



Health
Industry
Adv



Issue # 184

Monday, October 12, 2020

COVID-19 Report

Highlights

- **Newly detected cases per day are growing at a rapid rate worldwide.** These had leveled-off from mid-August to mid-September but, have increased by 13% in the past two weeks
- **Several European countries are driving the worldwide increase: Belgium, France, Iceland and the Netherlands have experienced significant increases in infections per capita recently;** The United Kingdom and Spain also have experienced rapid increases in this rate although in both countries, rates have receded in recent days
- **Testing volume in the United States again set a new high over the weekend;** Test-positive % increased slightly yet, remains just above the WHO suggested target and well below the CDC target for Phase 3 re-opening
- **The United States also is experiencing a resurgence in new cases, although it is not as pronounced as in parts of Europe: New cases as of yesterday increased by 14.2% on a week-over-week basis. Further, new cases on the weekend were higher than on any weekend since August 8-9**
- The 7-day rate of new daily infections per capita has now returned to the level it last reached on August 17; This rate remains 28% lower than its July 22 peak
- The highest 7-day rates of new infections per capita were experienced in Montana, North Dakota, South Dakota and Wisconsin; Montana, North and South Dakota also experienced the largest increases in this rate over the past two weeks
- **The intensity of the virus spread is most prominent in less-densely populated states:**
 - The four states with the largest increase in rates over the past two weeks are each in the bottom 25th percentile in population
 - Of the twelve states with the largest infection increase in the past two weeks, only Indiana and Tennessee are above the median in state population
 - The largest three states by population each experienced either a decline in infection rates or, an increase lower than the national average
- **On a same-day, prior-week basis, inpatient census of Covid-19 patients increased for the last eighteen consecutive days;** During this time, the average census increased by 226 patients per day.
 - Prior to this, on the same-day, prior-week basis, inpatient census of Covid-19 patients declined for fifty-eight consecutive days; During this time, the average census declined by an average 467 patients per day
 - **Despite the recent increase in hospitalizations, the census has regained only 17% of the decline it experienced since early-July**
- **The 7-day average daily deaths declined slightly over the weekend;** There were fewer deaths recorded over the past weekend than on eight of the past ten weekends
- ER visits for Covid-19-like illnesses declined on the five most recent days for which data are available. **Although flu season has officially begun, ER visits for influenza-like illnesses are not yet in evidence**

After leveling in late-August through early-September, new daily cases worldwide* have been increasing at a significant rate

New daily cases are now averaging more than 335k each day

* - 7-day moving average basis

New Daily Cases Worldwide

7-Day Moving Average

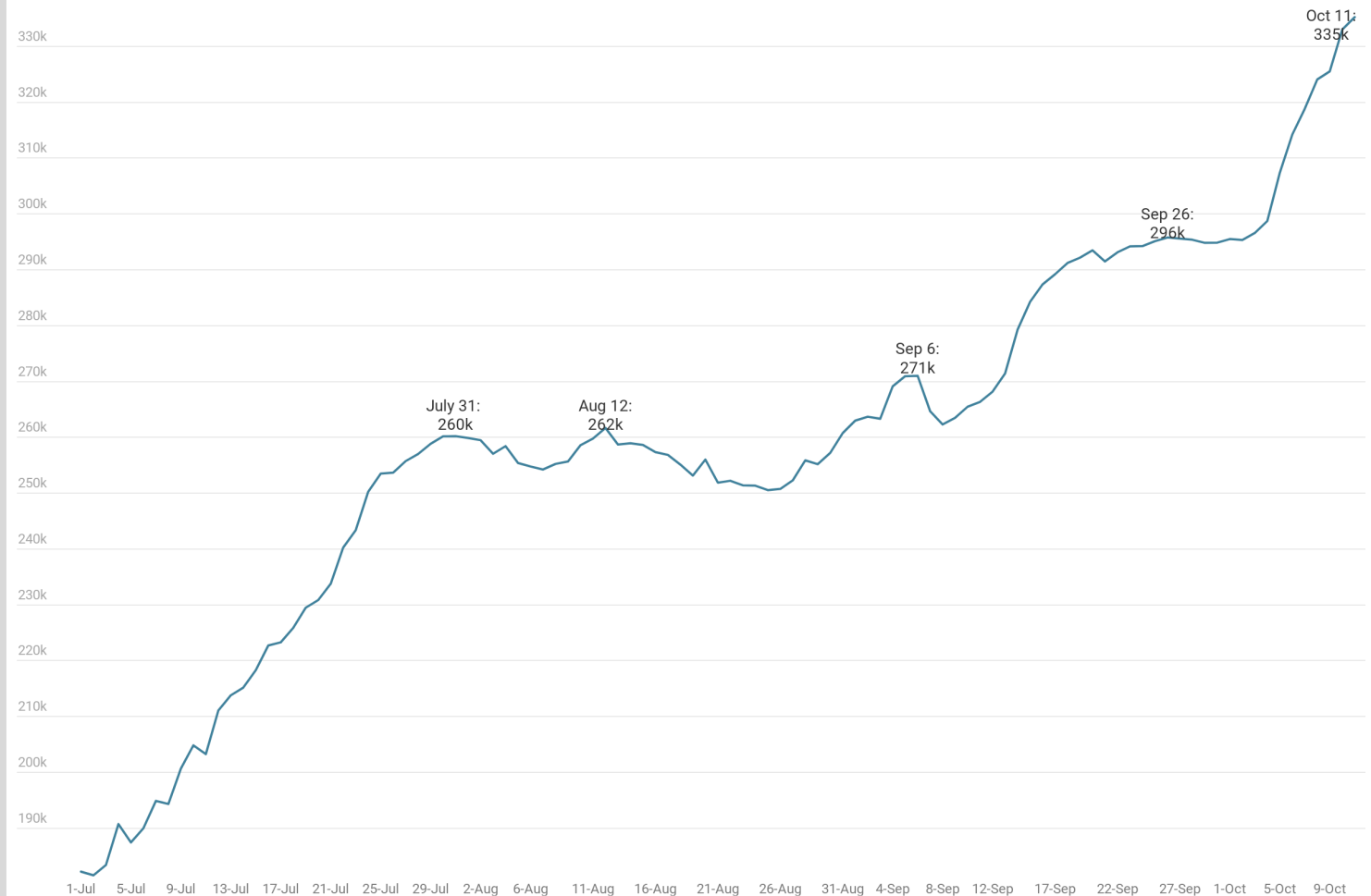


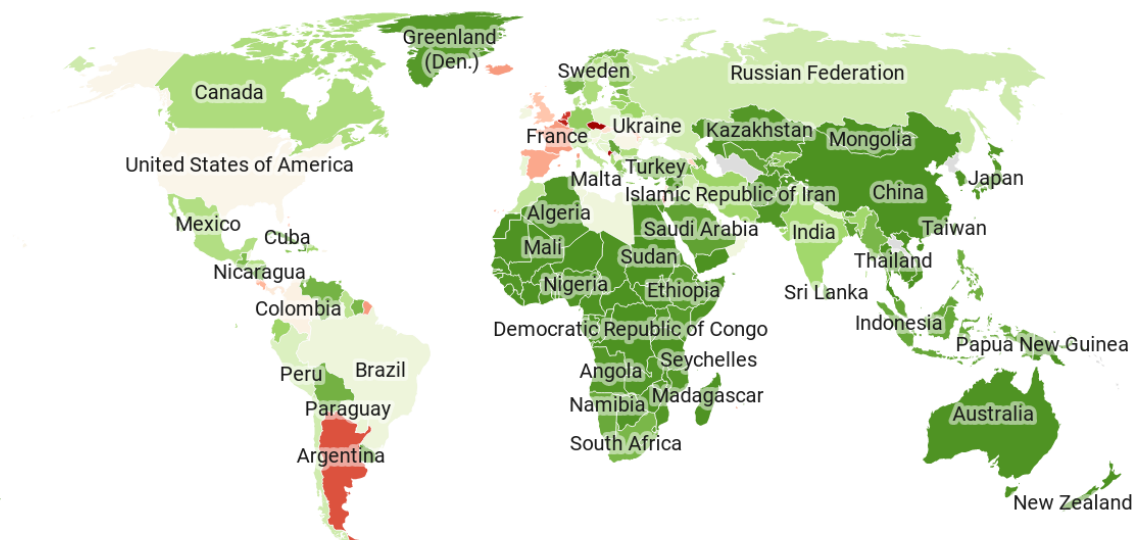
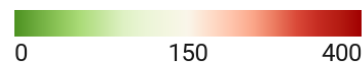
Chart: Health Industry Advisor LLC • Created with Datawrapper

