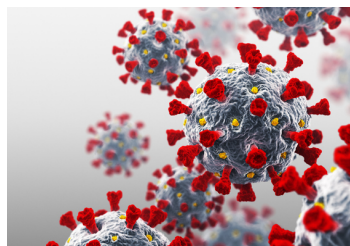


## Covid-19 "Vital Signs"

Issue # 301

March 15, 2021



## Covid-19 "Vital Signs"

# Newly Detected Cases Per Day

*In the US, 7-day new case rates dropped more than 10% week-over-week and 22% in the last two weeks. Worldwide cases trended up over the past three weeks.*

## Newly Detected Cases Per Day

As of March 14

United States Outside the US

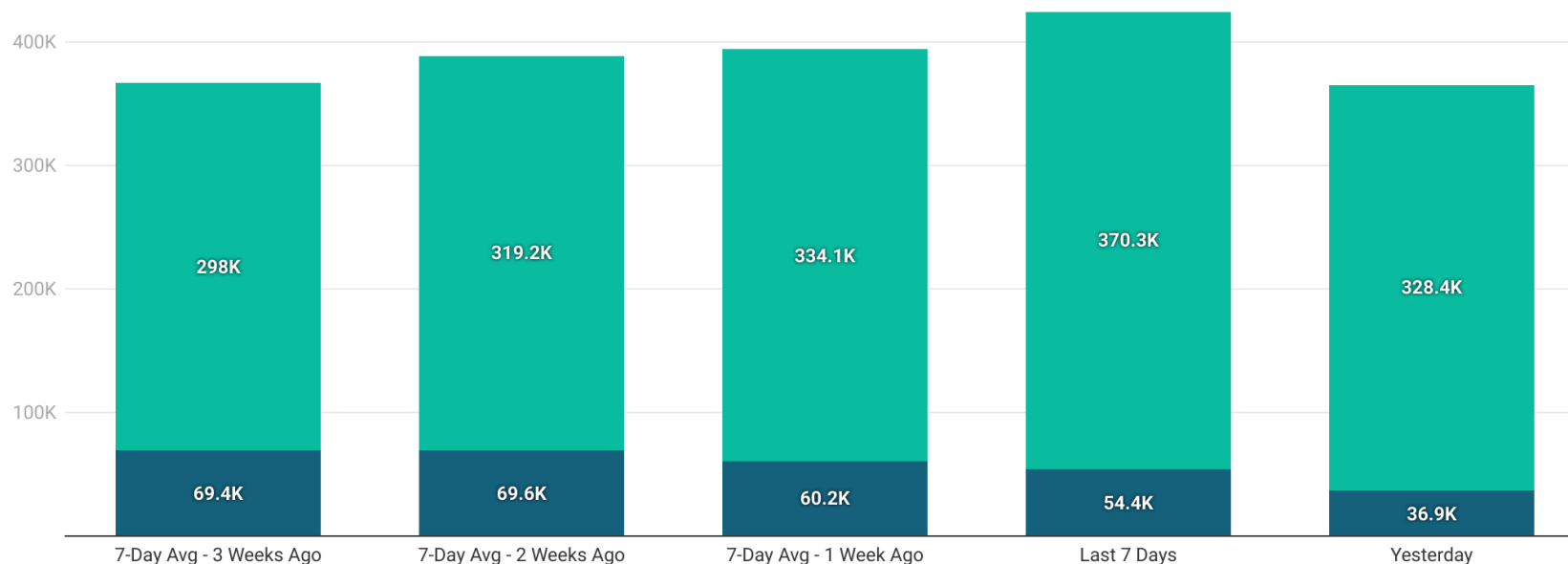


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## Newly Detected Cases / Million

*Israel's vaccination efforts are paying dividends, as new case rates continue to decline. Brazil's low vaccination rates are allowing the new variant to spread.*

