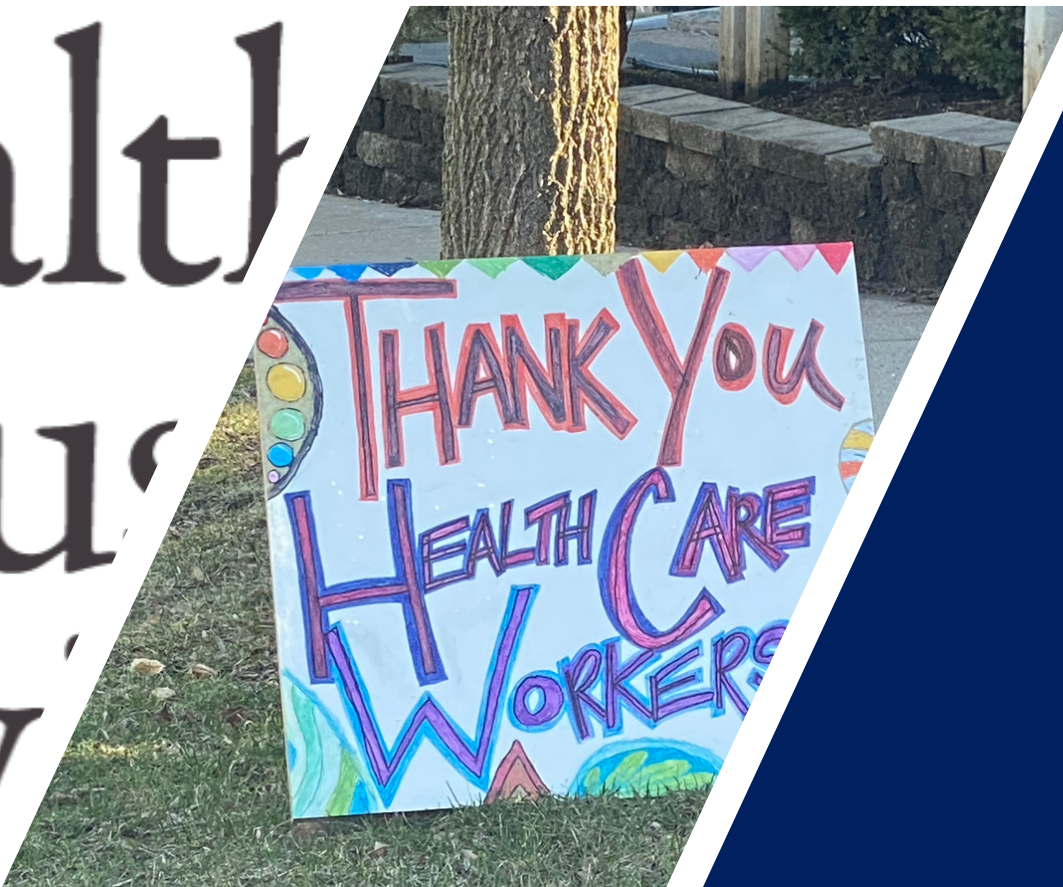




Health
Industry
Adv



Issue # 206
Saturday, November 7, 2020

COVID-19 Report

Highlights

- **The direction of new case detection worldwide v. in the United States began to diverge this week: Although these new cases continued to increase week-over-week worldwide and in the U.S., the rate of increase slowed worldwide; in the U.S., new cases are increasing at a faster week-over-week**
 - It is not for lack of testing that we cannot seem to contain the virus spread in the U.S.: test volume set a record for the seventh consecutive week; **we conducted 50% more tests last week than we did at the second half of August. The test-positive rate, however, has increased eight consecutive weeks**
 - Newly-detected cases in the U.S. have increased eight consecutive weeks and were higher last week than any other week since the pandemic began. Texas and Wisconsin had significantly more new cases last week than any other state. Only Tennessee and Georgia had fewer new cases last week than the prior week
- Following the pattern of new cases, **Covid-19 inpatient days, ICU days and ventilator days have each been increasing over the past several weeks.** Nevertheless, there are signs of relative improvement in these metrics:
 - **The rate of newly-detected cases requiring hospital care has declined eight consecutive weeks**
 - **The likelihood that a Covid-19 patient would require ICU care or a ventilator is as low as it has been at any time during the pandemic**
 - **Deaths with the coronavirus have been increasing as well, following the pattern of newly-detected cases.** The case fatality rate, however, has been stable for several weeks.
 - Deaths with coronavirus, influenza and pneumonia, as a % of all deaths in the U.S. have been declining since early-August

Worldwide, the rate of growth slowed over the twelve days

The U.S. is moving in the opposite direction

Week-Over-Week Changes in Newly-Detected Cases: USA v. Worldwide

7-Day Moving Average

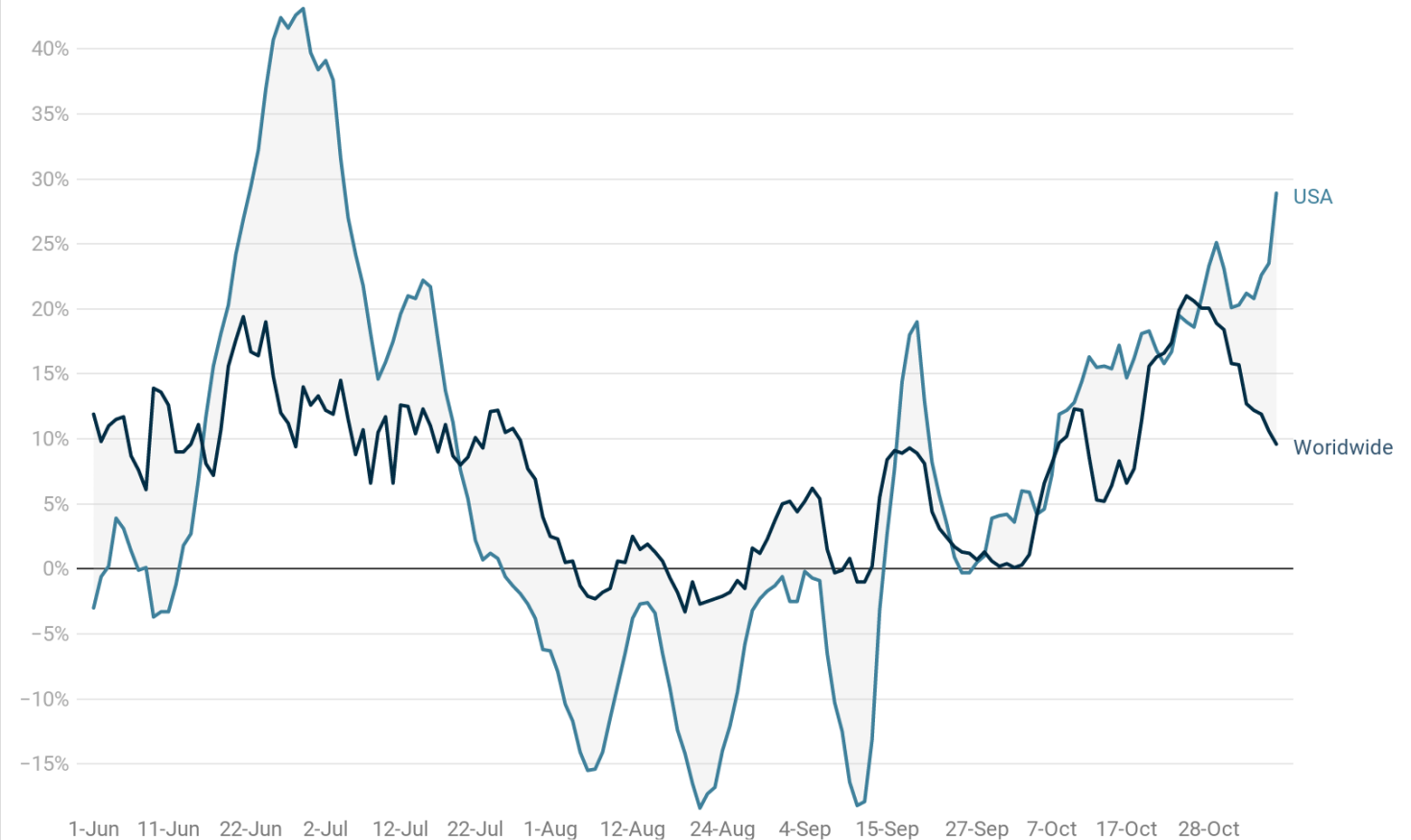


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

~ 3.8 million newly
detected cases
worldwide last week

Weekly New Detected Cases - Worldwide

For the 7 days ending on date shown

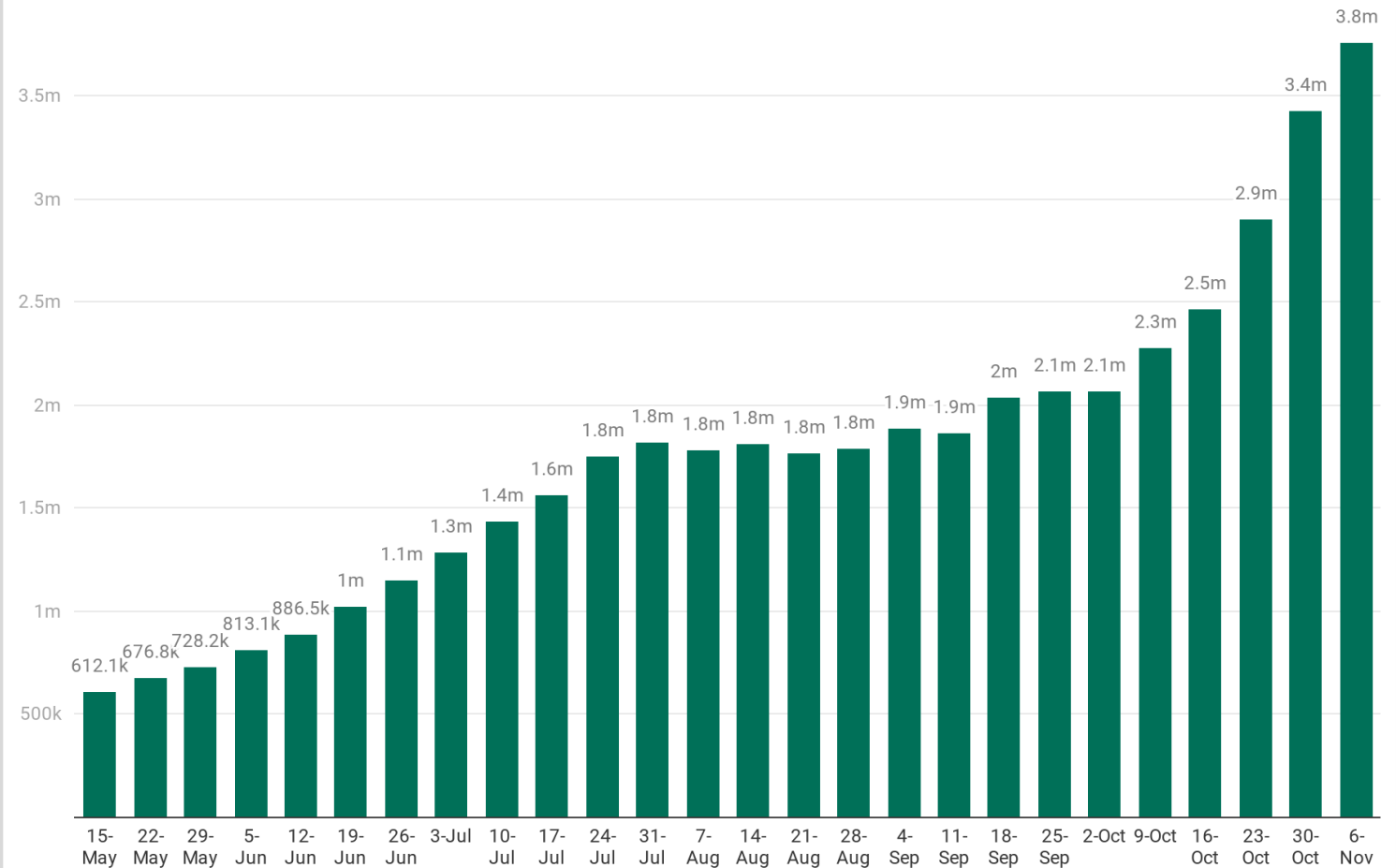


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Test volume set a record high for the seventh consecutive week

