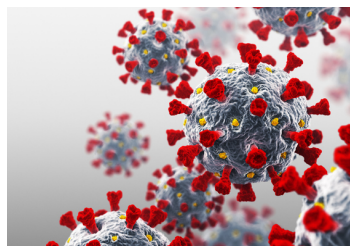


Covid-19 "Vital Signs"

Issue # 274

January 30, 2021



- Test volume declined for the second successive week, although the US tested more people than all but four other weeks during the pandemic. Nonetheless, **the test-positive rate declined for the third straight week. Last week's rate was lower than it was for any week since the beginning of November.**
- **The number of new cases fell for the third successive week, declining 35% during that span.** There were fewer new cases this past week than any week since November 6-13.
- Only six states reported more new cases this past week than the prior week; in each of these states, the week-over-week increase was fewer than 2,500 cases. **California detected 52,000 fewer new cases this past week than the preceding week.**
- **Covid-19 hospital occupancy plummeted this past week, with 19,000 fewer Covid-19 patients in the hospital yesterday than a week ago.** This occupancy is lower than it has been since December 11.
- **Covid-19 patients spent nearly 16,000 fewer days in the ICU last week than the prior week.** The weekly ICU census declined on two successive weeks and is now lower than any time since December 5-11.
- **The number of Covid-19 patient days on ventilators dropped by more than 5,000 week-over-week, the third successive week-over-week decline.** This weekly census was lower than it has been since December 26-January 1.
- The only vital sign that failed to improve, deaths with coronavirus, increased from last week's level. **Tragically, the US reported more deaths with coronavirus each of the past four weeks than during any other time of the pandemic.**
- **Vaccinations accelerated in the US last week, with 7.6 million Americans receiving a first dose and another 1.5 million receiving a second dose.** Thus far, 24.7 million Americans have received one dose, and another 4.3 million have received two doses.
- **An estimated 27.5% of Americans are immune to Covid-19,** based on the number already vaccinated, estimates of actual infections, and a presumed two-week lag from infections or vaccination to immunity.
- Through seventeen weeks, the 2020/2021 flu season has proven far milder than each of the past six seasons. By this point in the season, we should be nearing peak infections. Instead, flu visits are barely above levels seen during the non-peak season. At the comparable time during the 2019-20 and 2017-18 seasons, flu visits were 4.6x and 5.5x higher respectively than they were last week.

Covid-19 "Vital Signs"

Testing

Testing declined for the second successive week;

The test-positive rate improved for the third successive week, and was lower than any week since the first week of November

Weekly Tests - United States

For the 7 days ending on date shown

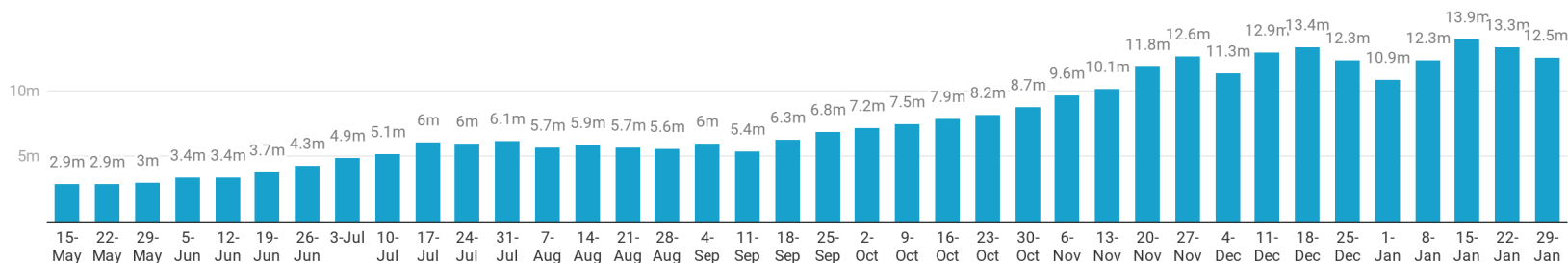


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Weekly Test-Positive% - United States

For the 7 days ending on date shown

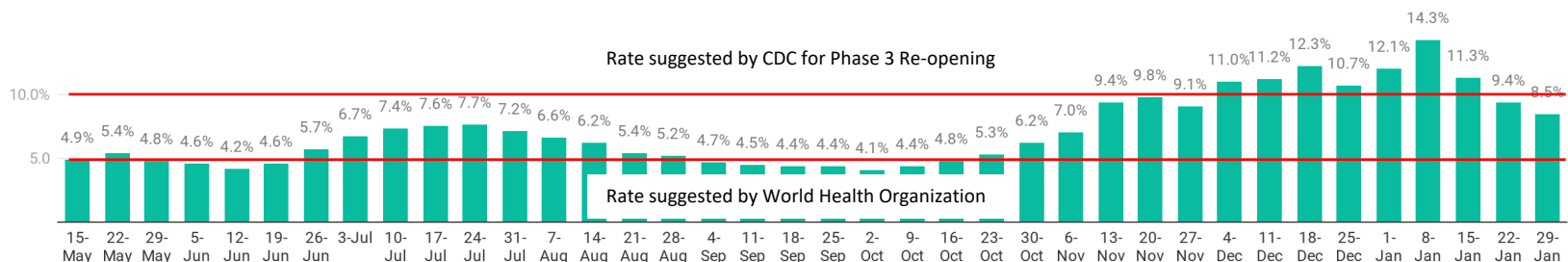


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking project • Created with Datawrapper

Newly Detected Cases

New cases dropped last week for the third successive week, and were lower than any week since November 7-13

