

Covid-19 "Vital Signs"

Issue # 288

February 20, 2021

Covid-19 "Vital Signs"

Vaccination and Immunity Status - US

Vaccinations slowed this week, likely due to the widespread snowstorms and deep-freeze in Texas

Estimated immunity neared one-third of the US population, still mostly coming from a prior infection

Covid-19 Vaccinations - US

For the week shown

■ First Dose ■ Second Dose

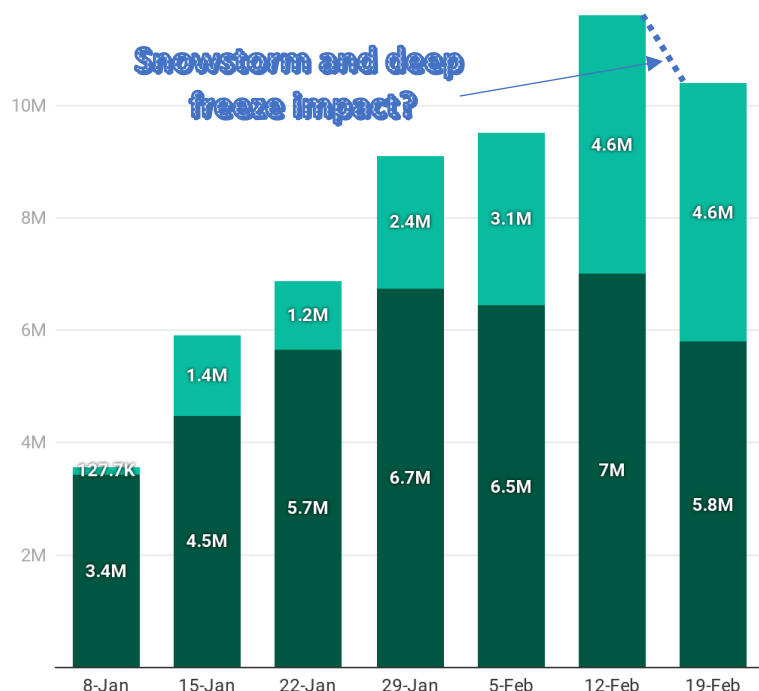
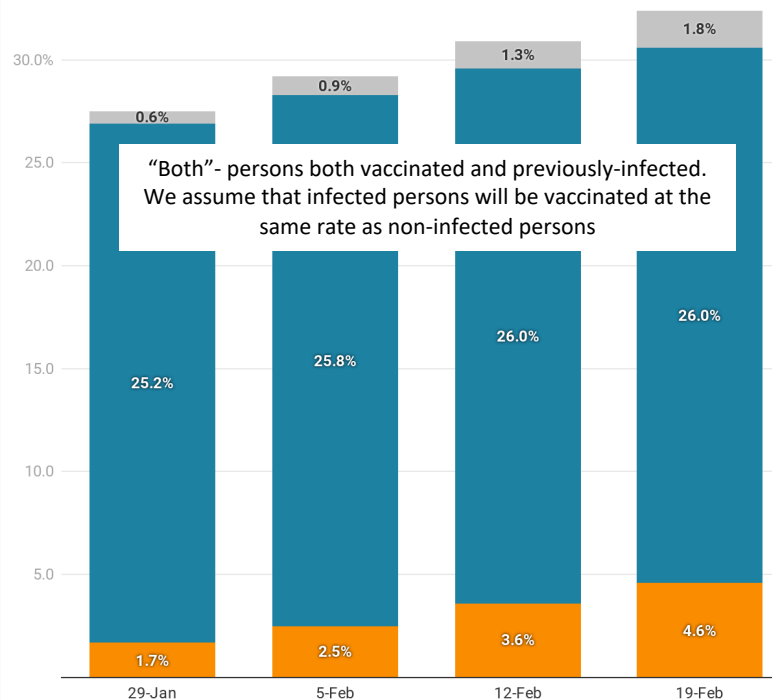


Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

Estimated % Immunity - US

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

■ Via Vaccination ■ Via Infection ■ Via Both



<https://covid19-projections.com>

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

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Covid-19 Testing

Testing declined for the fifth straight week, suggesting that fewer people are concerned about a recent exposure. Test-positivity met the World Health Organization's guidance – for the first time since mid-October.

Weekly Tests - United States

For the 7 days ending on date shown

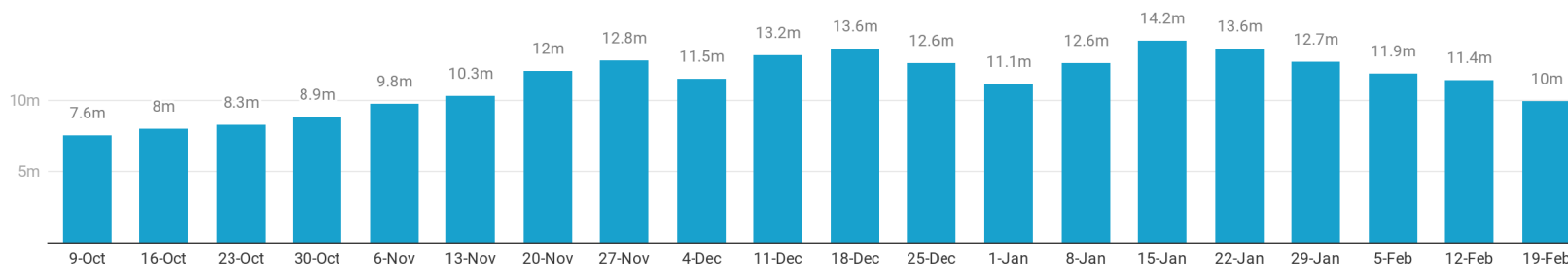


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Weekly Test-Positive% - United States

For the 7 days ending on date shown

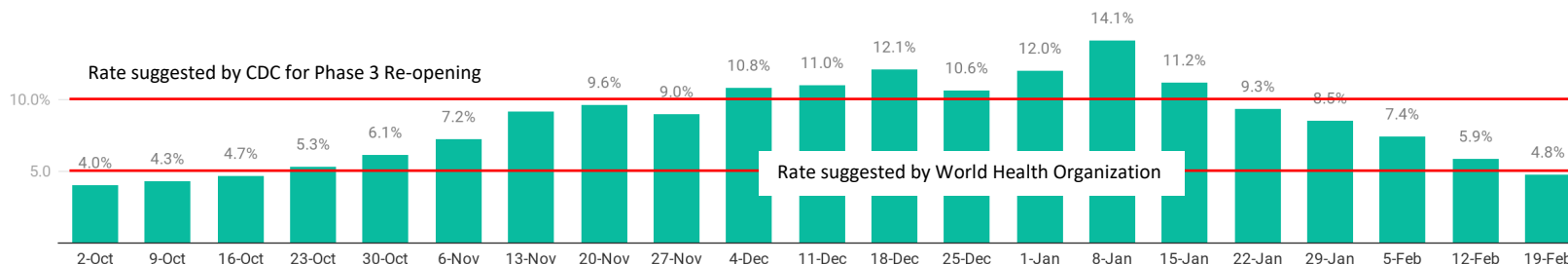


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking project • Created with Datawrapper

Newly Detected Cases

New cases dropped for the sixth successive week, plunging to just more than one-third of the early-January peak. We are seeing fewer new cases now than any time since mid-October.

