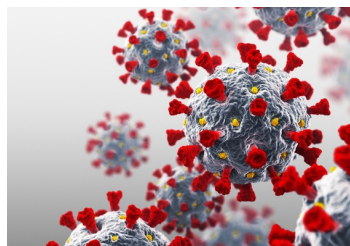


## Covid-19 "Vital Signs"

Issue # 324

April 24, 2021



## Covid-19 "Vital Signs"

# Vaccination Status - US

*Fewer Americans sought a first dose vaccine last week than during each of the prior six weeks. Second doses (or, sole JNJ doses) dropped from last week. Total doses were the lowest in a month.*

## U.S. Covid-19 Vaccinations - Weekly

7-Day Average, Though the Date Shown

■ 1st of 2 Doses ■ Second Dose (or, Only JNJ Dose)

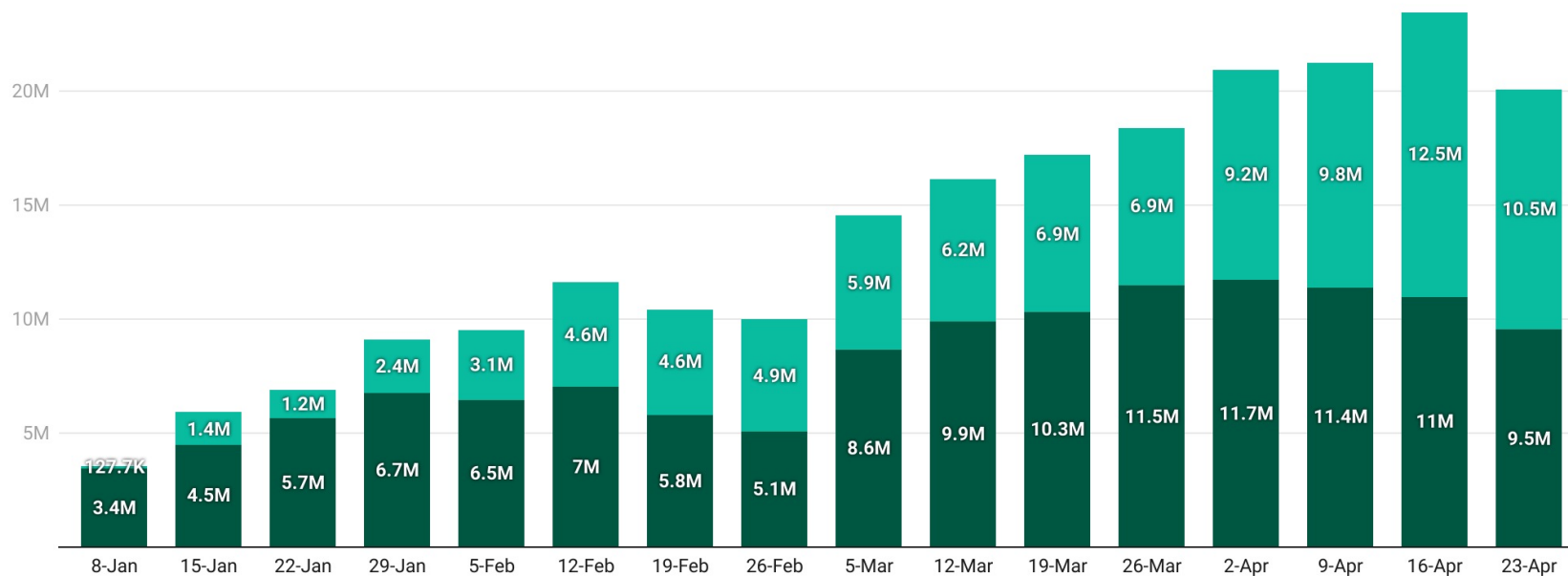


Chart: Health Industry Advisor • Source: Bloomberg • Created with Datawrapper

## Covid-19 "Vital Signs"

# Vaccination Status - US

*Vaccinations exceeded 222 million to-date. 52% of adults have received at least one dose and 35% are fully vaccinated. Among senior citizens, 80% have received at least one dose and nearly 67% are fully inoculated.*