Weekly New Detected Cases - United States

For the 7 days ending on date shown

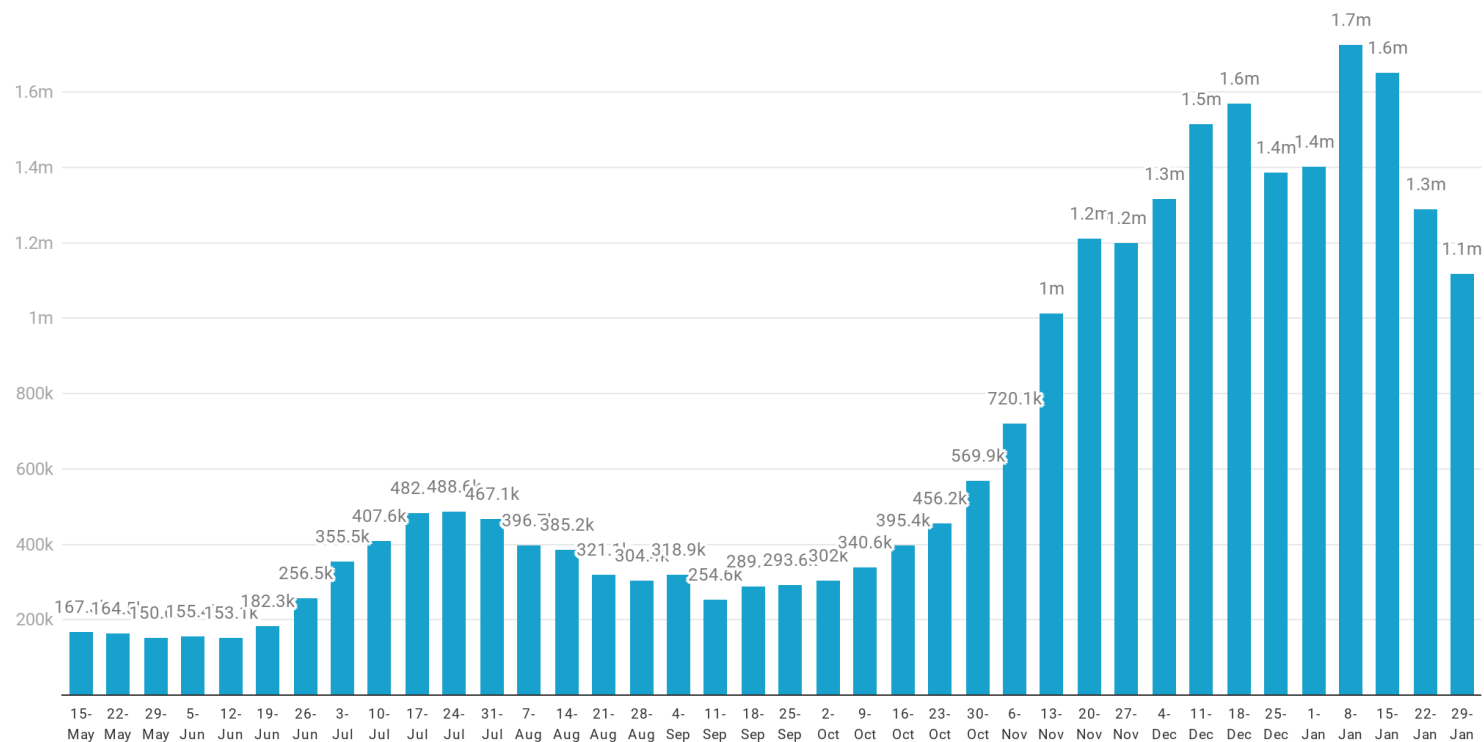


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Newly Detected Cases - By State

California was most-heavily impacted by newly detected cases over the past 7 days, followed in order by Texas, New York and Florida. Collectively, these states accounted for 39% of new cases in the US last week; California accounted for 13.5% of new cases

New Weekly Detected Cases - By State

January 23-29

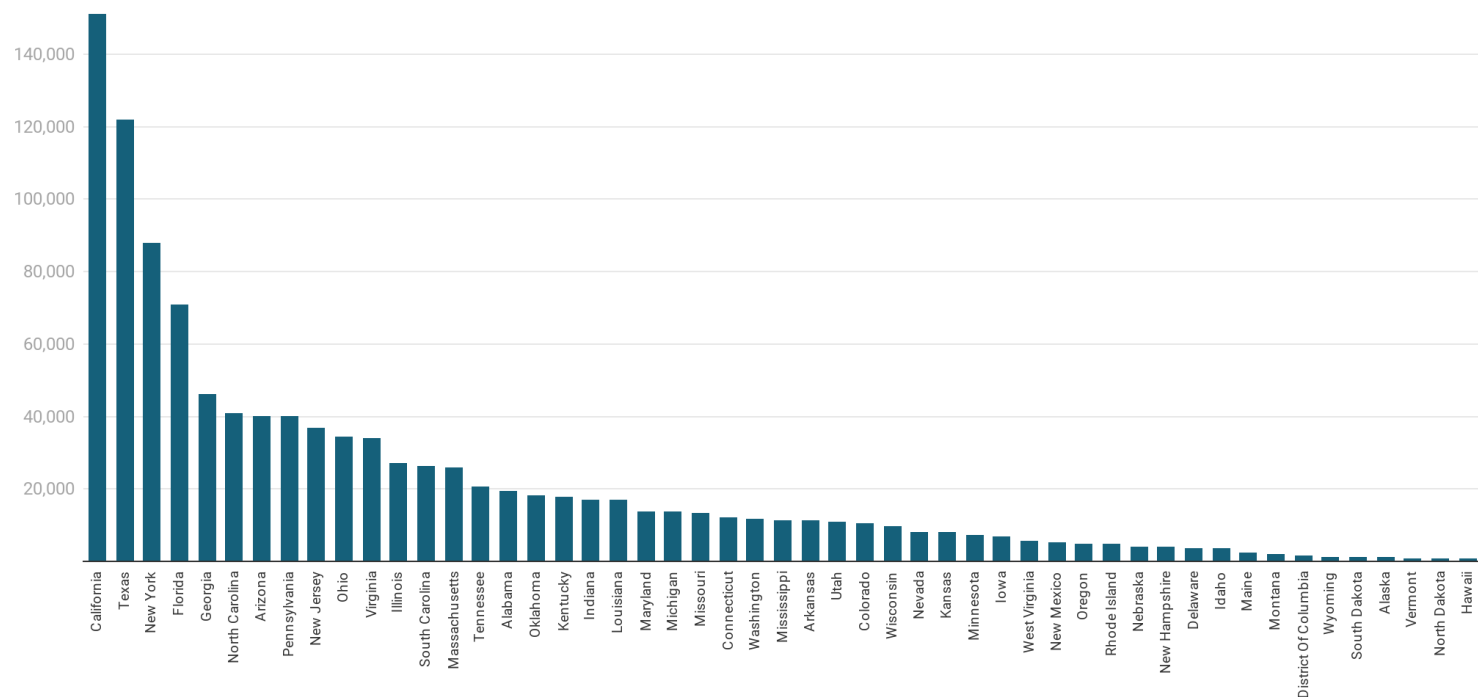


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Week-Over-Week Change in Newly Detected Cases

Only six states had more new cases the past week than the prior week – none increased by more than 2,600 cases. California had 52,000 fewer cases last week than the prior week

