

Covid-19 Report

Issue # 261

January 15, 2021

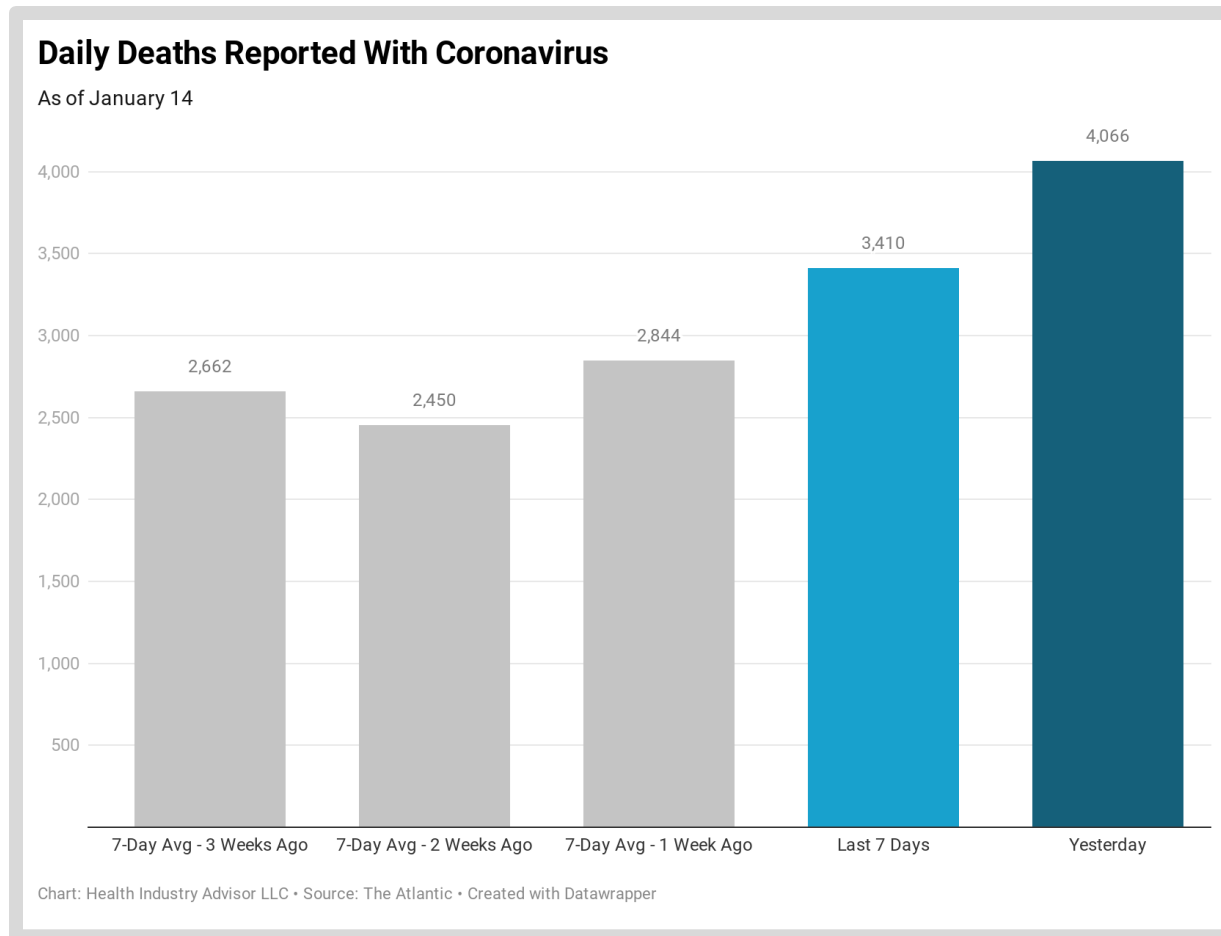
Covid-19 Highlights

- For the third successive day, more than 4,000 deaths were reported with coronavirus in the US. For the past seven-day period, reported deaths are up 20% over the prior week.
- Israel presents somewhat of an enigma:
 - Israel is experiencing one of the highest current rates of new cases per capita worldwide; further, this rate has consistently risen throughout January
 - Yet, Israel is setting the pace worldwide for vaccinations: as of yesterday, about one-quarter of residents have been vaccinated; among person 60 years and older, its three-quarters of the country's residents
 - Of note, vaccine efficacy has matched expectations set from the Phase 3 clinical trials. Further, side-effects have only been reported for 0.6% of those vaccinated
 - So, how do we square the high infections and vaccination rates? Is it merely that the infections were taking hold before the presumed 14-day period from second dose vaccination to full immunity?
 - Israel's experience over the next several weeks should tell us a great deal about herd immunity levels. Stay tuned!
- On the encouraging side:
 - The US reported more than 1.1 million new vaccinations yesterday. In our modeling, we presume that we must at least sustain this rate until the JNJ and AstraZeneca vaccines are approved and available; at that point, the rate would likely need to double
- Over the past four days, Operation Warp Speed has released 8.5 million doses to the states
- Covid-19 hospitalizations remain too high in the US; however, this Covid-19 census declined again yesterday - the six drop in the past eight days
 - As Thursdays are typically a peak census day of the week, this drop was particularly noteworthy
 - Even beleaguered California has gained a small amount of relief, with hospitalizations falling on successive days
- We are experiencing a milder flu season than any of the past five seasons. Last season's visits were seven times higher at this time than we experienced last week. This low visit experience has a sizable impact on hospital resources
- November, December and the first half of January have been a struggle, as new cases and estimated infections have increased each month - and are higher than experienced at any other time during the pandemic. There may be reasons for anticipating an improving situation:
- New cases declined day-over-day yesterday, defying the historical pattern of increasing on Thursdays; correspondingly, the 7-day new case rate has now declined three successive days. Excepting holiday periods and their reporting challenges, we have not experienced a three day run of declining rates in several months
- Estimated new infections, which rose rapidly from October to the present, are projected to fall sharply each month from February to May ([Gu](#))

Covid-19

Deaths Reported With Coronavirus

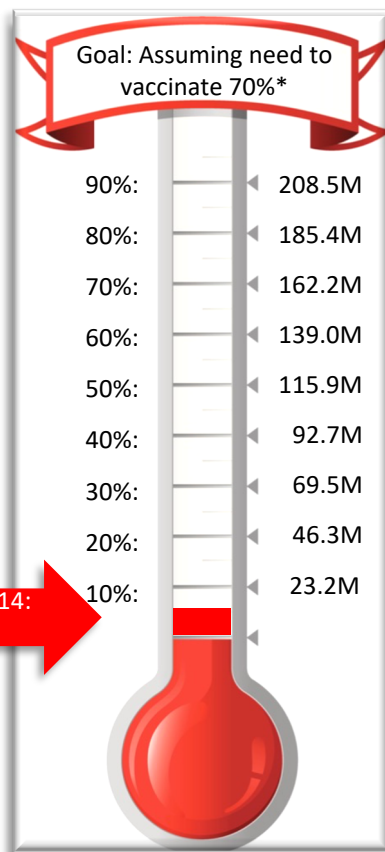
Tragically, there were more than 4,000 deaths reported with coronavirus for the third consecutive day



Covid-19

Vaccine Tracking

In the past four days, an additional 8.5 million doses have been distributed to the states; this brings the total available to nearly 30 million. Yesterday, more than a million doses were administered, bringing to total to 11.9 million doses



