

Covid-19 "Vital Signs"

Issue # 355

November 8, 2021

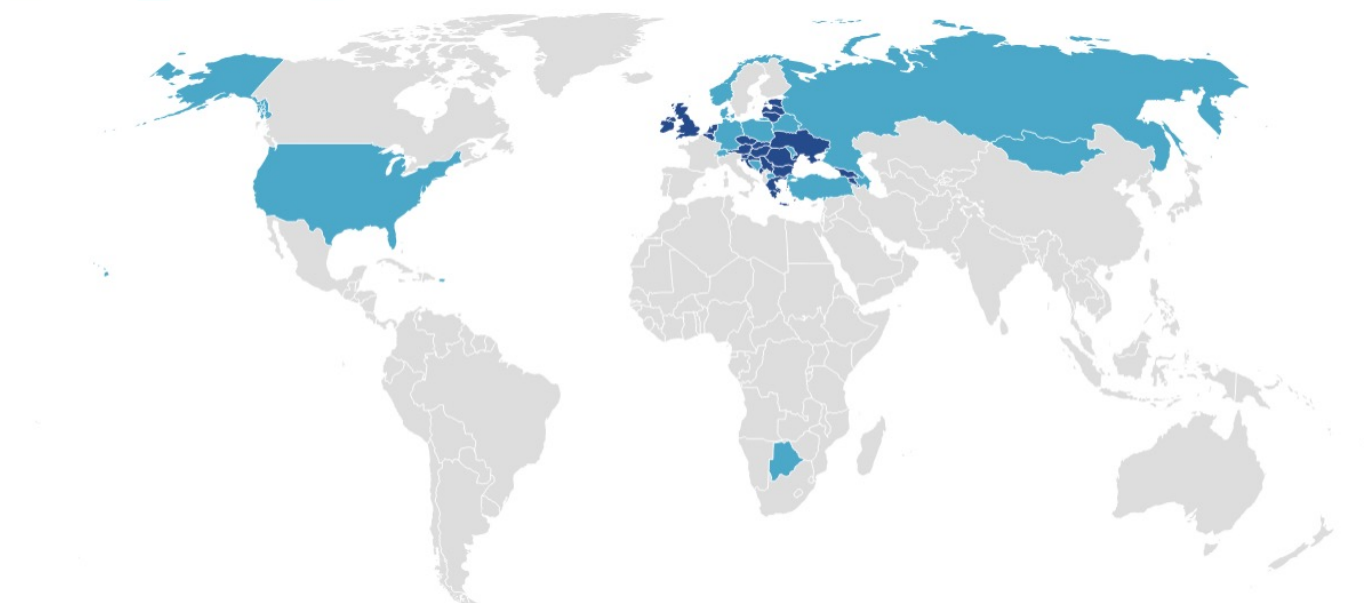
Current Reported Case Rates

The highest current rates are concentrated in Europe, and especially in Eastern Europe

Current Reported Cases / M

New Daily Cases/M, 7-Day Average as of November 5

< 200 200–400 ≥ 400



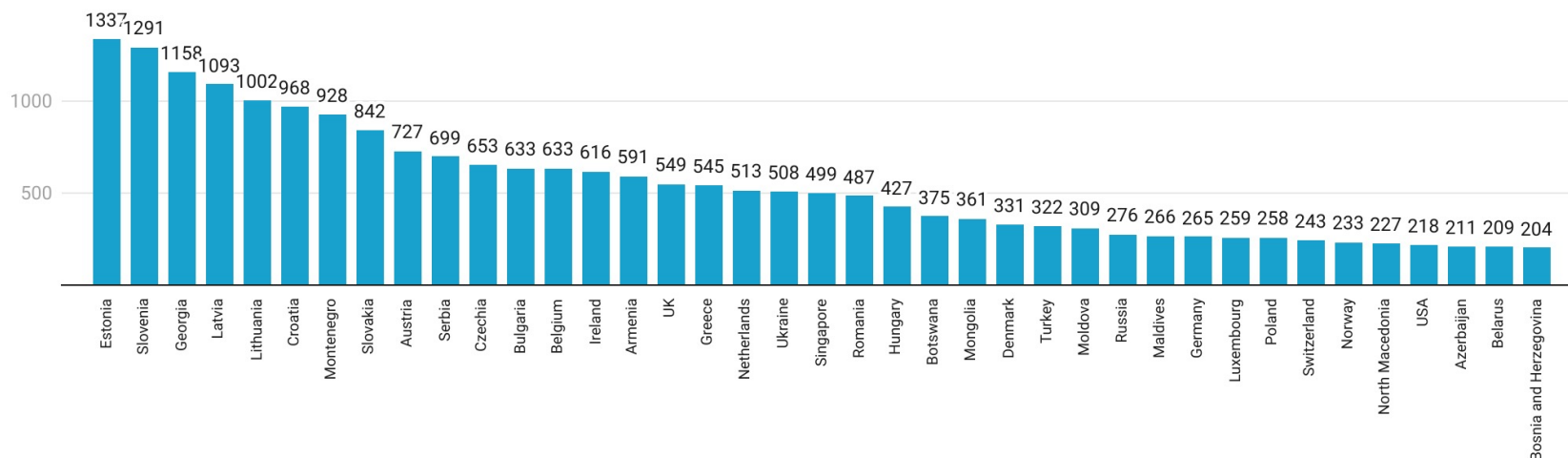
Map: Health Industry Advisor LLC • Source: Worldometers.info • Created with Datawrapper

Countries With Highest Current Case Rates

The United States ranks thirty-sixth among large countries (population > 500,000) in current reported rates per capita.

Highest Current Reported Case Rates

New Daily Cases/M, 7-day Average as of November 5



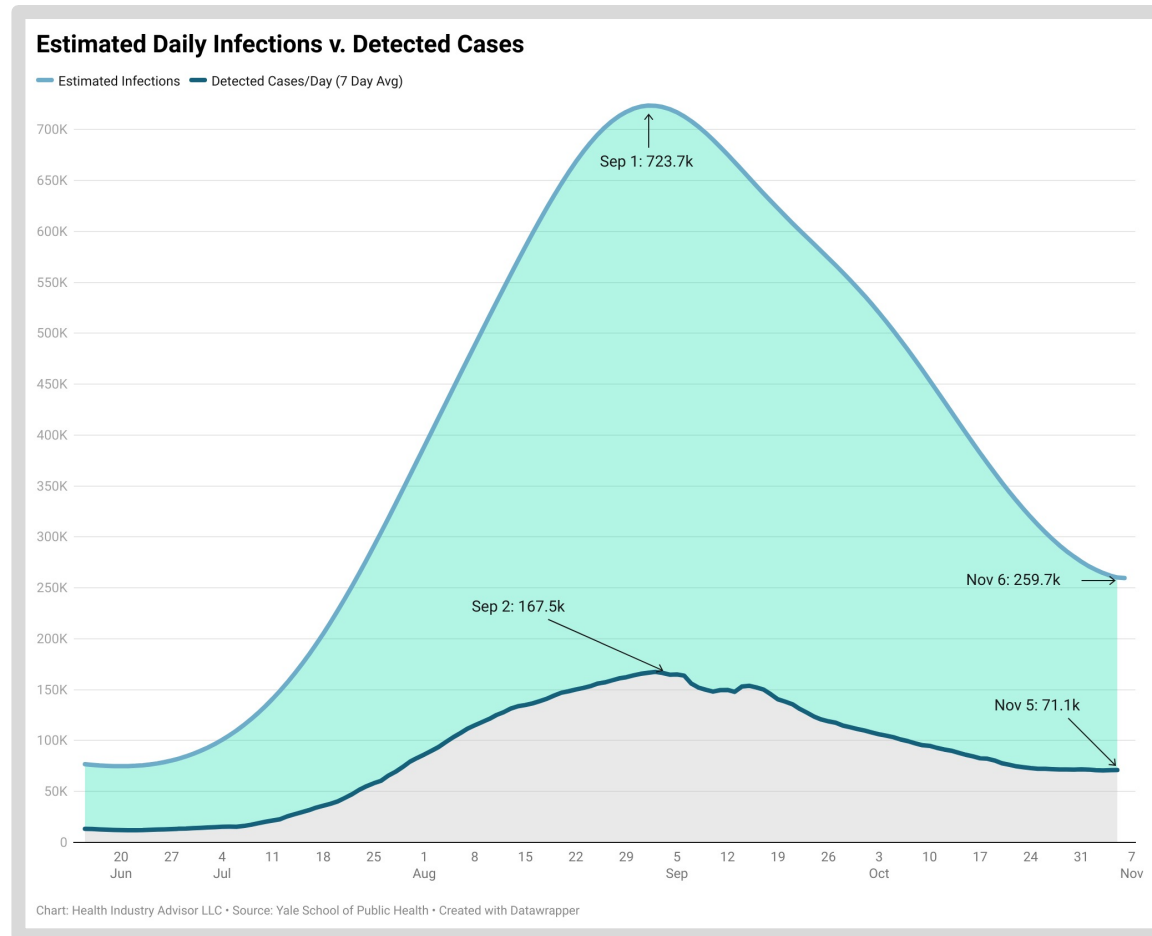
Depicting all countries with rates >200 and population of at least 500,000

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

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

In the U.S., estimated infections plunged by two-thirds from September 1 through last Friday. Reported cases plunged 60% during the same period.



