

Covid-19 "Vital Signs"

Issue # 360

December 13, 2021

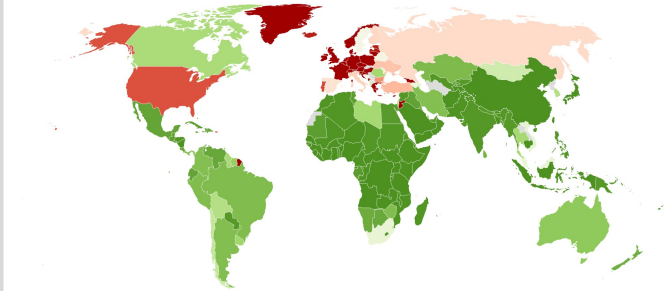
Covid-19 "Vital Signs"

Newly Detected Cases / Million

Delta and now, Omicron, drove infection rates higher last week across Europe, South Africa, and the United States. Rates are generally low in many other parts of the world.

New Daily Cases / Million

7-Day Average, As of December 3
0 200 400



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

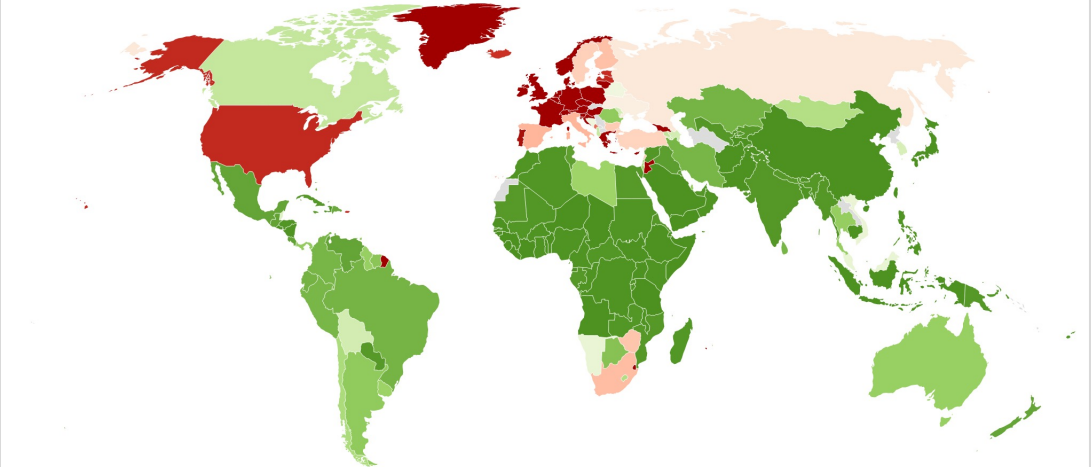
As of December 3

As of December 10

New Daily Cases / Million

7-Day Average, As of December 10

0 200 400

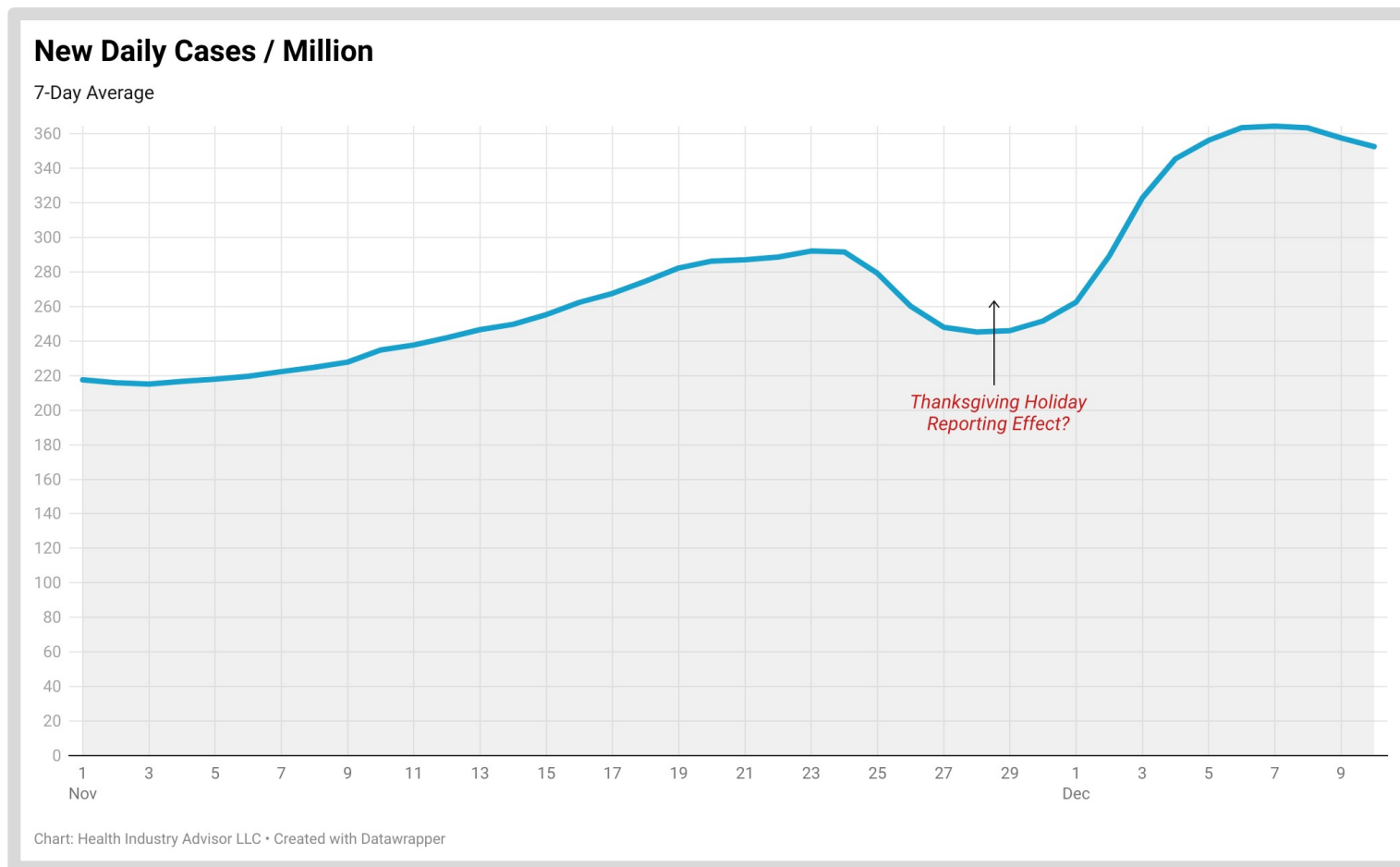


Map: Health Industry Advisor LLC • Source: worldometer.info • Created with Datawrapper

Covid-19 "Vital Signs"

Newly Detected Cases / Million - US

The new case rate has trended upward since early October. Thanksgiving holiday reporting issues artificially lowered reported cases that week and likely inflated them the following week.