Test volume has increased eight consecutive weeks

Test-positive rate has increased five consecutive weeks

Weekly Tests - United States

For the 7 days ending on date shown

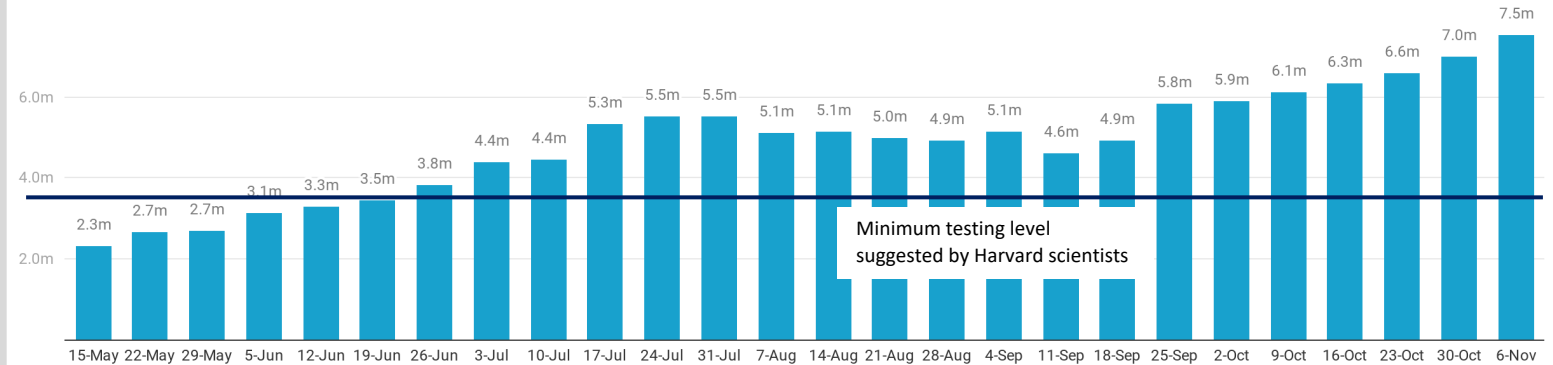


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Weekly Test-Positive% - United States

For the 7 days ending on date shown

Rate suggested by CDC for Phase 3 Re-opening

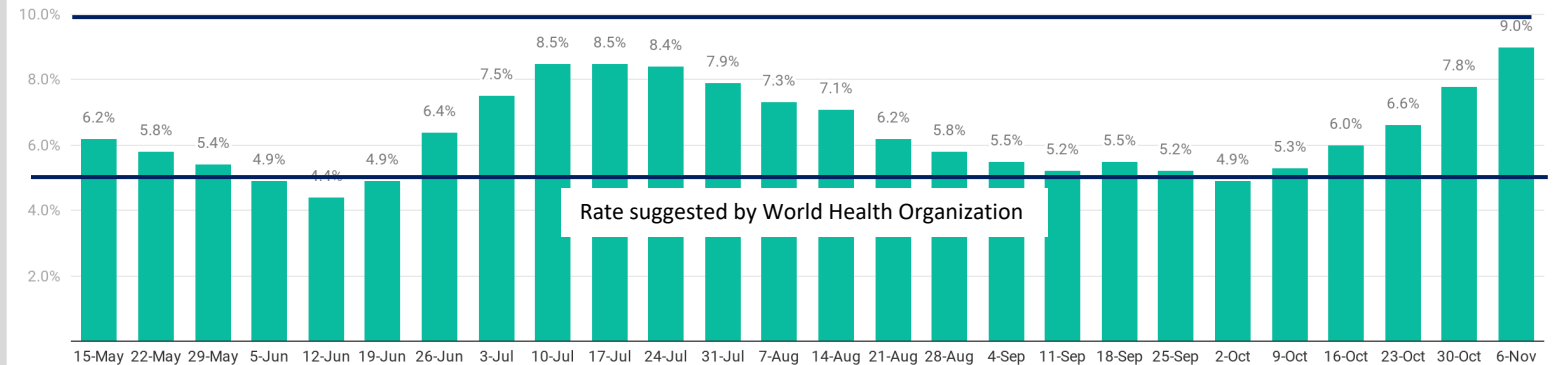


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking project • Created with Datawrapper

The ratio of tests performed to new cases detected has dropped six consecutive weeks

The higher this ratio, the more adequate testing is at identifying spread; a low measure suggests that testing isn't keeping pace

Weekly Tests / Newly Detected Case - United States

For the 7 days ending on date shown

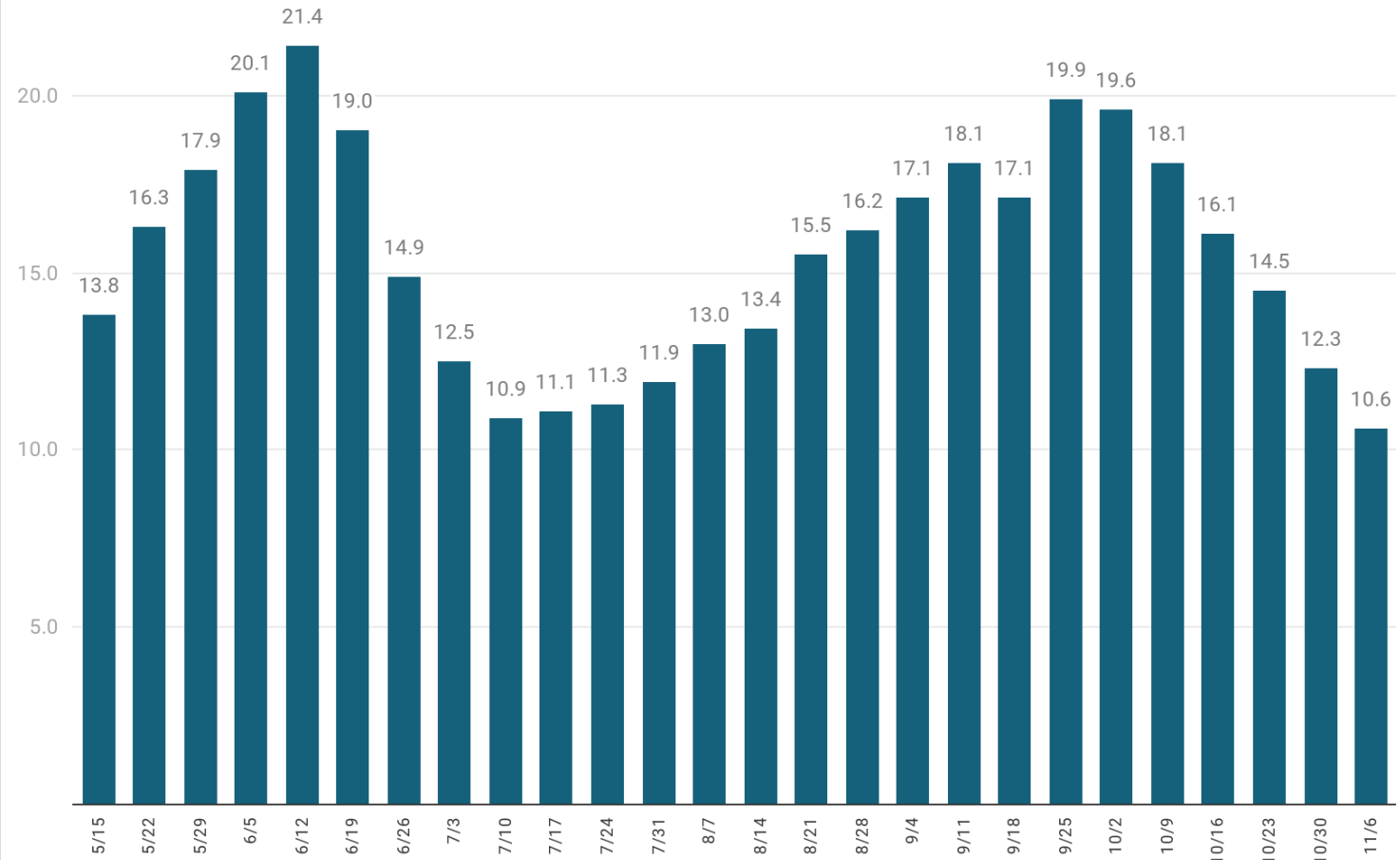


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

Newly detected cases increased for the eighth consecutive week

New cases were higher during this 7-day period than any comparable period since the pandemic began

