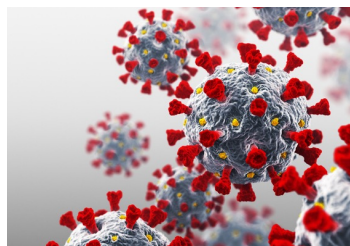


Covid-19 "Vital Signs"

Issue # 356

November 15, 2021



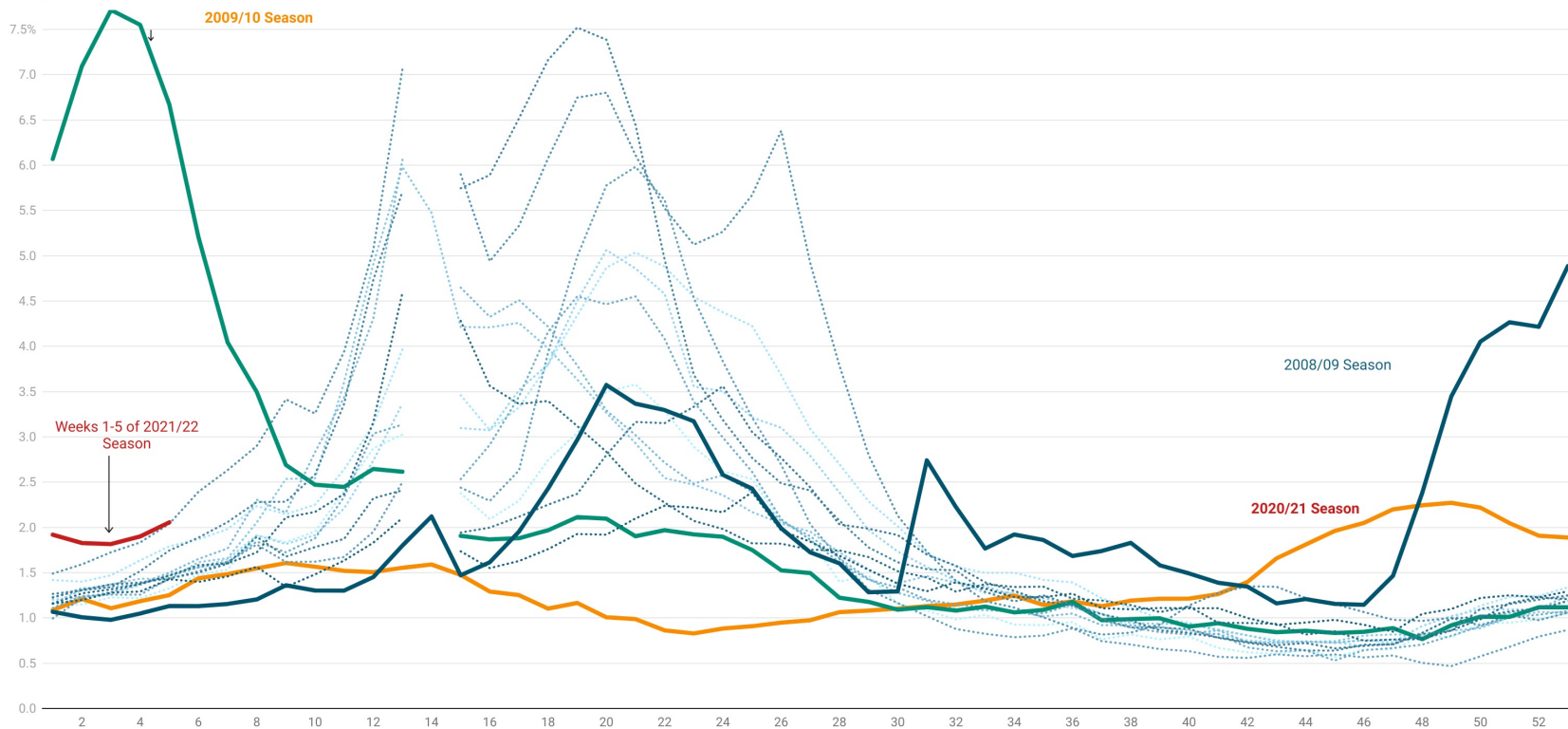
Covid-19 "Vital Signs"

Comparison of Flu Seasons

The flu visit rate is now tracking with the rate posted two years ago. That season proved to be the third most severe of the past fifteen years.

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

Ninety-nine percent of seniors are at least partially vaccinated. Thirty percent have received their booster shot already. Two-thirds of non-senior adults are fully vaccinated. Half of eligible teenagers are fully vaccinated..

Vaccination Status By Age

As of November 12

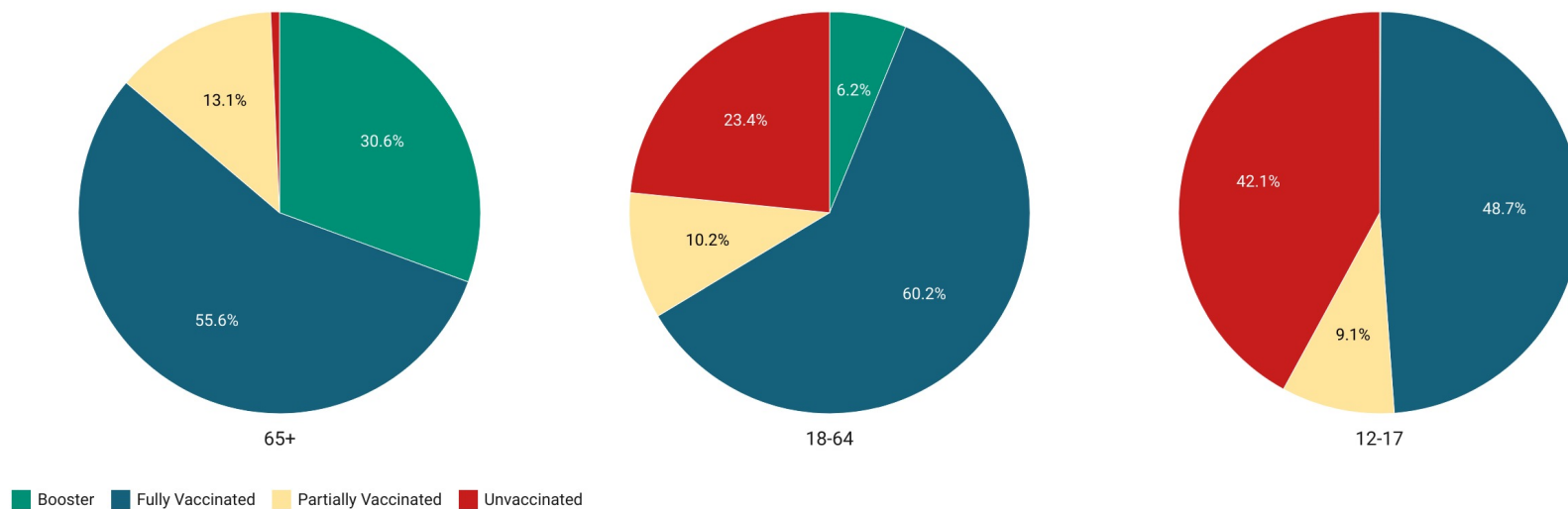


Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Vaccination Status By Age

Virtually everyone between 65 and 74 years old are fully vaccinated. Four-in-five persons between 40 and 59 years old are fully vaccinated. One remaining challenge is to vaccinate more children and teenagers.