### Newly Detected Cases Per Million: Select Countries of Interest

7-Day Moving Average

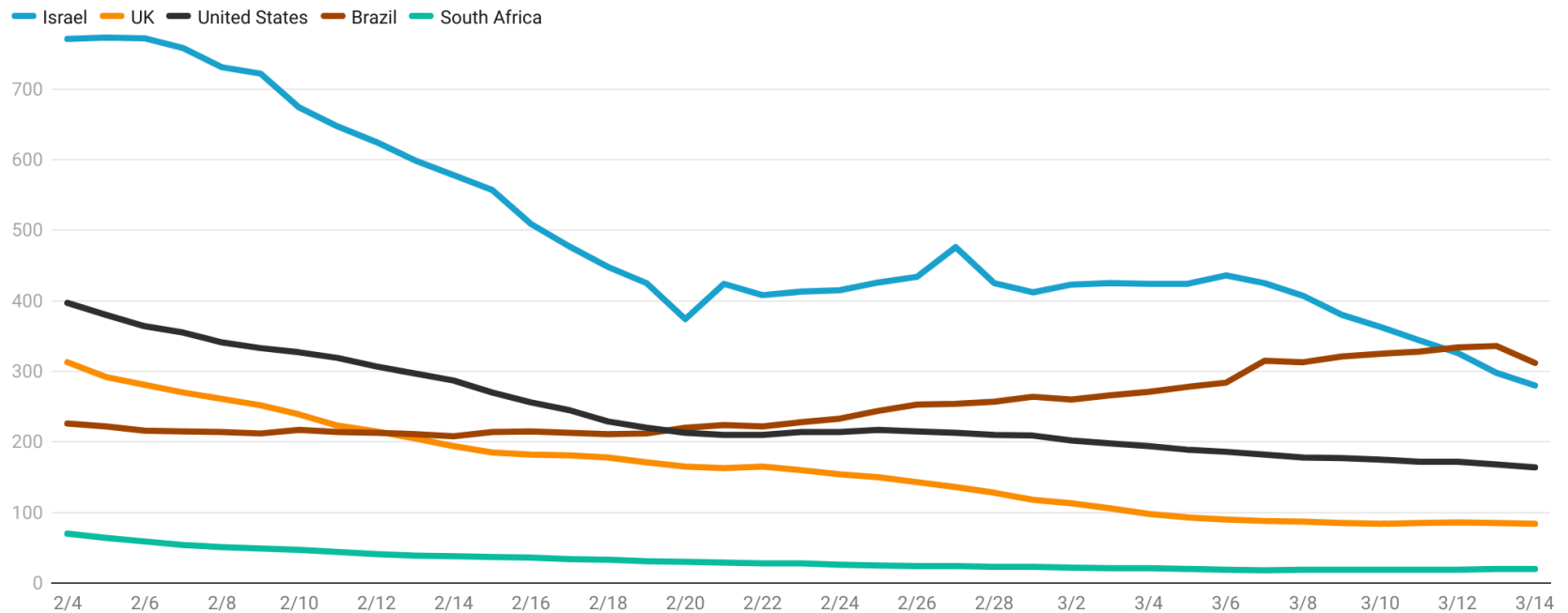


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

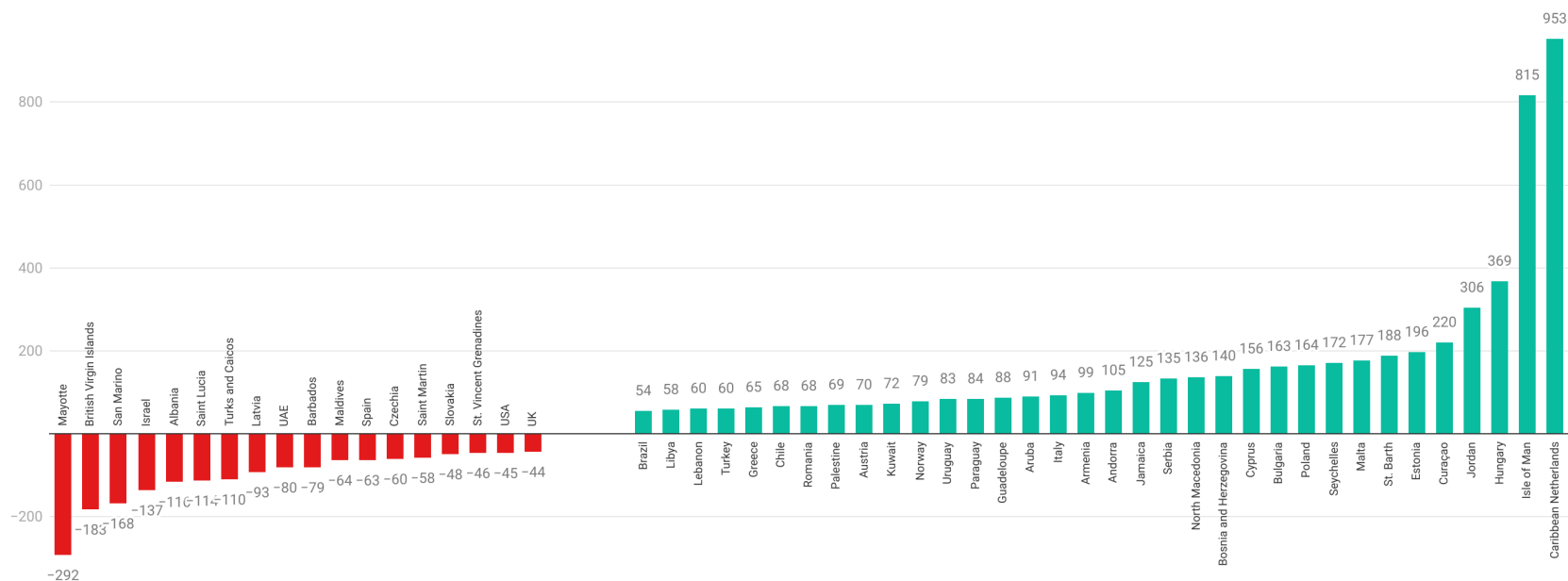
## Covid-19 "Vital Signs"

# Where Are Case Rates Increasing or Declining?

*Increasing case rates are found in several smaller countries although Brazil and Italy raise concern..*

