

Covid-19 "Vital Signs"

Issue # 349

September 27, 2021

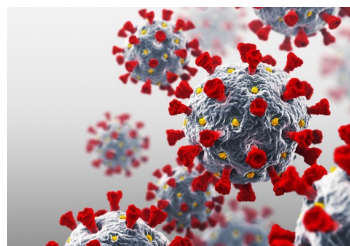


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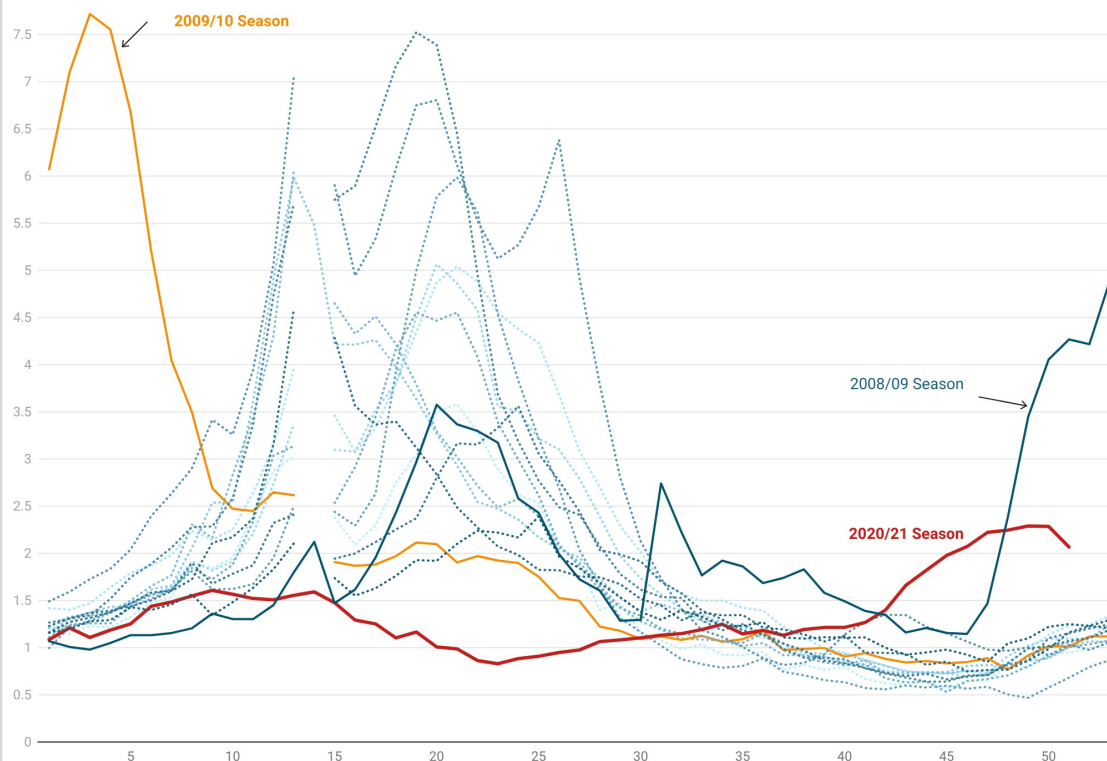
Comparison of Flu Seasons

We may be on the verge of an early and severe flu season.

- Last Winter, we enjoyed the mildest flu experience in at least fifteen years
- However, as we approach the 2021/22 season, we may be on the verge of one of the worst flu seasons in fifteen years:
 - We are already seeing more visits than during the peak of the season last Winter – two weeks before this season officially starts
 - Only the 2008/09 season ended in worse shape than we are in now. The subsequent 2009/2010 season was among the worst we have experienced in fifteen years
 - This 2009/10 season also reached peak earlier than in any other season