While many countries are experiencing relatively low infection rates*, Israel, Bahrain, Argentina, and many parts of Europe experienced high rates during the past week

* - 7-day moving average basis

New Infections / Million

7-Day Moving Average, As of October 11

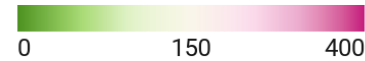


Map: Health Industry advisor LLC • Created with Datawrapper

The Czech Republic, Luxembourg and Montenegro experienced the highest rates of new infections per capita during the past week, followed by Andorra, Belgium, Iceland, France and the United Kingdom

New Daily Infections / Million - Europe

7-Day Moving Average, As of October 11



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

Infections have spread rapidly across Europe over the past several weeks – most notably in Belgium, France, Iceland and the Netherlands.

The United Kingdom and Spain also had experienced rapidly increasing infections, although these countries have seen it recede slightly in recent days

New Daily Infections / Million - U.S. and Selected European Countries

7-Day Moving Average, As of September 13 - October 11

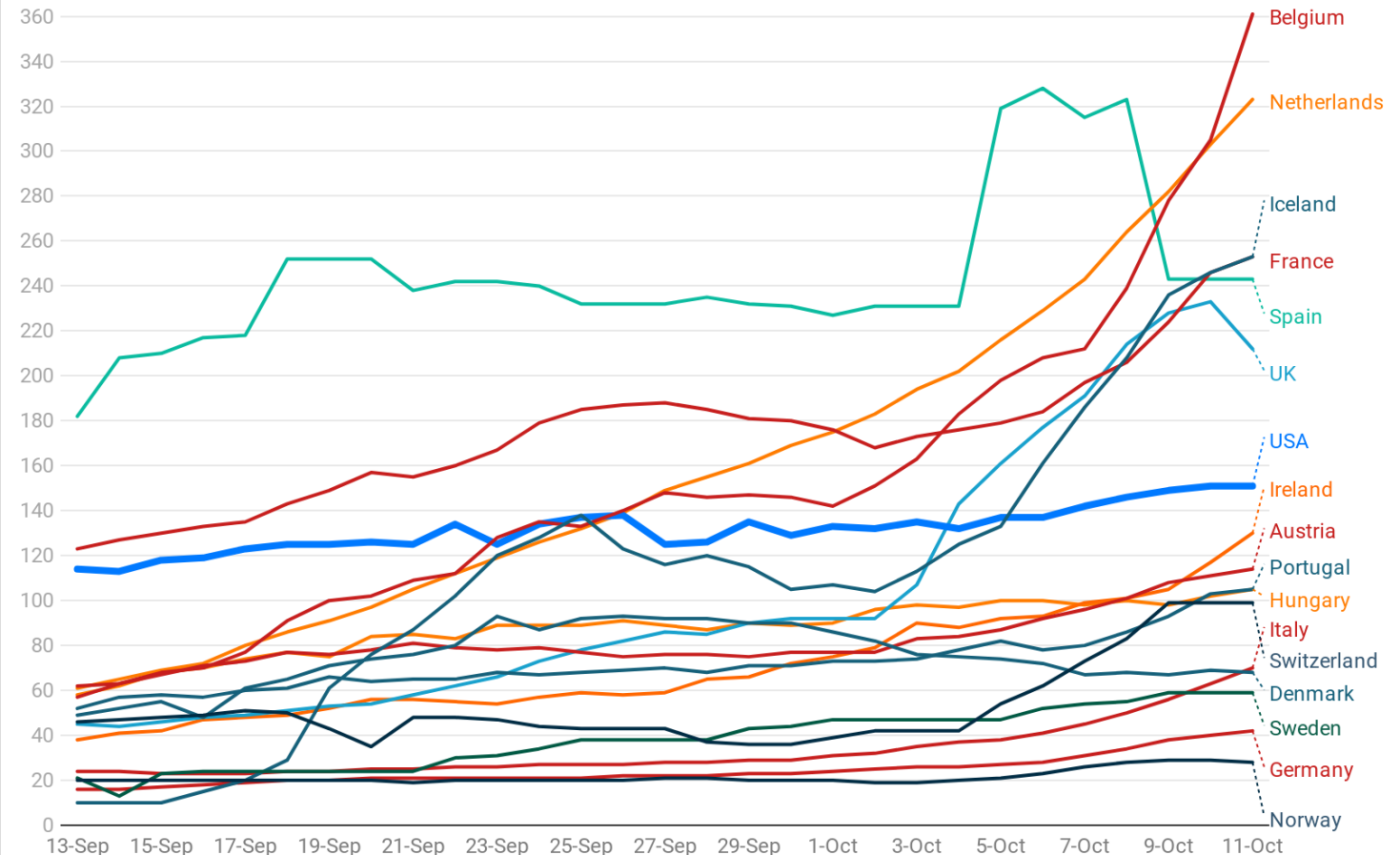


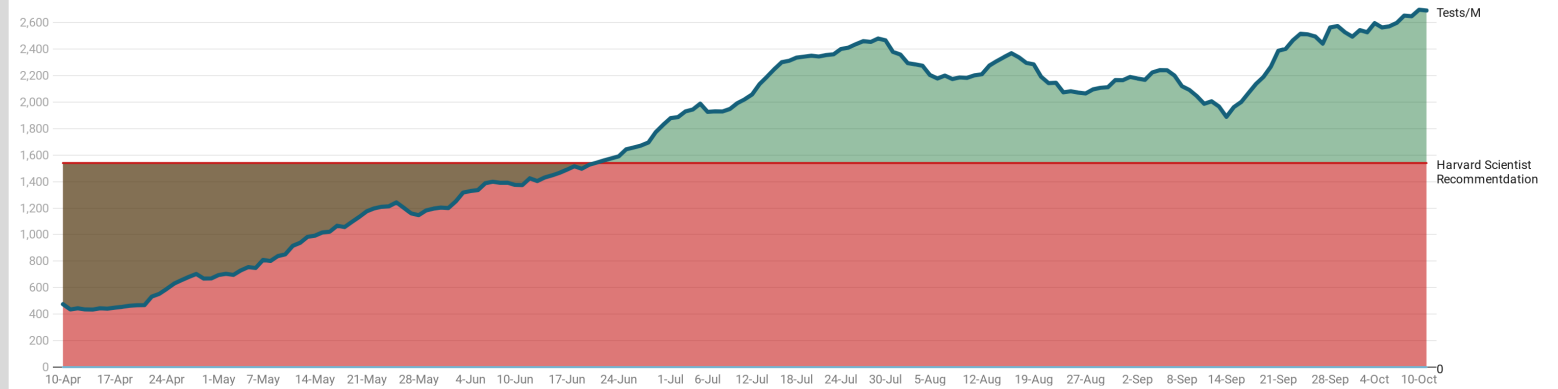
Chart: Health Industry Advisor LLC • Created with Datawrapper