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

January 17-29 V. January 10-16

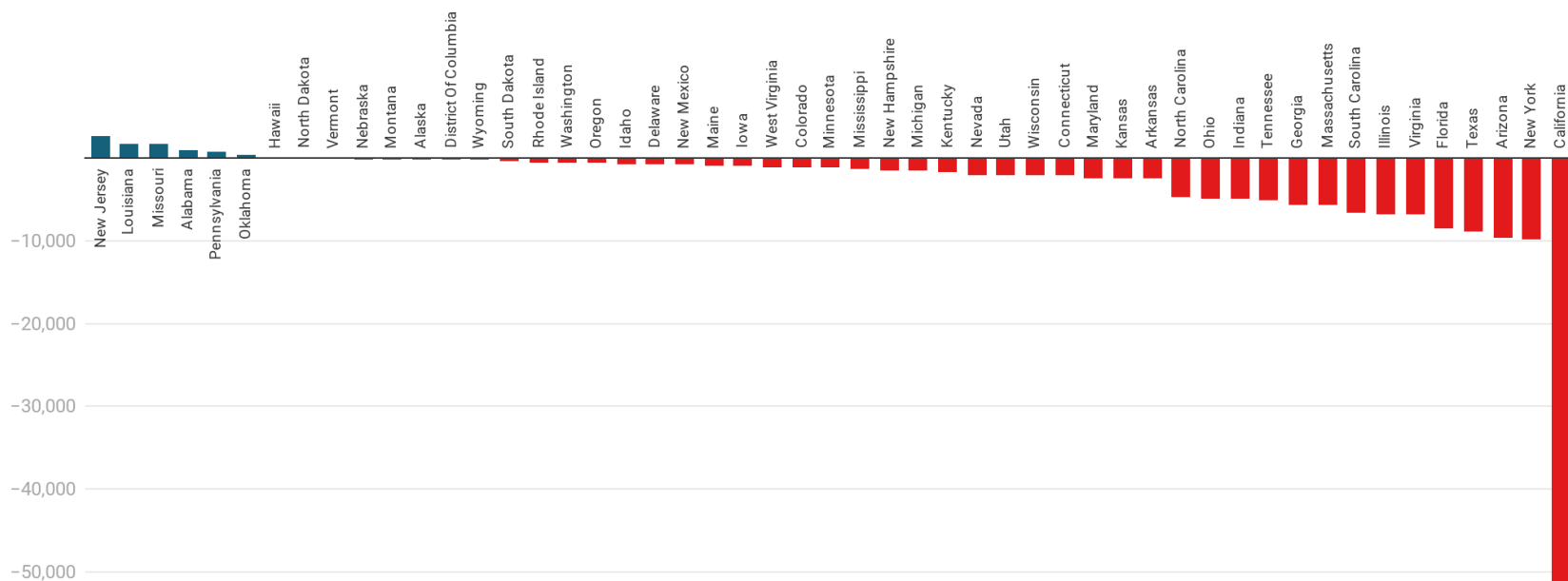


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Test Efficiency: Tests Per Case Detected

Test efficiency improved for the third successive week, as the test-positive rate improved and newly-detected cases fell. Last week's rate was better than on any week since October 31-November 6

Weekly Tests / Newly Detected Case - United States

For the 7 days ending on date shown

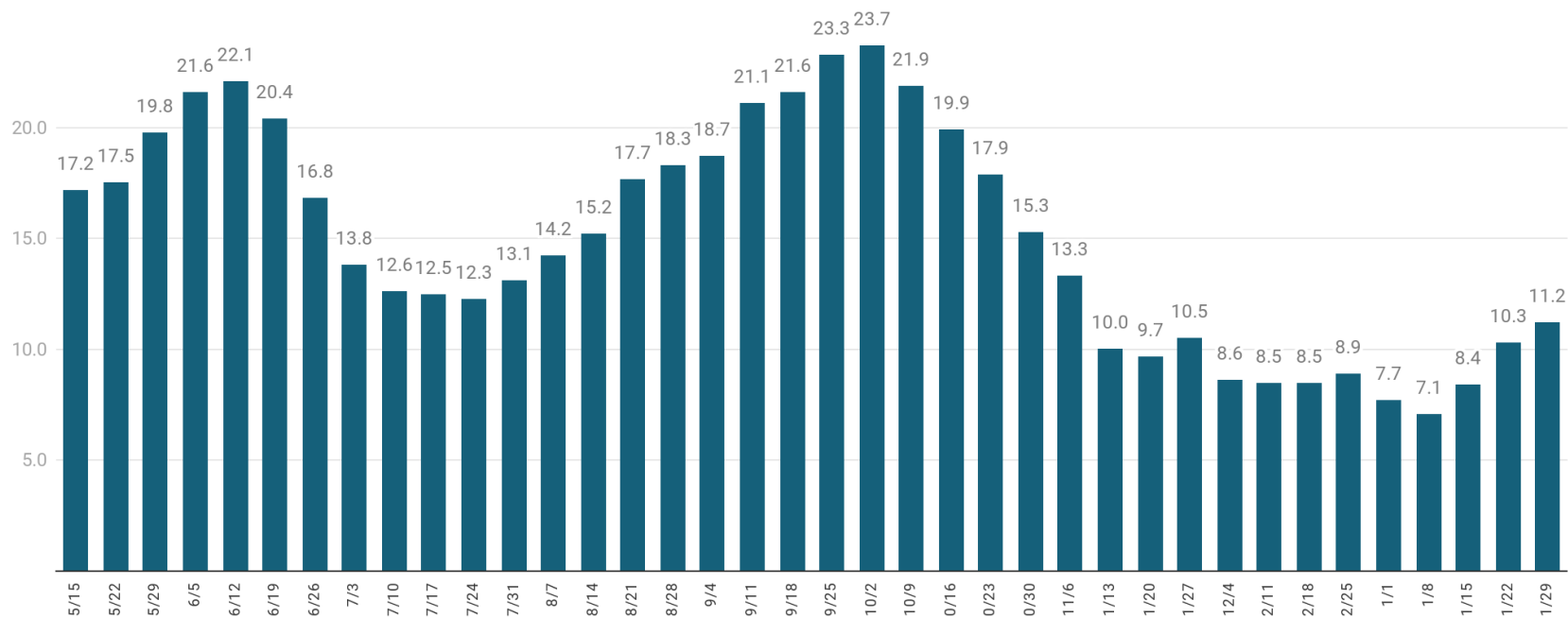


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Active Cases

There are an estimated 9.9 million people in the US currently dealing with Covid-19 symptoms (known, detected cases)