## Covid-19 Vaccinations - US

For the week shown

■ 1st of 2 Doses ■ Fully inoculated

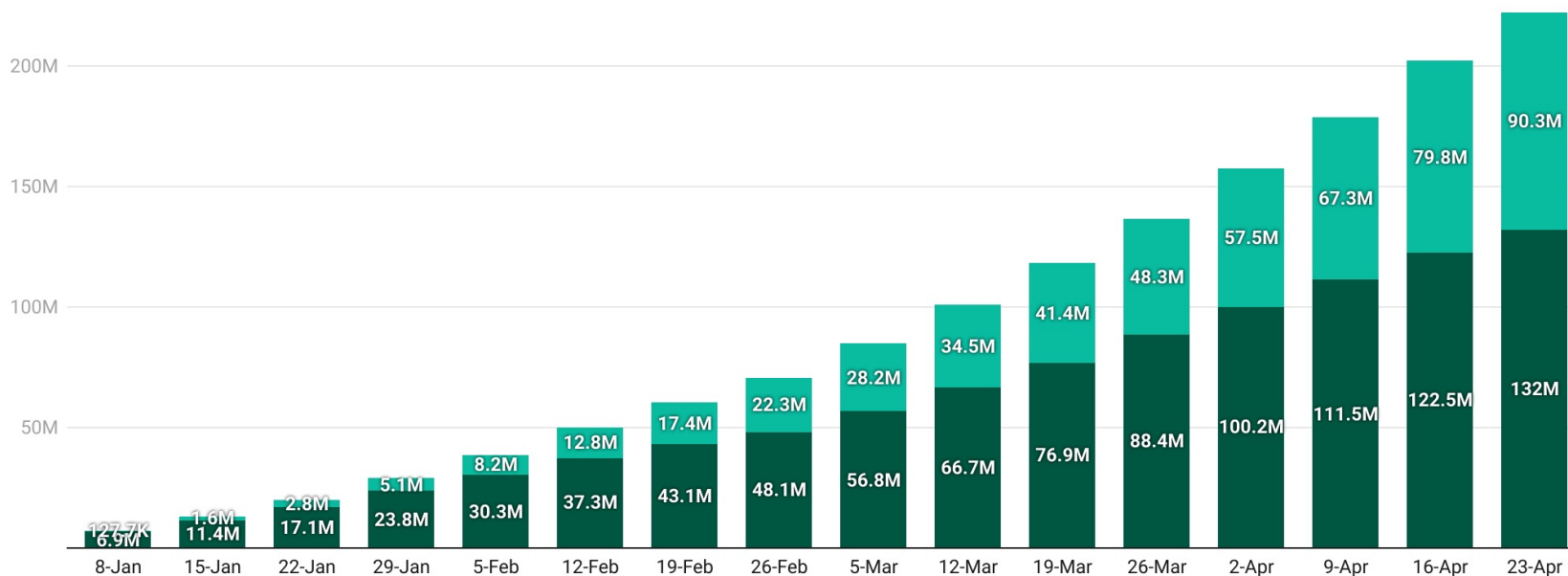


Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

## Estimated Immunity Status - US

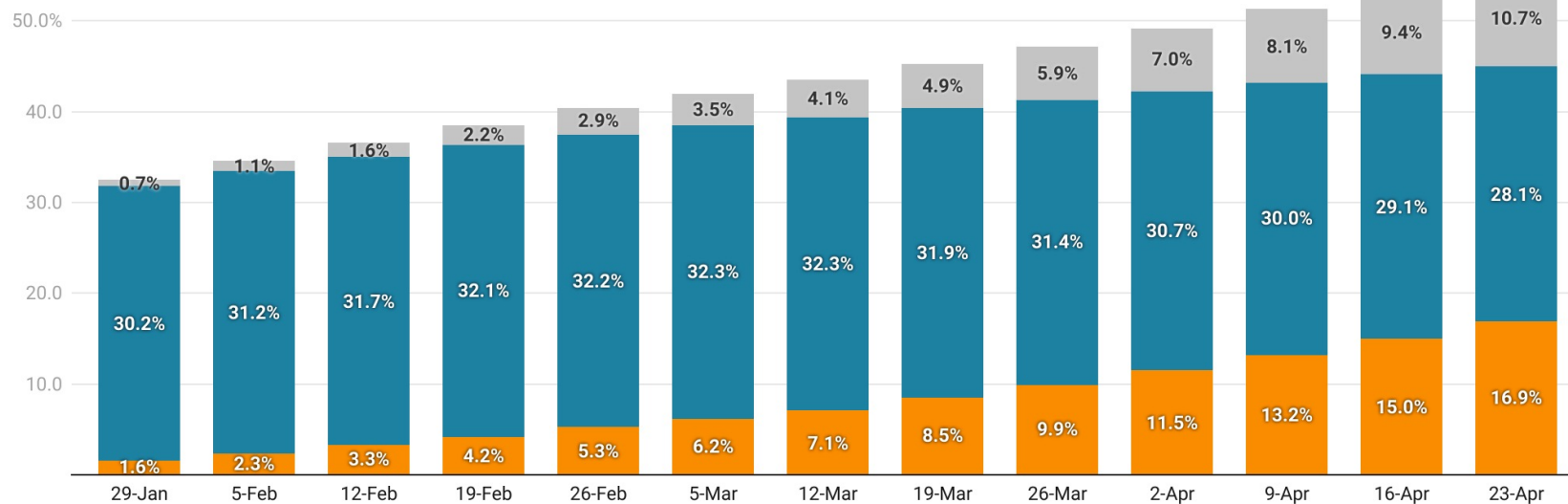
*Estimated immunity reached 56% of the US population, still mostly coming from a prior infection.*

### Estimated % Immunity - US

Based on Vaccination Rate and Estimated True Infections (Yale/Harvard Model)

■ Via Vaccination 
 ■ Via Infection 
 ■ Via Both

"Both"- persons both vaccinated and previously-infected. We assume that infected persons will be vaccinated at the same rate as non-infected persons



<https://covid19-projections.com>; <https://covidestim.org>

Chart: Health Industry Advisor LLC • Source: Harvard/Yale and Bloomberg • Created with Datawrapper



# Estimated Actual Infections – Yale/Harvard Model

*Estimated infections declined slightly last week. This latest estimate suggests that there may not have been a true fourth infection wave.*

## Weekly New Estimated Infections - Yale/Harvard Model

For the 7 days ending on date shown

\* Source: [Yale School of Public Health/Harvard T.H. Chan School of Public Health](#)

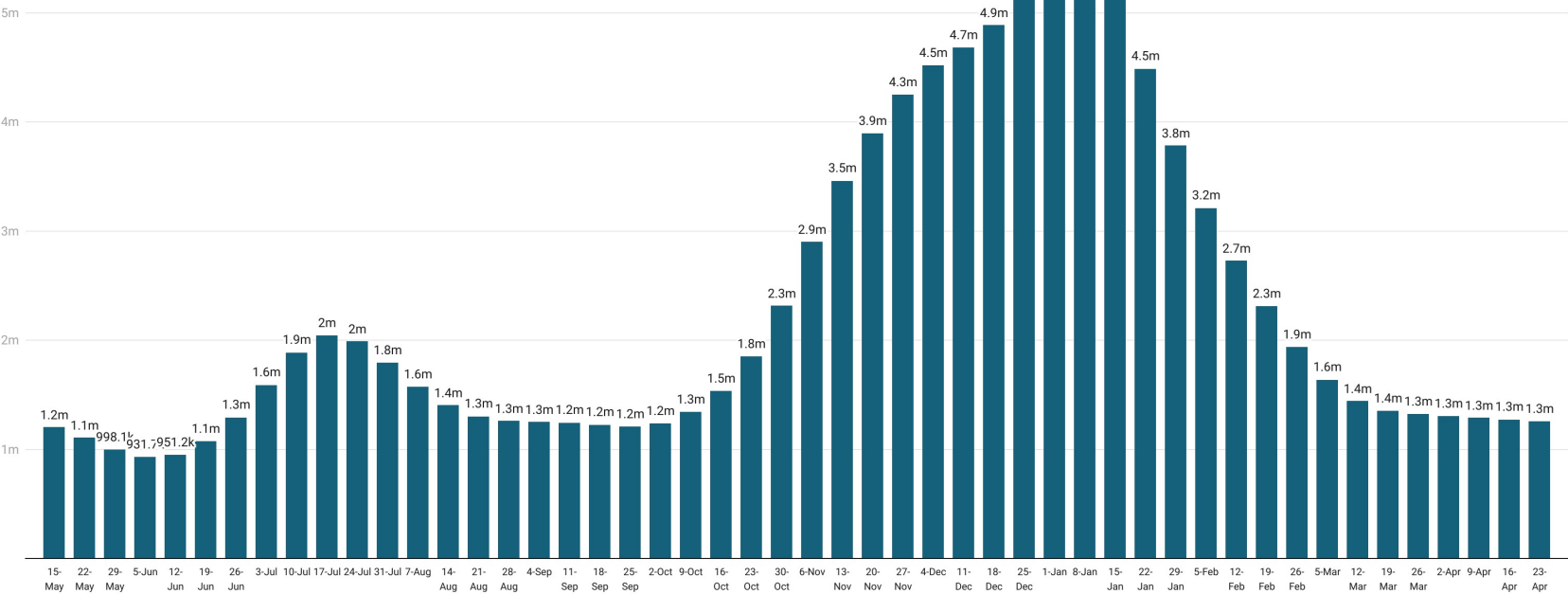


Chart: Health Industry Advisor LLC • Source: Yale and Harvard Schools of Public Health • Created with Datawrapper