The 7-day average testing volume on both weekend days were higher than on any day during the pandemic

The 7-day test-positive rate increased over the weekend yet, remains just outside the “green” zone – above WHO target yet, well-below the CDC target for Phase 3 re-opening

Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of October 11

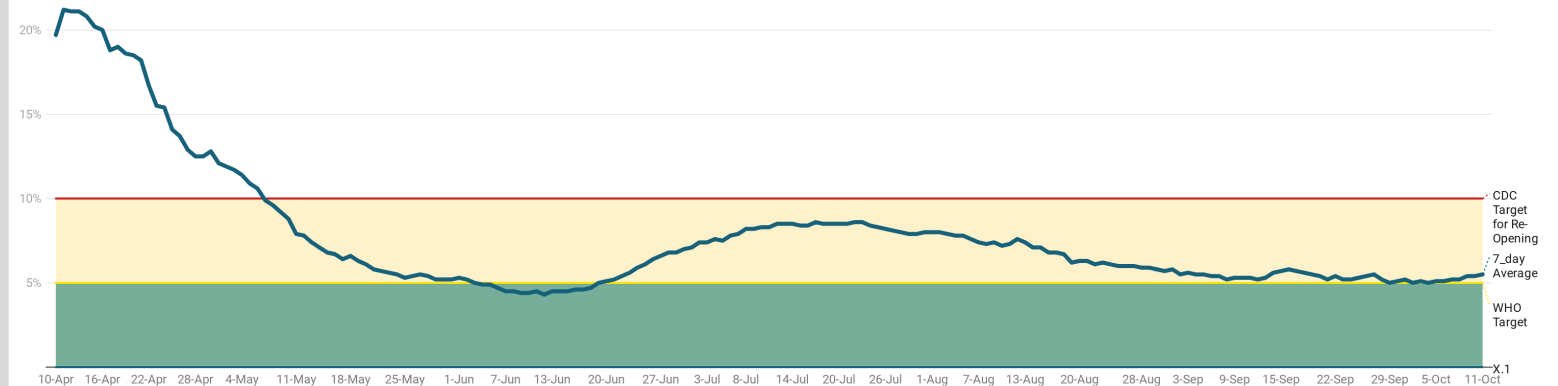


Health Industry Advisor LLC analysis

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 October 11



Health Industry Advisor LLC analysis

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

New cases on the weekend were the most since August 8-9

New Daily Cases

Through October 11

Saturdays & Sundays Highlighted

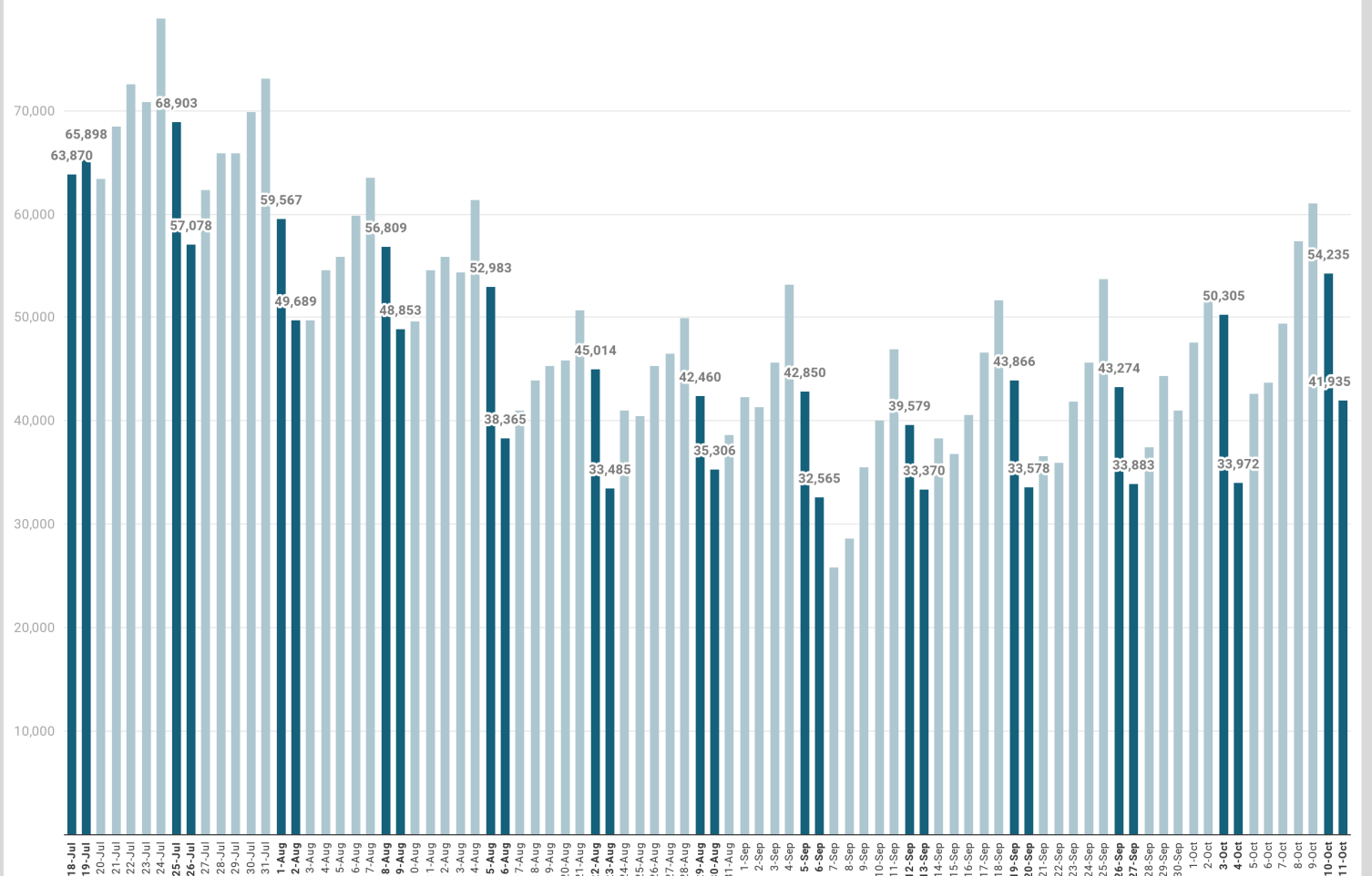


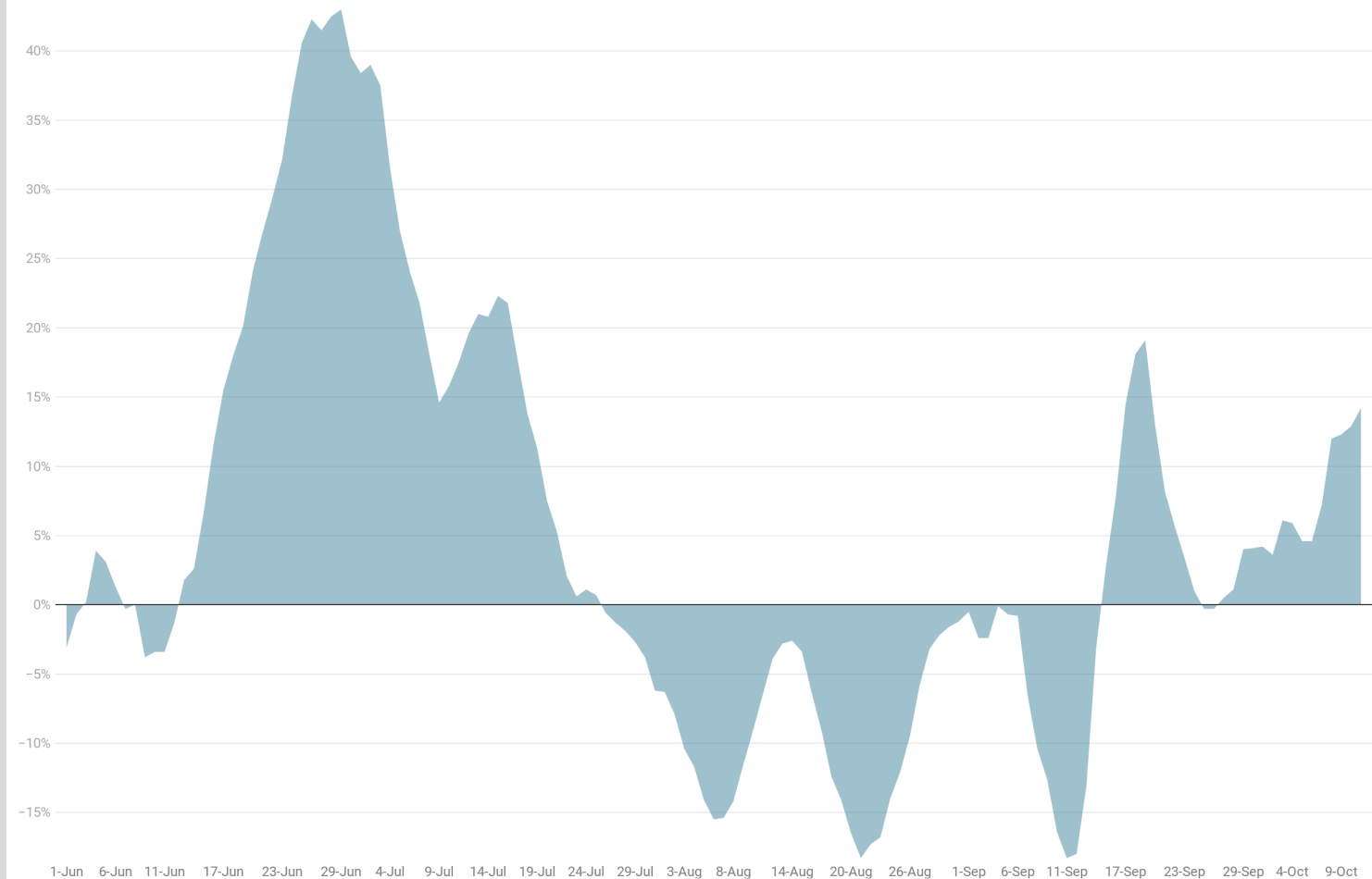
Chart: Health Industry Advisor LLC • Source: eorlometers.info • Created with Datawrapper

Following a seven-week period of decline, new cases began increasing on a week-over-week basis on September 15

Yesterday, this rate was up 14.2% on a week-over-week basis

Week-Over-Week Change In New Cases

Through October 11



Health Industry Advisor LLC analysis

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

A clear shift from declining to increasing infections:

New cases have been higher than for the same-day, previous week on five consecutive days

This measure has increased on twenty-two of twenty-nine days since September 13; it had declined on thirty-five of forty days from July 26 – September 12

Change in New Daily Cases v. Same Day Week Earlier - U.S.