Vaccination: Phase 1a Progress

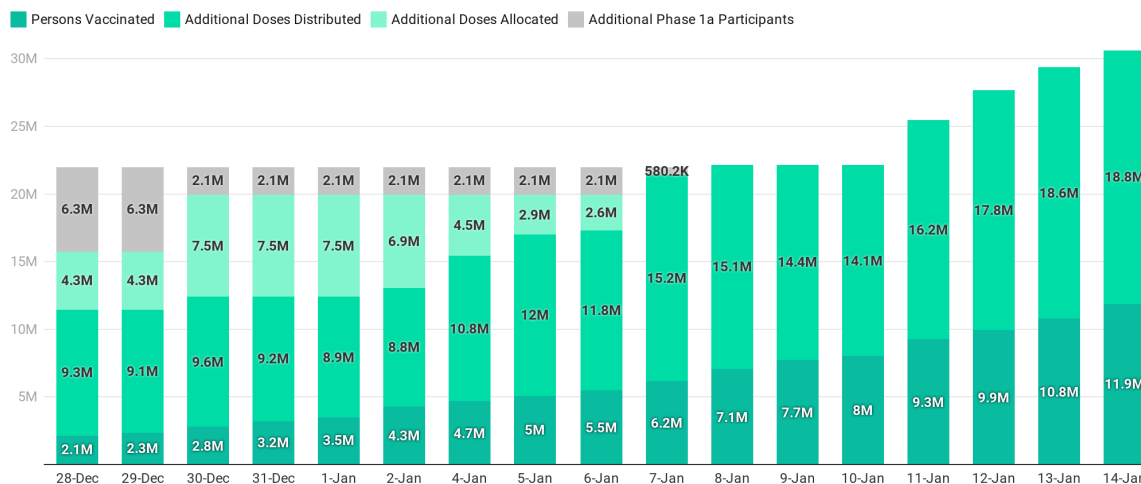


Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

From the CDC vaccine webpage: “Healthcare providers report doses to state, territorial, and local public health agencies up to 72 hours after administration. There may be additional reporting lag for data to be transmitted from the state, territorial, or local public health agency to CDC.”

Vaccine data from: [Centers for Disease Control and Prevention](https://www.cdc.gov/vaccines/imz/downloads/#vaccine-tracker) and [Bloomberg Vaccine Tracker](https://www.bloomberg.com/press/2021-jan-14-covid-vaccine-tracker)

Vaccination Progress By State

Covid-19

West Virginia and North Dakota each have vaccinated the highest % of residents – each >6% of residents receiving at least an initial dose.

Vaccination Progress

% of Population Receiving Initial Dose, As of January 14

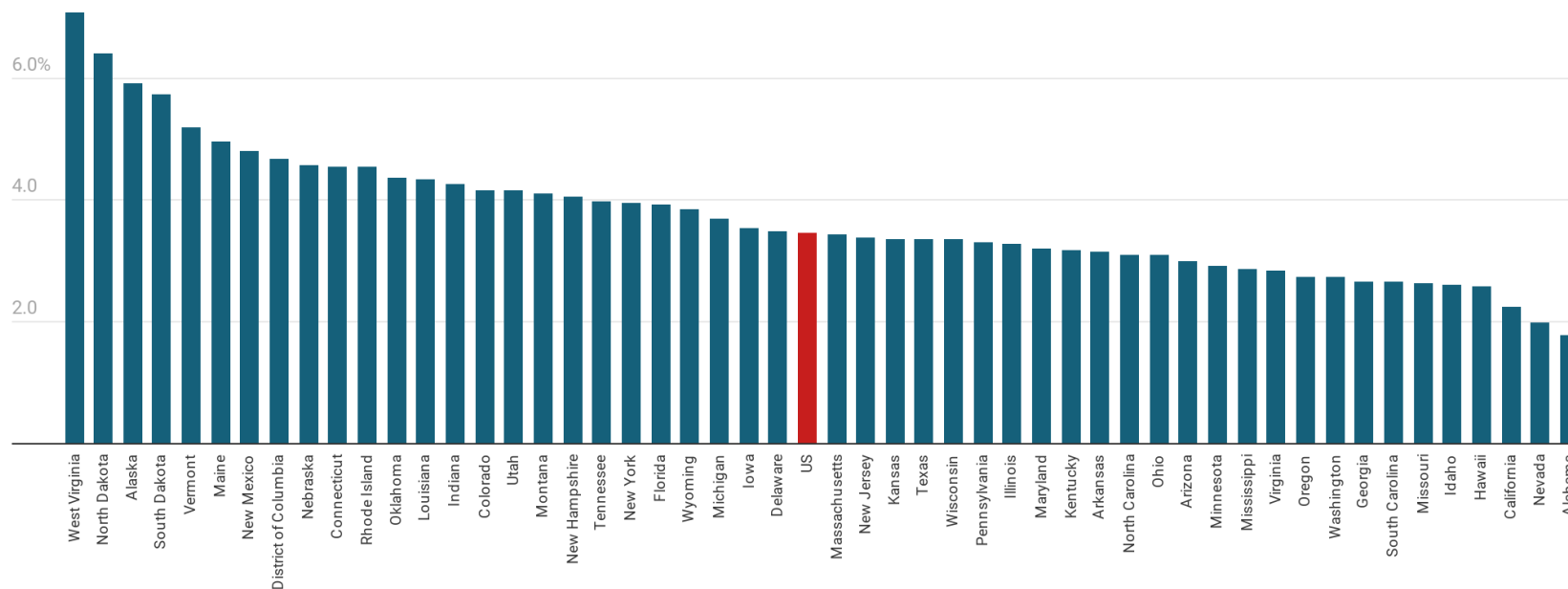


Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

Covid-19

Covid-19 Hospitalizations

For the third consecutive day, Covid-19 hospitalizations declined slightly over the past week. Indeed, this census fell day-over-day – the second successive Thursday this occurred; it had not happened on a Thursday since October 2 since September 16). Census has now declined day-over-day six of the past eight days

Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks, As of January 13

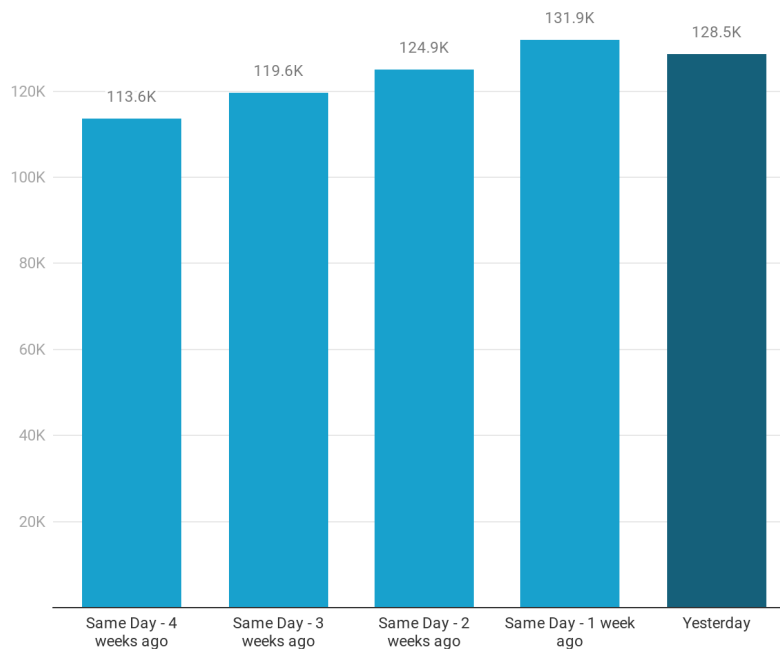


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

% in ICU - Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks, As of January 14

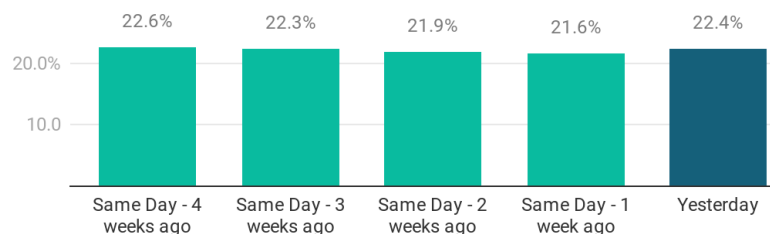


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

% on Ventilators - Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks, As of January 14

