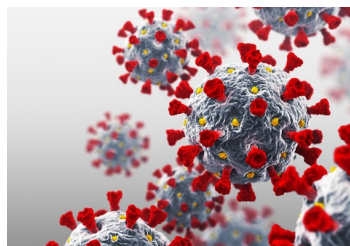


Covid-19 "Vital Signs"

Issue # 334

May 15, 2021



Covid-19 "Vital Signs"

Vaccination Status - US

First dose vaccines reached an eighteen-week low last week. Second doses (or, sole JNJ doses) dropped to a seven-week low. Total doses fell to an eleven-week low.

U.S. Covid-19 Vaccinations - Weekly

7-Day Average, Though the Date Shown

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

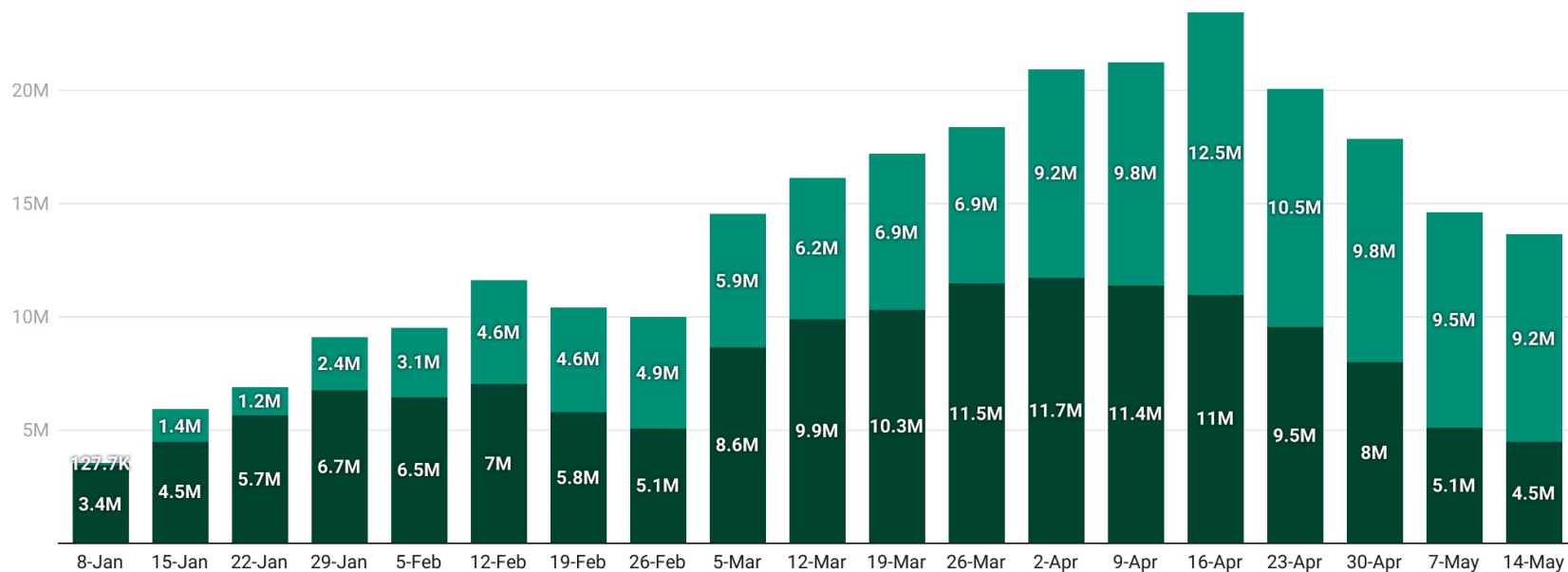


Chart: Health Industry Advisor • Source: Bloomberg • Created with Datawrapper

Covid-19 "Vital Signs"

Vaccination Status - US

Vaccinations reached 268 million to-date. 59% of adults have received at least one dose and 49% are fully vaccinated. Among senior citizens, 84% have received at least one dose and nearly 72% are fully inoculated.

Covid-19 Vaccinations - US

For the week shown

■ 1st of 2 Doses ■ Fully inoculated

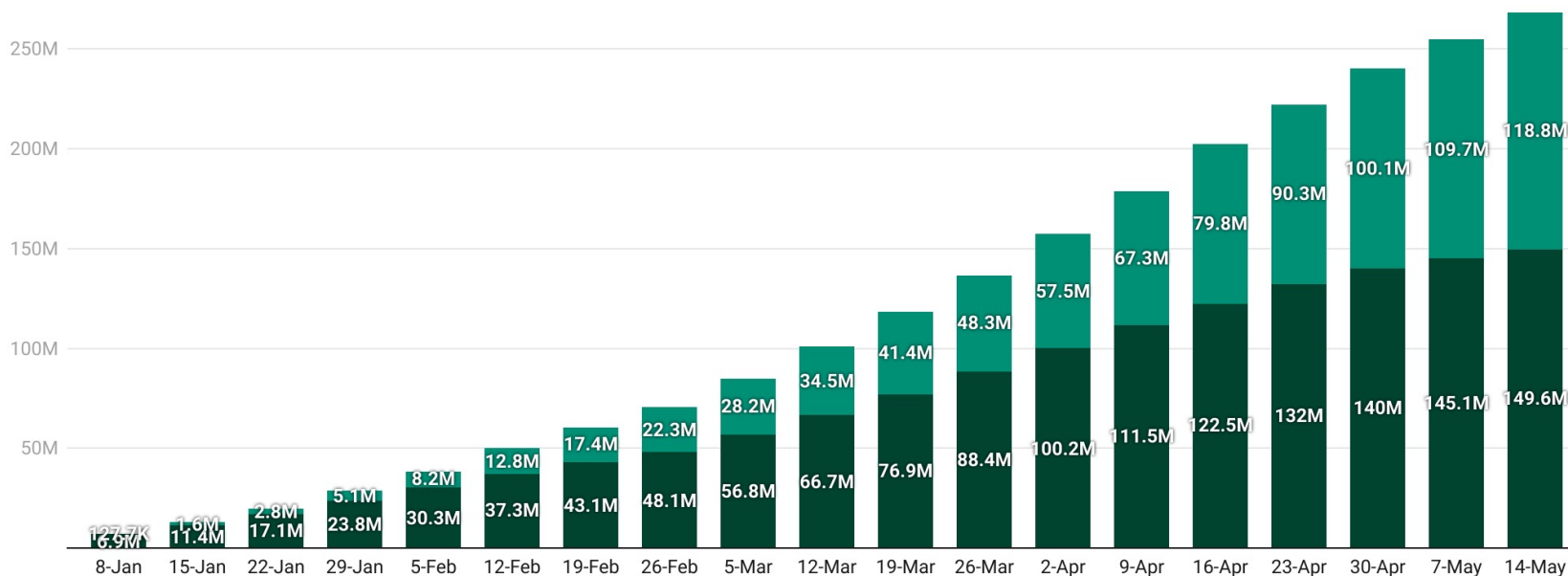


Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

Covid-19 "Vital Signs"