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

New cases were essentially flat over the last week. These cases had been falling since the beginning of September..

Week-Over-Week Changes in Newly-Detected Cases

7-Day Average, As of November 5

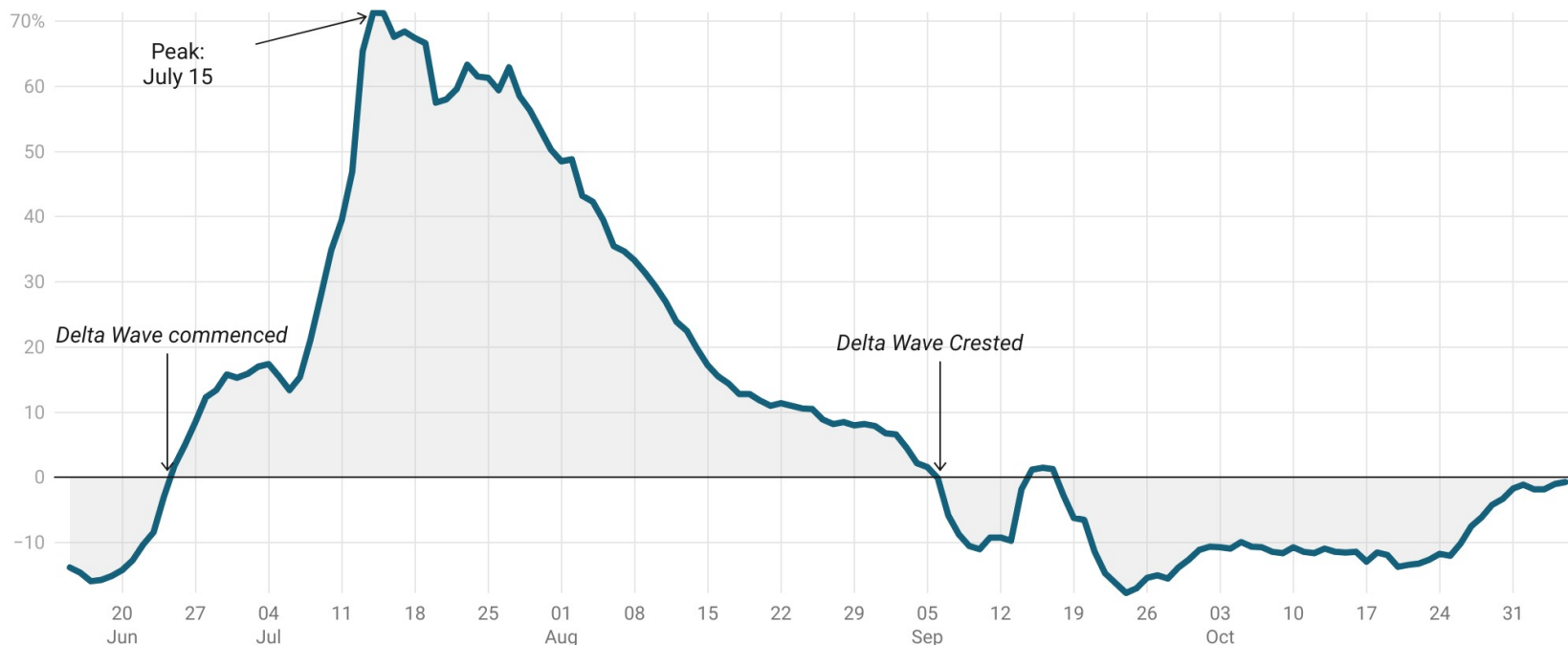


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

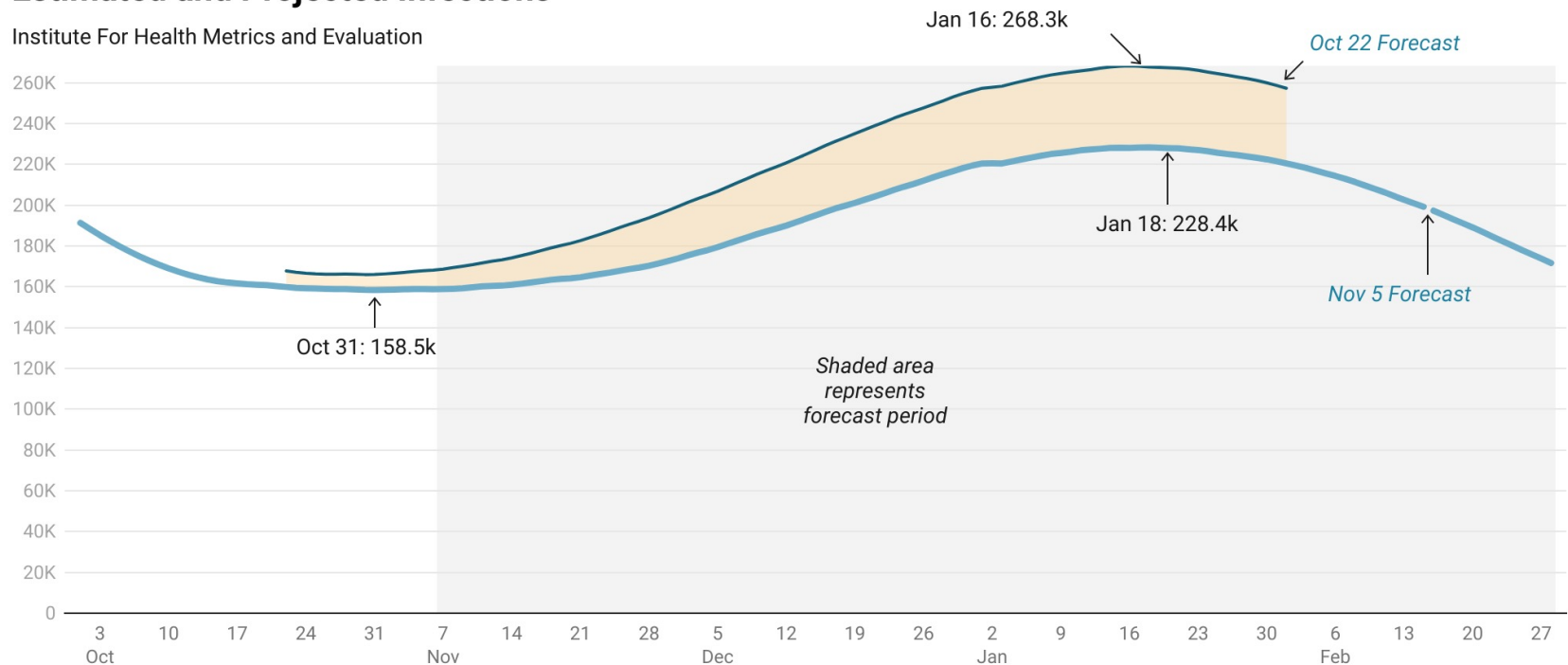
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Estimated Daily Infections & New Cases - IHME

In its latest model (published last Friday), the Institute for Health Metrics and Evaluation suggest that daily infections in the U.S. started increasing post-Halloween. The outlook in this IHME forecast is somewhat better than its forecast from two 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