July 26 - October 11

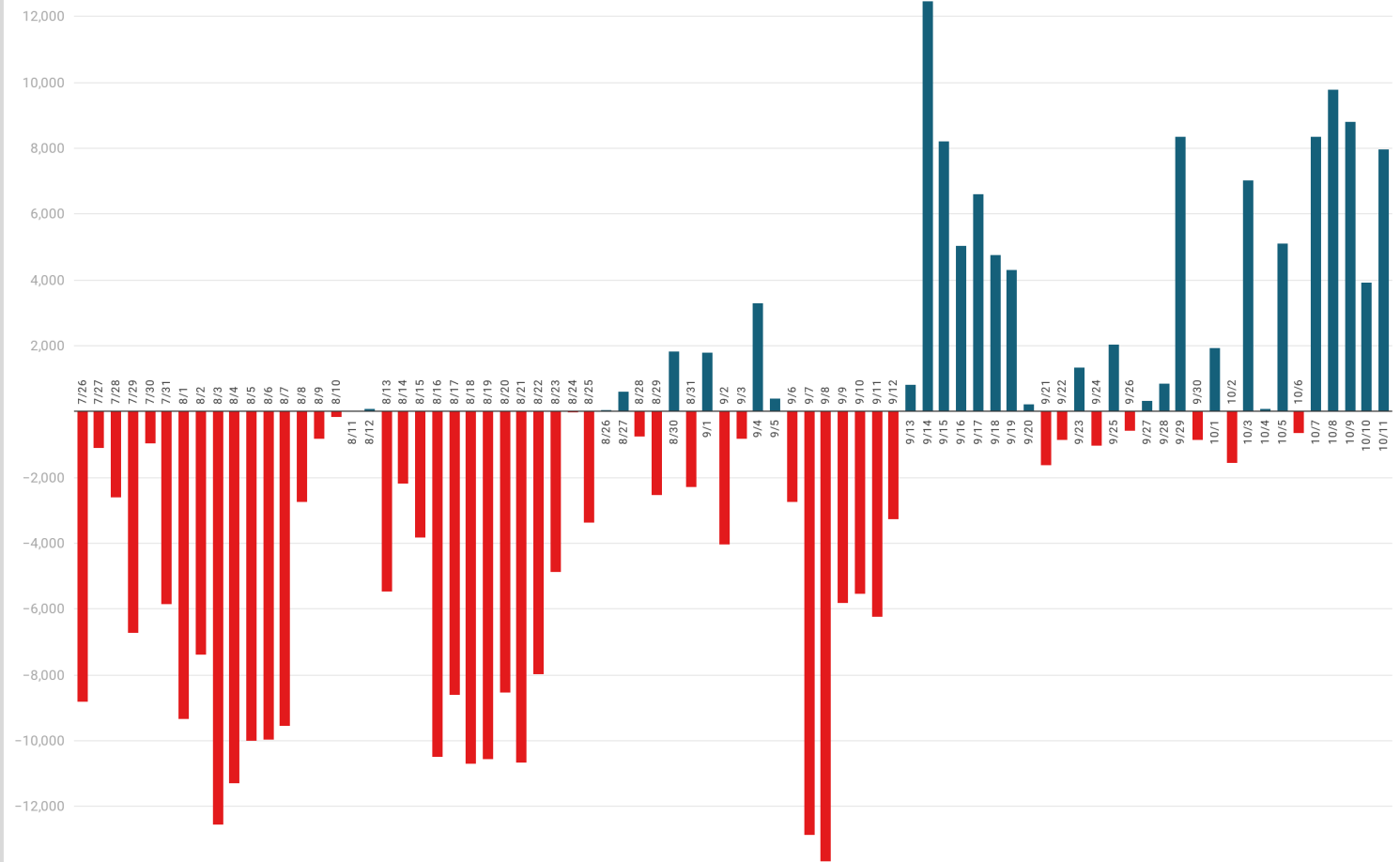


Chart: Health Industry Advisor LLC • Created with Datawrapper

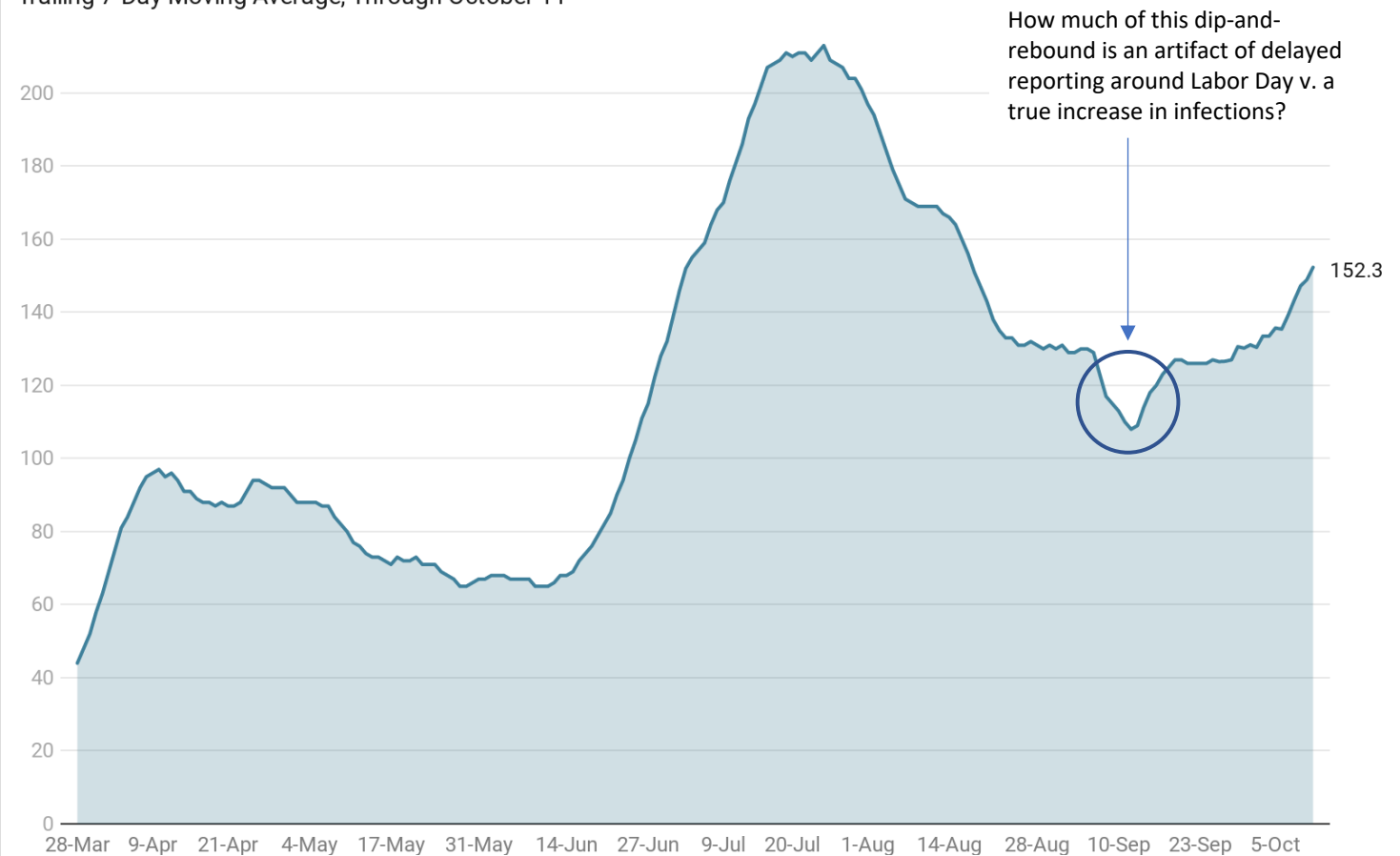
The rate of new infections per capita* in the U.S. is now trending upward

This rate is now back to where it was on August 17

* - 7-day moving average basis

New Infections Per 1 Million Population - United States