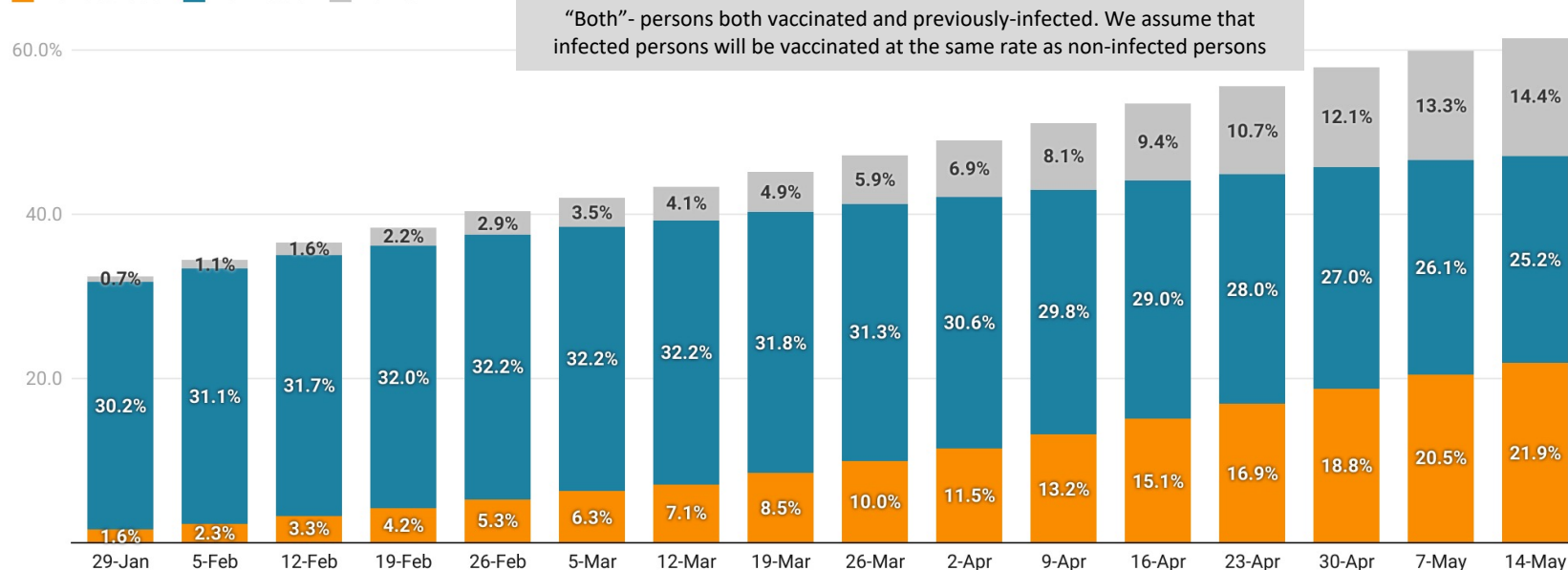
Estimated Immunity Status - US

Estimated immunity reached 62% of the US population. More than half is attributed to vaccination, including those immune via both vaccination and a prior infection.

Estimated % Immunity - US

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

■ Via Vaccination
 ■ Via Infection
 ■ Via Both



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

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

Covid-19 "Vital Signs"

Estimated Actual Infections – Harvard/Stanford/Yale Model

Estimated infections for the eighteenth straight week. The United States saw fewer estimated new infections last week than at any time since March 6-12, 2020.

Weekly New Estimated Infections - Harvard/Stanford/Yale Model

For the 7 days ending on date shown

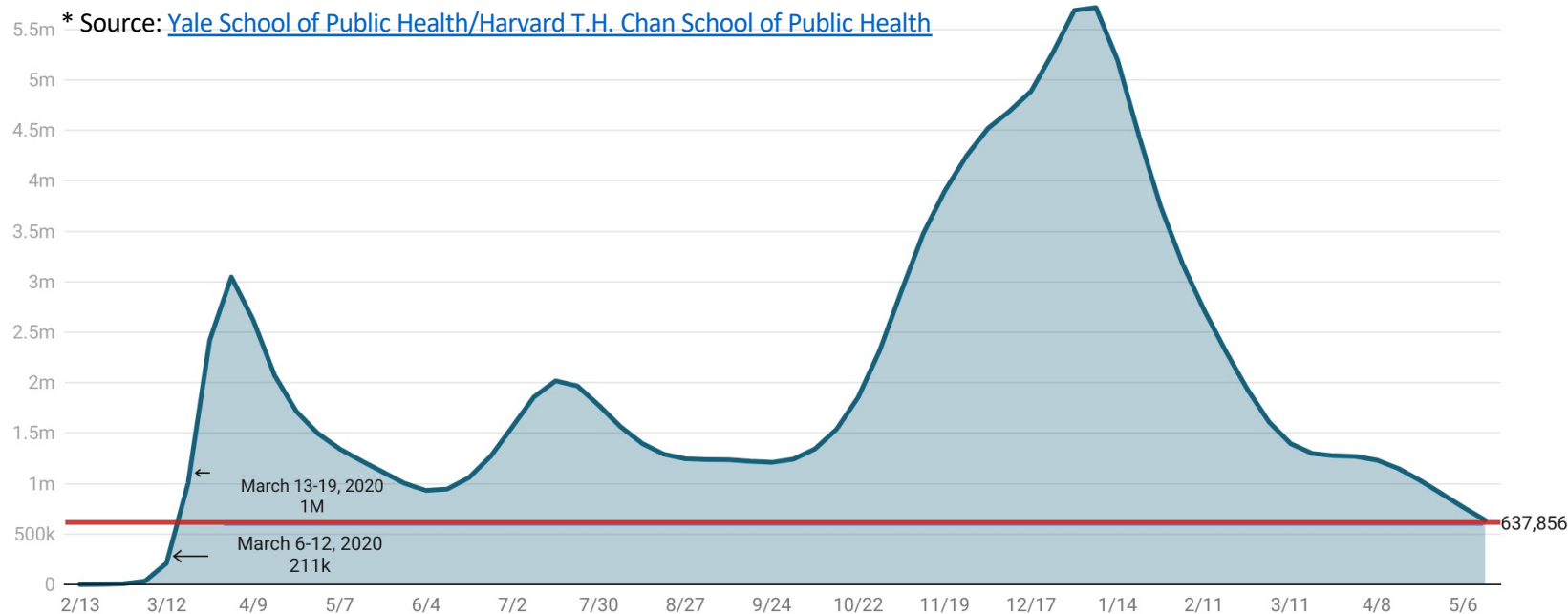


Chart: Health Industry Advisor LLC • Source: Yale and Harvard Schools of Public Health • Created with Datawrapper

Newly Detected Cases

New cases declined last week, falling to the lowest point in forty-seven weeks.