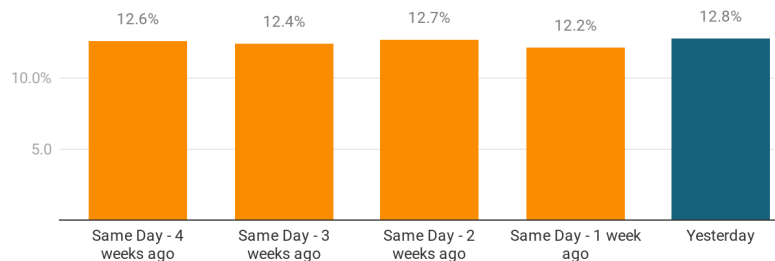


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19

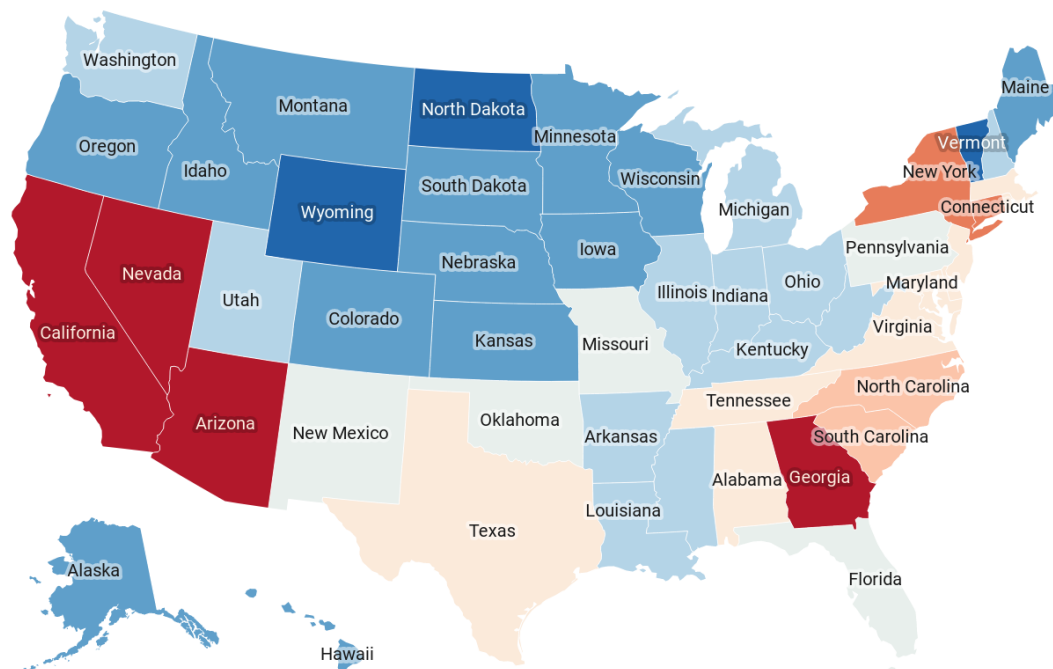
Covid-19 Inpatient Occupancy

Greatest strain on hospital beds continues to be in Arizona, California, Georgia and Nevada; Situation is also a concern in Connecticut and New York

Covid-19 Patients As % of All Inpatient Beds

As of January 14

< 10% **10%–20%** **20%–30%** **30%–40%** **40%–50%** **50%–60%** **60%–70%** **≥ 70%**



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

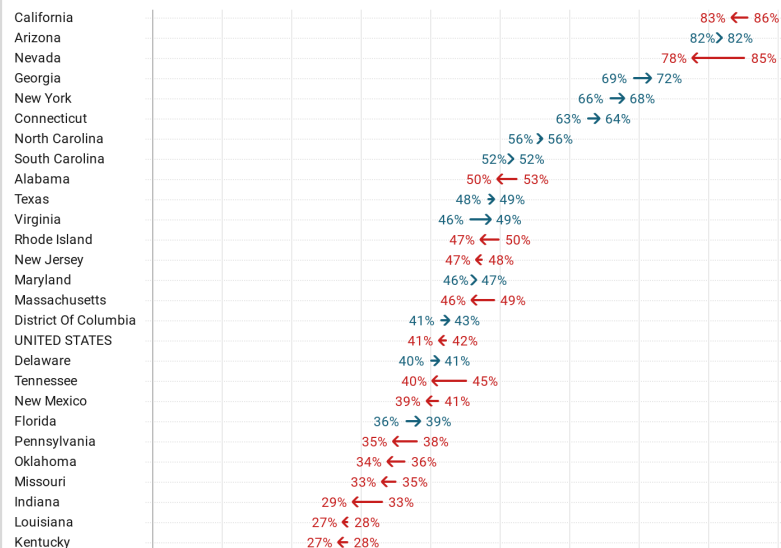
Covid-19

Hospitalized Covid-19 Patients

Hospitalization rate fell week-over-week in thirty-seven states, including California and Nevada

Covid-19 Patients / Total Inpatient Beds

7-Day Moving Average, As of January 7 & 14



Covid-19 Patients / Total Inpatient Beds

7-Day Moving Average, As of January 7 & 14

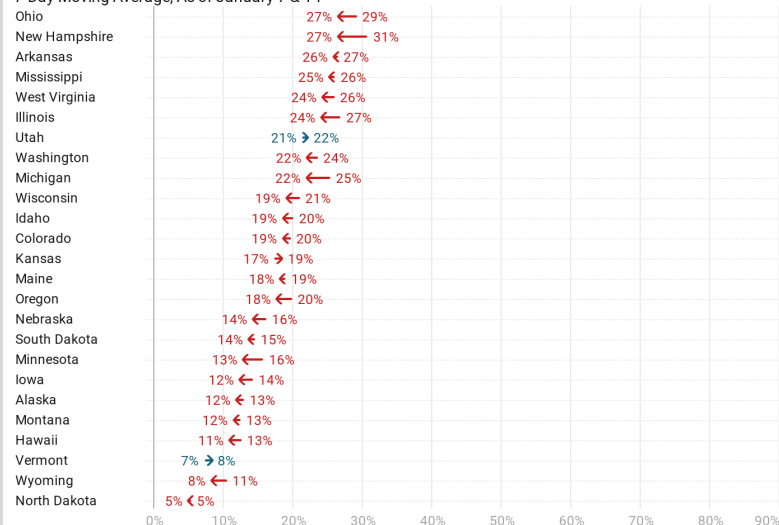


Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking project & worldometers.info • Created with Datawrapper

Covid-19

Estimated New Infections – US (Gu Model)

The US experienced a surge in estimated new infections, beginning in November and perhaps continuing through the end of January; Infections are projected to fall quickly in February, March and April

