



"Strategic Advice in an Era of Unprecedented Change"

COVID19 VITAL SIGNS

ISSUE #368

MONDAY, FEBRUARY 7, 2022

Highlights

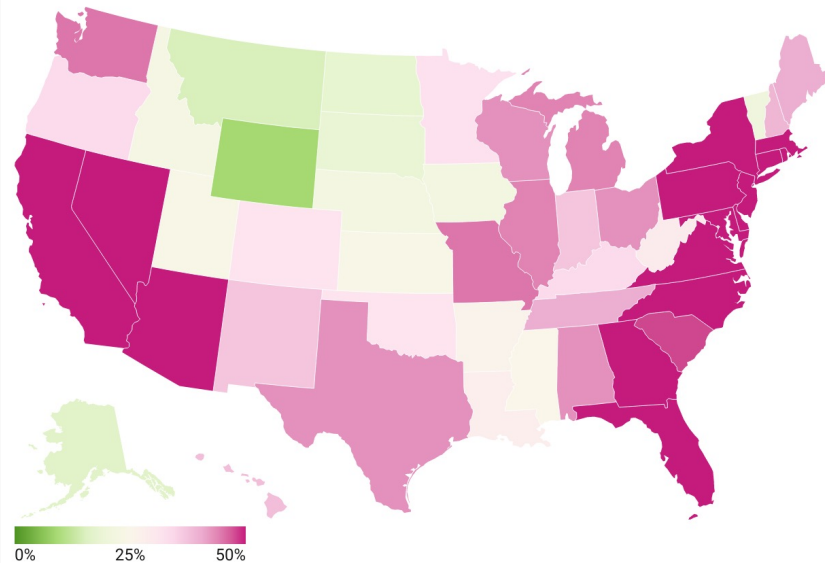
- ▶ The US healthcare system continues to strain under the weight of Covid patients; However, this pressure eased during each of the past few weeks:
 - ▶ Covid admissions in the U.S. dropped 28% in less than three weeks; Patient census declined 18% in the past two weeks
 - ▶ IHME forecasts an 80% decline in admissions, from the peak at first of the year to the end of this month; and a 70% decline in patient census
 - ▶ Admissions to New York hospitals plunged 63% from the recent peak; Illinois, 54%; Pennsylvania, 48%; and Florida, 36%
 - ▶ Flu visits fell for the fourth consecutive week; visits haven't reached prior seasons' peaks and are nearing seasonal lows
- ▶ Deaths remain high but, show signs of declining:
 - ▶ The 7-day death total peaked in late January
 - ▶ Despite surging cases with Omicron circulating, deaths are 30-40% lower than this time last year
 - ▶ The case fatality rate plunged thus far during the Omicron wave; Pre-Omicron, this rate tracked slightly lower than the rate from a year ago
- ▶ Case rates tumbled to levels last seen in late December; the rate of decline accelerated, indicating the case rate should drop further in the near term
 - ▶ IHME forecasts that infections will be 90% lower by the end of February than posted at the beginning of the year
 - ▶ Cases dropped in 48 of 50 states last week; In forty states, cases plunged 40% or more from the prior week

The health system gained a measure of relief over the past two weeks; Still, Covid patients strain the system in several large coastal states

As of January 20

Covid-19 Patients As % of All Inpatient Beds

As of January 20

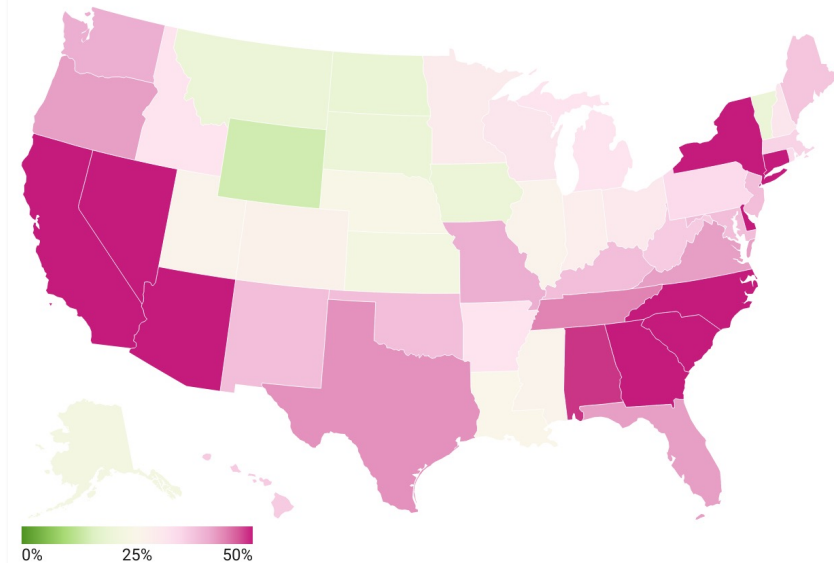


Map: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

As of February 4

Covid-19 Patients As % of All Inpatient Beds

As of February 2



Map: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid admissions plunged 28% in last eighteen days;
 Census dropped 18% in the past two weeks. Admissions to
 New York hospitals dropped 63%; Illinois hospitals, 54%

Covid-19 Admissions & Census

7-Day Average, As of February 2

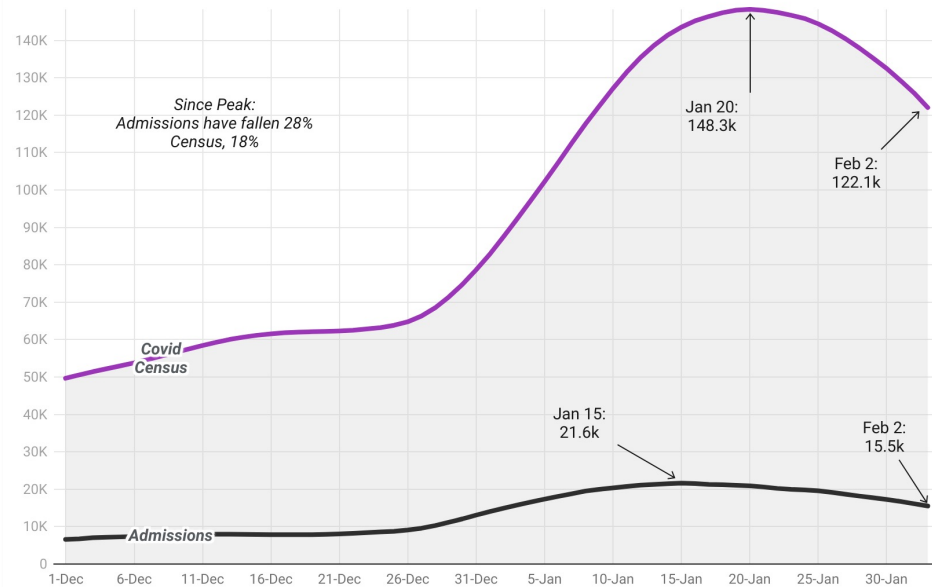
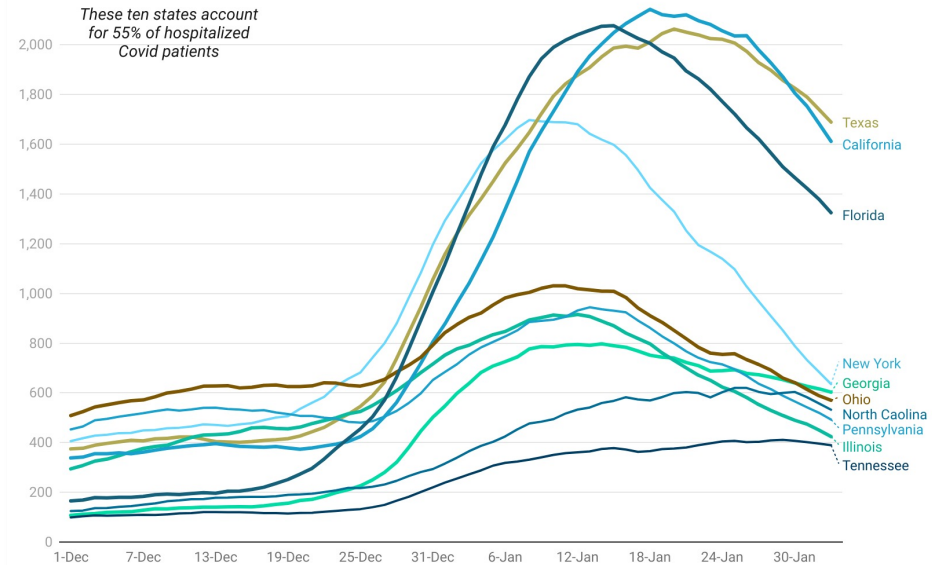