# Newly Detected Cases

*New cases last week, reversing a four-week trend of increasing cases.*

## Weekly New Detected Cases - United States

For the 7 days ending on date shown

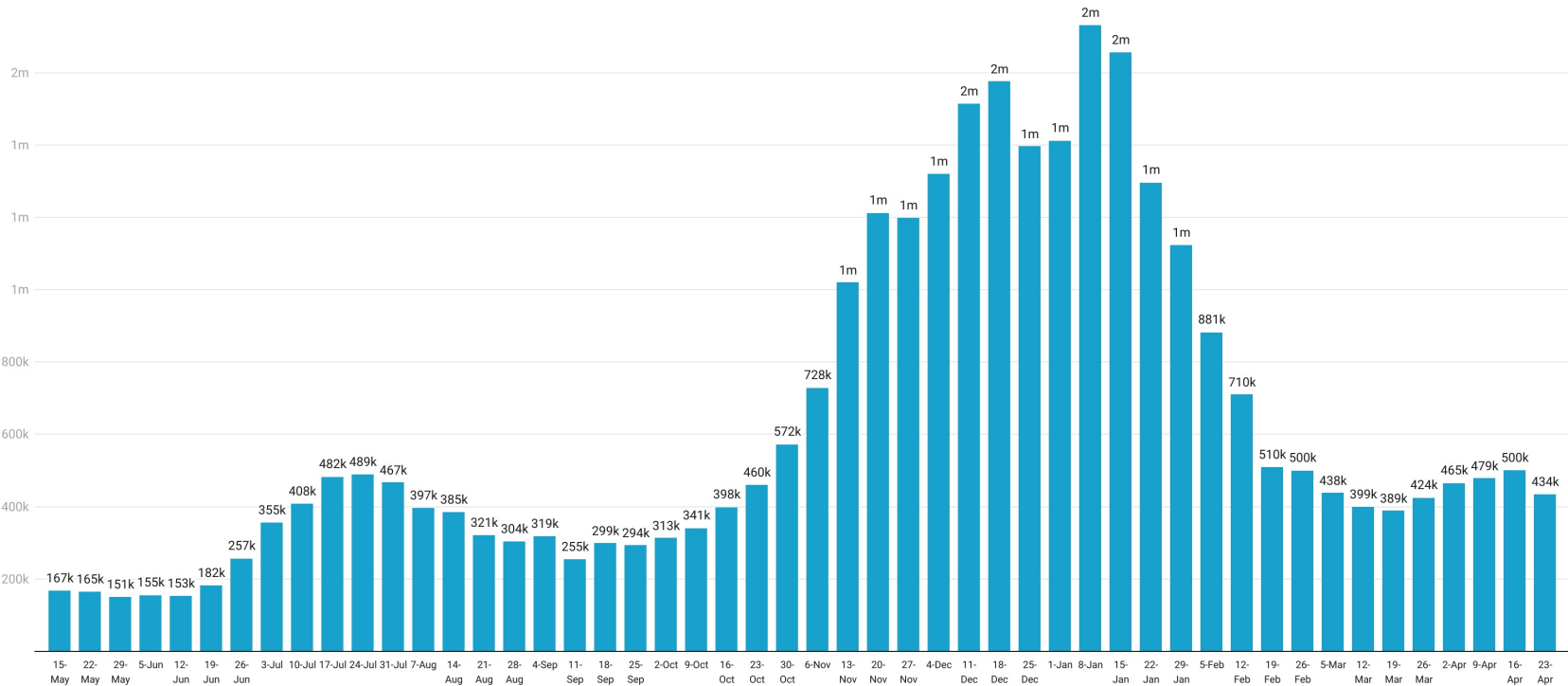


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## Covid-19 "Vital Signs"

# Weekly Change in Newly Detected Cases

*The number of new cases fell sharply from last week.*

## Weekly Change in New Detected Cases - United States

For the 7 days ending on date shown

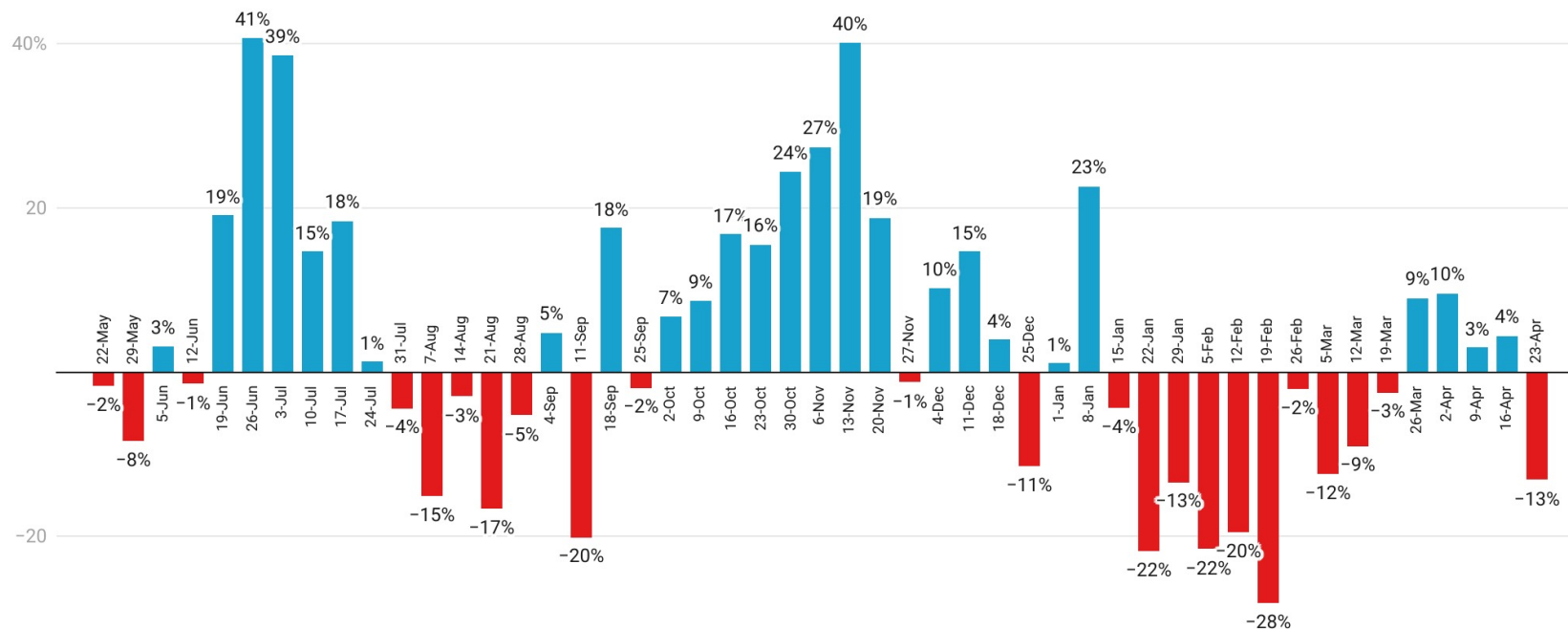


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## Newly Detected Cases - By State

*More than one third of all new cases in the past week were detected in just four states: Florida, Michigan, New York, and Pennsylvania.*