Weekly New Detected Cases - United States

For the 7 days ending on date shown

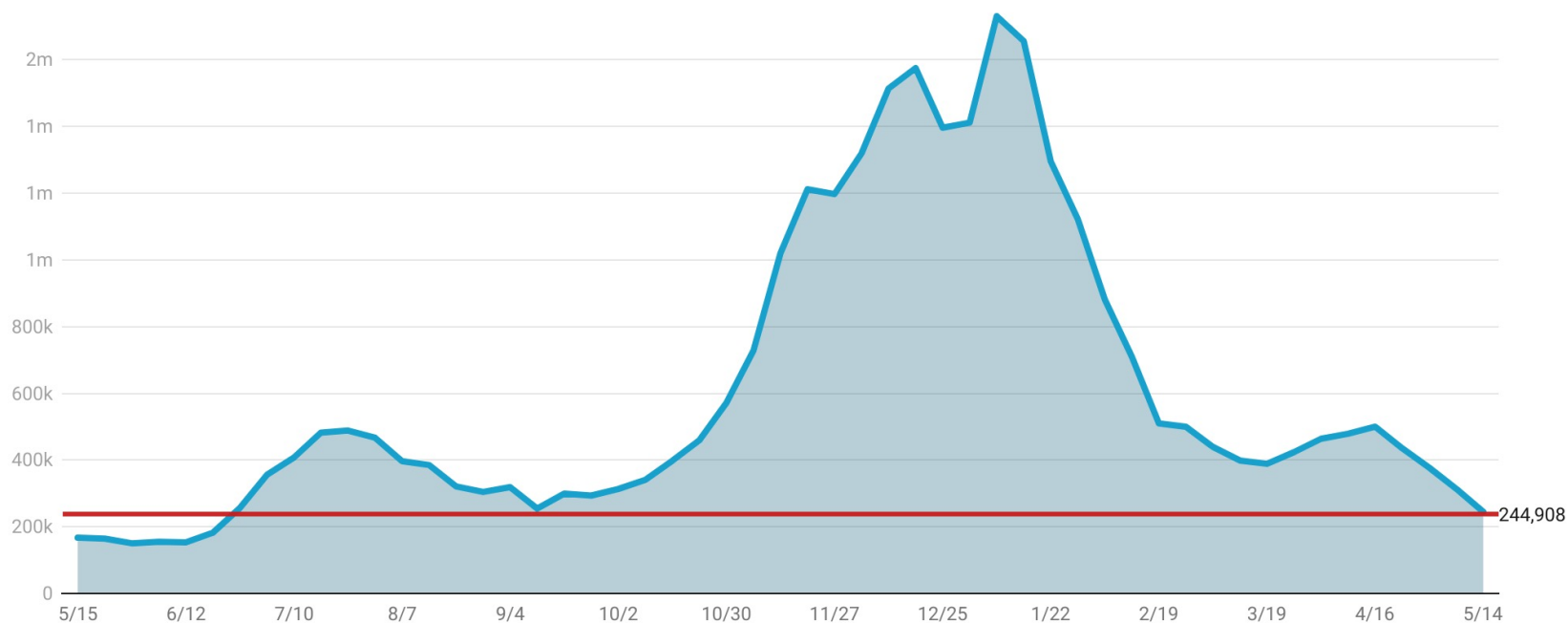


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Weekly Change in Newly Detected Cases

The number of new cases fell sharply for the fourth straight week.

Weekly Change in New Detected Cases - United States

For the 7 days ending on date shown

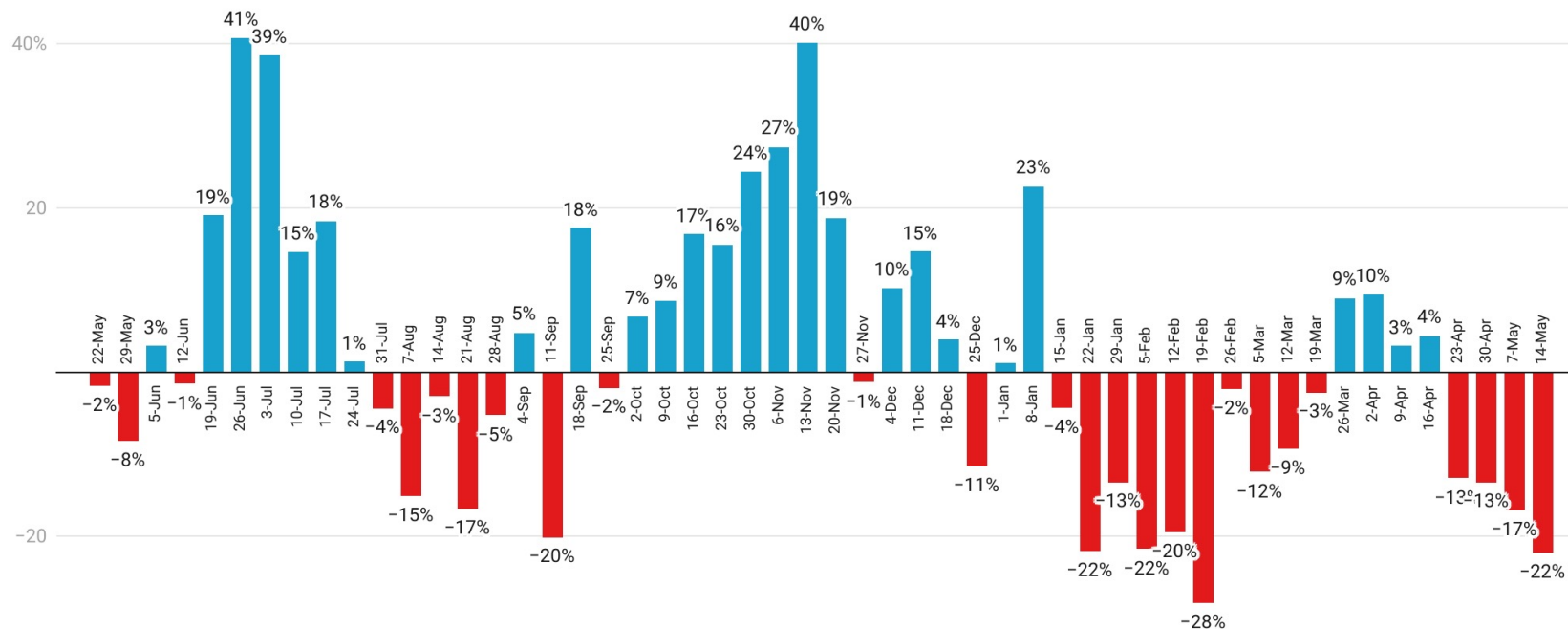


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Newly Detected Cases - By State

*40% of all new cases in the past week were detected in just six states:
Florida, Illinois, Michigan, New York, Pennsylvania, and Texas.*