% Fully Vaccinated By Age

As of November 11

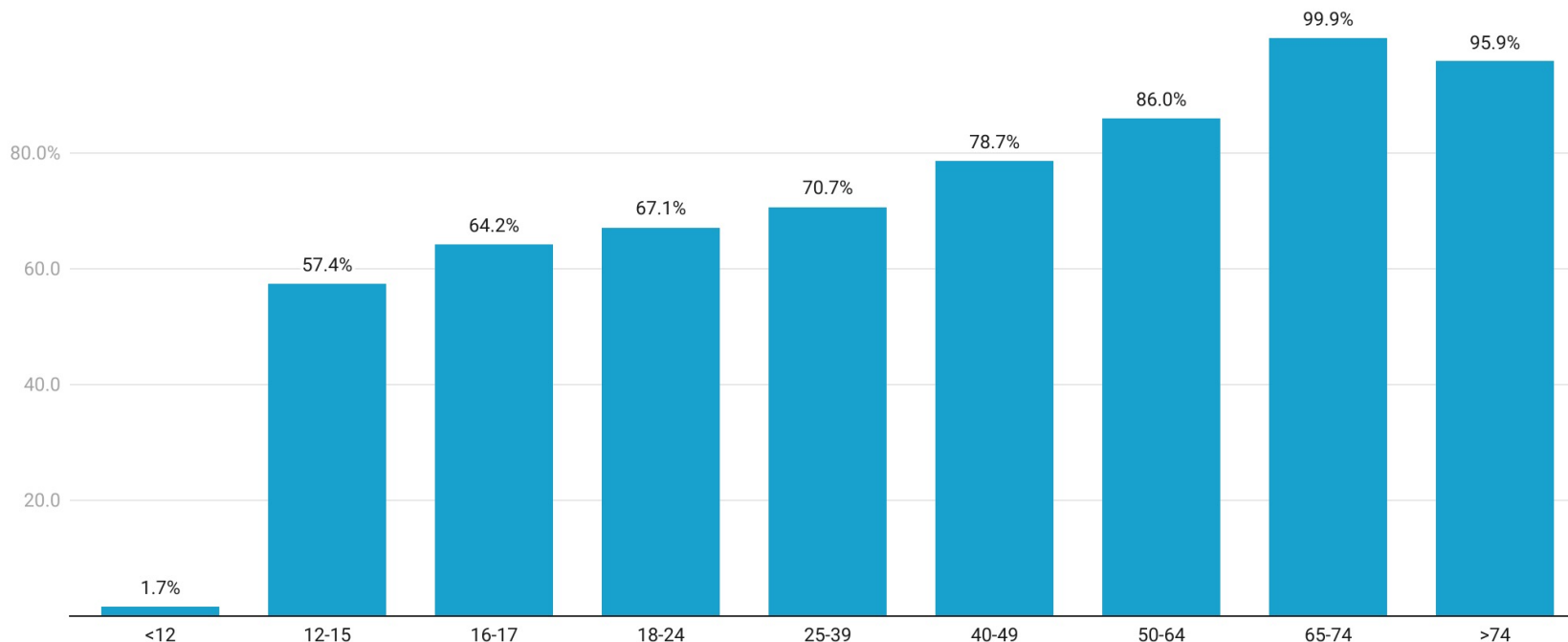


Chart: Health Industry advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid-19 "Vital Signs"

Test-Positive Rate

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

Test-Positivity Rate

7-Day Average, Through November 7

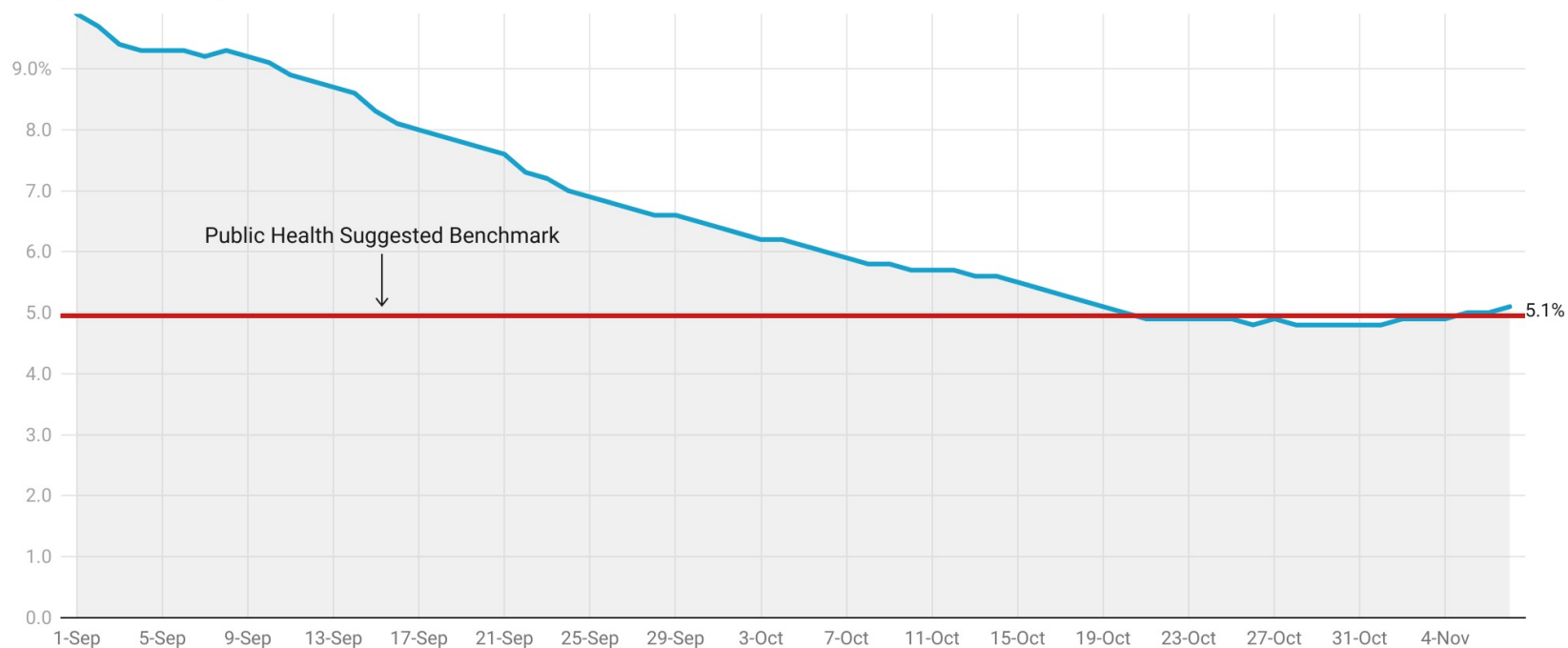


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

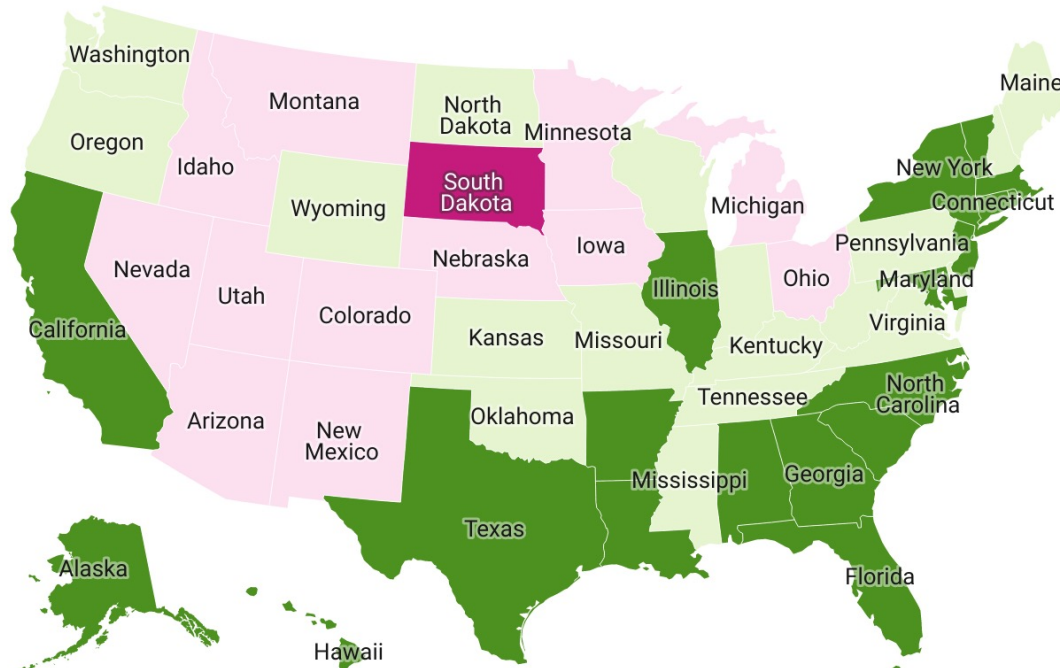
7-Day Average Test-Positivity %

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

Test Positivity %

7-Day Average, As of November 7

■ < 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.