Covid-19 "Vital Signs"

Week-Over-Week Changes in New Cases – U.S.

Holiday case reporting issues cloud week-to-week comparisons. We should gain a clearer picture this week.

Week-Over-Week Change in New Cases

7-day Average



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

Covid-19 "Vital Signs"

Estimated Daily Infections & New Case Rates – U.S.

Estimated daily infections rose last week, reversing a short-term decline and the end of November.

Estimated Daily Infections v. Detected Cases

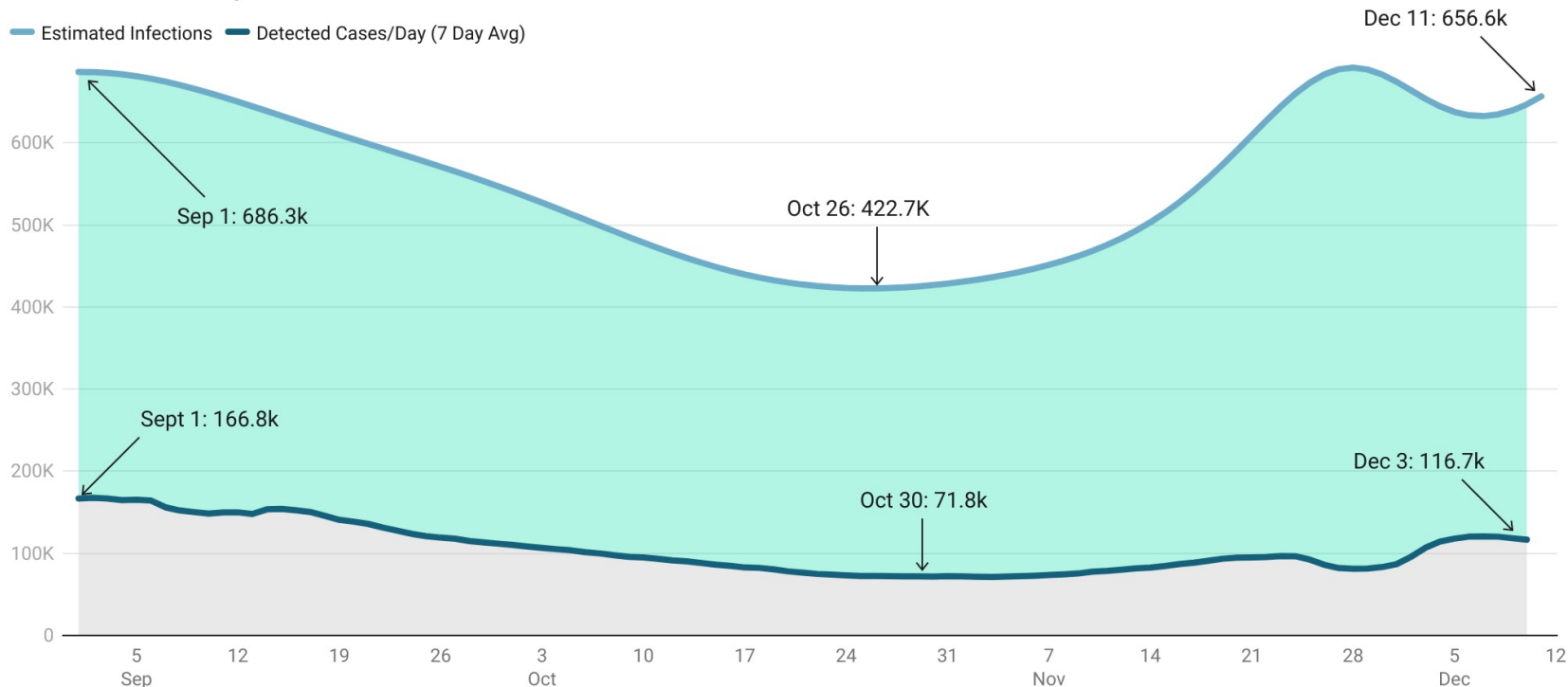


Chart: Health Industry Advisor LLC • Source: Yale School of Public Health • Created with Datawrapper

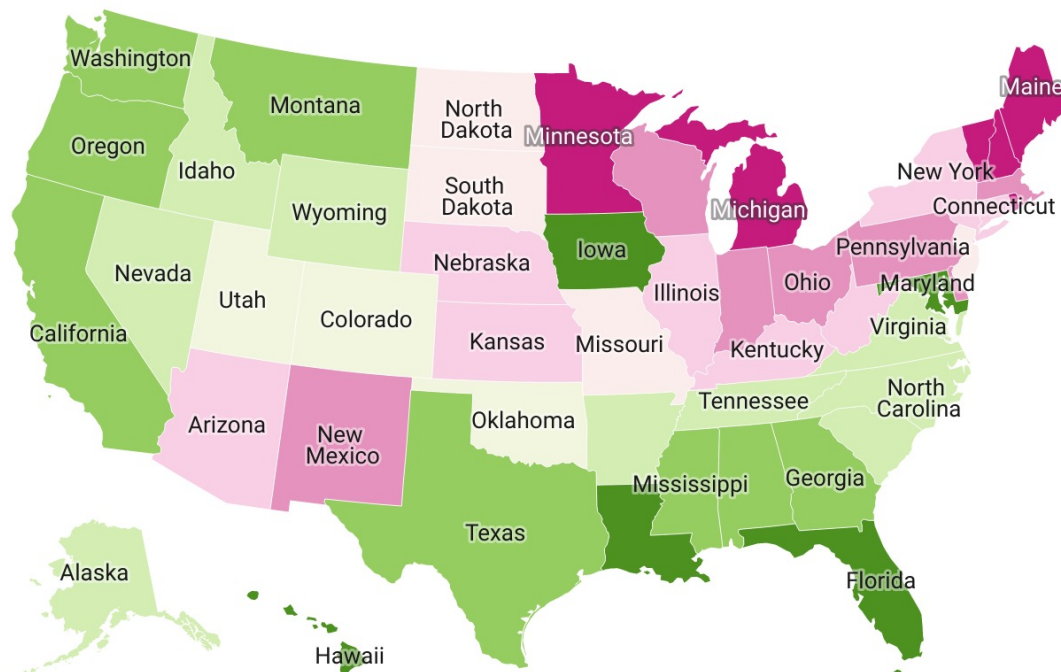
New Daily Cases Per Capita By State

Infections spiked last week across the Midwest and Northeast. Maine, Michigan, Minnesota, Rhode Island, and Vermont posted the highest new case rates of all states.