Current Active Cases - United States

For the 7 days ending on date shown

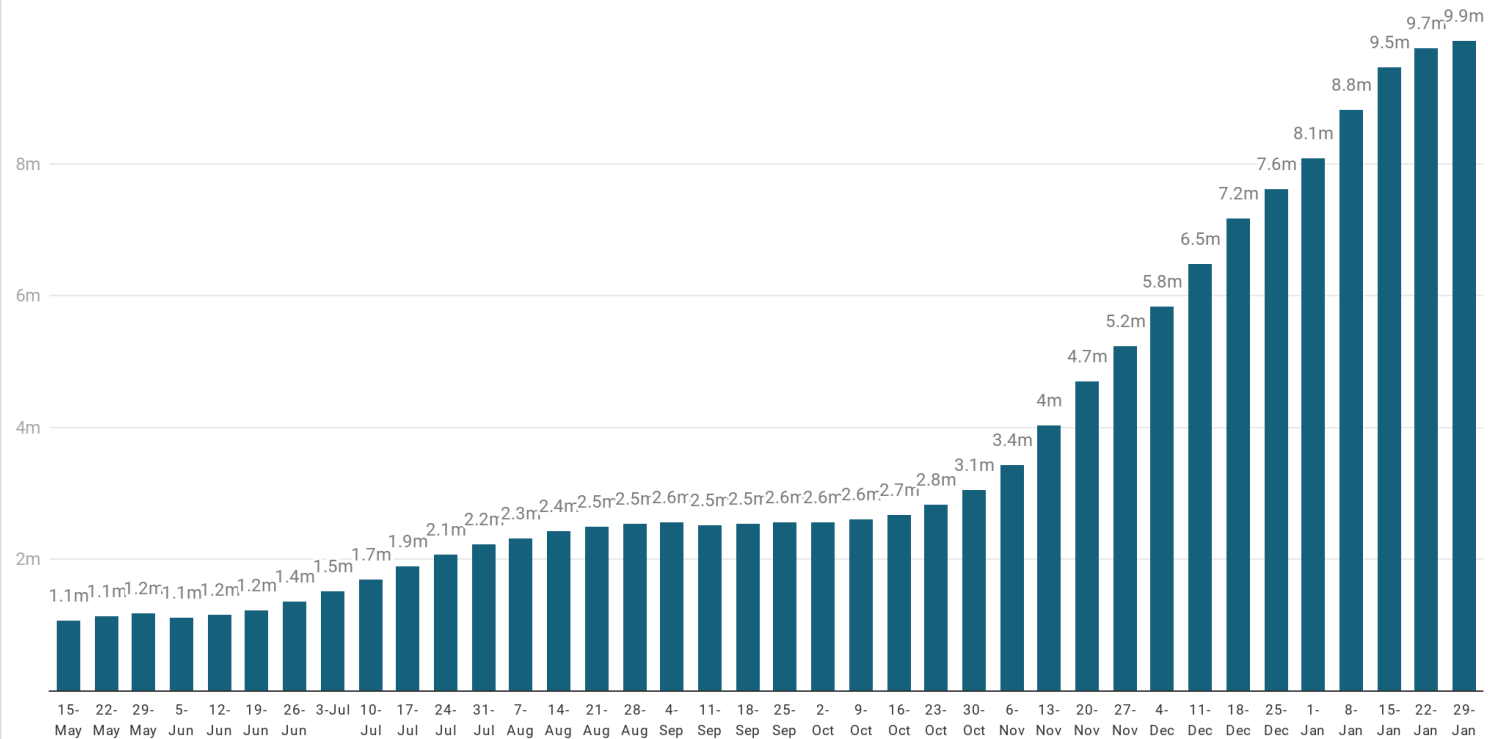


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

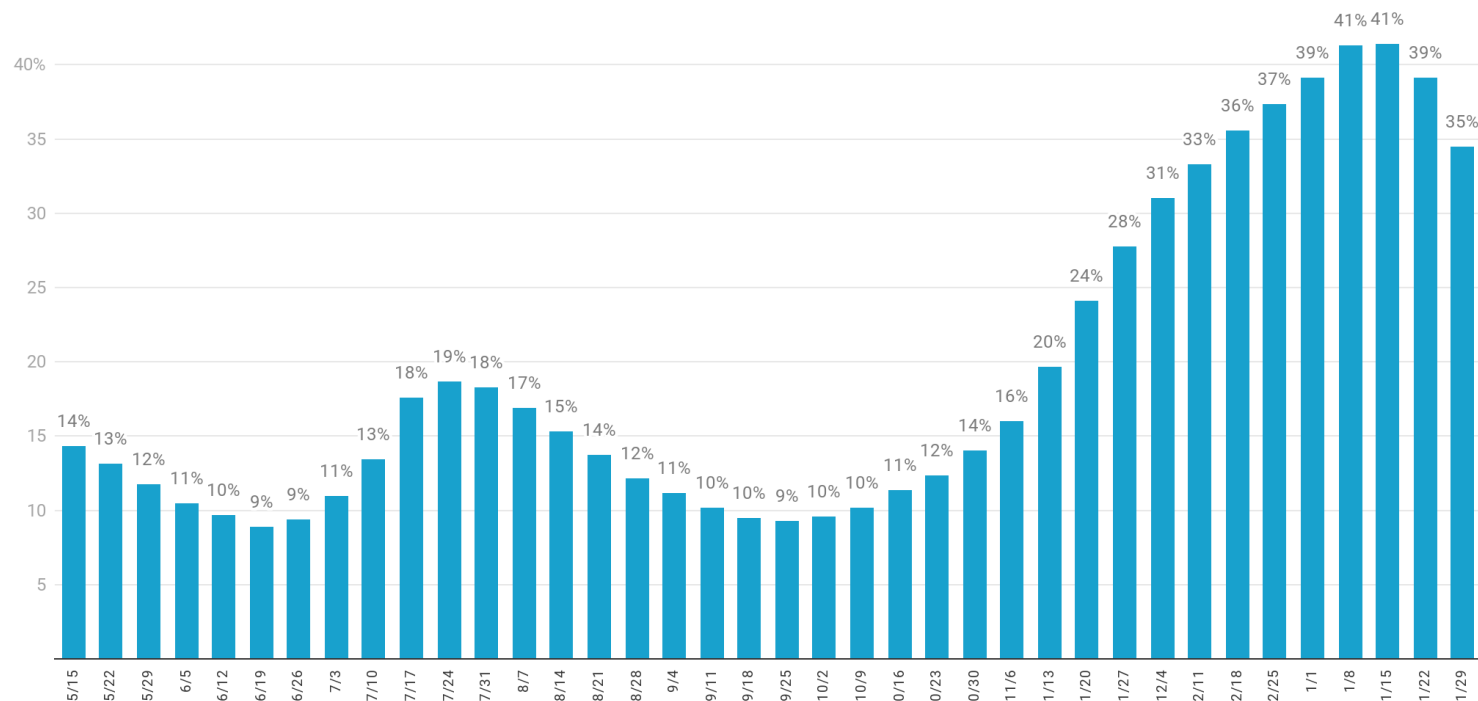
Covid-19 "Vital Signs"

Covid-19 Hospital Occupancy

The number of Covid-19 patients plummeted last week. Covid-19 occupancy is lower than any time since December 11

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: The Atlantic's Covid Tracking Project • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Patient Days / 100 New Cases

The ratio of patient days per new case increased again last week. Given the lag from new case detection to hospital discharge, we should expect Covid-19 census to decline further in coming weeks