In the U.S., estimated infections increased on Thursday and again on Friday. Reported cases (7-day average) increased each day for the past nine.

Estimated Daily Infections v. Detected Cases

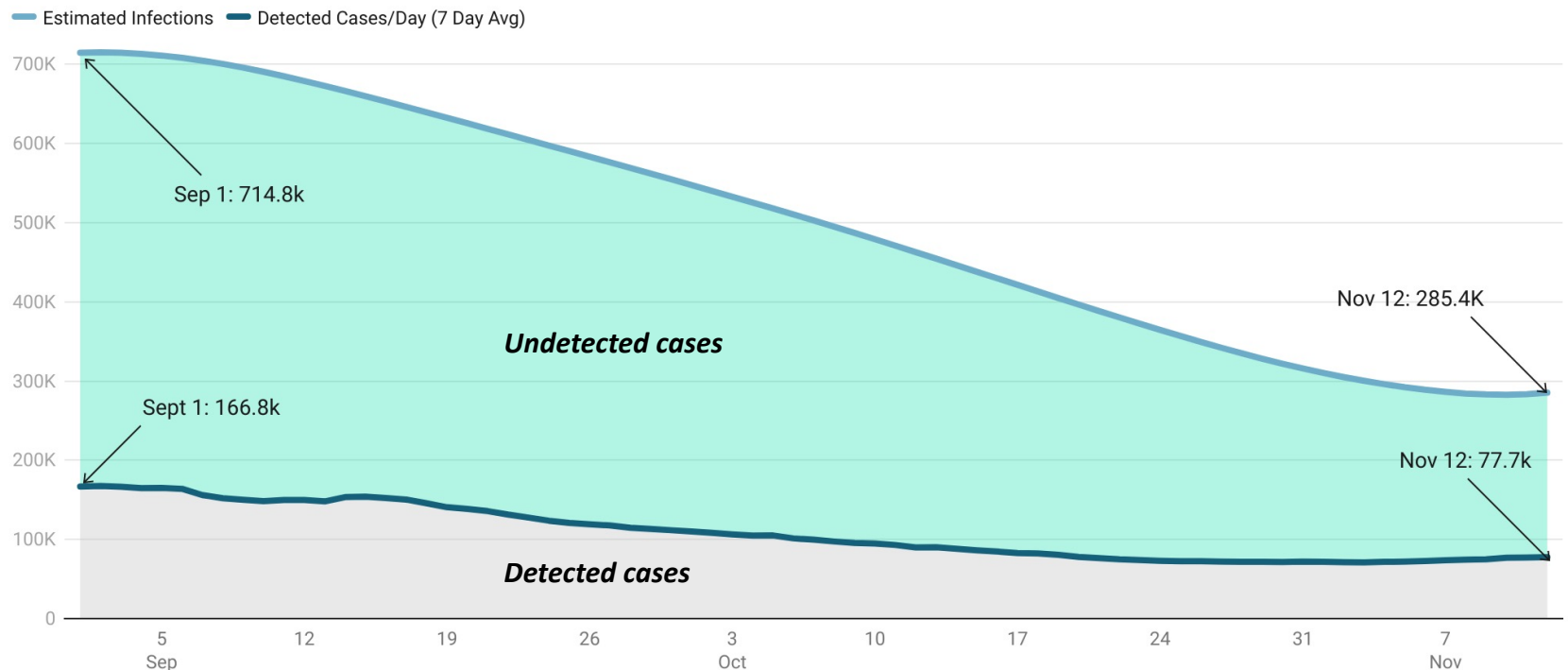


Chart: Health Industry Advisor LLC • Source: Yale School of Public Health • Created with Datawrapper

Covid-19 "Vital Signs"

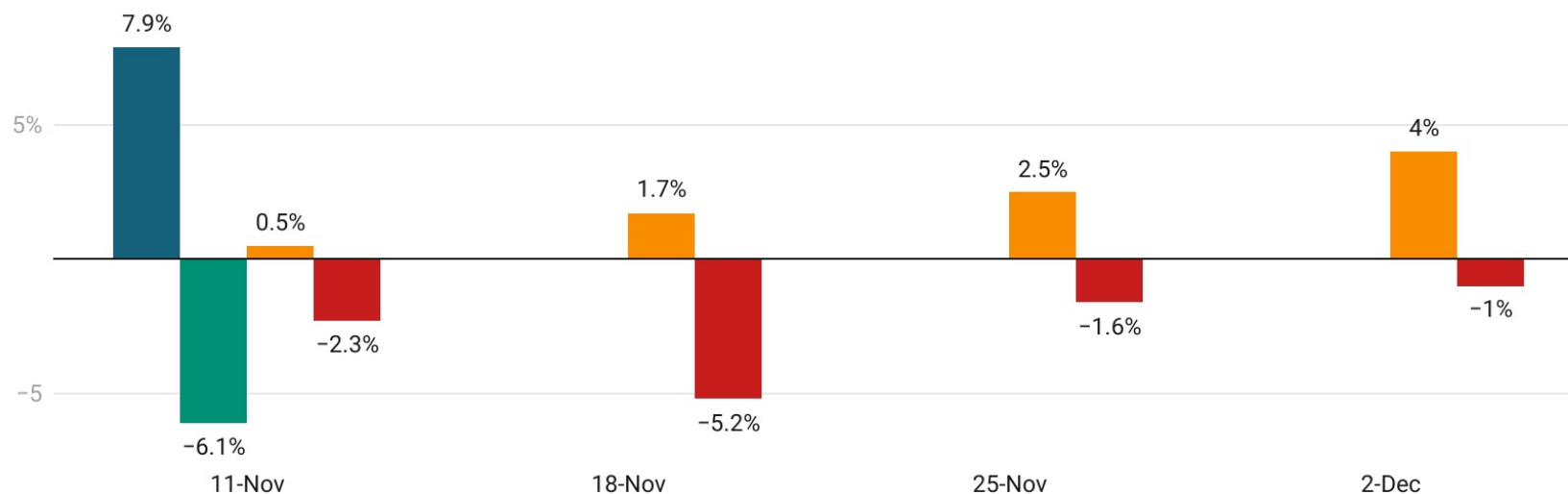
Latest Forecasts – IHME & Ensemble

IHME and the Ensemble forecast diverge in their expectations for future cases and infections. IHME anticipates rising infections each week. The Ensemble expects fewer cases week-over-week. Last week, the two forecasts fell between the actual case count and estimated infections.

Weekly Change in Infection Rates

Reported v. Estimated v. Projected (IHME & Ensemble)

■ Reported ■ Estimated ■ IHME ■ Ensemble



IHME & Ensemble Forecasts as of November 5

Chart: Health Industry Advisor LLC • Source: IHME, Covid19 vizHub • Created with Datawrapper

Covid-19 "Vital Signs"

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

New cases increased week-over-week for the past eight days. The rate of increase seemed to level off on Thursday and Friday.

