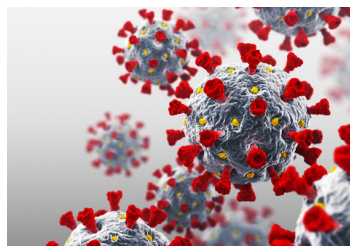


Covid-19 "Vital Signs"

Issue # 357

November 22, 2021

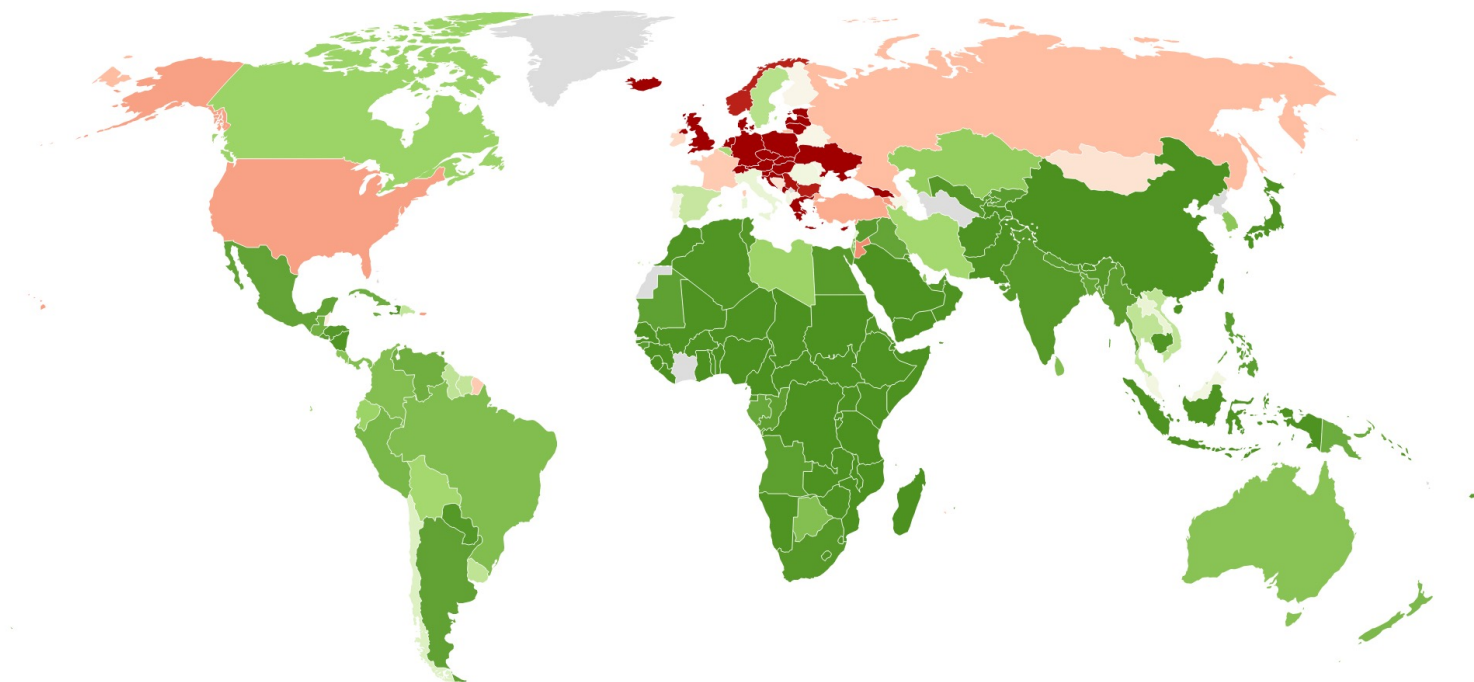


Newly Detected Cases / Million

Europe is seeing the highest new case rates currently. Rates are generally low in many other parts of the world.

New Daily Cases / Million

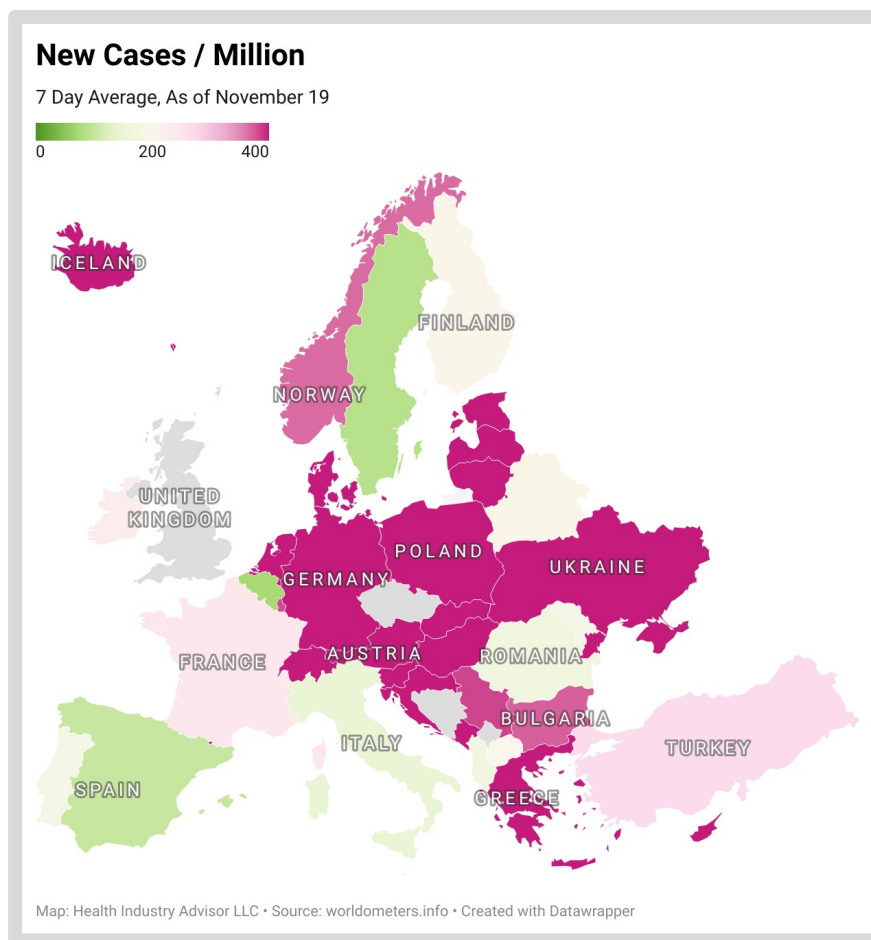
7-Day Average, As of November 19



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

Newly Detected Cases / Million

Countries in Eastern Europe suffer with the highest rates of new cases per capita at this time.



Highest Rates of New Detected Cases / Million

Case rates in the United States rank 42nd globally. United Kingdom rate is double that of the United States.

