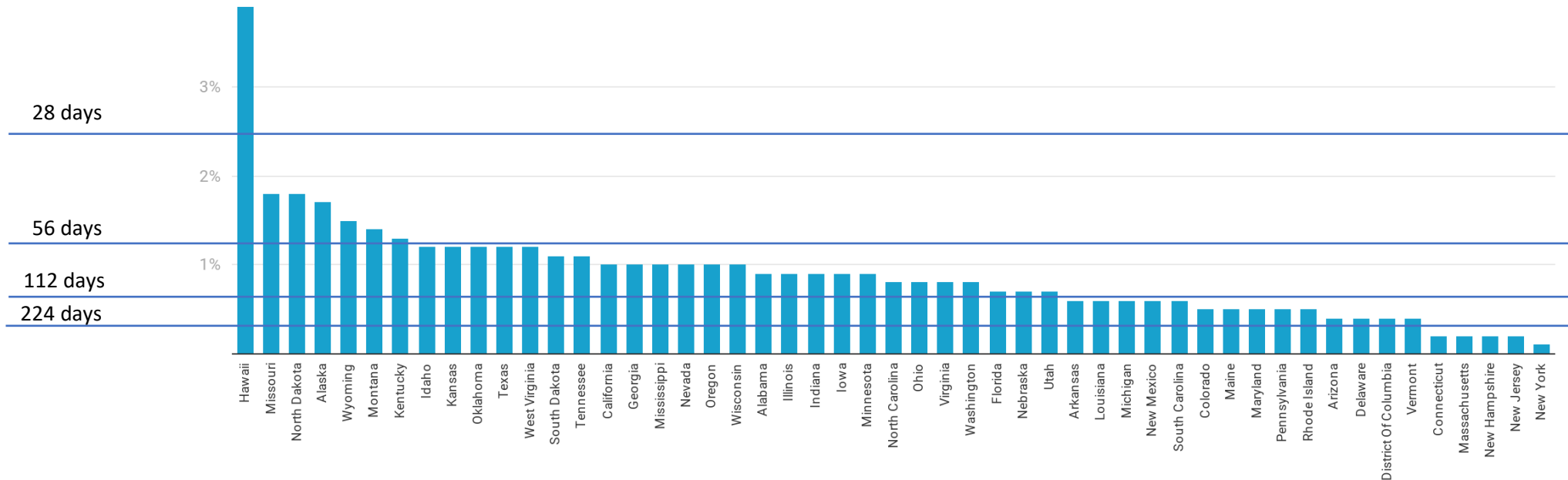
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## State-By-State

Case growth is slowing - even Hawaii is seeing a slowdown. At current rates, cases are doubling every 18 days in Hawaii; every 475 days in New York; every 90 days for the United States overall

### Growth Rate in Total Cases

Trailing 5-Day Moving Average, Through August 20



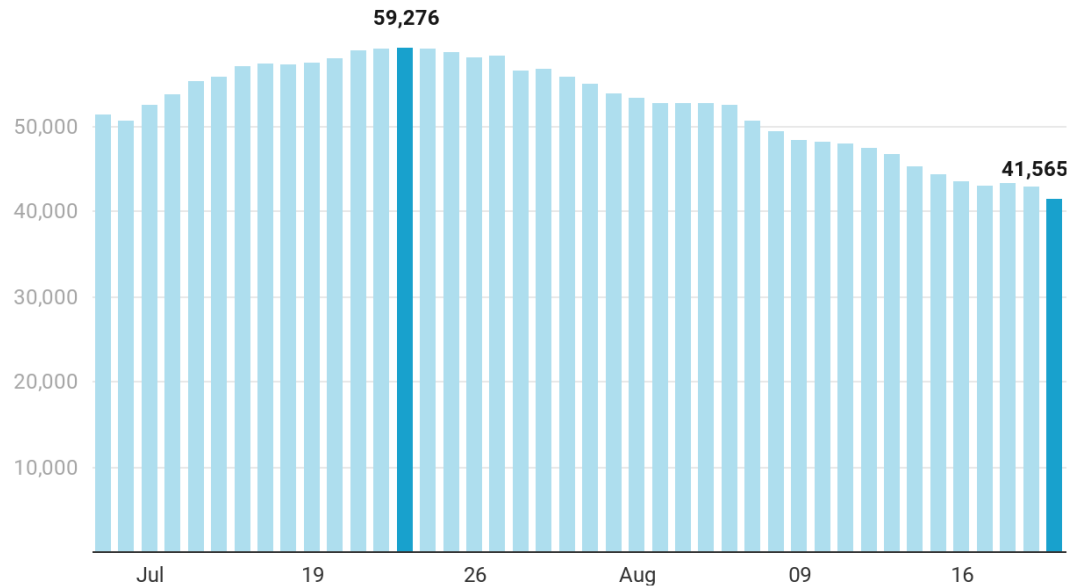
Health Industry Advisor LLC analysis

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

COVID-19 inpatient declined yesterday, continuing a trend for at least the past month; California, Florida and Texas account for most inpatients; each saw fewer patients this week than last