Weekly New Detected Cases - United States

For the 7 days ending on date shown

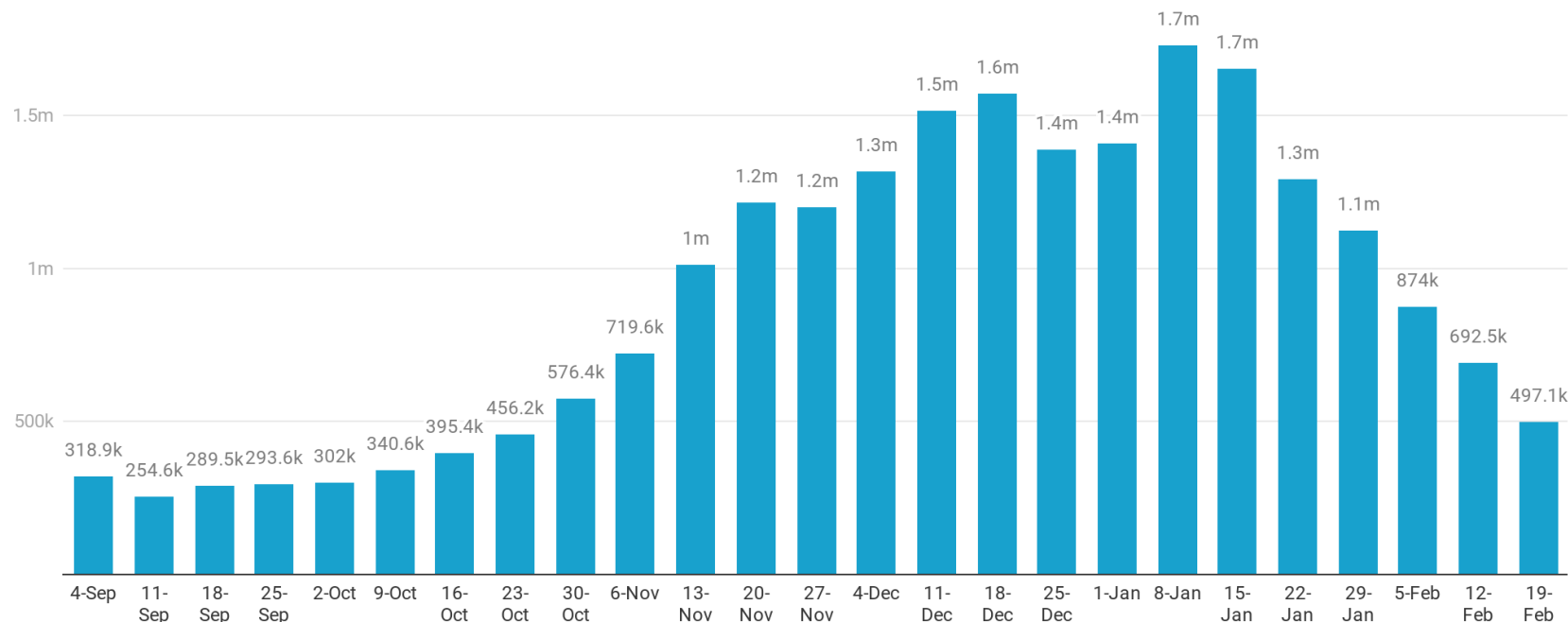


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Newly Detected Cases - By State

California, Florida, New York and Texas accounted for 35% of all new cases in the US over the past seven days.

New Weekly Detected Cases - By State

February 13 - 19

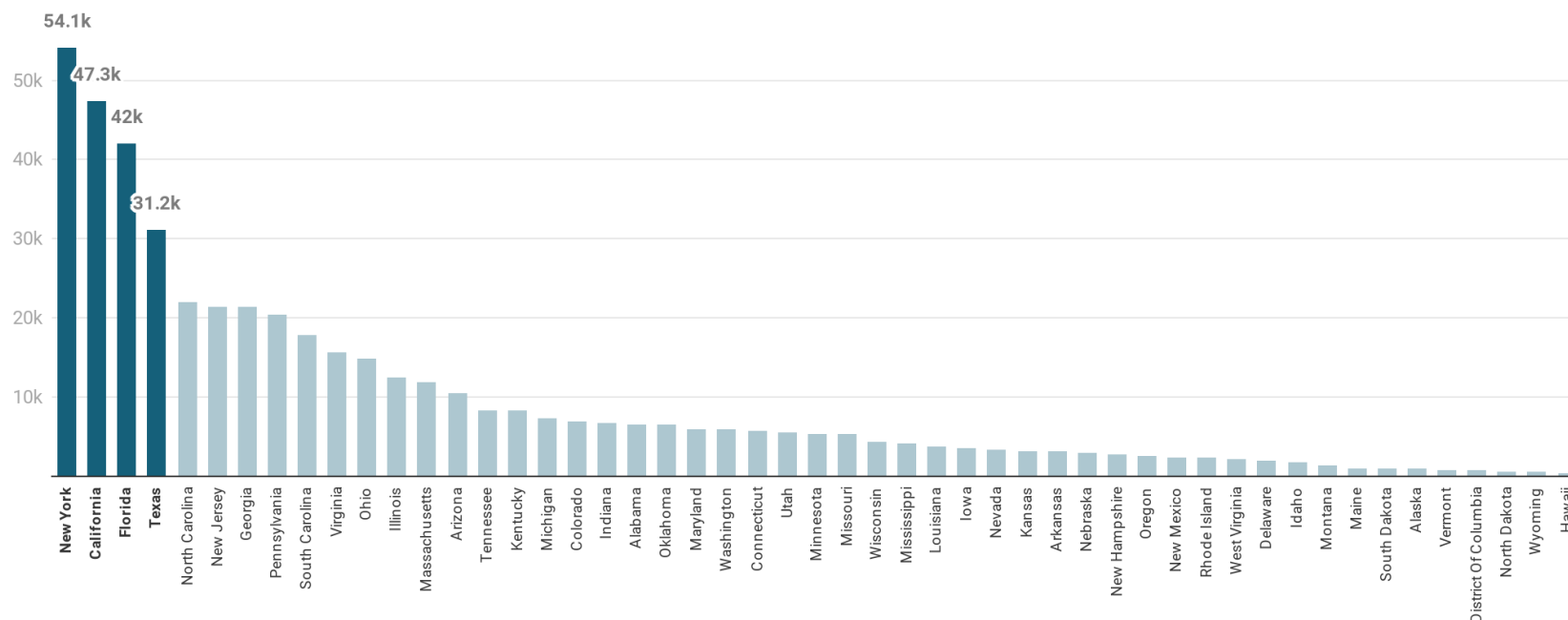


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

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Week-Over-Week Change in Newly Detected Cases

Texas detected 31,200 fewer new cases last week than the week prior and California, 27,900 fewer.