Week-Over-Week Changes in Newly-Detected Cases

7-Day Average, As of November 12

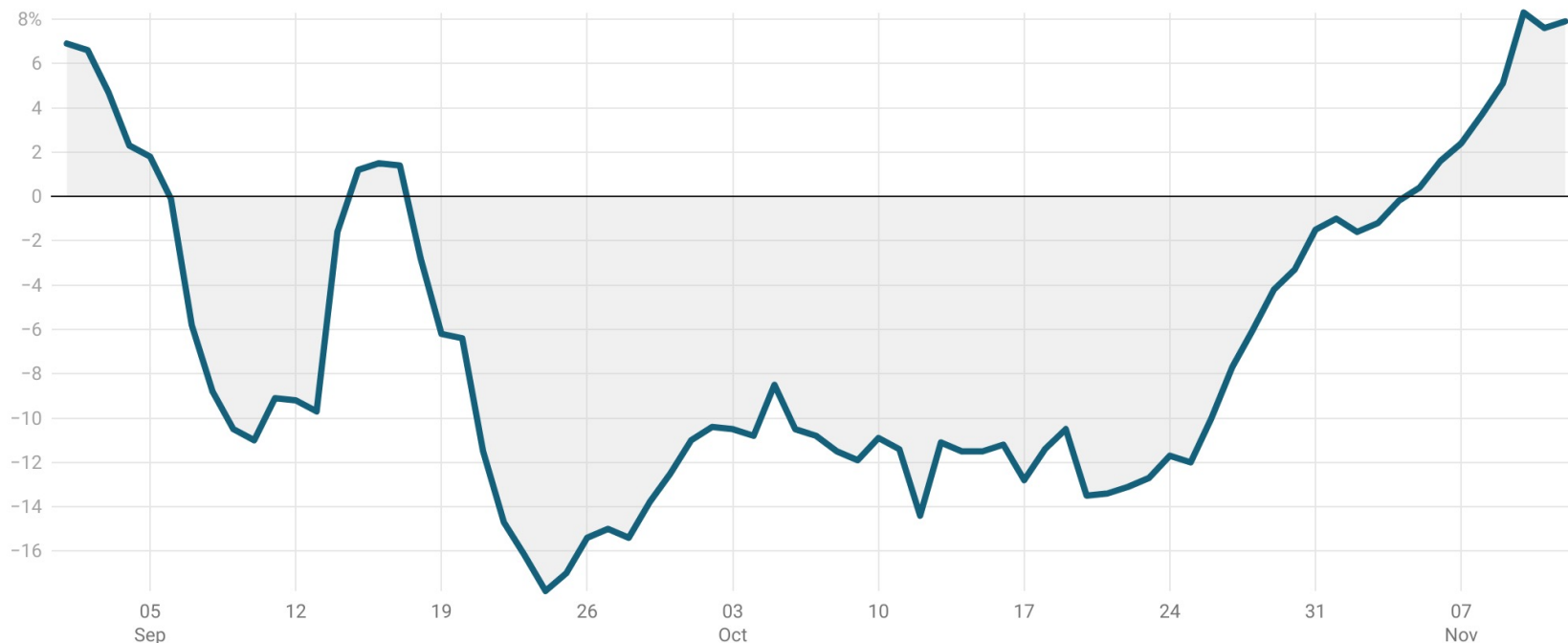


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

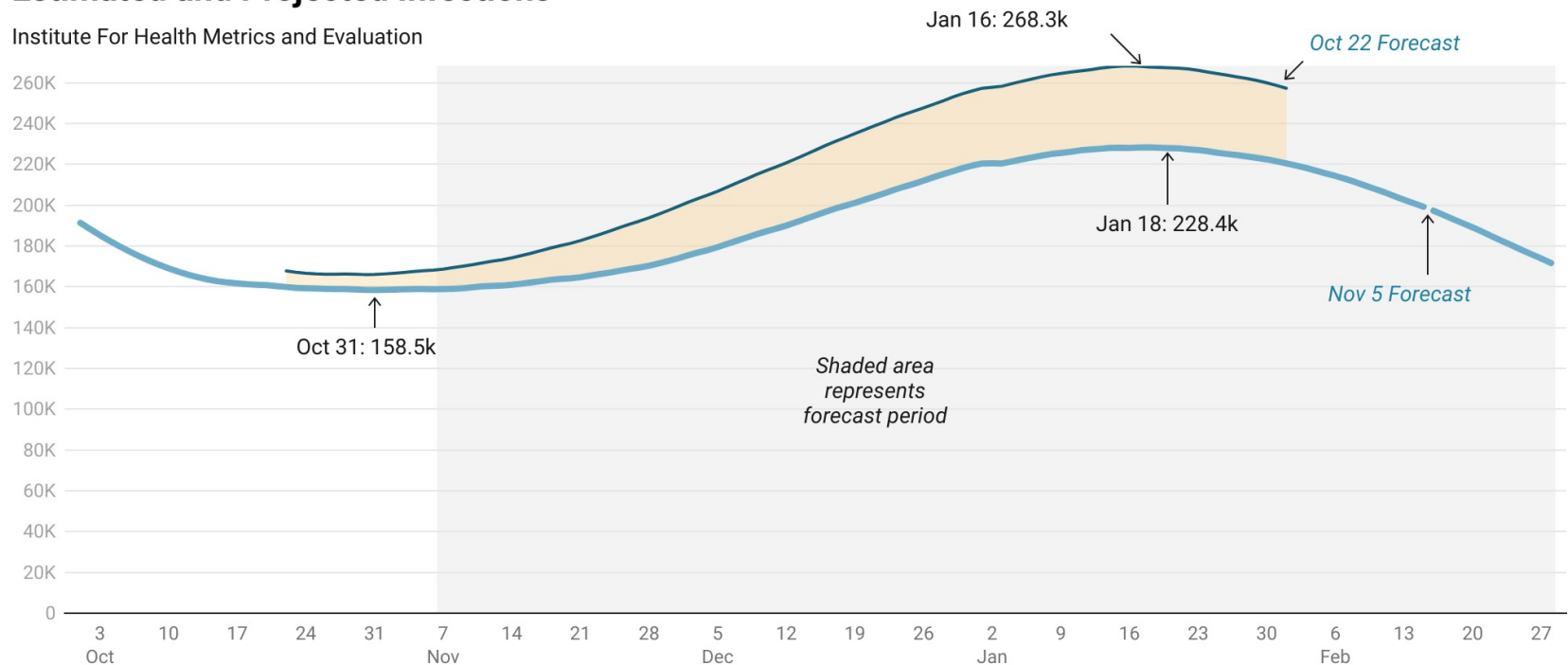
Covid-19 "Vital Signs"

Estimated Daily Infections & New Cases - IHME

In its latest model (published November 11), the Institute for Health Metrics and Evaluation suggests that daily infections in the U.S. started increasing post-Halloween. The outlook in this IHME forecast is somewhat better than its forecast from three weeks ago.