New Cases / Million

7-Day Average, As of December 10

< 100 100–200 200–300 300–400 400–500 500–600 600–700 ≥ 700



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

Estimated Daily Infections & New Case Rates

Cases per capita rose most sharply week-over-week in Connecticut, Delaware, Maine, and Vermont.

Current Reported Case Rate & Week-Over-Week Increase

7-Day Average, as of December 10



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

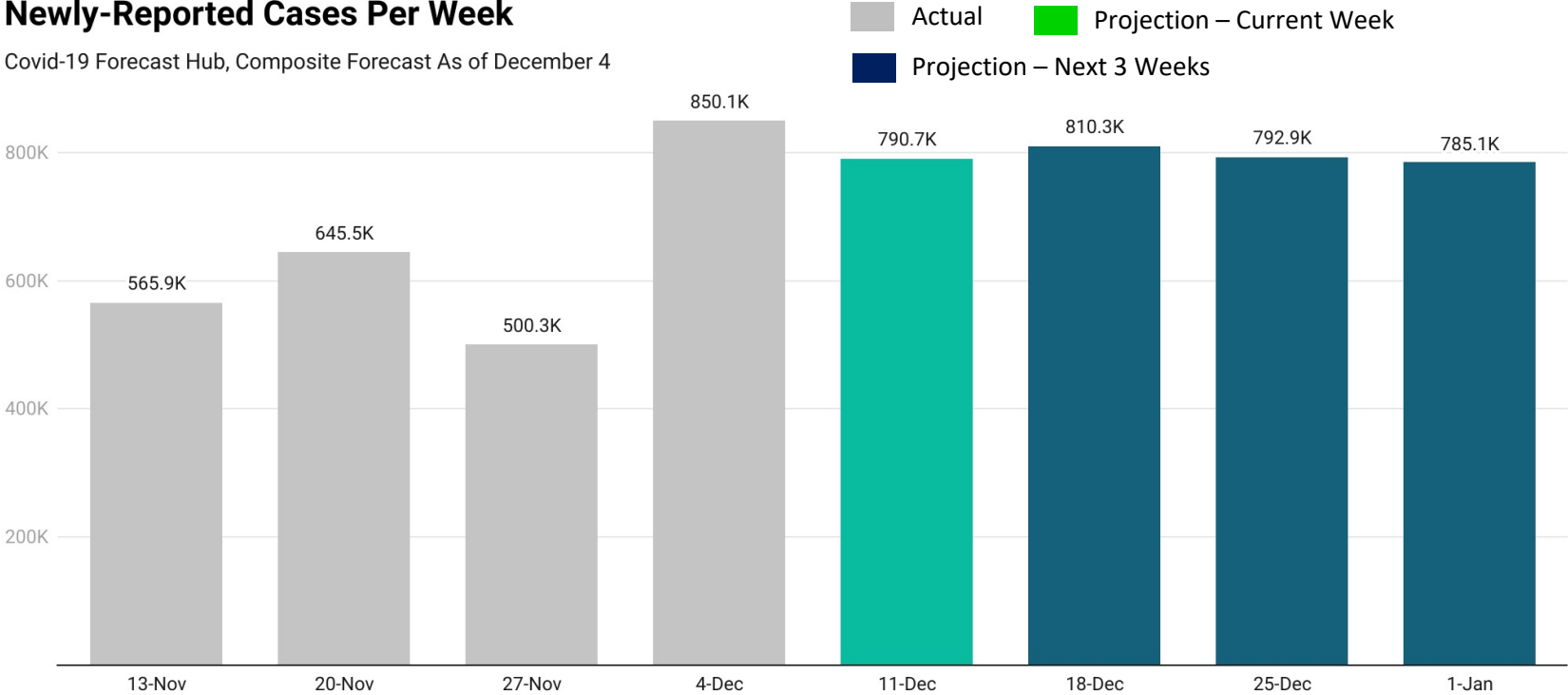


Covid-19 Cases: Ensemble Forecast

The most-recent ensemble predicts that cases will decline slightly next week and again the following week.