Trailing 7-Day Moving Average, Through October 11



Health Industry Advisor LLC analysis

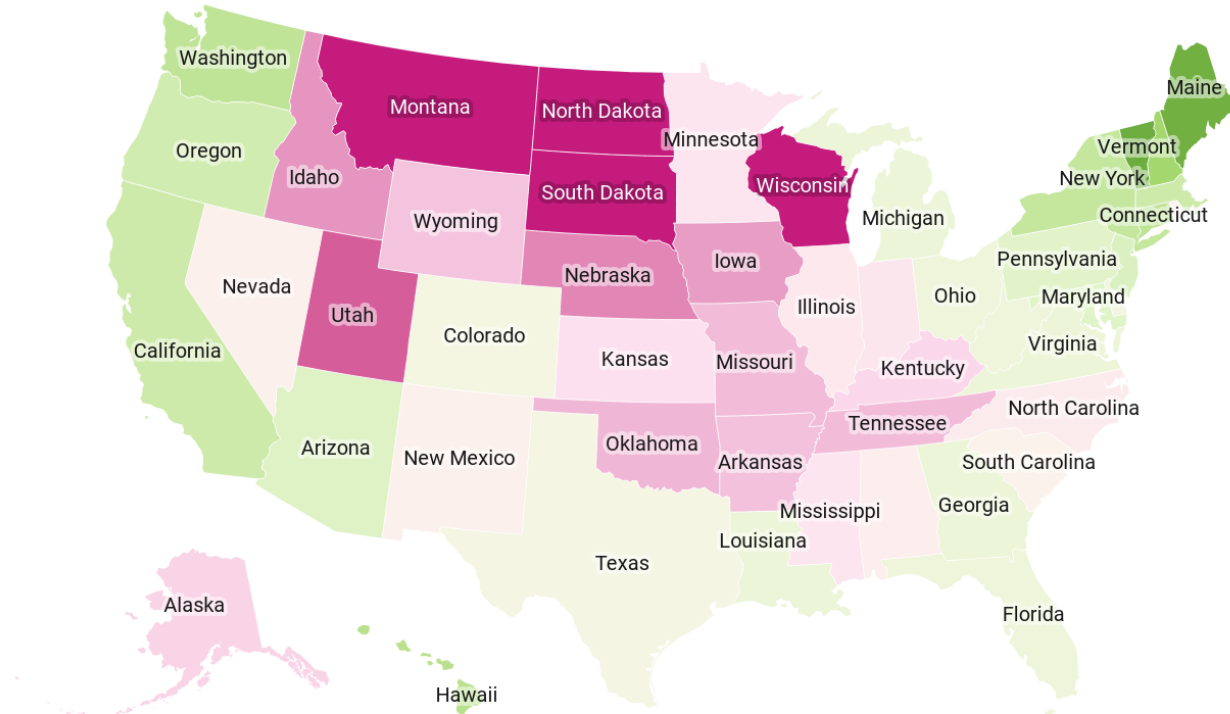
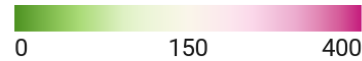
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

New daily infections rates are highest in Montana, North Dakota, South Dakota and Wisconsin

Other states with high rates are concentrated in the Upper Midwest and Mountain States