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid Admissions - States

7-Day Average



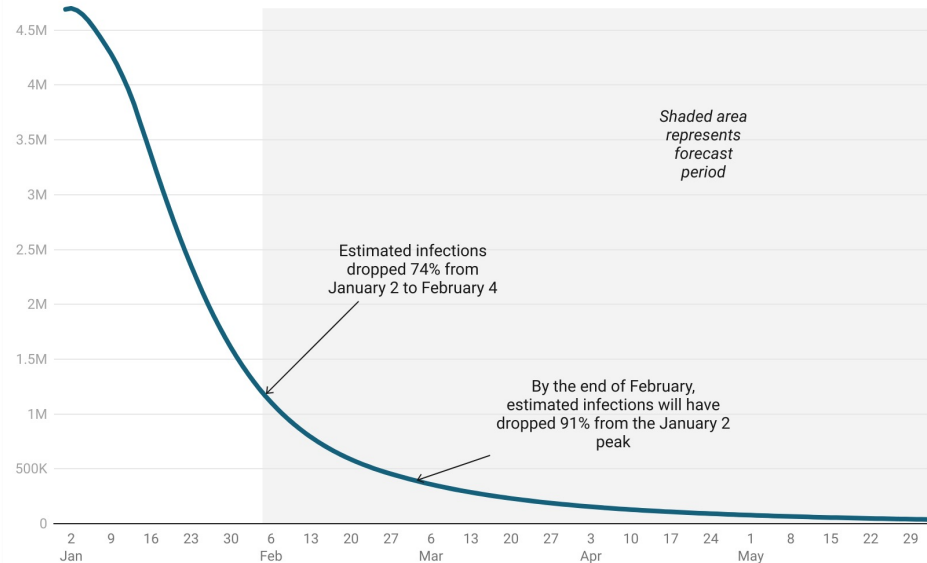
Ten states with most Covid patients, as of February 2

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

By the end of February, IHME forecasts infections to be 90% lower than at the start of the year; admissions to be 80% lower; and census 70% lower

Estimated and Projected Infections - U.S.

Institute For Health Metrics and Evaluation

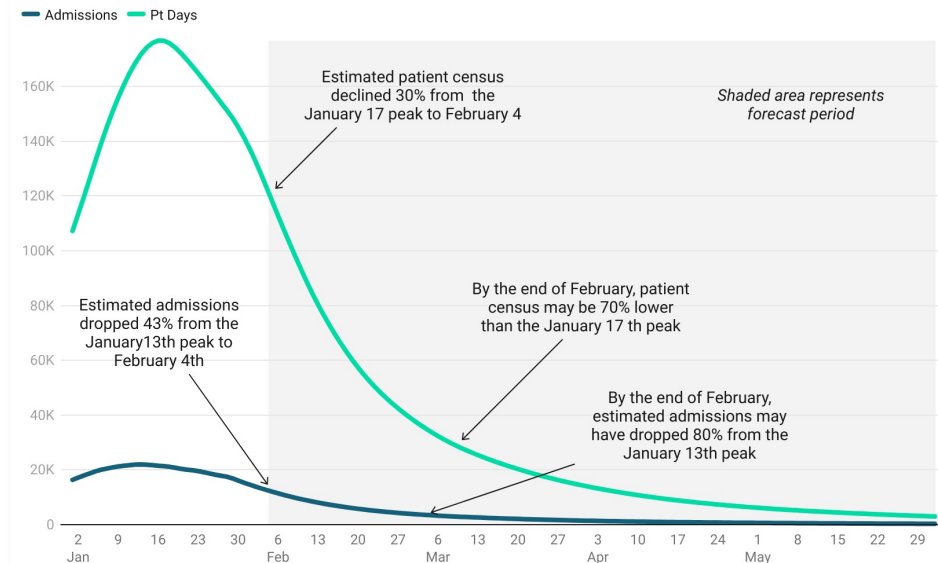


Forecast Date: February 4

Chart: Health Industry Advisor LLC • Source: Institute For Health Metrics and Evaluation • Created with Datawrapper

Estimated & Projected Hospital Covid-19 Admissions & Patient Days

Institute for Health Metrics and Evaluation



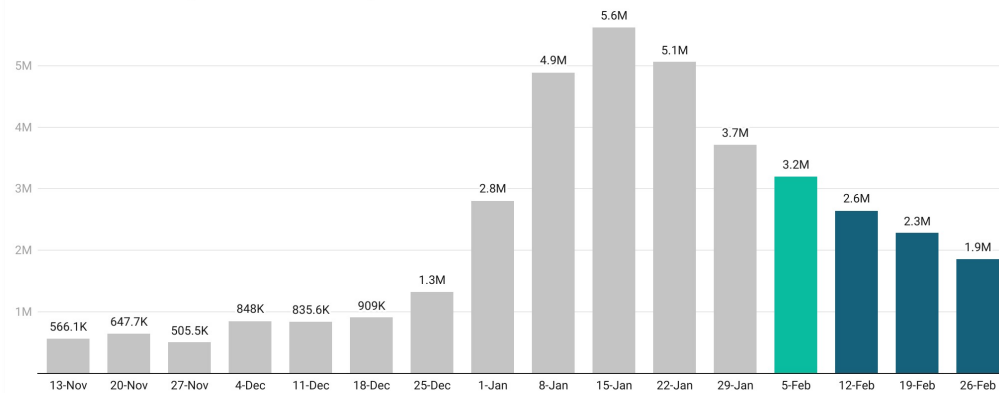
Forecast Date: February 4

Chart: Health Industry Advisor LLC • Source: Institute for Health Metrics and Evaluation • Created with Datawrapper

The ensemble forecast predicts declining infections throughout February; deaths peak this week

Newly-Reported Cases Per Week

Covid-19 Forecast Hub, Composite Forecast As of January 29



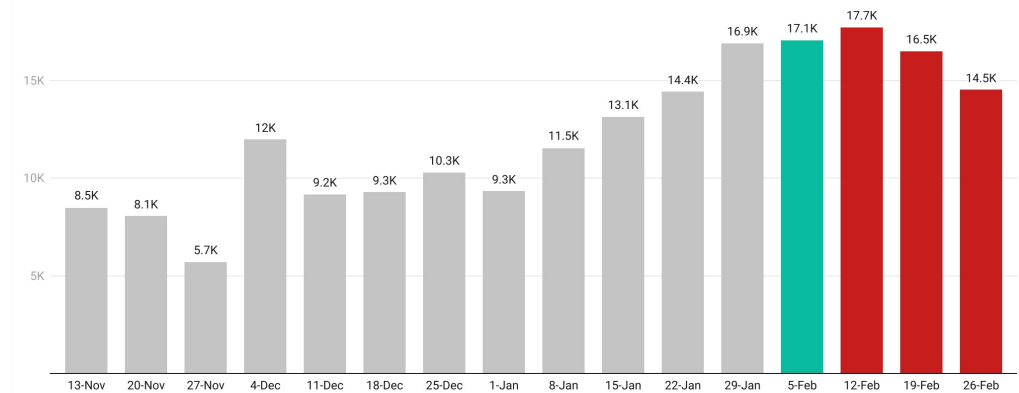
For the week ending on the date shown

Chart: Health Industry Advisor LLC • Source: Covid-19 Forecast Hub • Created with Datawrapper