### Where Are Cases Rates Increasing & Declining

7-Day Average, March 14 v. February 28



All countries >. 500,000 population, with change in new cases / million > +/- 50

Created with Datawrapper

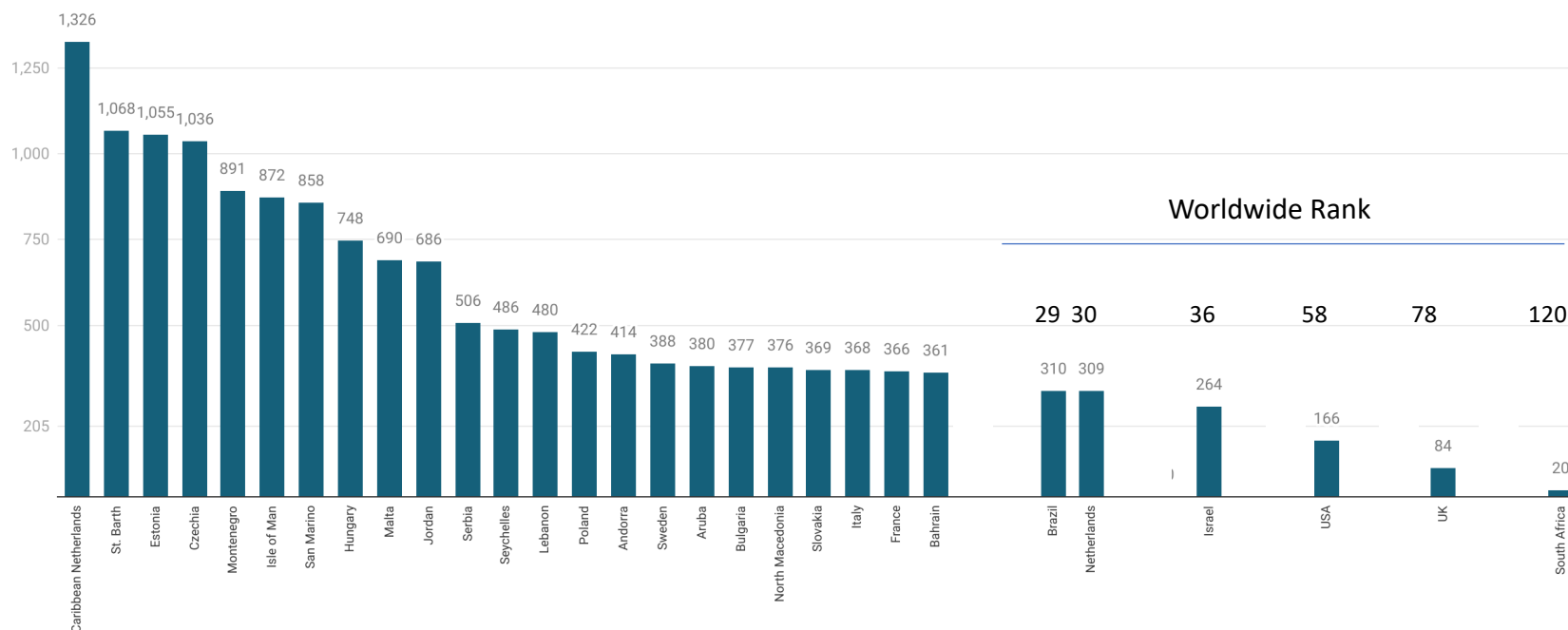
## Covid-19 "Vital Signs"

# Highest Current Case Rates Worldwide

*The US ranks 58<sup>th</sup> worldwide in new daily cases per capita. Brazil, the United Kingdom, and South Africa, despite new variant concerns, rank 29<sup>th</sup>, 78<sup>th</sup>, and 120<sup>th</sup>, respectively.*

## Newly Detected Cases / Million

Countries With Highest Rates Plus Other Countries of Interest, 7-Day Average



As of March 14, 2021

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

## Covid-19 "Vital Signs"

# Pace of Worldwide Vaccinations

*Gibraltar and Israel are pacing the world in vaccinating residents, with more more than one vaccine per person. The United States ranks seventh in the world. Brazil, Czechia, and Italy, three countries suffering high and rising infection rates, have been much slower in rolling out vaccines.*