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

February 13-19 v. February 6-12

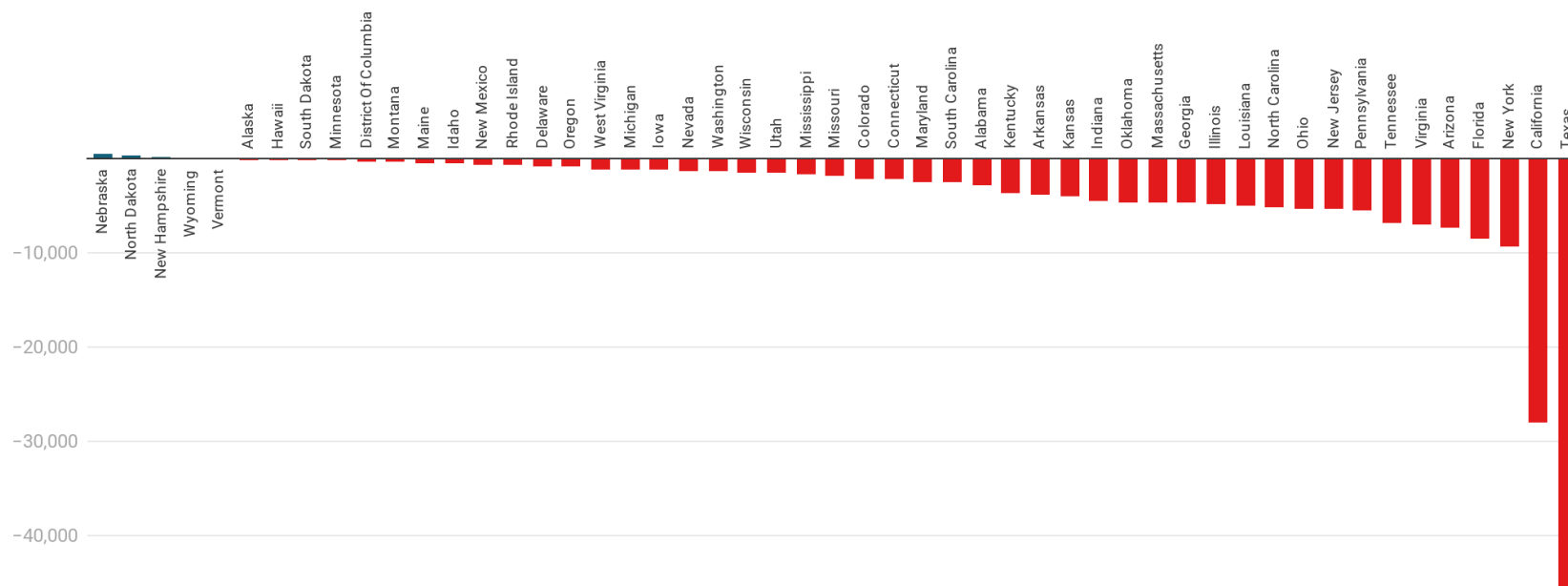


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Estimated Actual Infections – Yale/Harvard Model

Estimated infections dropped for the sixth successive week, plummeting by 75% in the time. There were fewer estimated infections last week than any week since early October

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](#)

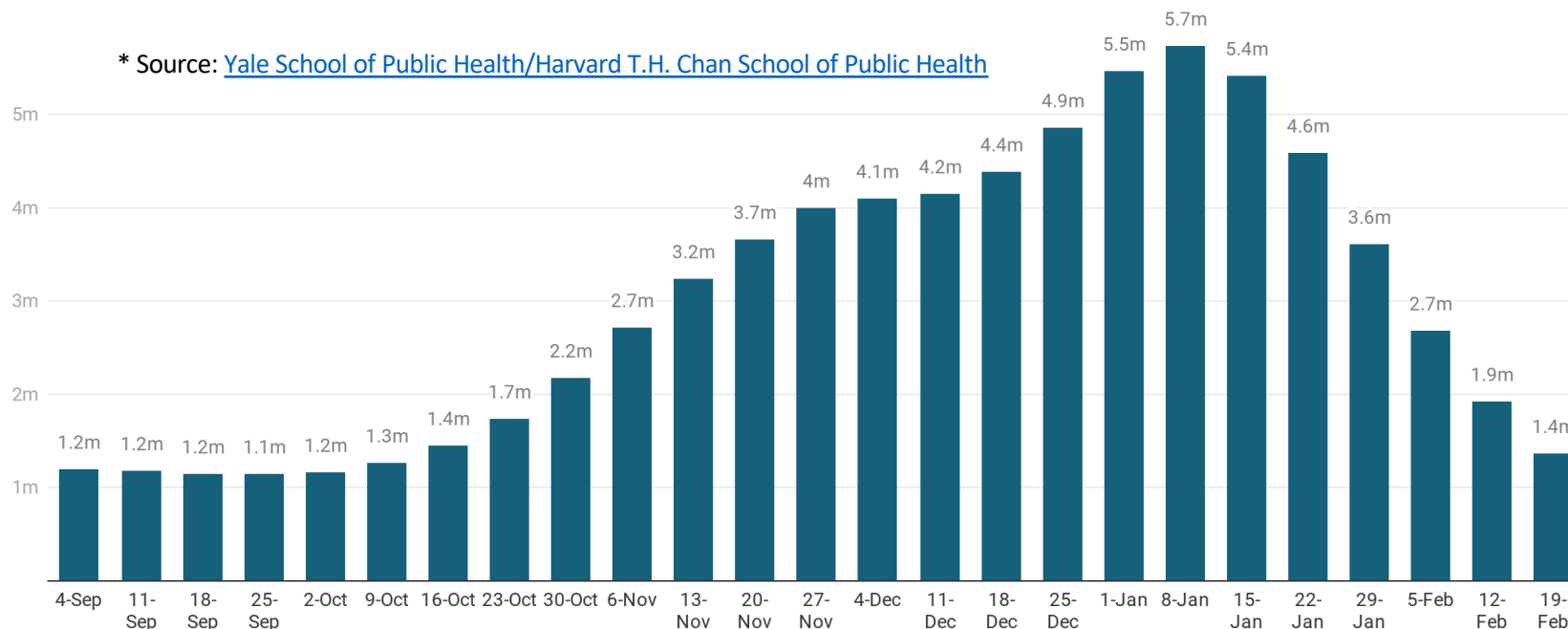


Chart: Health Industry Advisor LLC • Source: Yale and Harvard Schools of Public Health • Created with Datawrapper

Test Efficiency: Tests Per Case Detected

Test efficiency strengthened for the six successive week, thanks to an improving test-positivity and falling cases. It required 20 tests to detect a new case last week, up from a low of only 7 tests in early January.