New Weekly Detected Cases - By State

May 8-14

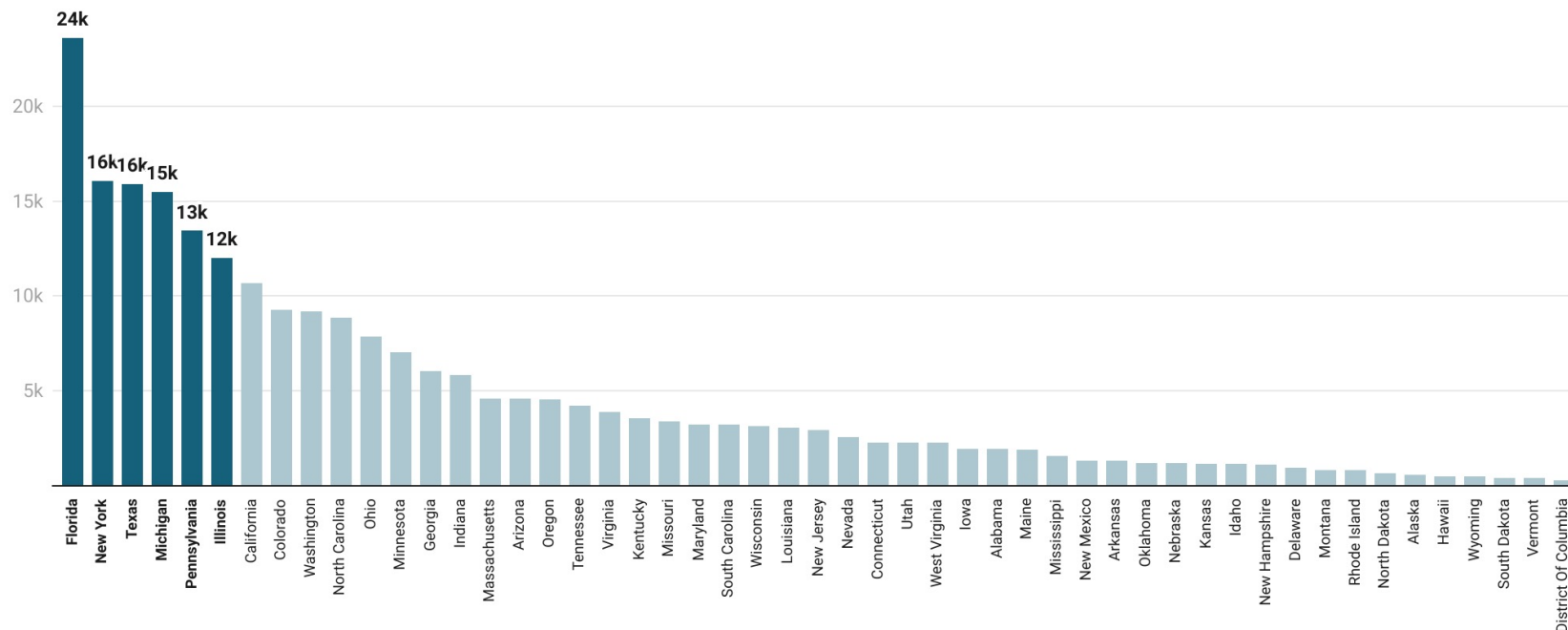


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Week-Over-Week Change in Newly Detected Cases

New cases dropped week-over-week in all states except Alabama, Mississippi, and Nevada. These states saw minor week-over-week increases. Michigan saw 1,000 fewer cases per day than one week ago.

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

May 8-14 v. May 1-7

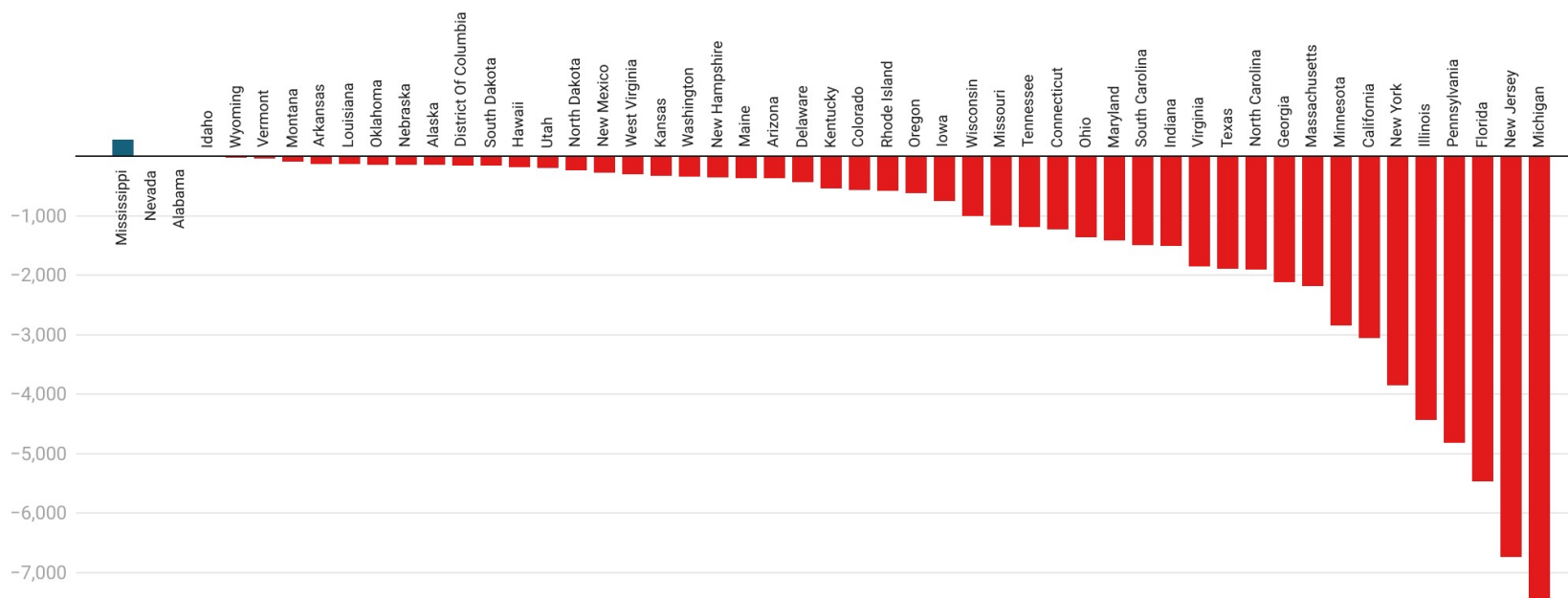


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Testing

The rate of positive Covid-19 tests reached a pandemic low.