## Vaccines Per 100 Population

As of March 13

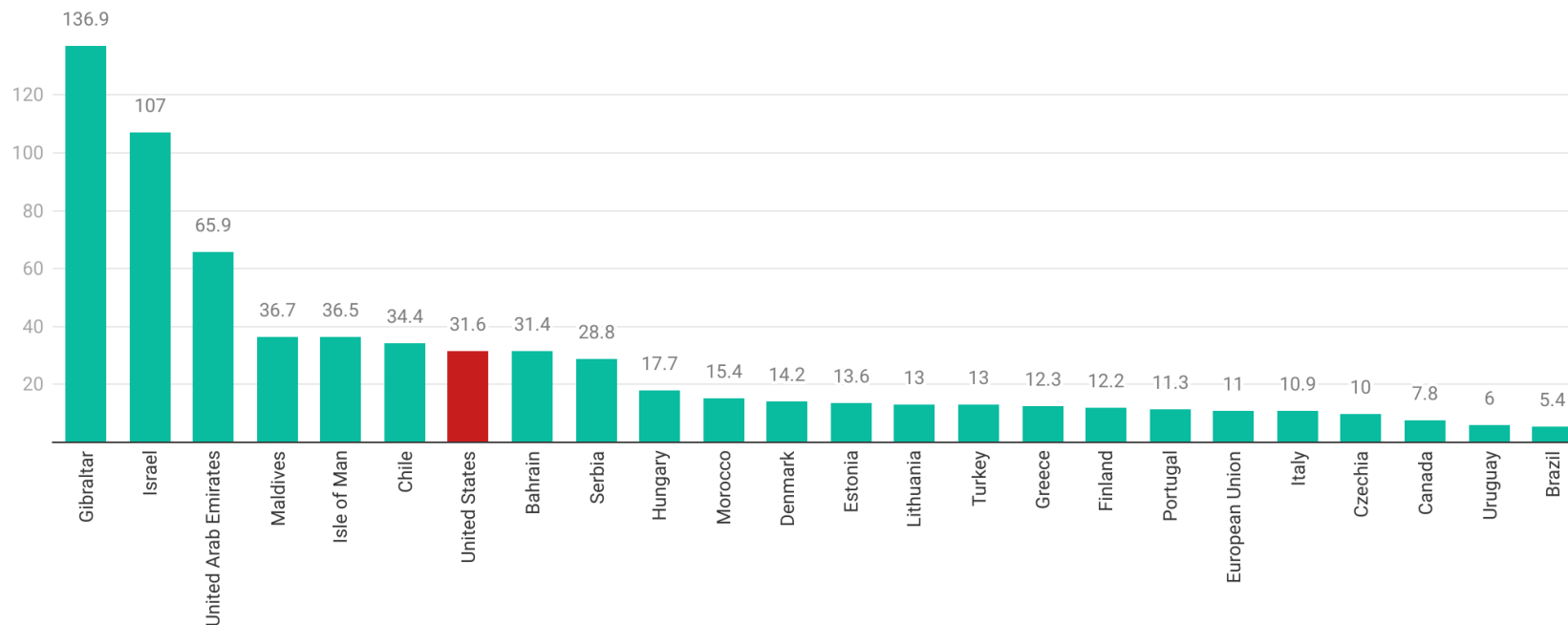


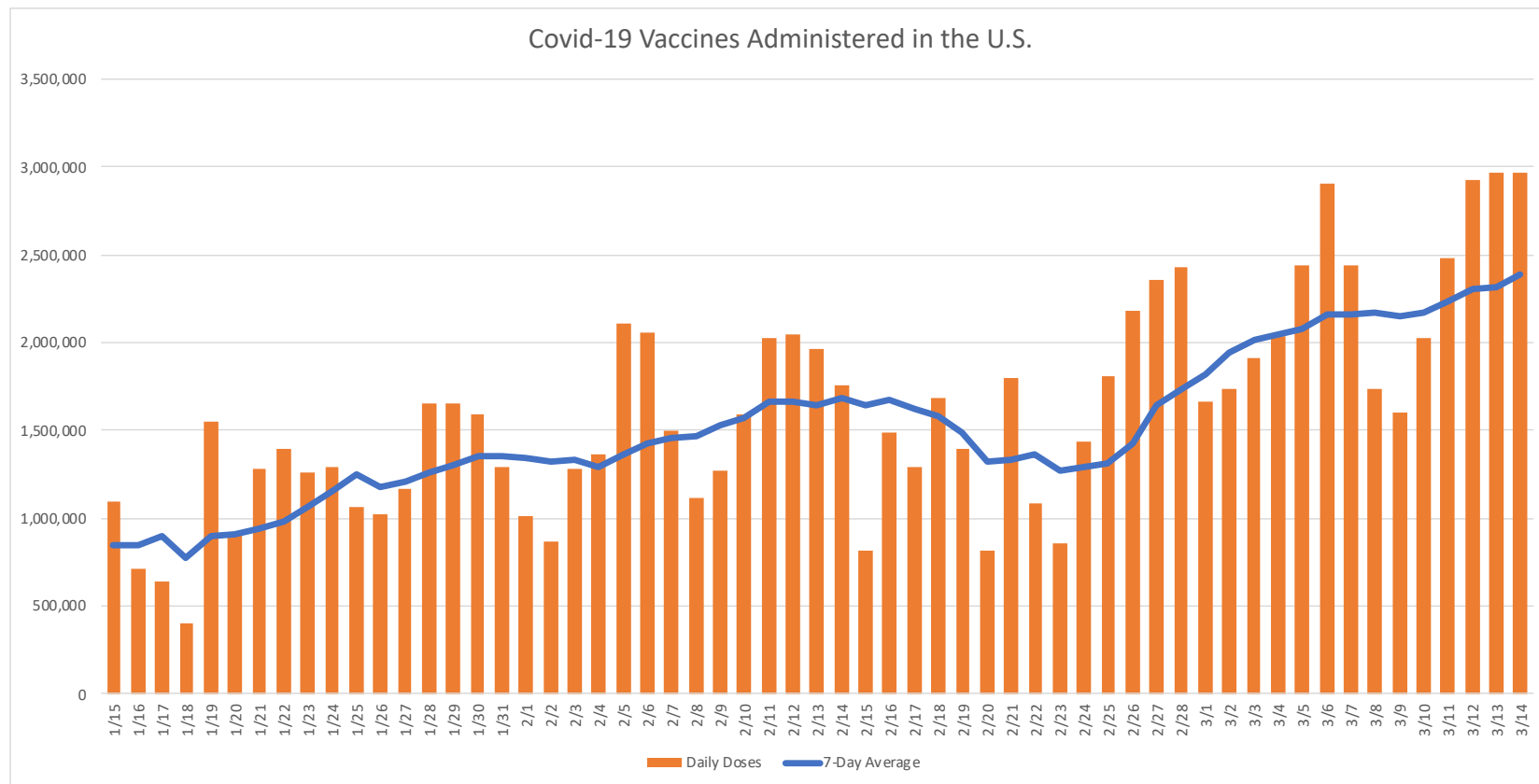
Chart: Health Industry Advisor LLC • Source: Our World In Data • Created with Datawrapper

<https://ourworldindata.org/covid-vaccinations>

## Covid-19 "Vital Signs"

# Pace of Vaccinations

*An average of 2.4 million people were vaccinated over the past week, an increase of more than 10% from one week earlier and 37% from two weeks earlier. Four of the five highest vaccination rates to-date occurred on the past four days.*



## Covid-19 "Vital Signs"

# Vaccine Tracking

To date, the US has administered 107.1 million doses, with 37.1 million people jabbed twice. As of yesterday, 27.4% of U.S. adults have received at least one dose; 14.5% have received two.