Covid-19 Inpatient Days / 100 New Cases

For the 7 days ending on the date shown

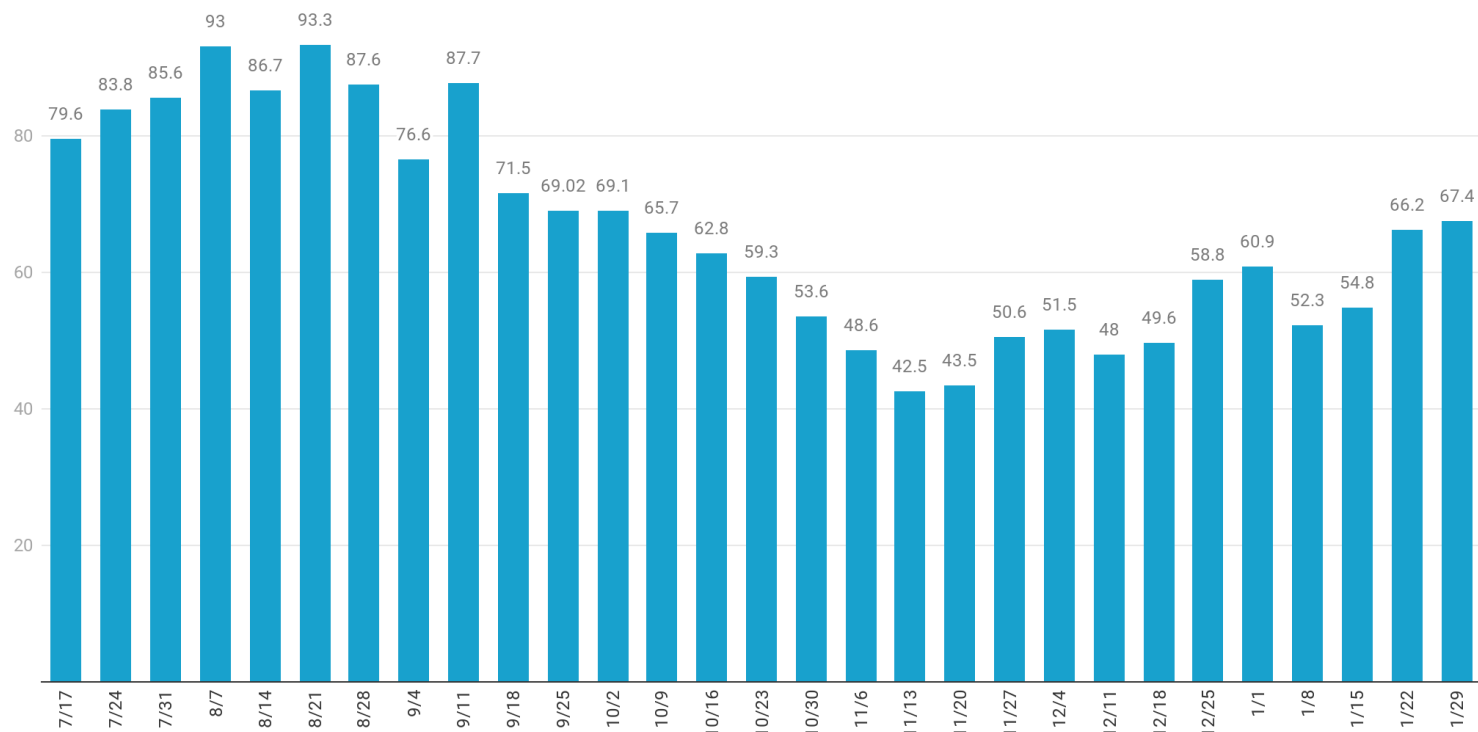


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

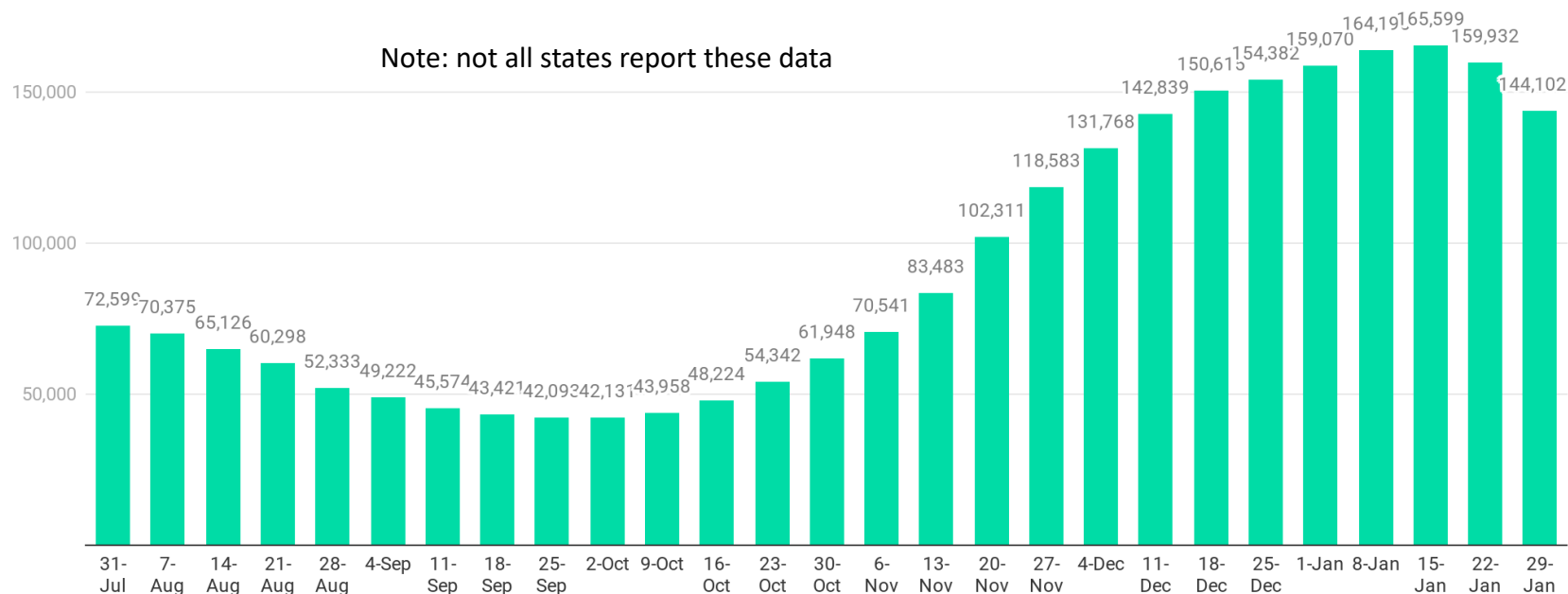
Covid-19 ICU Patient Days

Covid-19 patients spent nearly 16,000 fewer days in the ICU last week than the prior week, the second successive weekly decline. There were fewer Covid-19 patients in the ICU last week than any week since December 5-11

Weekly ICU Covid-19 Census - United States

For the 7 days ending on date shown

Note: not all states report these data



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

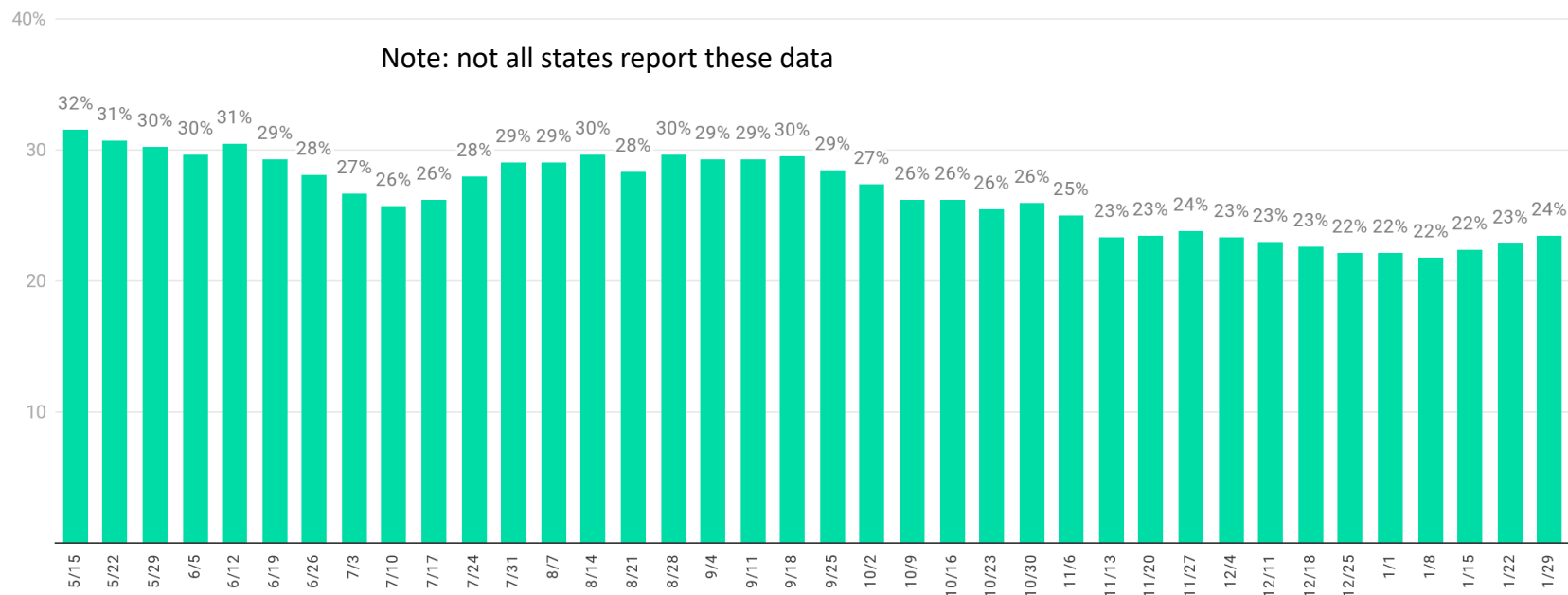
Covid-19 "Vital Signs"