### New Weekly Detected Cases - By State

April 17 - 23

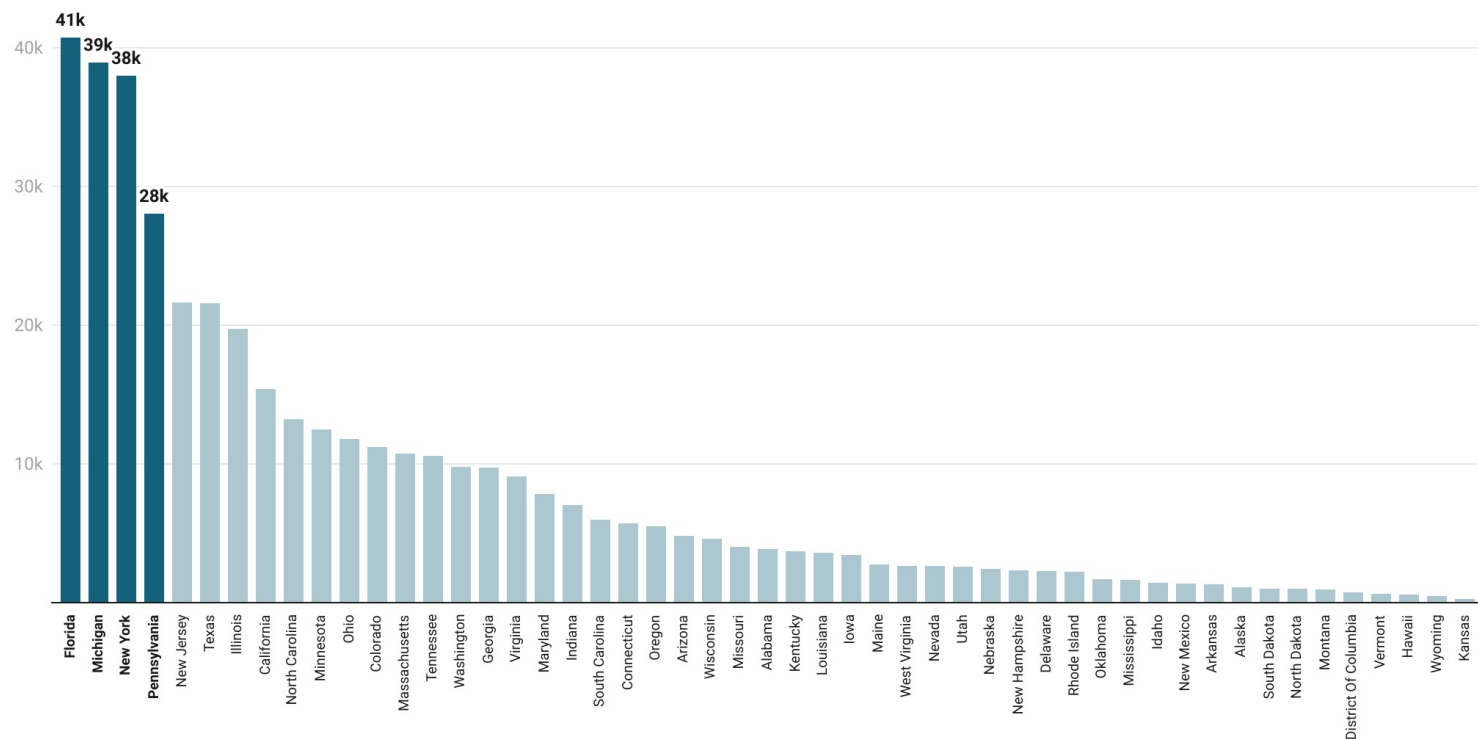


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## Covid-19 "Vital Signs"

# Week-Over-Week Change in Newly Detected Cases

*Michigan saw nearly 16,000 fewer new cases this week than last. Indeed, most states experienced declining new cases week-over-week.*

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

April 17-23 vs. April 10-16

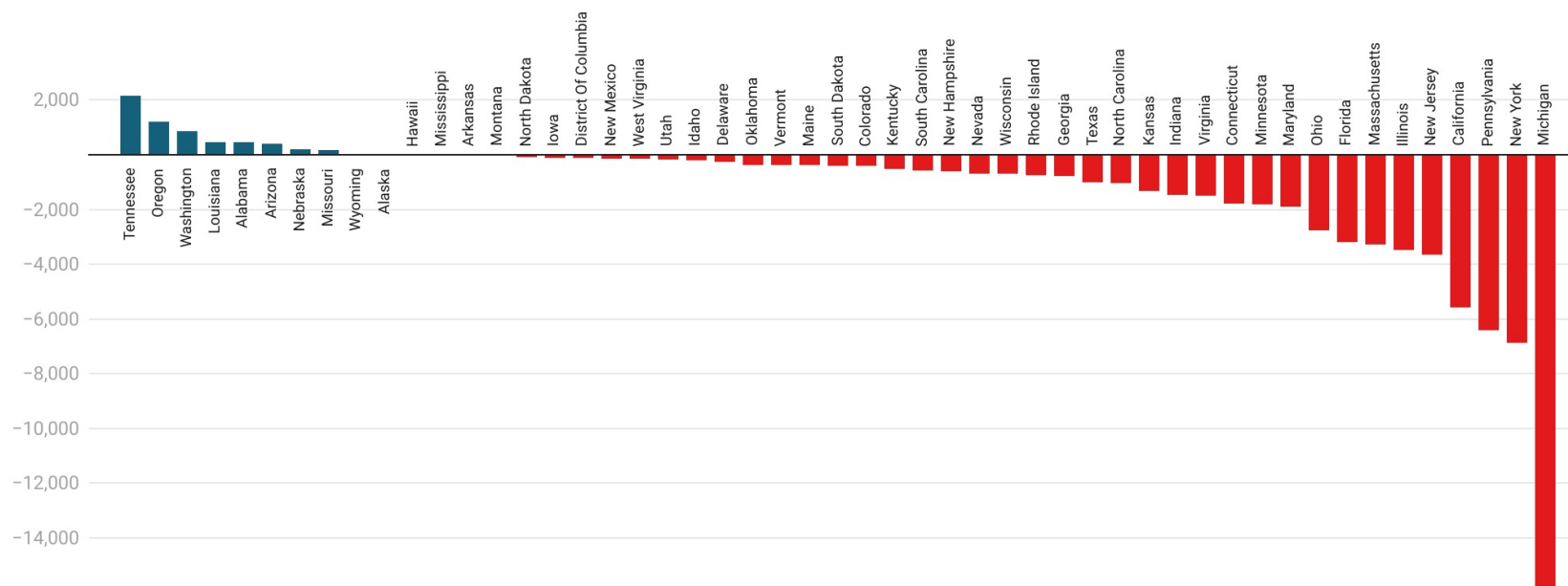


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## Covid-19 "Vital Signs"

# Covid-19 Testing

*Test-positivity declined week-over week but remains slightly above the WHO recommended target. Nonetheless, this rate remains lower than most weeks during the pandemic, especially periods of earlier surges..*