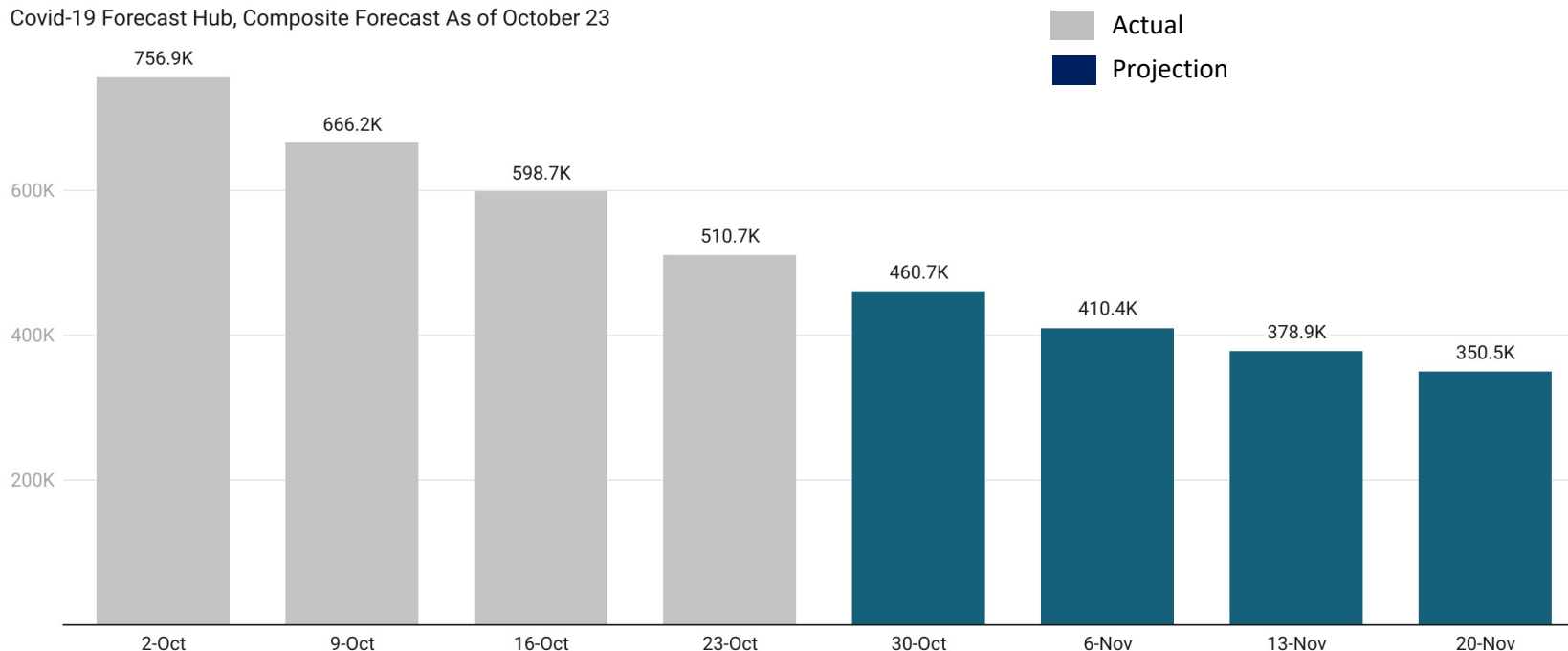
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Covid-19 Cases: Ensemble Forecast

The ensemble forecast published a week ago predicts that infections will continue falling for the next several weeks. In this forecast, cases plunge 30% in four weeks. Note that cases were essentially flat last week, whereas the ensemble forecast predicted cases would decline.

Newly-Reported Cases Per Week

Covid-19 Forecast Hub, Composite Forecast As of October 23



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>

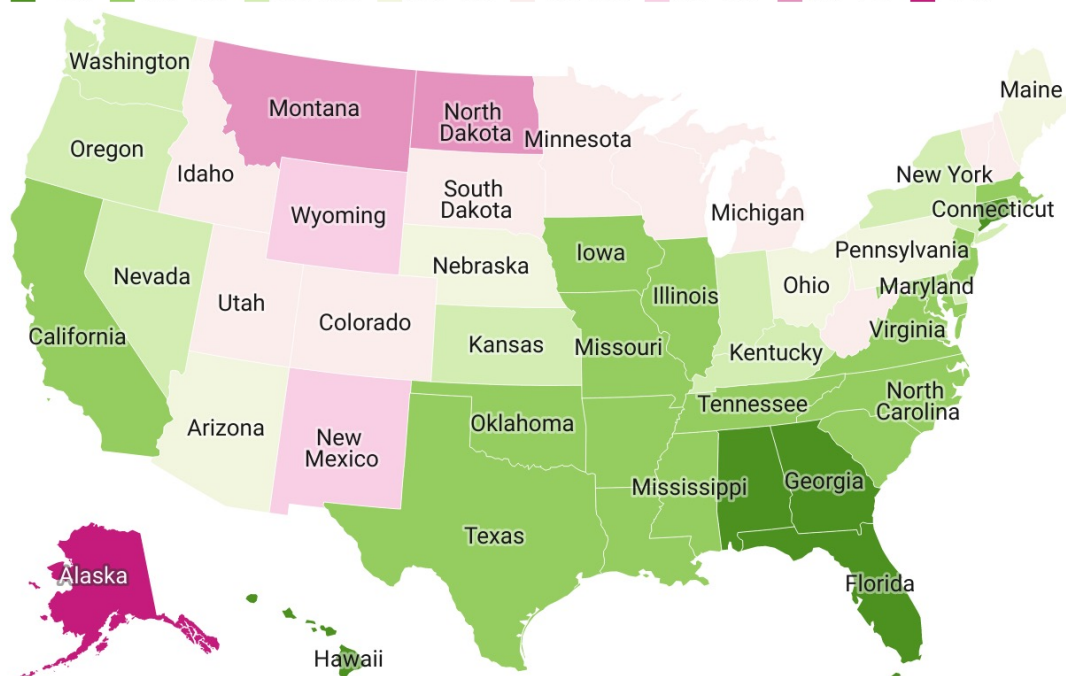
New Daily Cases Per Capita By State

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

New Cases / Million

7-Day Average, As of November 5

< 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

Alaska posted the highest case rate of all states last week. However, the rate declined from the prior week. New Hampshire experienced the largest week-over-week increase in its new case rate.