Highest Current Reported Case Rates

New Daily Cases/M, 7-day Average as of November 19

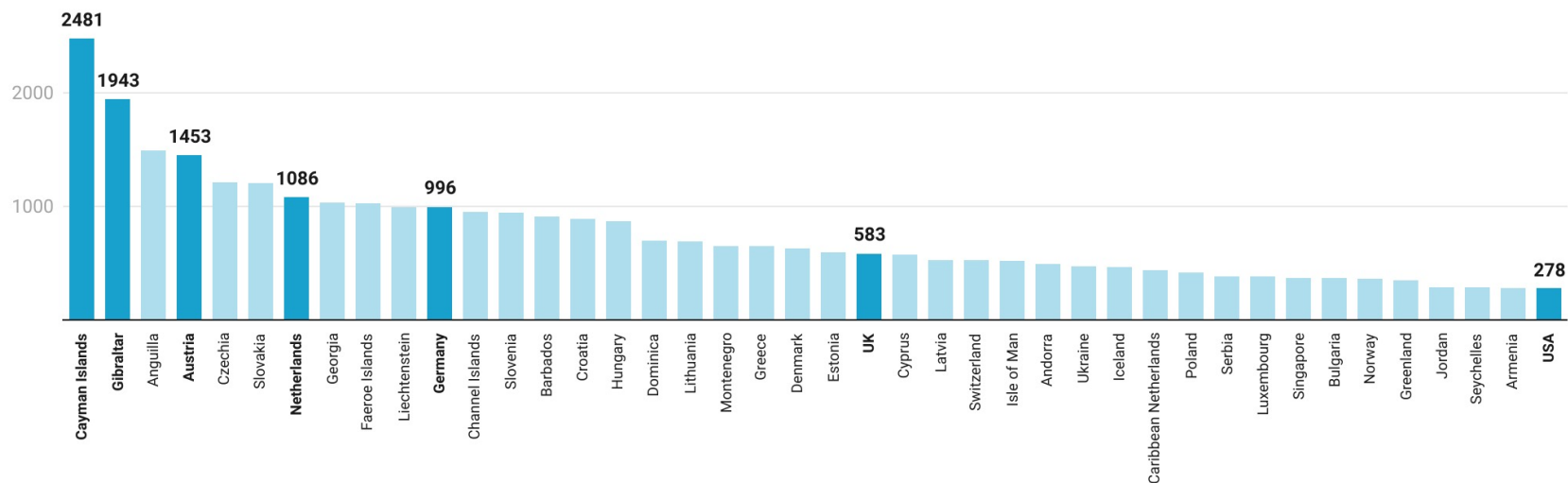


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

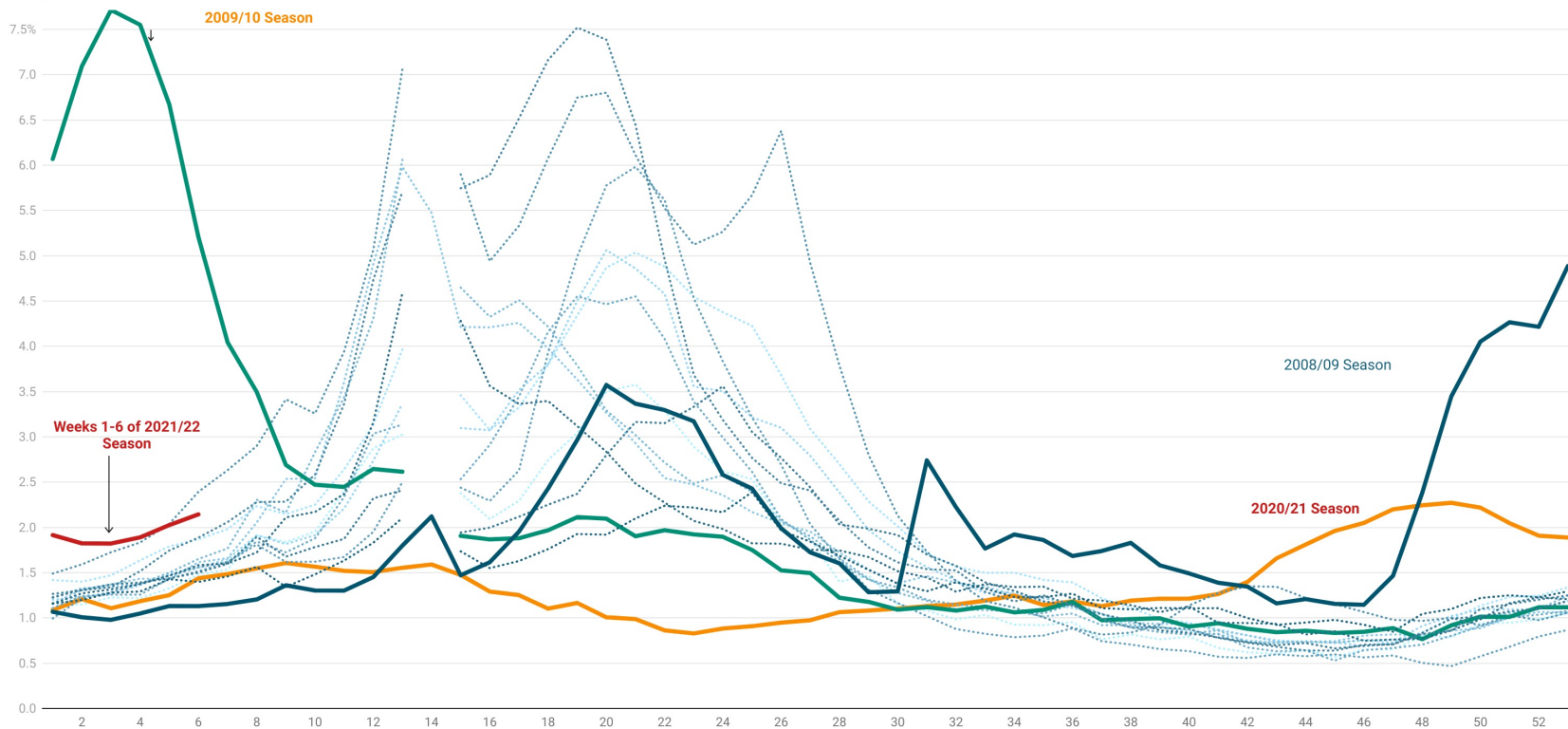
Covid-19 “Vital Signs”

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

Vaccination Status By Age – United States

More than one third of senior citizens received their booster shots at this point. Among 5-to-11-year-olds, one-in-ten received an initial vaccine already.

Vaccination Status By Age

As of November 20

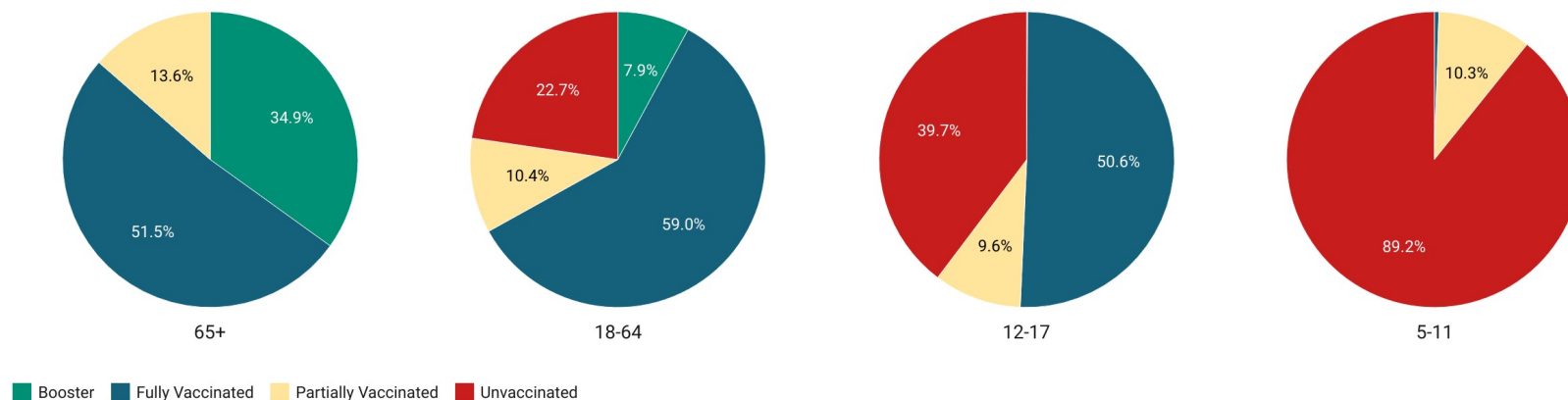


Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Vaccination Status By Age

Vaccine status increases with age, at least through age 74. Teenagers and younger adults hesitate more than others, with half un- or under-protected from the virus.