### Weekly Test-Positive% - United States

For the 7 days ending on date shown

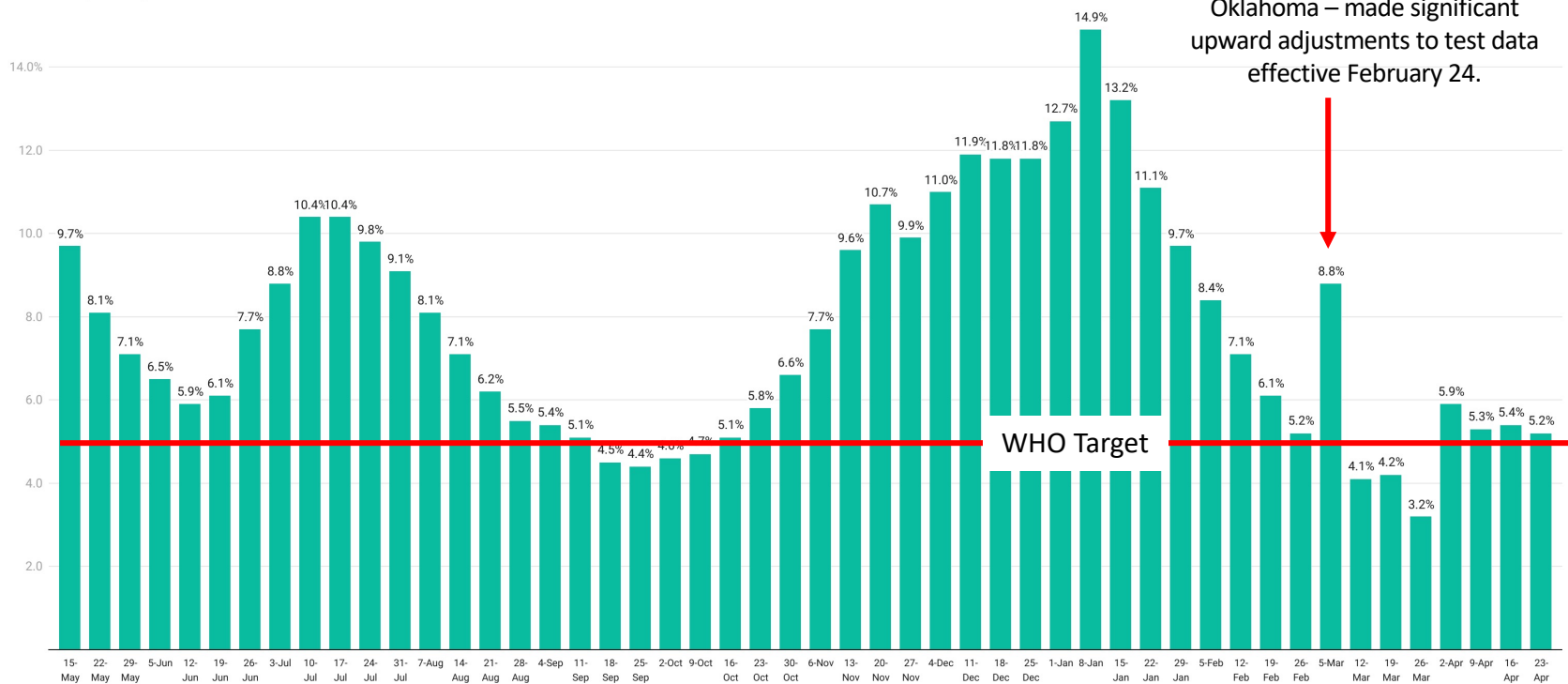


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

# Test Efficiency: Tests Per Case Detected

*Test efficiency improved week-over-week.*

## Weekly Tests / Newly Detected Case - United States

For the 7 days ending on date shown

Two states – Montana and Oklahoma – made significant upward adjustments to test data effective February 24.

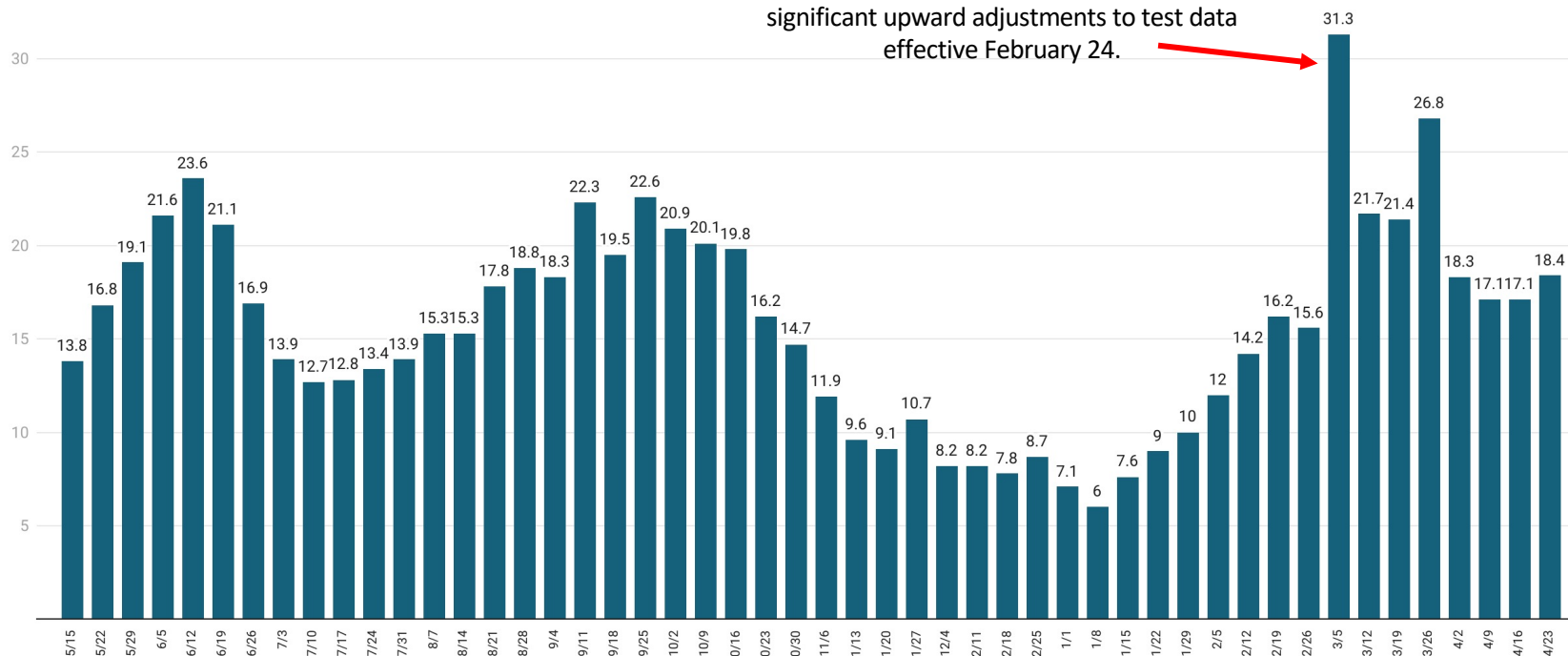


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper



# Active Cases

The number of Active Cases declined slightly last week.