Weekly Test-Positive% - United States

For the 7 days ending on date shown

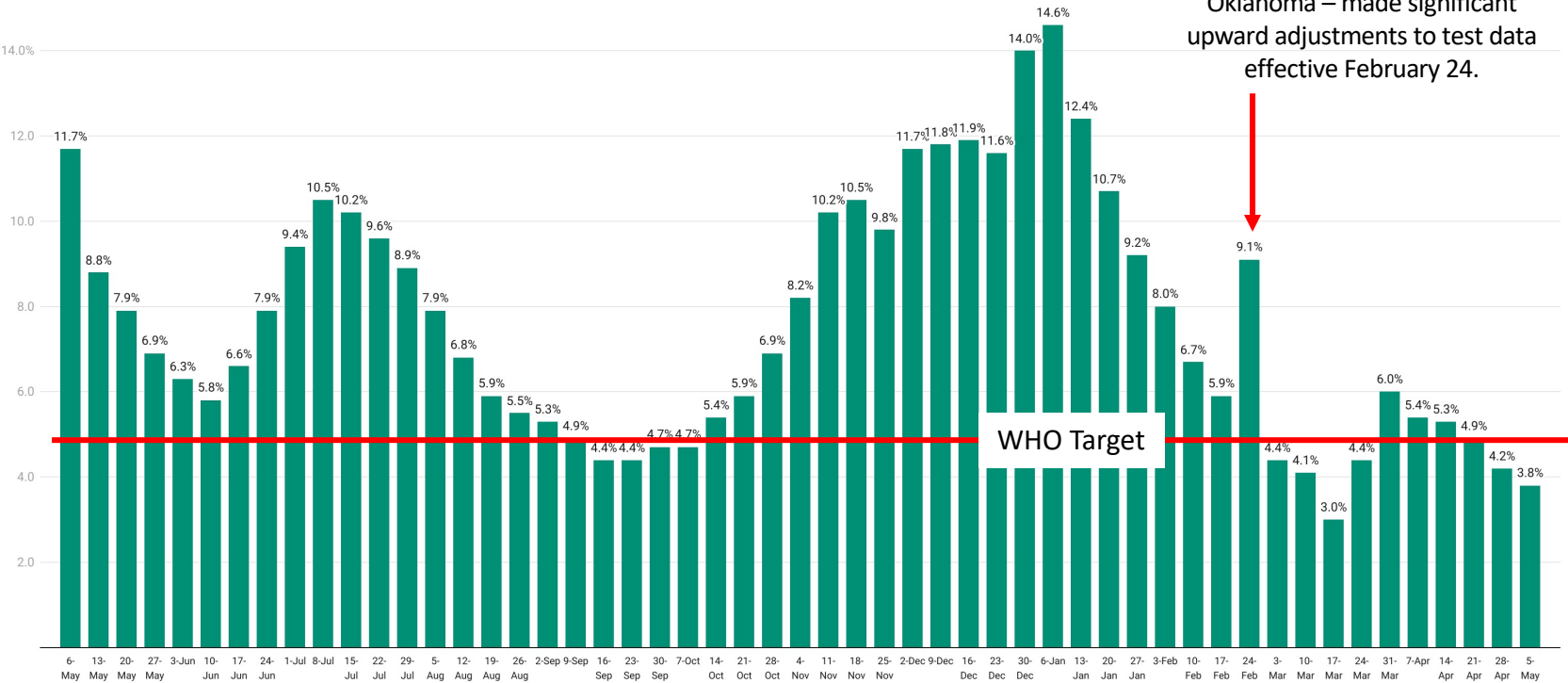


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Test Efficiency: Tests Per Case Detected

Test efficiency reached a pandemic high.

Weekly Tests / Newly Detected Case - United States

For the 7 days ending on date shown

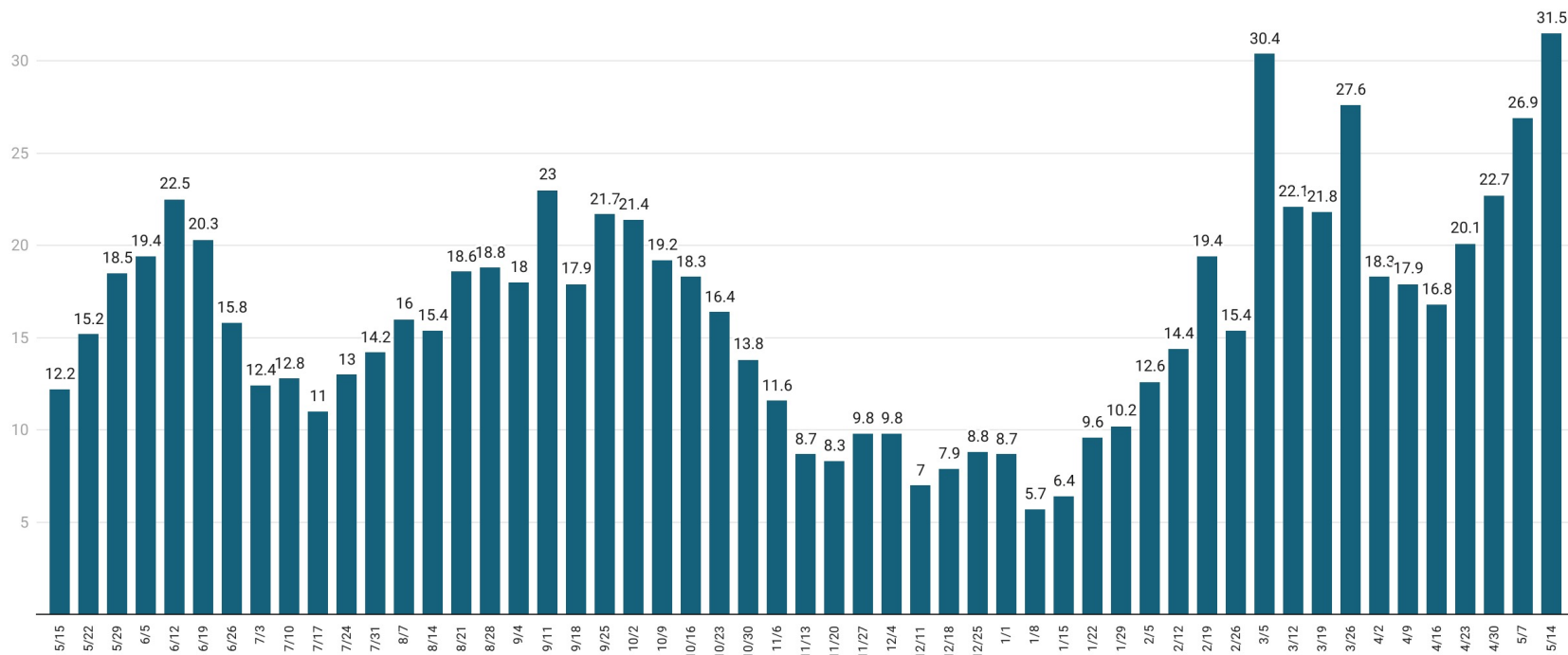


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Active Cases

The number of Active Cases declined to the lowest point in five-and-one-half months.