% Fully Vaccinated By Age

As of November 19

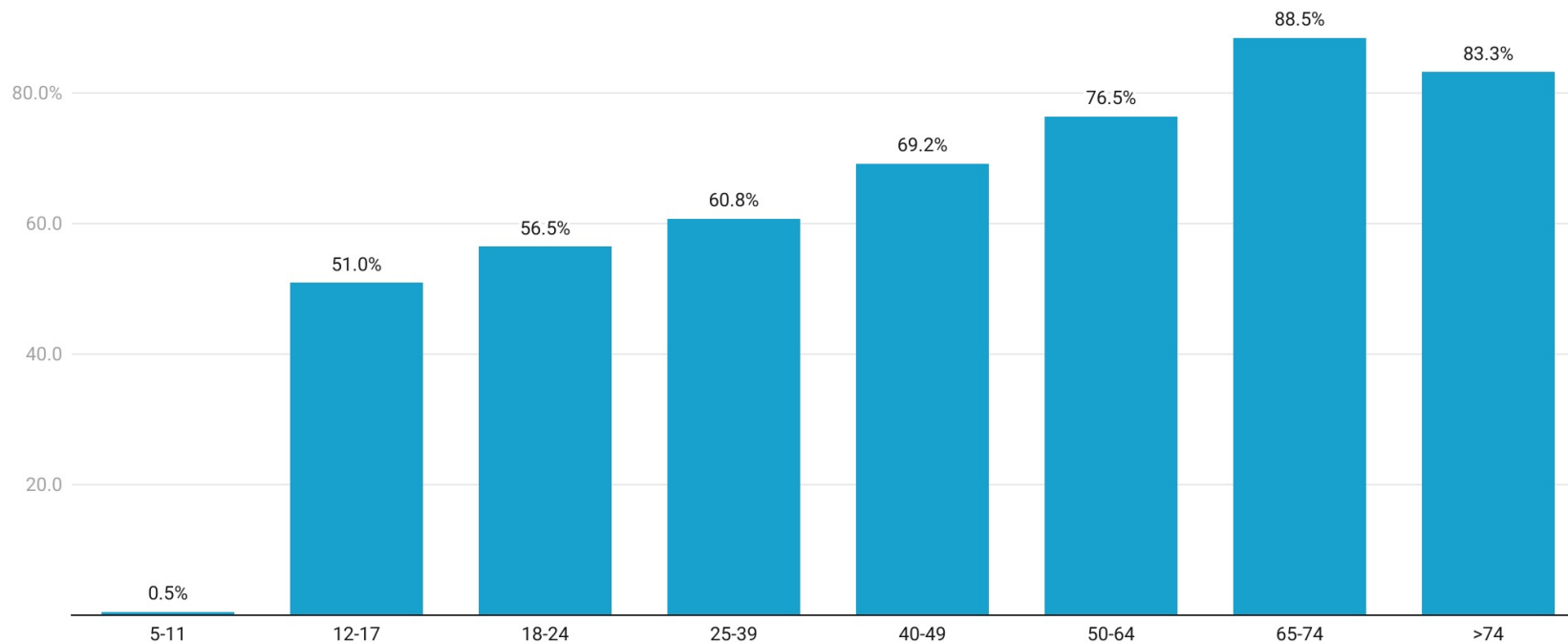


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid-19 "Vital Signs"

Test-Positive Rate

The test-positive rate recently moved above the suggested 5% benchmark set by public health officials.

Test-Positivity Rate

7-Day Average, Through November 16

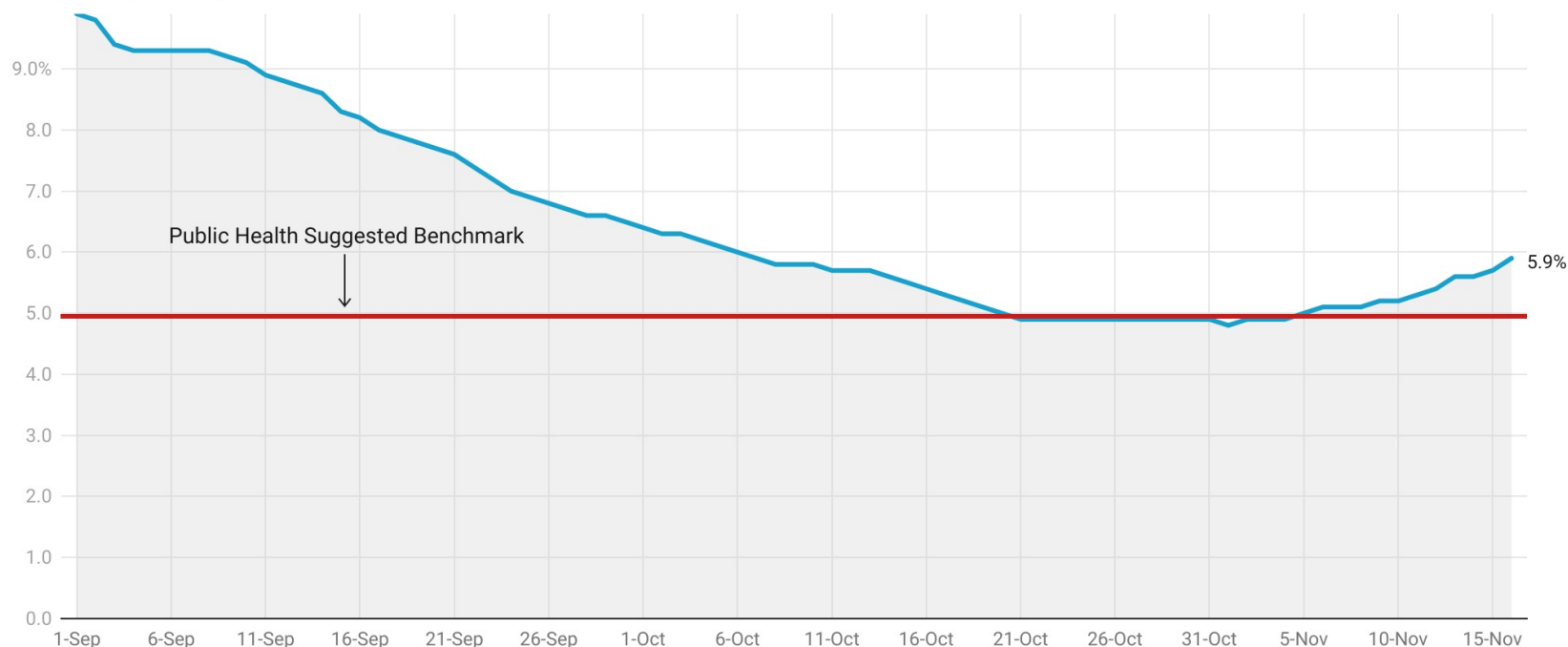


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

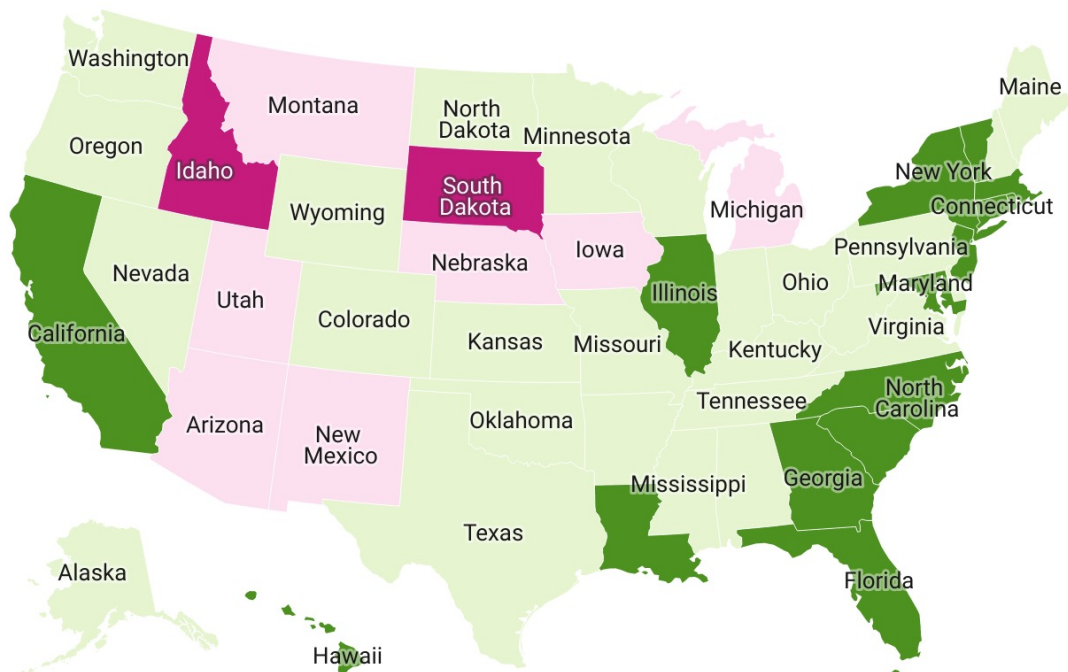
7-Day Average Test-Positivity %

And Idaho South Dakota posted the highest test-positivity rates of all states last week. Several Midwest and Mountain States experienced higher-than-desirable rates.