## Hospital Census: COVID-19 Patients

As of August 20



Florida data first available on July 10

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

### Inpatient COVID-19 Census

August 20 v August 13

20-Aug 13-Aug

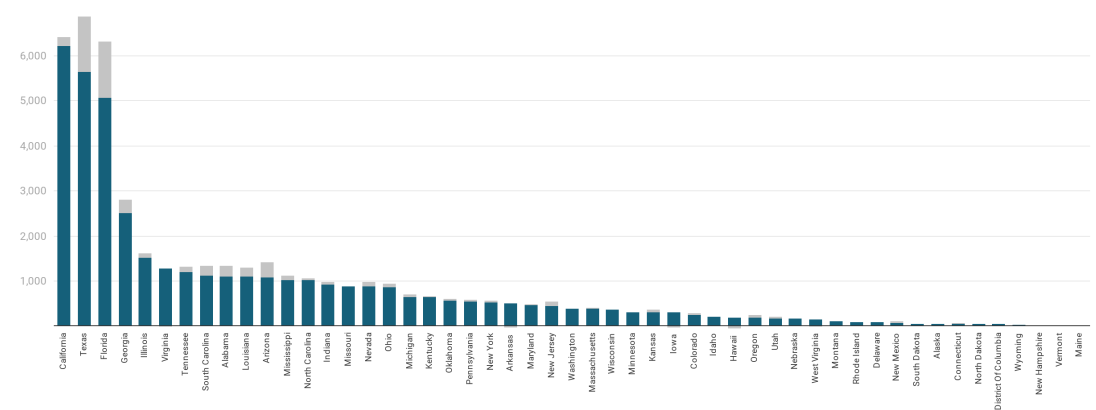
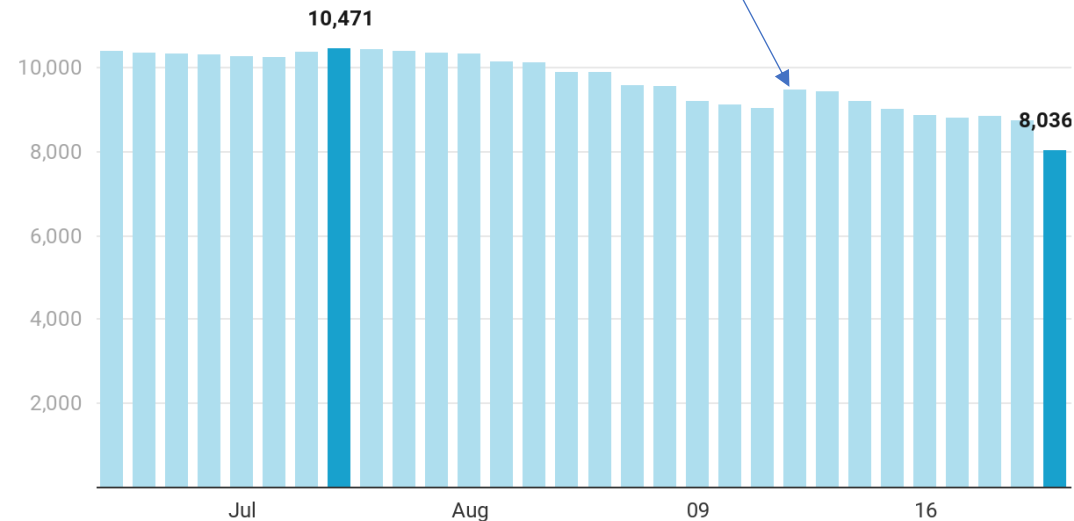


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

ICU census is down since early July

## COVID-19 ICU Census



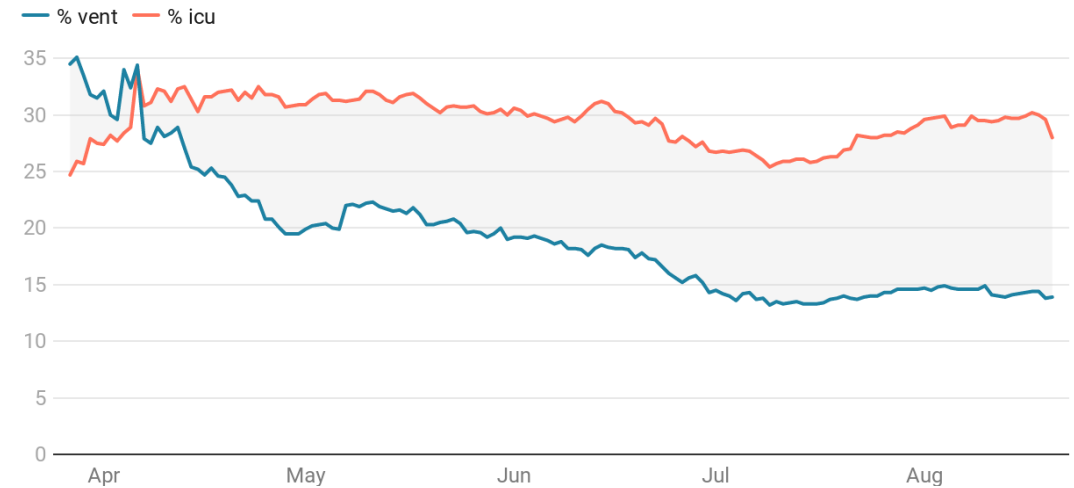
For states reporting these data: AZ, CA, ID, IL, IN, IA, KS, KY, ME, MD, MA, MI, MN, MS, NV, NJ, NY, NC, OH, OK, OR, RI, SC, TX, UT, VA, WI & WY