Current Active Cases - United States

For the 7 days ending on date shown

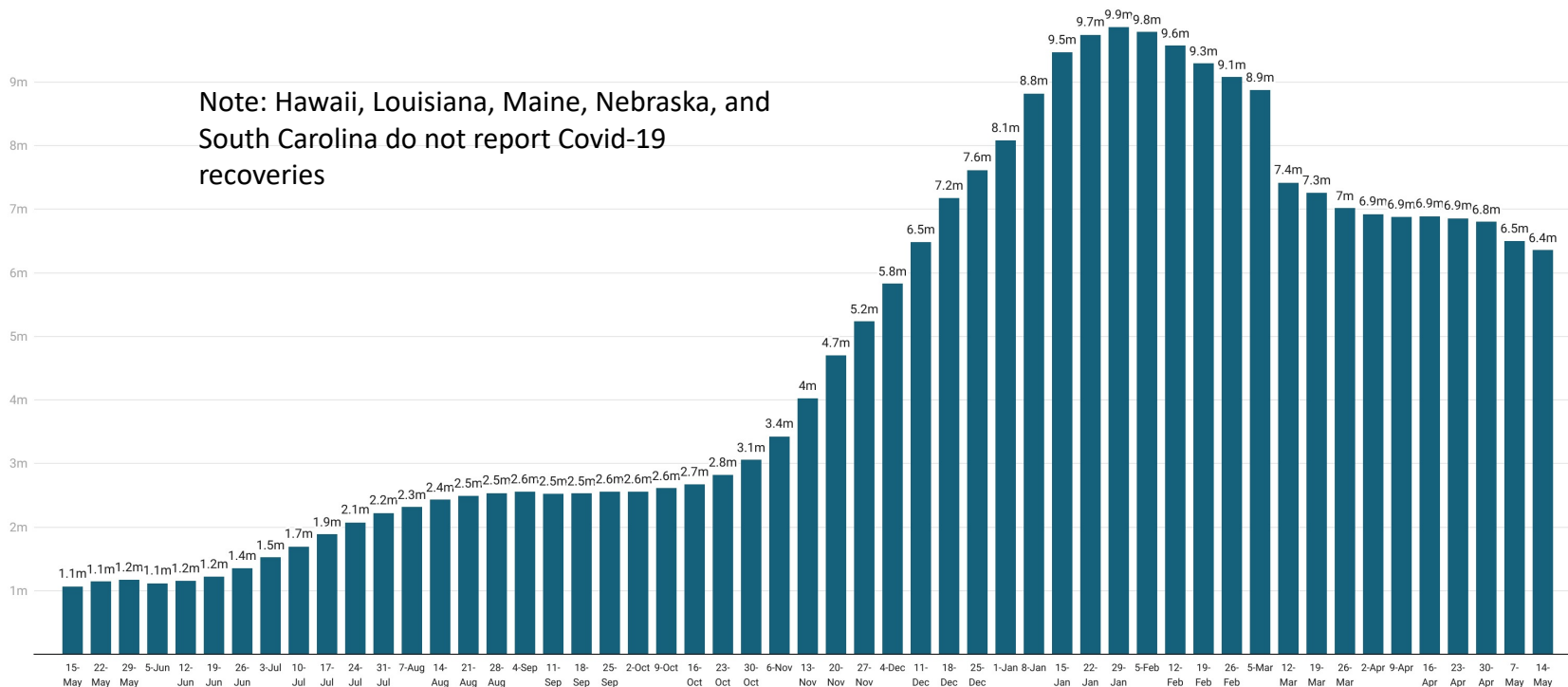


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 Hospital Occupancy

Covid-19 occupancy dropped last week to its lowest point in six months.

Covid-19 Occupancy - % of Inpatient Beds - United States

For the 7 days ending on date shown

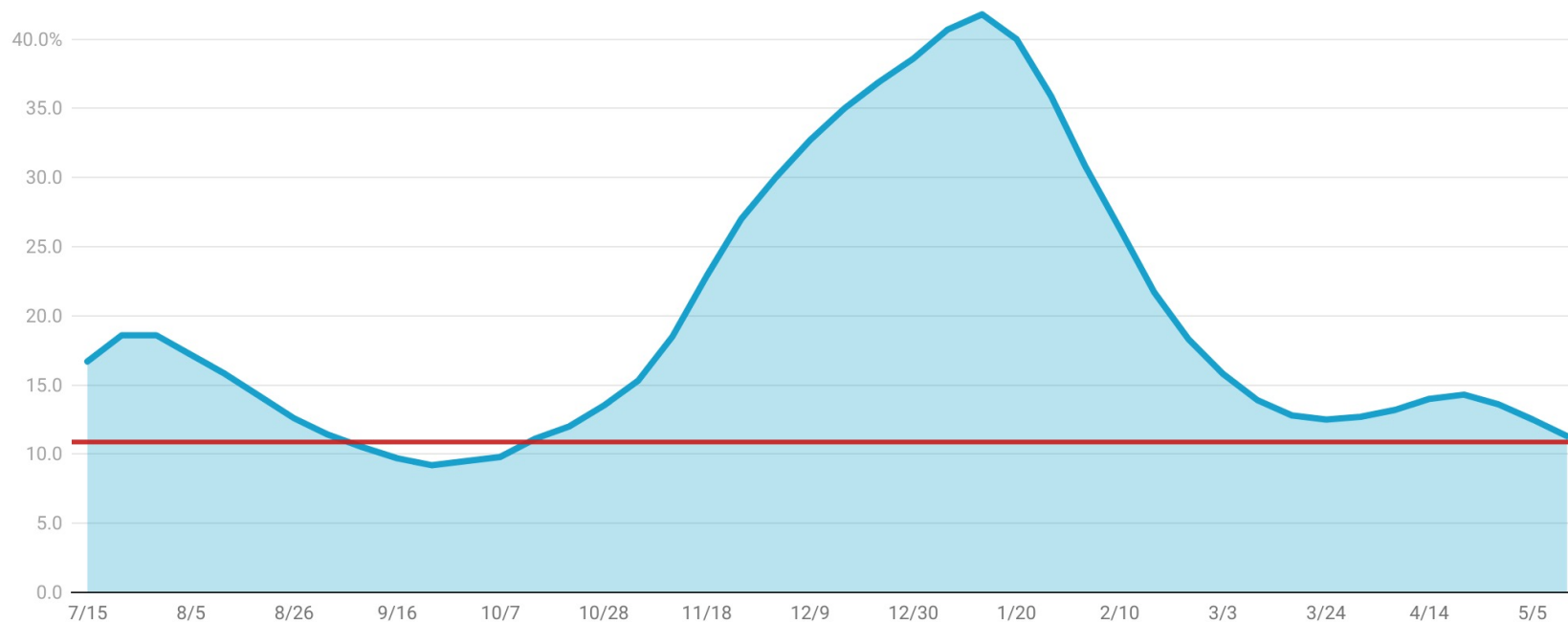


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper

Covid-19 Hospital Occupancy

Covid-19 “Vital Signs”

Maryland and Michigan are the only states where Covid-19 patients occupy one in every five inpatient beds.