New Infections / Million

7-Day Moving Average, As of October 11

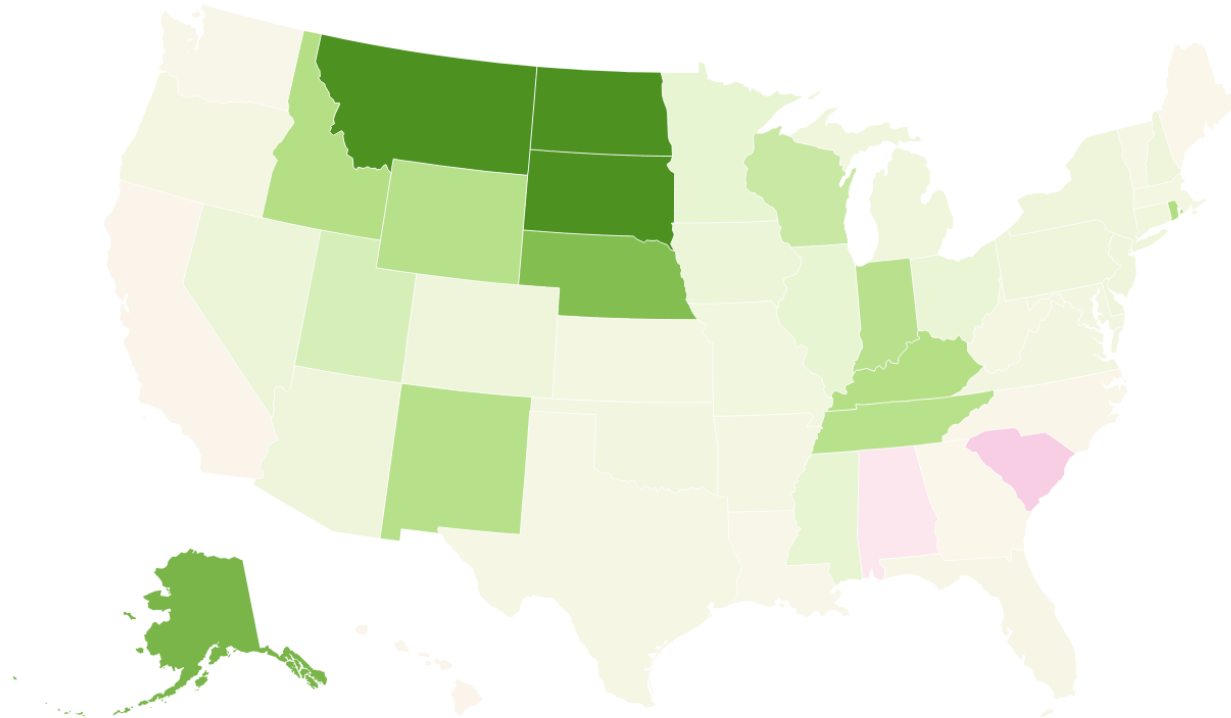
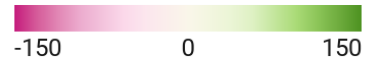


Map: Health Industry Advisor LLC • Created with Datawrapper

Montana, North and South Dakota also experienced the largest increases in new infection rates over the past two weeks

Change in New Daily Infections / Million: Past Two Weeks

7-Day Moving Average, September 20-26 v. October 5-11



Created with Datawrapper

The four states with the highest rates of increase in new daily infections are each in the bottom 25th percentile in population in the country

Of the twelve states experiencing the largest increase in infection rates, only Indiana and Tennessee rank in the top ½ in statewide population

The three largest states by population experienced declining infection rates or increasing rates lower than the national average

Two-Week Change in New Infection Rate v. Population (Log Scale)

October 10-11 v. September 26-27

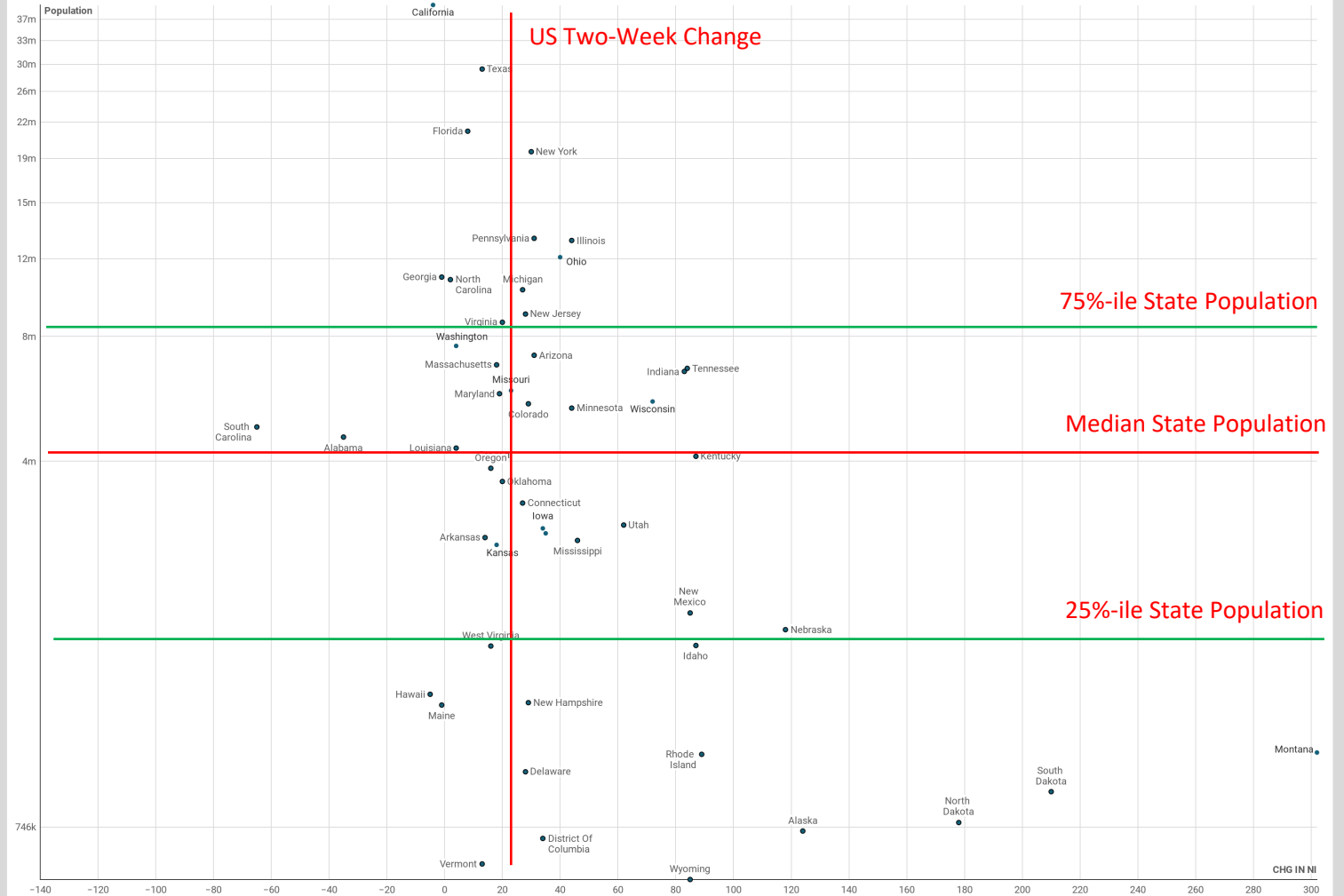


Chart: Health Industry Advisor LLC - Created with Datawrapper

Inpatient COVID-19 census has increased on a same-day, prior week basis for eighteen consecutive days; it had previously declined on 58 consecutive days

Fortunately, the increases have averaged less than the increases: The average daily census increased over the past fourteen days by 220 patients/day; the average daily census declined during the preceding fifty-eight days by 467/day

Change in COVID-19 Inpatient Census - U.S.