Estimated and Projected Infections

Institute For Health Metrics and Evaluation



Forecast Date: November 5

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

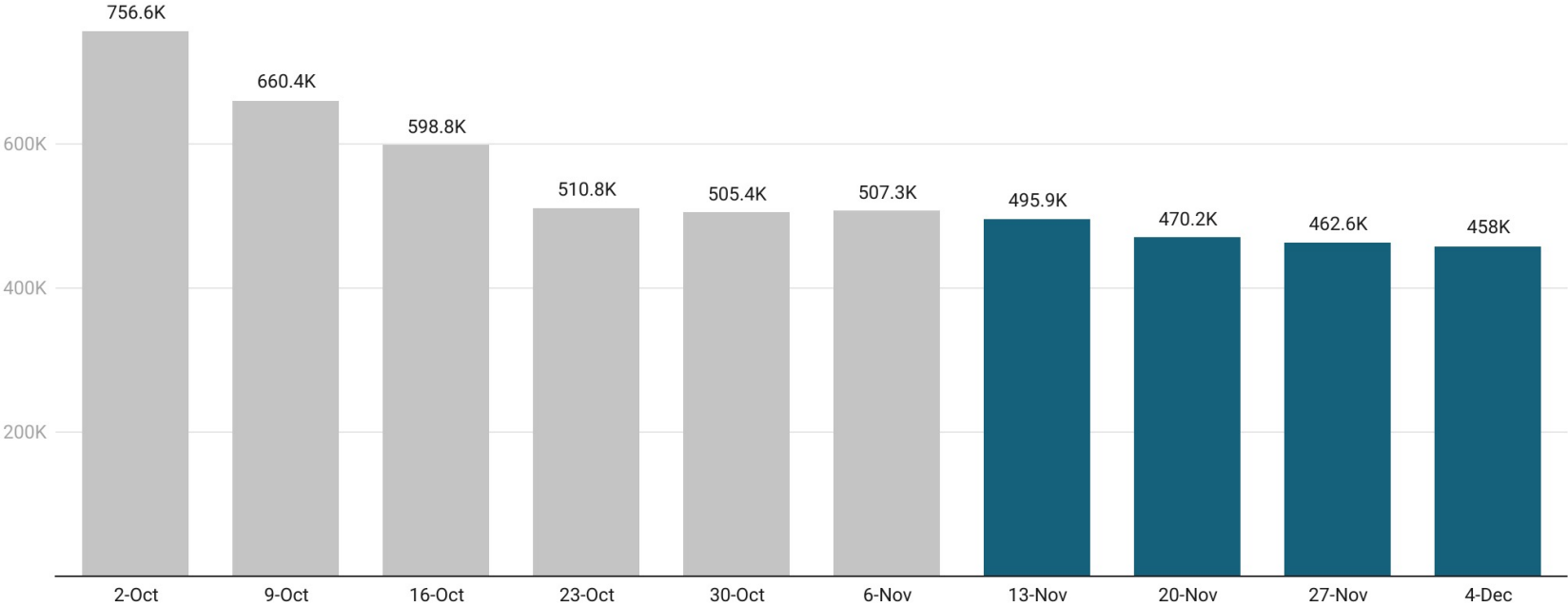


Covid-19 Cases: Ensemble Forecast

The ensemble this week predicts that infections will continue falling for the next several weeks.

Newly-Reported Cases Per Week

Covid-19 Forecast Hub, Composite Forecast As of November 6



For the week ending on the date shown

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

Cases Per Capita By Age Group

Covid-19 "Vital Signs"

*Infants and toddlers (0-to-4-years-old) continue to report the lowest infection rate per capita. Seniors, thanks to impressive vaccination rates, benefit from lower rates than any other age group. With the highest infection rate, children 5-to-11-years old should benefit from anticipated **vaccine approval**.*

Cases / 100,000 - by Age

Week ending October 30

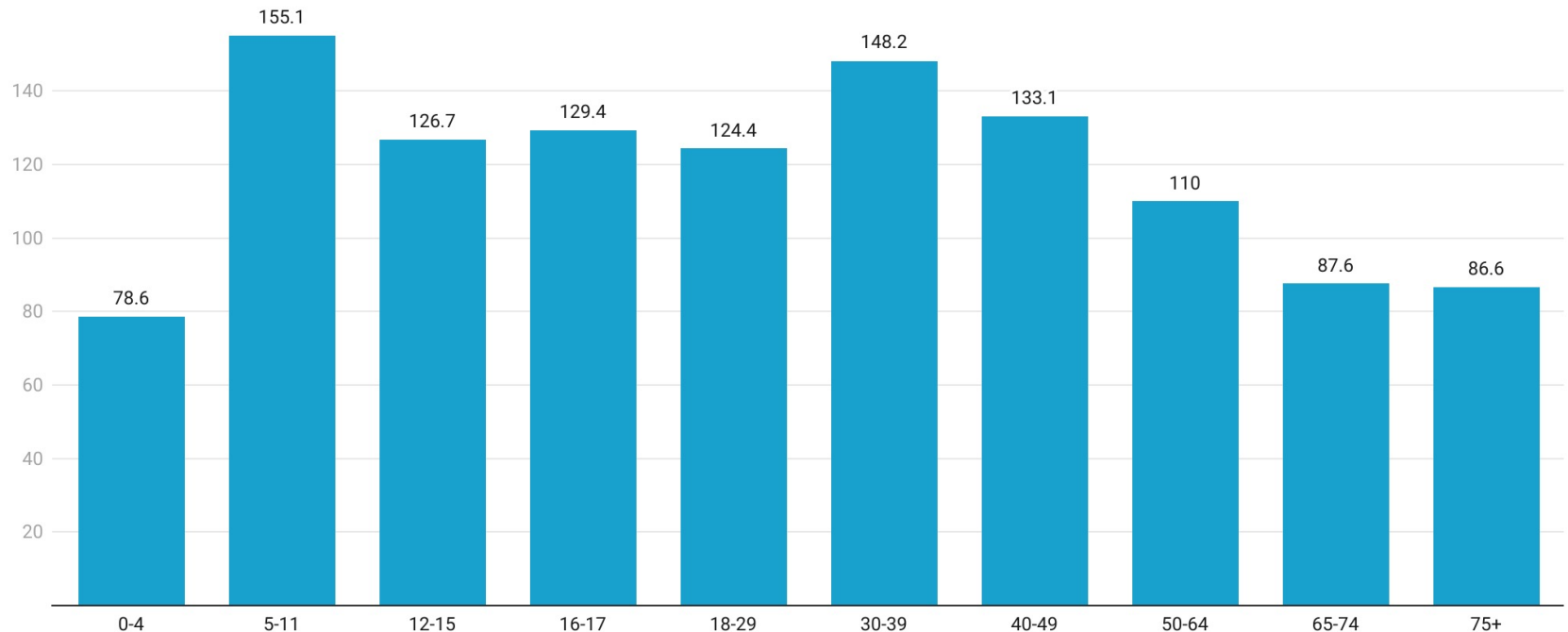
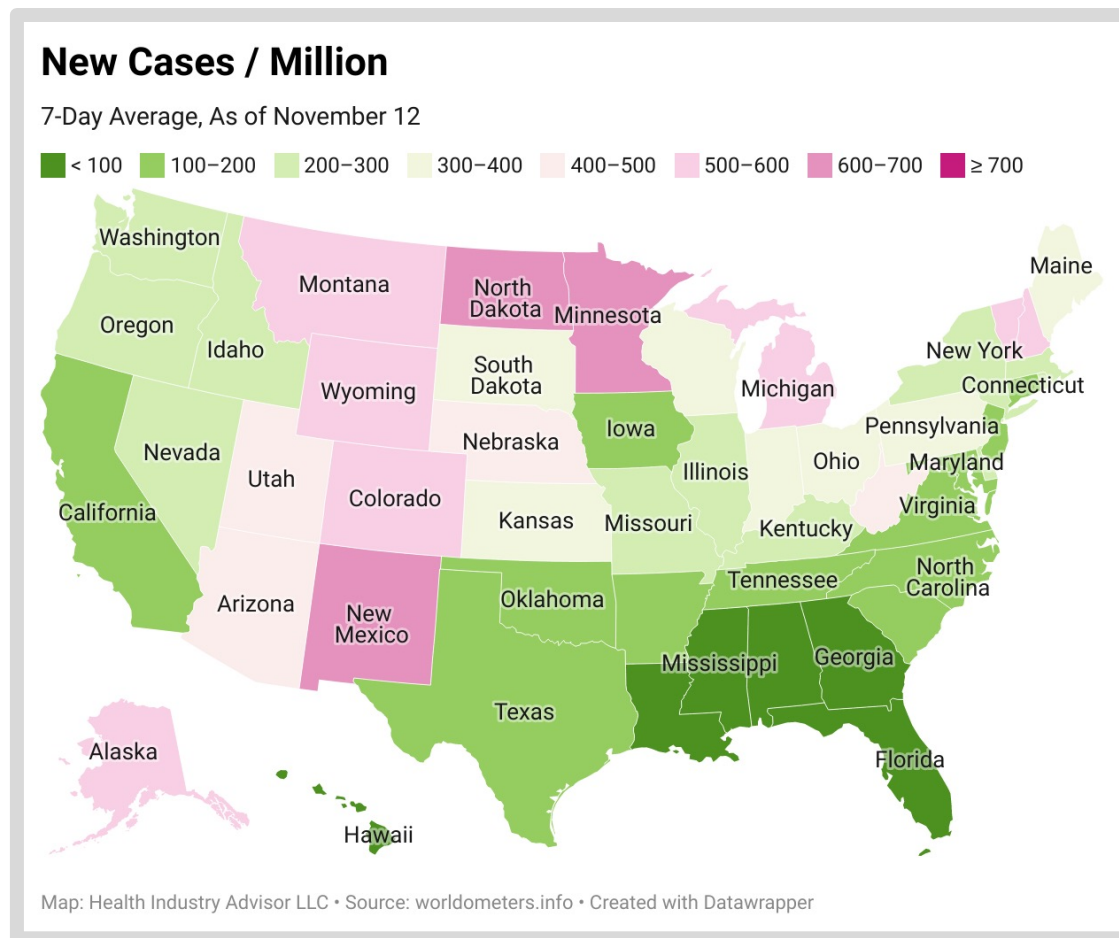