Test Positivity %

7-Day Average, As of November 15

■ < 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"

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

Reported case rates began rising early this month, increasing 7% during this time. Estimated infections started rising a week later than reported cases. However, these infections surged 30% already. Both measures remain lower than their earlier, Delta peaks.

Estimated Daily Infections v. Detected Cases

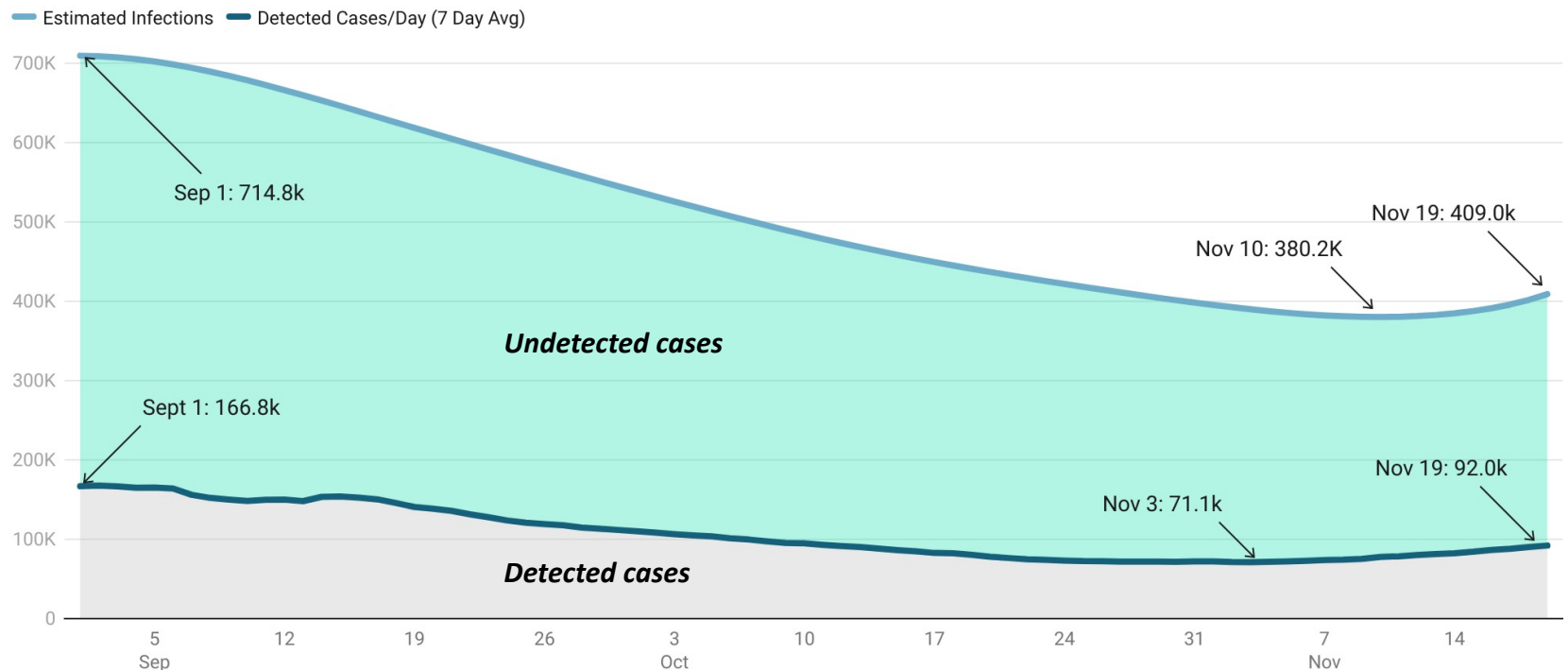


Chart: Health Industry Advisor LLC • Source: Yale School of Public Health • Created with Datawrapper

Covid-19 "Vital Signs"

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

New cases increased week-over-week all month. However, the rate of increase seemed to level off last week.