Covid-19 Occupancy: % of Inpatient Beds By State

As of May 14

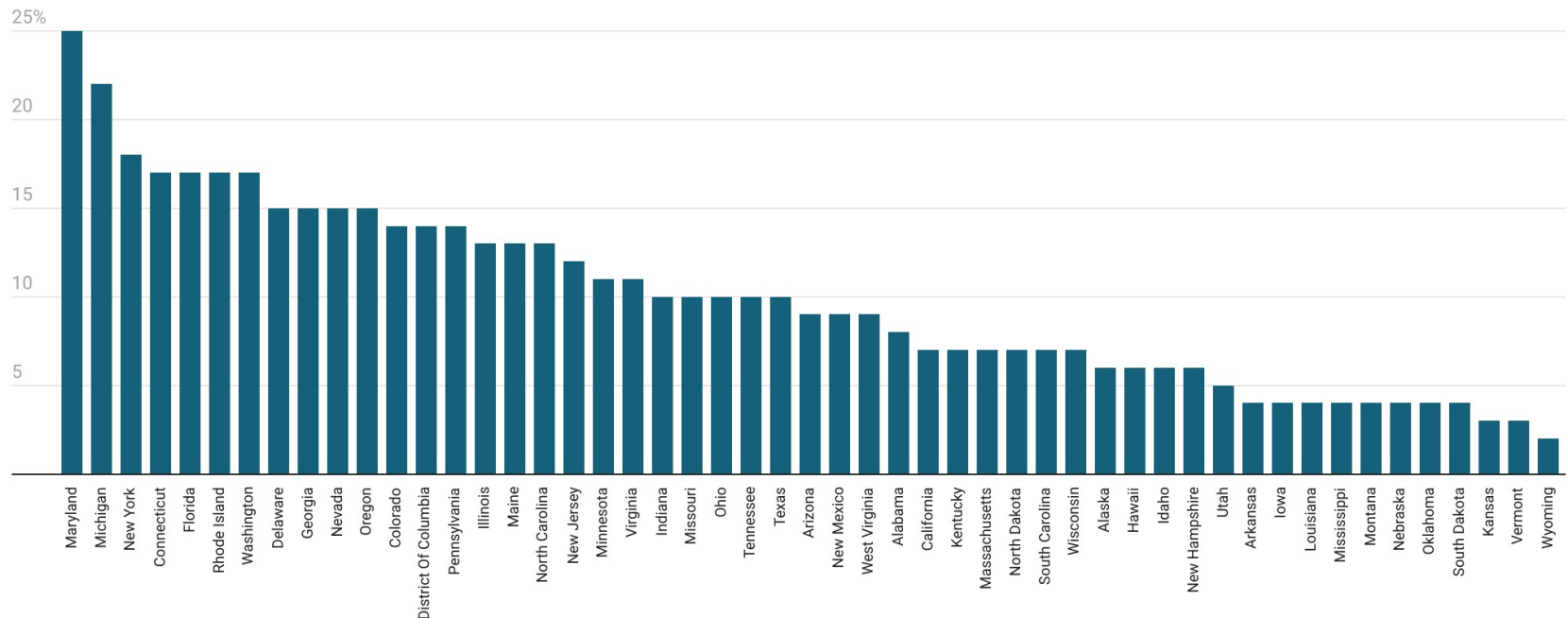


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper



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

Covid-19 "Vital Signs"

Covid-19 Hospitalizations By Age

Hospitalized Covid-19 patients have shifted younger since the beginning of the year, particularly to 18–49-year-olds. Responding to vaccinations efforts, the mix of senior citizens has fallen sharply.