Estimated True Infections - US

Using data from <https://covid19-projections.com>, accessed January 15, 2021

Gu Model, As of January 14

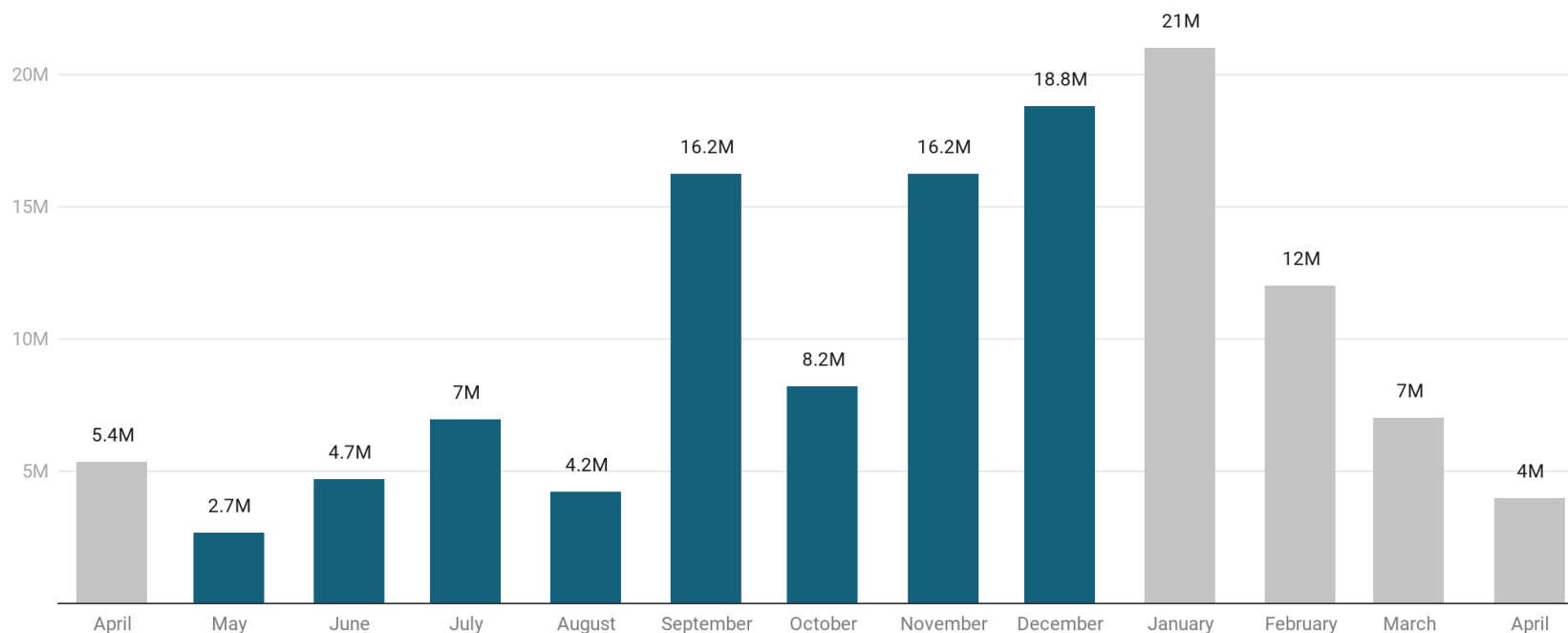


Chart: Health Industry Advisor LLC • Source: Youyang Gu • Created with Datawrapper

Covid-19

% of Visits Relating to Influenza

Fourteen weeks into the 2020/21 flu season, we are experiencing a milder season than in each of the past 5 years; For last week, visits during the comparable week last year were 7x higher last year than this year

% of Visits For Influenza-Like Illnesses, National Summary

By Week & Flu Season

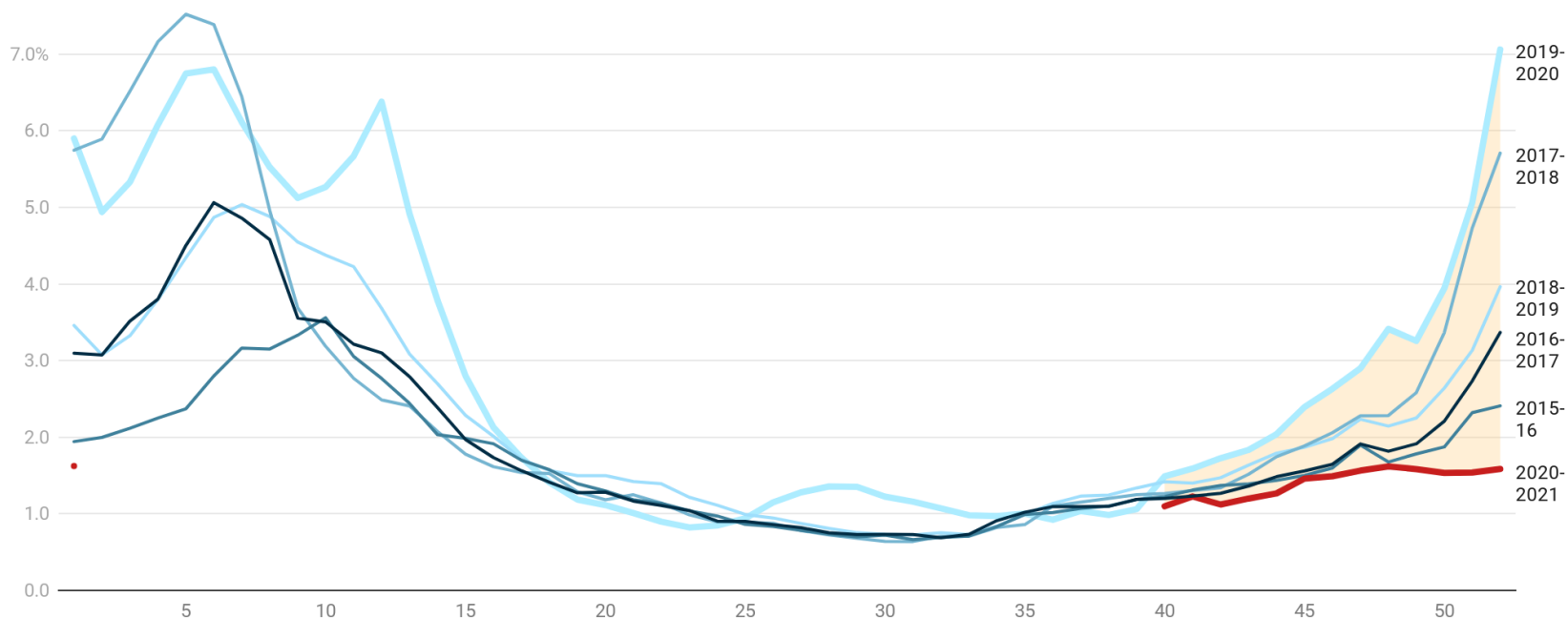


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control & Prevention • Created with Datawrapper

Covid-19

Newly Detected Cases / Million

The UK's case rate has declined on five successive days; Ireland's on four and the US's, on three. Israel's rate continues to rise, despite strong vaccination efforts