## Vaccination Progress

Most Recent Two Weeks

First Doses Second Doses

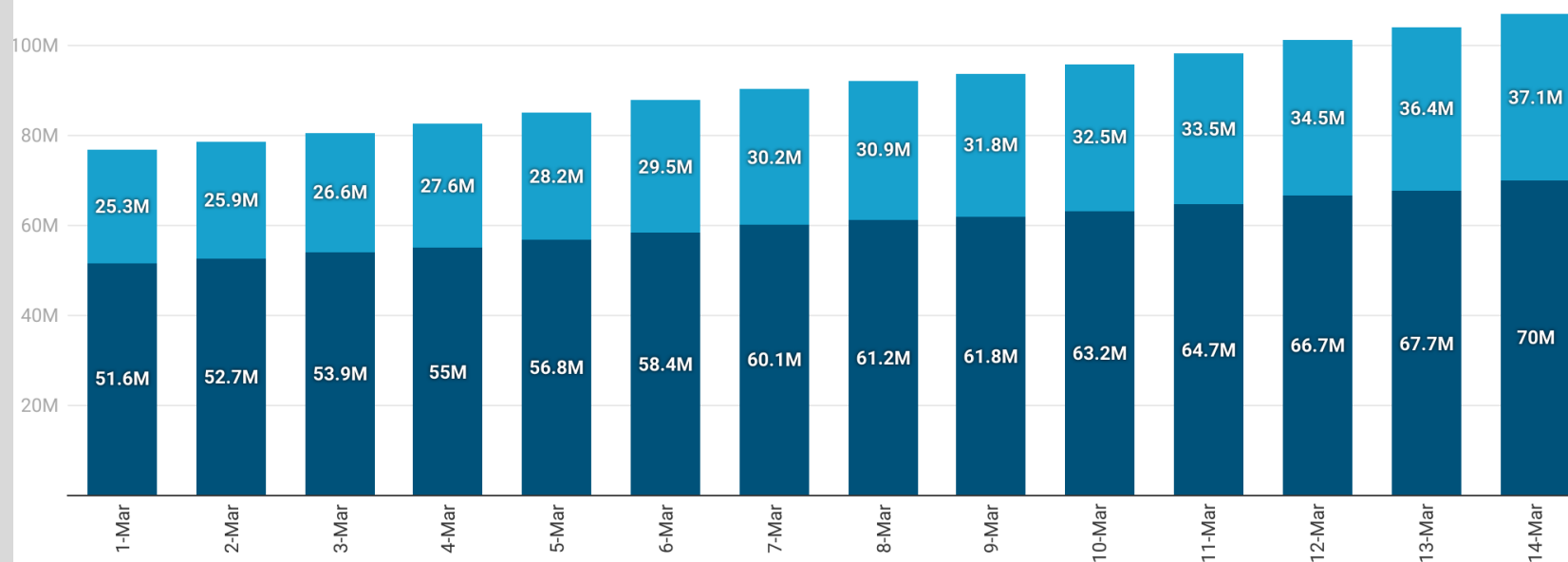


Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

Vaccine data from: [Centers for Disease Control and Prevention](#) and [Bloomberg Vaccine Tracker](#)

## Covid-19 "Vital Signs"

# Immunity: Projected v. Estimated

*Estimated immunity is 38% to 45%, based on vaccination and estimated infection rates, vaccine efficacy and a presumed two-week lag from infection or vaccination to immunity.*

## Estimated Immunity

Current Estimates v. HIA Projection

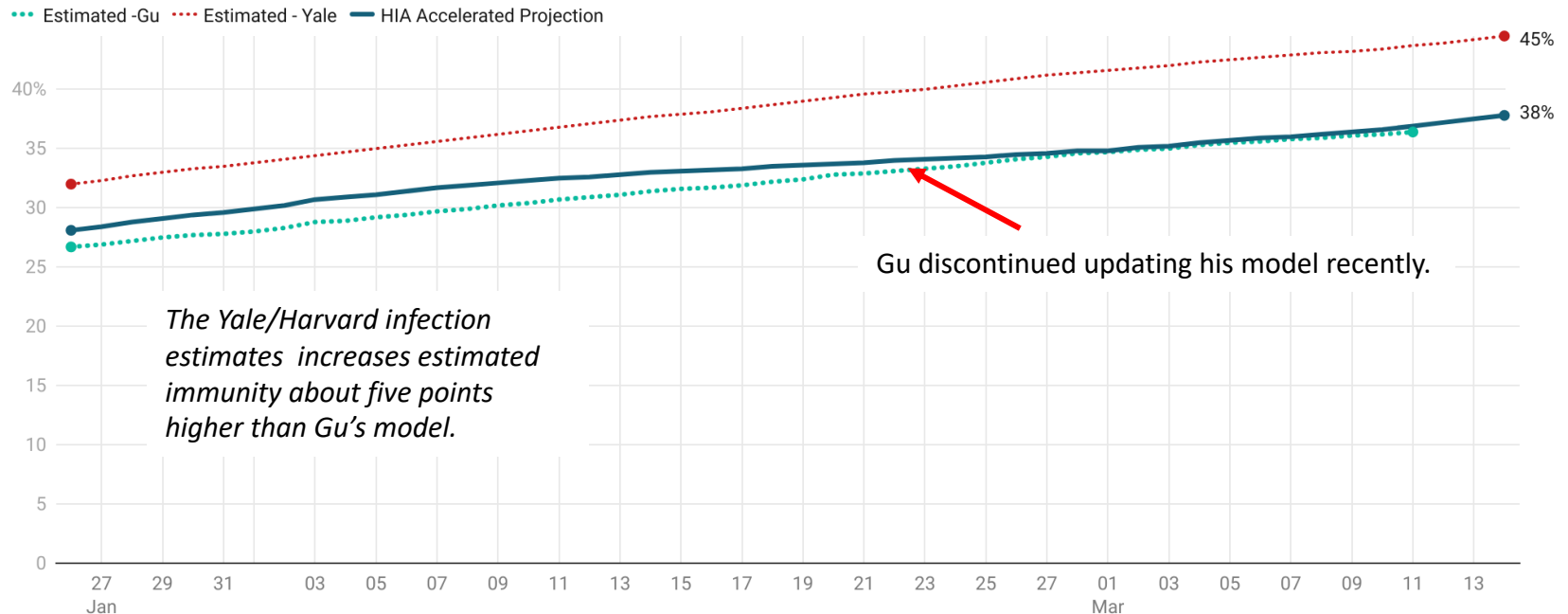


Chart: Health Industry Advisor LLC • Created with Datawrapper

## Test-Positivity Rate

*The 7-day test-positivity rate reached its lowest point since the pandemic began.*