Weekly New Detected Cases - United States

For the 7 days ending on date shown

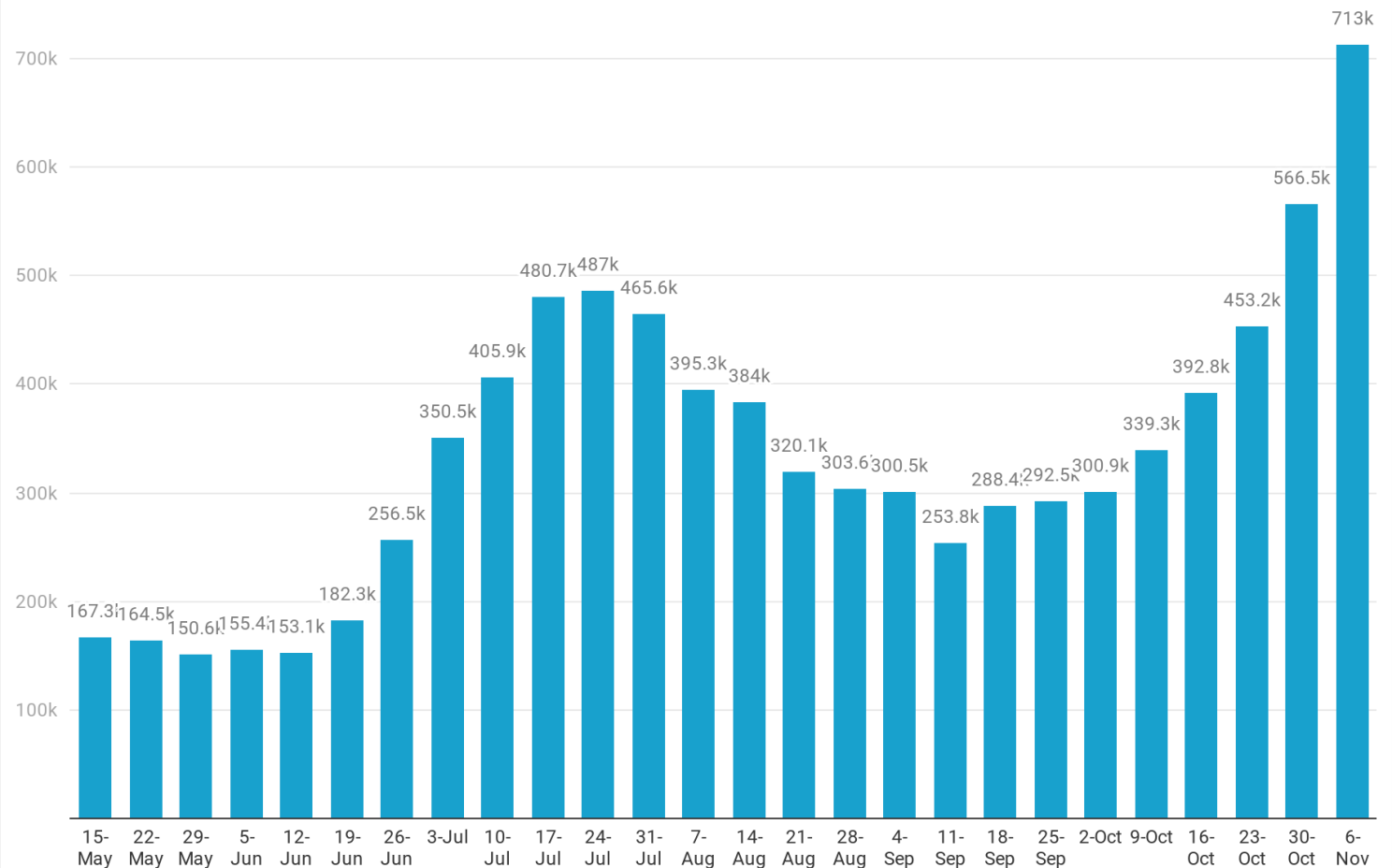


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Texas and Illinois recorded the highest number of newly detected cases over the past seven days – by a significant margin

Wisconsin and California had the 3rd and 4th most new cases last week

New Weekly Detected Cases - By State

October 30 - November 6

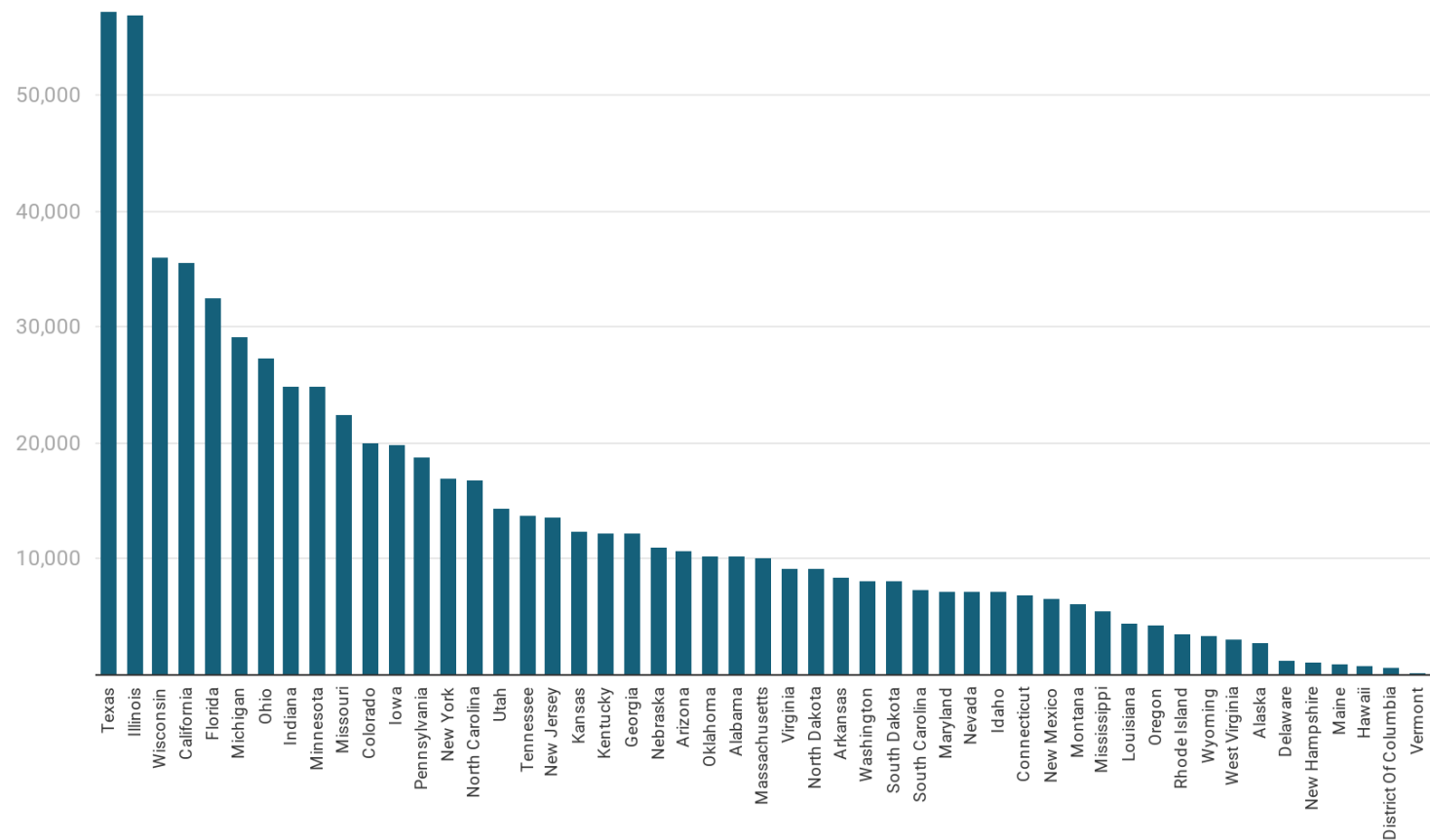


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Illinois experienced the largest increase in new cases relative to the prior week

Only two states –Tennessee and Georgia – experienced fewer newly detected cases this past week v. the prior week

Week-Over-Week Change In Newly Detected Cases - By State

October 31 - November 6 v. October 24 - 30

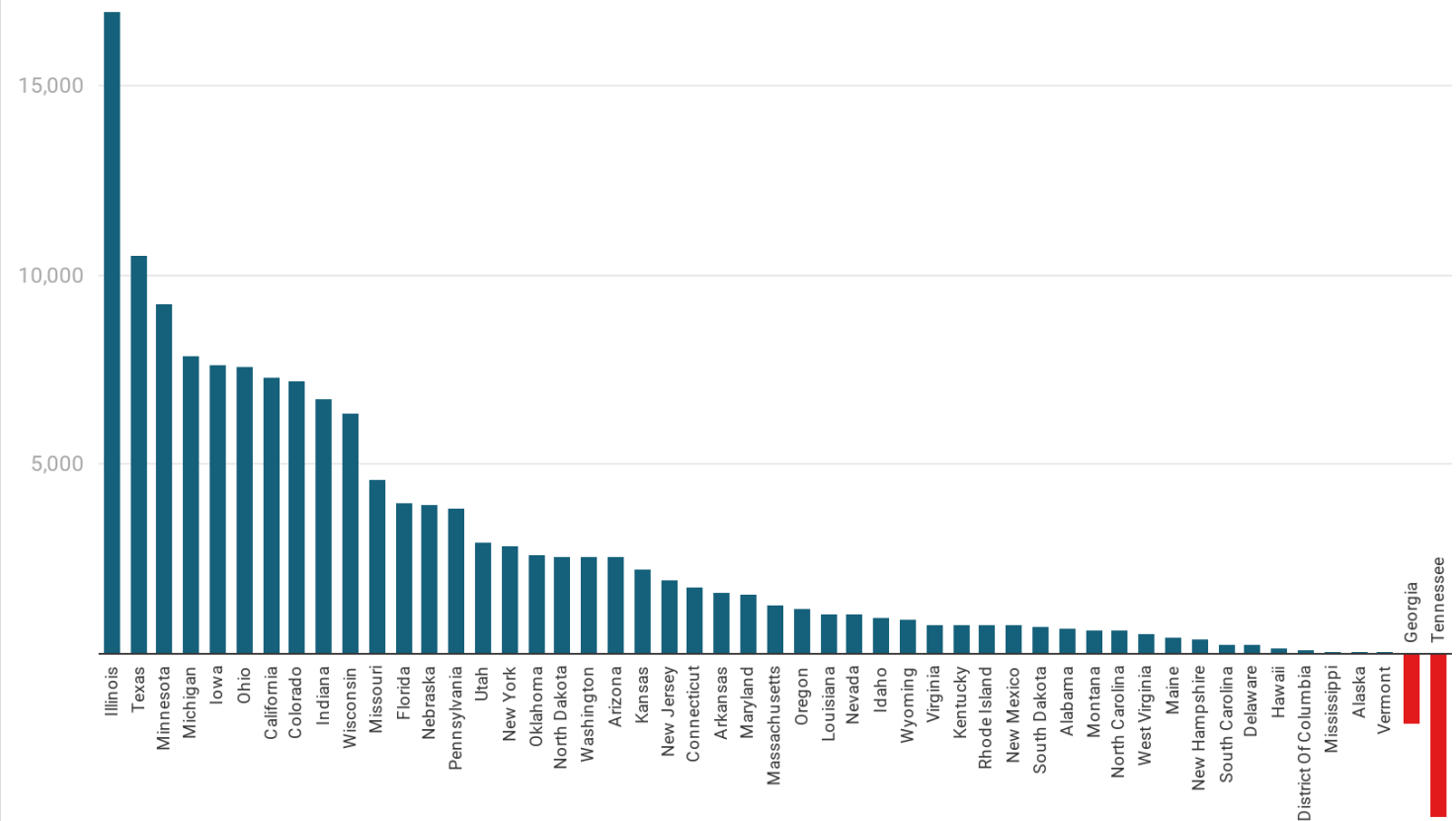


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

The estimated number of active, detected cases in the U.S. increased for the 5th consecutive week, following six weeks of relative stability