Newly Detected Cases Per Million

7-Day Moving Average

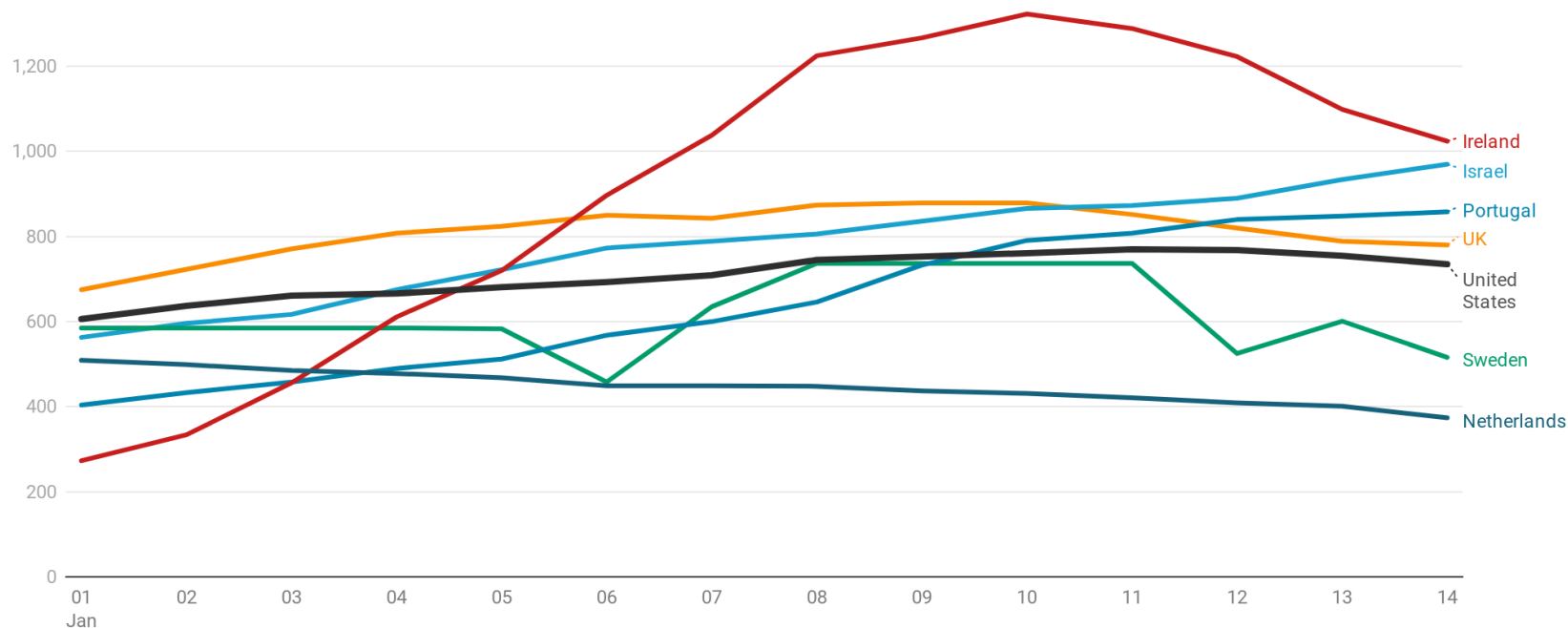


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19

Newly Detected Cases / Million - US

Newly detected cases (7-day average) have now declined on three successive days

Newly-Detected Cases / Million - US

7-Day Moving Average

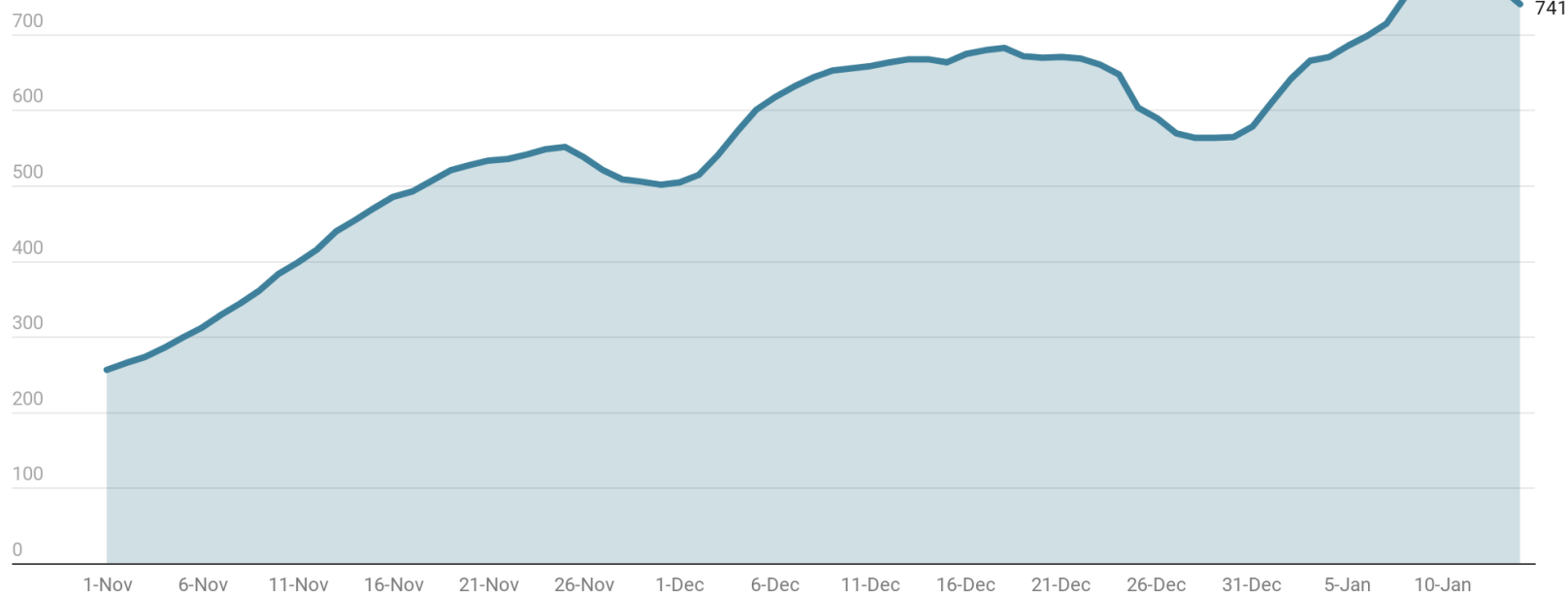


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19

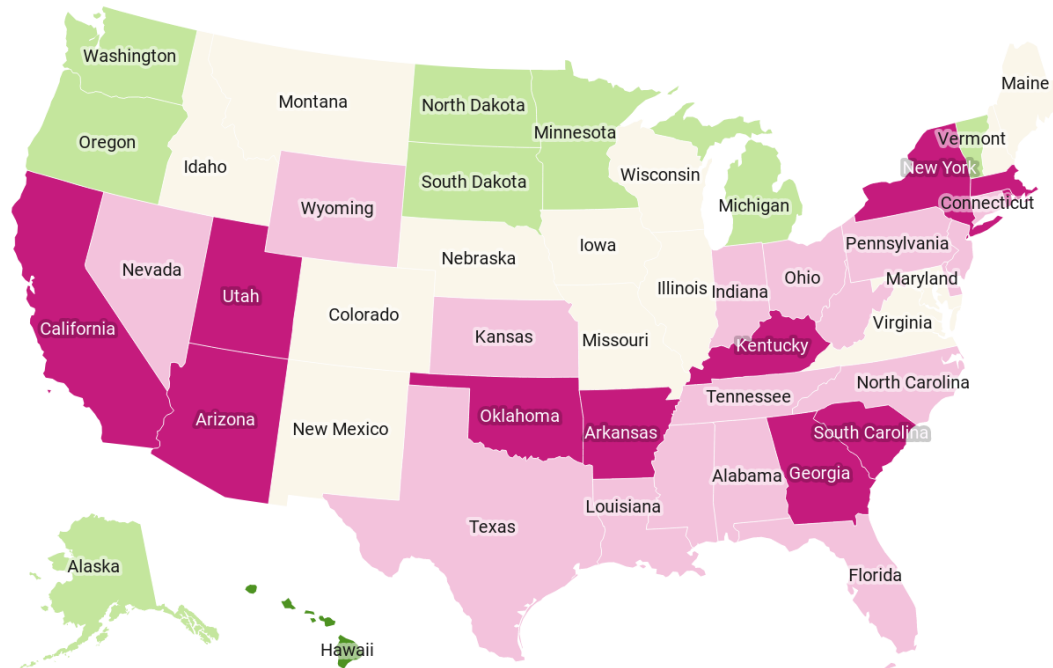
New Case Rate By State

New case rates are highest Arizona, Arkansas, California, Connecticut, Georgia, Kentucky, New York, Oklahoma, South Carolina and Utah