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

New Daily Cases Per Capita By State

Midwest and Mountain States posted the highest case rates last week. States in the Southeast experienced the lowest rates.



Covid-19 "Vital Signs"

Change in Newly Detected Cases - Last Two Weeks

New cases rates jumped in New Hampshire, Minnesota, Vermont, and New Mexico during the past two weeks. Case rates plunged in Alaska and Idaho.

Ranking of Change in New Cases / Million: Last Two Weeks

7-Day Average, As of November 12 v October 29

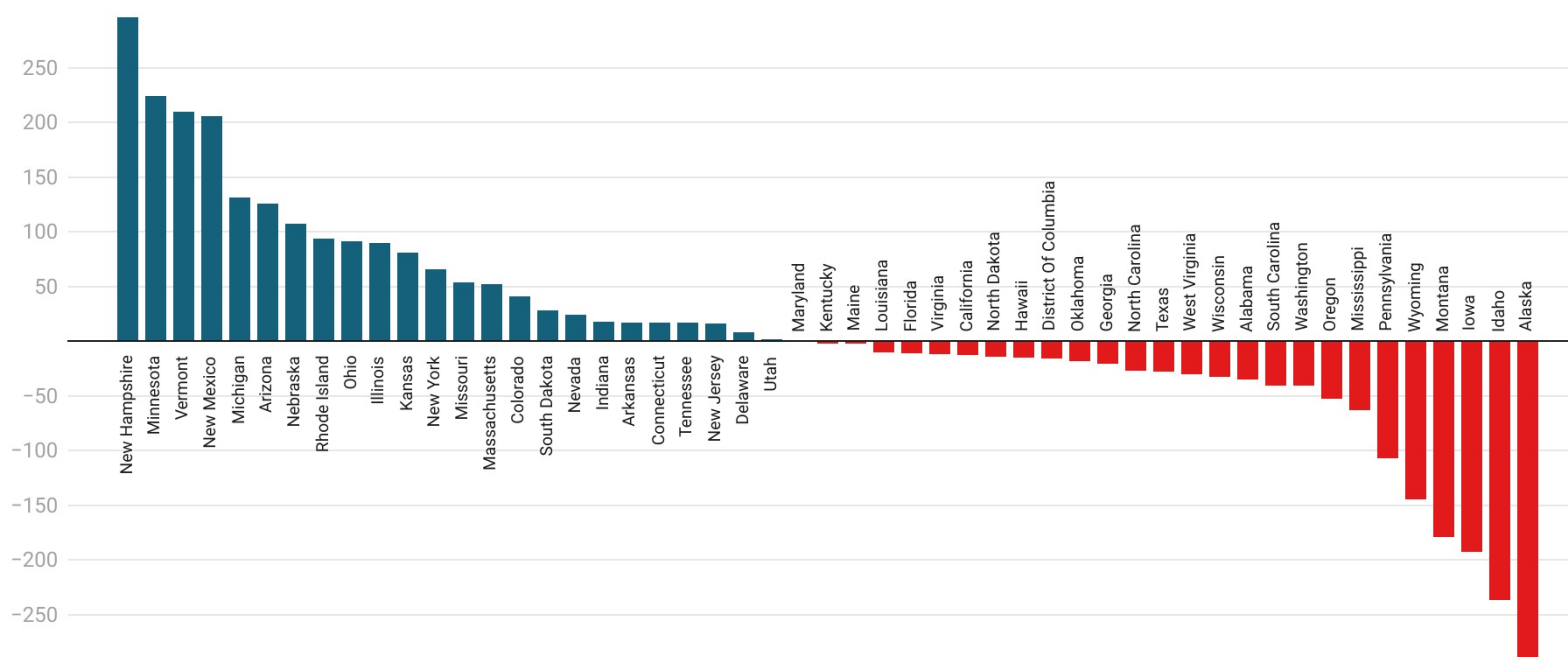


Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

Which States Have Highest Rates of New Cases?

New Hampshire, Vermont, Minnesota, and New Mexico suffer with the dubious combination of high and rising case rates.