Newly-Reported Cases Per Week

Covid-19 Forecast Hub, Composite Forecast As of December 4



For the week ending on the date shown

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

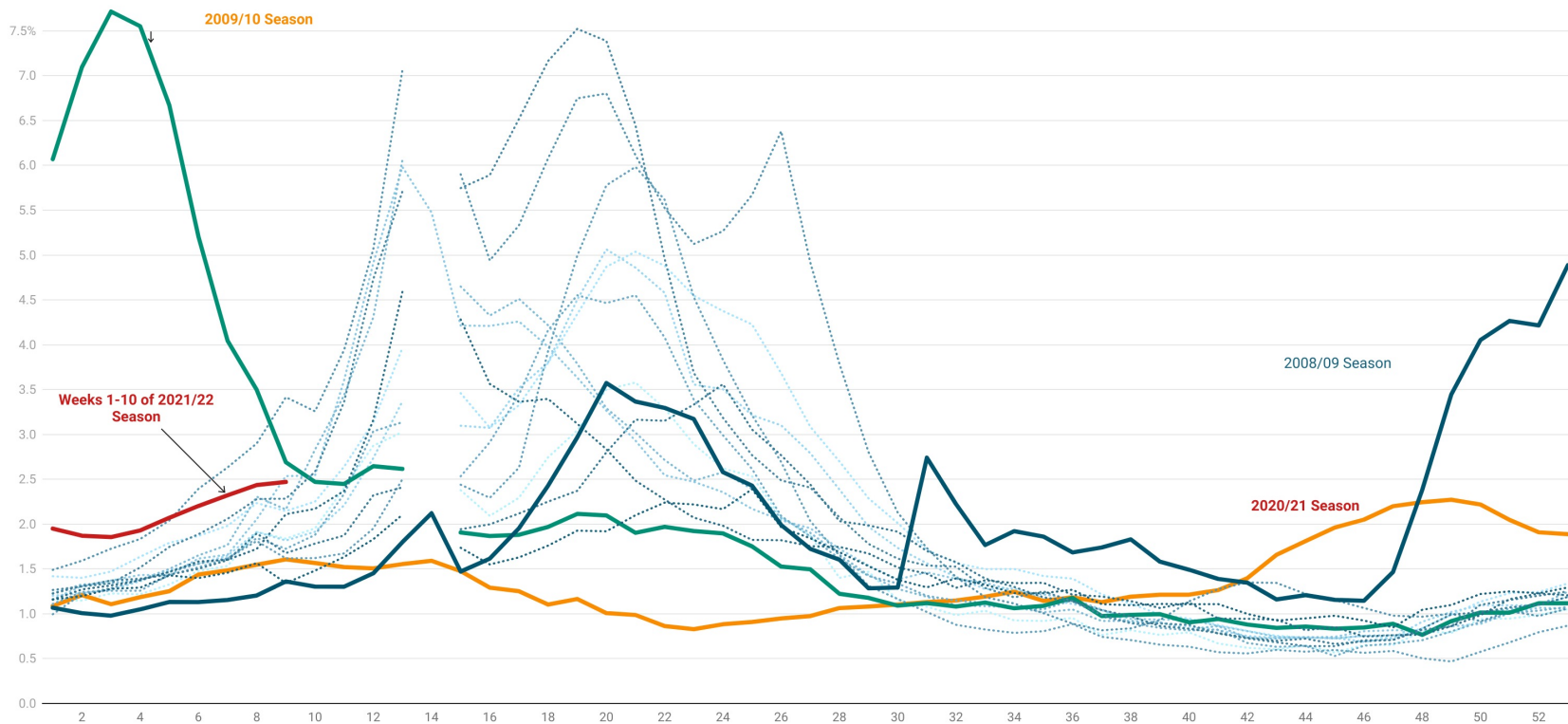
<https://viz.covid19forecasthub.org>

Comparison of Flu Seasons

The United States’ flu visit rate exceeds the rate for the comparable week during all but two of the last fifteen seasons. The peak of the typical flu season lies ahead of us.

Percentage Visits for Influenza-Like Illness, National Summary

Comparison of Last Fifteen Seasons



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

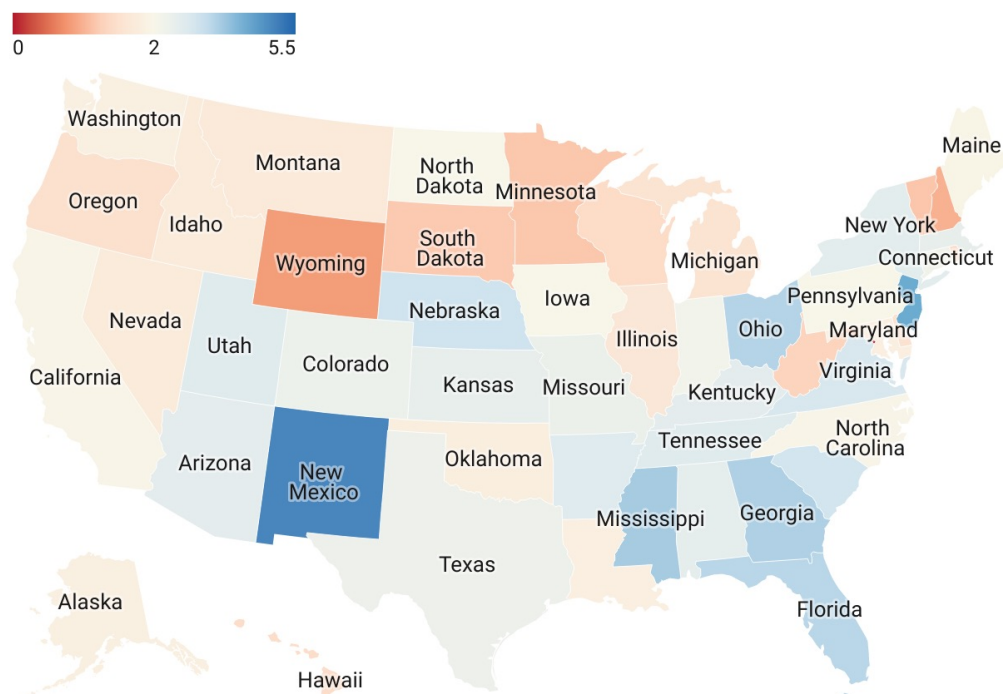
Chart: Health Industry Advisor LLC • Source: Centers For Disease Control and Prevention • Created with Datawrapper

Flu Situation By State

Flu visits are highest across the southern United States.

Percentage of Visits for Influenza-Like Illnesses

Week ending December 4, 2021



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

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

Vaccination Status By Age – United States

More senior citizens are now boosted than those have just two shots. The number of 5-to-11-year-olds having received a single shot doubled in the past week.