Actual
 Projection – Last Week
 Projection – Next 3 Weeks

Newly-Reported Deaths Per Week

Covid-19 Forecast Hub, Composite Forecast As of January 29



For the week ending on the date shown

Chart: Health Industry Advisor LLC • Source: Covid-19 Forecast Hub • Created with Datawrapper

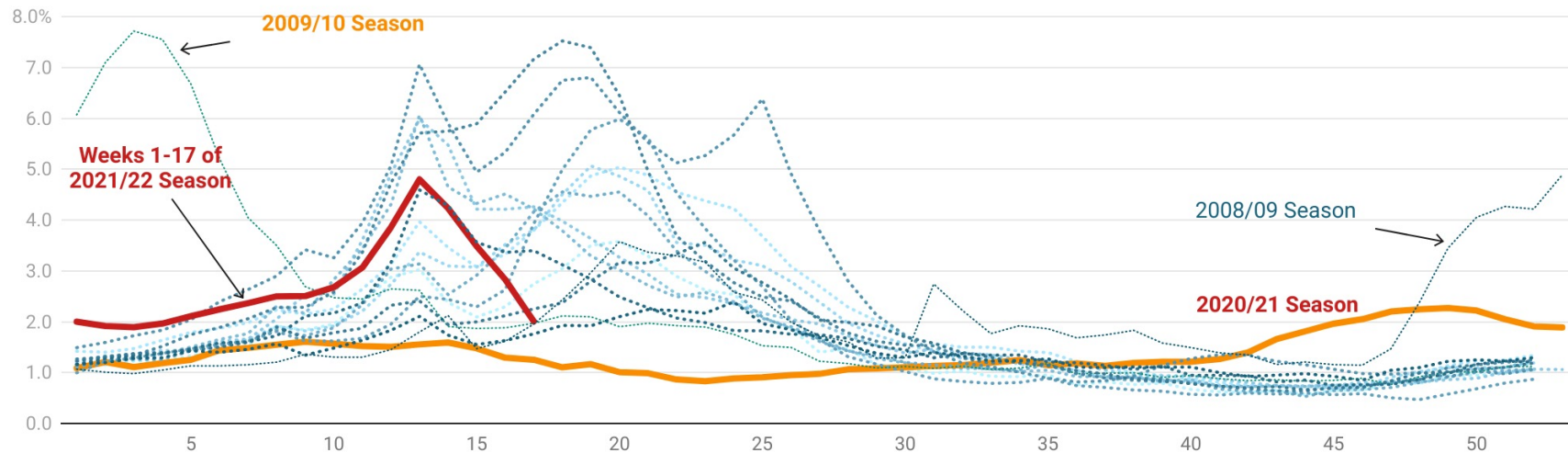
Actual
 Projection – Last Week
 Projection – Next 3 Weeks

Source: Covid-19 Forecast Hub

Flu visits dropped each of the last four weeks, without reaching typical seasonal peaks; Visits trended toward seasonal lows

Percentage Visits for Influenza-Like Illness, National Summary

Comparison of Last Fifteen Seasons



Reported by: U.S. WHO/NREVSS Collaborating Laboratories and ILINet

Chart: Health Industry Advisor LLC • Source: Centers For Disease Control and Prevention • Created with Datawrapper

Deaths slowing and remain below levels reached a year ago. The case fatality rate nose-dived thus far during Omicron wave

Deaths With Coronavirus

7-Day Average, Through February 4

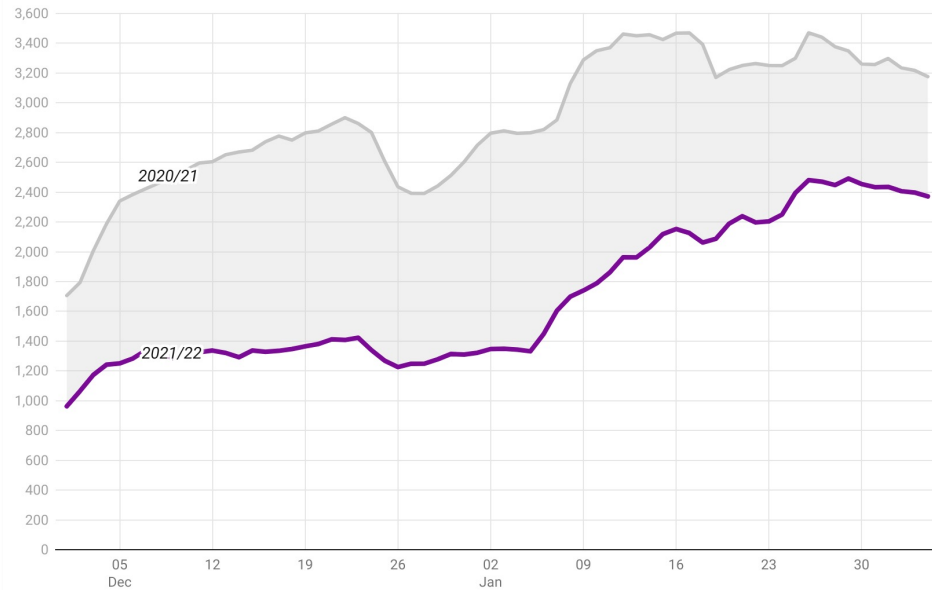


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Deaths Per 1000 New Cases

7-Day Average, Presumed 3-Week Lag Cases:Deaths

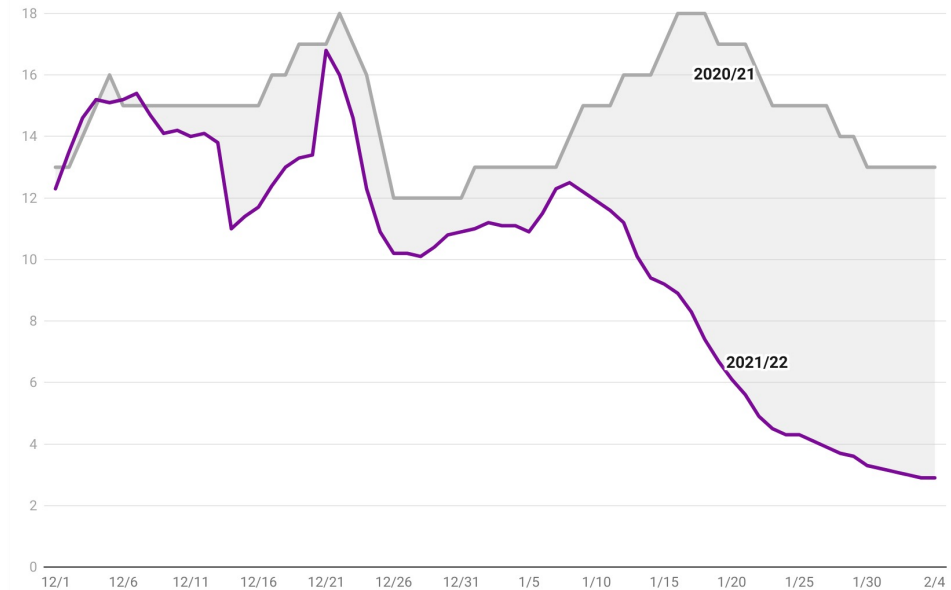


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Daily cases per million tumbled to late 2021 levels. The rate of decline accelerated, suggesting further near-term relief