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

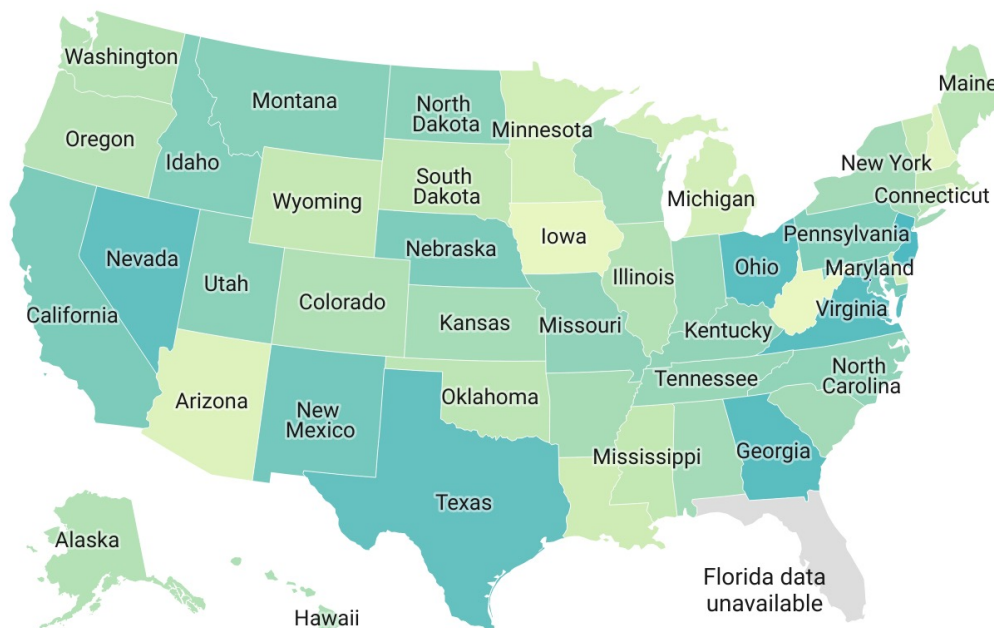
Several states are seeing more than twice as many flu visits as one year ago. Ten have already surpassed last year's peak visits.

As of the week ending September 18:

- The 2021/22 flu season does not begin for another week
- However, ten states are experiencing higher flu visit rates than at any time during the current 2020/21 season:
 - Maine, Maryland, Montana, Nevada, New York, Ohio, Pennsylvania, Virginia, Washington, and Wisconsin
- Rates in twenty-two states are at least double what they were one year ago:
 - California, Delaware, Idaho, Maine, Maryland, Michigan, Montana, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Texas, Utah, Virginia, Washington, and West Virginia

Percentage of Visits for Influenza-Like Illnesses

Week ending September 18, 2021



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

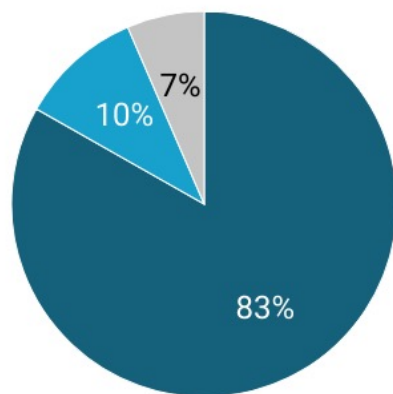
Map: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Vaccination Status By Age – United States

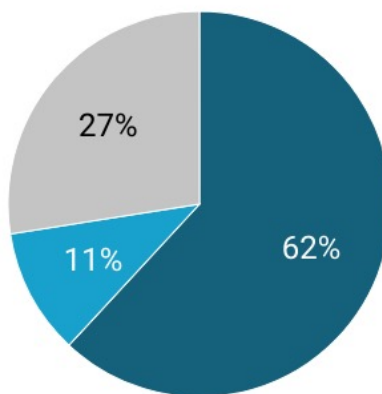
More than one of every four non-senior adults (18-64 years old) are refusing to be vaccinated. Among eligible teenagers, more than four in ten are resisting.