Mix of Covid-19 Patients: % in ICU

The % of Covid-19 patients requiring intensive care last week increased slightly last week

% 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

Covid-19 "Vital Signs"

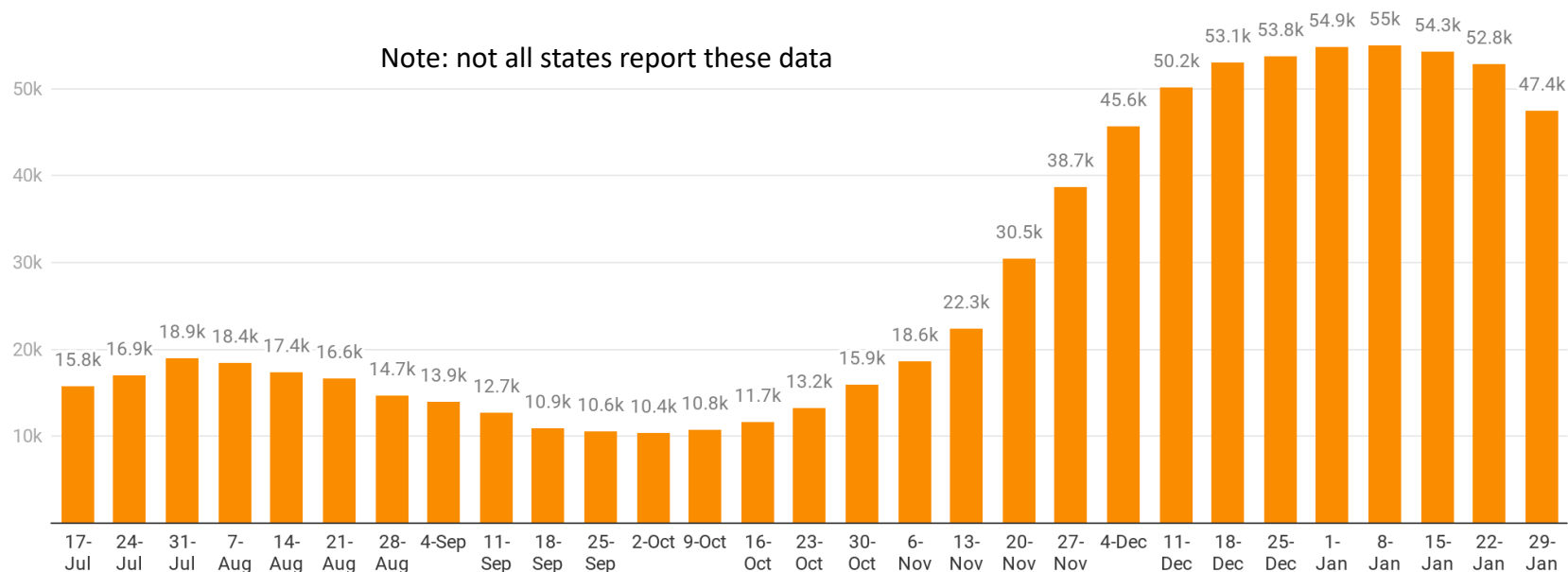
Covid-19 Ventilator Days

The number of days that Covid-19 patients spent on ventilators dropped for the third successive week. There were 7,000 fewer Covid-19 ventilator days last week than the week of December 26-January 1

Ventilator Days COVID-19 - United States

For the 7 days ending on date shown

Note: not all states report these data



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

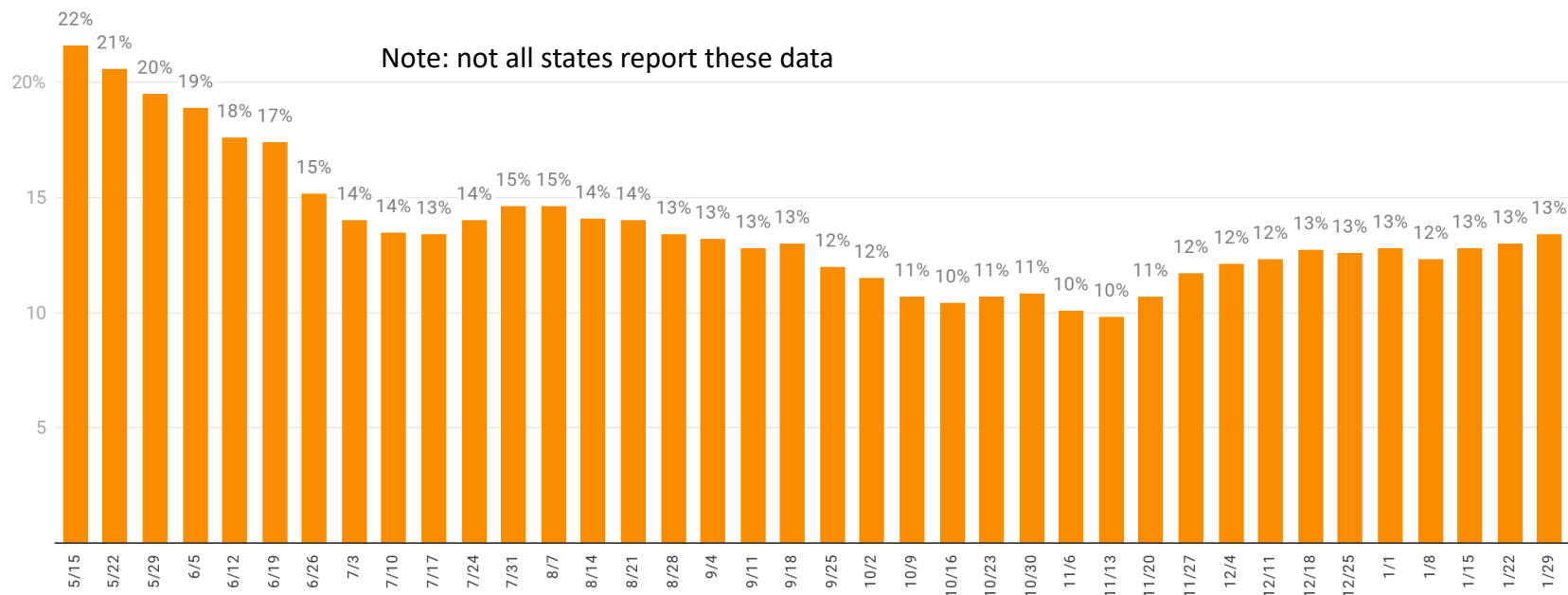
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Mix of Covid-19 Patients: % on Ventilators

The % of Covid-19 patients requiring ventilator care was marginally higher than in recent weeks