Compared to Same-Day, Prior Week

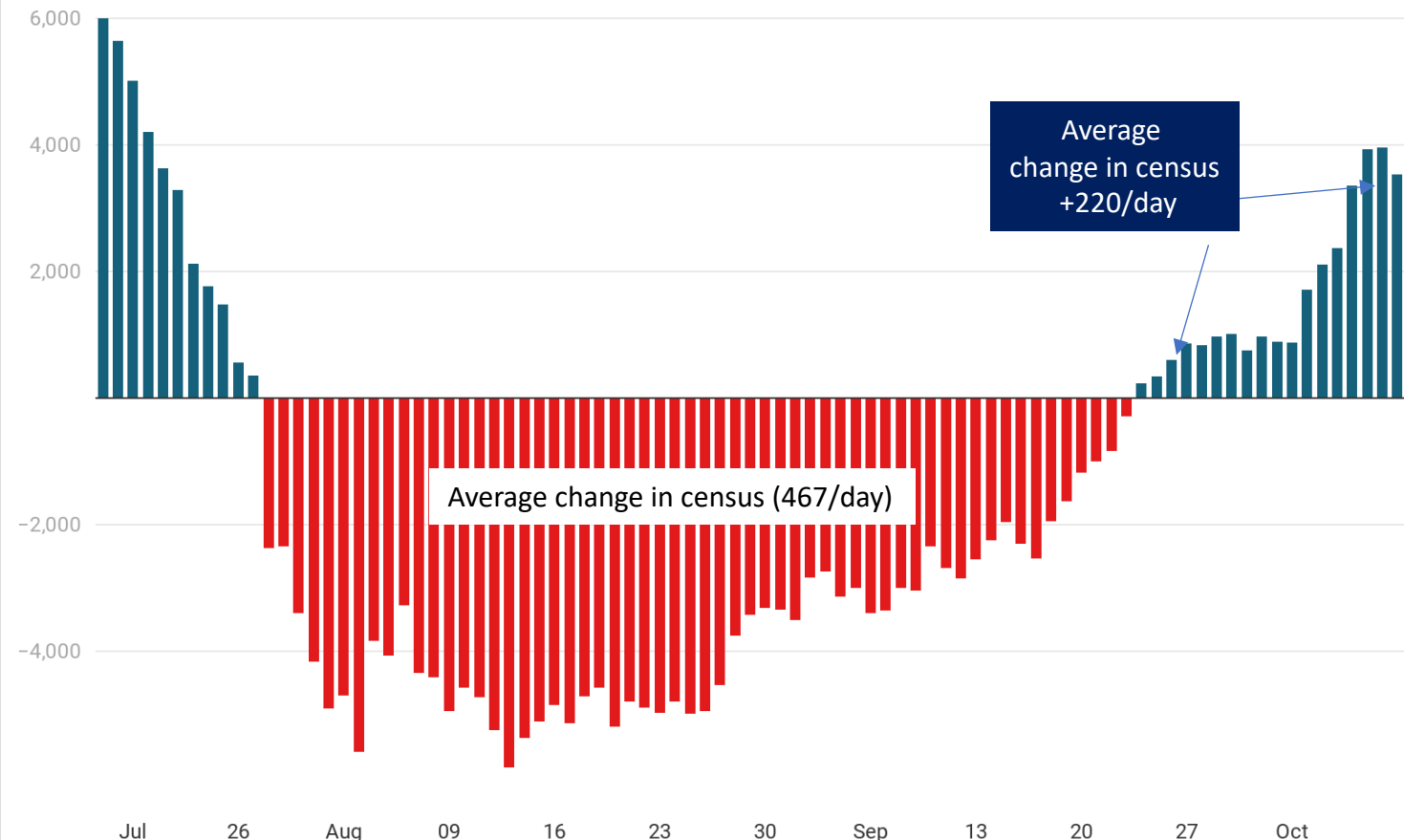
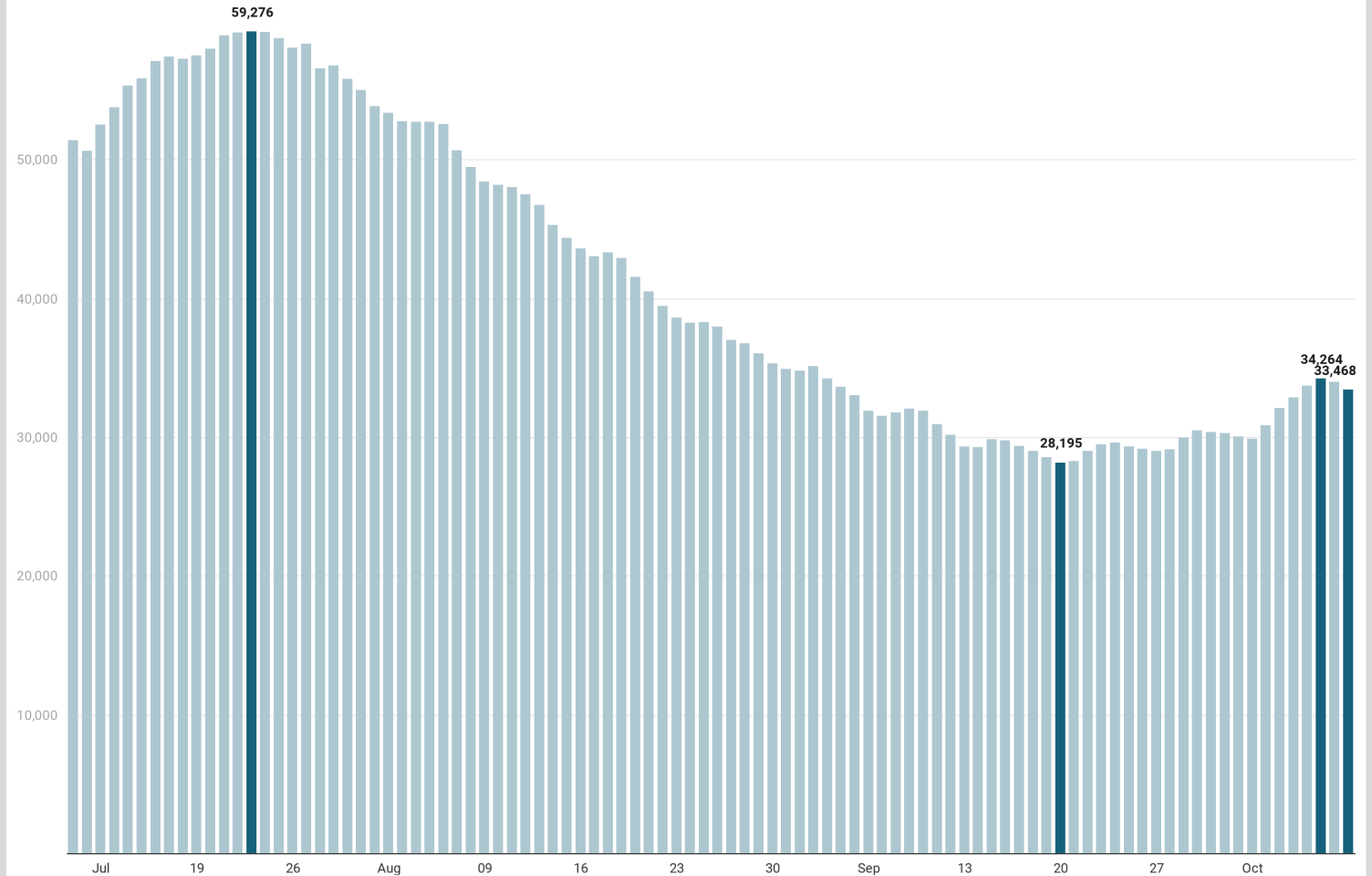


Chart: Health Industry Advisor LLC • Created with Datawrapper

Despite the recent rise in Covid-19 hospitalizations, the census has only regained 17% of the reduction in inpatient days from late-July to September 20

Hospital Census: COVID-19 Patients

As of October 11



Florida data first available on July 10

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

The 7-day average deaths per day declined slightly over the weekend

Despite this increase, average daily deaths remain lower than at any point since July 10

Deaths Reported With Coronavirus in the U.S.