Week-Over-Week Changes in Newly-Detected Cases

7-Day Average, As of November 19

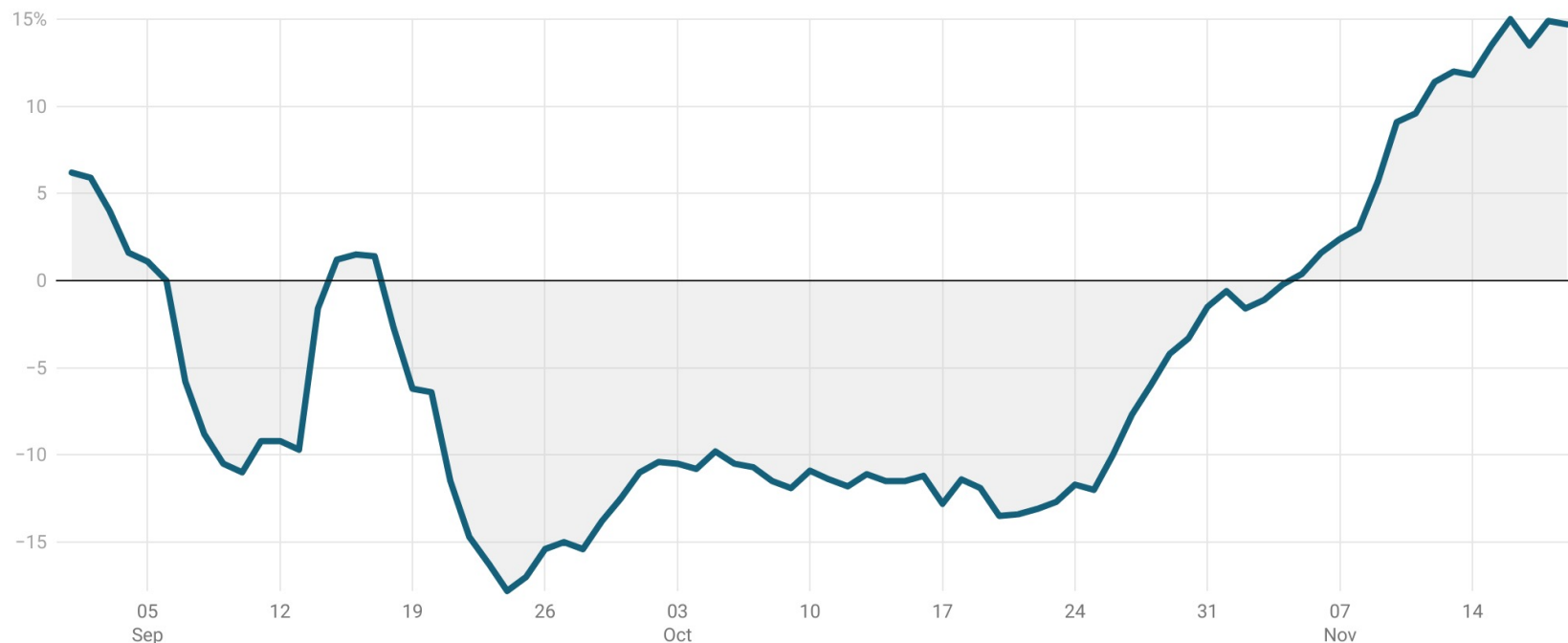


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

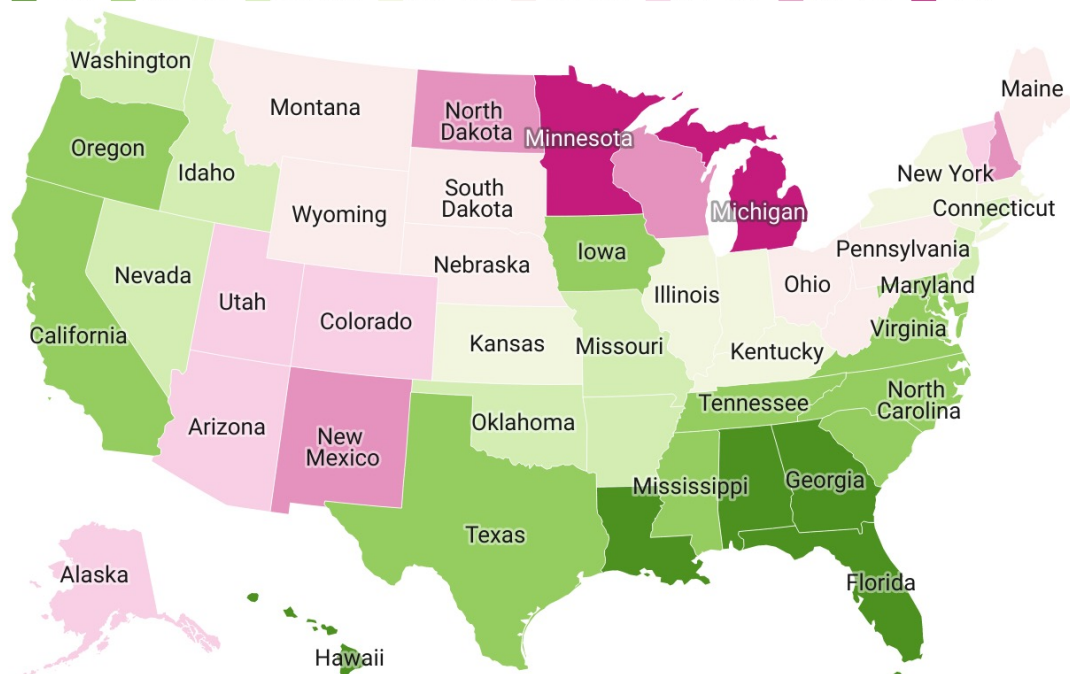
New Daily Cases Per Capita By State

Michigan and Minnesota posted the highest new case rates of all states last week. New Mexico, New Hampshire, North Dakota, and Wisconsin suffered with high rates as well.

New Cases / Million

7-Day Average, As of November 19

< 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

Covid-19 “Vital Signs”

New Daily Cases Per Capita By State - Relative to Delta Peak

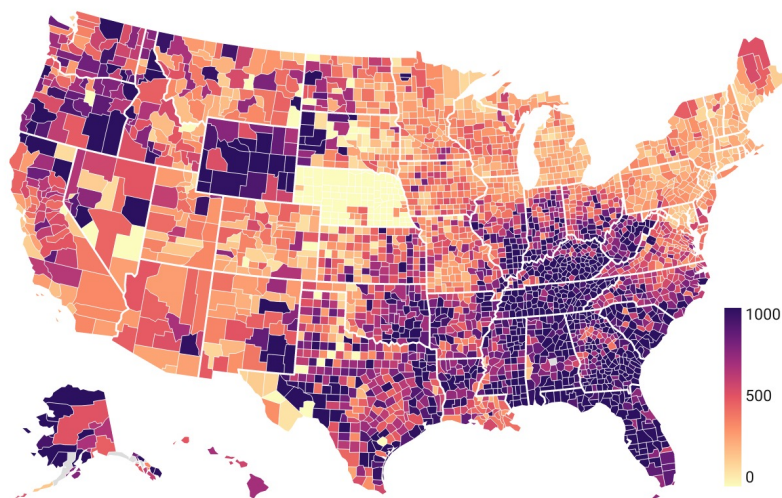
States experiencing high case rates now did not suffer nearly as much during the peak of the Delta wave. Conversely, the states hit hardest during the Delta peak are in better position today.

September 2 – “Delta Peak”

November 18

New Daily Infections / Million

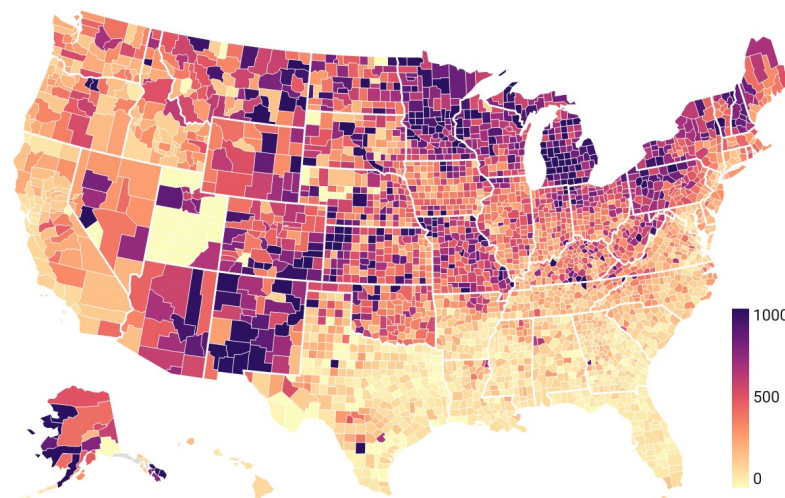
7-Day Moving Average, As of September 2



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

New Daily Infections / Million

7-Day Moving Average, As of November 18



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

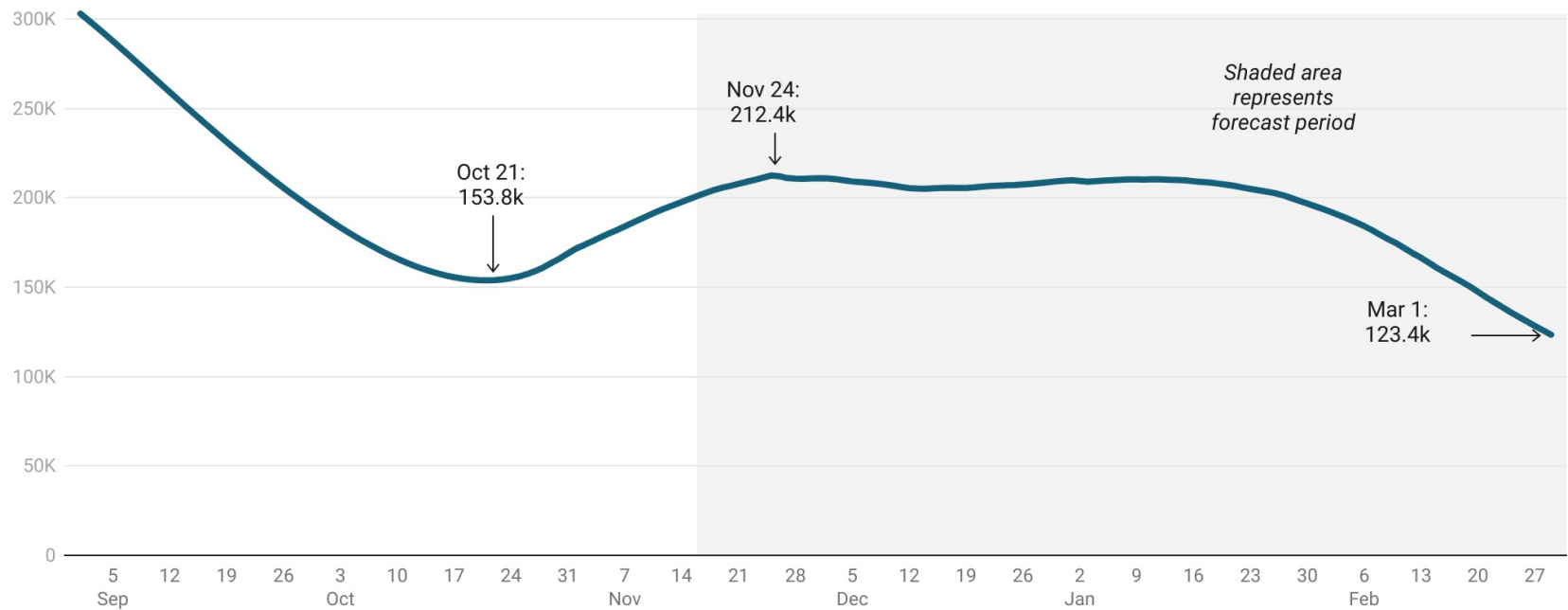
Covid-19 "Vital Signs"

Estimated Infections - IHME Projections

IHME's latest model (published November 19) anticipates that infections plateau this week through the end of January. These are not expected to reach the mid-August peak.