New Daily Cases / Million

7-Day Average

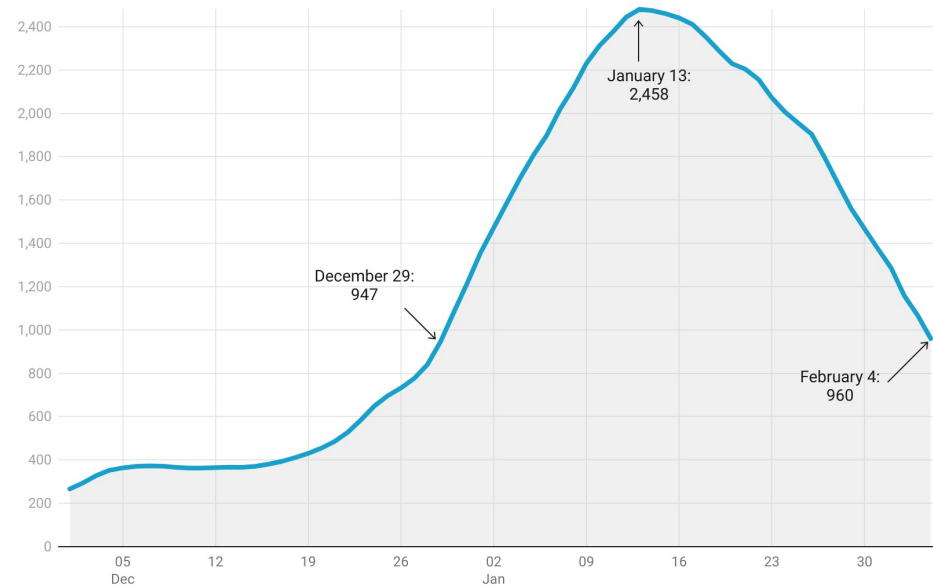


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Week-Over-Week Change in Newly Reported Cases

7-Dy Average

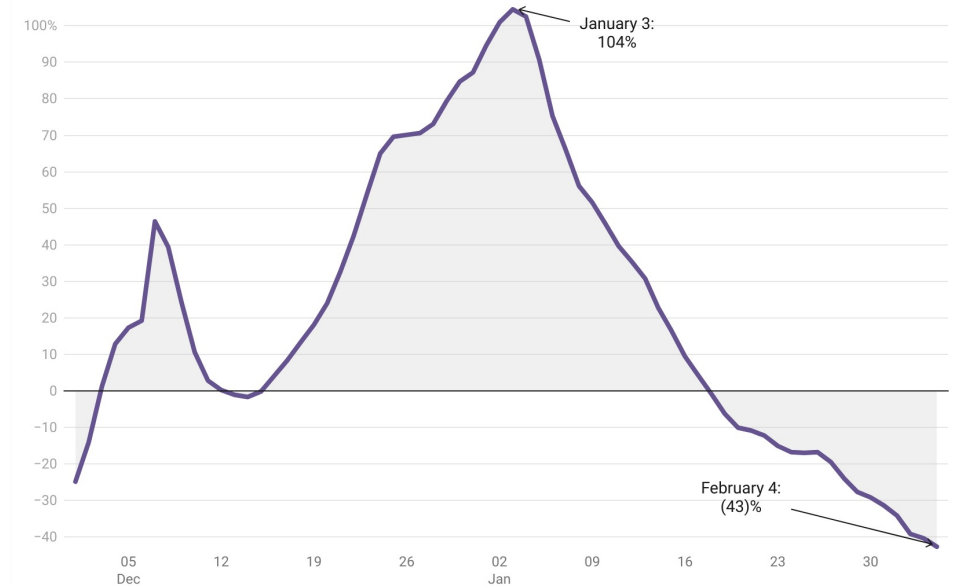


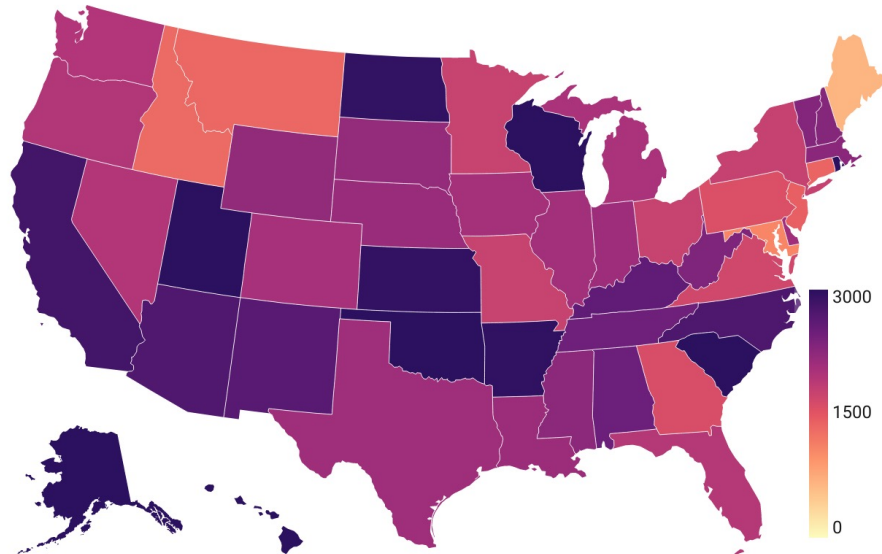
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

New case rates plummeted across the country, as seen in this state-based view

As of January 21

New Cases / Million

7-Day Average, As of January 21

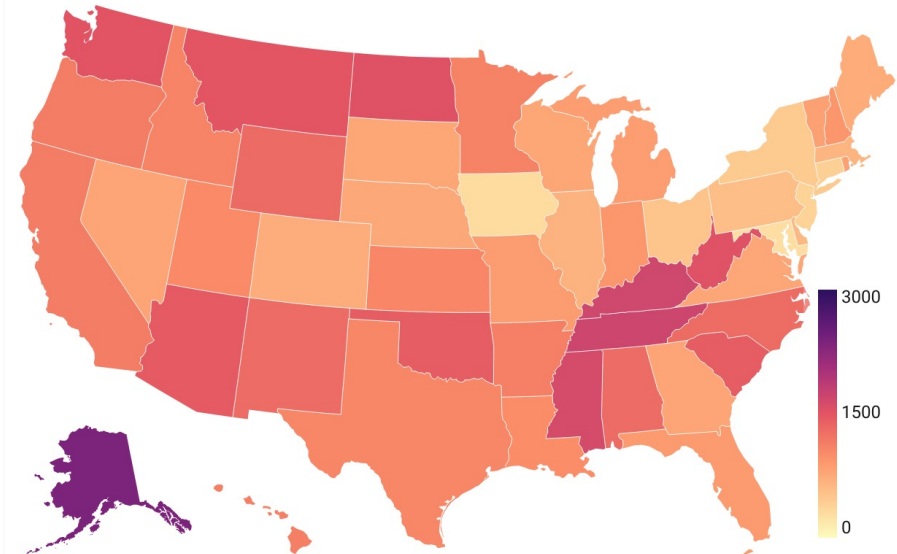


Map: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

As of February 4

New Cases / Million

7-Day Average, As of February 4



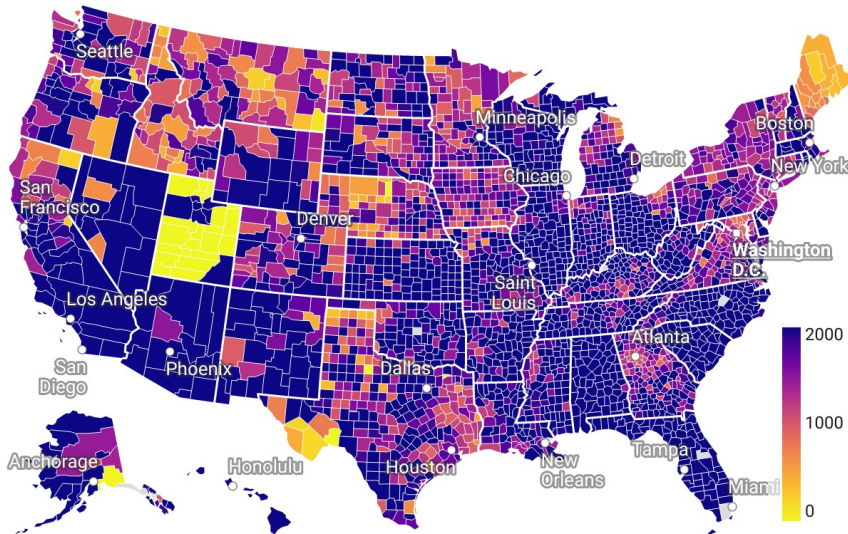
Map: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