New Cases / Million

7-Day Moving Average, As of January 14

< 200 200-400 400-600 600-800 ≥ 800

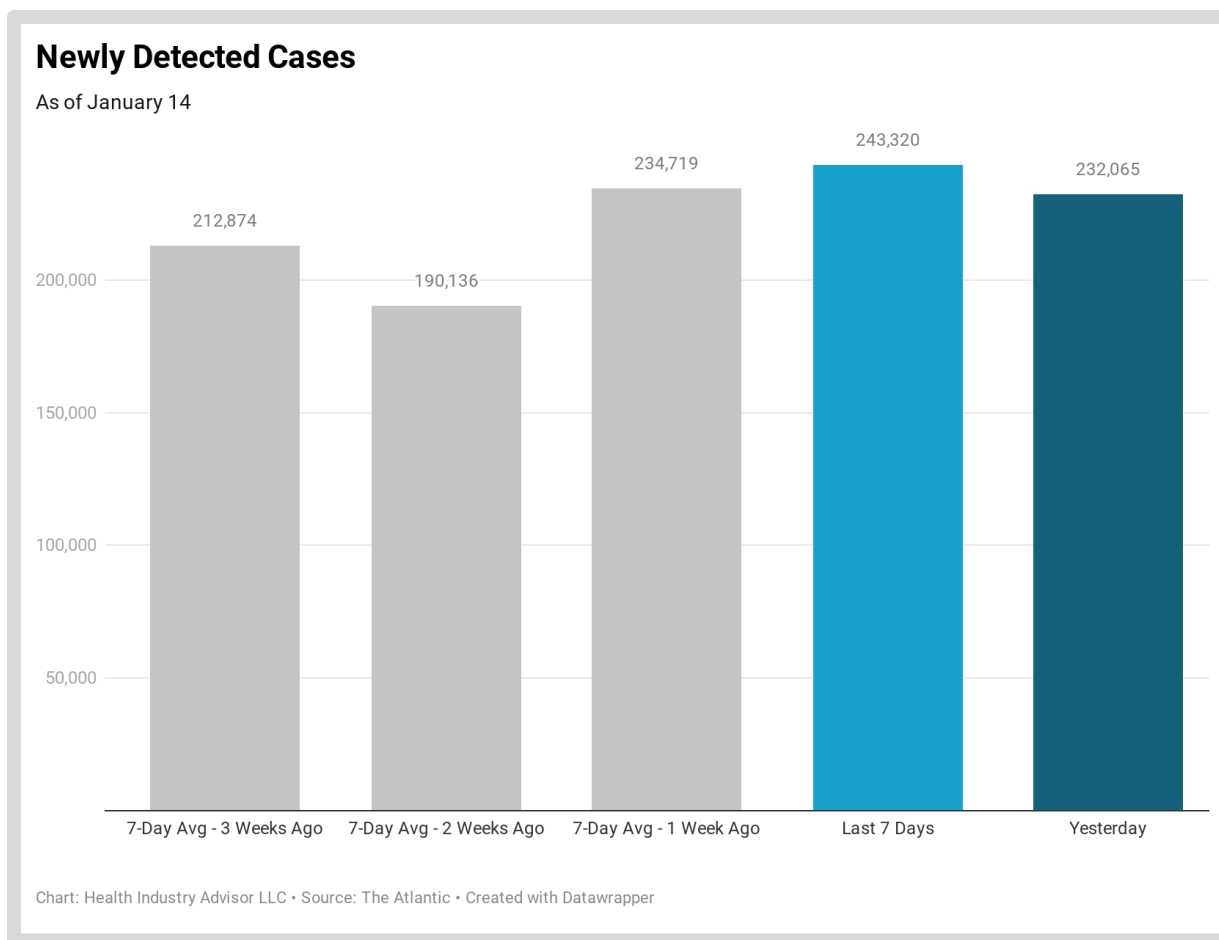


Map: Health Industry Advisor LLC • Created with Datawrapper

Covid-19

Newly Detected Cases

New cases yesterday were below the 7-day average again yesterday – unusual for a Thursday, and were comparable to the 7-day average through one week ago – which included New Year's Day



Covid-19

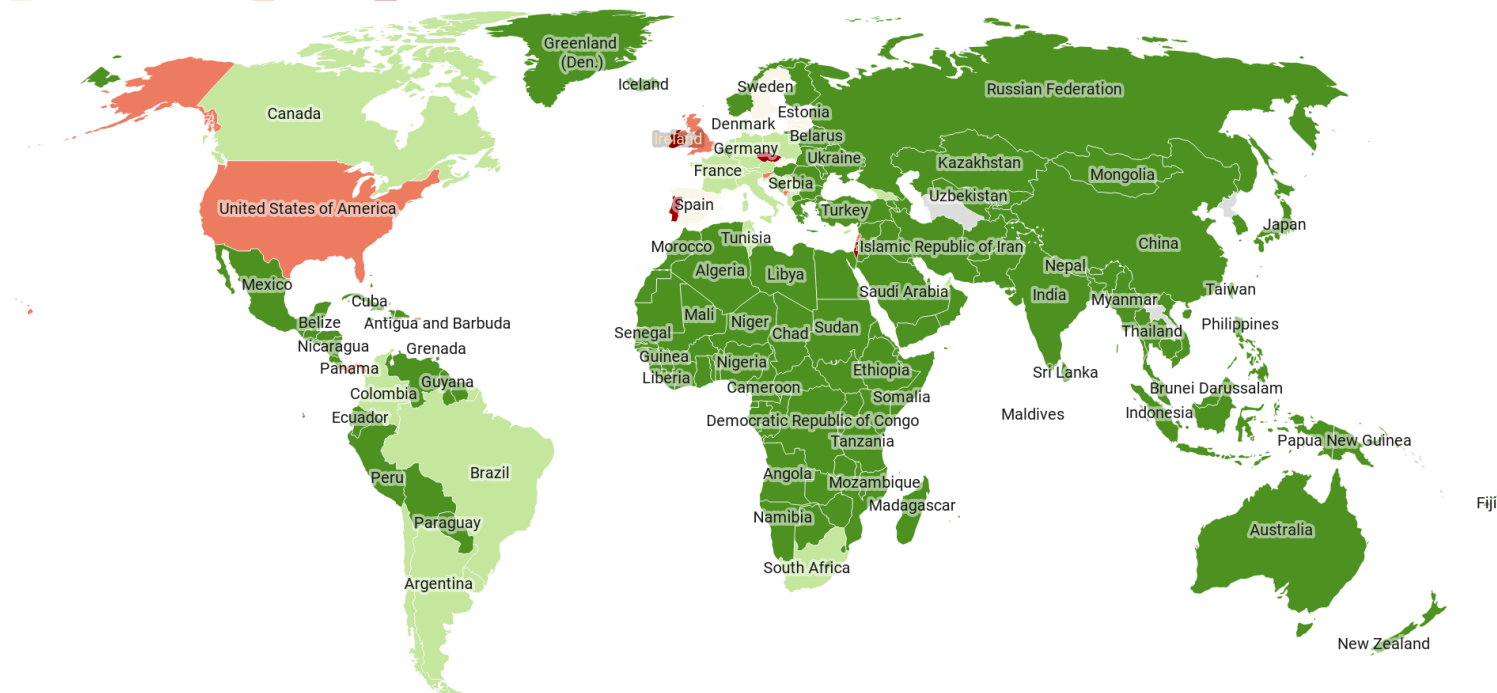
Newly Detected Cases / Million

The ten countries with the highest current new case rates (in descending order of case rates): Gibraltar, Ireland, Andorra, Czechia, Israel, Portugal, United Kingdom, Slovenia, United States and Panama