Vaccination Status By Age

As of December 4

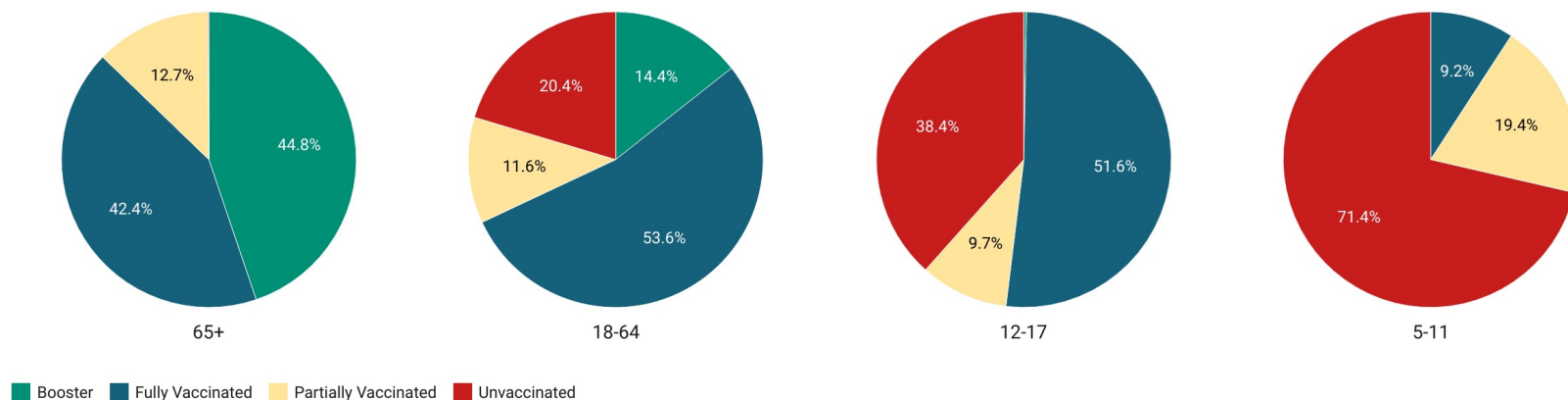


Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Covid-19 "Vital Signs"

Test-Positive Rate

The test-positive rate eased slightly last week. This rate had increased steadily since Halloween.