### Test-Positivity Rate

7-Day Average, Through March 14

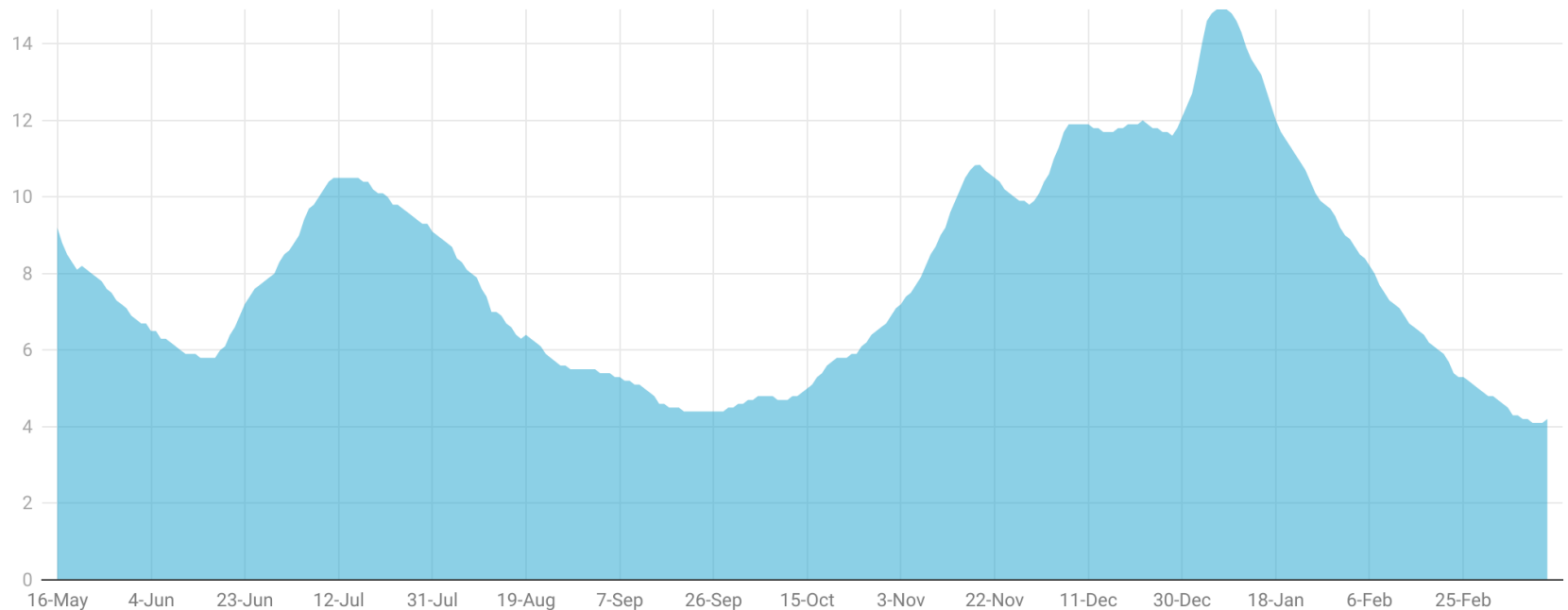


Chart: Health Industry advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

## Test-Positivity Rate

*The test-positivity rate has dropped by more than one-third in the past three weeks.*

### Test-Positivity Rate

As of March 14

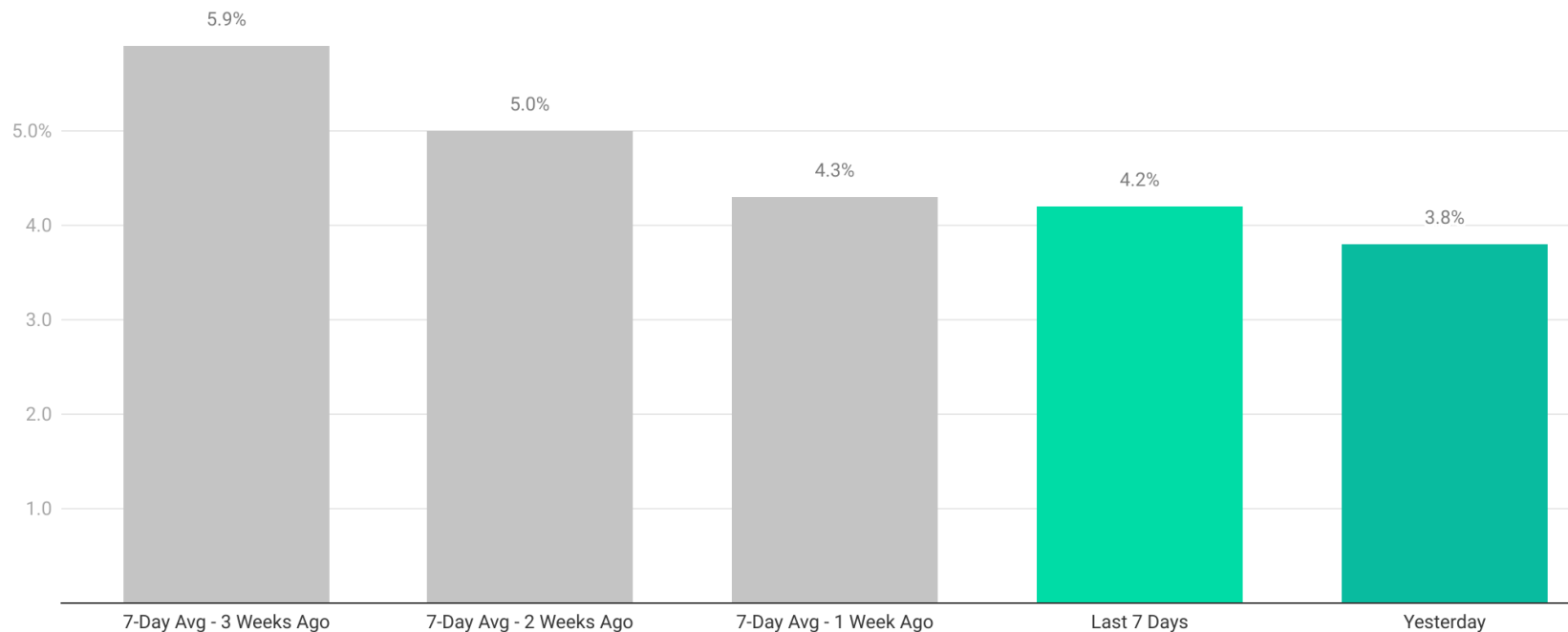


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

## Covid-19 "Vital Signs"

# Newly Detected Cases / Million - US

*Newly detected cases (7-day average) continue dropping from a January 11<sup>th</sup> peak. Cases plunged an astonishing 79% in two months. This rate set a five-month low.*