Weekly Tests / Newly Detected Case - United States

For the 7 days ending on date shown

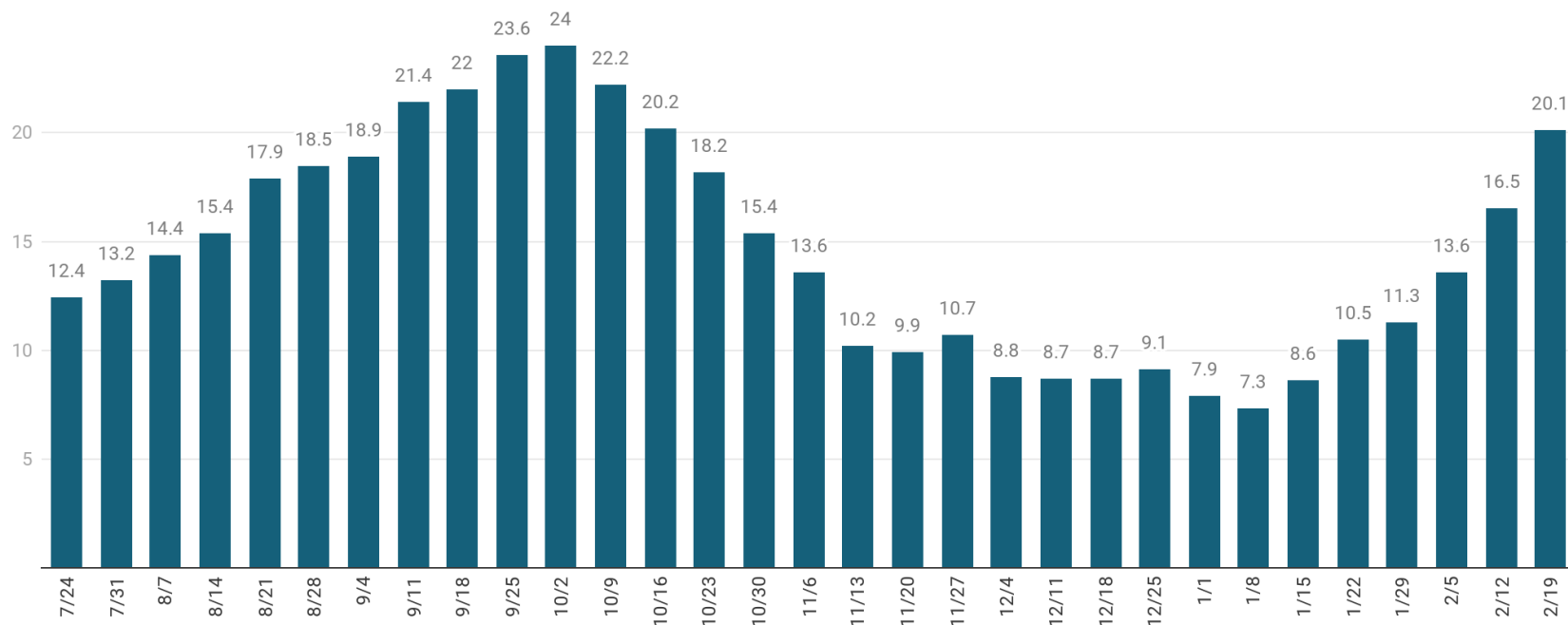


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper



Active Cases

The number of Active Cases eased for the third straight week, as recoveries outpaced newly-detected cases

Current Active Cases - United States

For the 7 days ending on date shown

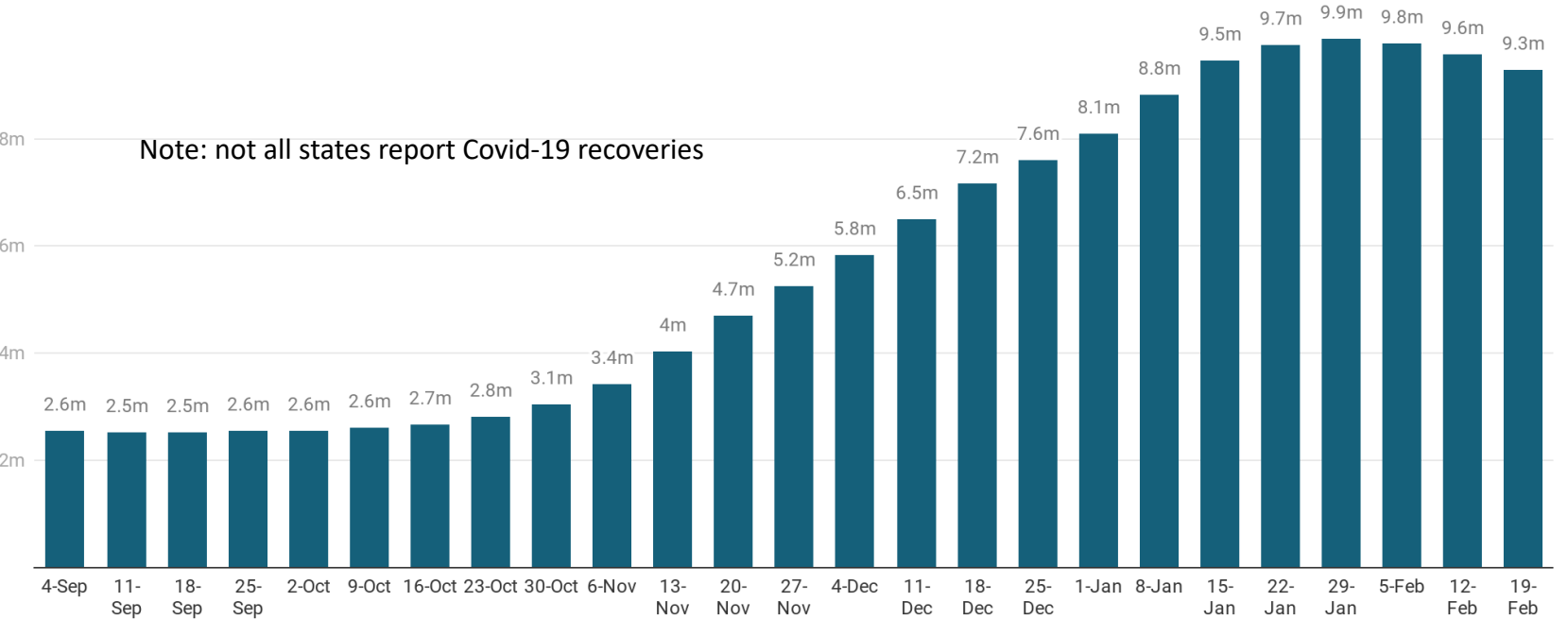


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

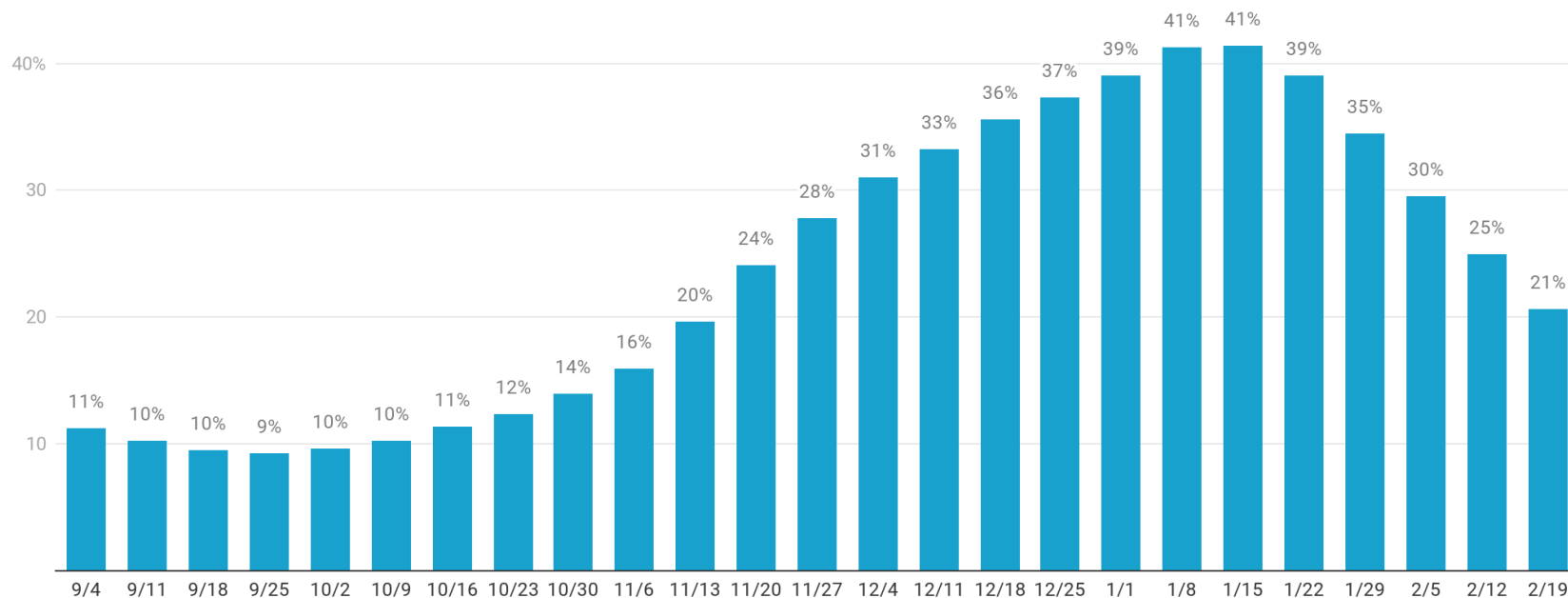
Covid-19 "Vital Signs"

Covid-19 Hospital Occupancy

Covid-19 patients spent fewer days in the hospital for the fifth straight week. Covid-19 occupancy fell to its lowest rate since mid-November.