Vaccination Status By Age

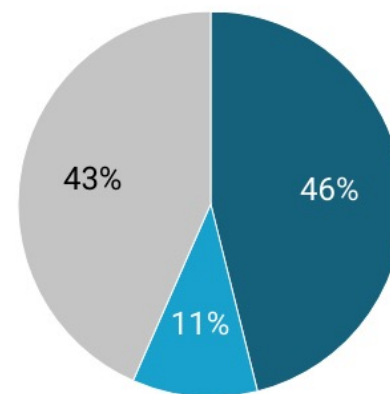
As of September 24



65+



18-64



12-17

■ Fully Vaccinated ■ Partially Vaccinated ■ Unvaccinated

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

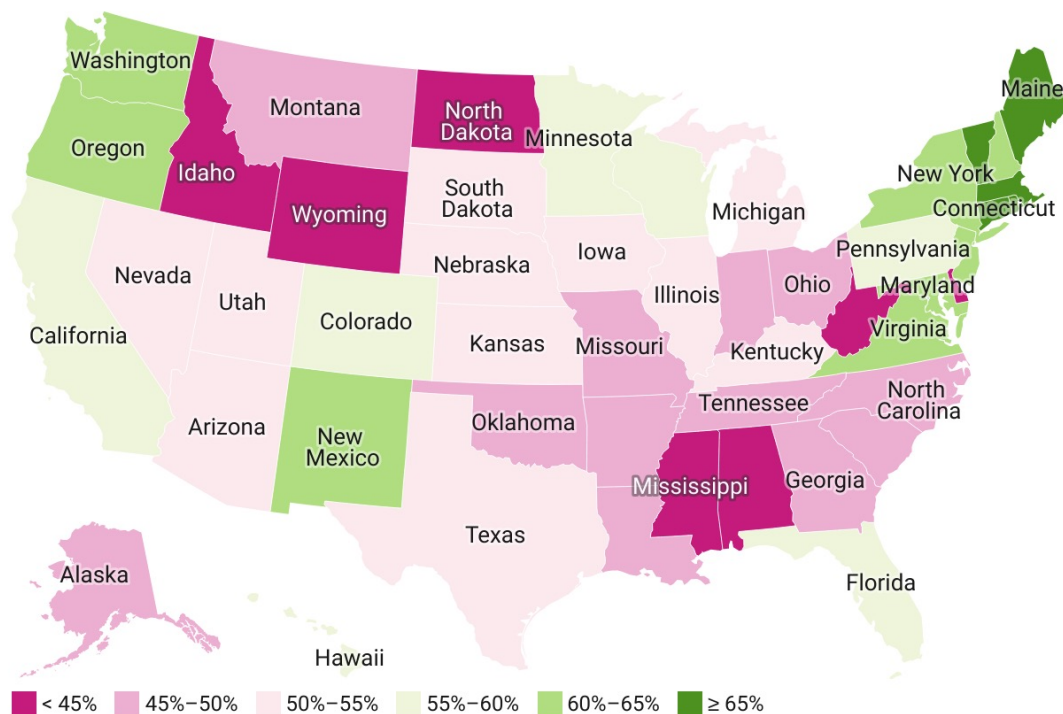
Vaccine Tracking - % of Population Vaccinated

The United States still has a long way to go in getting enough people vaccinated against Covid-19.

- Alabama, Delaware, Idaho, Mississippi, North Dakota, West Virginia, and Wyoming trail the rest of the country in vaccination rates.
- Other states that have vaccinated fewer than half of their citizens: Alaska, Arkansas, Georgia, Indiana, Louisiana, Missouri, Montana, North Carolina, Ohio, Oklahoma, and South Carolina.
- Connecticut, Maine, Massachusetts, Rhode Island, and Vermont have done the best job of vaccinating citizens.
- Other states that have vaccinated at least 60% of their citizens: Maryland, New Hampshire, New Jersey, New Mexico, New York, Oregon, Virginia, and Washington.

% of Population Fully Vaccinated

As of September 24



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

Test-Positive Rate

The test-positive has fallen over the past four weeks.