Current Reported Case Rate & Week-Over-Week Increase

7-Day Average, as of November 5

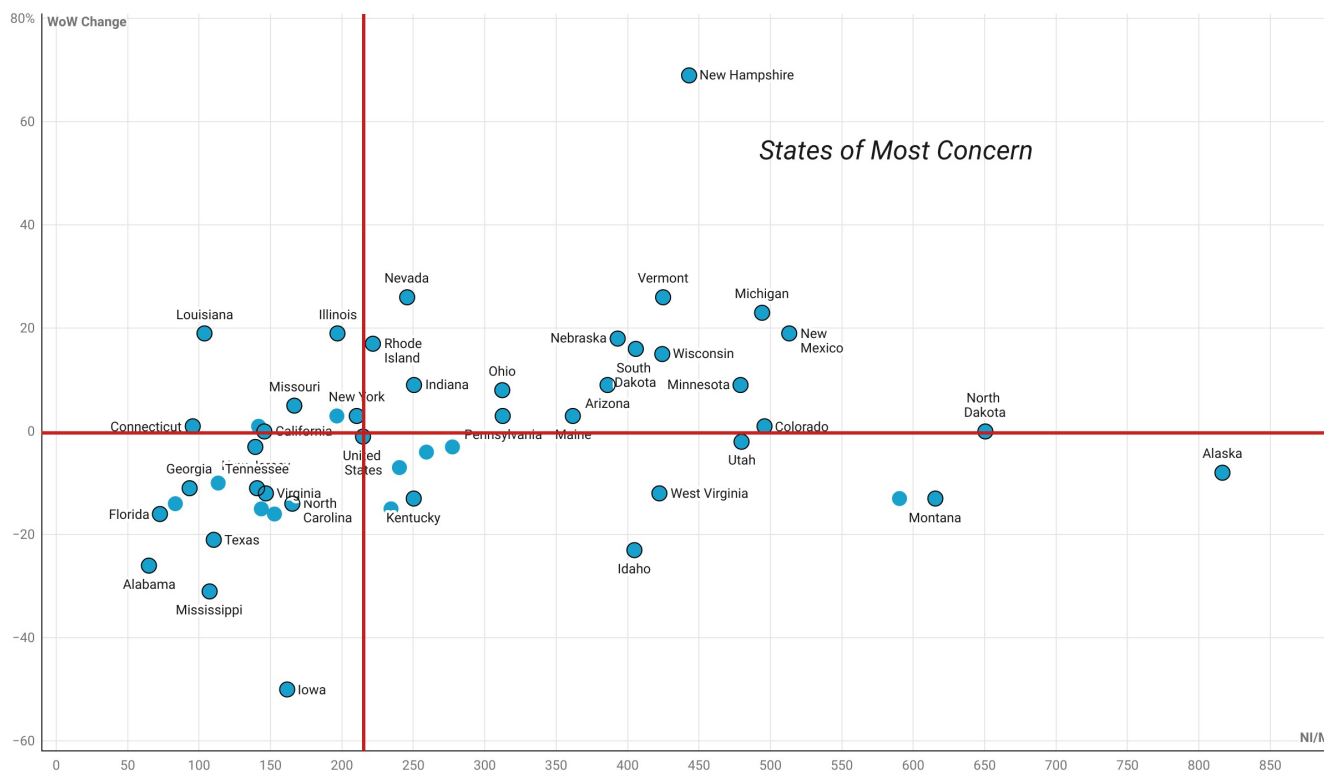


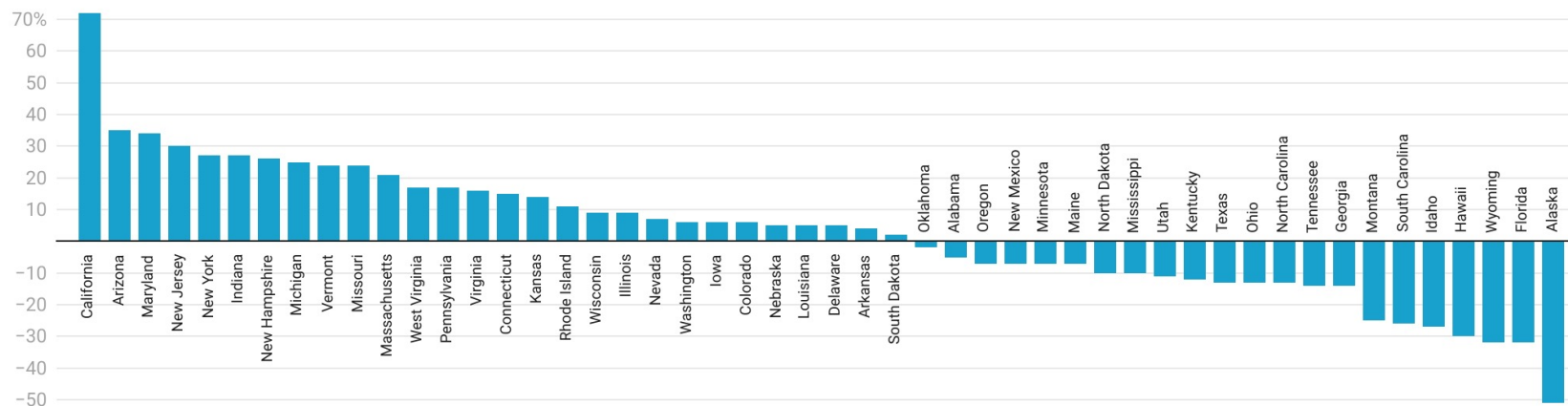
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Projected Change in Case Rate For November - IHME

IHME anticipates that California will experience a 70% surge in its new daily case rate during November. Arizona, Maryland, and New Jersey could see a 30% jump.

Projected % Change in New Daily Infections

Month of November



Forecast published November 5th

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

Vaccination Status By Age – United States

Fewer than 2% of seniors have yet to be at least partially vaccinated. More than one-quarter received their booster shot already. Three-quarters of non-senior adults are at least partially vaccinated.

Vaccination Status By Age

As of November 5

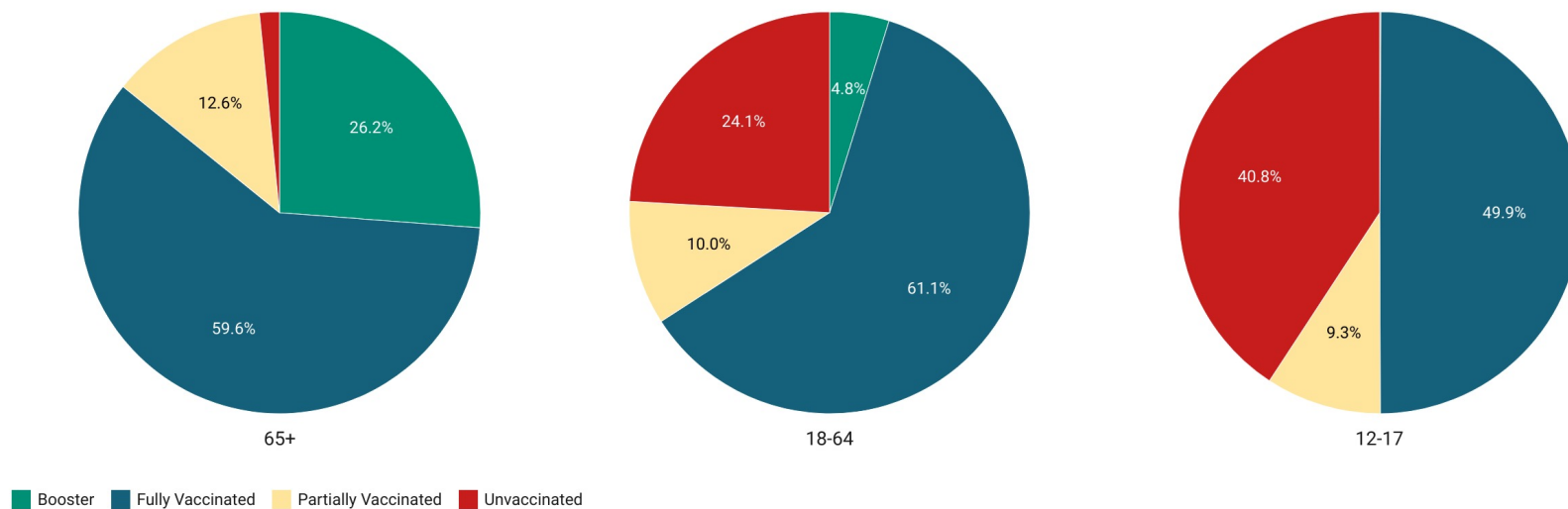


Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Covid-19 “Vital Signs”

Inpatient Covid Admissions and Census

Despite the flattening cases, inpatient census and admissions declined last week. Both measures plunged from late August/early September highs.