Test-Positivity Rate

7-Day Average, Through December 3

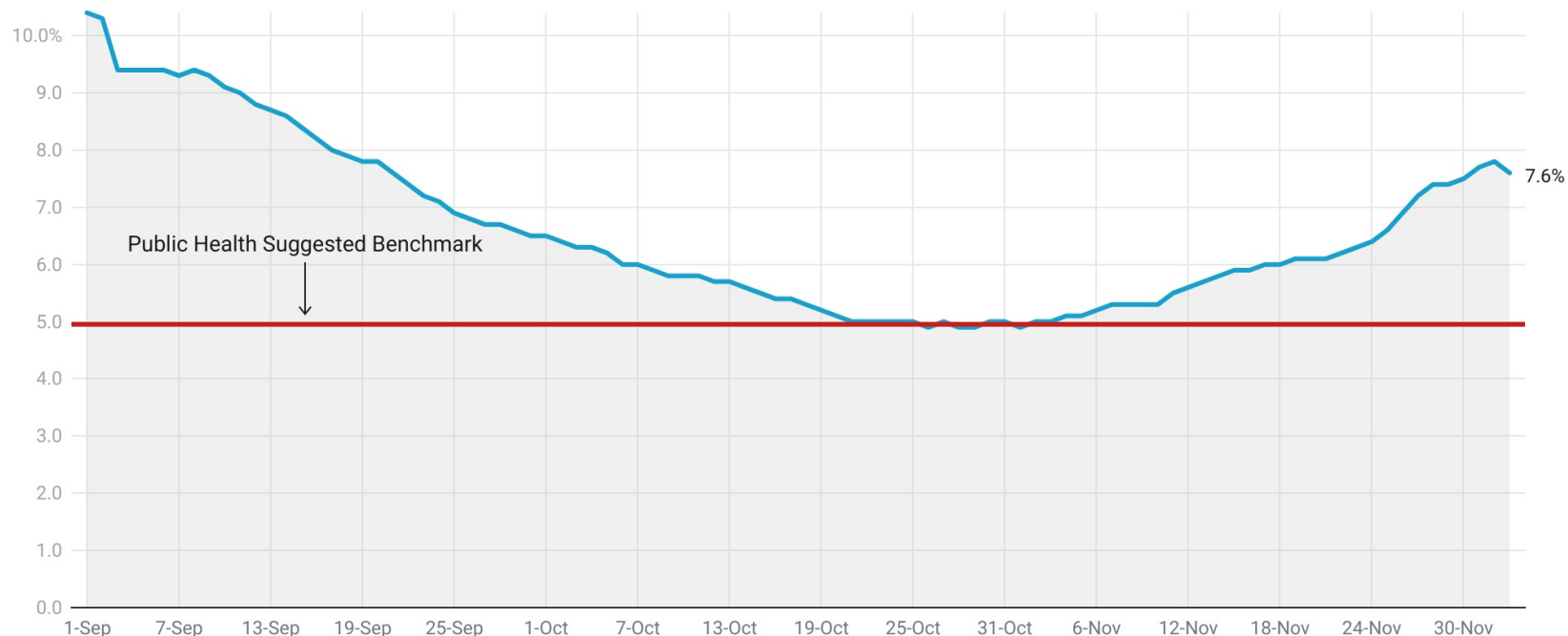


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

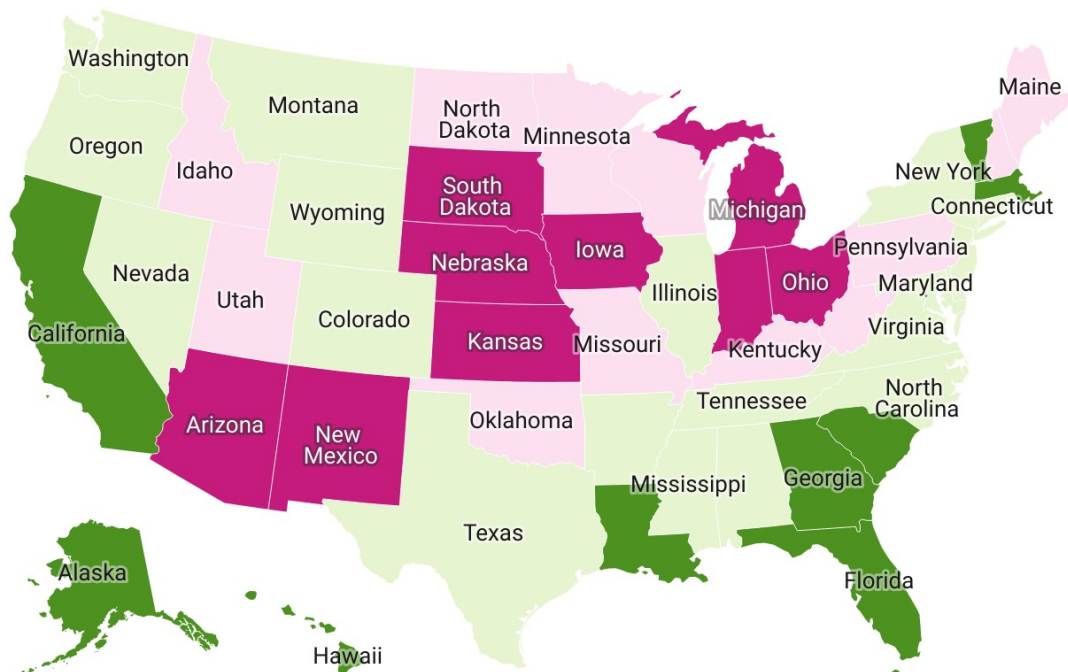
7-Day Average Test-Positivity %

Arizona, Indiana, Iowa, Kansas, Michigan, Nebraska, New Mexico, Ohio, and South Dakota posted the highest test-positivity rates of all states last week.

Test Positivity %

7-Day Average, As of December 3

■ < 5% ■ 5%–10% ■ 10%–15% ■ ≥ 15%



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

Covid-19 "Vital Signs"

Inpatient Covid Admissions and Census

Covid admissions have trended upward since early in November, increasing 32% already. Covid census is up 39% in the past month. Fortunately, both measures are sharply lower than early September.

Covid-19 Admissions & Census

As of December 9

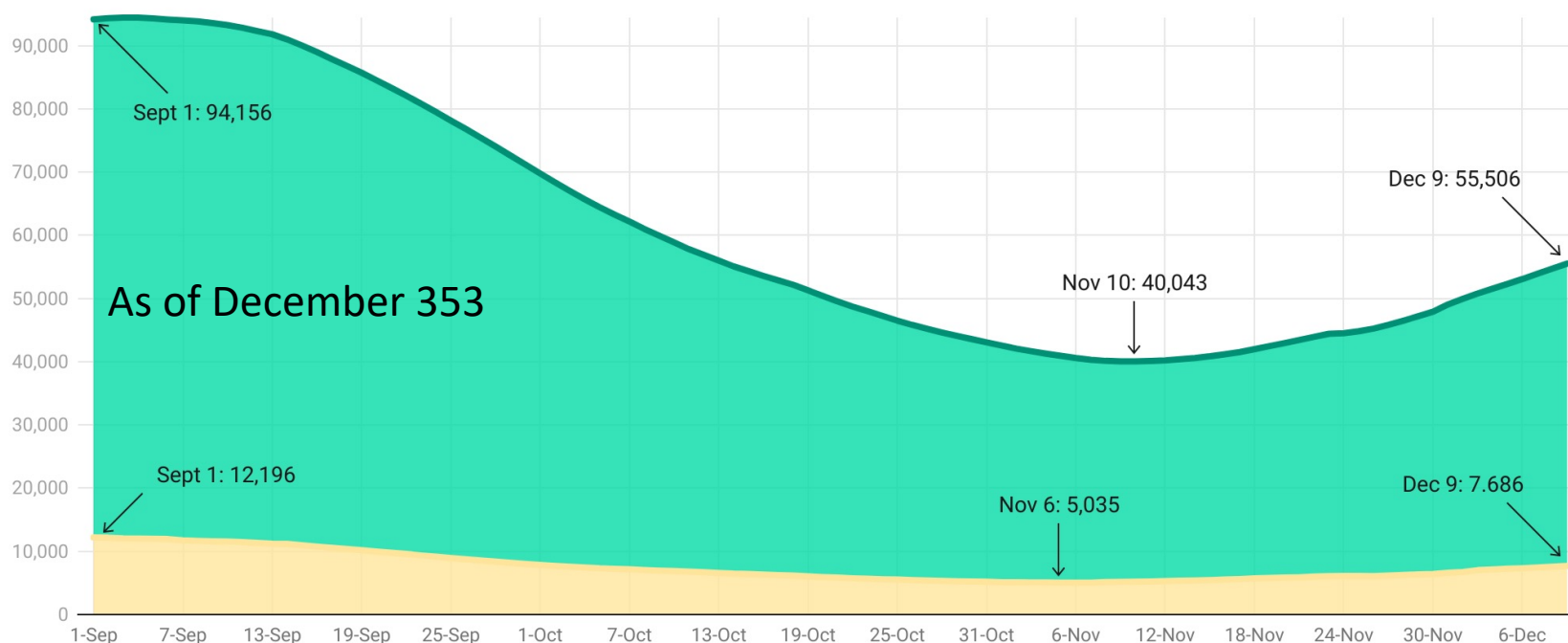


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid-19 "Vital Signs"

Covid Hospital Occupancy Trends

Covid census in most states increased over the past two weeks. Of particular concern are states with high occupancy rates already, including Arizona, Delaware, Michigan, New Hampshire, and New Mexico.