Current Reported Case Rate & Week-Over-Week Increase

7-Day Average, as of November 12

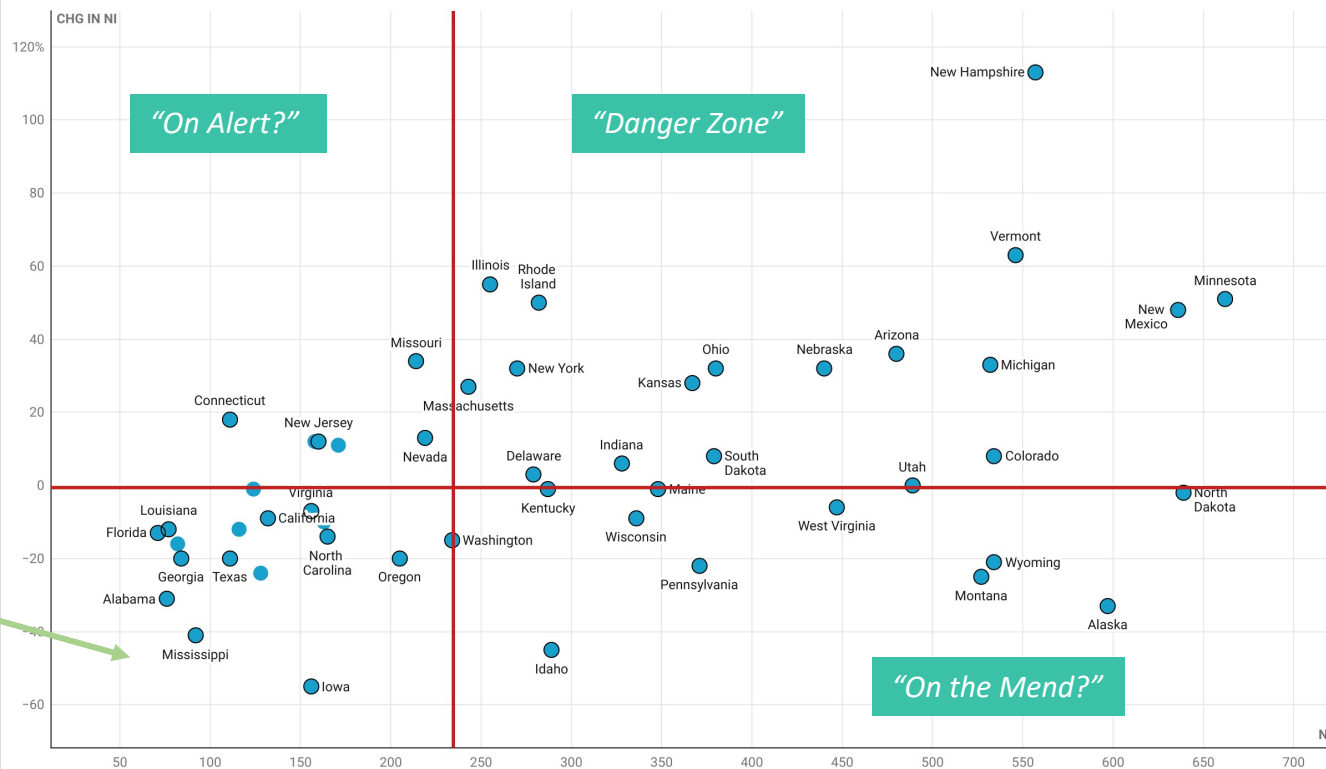


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Inpatient Covid Admissions and Census

Despite the flattening cases, inpatient census declined last week. However, admissions moved up slightly during the week. Both measures plunged from late August/early September highs.

Covid-19 Admissions & Inpatient Census

As of November 11

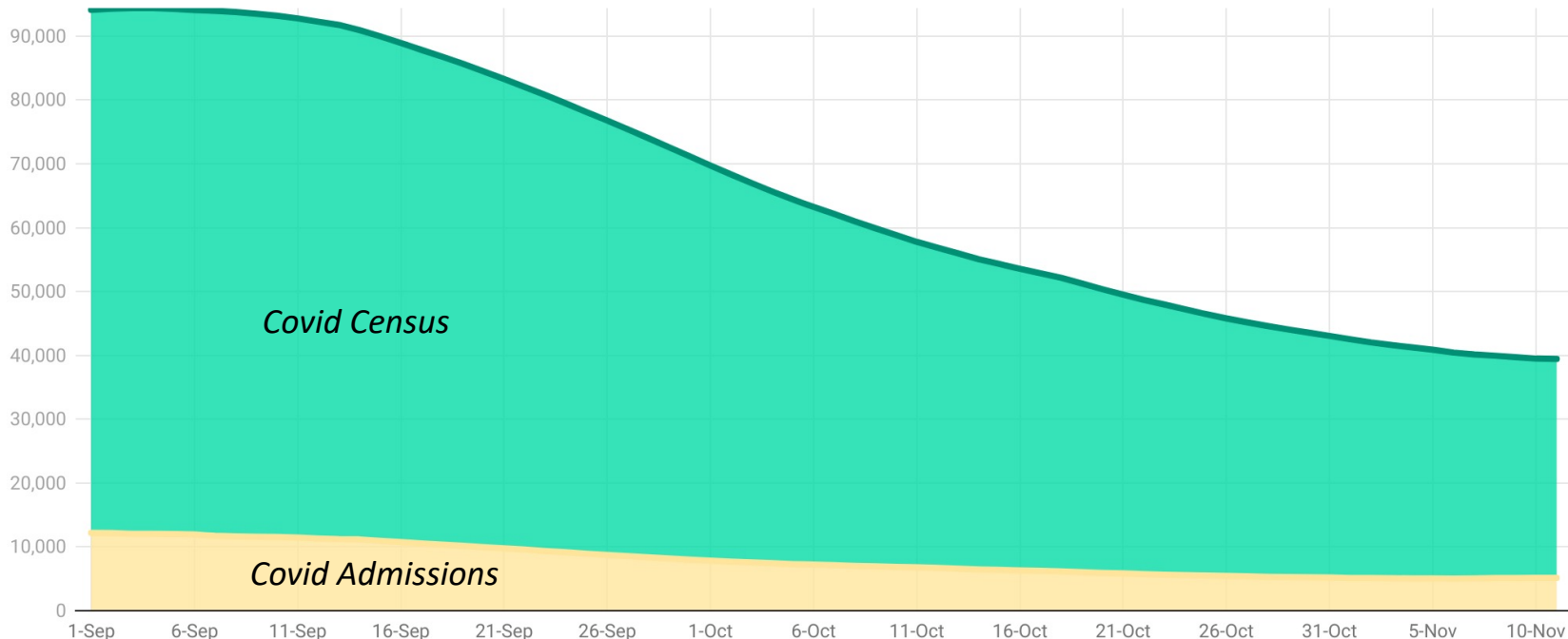


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

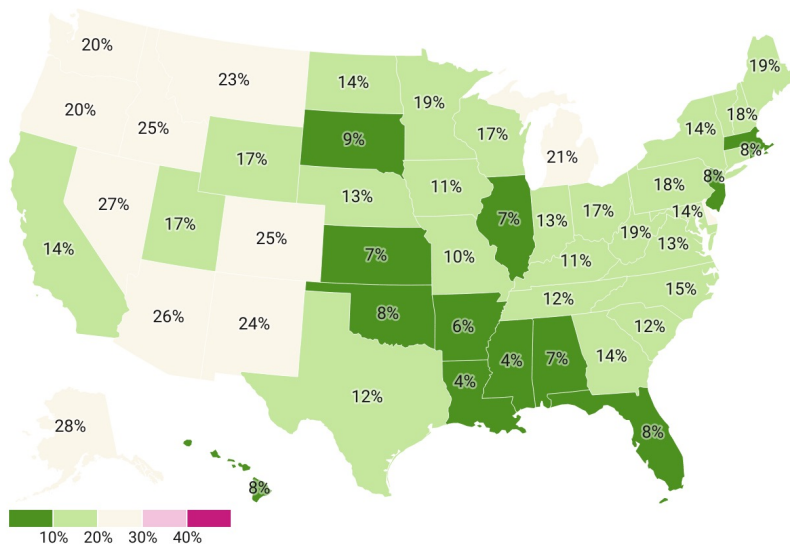
Covid-19 "Vital Signs"

Covid Hospital Occupancy By State

Covid hospitalization levels improved across several parts of the country over the past week. Covid patients occupy one of every eight beds nationally.