Estimated and Projected Infections - U.S.

Institute For Health Metrics and Evaluation



Forecast Date: November 19

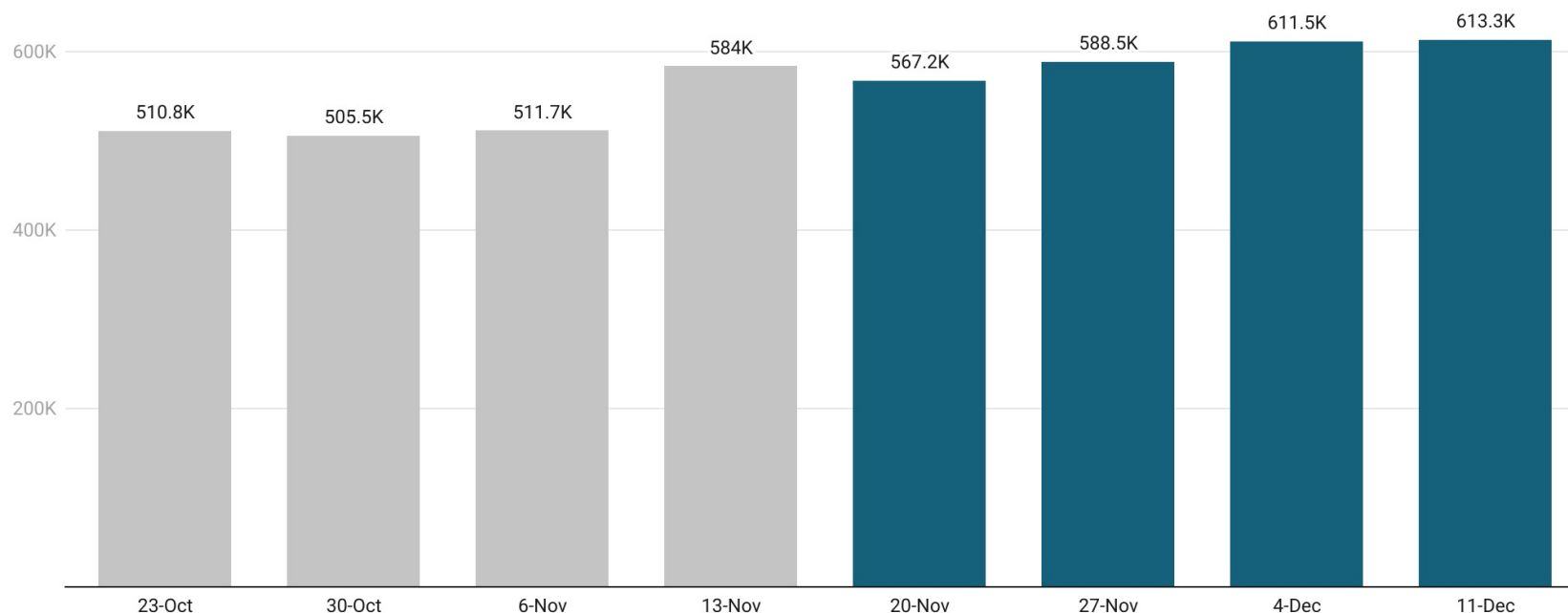
Chart: Health Industry Advisor LLC • Source: Institute For Health Metrics and Evaluation • Created with Datawrapper

Covid-19 Cases: Ensemble Forecast

The ensemble this week predicts that infections increase modestly each of the next few weeks.

Newly-Reported Cases Per Week

Covid-19 Forecast Hub, Composite Forecast As of November 13



For the week ending on the date shown

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

Covid-19 "Vital Signs"

Inpatient Covid Admissions and Census

Covid admissions began rising early in November, increasing 12% already. Covid census started increasing shortly thereafter. Census is up 4% in the past two weeks.