Covid-19 Admissions & Inpatient Census

As of November 4

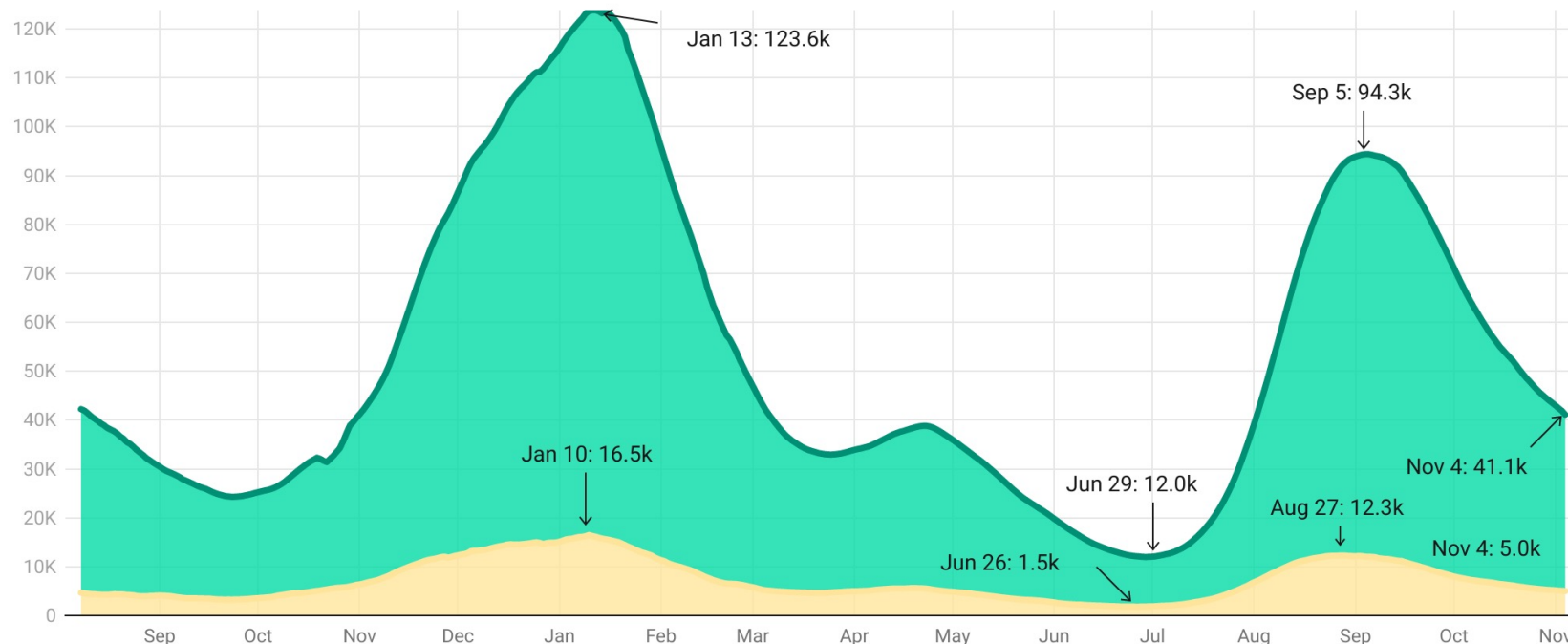


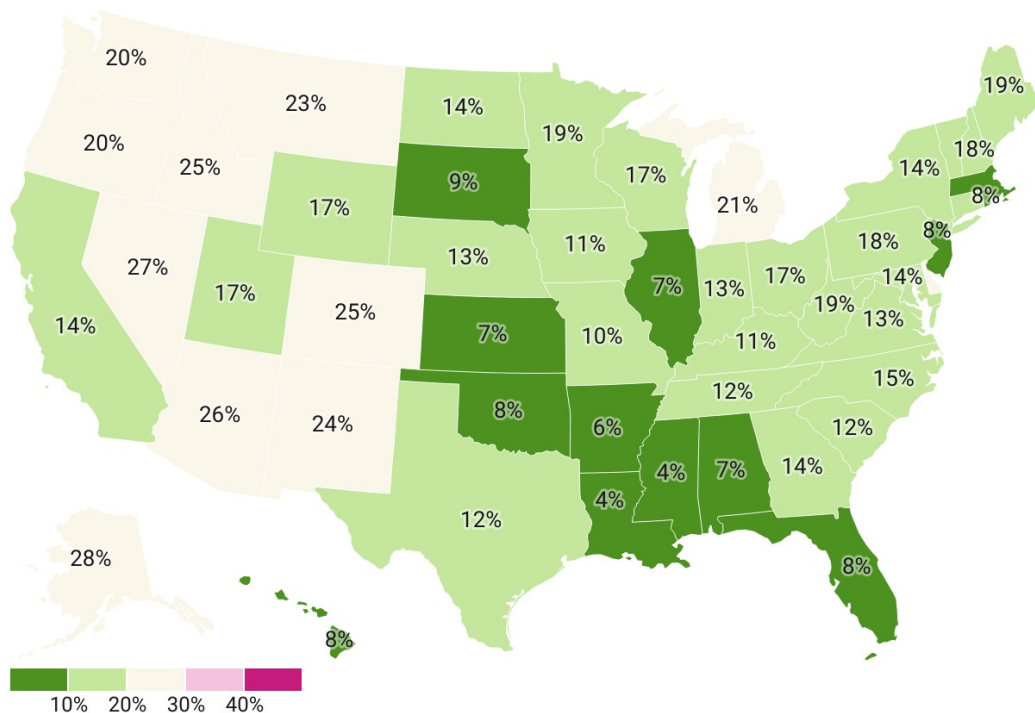
Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid Hospital Occupancy By State

Covid patients occupy fewer than one of ten beds in eleven states. Alaska is experiencing the highest rate, 28%

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 "Vital Signs"

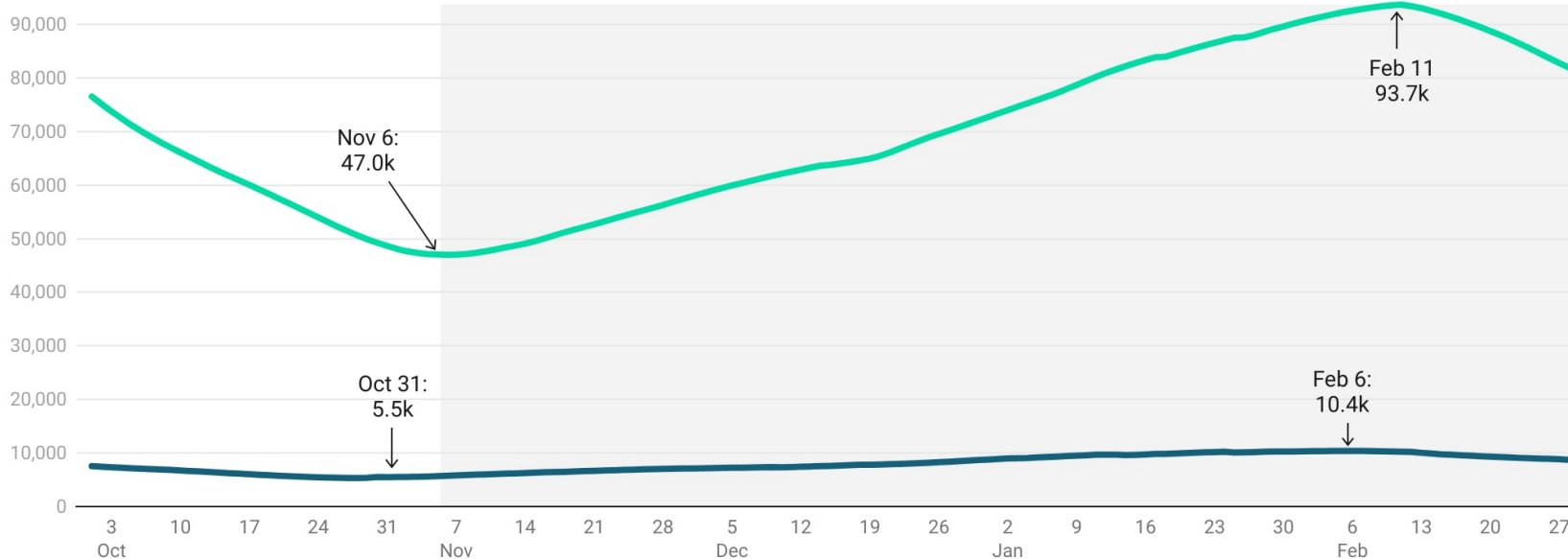
Estimated Covid Admissions and Patient Days - IHME

Based on IHME's latest modeling, inpatient Covid admissions and census will double between now and early February.

Estimated & Projected Hospital Covid-19 Admissions & Patient Days

Institute for Health Metrics and Evaluation

Admissio Pt Days



Forecast Date: November 5

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

Covid-19 "Vital Signs"

Estimated Daily Infections & New Case Rates

Alaska, which posted the highest Covid occupancy rate last week, also experienced more discharges than new admissions. Of concern are states with both high and increasing occupancy rates, such as Arizona, Colorado, and New Mexico.