Current Active Cases - United States

For the 7 days ending on date shown

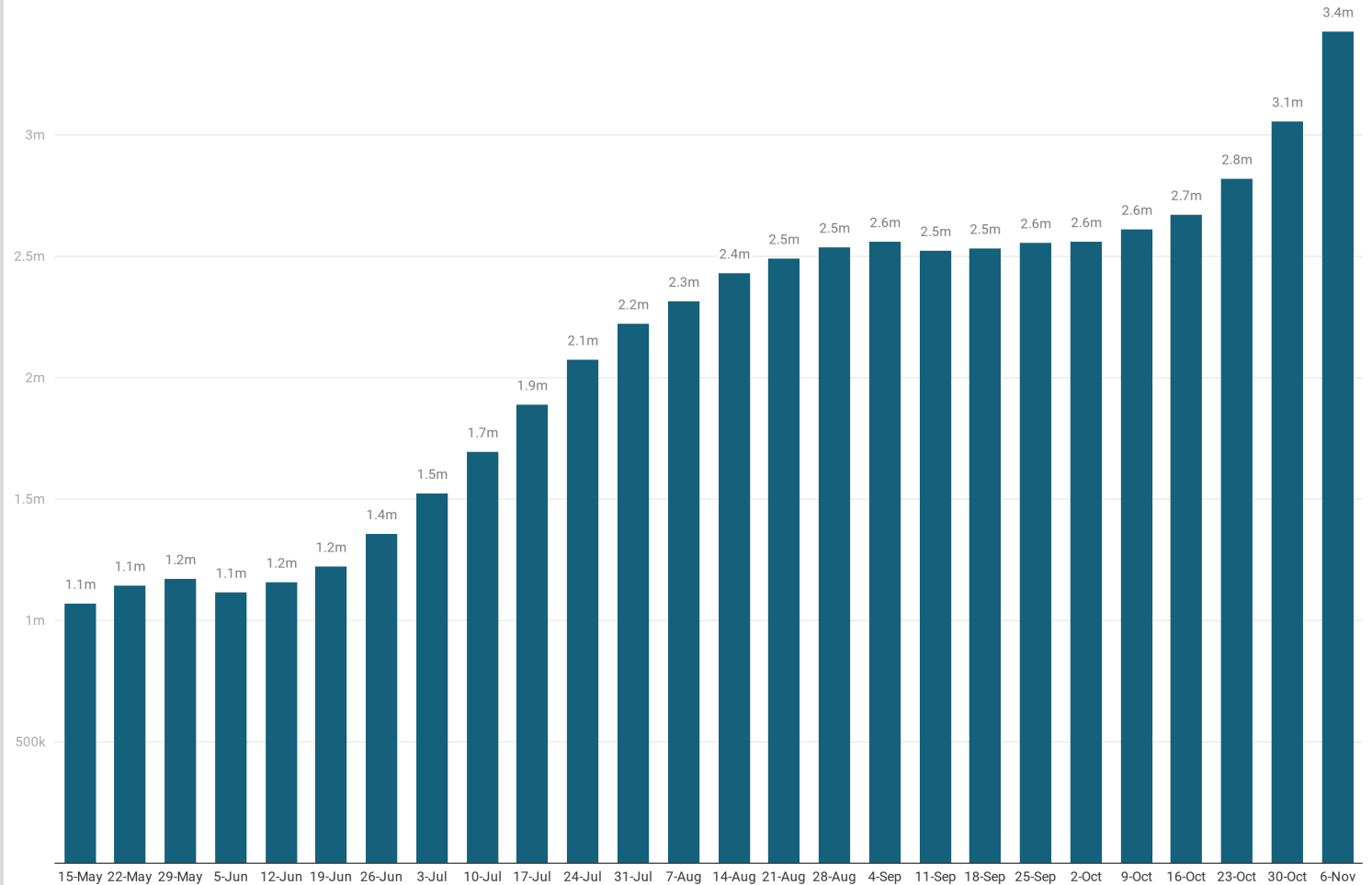


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Recoveries from detected infections in the U.S. increased each of the past two weeks

6.4M people in the U.S. have recovered from a detected SARS-CoV-2 infection

Weekly Recoveries - United States

For the 7 days ending on date shown

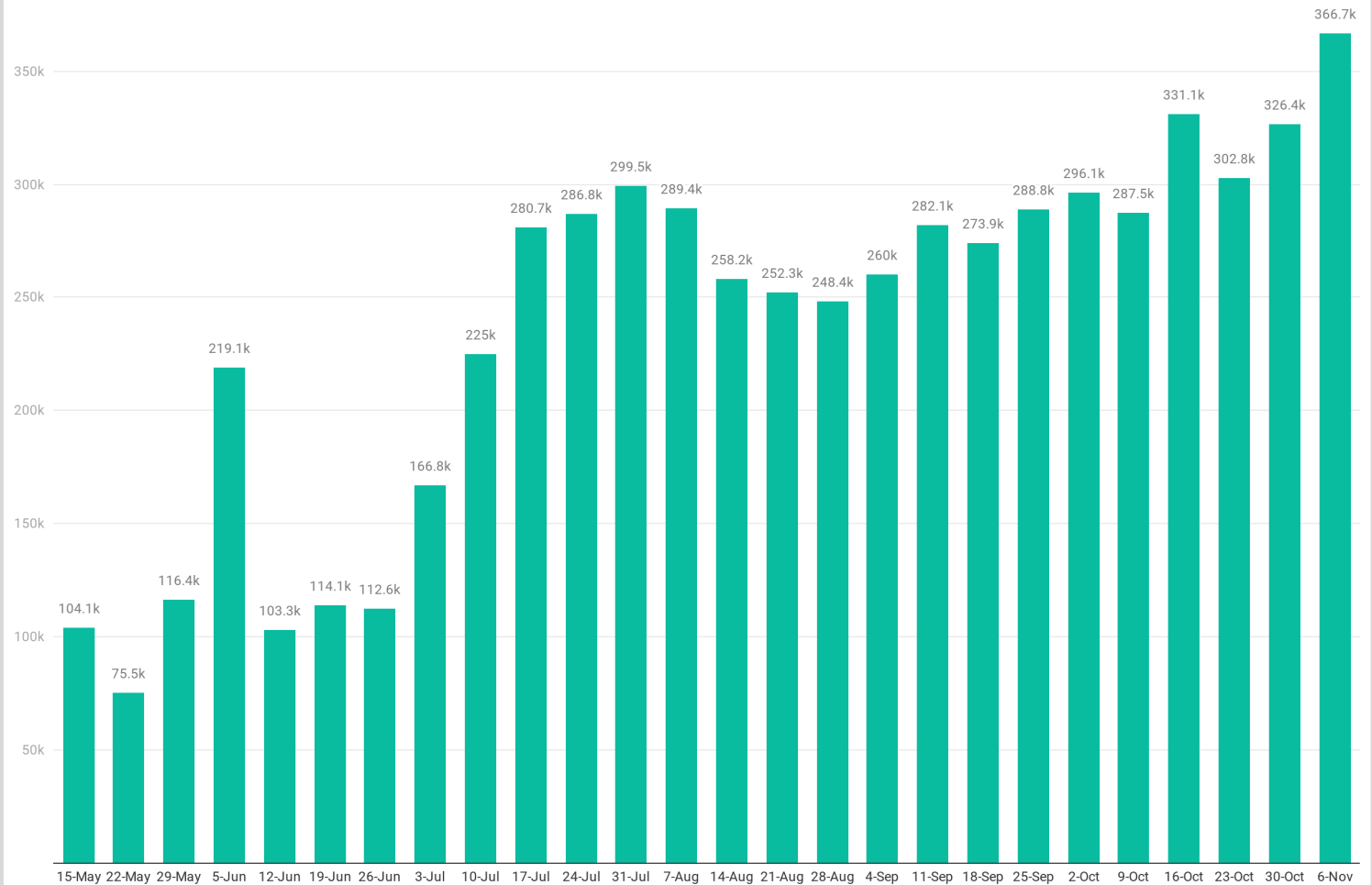


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Over time, more –and– more persons infected by the SARS-CoV-2 virus have successfully recovered

The number of active cases, as a % of all detected cases, have recently increased

How has the status of cases changed over time?