Covid-19 Admissions & Inpatient Census

As of November 18

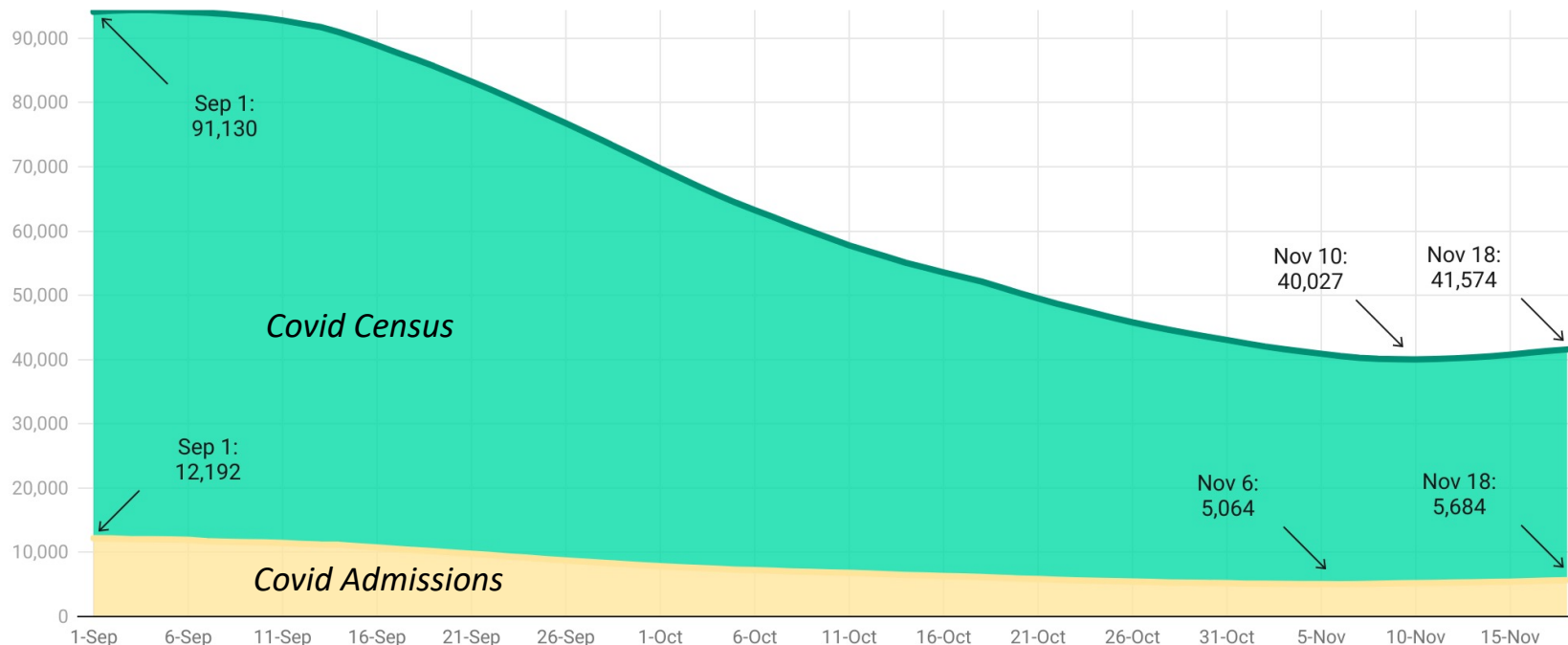


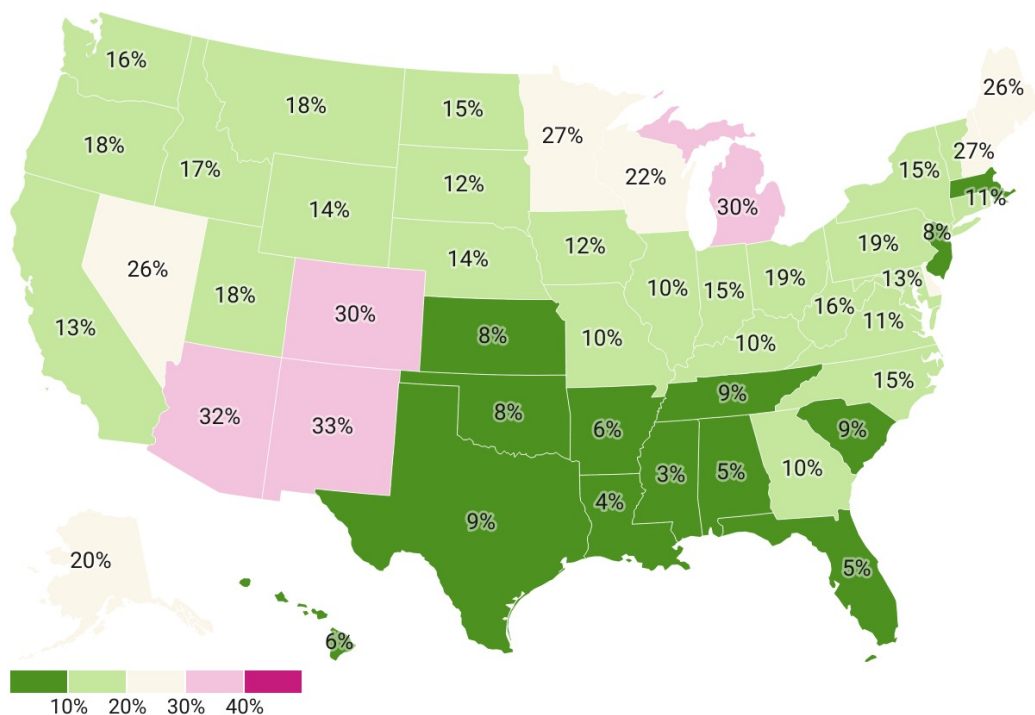
Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid Hospital Occupancy By State

Covid hospitalization levels reached concerning levels last week in Arizona, Colorado, Michigan, and New Mexico. Rate remain relatively low in several heavily-populated states - California, New Jersey, New York, Ohio, and Texas

Covid-19 Patients As % of All Inpatient Beds

As of November 18



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

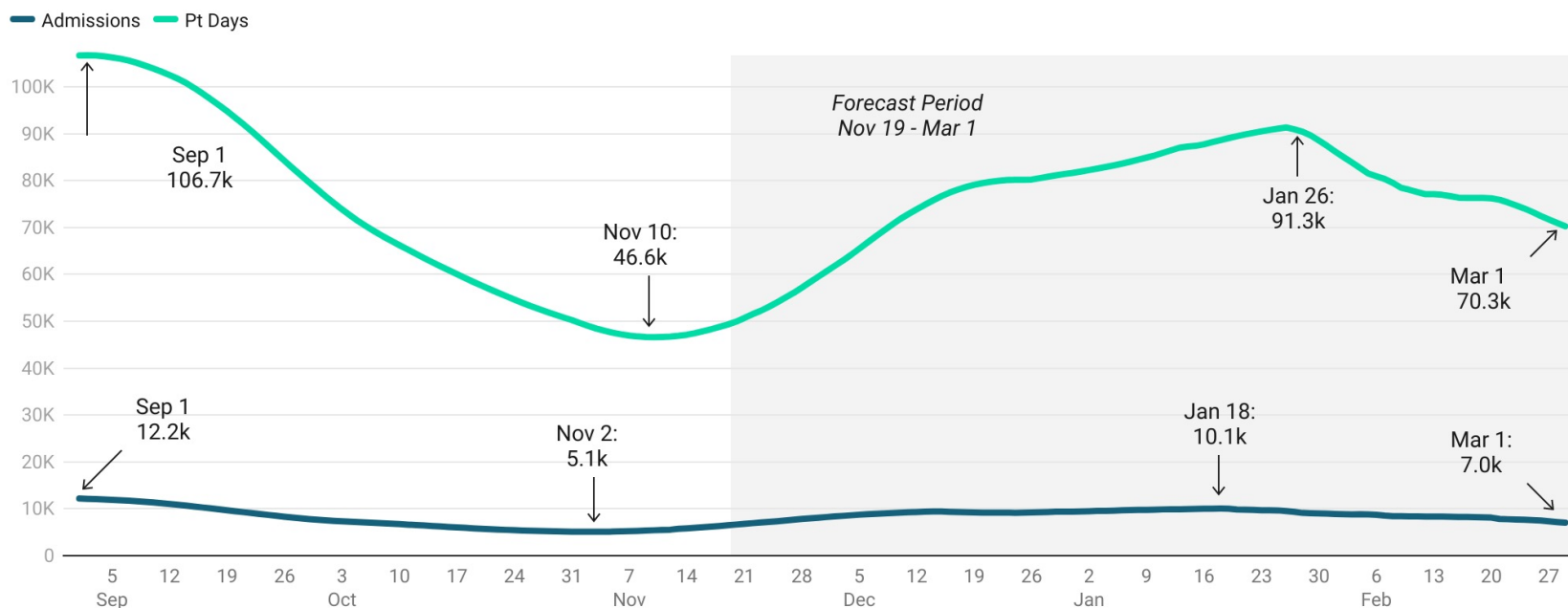
Covid-19 "Vital Signs"

Covid-19 Inpatient Admissions & Census – IHME

IHME anticipates rising Covid admissions and census for the next two months. Both estimates peak at nearly double levels posted early in November. Still, these estimates fall short of levels posted during the Delta peak.

Estimated & Projected Hospital Covid-19 Admissions & Patient Days

Institute for Health Metrics and Evaluation



Forecast Date: November 19

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

Covid-19 "Vital Signs"

Deaths with Covid-19

Deaths with Covid increased late last week. The current rate is slightly above 1,000 per day.