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

Newly-detected cases declined faster than Covid-19 census over the past month. Given the lag from new case detection to hospital discharge, Covid-19 census should decline even further in the coming weeks.

Covid-19 Inpatient Days / 100 New Cases

For the 7 days ending on the date shown

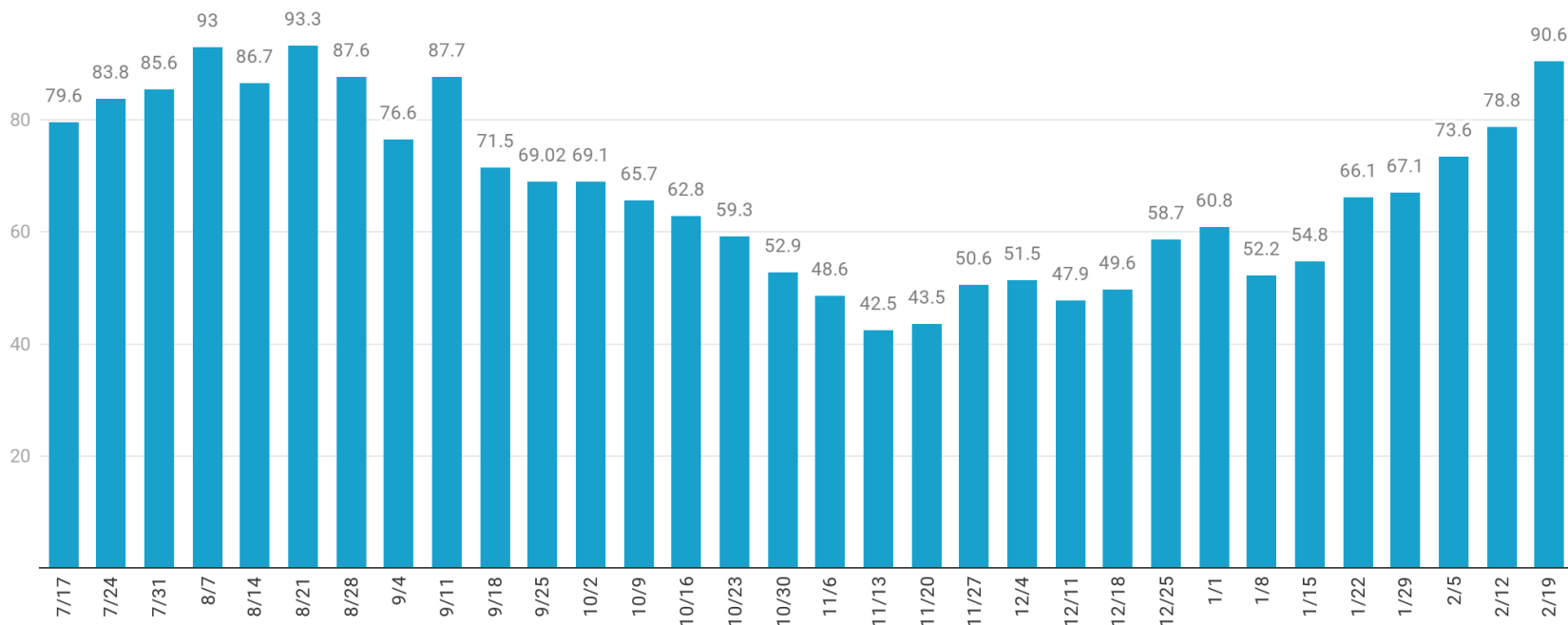


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project & worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Hospitalized Covid-19 Patients / Active Cases

Active Covid-19 cases increasingly are recovering outside hospitals – more so than at any other time during the pandemic

% of Active Cases in the Hospital

For the week shown

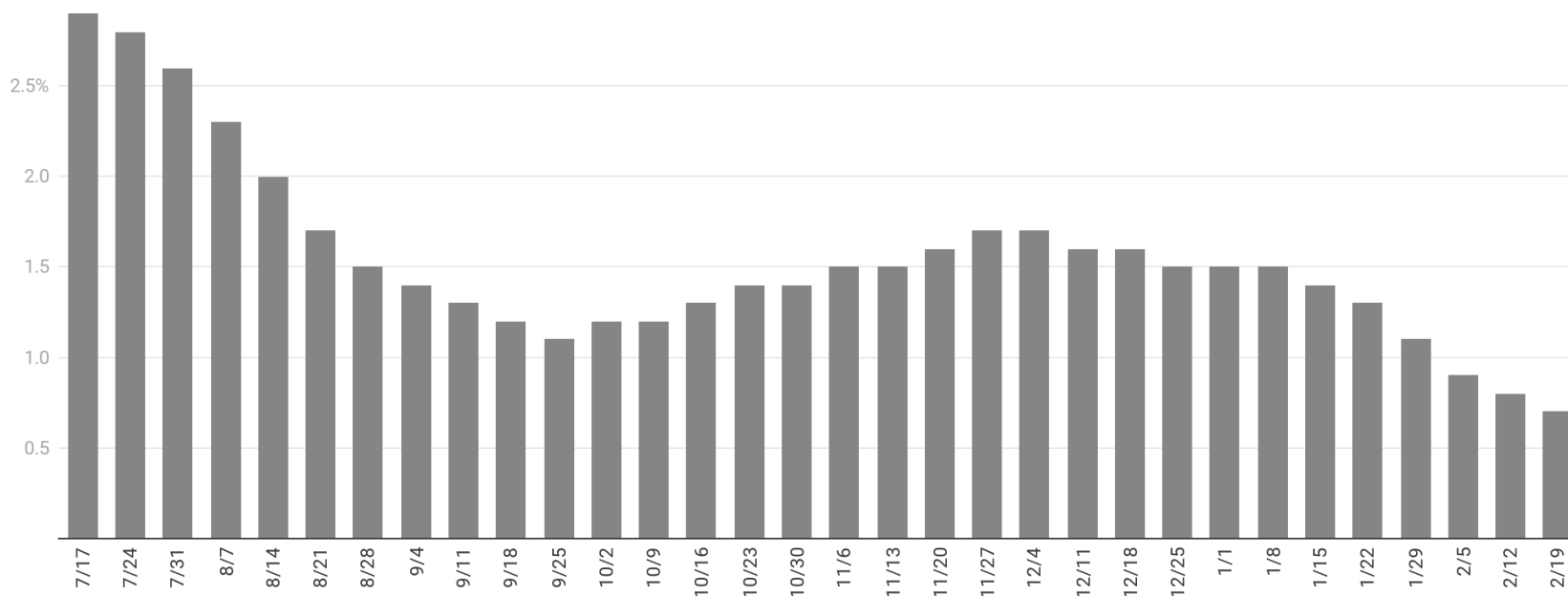


Chart: Health Industry Advisor LLC • Source: The Atlantic and worldometers.info • Created with Datawrapper