This municipality-based view illustrates the breadth of the drop in new case rates

As of January 21

New Daily Infections / Million

7-Day Average, As of January 21

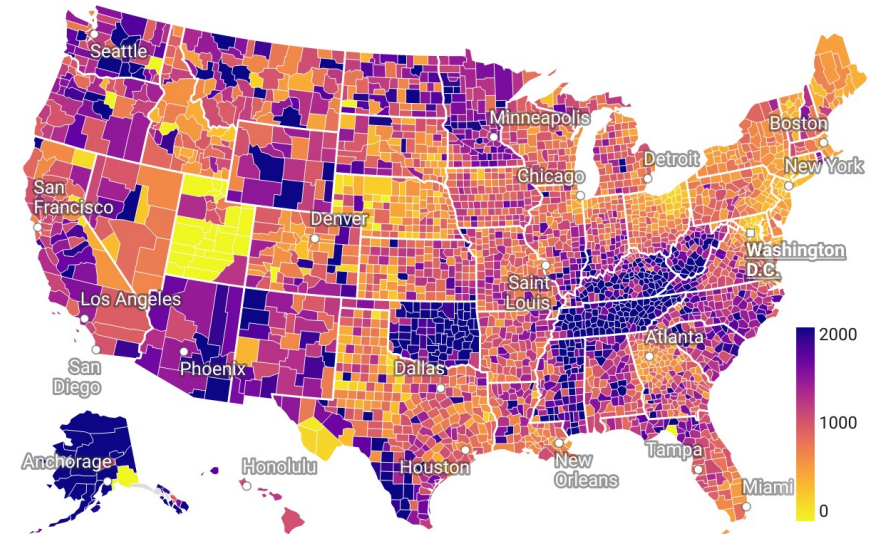


Map: Health Industry Advisor LLC • Source: Center for Systems Science and Engineering at Johns Hopkins University • Created with Datawrapper

As of February 4

New Daily Infections / Million

7-Day Average, As of February 4

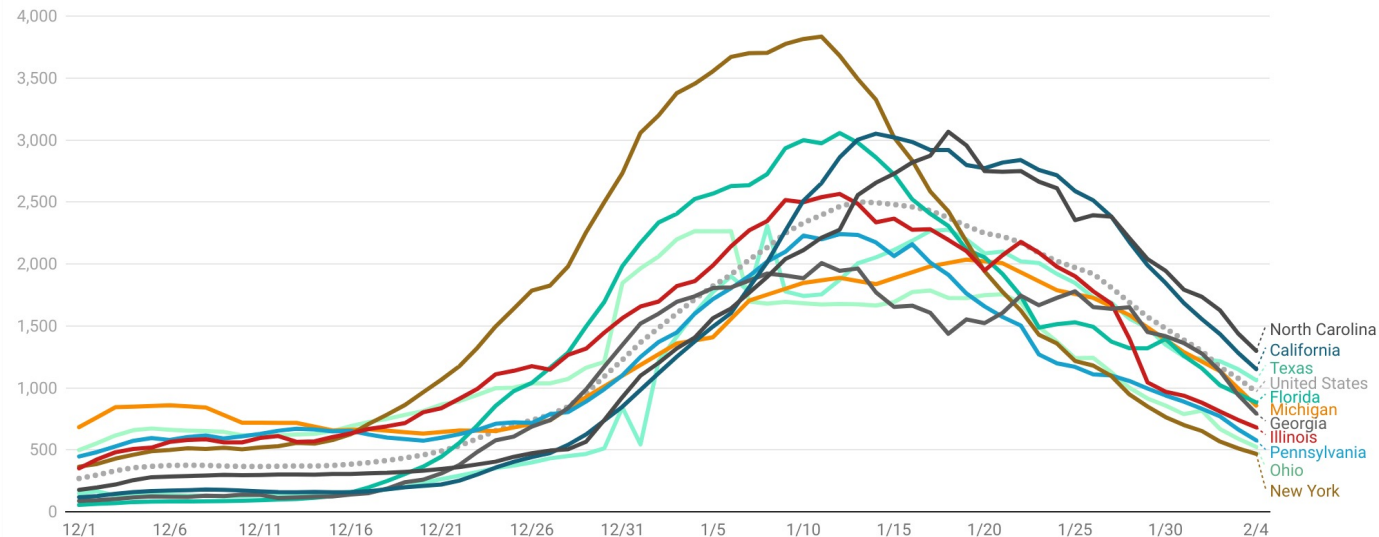


Map: Health Industry Advisor LLC • Source: Center for Systems Science and Engineering at Johns Hopkins University • Created with Datawrapper

Case rates fell in a similar pattern across the most populous states

Timeline: New Daily Infections / Million

Ten Most Populous States



7-day average rate

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

Only two states, Maine and Montana, recorded more new cases last week than a week earlier. Other states posted declines of 17-78% in one week

Change in New Daily Cases

7-Day Average, February 4 v. January 21

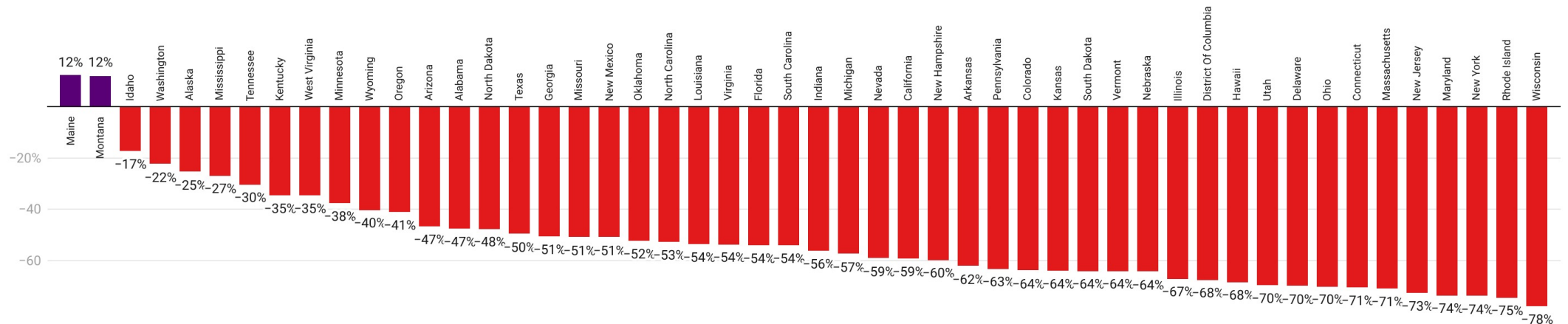


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Case rates declined last week in each of the twenty largest metropolitan areas