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

Covid-19 "Vital Signs"

Deaths With Coronavirus

Tragically, too many people died with coronavirus last week. These were the second most deaths reported in a week since the pandemic started

Weekly Deaths - United States

For the 7 days ending on date shown

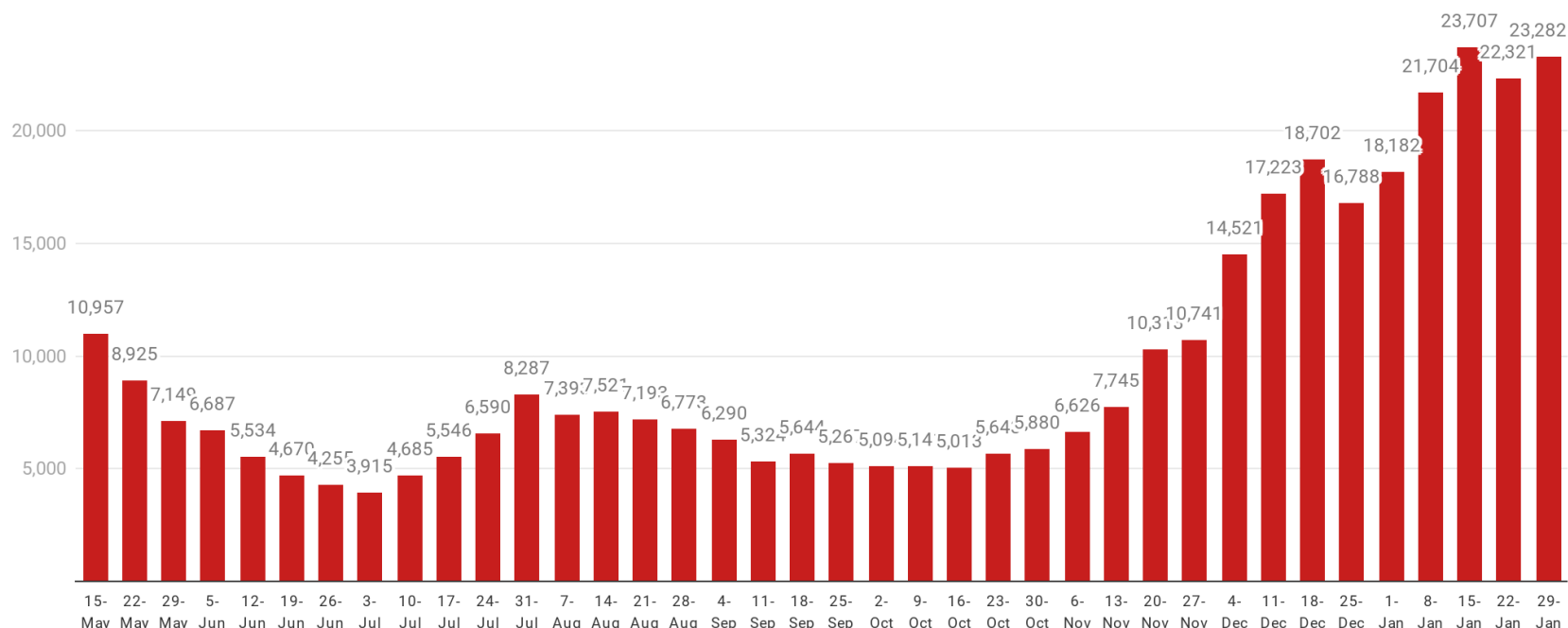


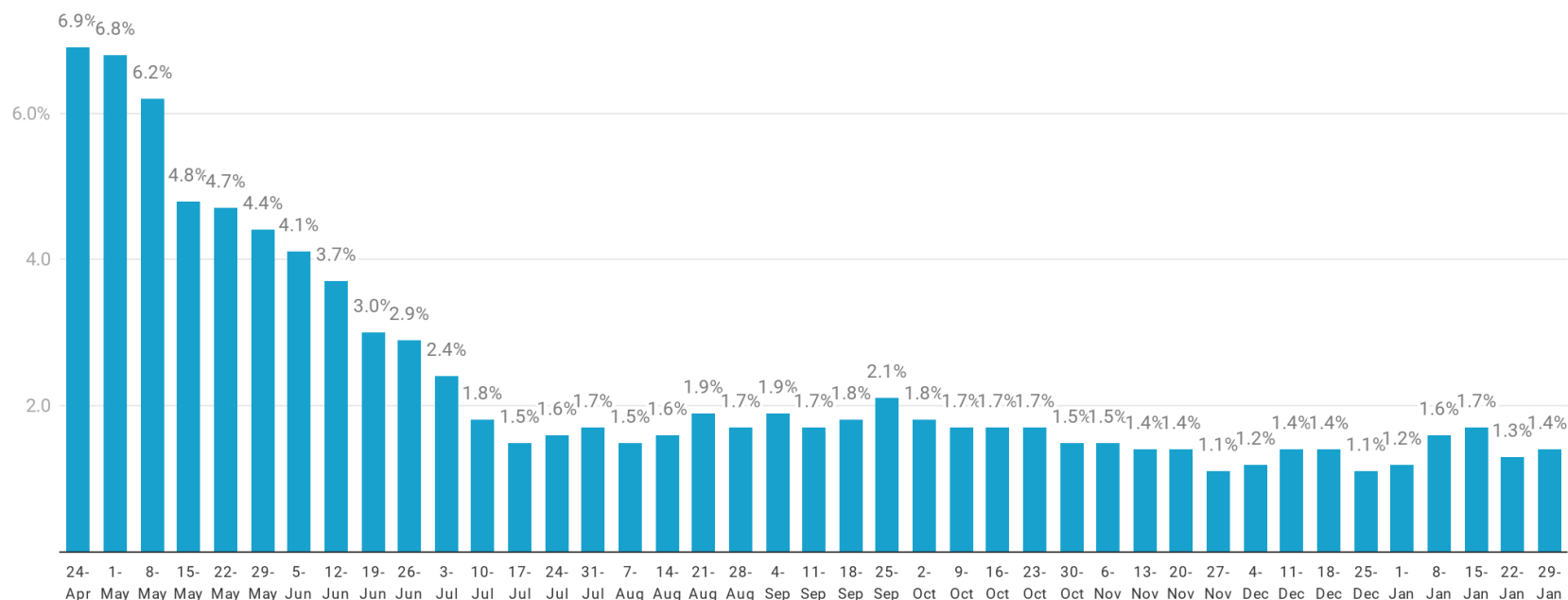
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Case Fatality Rate: 2-Week Lag From Case Detection

The case fatality rate increased this week; nonetheless, this rate remains lower than it has been most weeks since the pandemic began

Case Fatality Rate (2-Week Case Lag) - United States

For the 7 days ending on date shown



Deaths : New Cases, 2 week lag

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

Covid-19 "Vital Signs"

Vaccination and Immunity Status - US

Vaccinations accelerated last week, with an average of more than 1 million first doses per day. 4.3 million Americans have received second doses, up from 2.8 million last week. Immunity is increasing slowly, though to-date it is mostly from infections not vaccinations