Covid Hospital Occupancy % v. & Week-Over-Week Change in Census

As of December 9

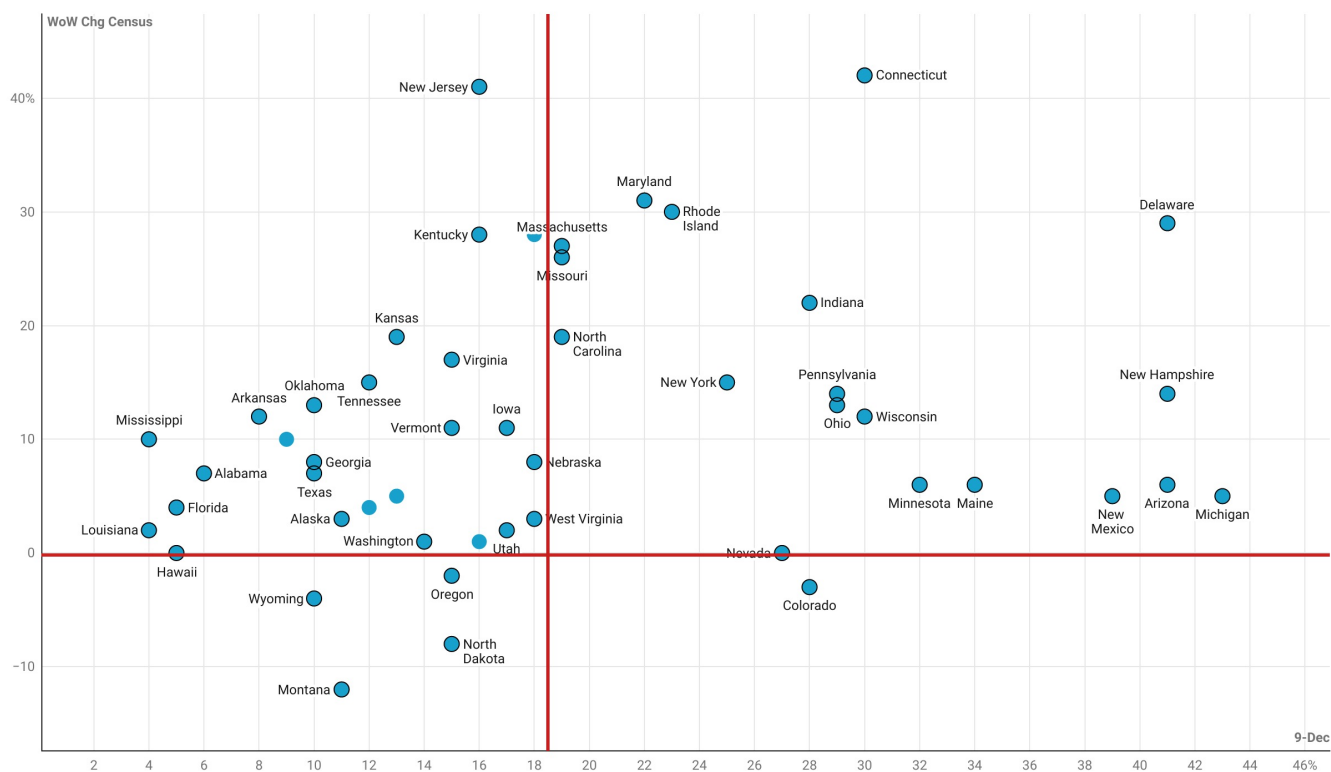


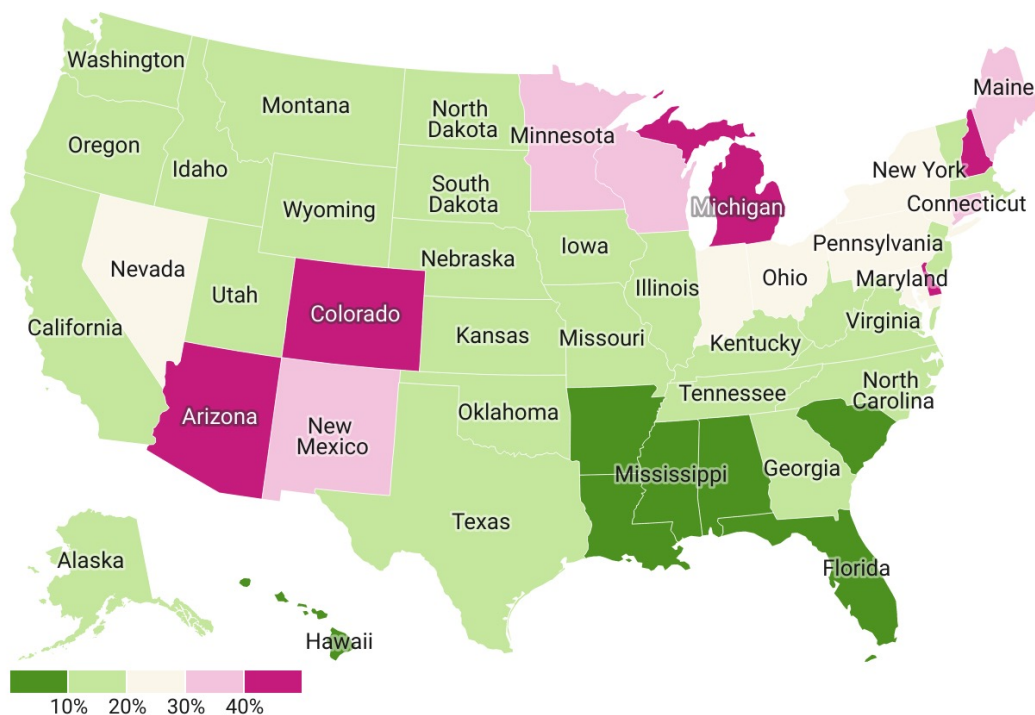
Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid Hospital Occupancy By State

Covid hospitalization levels reached concerning levels last week in Arizona, Colorado, Connecticut, Delaware, Maine, Michigan, Minnesota, New Hampshire, and New Mexico. Rates remain relatively low in across the Southeast.

Covid-19 Patients As % of All Inpatient Beds

As of December 9



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

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Deaths with Covid-19

Deaths with Covid remained high last week. The current rate is above 1,200 per day.