Covid-19 Patients As % of All Inpatient Beds

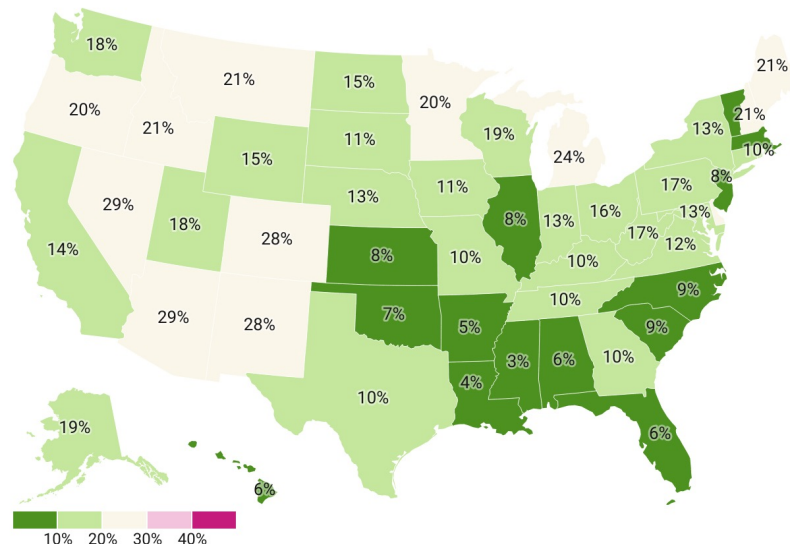
As of November 4



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

Covid-19 Patients As % of All Inpatient Beds

As of November 11



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

Covid-19 "Vital Signs"

Deaths with Covid-19

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

Deaths With Coronavirus

7-Day Average, Through November 11

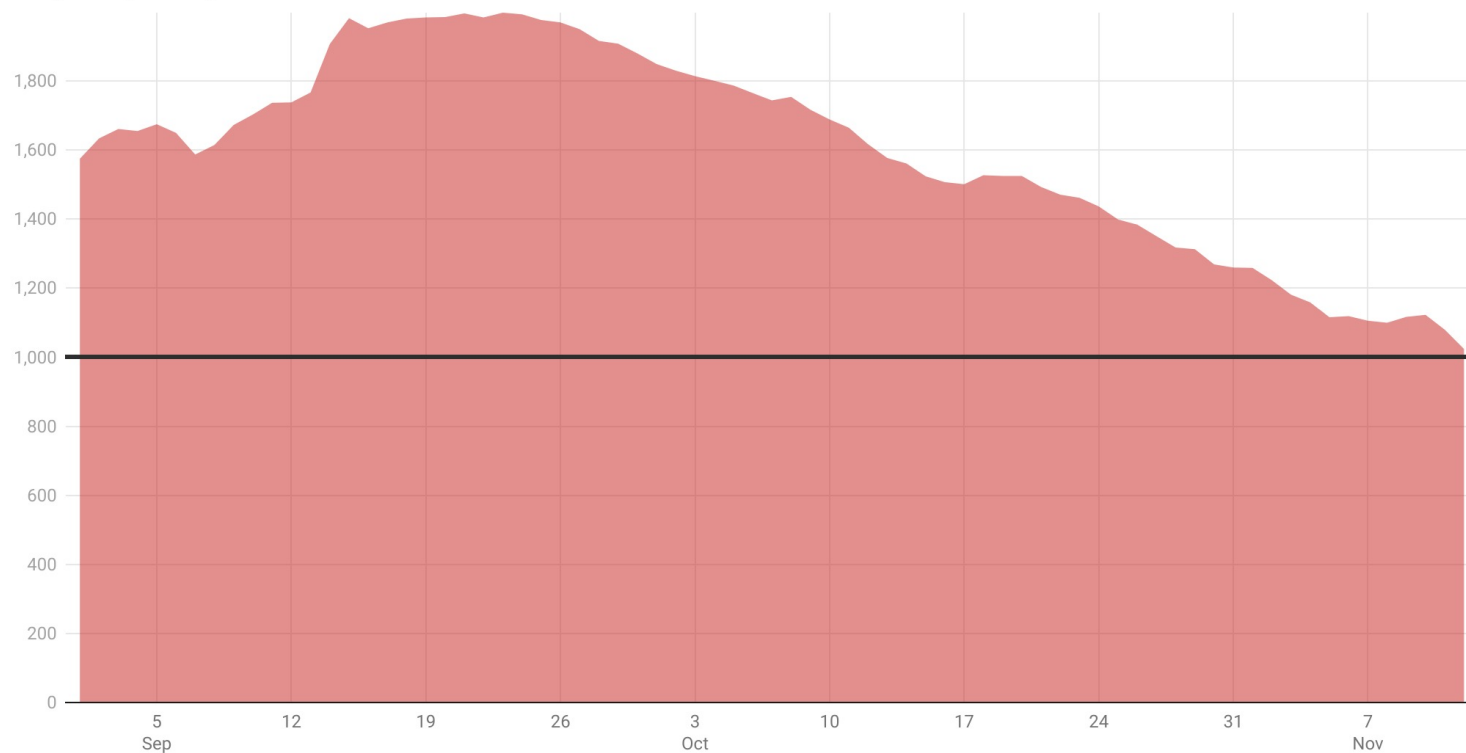


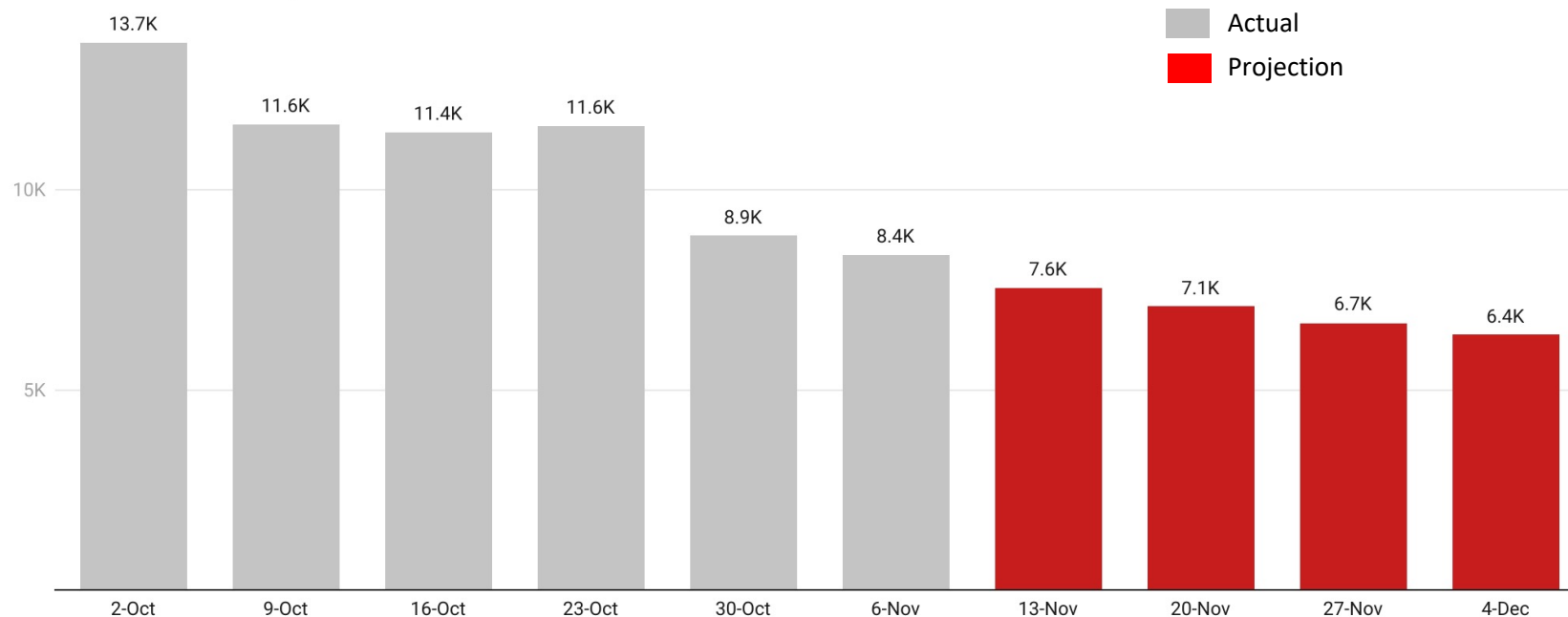
Chart: Health Industry Advisor LLC • Created with Datawrapper

Death Projections – Ensemble Forecast

The ensemble forecast predicts declining Covid deaths over the next four weeks.

Newly-Reported Deaths Per Week

Covid-19 Forecast Hub, Composite Forecast As of November 5



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>