Current Covid Hospital Occupancy & Week-Over-Week Increase

7-Day Average, as of November 5

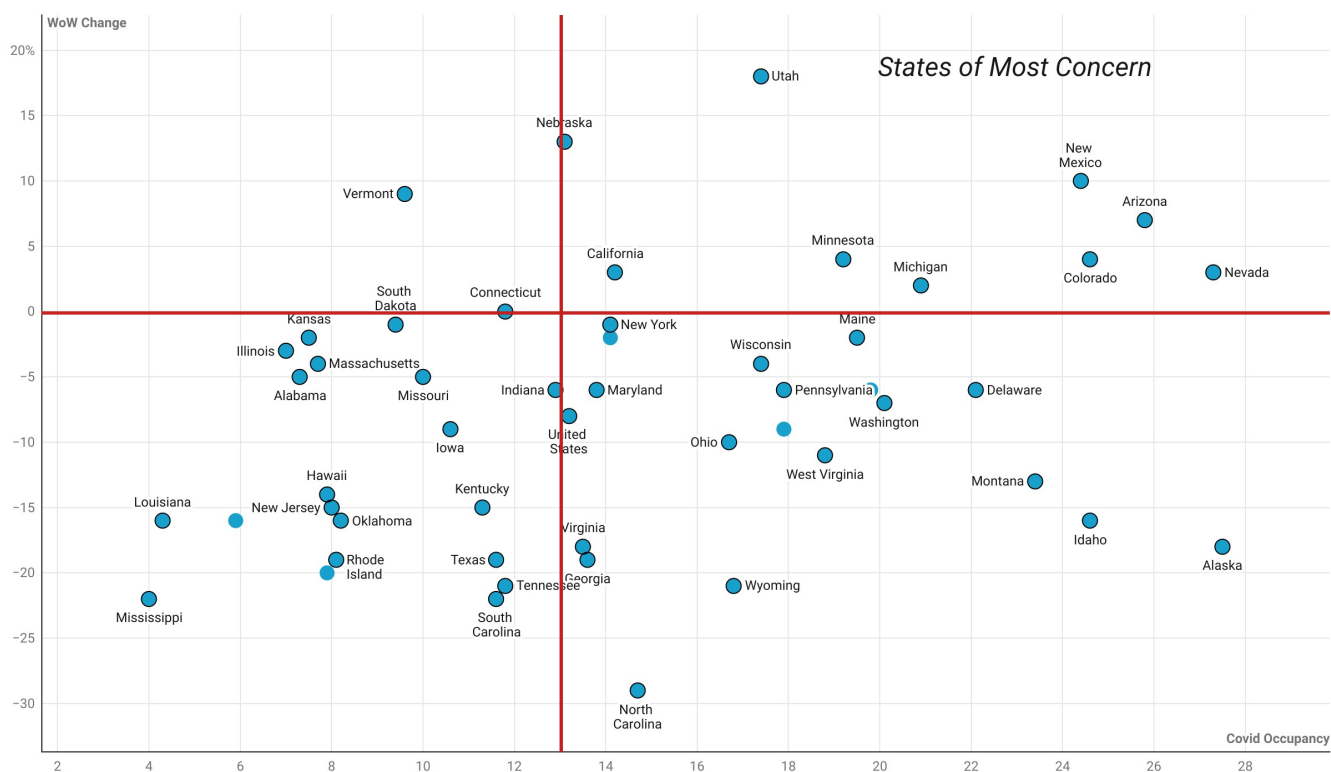


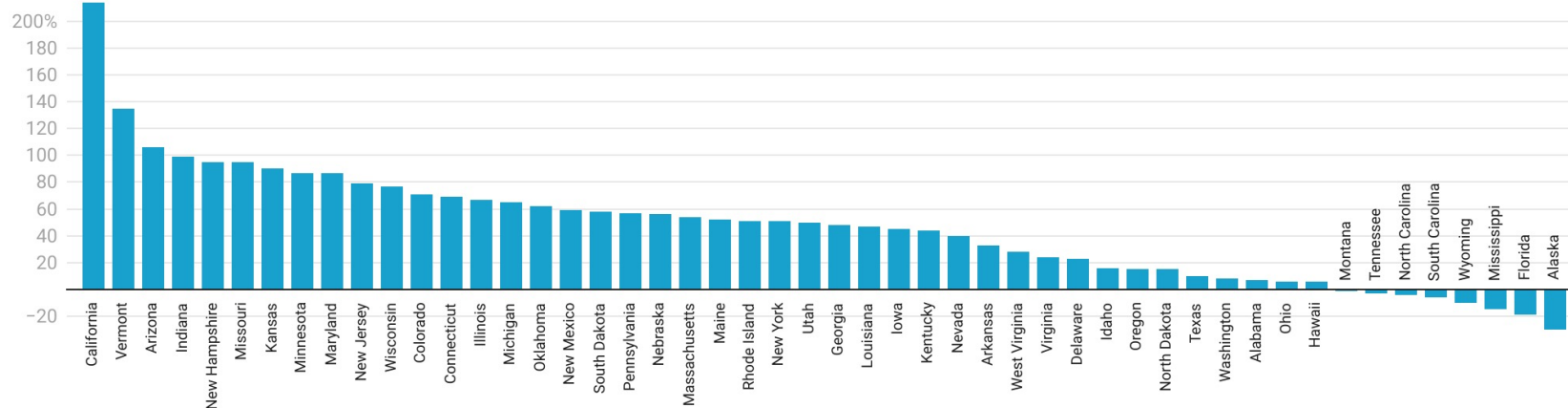
Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Projected Change in Covid Admissions - IHME

IHME envisions California will see three times as many new Covid admissions at the end of November as it did in late October. IHME expects admissions will double in Arizona, Indiana, and Vermont.

Projected % Change in Covid Hospital Admissions

Month of November



Forecast published November 5th

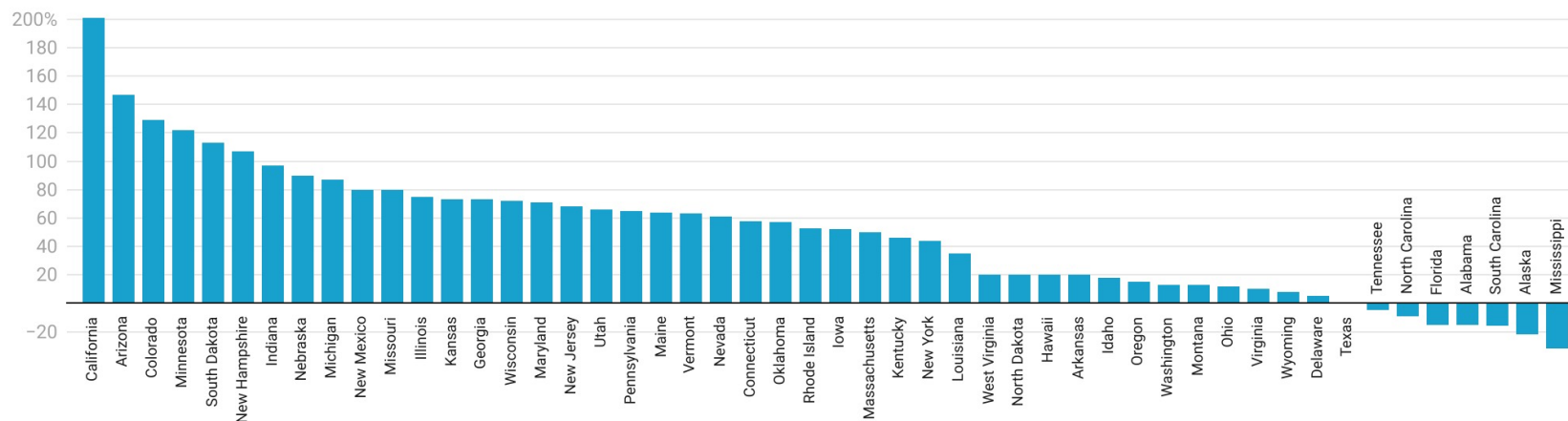
Chart: Health Industry Advisor LLC • Source: Institute for Health Metrics and Evaluation • Created with Datawrapper

Projected Change in Covid Admissions - IHME

Like anticipated Covid admissions, IHME envisions a tripling of Covid census in November in California.

Projected % Change in Covid Hospital Census

Month of November



Forecast published November 5th

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 continued declining last week. The current rate reached a nearly twelve-week-low.