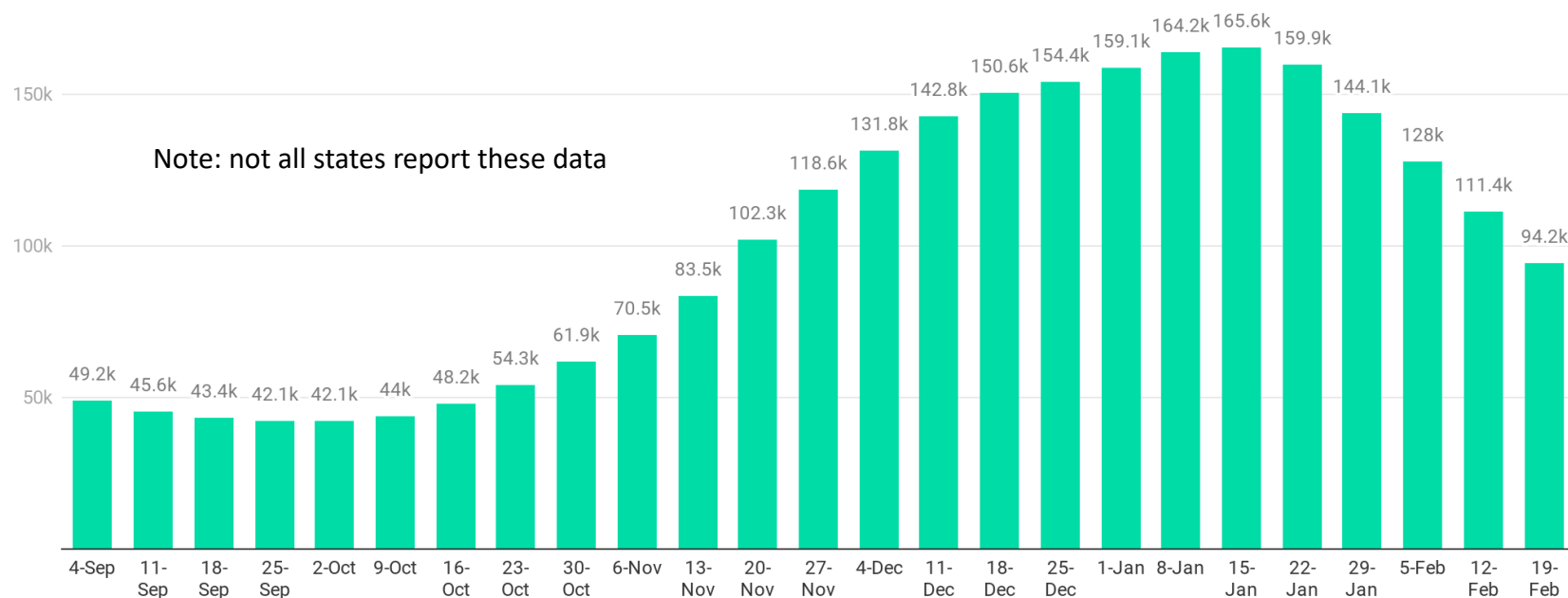
Covid-19 "Vital Signs"

Covid-19 ICU Patient Days

Covid-19 ICU patient days declined for the fifth straight week,. There were fewer Covid-19 patients in the ICU last week than any week since the first half of November.

Weekly ICU Covid-19 Census - United States

For the 7 days ending on date shown



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

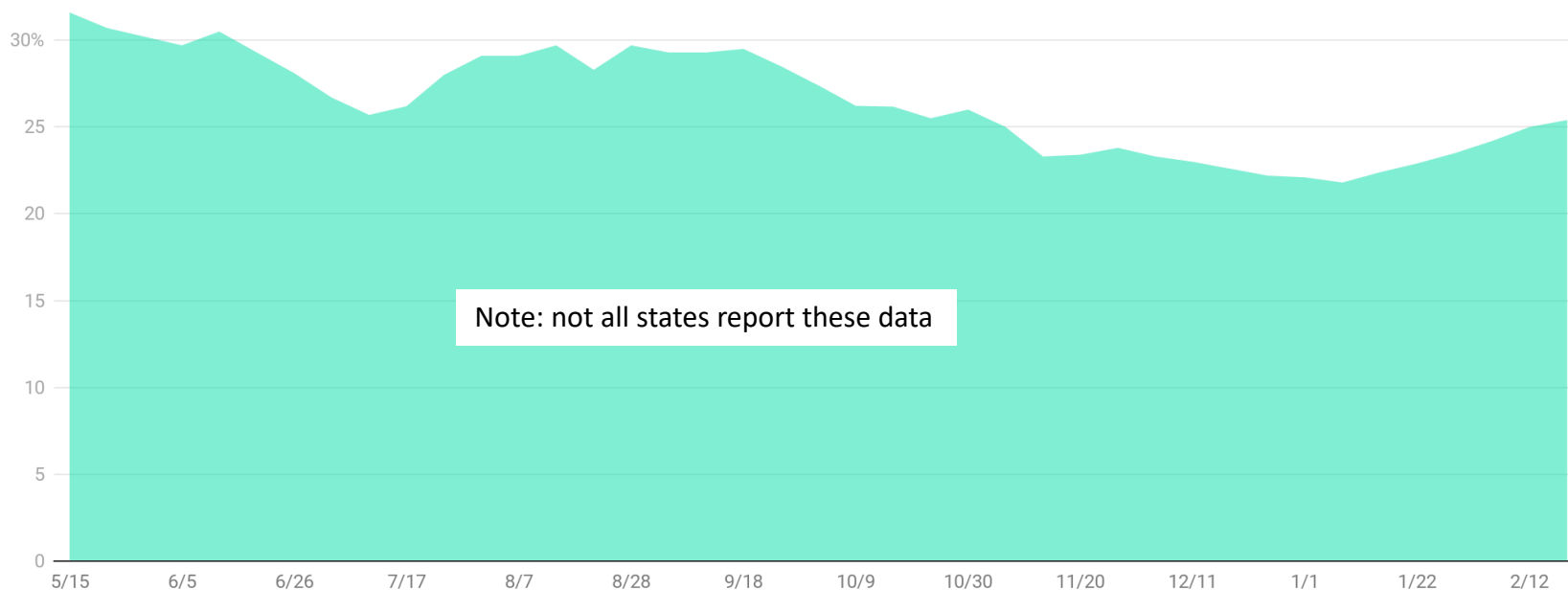
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Mix of Covid-19 Patients: % in ICU

The % of Covid-19 patients requiring intensive care increased each of the past few weeks - this measure is likely a trailing indicator of the pandemic.