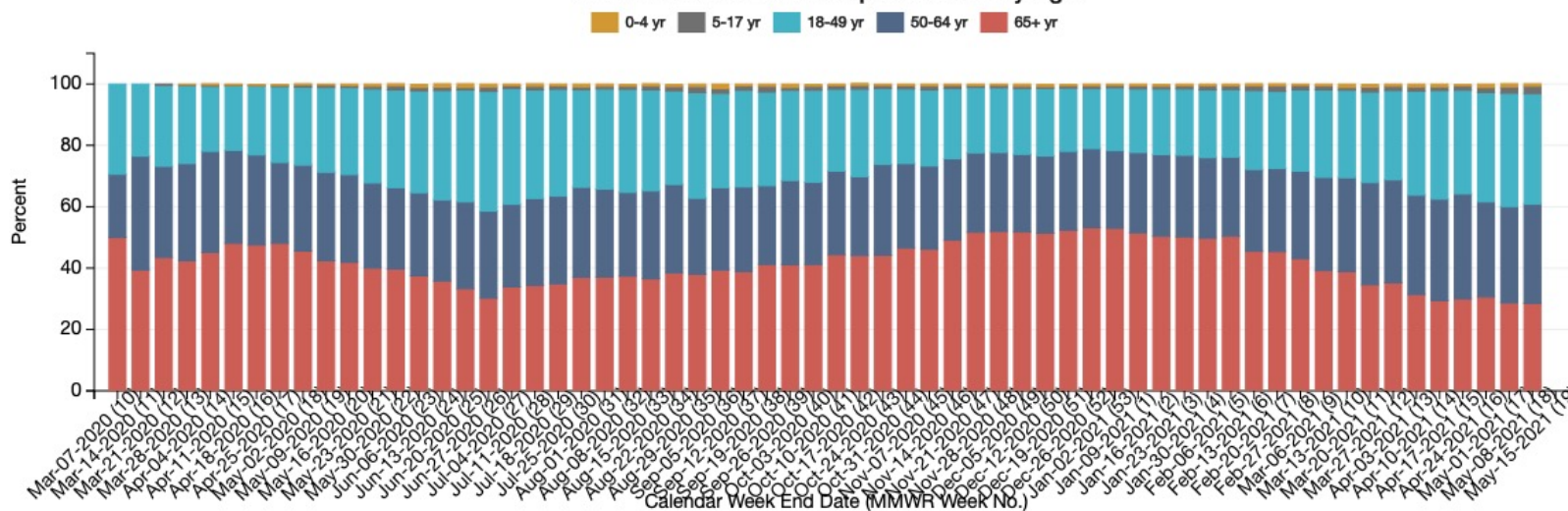
COVID-NET

A Weekly Summary of U.S. COVID-19 Hospitalization Data



Laboratory-Confirmed COVID-19-Associated Hospitalizations

Covid-19-associated Hospitalizations By Age

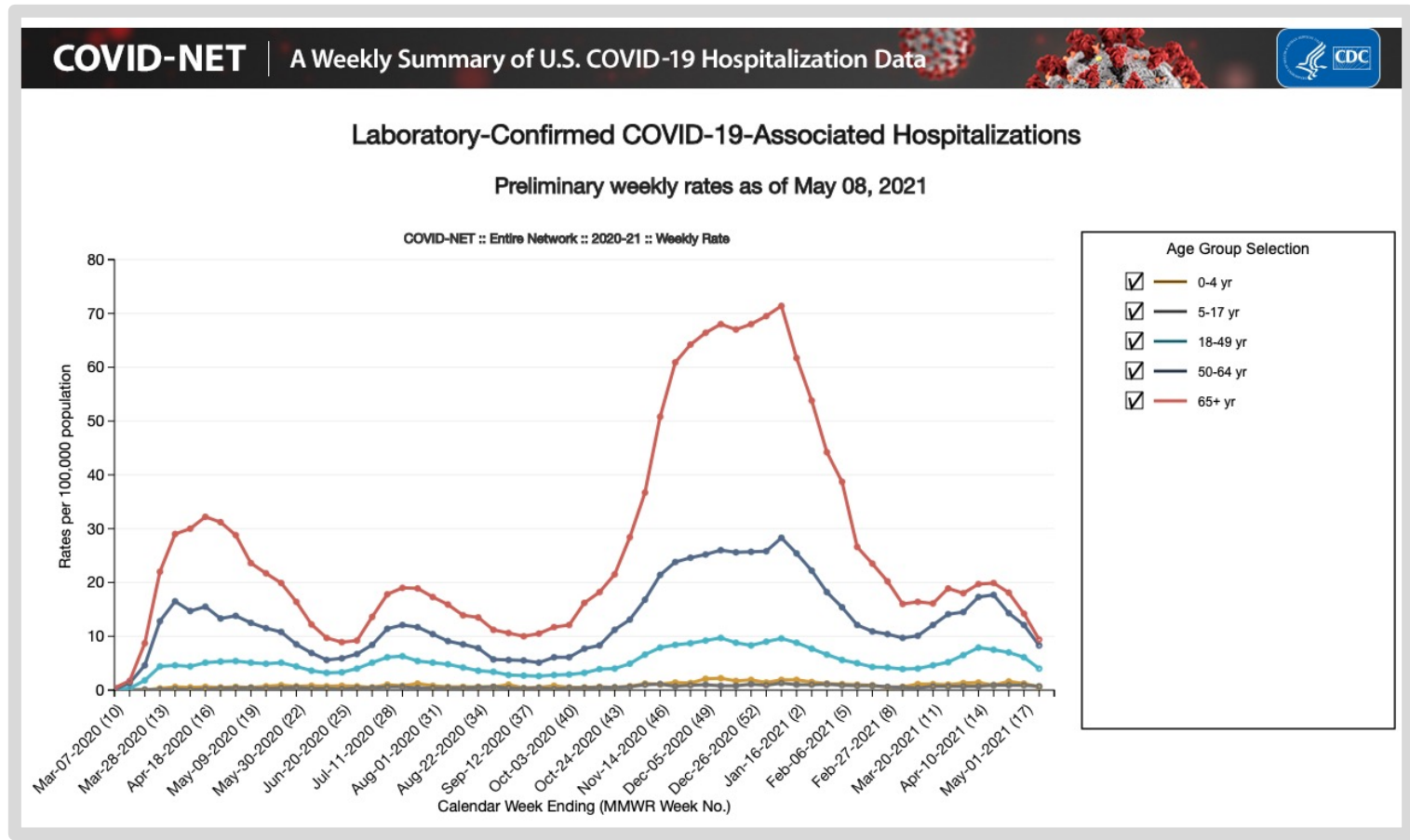


The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. As data are received each week, prior case counts and rates are updated accordingly.

Covid-19 "Vital Signs"

Covid-19 Hospitalizations Per Capita By Age

Covid-19 hospitalizations per capita have fallen across all age groups. The decline has been most notable among senior citizens.



Covid-19 "Vital Signs"

Deaths With Coronavirus

The weekly death rate is lower than all except two weeks in the past year.

Weekly Deaths - United States

For the 7 days ending on date shown

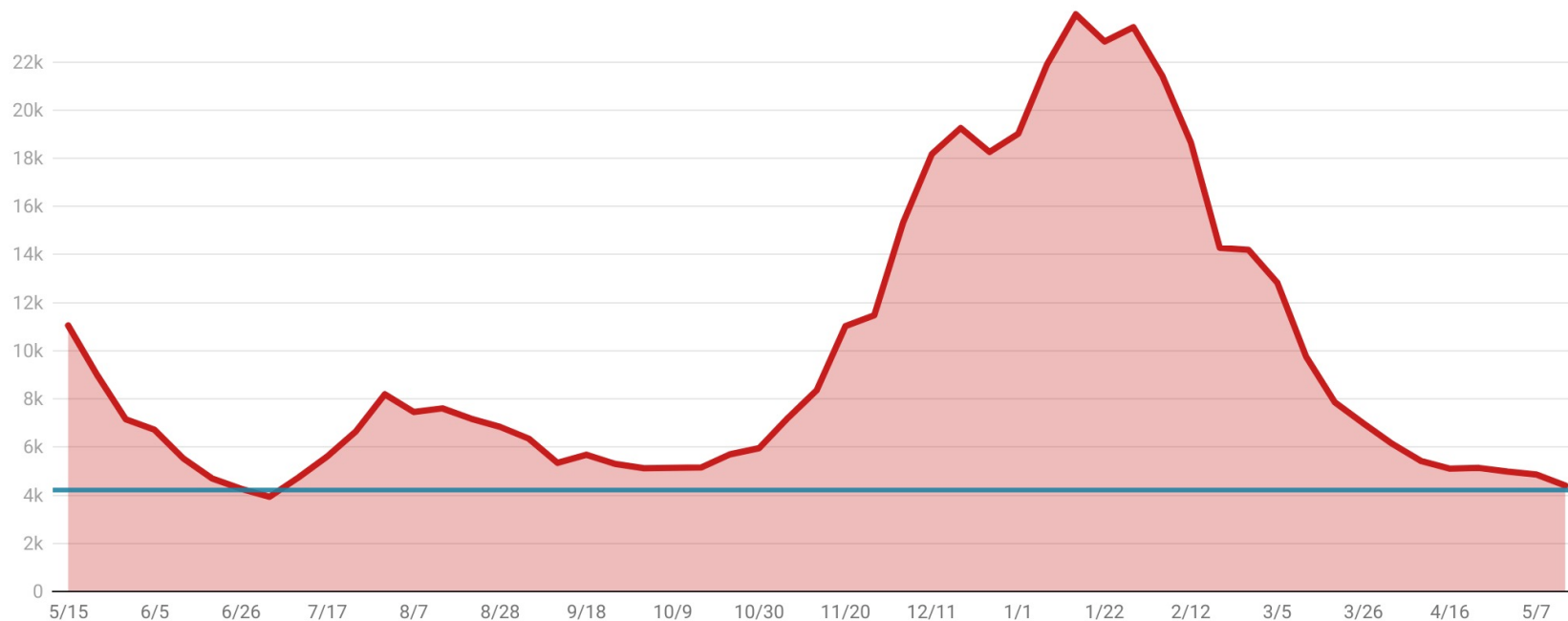


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

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
- 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>