Timeline: Ten Largest Metro Areas

New Daily Cases / Million, 7-Day Average

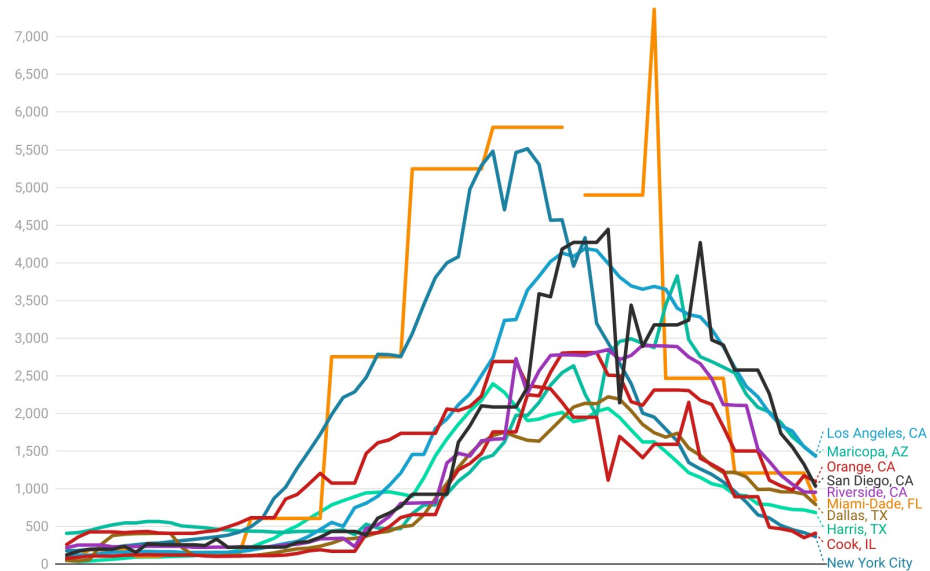


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Timeline: Next Ten Largest Metro Areas

New Daily Cases / Million, 7-Day Average

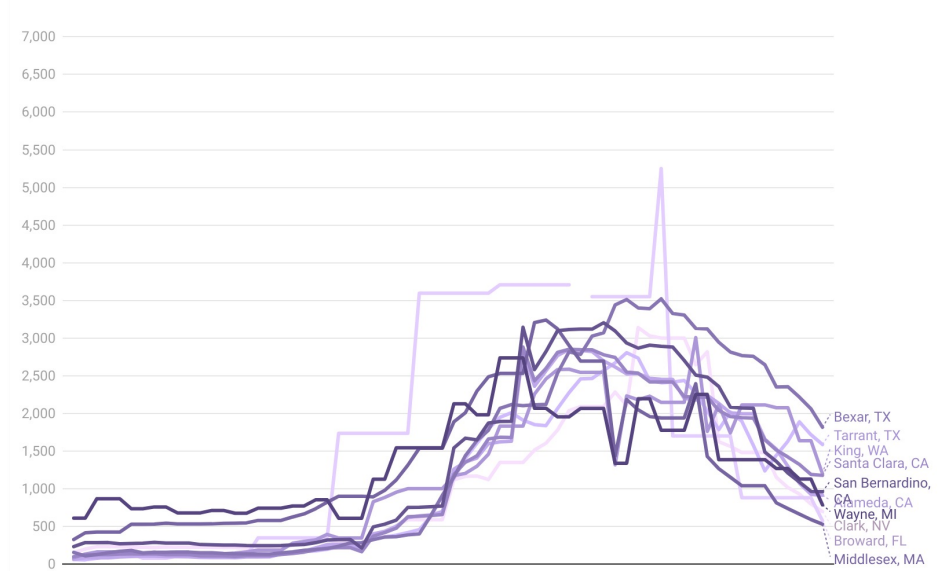


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Test-positive rates eased further last week; However, rates remain higher than public health recommended levels

Test-Positivity Rate

7-Day Average, Through January 25

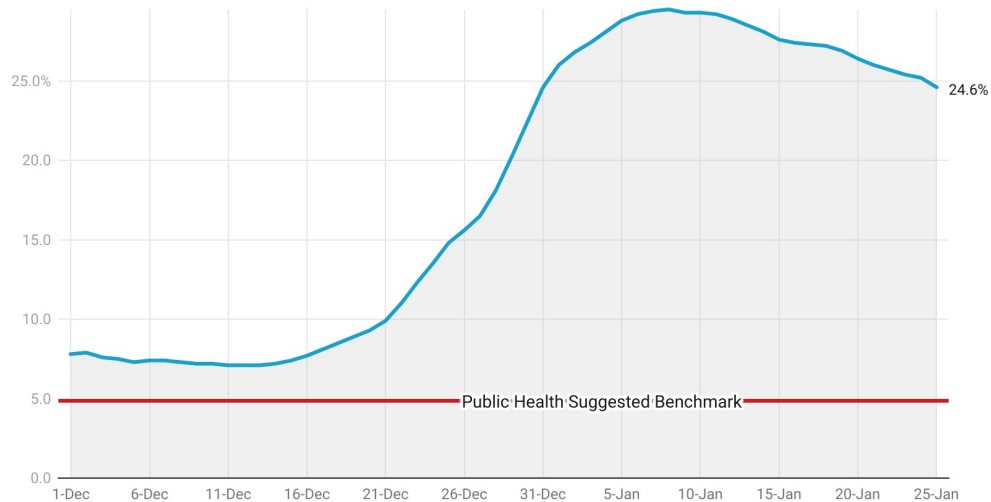
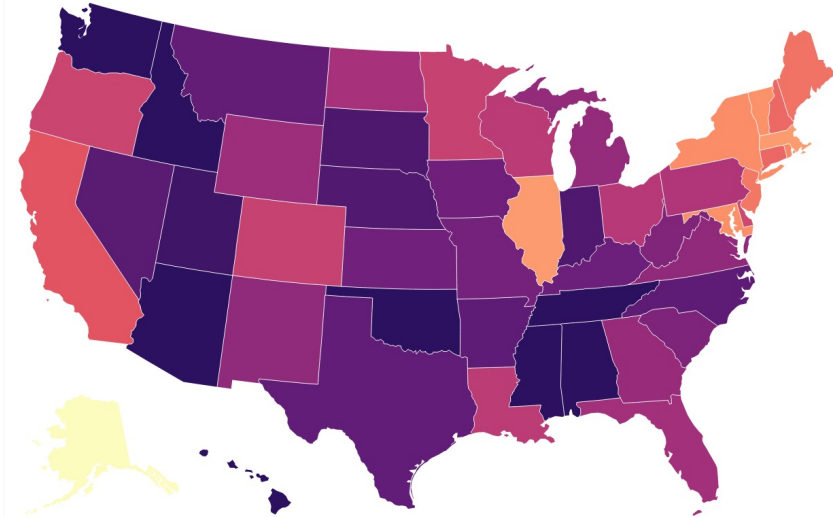


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Test Positivity %

7-Day Average, As of January 25

0% 20% 40%



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

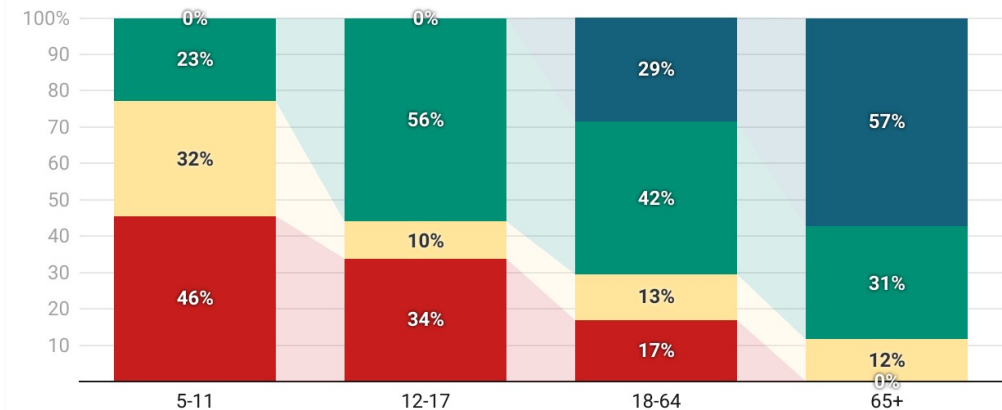
Vaccination status by age parallels expected risk of severe illness from Covid – increases with age