As of the date shown

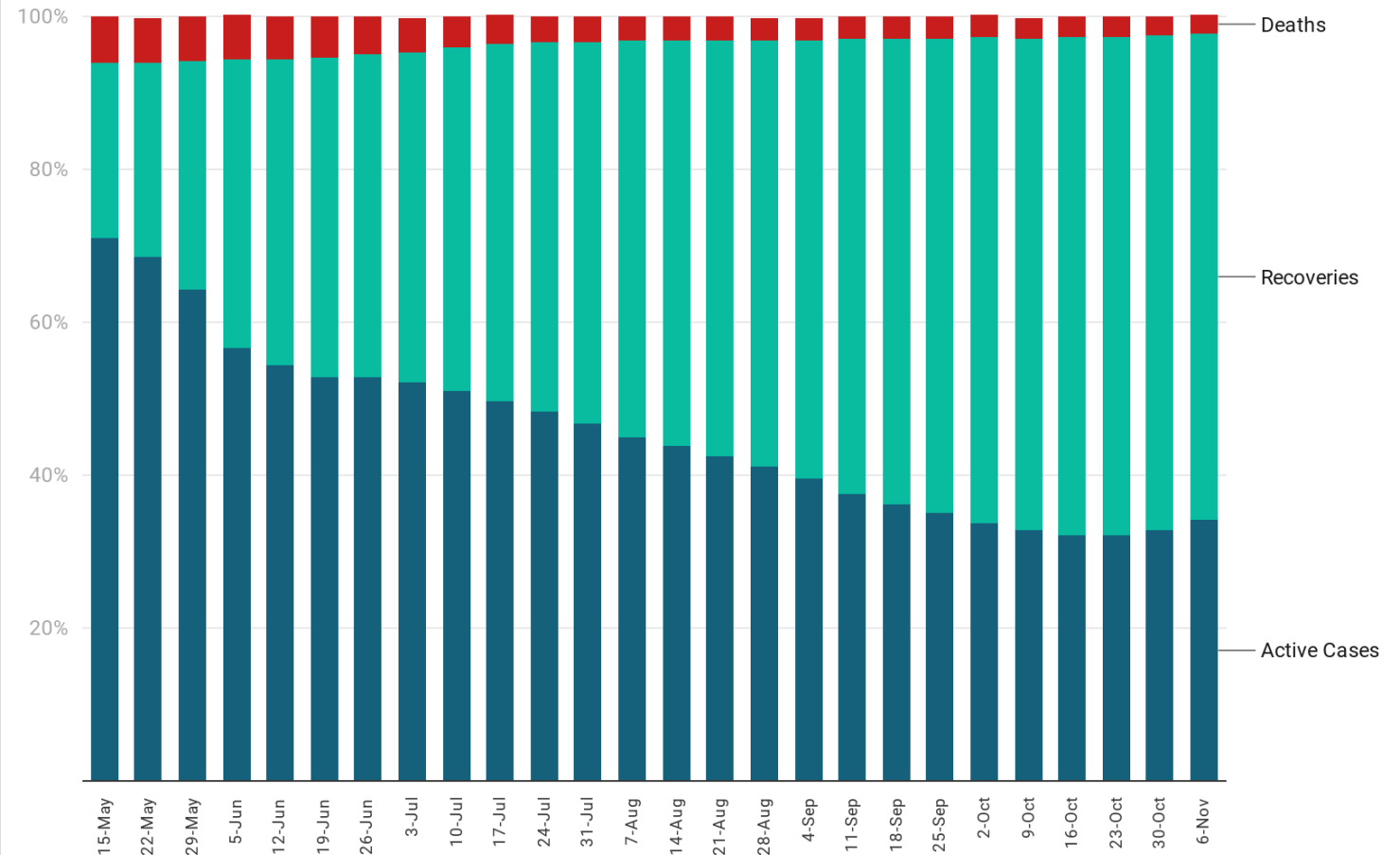


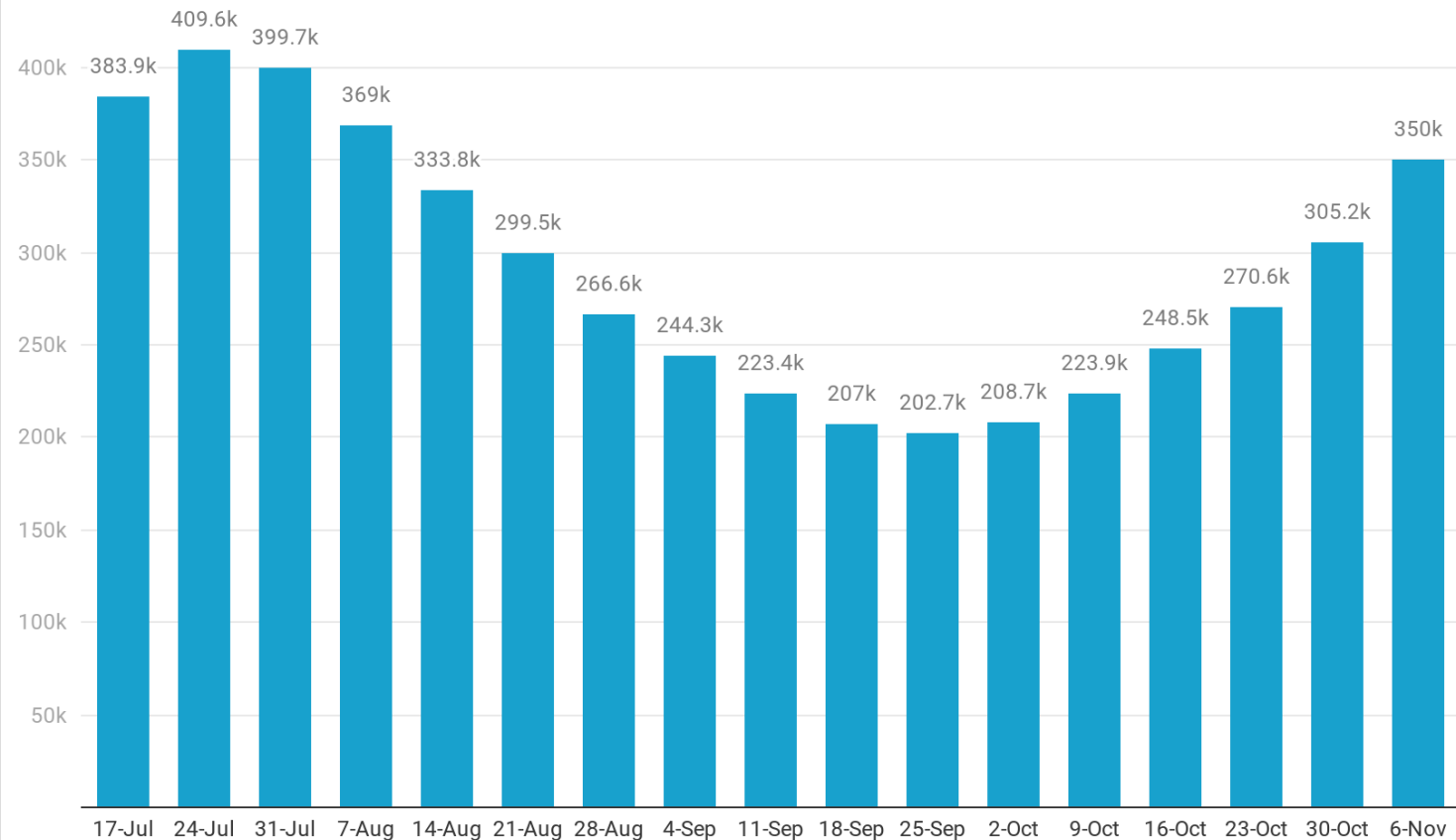
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Inpatient COVID-19 census increased last week, for the sixth consecutive week

This census remains lower than its July 18-24 level

Weekly Covid-19 Inpatient Days - United States

For the 7 days ending on date shown



The following states started reporting data on: HI, 7/14; KS, 7/25

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

Covid-19 inpatient days
per 100 new cases
declined for the eighth
consecutive week

Covid-19 Inpatient Days / 100 New Cases

For the 7 days ending on the date shown

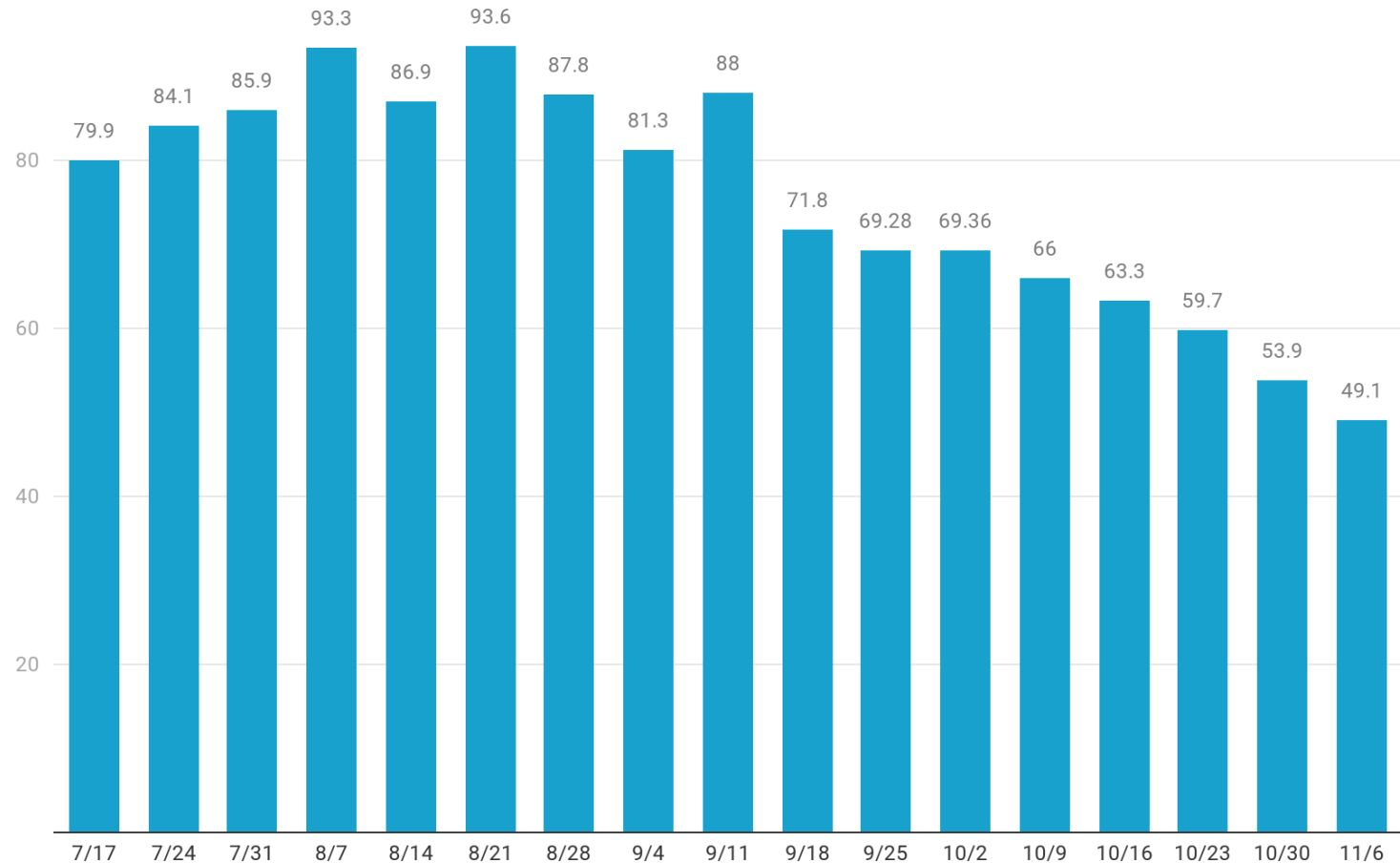


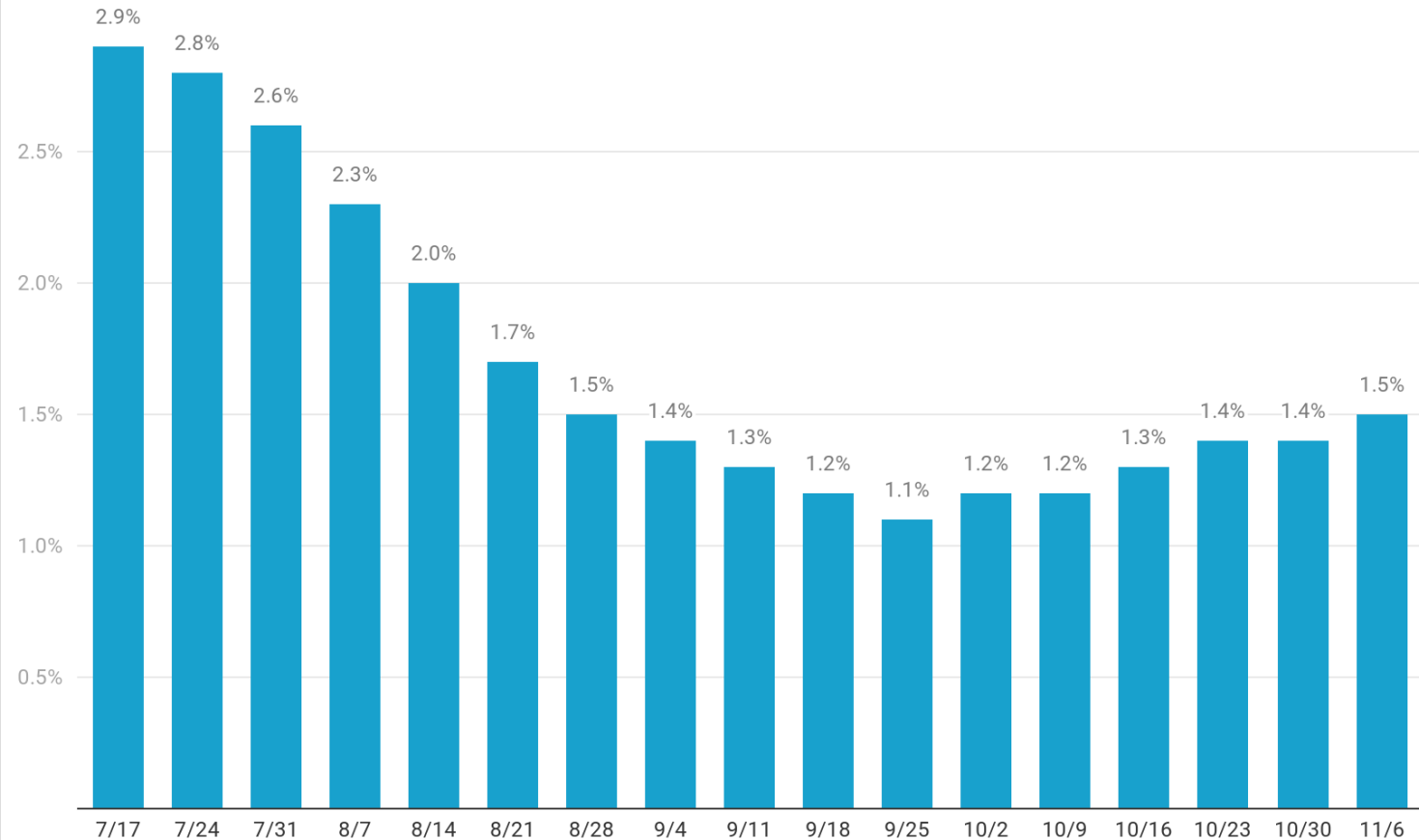
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