## Current Active Cases - United States

For the 7 days ending on date shown

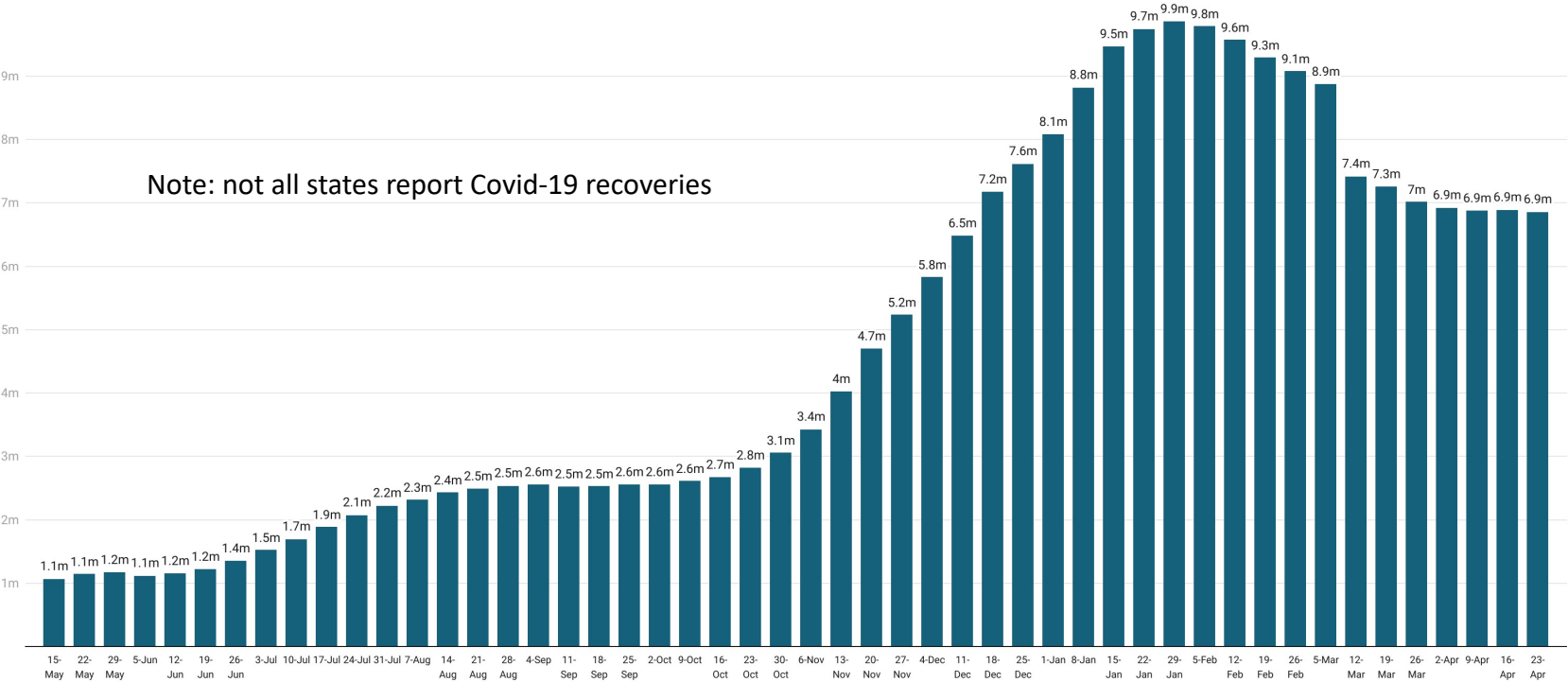


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

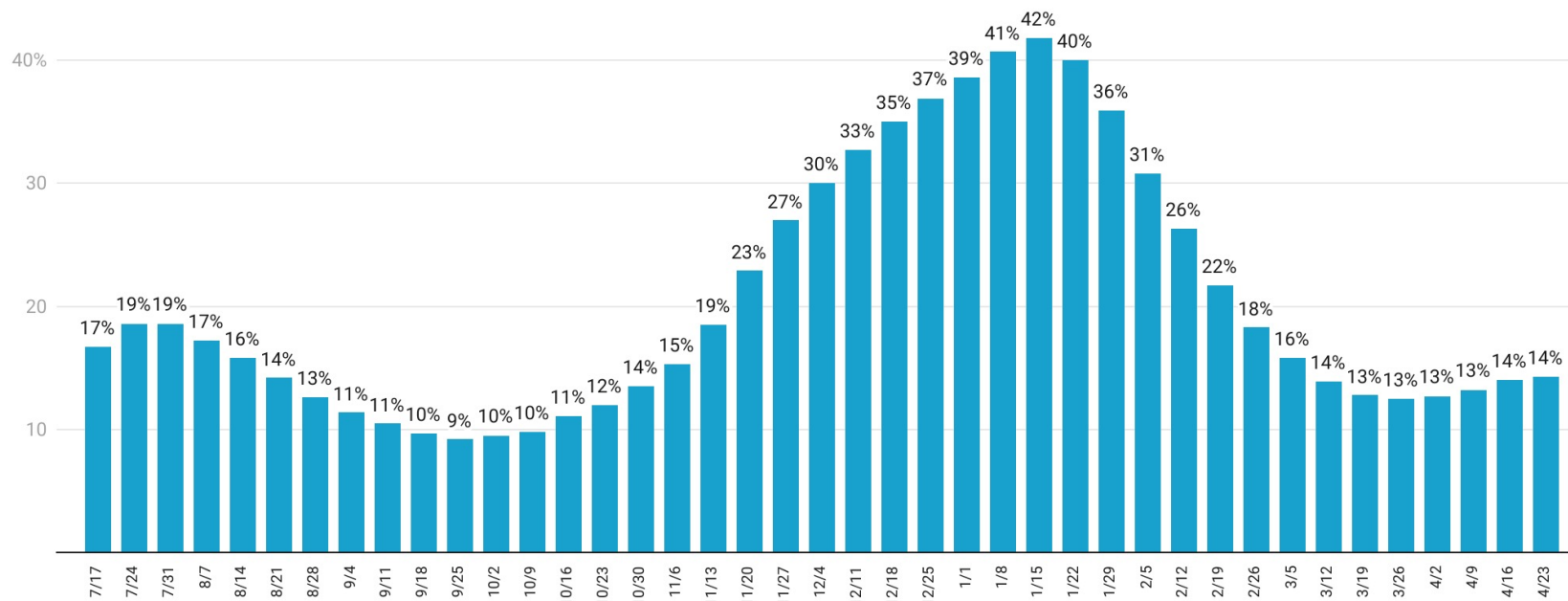
## Covid-19 "Vital Signs"

# Covid-19 Hospital Occupancy

*Covid-19 occupancy inched higher last week yet remains about where it has been for the last seven weeks. The current Covid-19 census is one third of where it was at peak.*

## Covid-19 Occupancy - % of Inpatient Beds - 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: Centers for Disease Control & Prevention • Created with Datawrapper

# Covid-19 Hospital Occupancy

## Covid-19 “Vital Signs”

*Michigan is the only state where Covid-19 patients occupy four of every ten inpatient beds. In Connecticut, Delaware, Maryland and New York, Covid-19 patients occupy more than three of every ten beds.*