Deaths With Coronavirus

7-Day Average, Through November 19

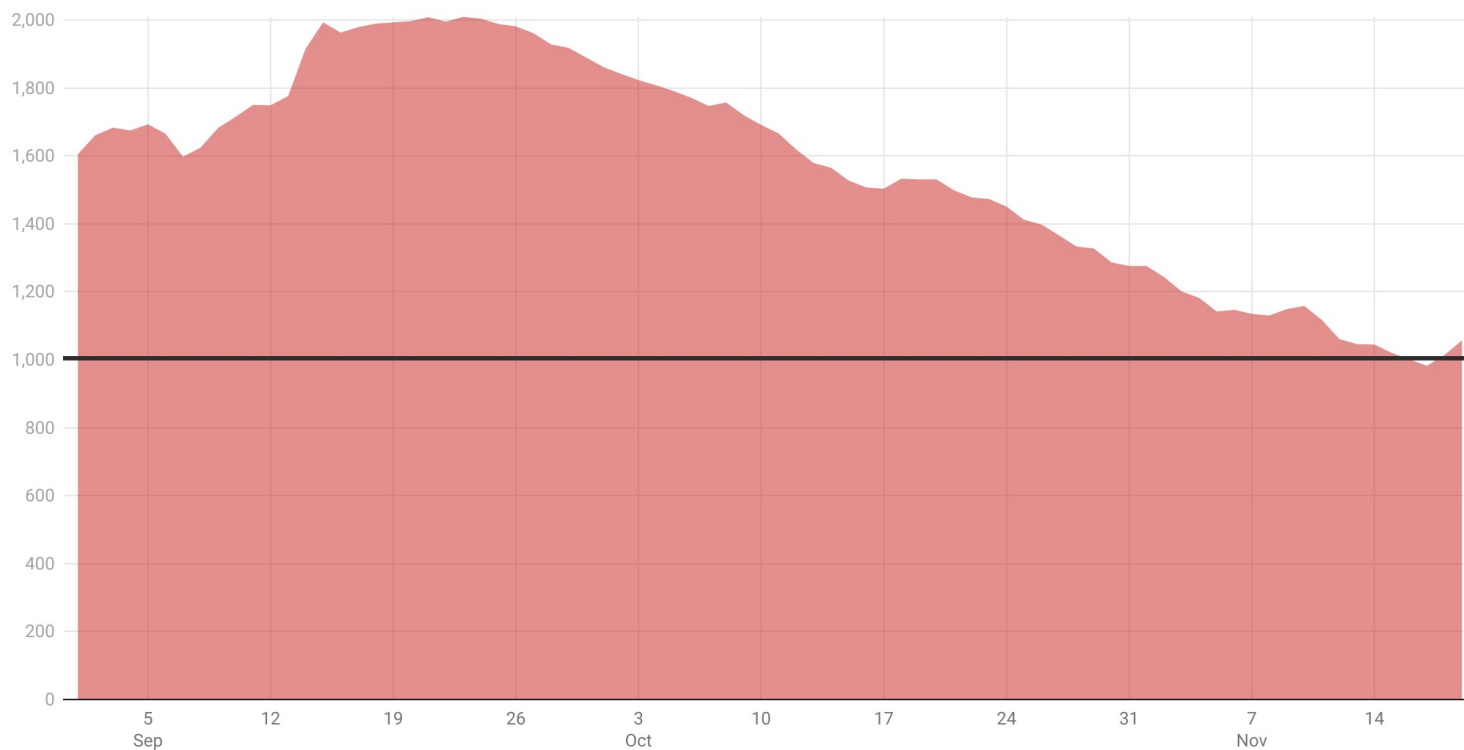


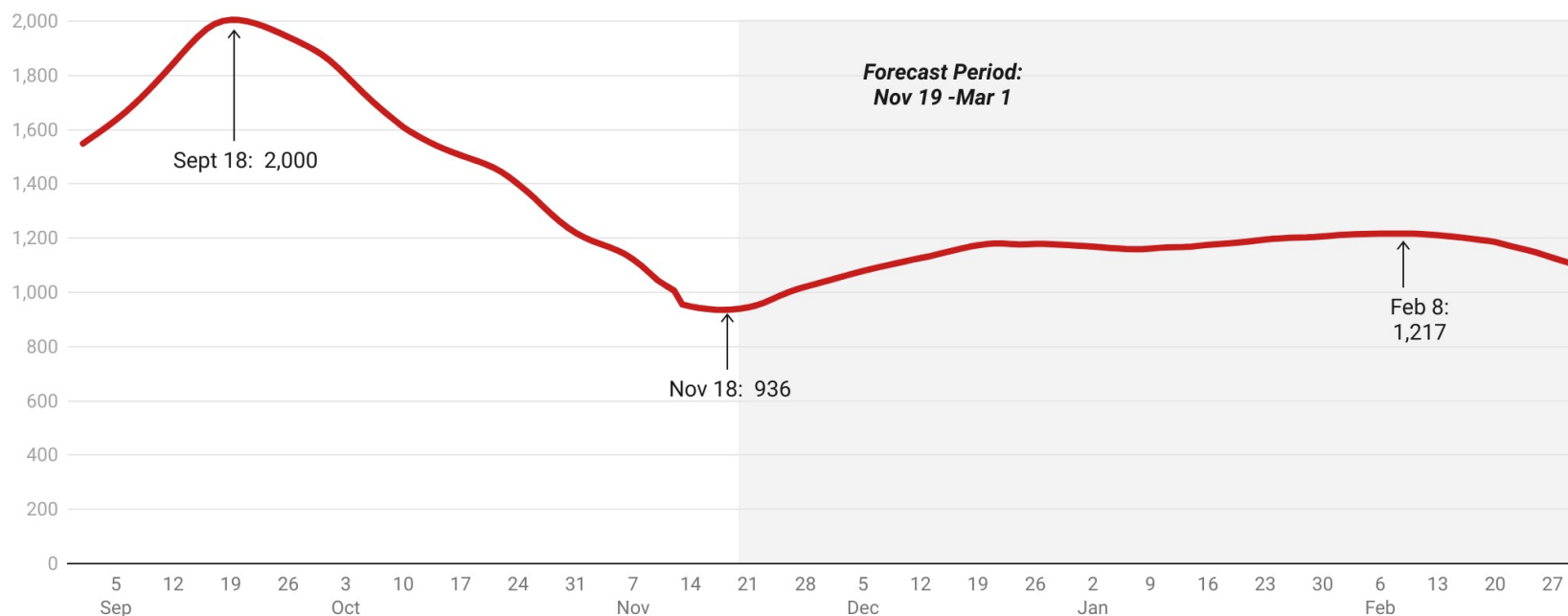
Chart: Health Industry Advisor LLC • Created with Datawrapper

Deaths With Covid-19: IHME Projection

IHME's model predicts that Covid deaths will trend higher through early February.

Estimated and Projected Covid Deaths - U.S.

Institute For Health Metrics and Evaluation



Forecast Date: November 19

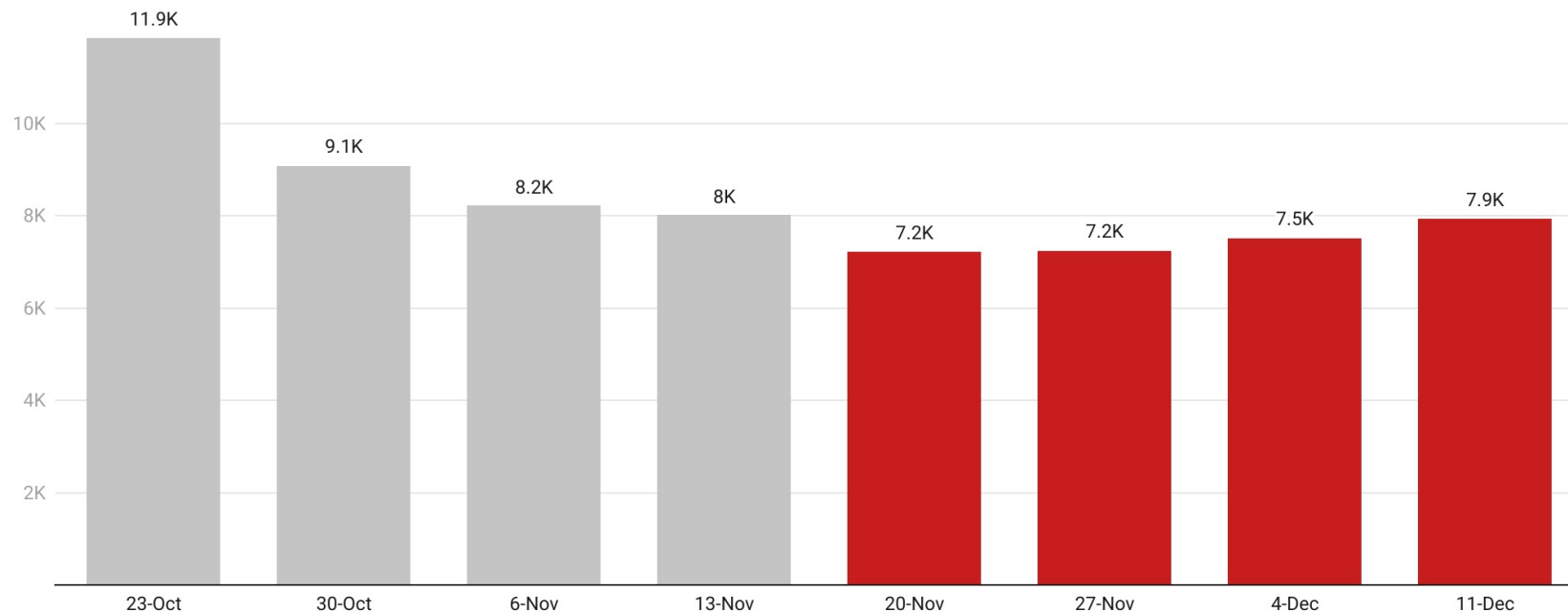
Chart: Health Industry Advisor LLC • Source: Institute For Health Metrics and Evaluation • Created with Datawrapper

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 November 13



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>