Only about 1.5% of actively-infected persons are in the hospital – consistent with the two weeks

Despite the recent increase in Covid-19 inpatients, the likelihood of a detected & actively-infected person being in the hospital is ~1/2 what it was in mid-July

Estimated % of Detected & Active Covid-19 Patients in the Hospital

For the 7 days ending on date shown



The following states started reporting data on: HI, 7/14; KS, 7/25

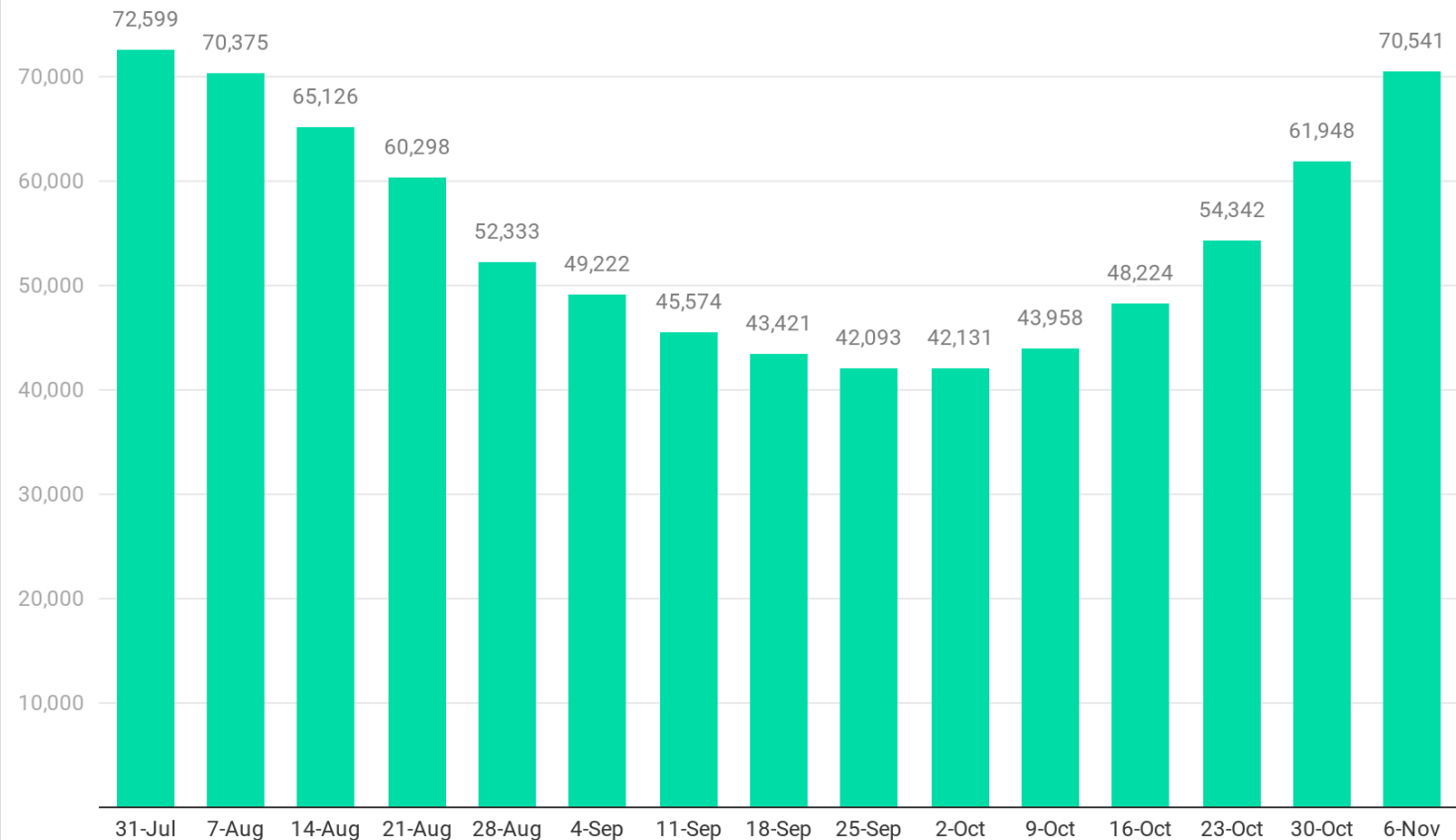
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & Worldometers.info • Created with Datawrapper

ICU census of COVID-19 patients has increased six consecutive weeks

This census has returned to early-August levels

Weekly ICU Covid-19 Census - United States

For the 7 days ending on date shown



The following states started reporting data on: HI, 7/30; ND, 8/19; SC, 7/28; TN, 8/12. The following states do not report: AL, AK, AR, CO, CT, FL, GA, LA, MO, MT, NE, NH, NM, PA, SD, VT, WA

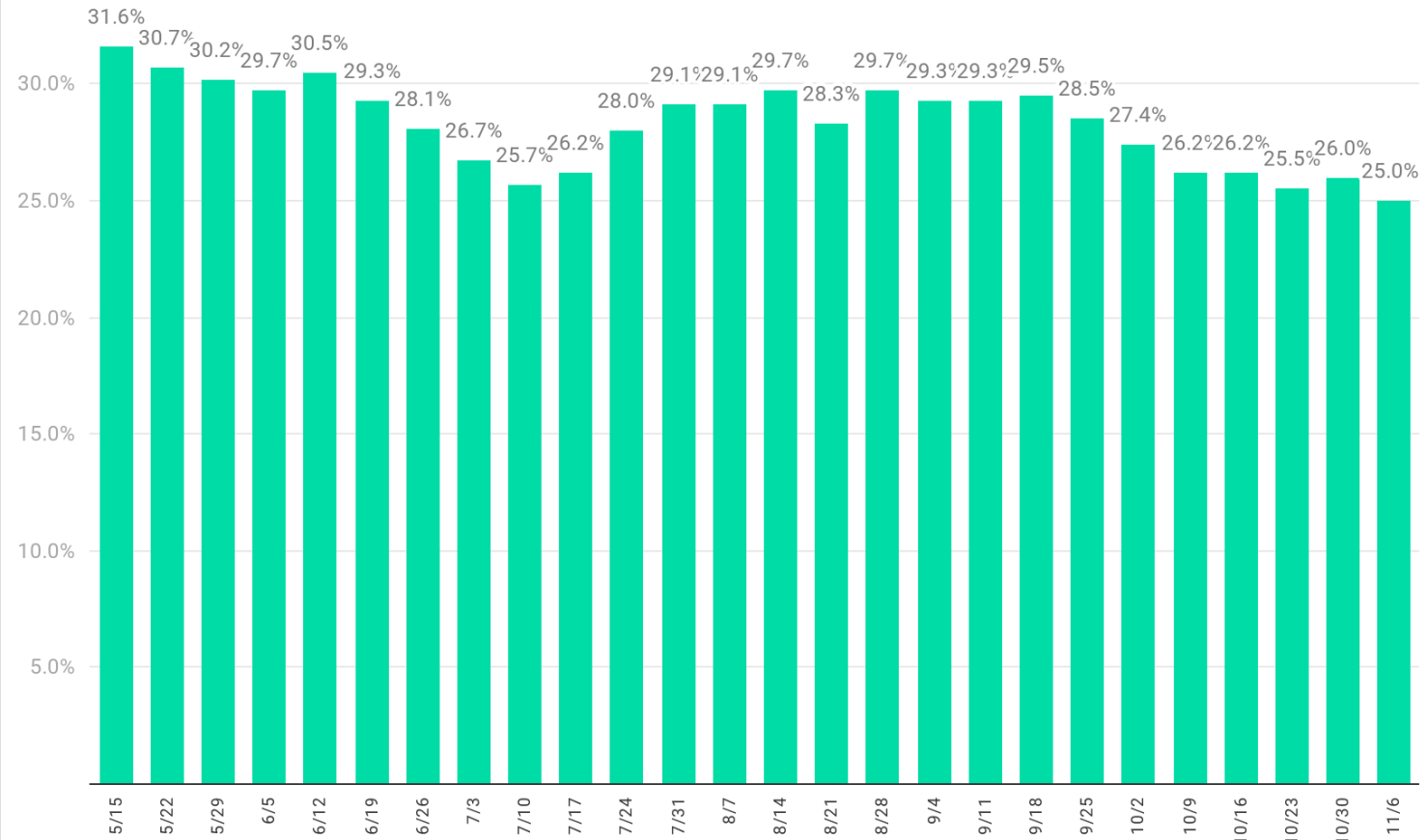
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

About a ¼ of Covid-19 inpatients were in the hospital last week

This % is as low as it has been since at least mid-May

Weekly Comparison of the % of Hospitalized Covid-19 Patients in the ICU

For the date shown



The following states started reporting data on: HI, 7/14; KS, 7/25

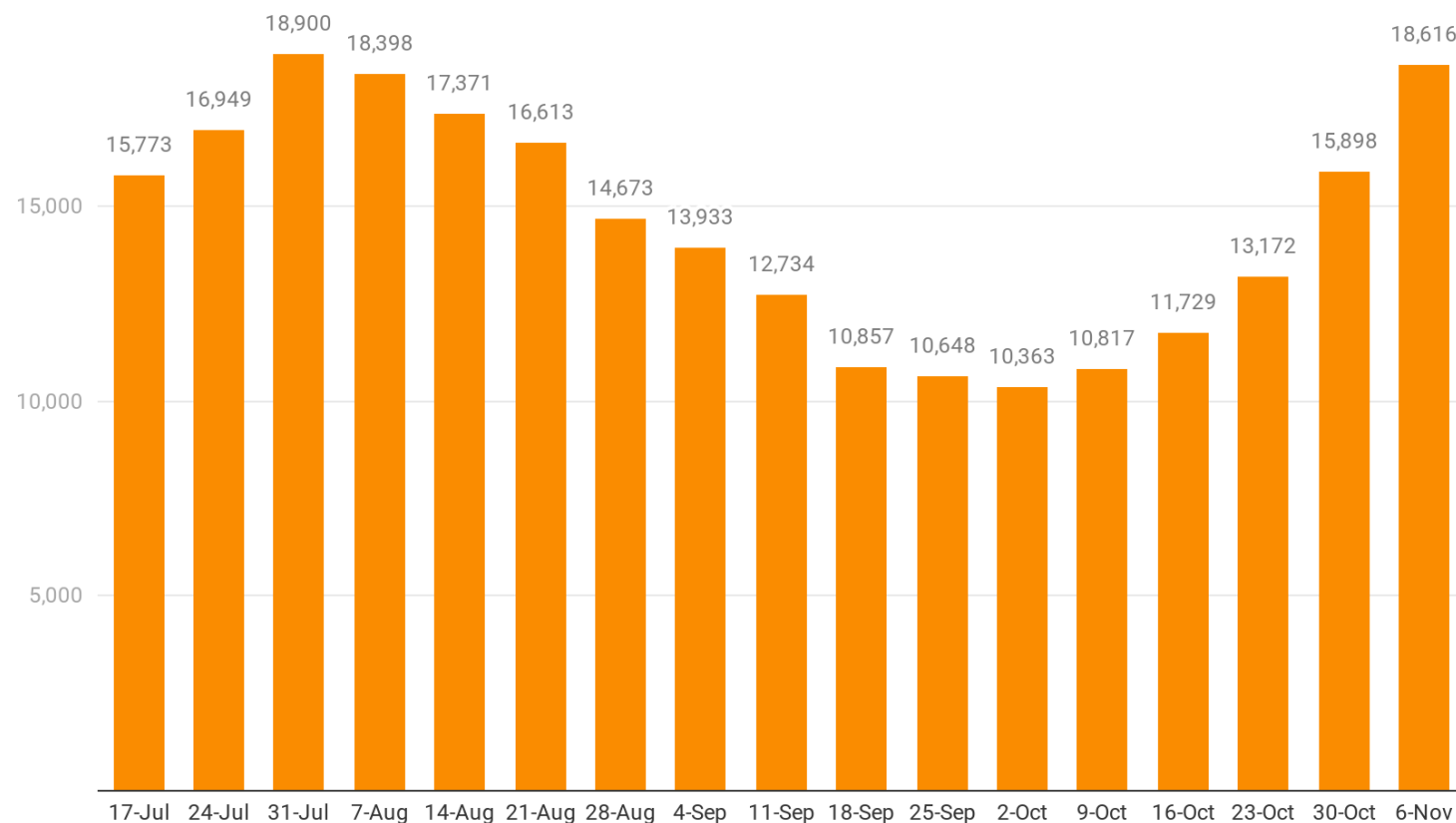
Chart: Health Industry Advisor LLC • Source: Atlantic's Covid Tracking project • Created with Datawrapper