New Infections / Million

7-Day Moving Average, As of January 14

■ < 200 ■ 200–400 ■ 400–600 ■ 600–800 ■ ≥ 800



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

Covid-19

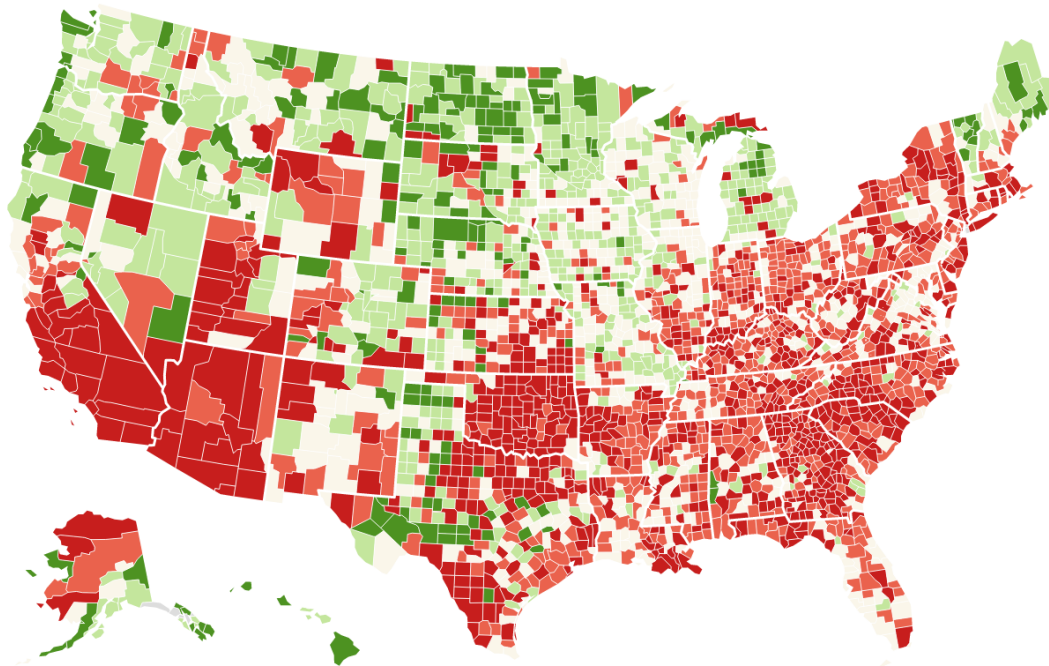
Metro Areas in the US

Newly detected cases per capita are at high rates across the US, although the Midwest, New England and the Northwest appear to be doing better than the rest of the country

New Daily Infections / Million

7-Day Moving Average, As of January 14

< 200 200-400 400-600 600-800 ≥ 800



Map: Health Industry Advisor LLC • Created with Datawrapper

Metro Areas With Major Universities

Covid-19

Washington County, home to the University of Arkansas, reported the highest new case rate of the 33 such areas we track; Washtenaw County (University of Michigan), the lowest. Only 7 of the 33 areas exceeded the national rate

Metro Areas With Major Universities: New Daily Infections / 1M Population

7-Day Average, As of January 14

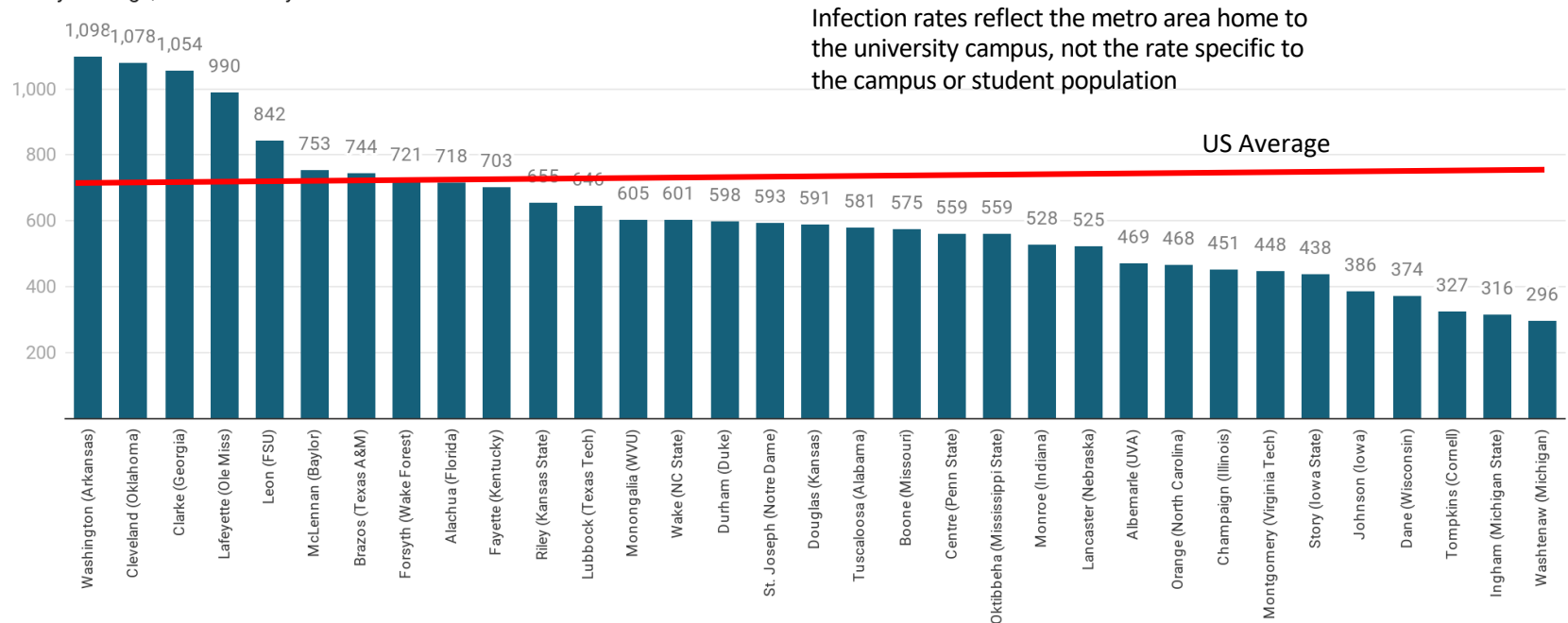


Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19

Metro Areas With Major Universities

New case rates declined week-over-week in eighteen of the thirty-three metro areas that we track. Lafayette, home of the University of Mississippi reported the largest increase week-over-week; Tuscaloosa, home of the National Champions, had the largest decrease

Metro Areas With Major Universities: Week-Over-Week Change In New Daily Infections / 1M Population