% of Hospitalized Covid-19 Patients in the ICU

For the date shown



Note: not all states report these data

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

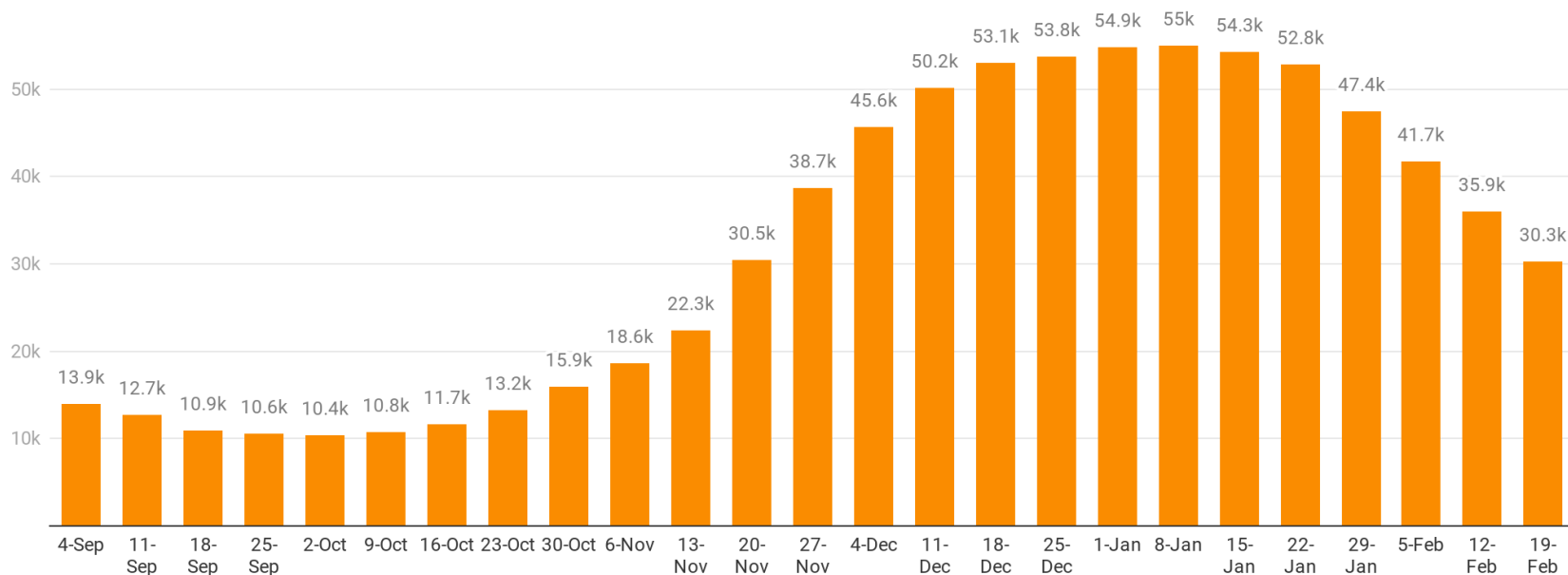
Covid-19 "Vital Signs"

Covid-19 Ventilator Days

Covid-19 ventilator days dropped for the sixth straight week. There were 24,600 fewer Covid-19 ventilator days last week than the week of January 2-8.

Ventilator Days Covid-19 - United States

For the 7 days ending on date shown



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

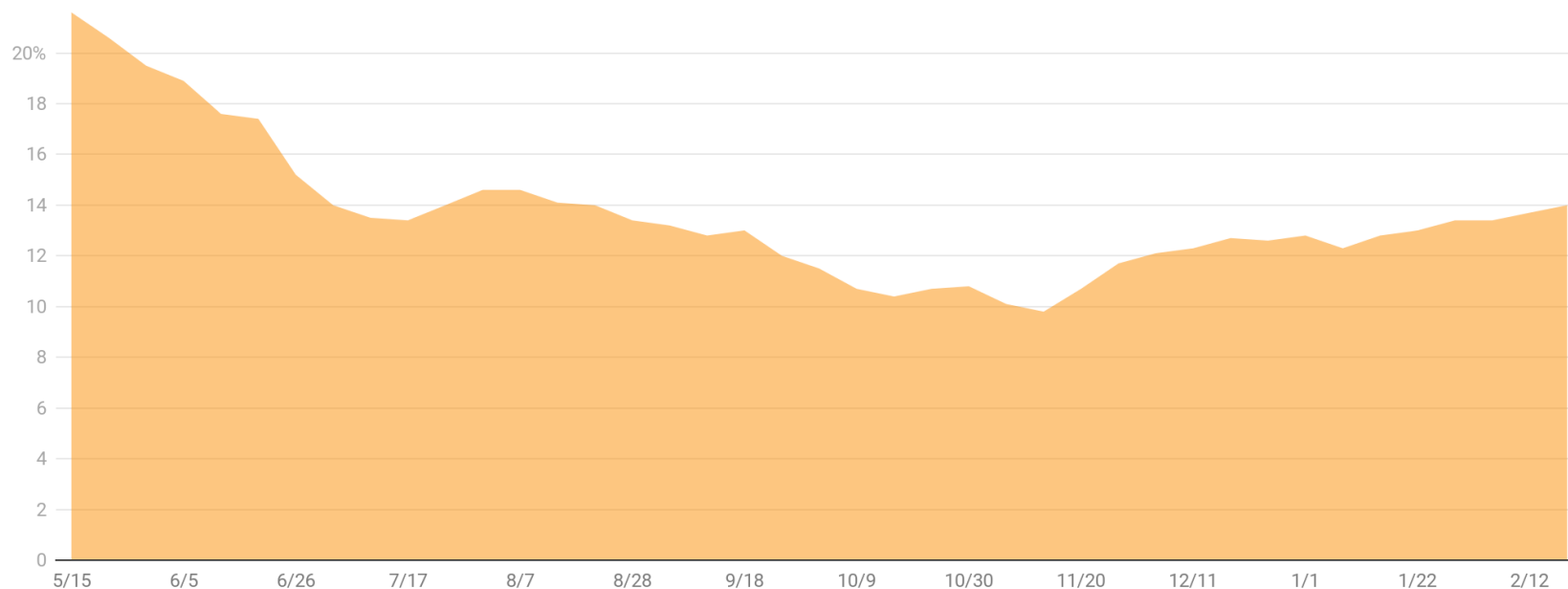
Covid-19 "Vital Signs"

Mix of Covid-19 Patients: % on Ventilators

The % of Covid-19 patients requiring ventilator care has inched upward since the beginning of the year. Like the % of patients in the ICU, this is likely a trailing indicator of the pandemic.

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

% of Visits Relating to Influenza

As we move past the normal peak of the flu season, we observe how mild this season was compared to each of the past several seasons.

% of Visits For Influenza-Like Illnesses, National Summary

By Week & Flu Season

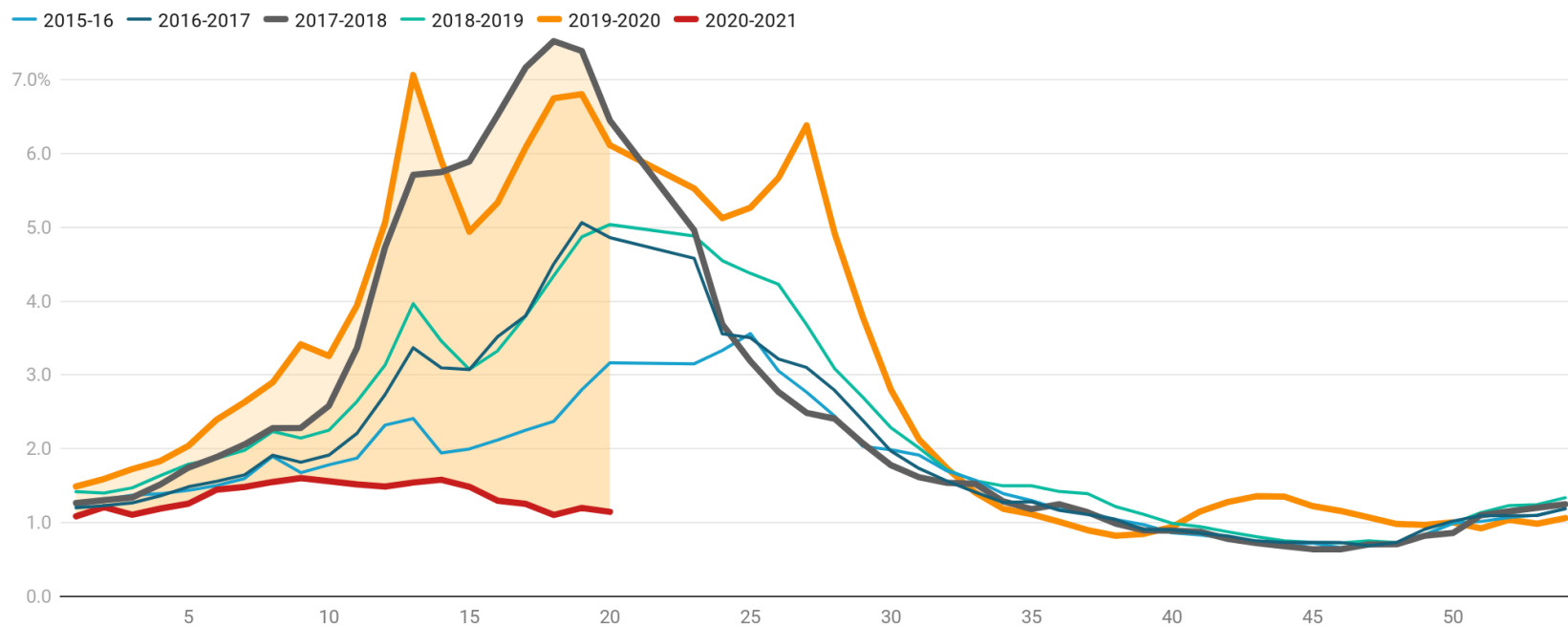


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper

Covid-19 "Vital Signs"