Census of COVID-19 patients on ventilators increased last week – the fifth consecutive week-over-week

This census is nearing it's late-July peak

Ventilator Days COVID-19 - United States

For the 7 days ending on date shown



The following states started reporting data: HI, 7/31; KS, 7/16; SC, 7/24; TN, 8/12. The following states do not report: AL, CA, CO, CT, FL, GA, ID, KY, MD, MN, MT, NH, NM, NC, ND, OK, SD, TX, UT, VT, WI, WY

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

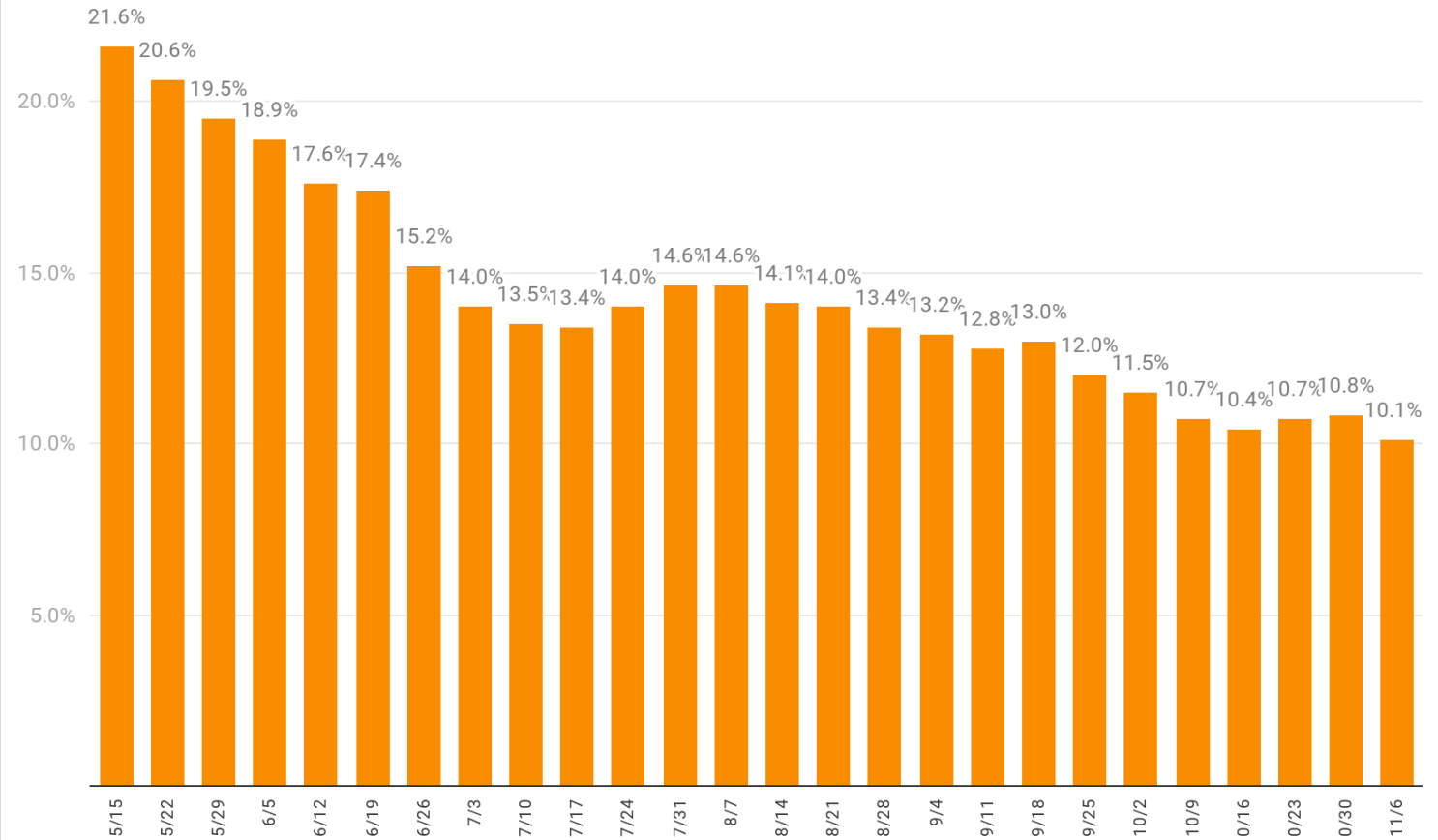
Despite the increase in ventilator patients last week, the likelihood of a hospitalized Covid-19 patient would be on a ventilator declined from last week

About 10% of Covid-19 inpatients were on a ventilator last week

A reflection of changing treatment protocols, the likelihood of a person hospitalized with a SARS-CoV-2 infection has been cut by more than ½ since mid-May

Weekly Comparison of the % of Hospitalized Covid-19 Patients on Ventilators

For the 7 days as of the date shown



The following states started reporting data on: HI, 7/14; KS, 7/25

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

Deaths reported with the coronavirus in the U.S. increased for the third consecutive week— likely a result of the recent case surge