Deaths With Coronavirus

7-Day Average, Through December 10

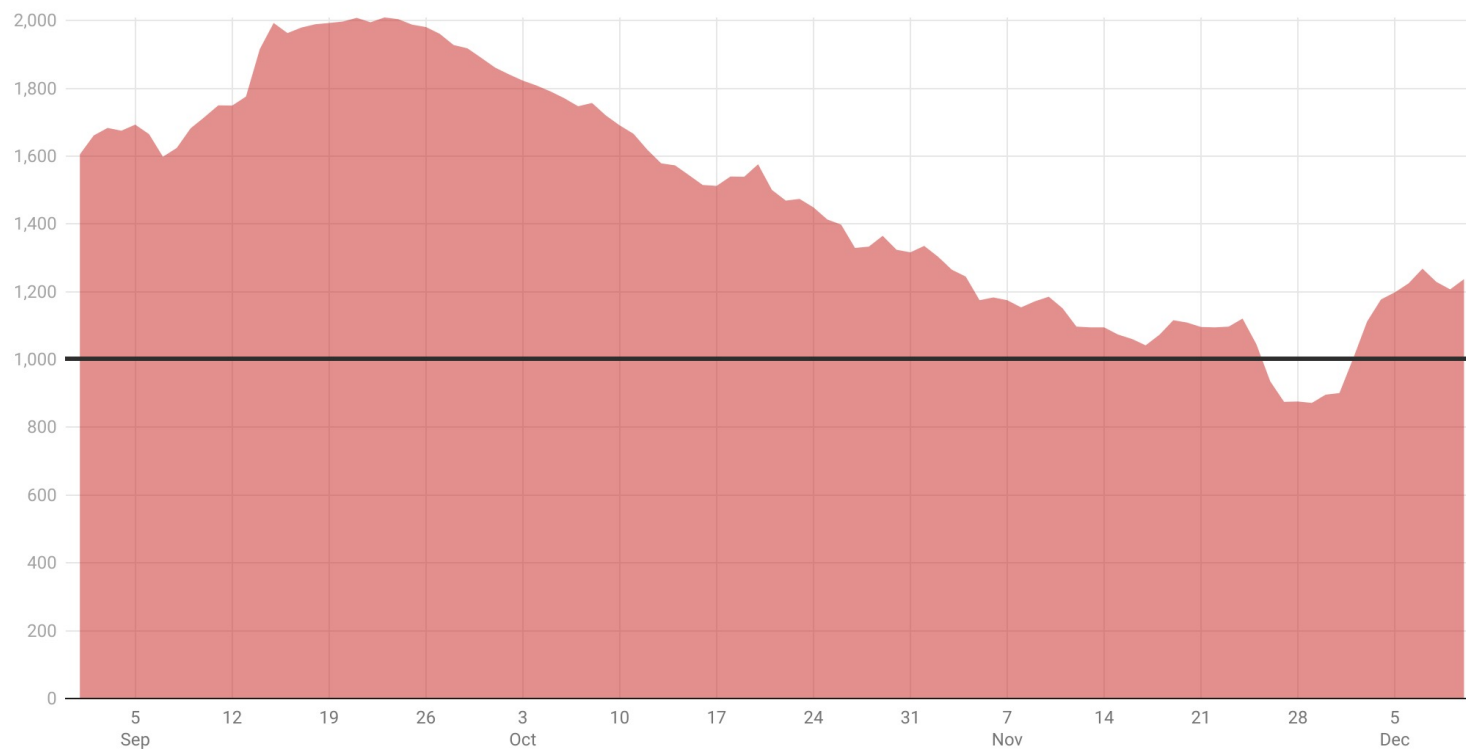


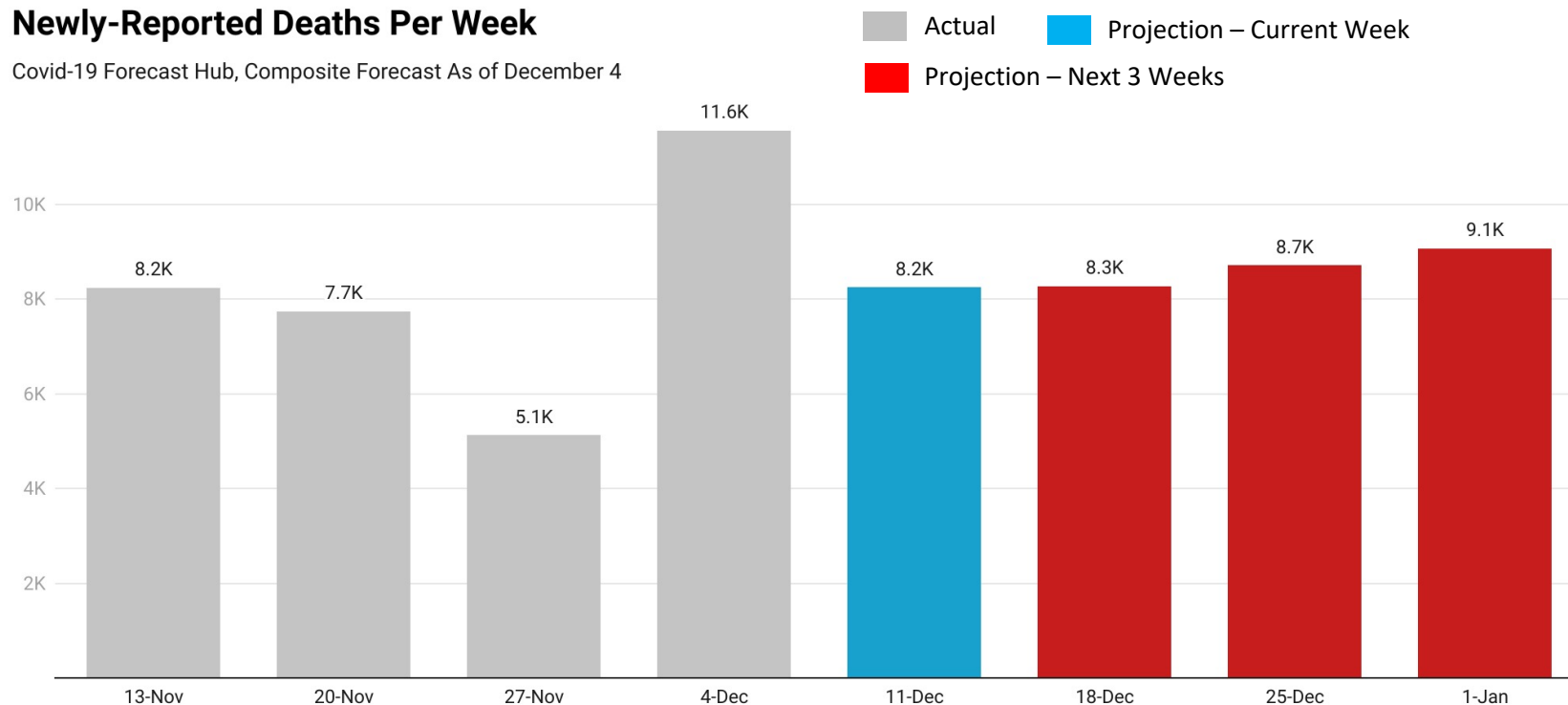
Chart: Health Industry Advisor LLC • Created with Datawrapper

Death Projections – Ensemble Forecast

The ensemble forecast predicts rising Covid deaths over the next few weeks.

Newly-Reported Deaths Per Week

Covid-19 Forecast Hub, Composite Forecast As of December 4



For the week ending on the date shown

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

<https://viz.covid19forecasthub.org>

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>