7-Day Average, January 14 v. January 7

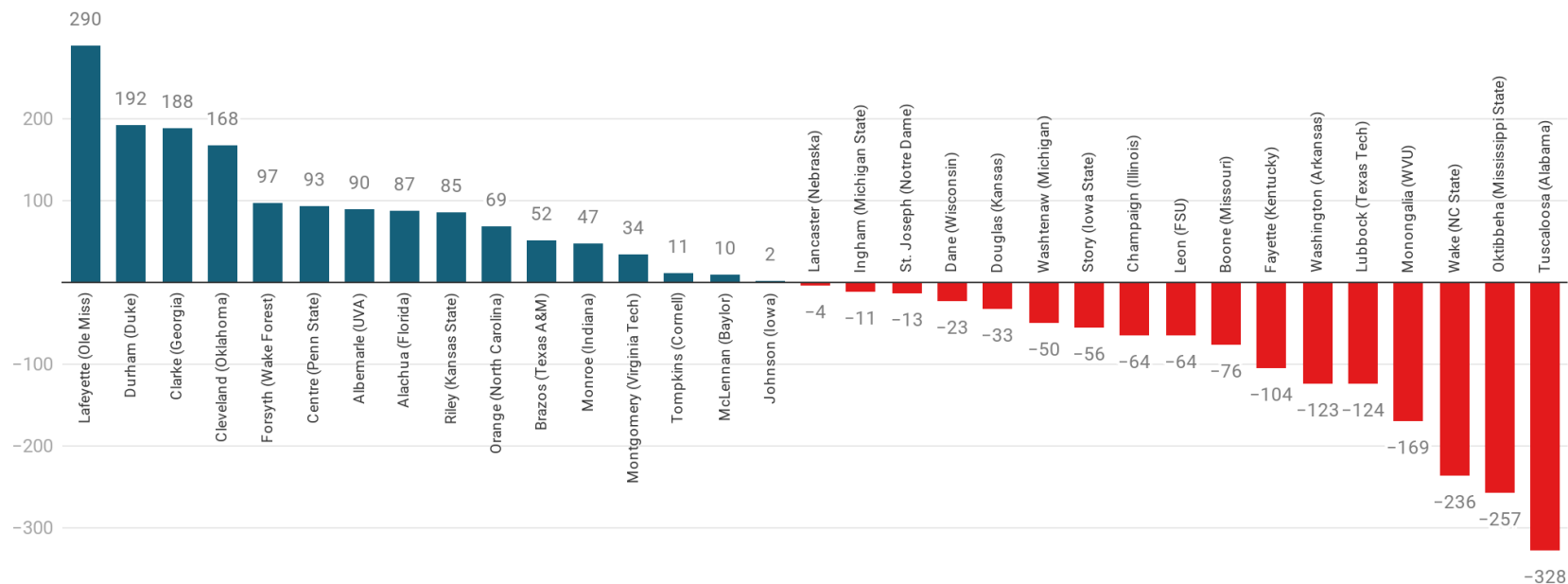


Chart: Health Industry Advisor LLC • Created with Datawrapper

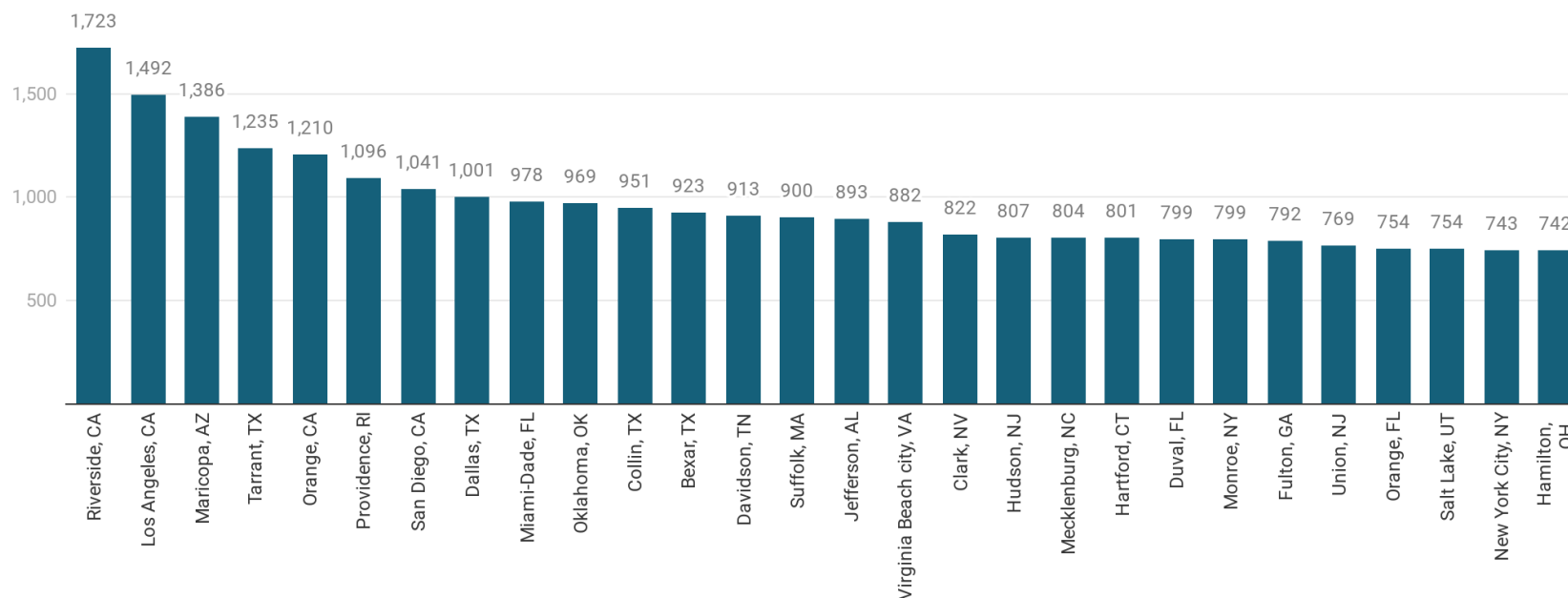
Covid-19

Large Central Metro Areas in the US

Twenty-eight Large Central Metro Areas have newly detected cases per capita above the national average, including New York City; Of the twelve highest, four each are in California and Texas

New Daily Infections / Million Population - Large Central Metro Areas

7-Day Moving Average, As of January 14



Health Industry Advisor LLC analysis

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

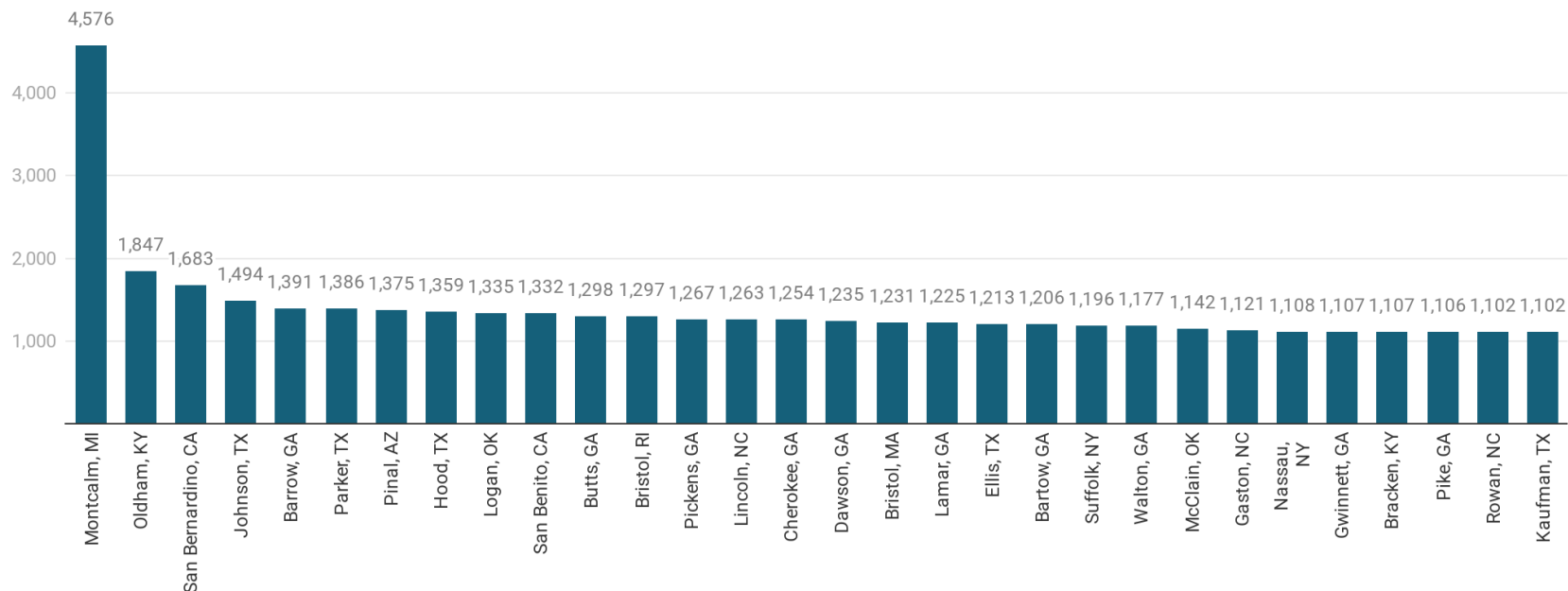
Covid-19

Large Fringe Metro Areas in the US

Of the 30 Large Fringe Metro Areas with the highest current rate of new cases per capita, fifteen are in Georgia and five are in Texas

New Daily Infections / Million Population - Large Central Metro Areas

7-Day Moving Average, As of January 14



Health Industry Advisor LLC analysis

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

Covid-19

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>
- Oliver Wyman Pandemic Navigator, <https://pandemicnavigator.oliverwyman.com/forecast?mode=country®ion=United%20States&panel=mortality>
- Bloomberg Vaccine Trackers, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/?sref=Z0b6TmHW>