There were more deaths last week than any week since August 22-28

Weekly Deaths - United States

For the 7 days ending on date shown

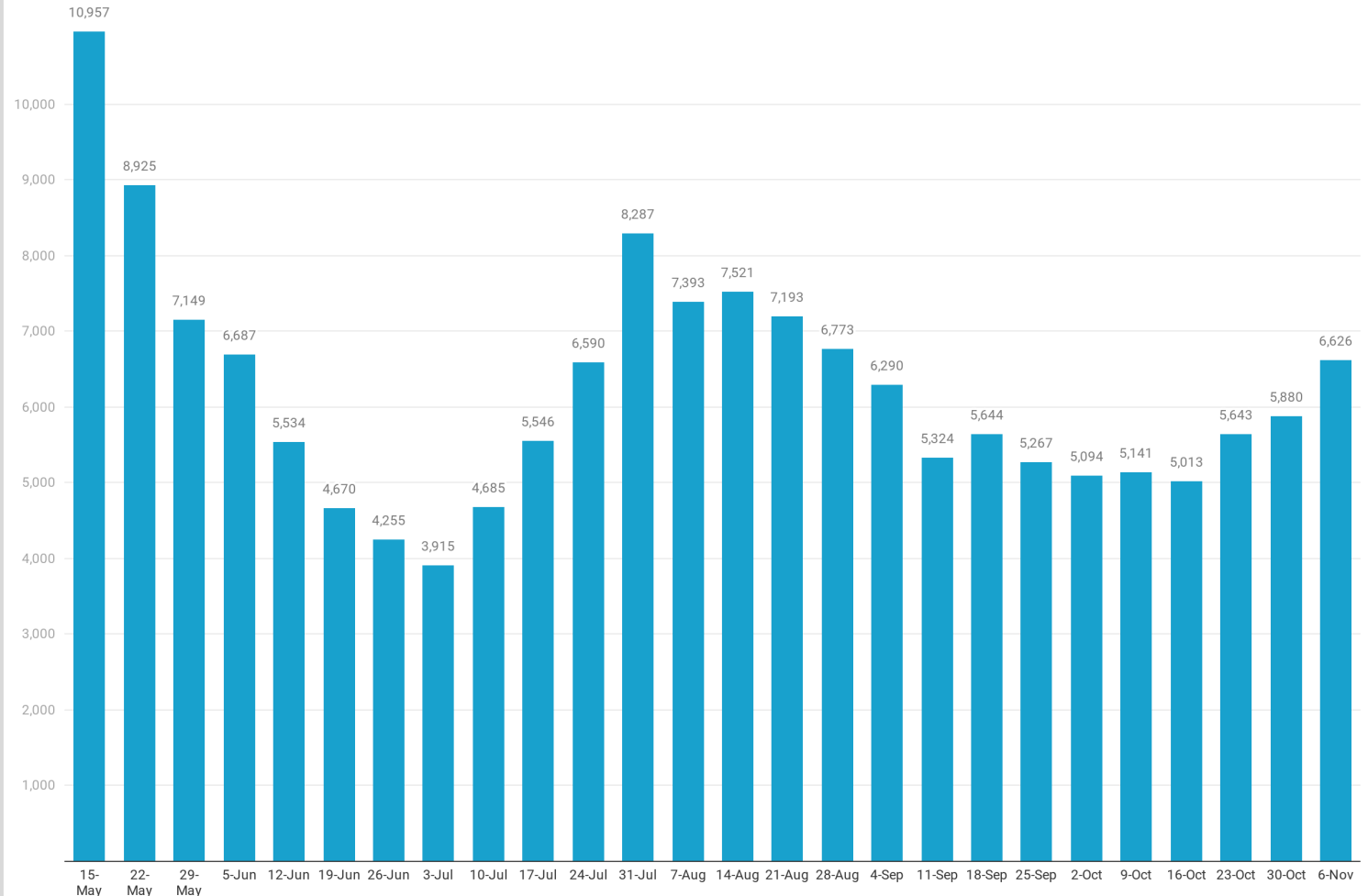


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

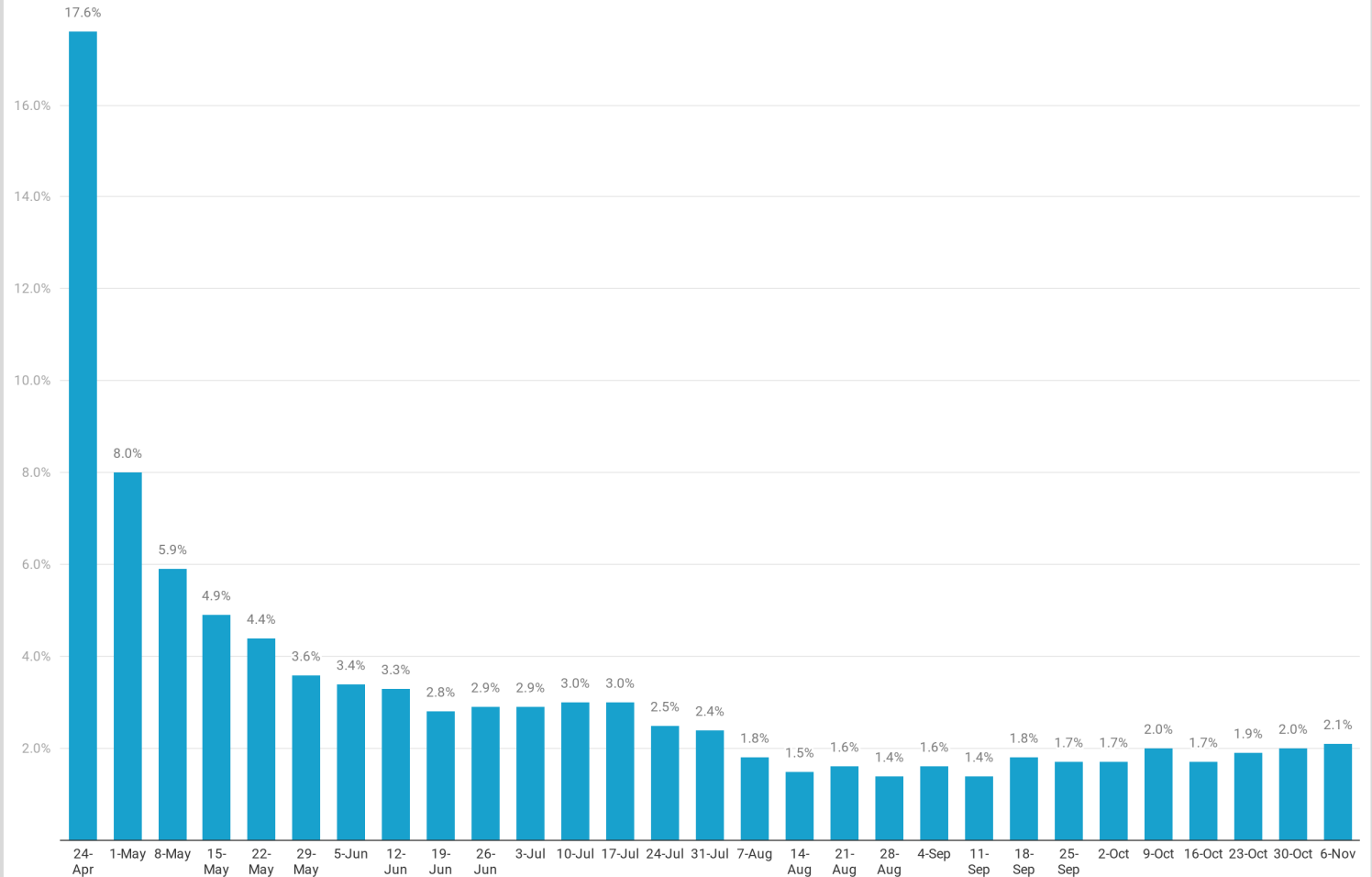
The rate of deaths per new case (4-week lag) has been relatively stable for the past month

This rate is at least a full percentage point lower than it was for most of June and July

The high rate experienced in late-April is suggestive that our limited testing in March was only identifying the most severe cases

Case Fatality Rate (4-Week Case Lag) - United States

For the 7 days ending on date shown



Deaths : New Cases, 4 week lag

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

The % of deaths due to Covi-19, influenza and pneumonia have declined on ten of the past twelve weeks (there were constant one week)

This ratio is as low as it has been since at least the first of March; is ½ what it was in late-July and ~1/4 what it was in mid-April

% of Deaths Due to Covid-19, Influenza or Pneumonia

For the week ending on the date shown

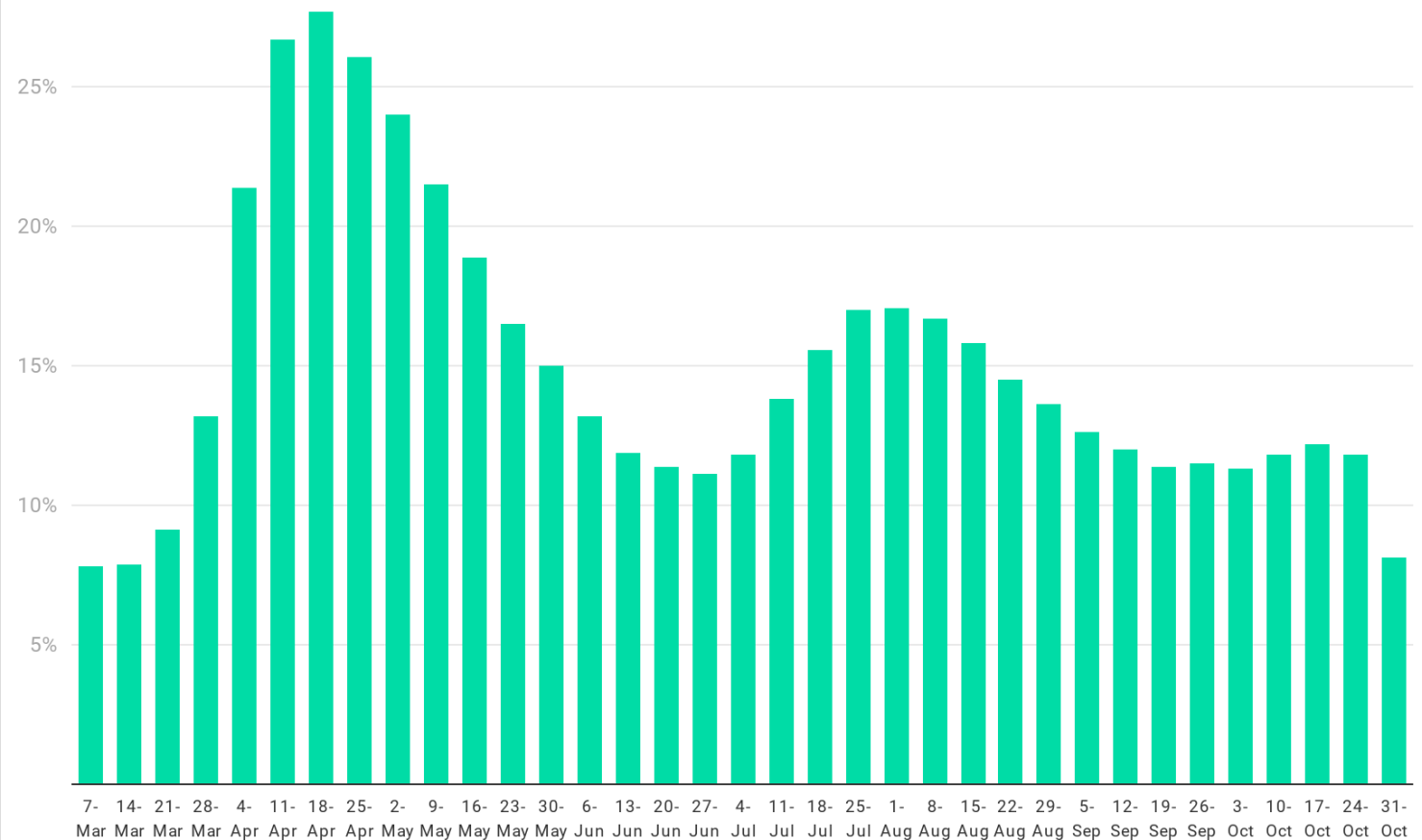


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid-19 visits have increased in recent weeks, following a similar pattern as cases and hospitalizations – these remain sharply lower than in during both the March/April and July surge in cases

Four weeks into the 2020-21 flu season, flu visits are trending lower than each of the past five years (but its still early)

% of ER/Outpatient Visits For Covid-19 and Influenza-Like Illnesses

For the week ending on the date shown

■ % of Visits for CLI (NSSP) ■ % of Visits for ILI (ILINet)

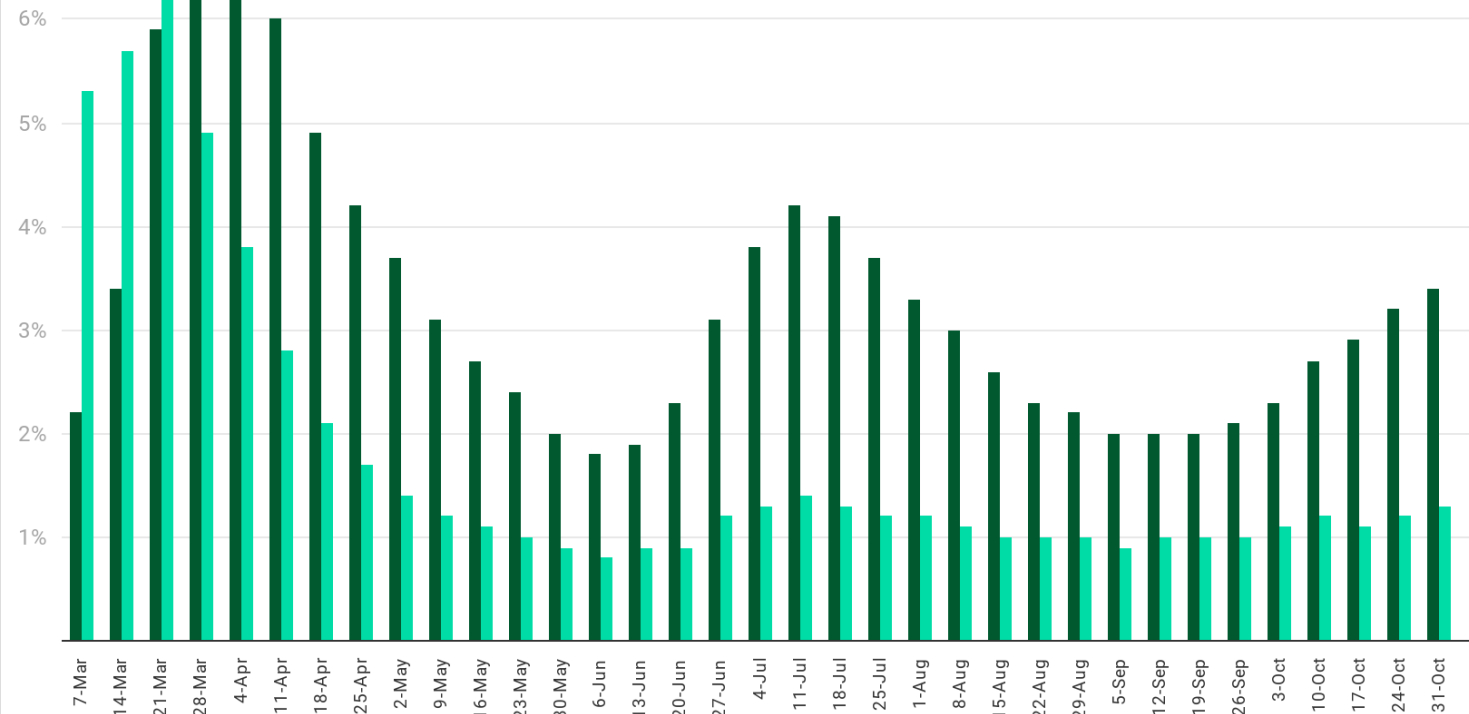


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Data Sources

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