## Newly-Detected Cases / Million

7-Day Average

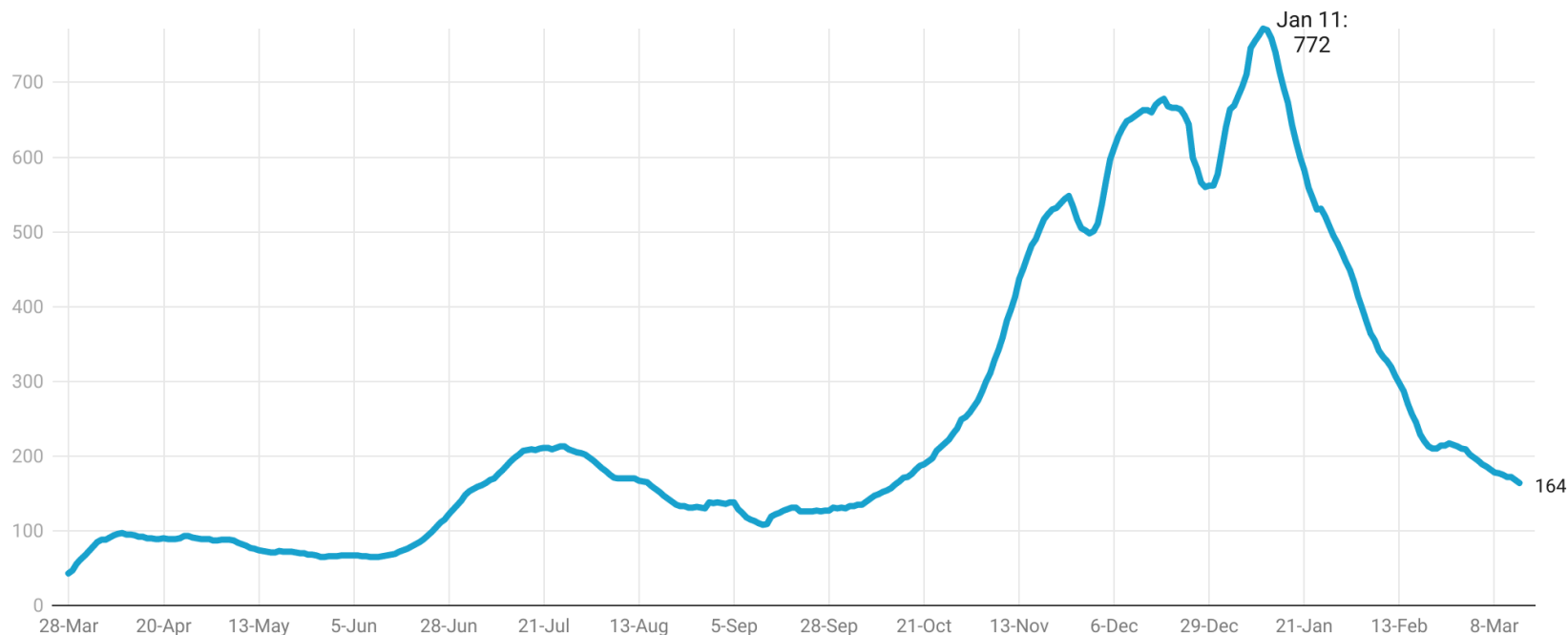


Chart: Health Industry Advisor LLC • Created with Datawrapper

## Covid-19 "Vital Signs"

# Estimated Daily Infections & New Case Rates

*Estimated new infections and reported cases continue falling in the US. The Yale/Harvard model suggests that infections have plummeted 80% since the beginning of the year. The 7-day new case rate fell for the seventeenth straight day, and fifty-eighth time in the last sixty-three days.*