Deaths With Coronavirus

7-Day Average, Through November 5

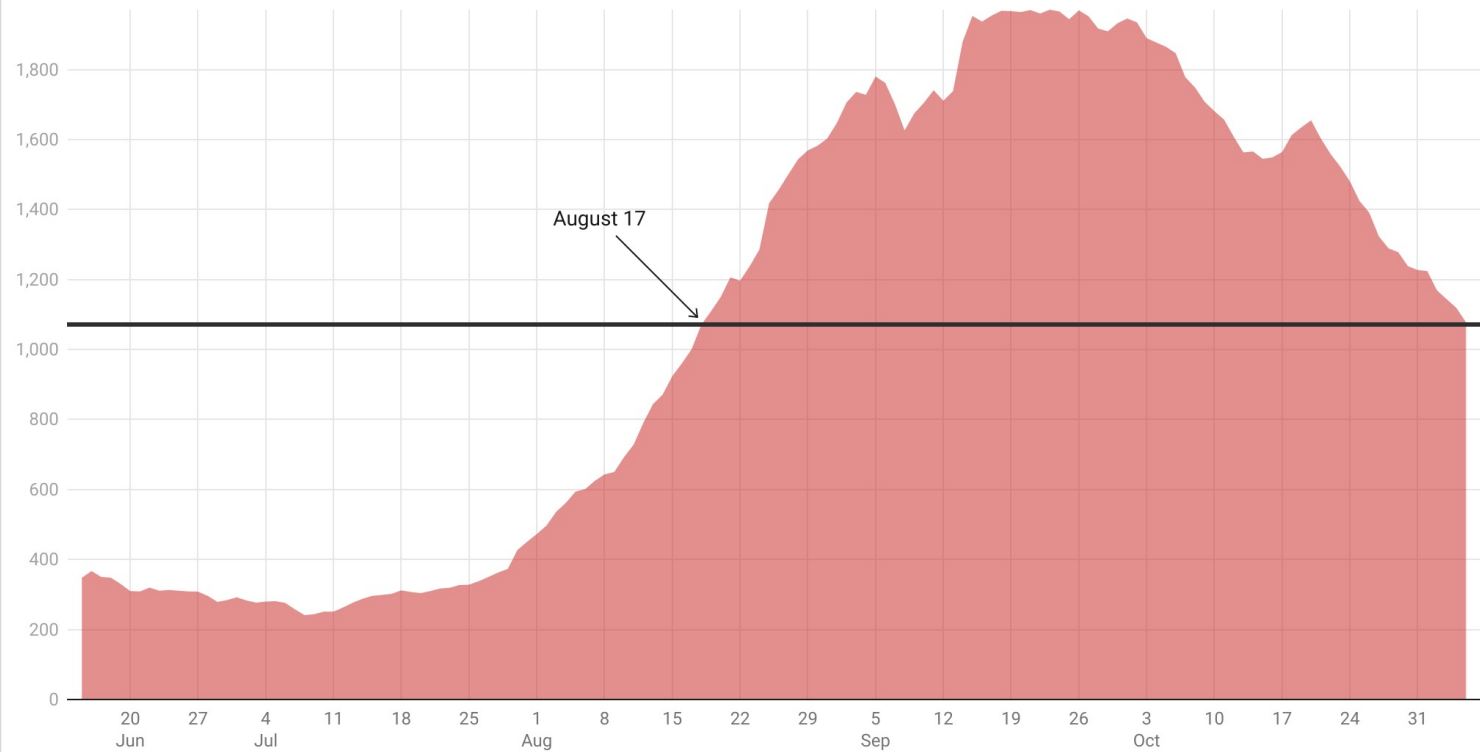


Chart: Health Industry Advisor LLC • Created with Datawrapper

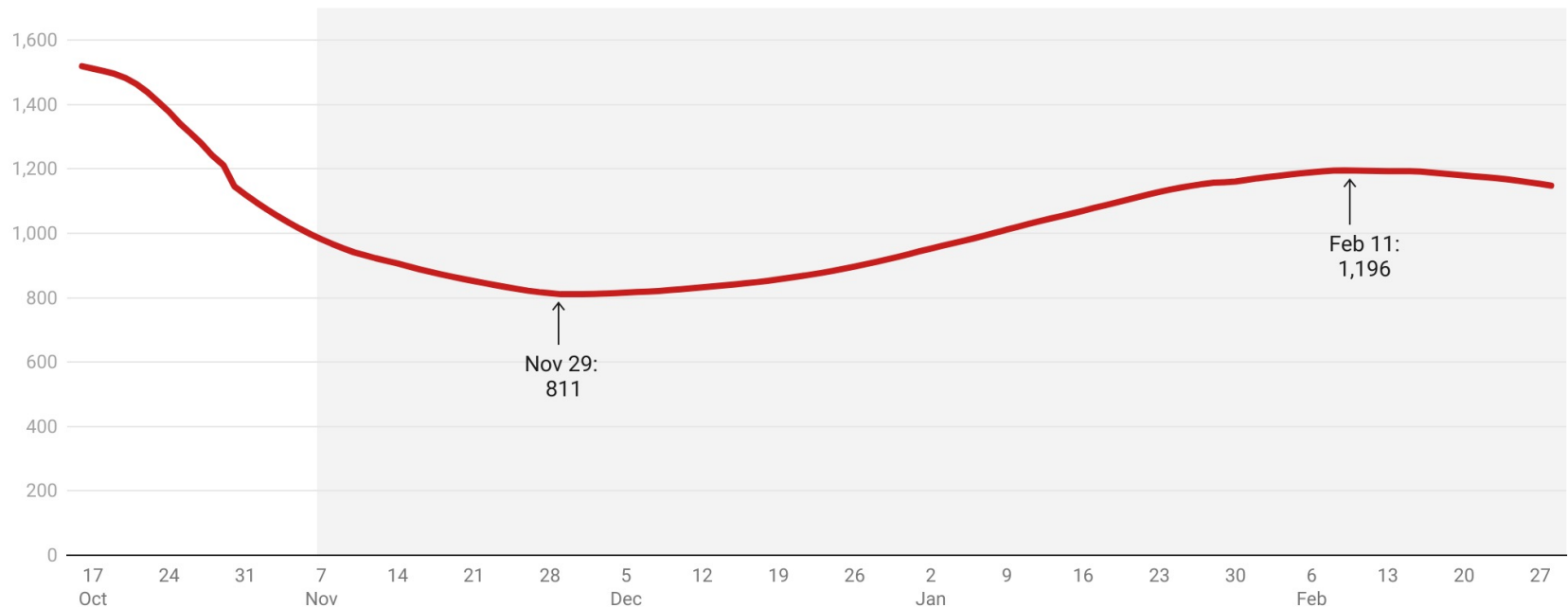
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Estimated Covid Deaths- IHME

IHME expects Covid deaths to fall throughout November. However, IHME then anticipates deaths will climb to nearly 1,200 per day by early February.

Estimated and Projected Covid Deaths - U.S.

Institute For Health Metrics and Evaluation



Forecast Date: November 5

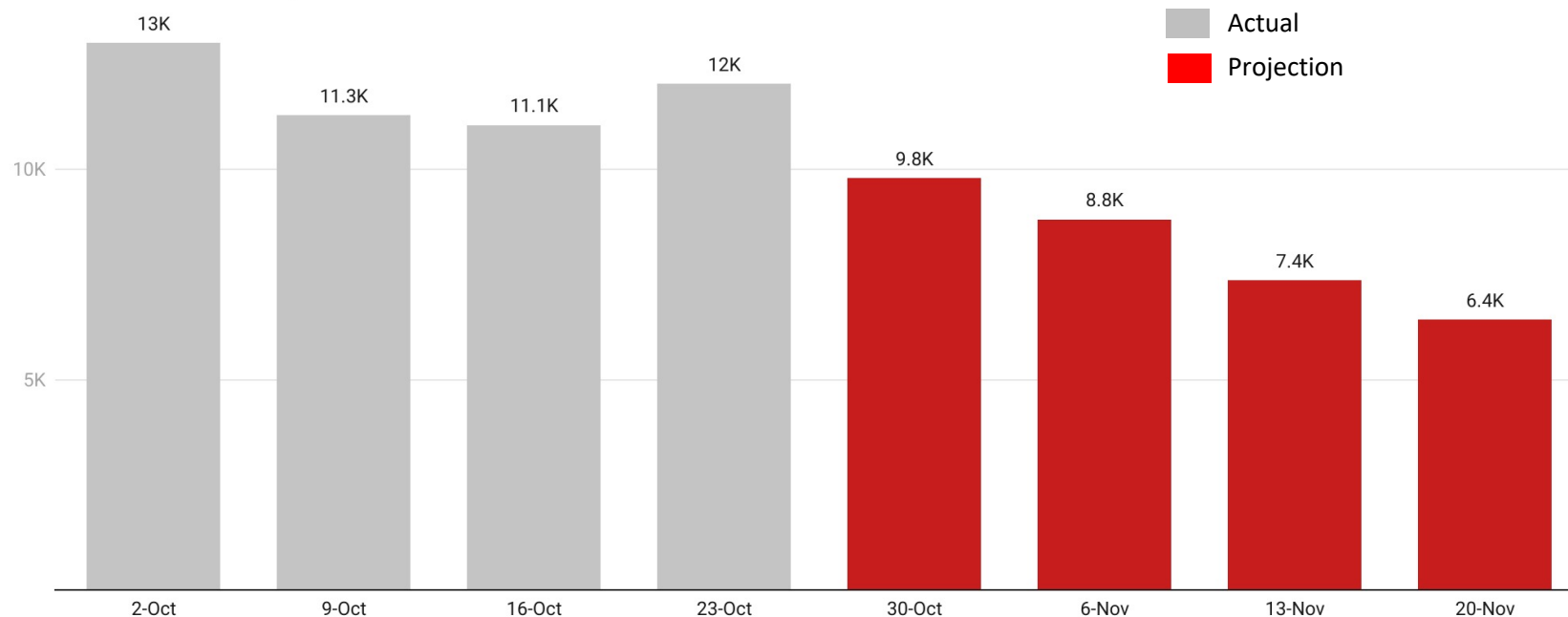
Chart: Health Industry Advisor LLC • Source: Institute For Health Metrics and Evaluation • Created with Datawrapper

Death Projections – Ensemble Forecast

The ensemble forecast also predicts declining Covid deaths (46%) over the next four weeks.