### Covid-19 Occupancy: % of Inpatient Beds By State

As of April 23

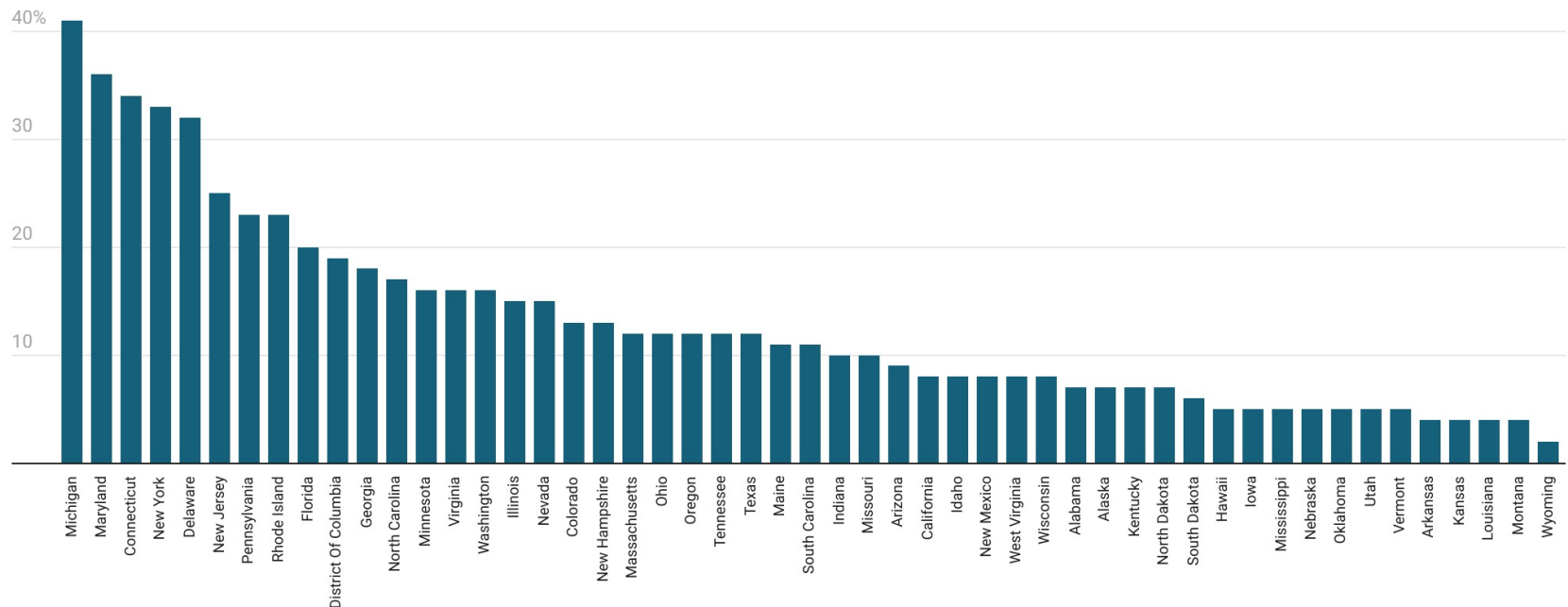


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper

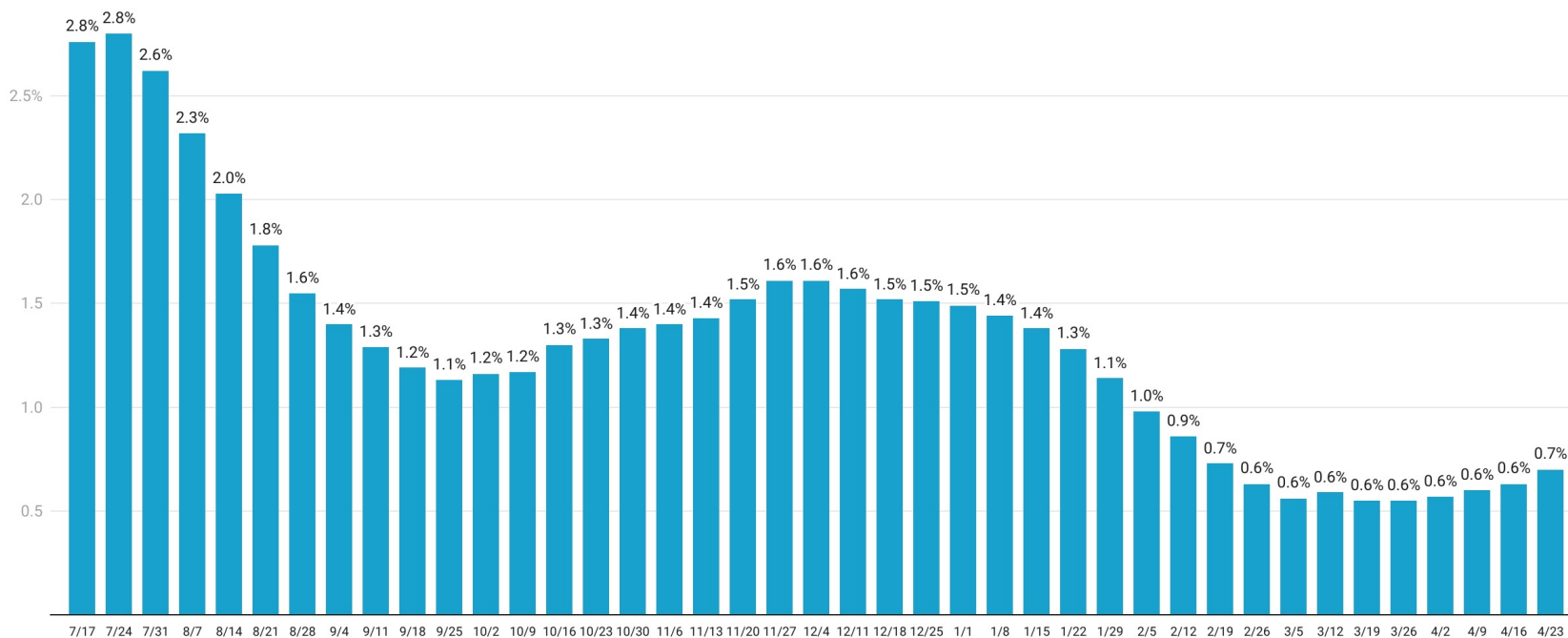
## Covid-19 "Vital Signs"

# Hospitalized Covid-19 Patients / Active Cases

*Active Covid-19 cases requiring hospital care remains substantially lower than earlier in the pandemic.*

## 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

## Covid-19 "Vital Signs"

# Covid-19 Patient Days / 100 New Cases

*Hospitalization rates jumped week-over-week, likely due to patient stays from earlier infections and declining new cases.*