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

As hospital census declines, % in ICU and on ventilators is stable/declining

## Severity of Hospitalized Patients

% of patients on ventilators and in the ICU, As of August 20

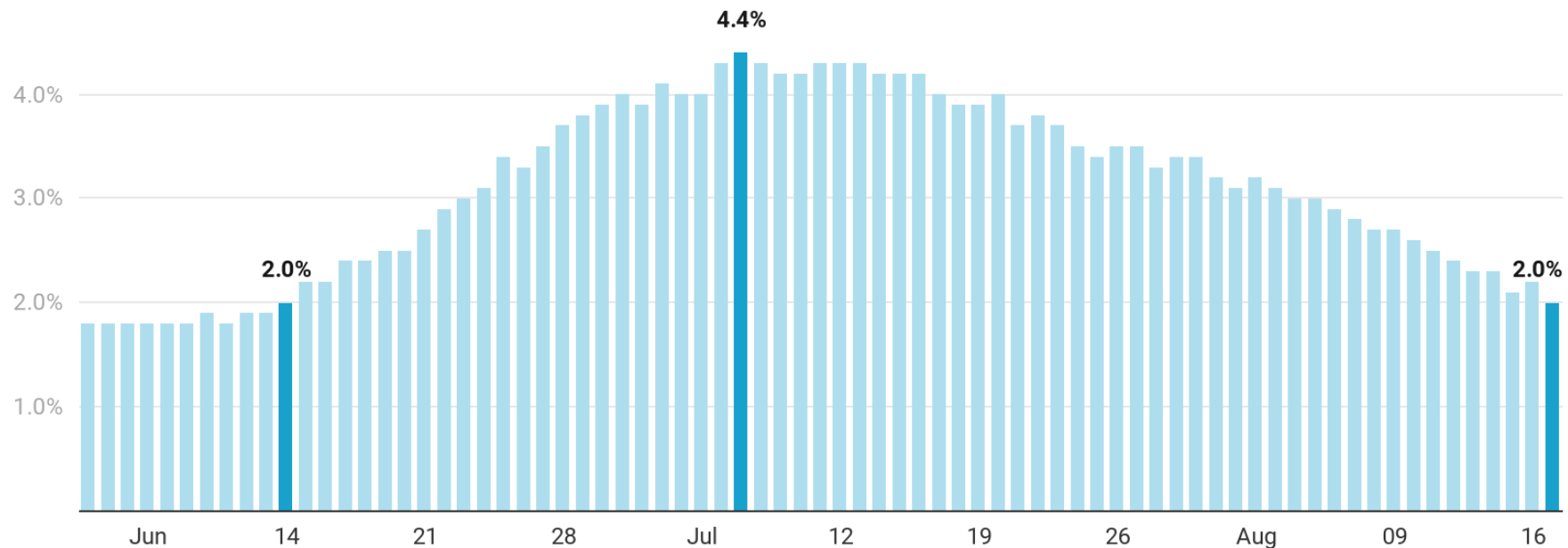


Health Industry Advisor LLC analysis

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

## % of Emergency Department Visits for COVID-Like Illness

As of August 17



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 August 20



Health Industry Advisor LLC analysis

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

Thursdays Highlighted

## Daily Deaths Reported

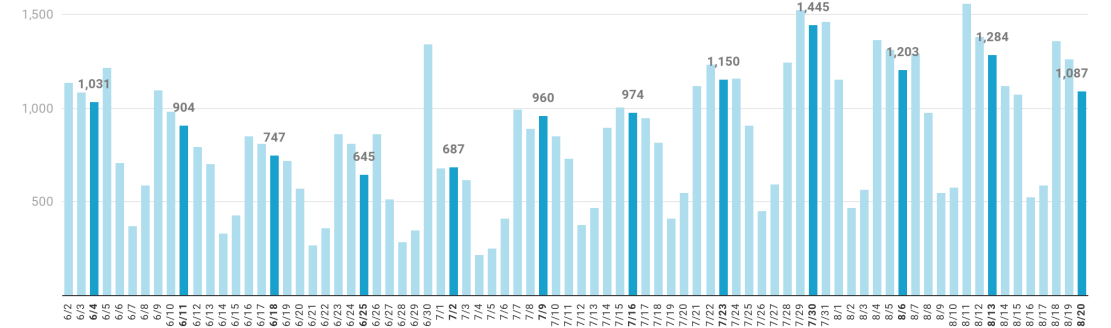


Chart: Health Industry Advisor LLC • Created with Datawrapper

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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](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>
- COVID-19 Projections Using Machine Learning, <https://covid19-projections.com>