Newly-Reported Deaths Per Week

Covid-19 Forecast Hub, Composite Forecast As of October 23



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>

Covid-19 "Vital Signs"

Test-Positive Rate

The test-positive rate continues to drop, falling below the 5% benchmark set by public health officials. This rate is now as low as it has been since mid-July.

Test-Positivity Rate

7-Day Average, Through November 2

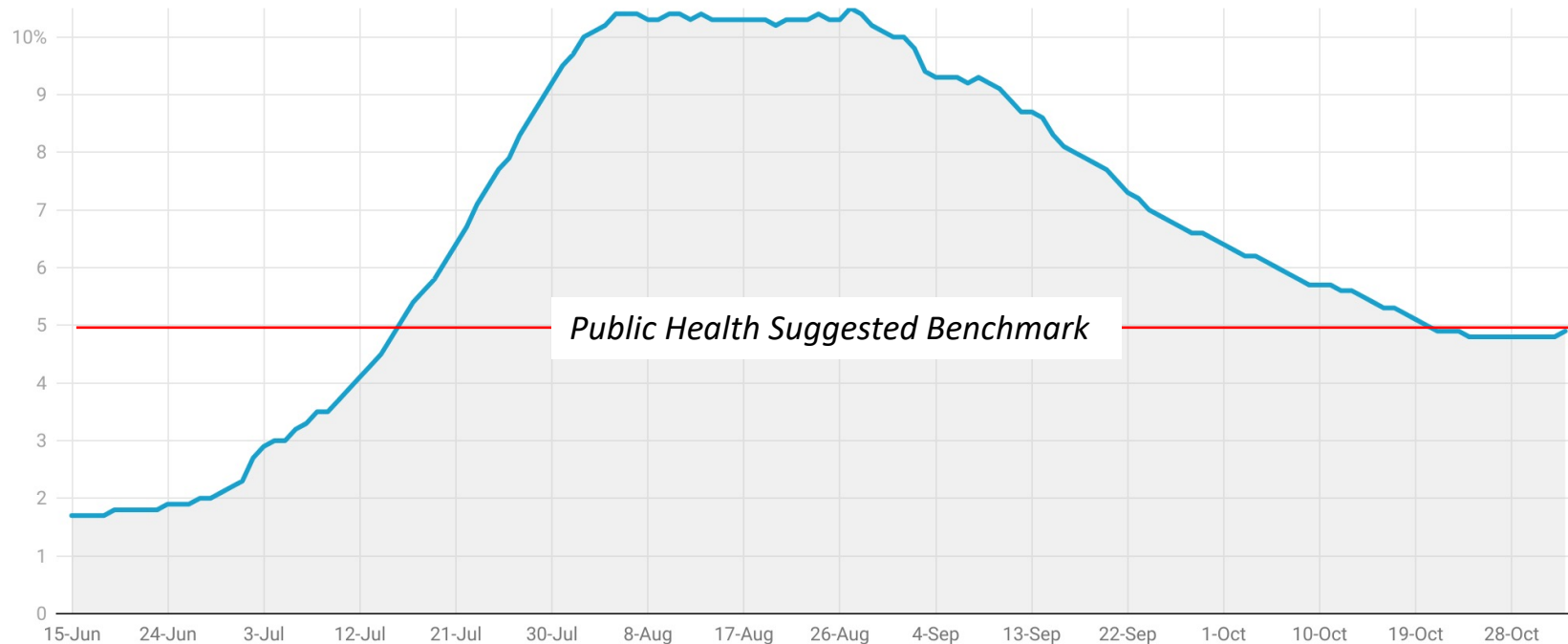
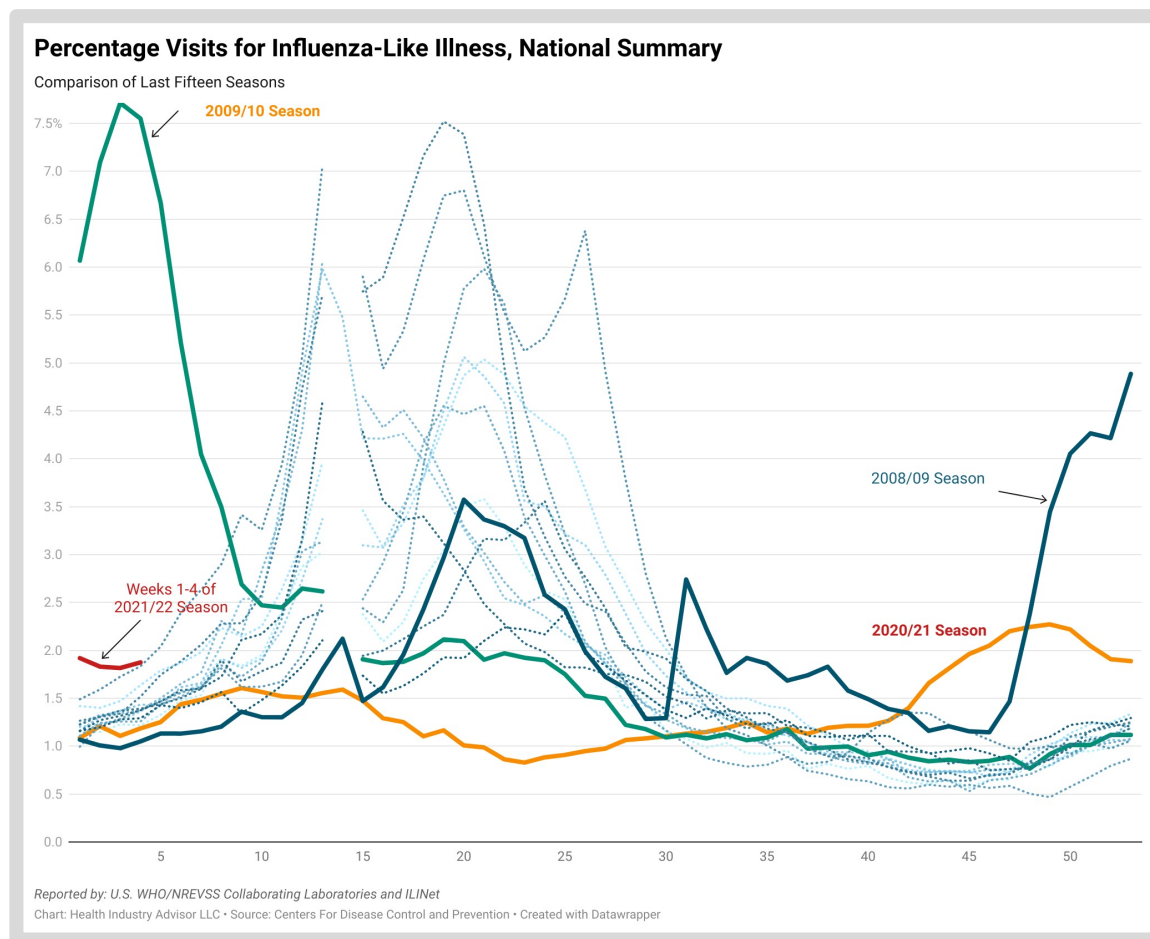


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Comparison of Flu Seasons

After a concerning run-up in flu cases last month, these visits have slowed in recent weeks. However, they remain higher than experienced last winter.



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>