- ▶ Senior citizens:
 - ▶ 9 in 10 are fully vaccinated or boosted
 - ▶ 6 in 10 are boosted
- ▶ Working aged adults:
 - ▶ 7 in 10 are fully vaccinated or boosted
 - ▶ 3 in 10 are boosted
- ▶ Teenaged minors:
 - ▶ 6 in 10 are fully vaccinated
 - ▶ 3+ in 10 are unvaccinated
- ▶ Eligible children:
 - ▶ Nearly 5 in 10 are unvaccinated

Vaccination Status By Age

As of February 4

Unvaccinated Partially Vaccinated Double Vaccinated Boosted



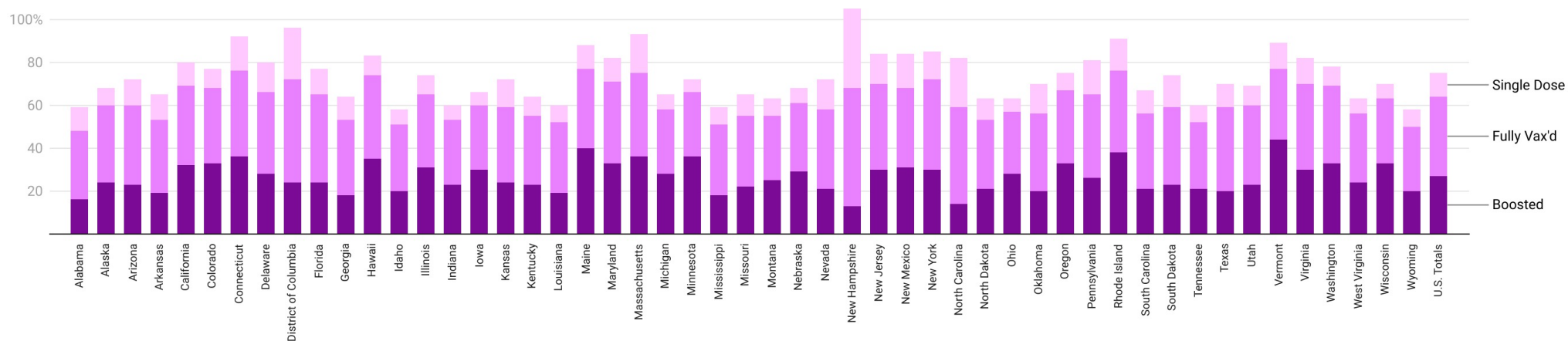
CDC reports more first doses for 65+ year olds than the population of this age group

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

Vaccination status varies widely among the states:
Vermont and Rhode lead in boosted rates; Alabama and Mississippi report the highest unvaccinated rates

Vaccination Rates By State

% of Population



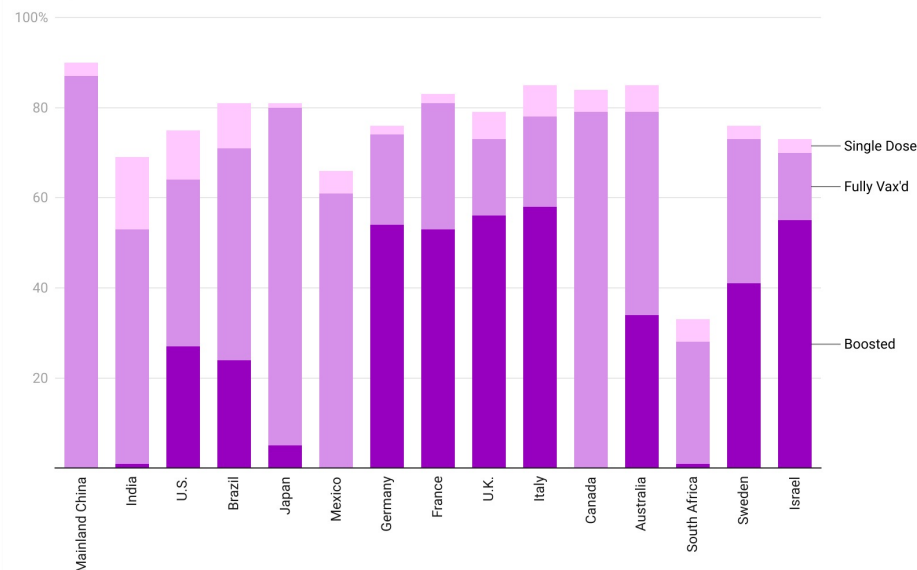
As of February 4

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

United States lags many large countries in vaccine uptake. China has fully vaccinated most of its citizens. Germany, Italy, Israel, and the UK have boosted more than half their residents

Vaccination Rates For Selected Countries

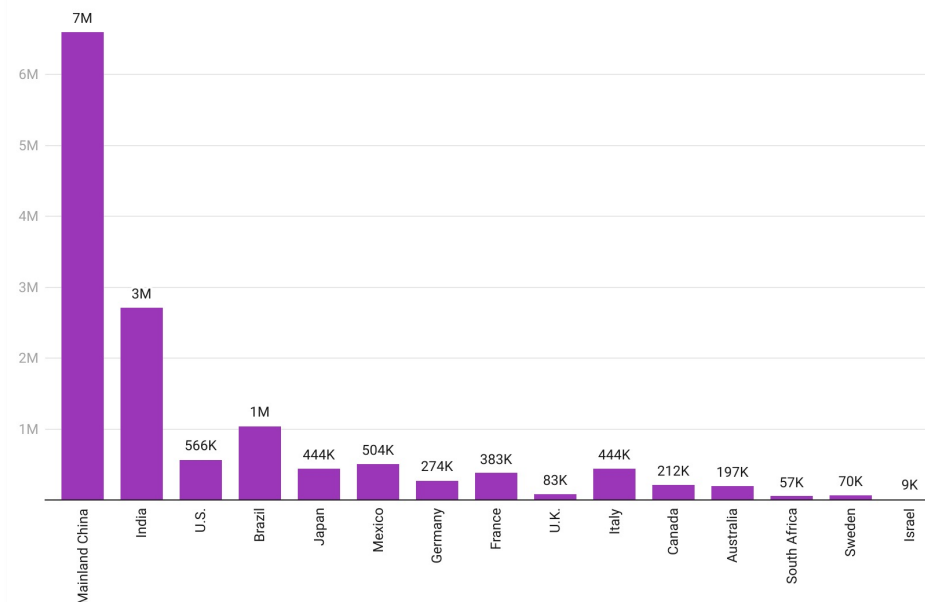
% of Population



As of February 4

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

Daily Doses Administered - Select Countries



As of February 4

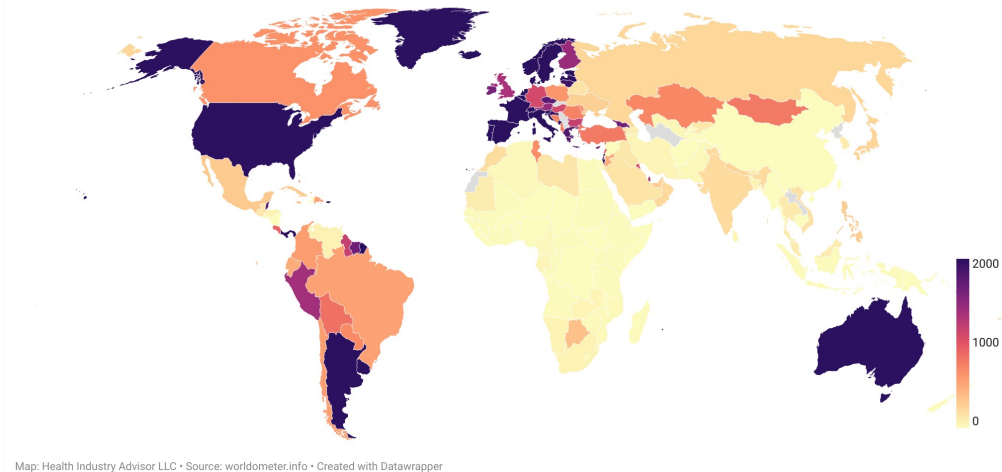
Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