## Estimated Daily Infections v. Detected Cases

Yale/Harvard Schools of Public Health Model

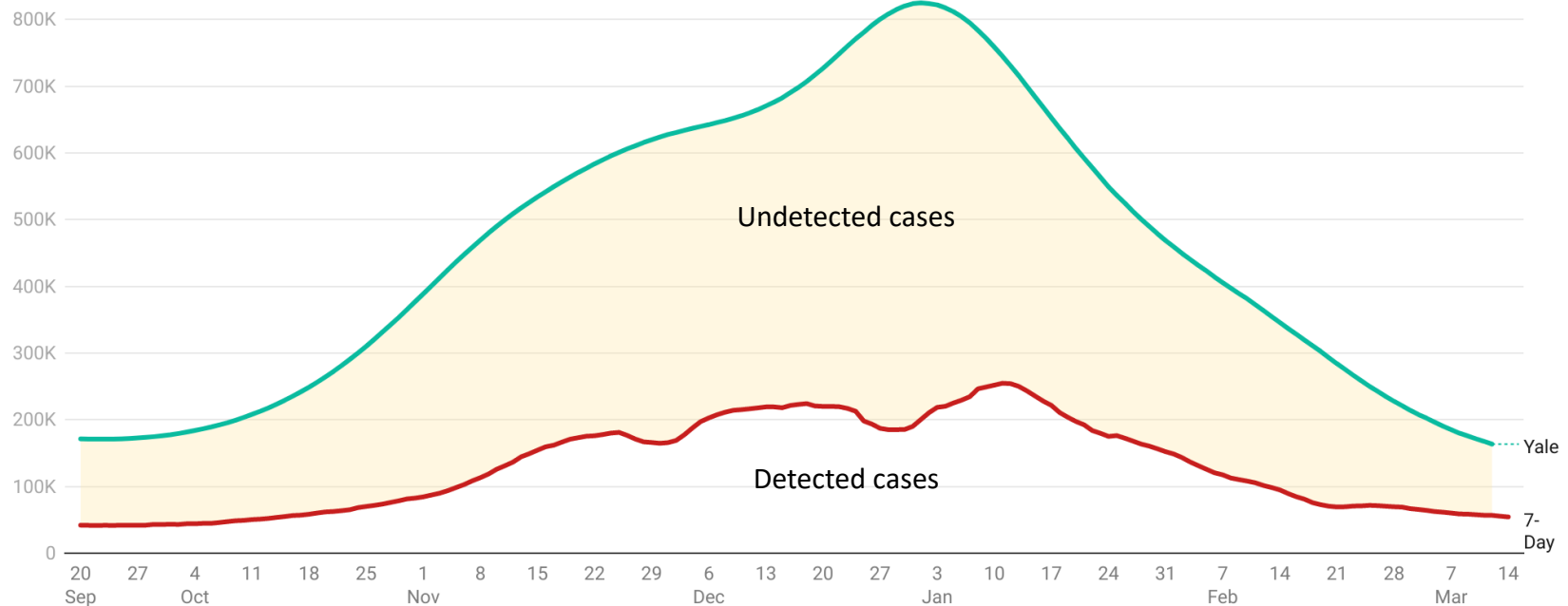


Chart: Health Industry Advisor LLC • Source: Youyang Gu, Yale School of Public Health • Created with Datawrapper

Two models:

- Youyang Gu: <https://covid19-projections.com>, lags by two weeks
- Yale School of Public Health: <https://covidestim.org>

## Covid-19 “Vital Signs”

# Deaths With Coronavirus

*Deaths with coronavirus (7-day average) have declined by 59% since a peak in late January. This rate is lower than at any time in the last four months.*

## Deaths With Coronavirus

7-Day Average, Through March 14



Chart: Health Industry Advisor LLC • Created with Datawrapper



# Deaths Reported With Coronavirus

*The 7-day average death rate fell 22% from last week and 32% in two weeks.*

## Daily Deaths Reported With Coronavirus

As of March 14

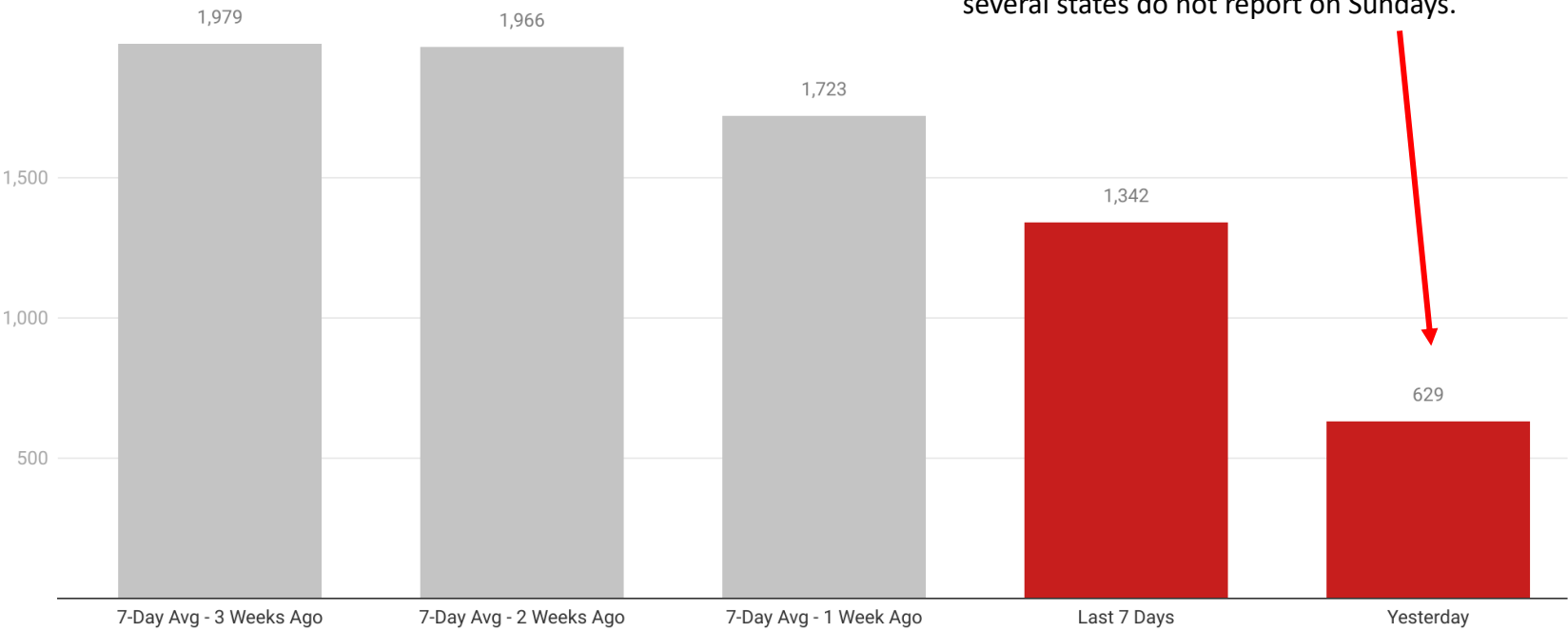


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

# Sources

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

- U.S. Department of Health & Human Services: <https://healthdata.gov/dataset/covid-19-estimated-patient-impact-and-hospital-capacity-state>
- U.S. Department of Health & Human Services <https://beta.healthdata.gov/dataset/COVID-19-Diagnostic-Laboratory-Testing-PCR-Testing/j8mb-icvb>
- Worldometers.info: <https://www.worldometers.info/coronavirus/>
- Centers for Disease Control and Prevention, National, Regional, and State Level Outpatient Illness and Viral Surveillance <https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>
- Centers for Disease Control and Prevention, 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 and Prevention, COVID Data Tracker <https://www.cdc.gov/covid-data-tracker/index.html#mobility>
- Centers for Disease Control and Prevention, Vaccines, <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/index.html>
- 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>
- Covid-19 Forecast Hub, <https://viz.covid19forecasthub.org>
- Yale School of Public Health & Harvard TH Chan School of Public Health, <https://covidestim.org>
- Bloomberg Vaccine Trackers, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/?sref=Z0b6TmH>