Covid-19 Vaccinations - US

As of the date shown

■ First Dose ■ Second Dose

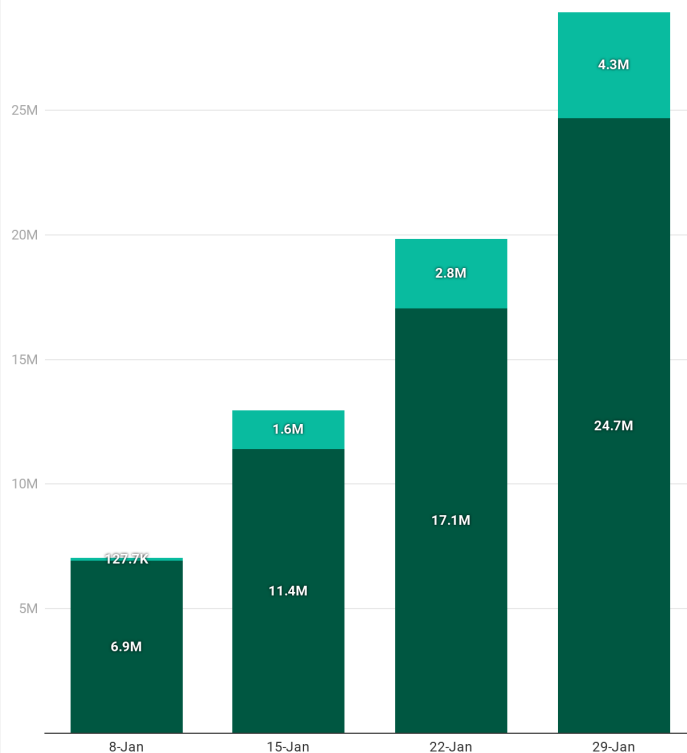
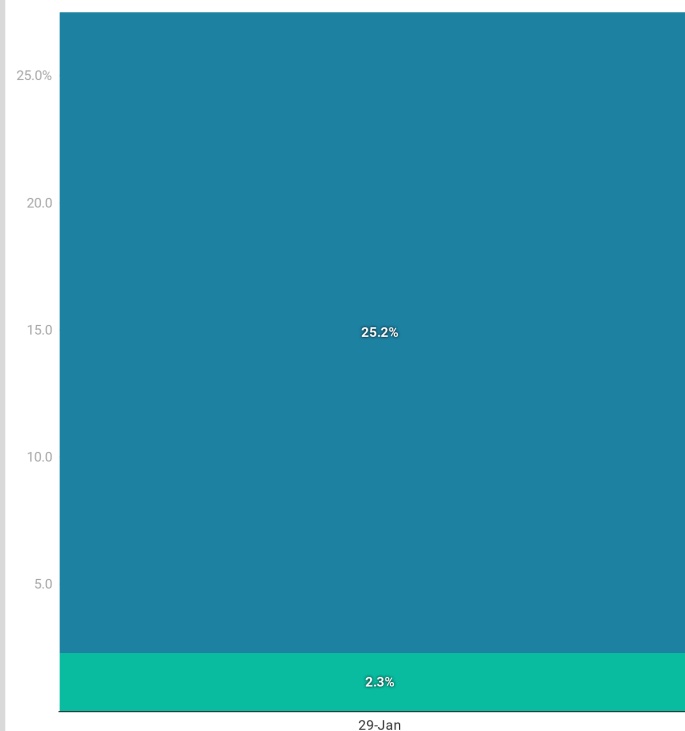


Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

Estimated % Immunity - US

Based on Vaccination Rate and Estimated True Infections (Gu Model)

■ Via Vaccination ■ Via Infection



<https://covid19-projections.com>

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

% of Visits Relating to Influenza

Seventeen weeks into the 2020/21 flu season, we are experiencing a milder season than in each of the past 5 years; Visits during the comparable week last year and during the 2017-2018 seasons were 4.6x and 5.5x higher respectively than this year

% of Visits For Influenza-Like Illnesses, National Summary

By Week & Flu Season

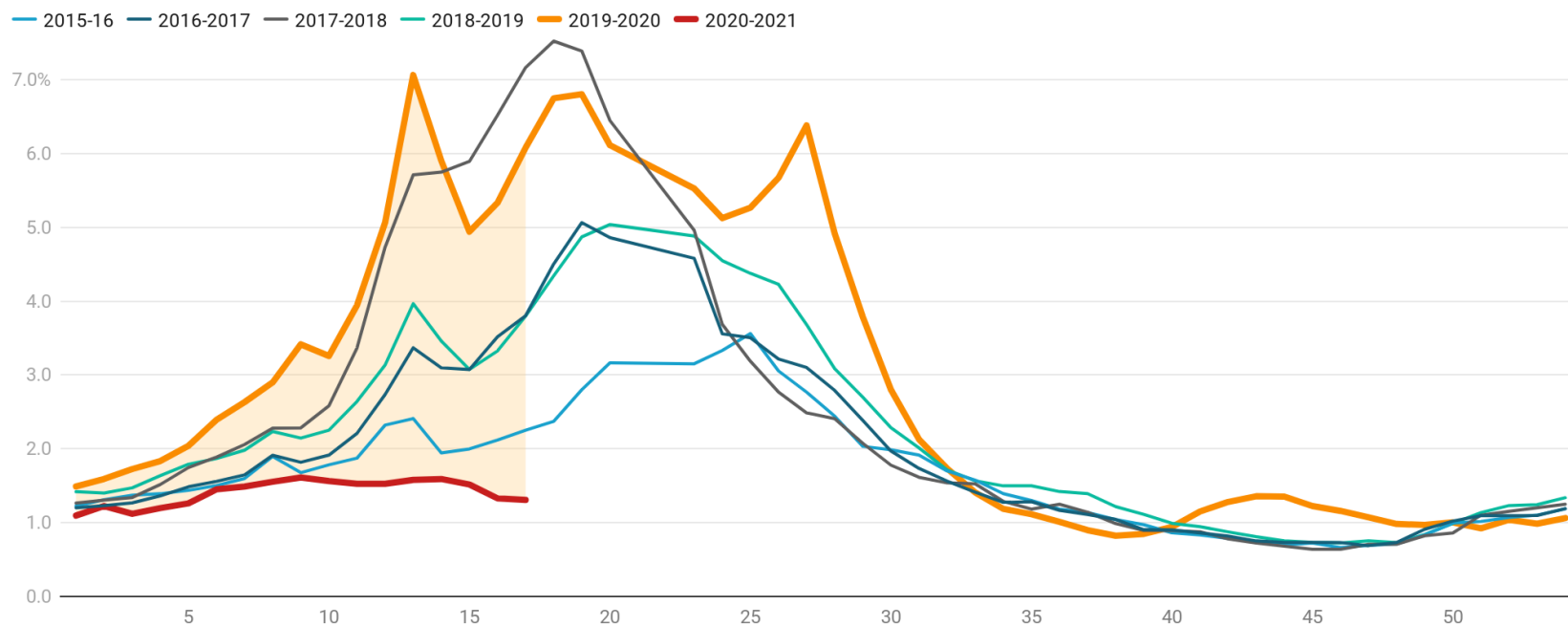


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper

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 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>
- Covid-19 Forecast Hub, <https://viz.covid19forecasthub.org>
- Oliver Wyman Pandemic Navigator, <https://pandemicnavigator.oliverwyman.com/forecast?mode=country®ion=United%20States&panel=mortality>
- [Rt.live](https://rt.live)
- 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=Z0b6TmHW>