Deaths With Coronavirus

Tragically, too many people died with coronavirus last week. Still, there were fewer deaths with coronavirus last week than during any week since early December.

Weekly Deaths - United States

For the 7 days ending on date shown

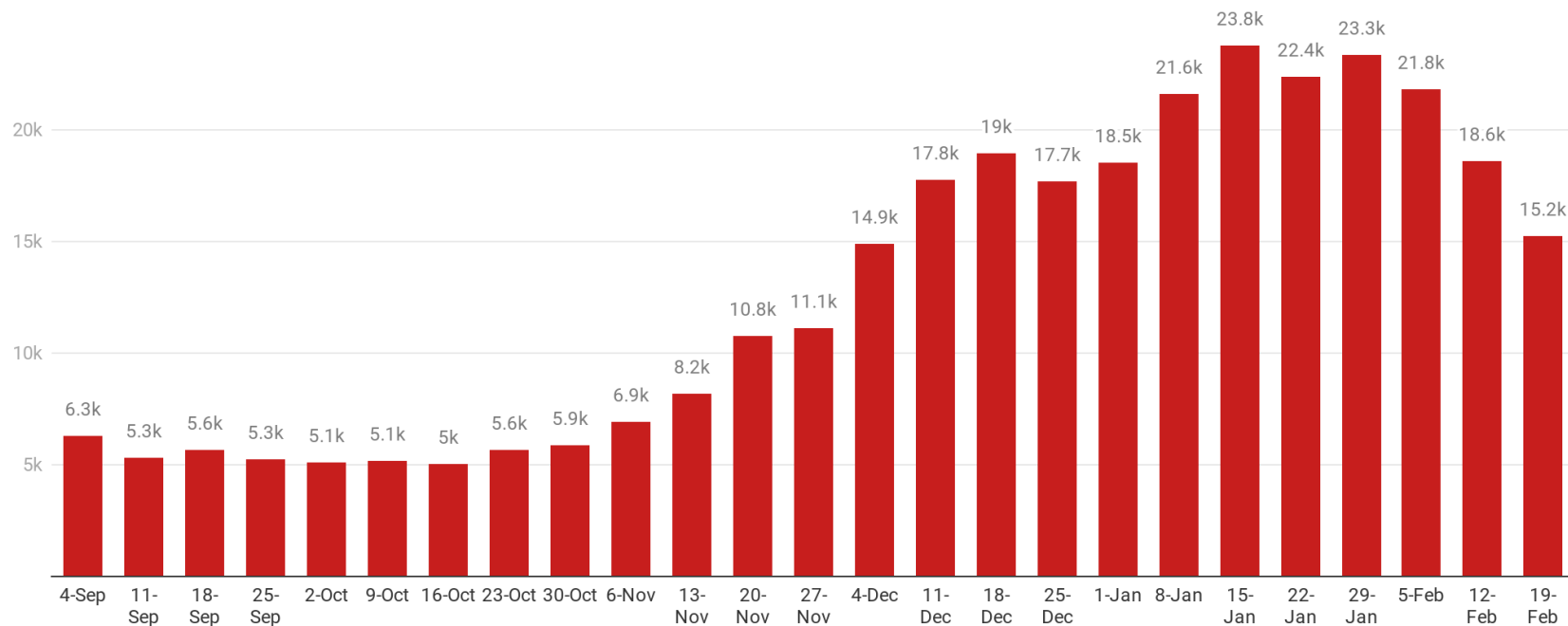


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Mix of Cases – Active, Recovered, Death & Undetected

Although improving over time, most cases still go undetected

How has the mix of cases changed over time?

As of the date shown

Active Cases Recoveries Deaths Estimated Undetected Cases (Yale)

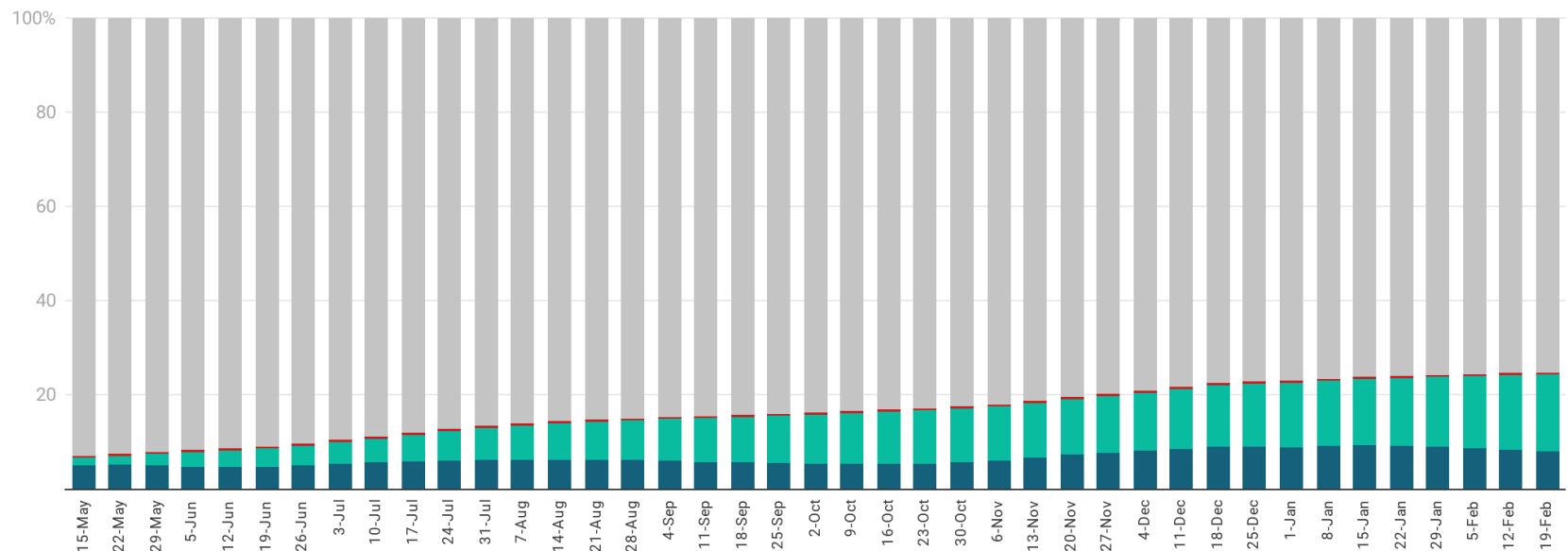


Chart: Health Industry Advisor LLC • Source: worldometers.info & Yale School of Public Health • Created with Datawrapper

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>