Case rates eased in the past two weeks in several global hotspots. Brazil and Russia experienced high, surging case rates

As of January 21

New Daily Cases / Million

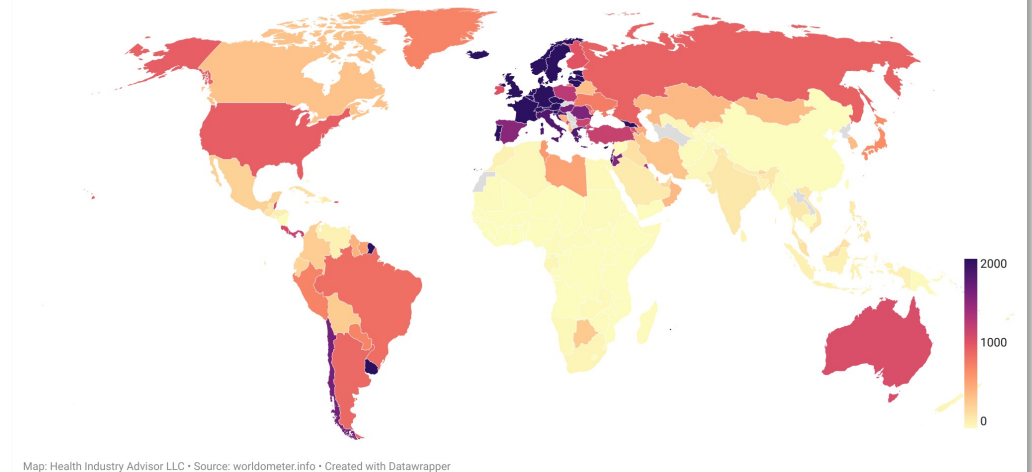
7-Day Average, As of January 21



As of February 4

New Daily Cases / Million

7-Day Average, As of February 4

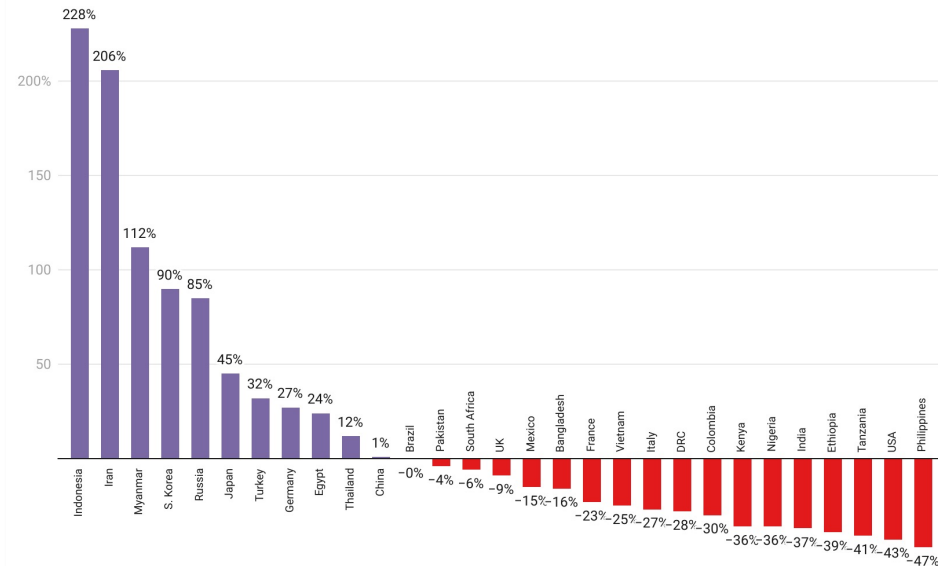


Global View

Case rates tripled in a week in Indonesia and Iran; doubled in Myanmar. The US posted the second largest decline in case rates among large countries globally

Weekly Increase% in New Cases

7-Day Average, As of February 4

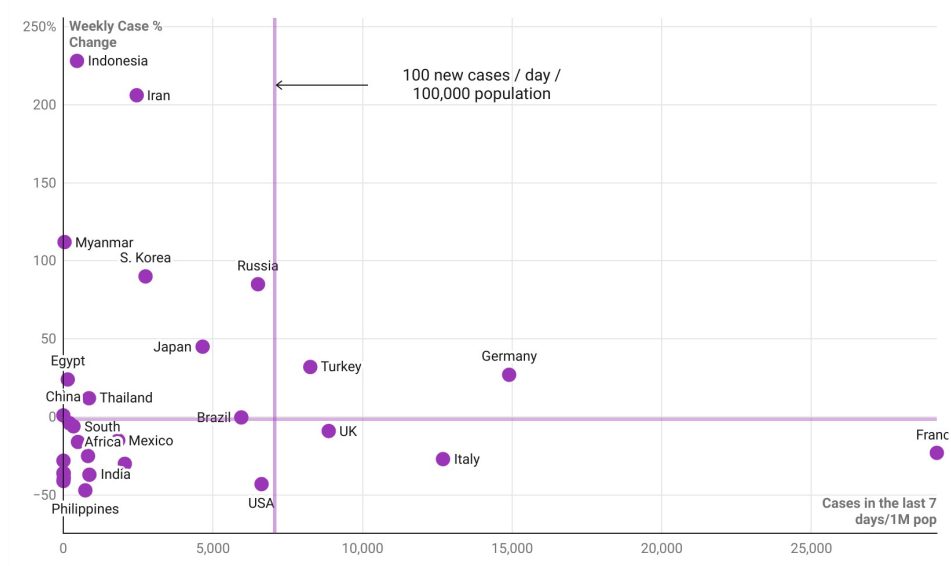


All Countries With 50M+ population

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

New Weekly Cases /M v. Week-Over-Week Change in Rate

As of February 4



Countries with 50M+ population

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

Sources

- ▶ Bloomberg Vaccine Trackers, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/?sref=Z0b6TmH>
- ▶ 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, COVID-19 Laboratory-Confirmed Hospitalizations https://gis.cdc.gov/grasp/COVIDNet/COVID19_5.html
- ▶ Centers for Disease Control and Prevention, National, Regional, and State Level Outpatient Illness and Viral Surveillance <https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>
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- ▶ COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University <https://github.com/CSSEGISandData/COVID-19>
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- ▶ New York Times, Covid-19 data <https://github.com/nytimes/covid-19-data>
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- ▶ U.S. Department of Health & Human Services <https://beta.healthdata.gov/dataset/COVID-19-Diagnostic-Laboratory-Testing-PCR-Testing/j8mb-icvb>
- ▶ U.S. Department of Health & Human Services: <https://healthdata.gov/dataset/covid-19-estimated-patient-impact-and-hospital-capacity-state>
- ▶ Worldometers.info: <https://www.worldometers.info/coronavirus/>
- ▶ Yale School of Public Health & Harvard TH Chan School of Public Health, <https://covidestim.org>