Trailing 7-Day Moving Average, As of October 11



Health Industry Advisor LLC analysis

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

There were fewer deaths reported this past weekend last weekend; and fewer deaths than on eight of the past 10 weekends – dating back to the 4th of July

Newly Reported Deaths

Through October 11

Saturdays & Sundays Highlighted

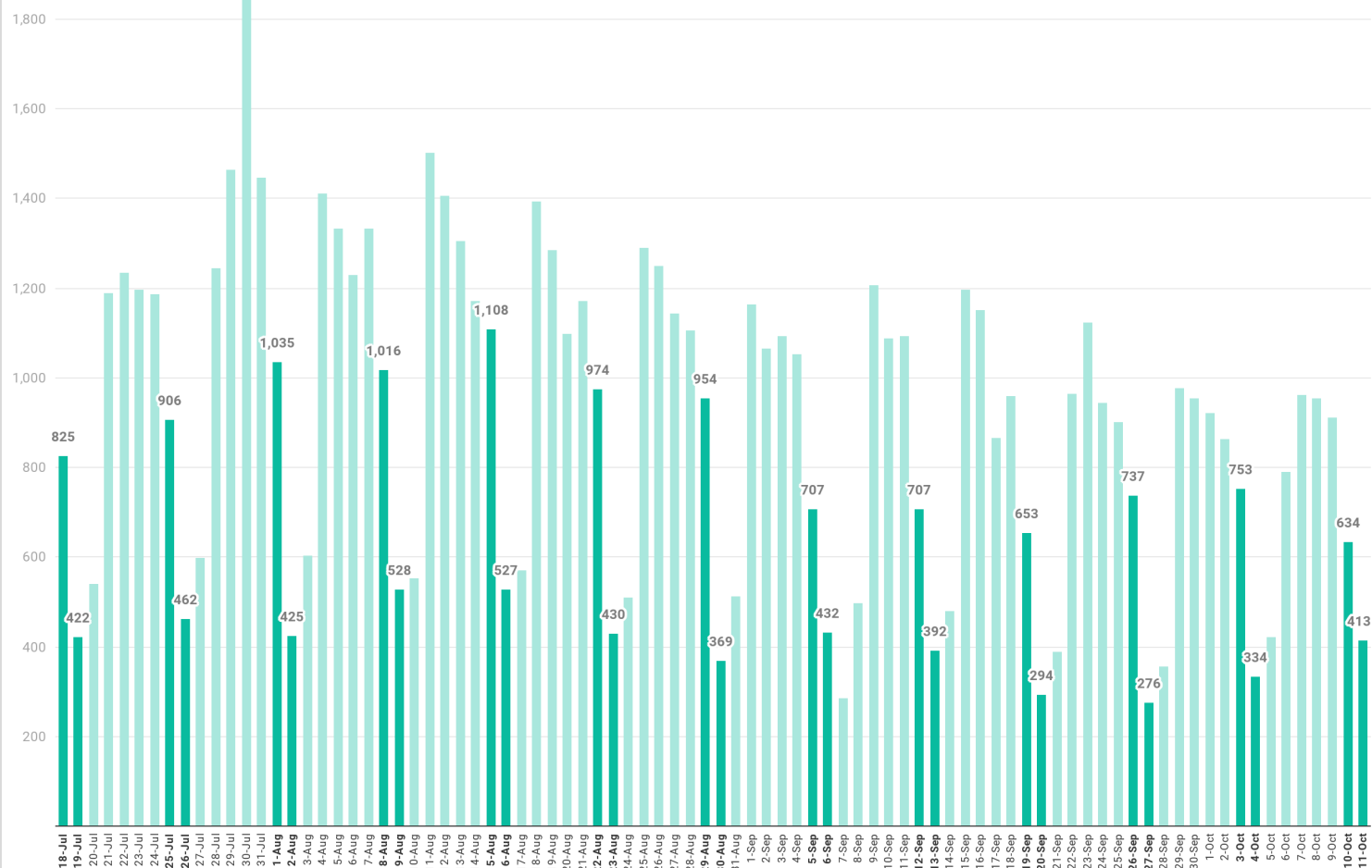


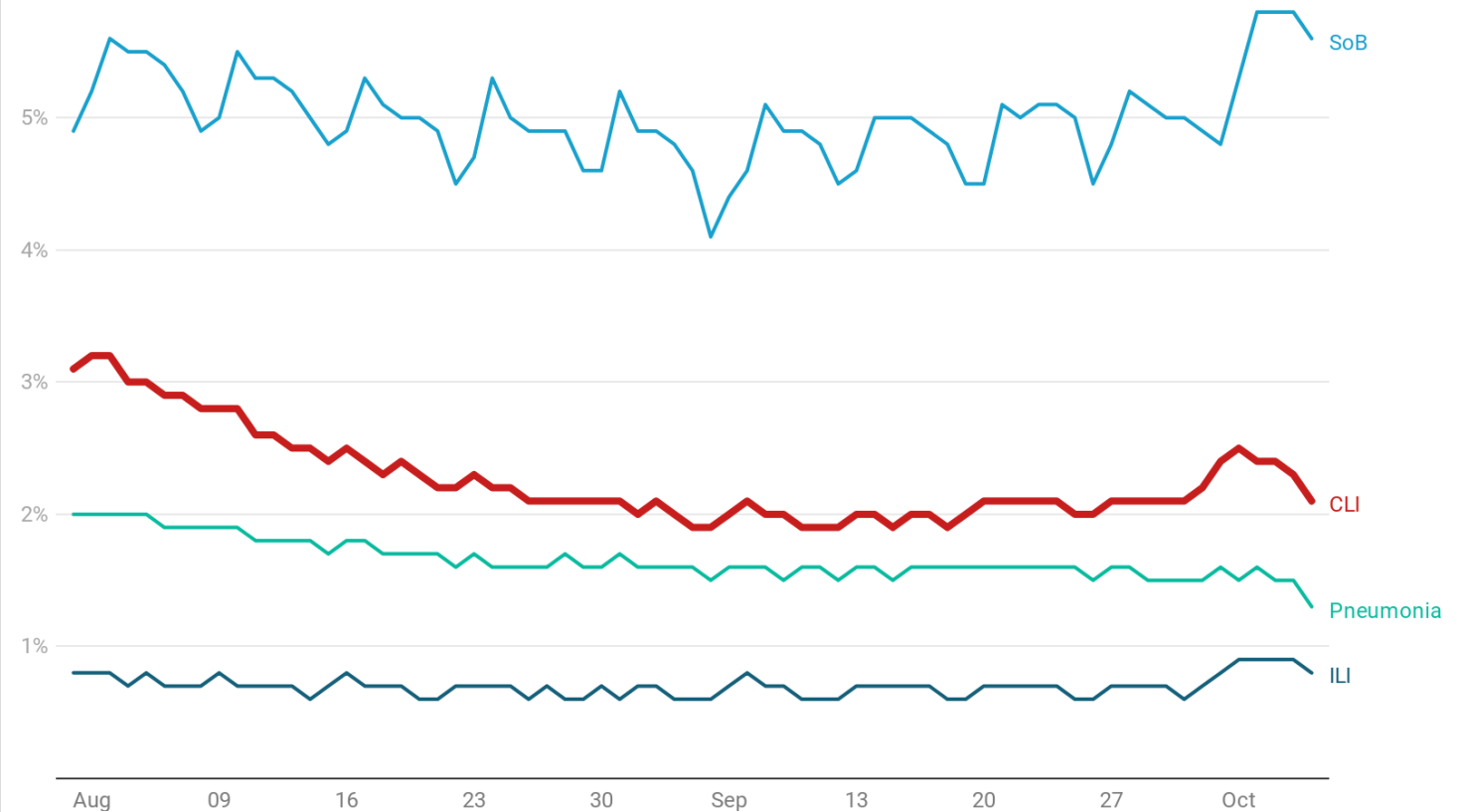
Chart: Health Industry Advisor LLC • Source: eorlometers.info • Created with Datawrapper

The % of ER visits for COVID-19-like illnesses (CLI) has eased over the past five days; this rate remains less than ½ of what it was in mid-July

Although the flu season has officially begun, we have yet to observe any impact on the rate of influenza-like illness (ILI) visits to the ER

% of Emergency Department Visits for COVID-Like Illness (CLI), Influenza-Like Illness (ILI), Pneumonia & Shortness-of-Breath (SoB)

As of October 8



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: Centers for Disease Control • 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>