## Covid-19 Inpatient Days / 100 New Cases

For the 7 days ending on the date shown

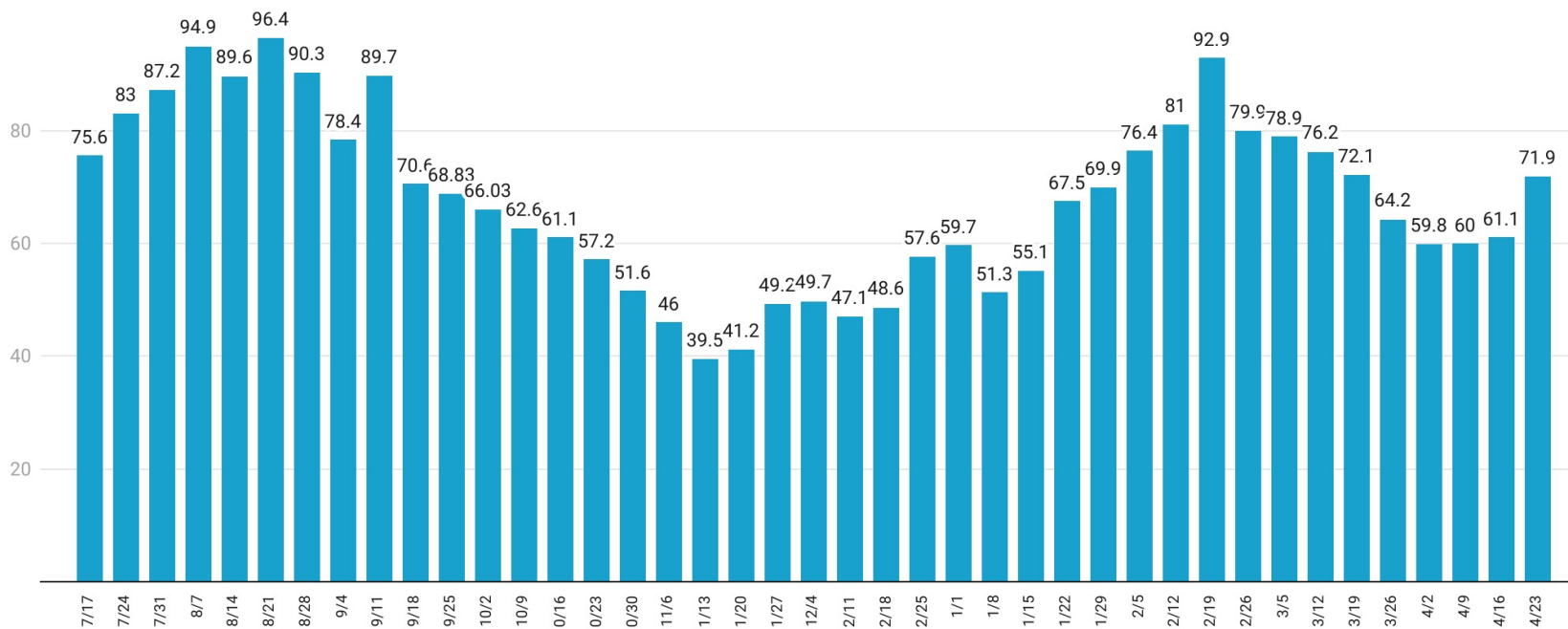


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

## % of Visits Relating to Influenza

*The United States avoided the typical flu season this year.*

### % of Visits For Influenza-Like Illnesses, National Summary

By Week & Flu Season

— 2015-16 — 2016-2017 — 2017-2018 — 2018-2019 — 2019-2020 — 2020-2021

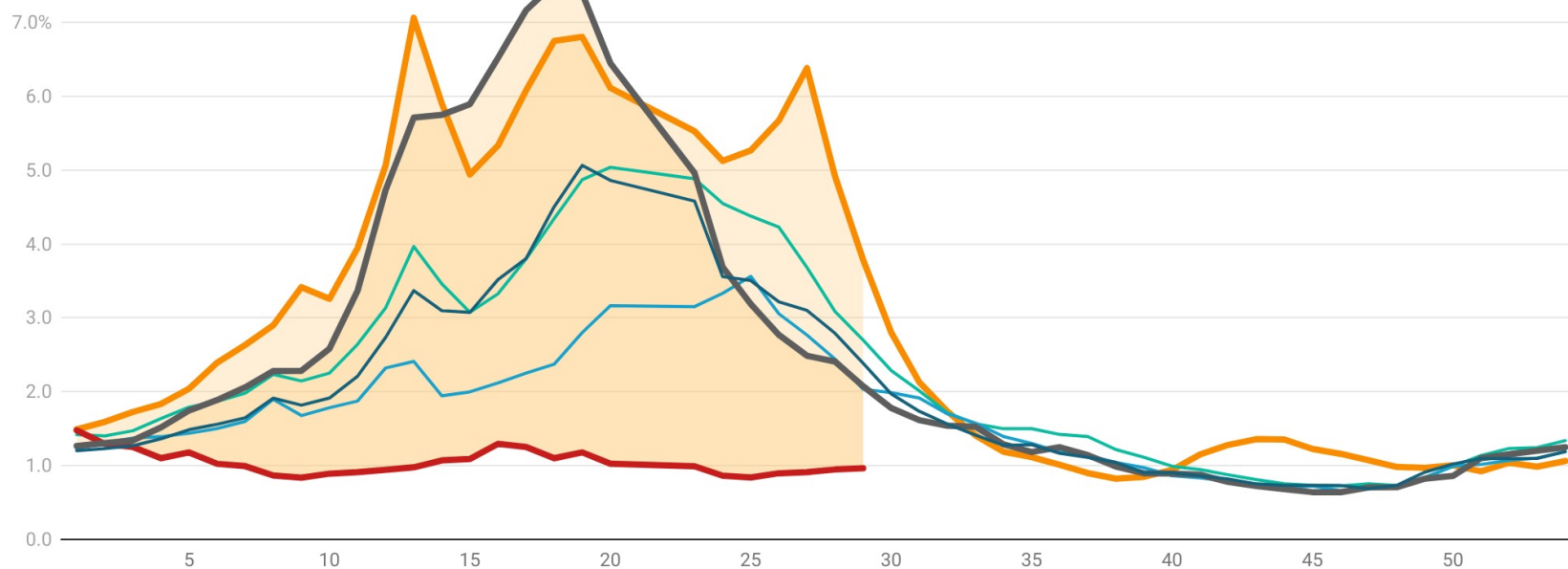


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper

## Covid-19 "Vital Signs"

# Deaths With Coronavirus

*Deaths with coronavirus increased slightly this week. Still, the death rate is as low as it has been since mid-July.*

### Weekly Deaths - United States

For the 7 days ending on date shown

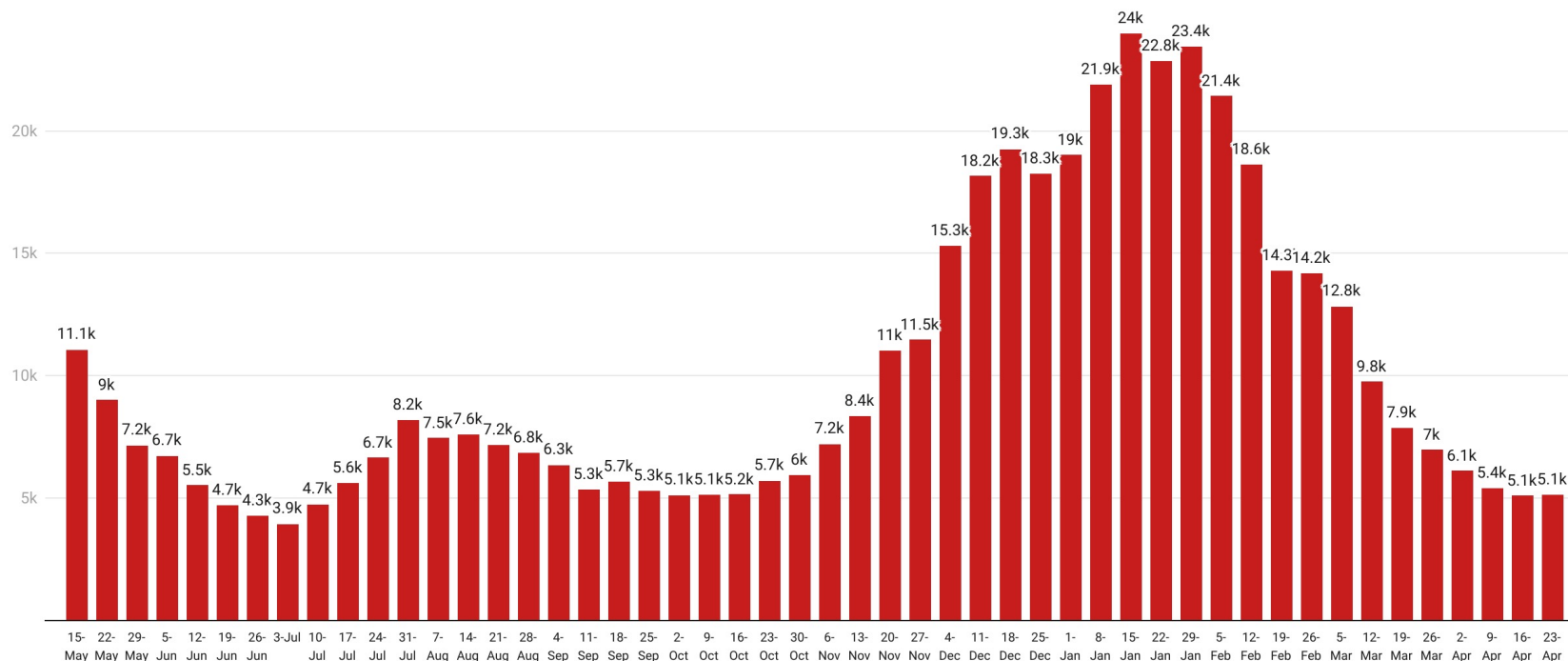


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

## 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>
- Our World In Data, <https://ourworldindata.org/covid-vaccinations>
- 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>