Test-Positivity Rate

7-Day Average, Through September 21

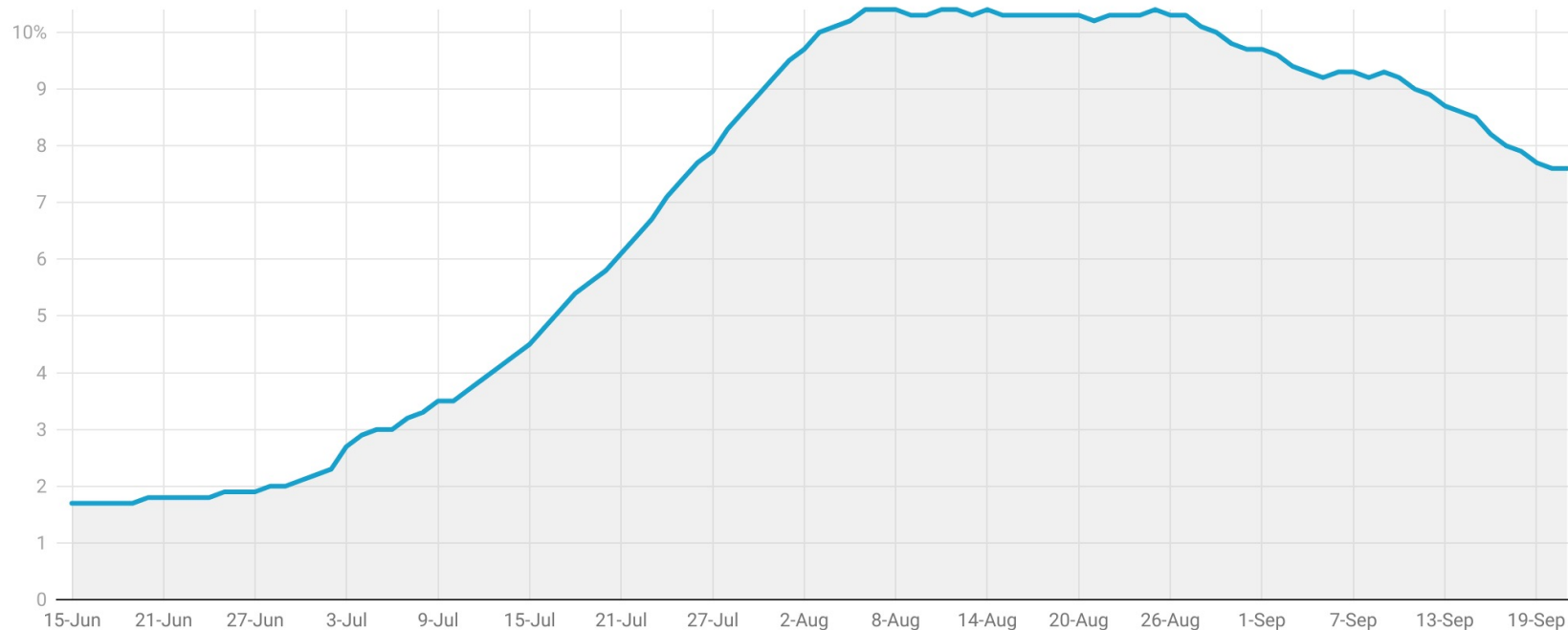


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

7-Day Average Test-Positivity %

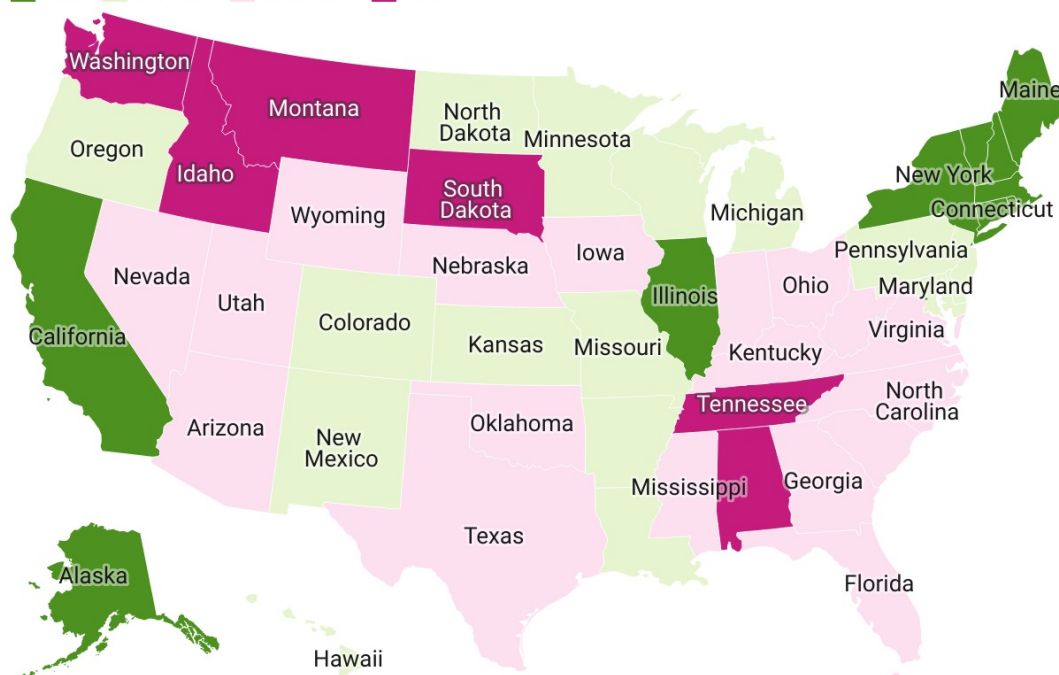
Test-positivity rates are improving but, still higher than recommended by public health officials.

- Several states continue to post high test-positive rates (>15%):
 - Alabama, Idaho, Montana, South Dakota, Tennessee, and Washington
- Several states report rates that beat recommended targets (<5%):
 - Alaska, California, Connecticut, Illinois, Maine, New Hampshire, New York, Rhode Island, and Vermont.

Test Positivity %

Latest Available Data, As of September 21

■ < 5%
 ■ 5%–10%
 ■ 10%–15%
 ■ ≥ 15%



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

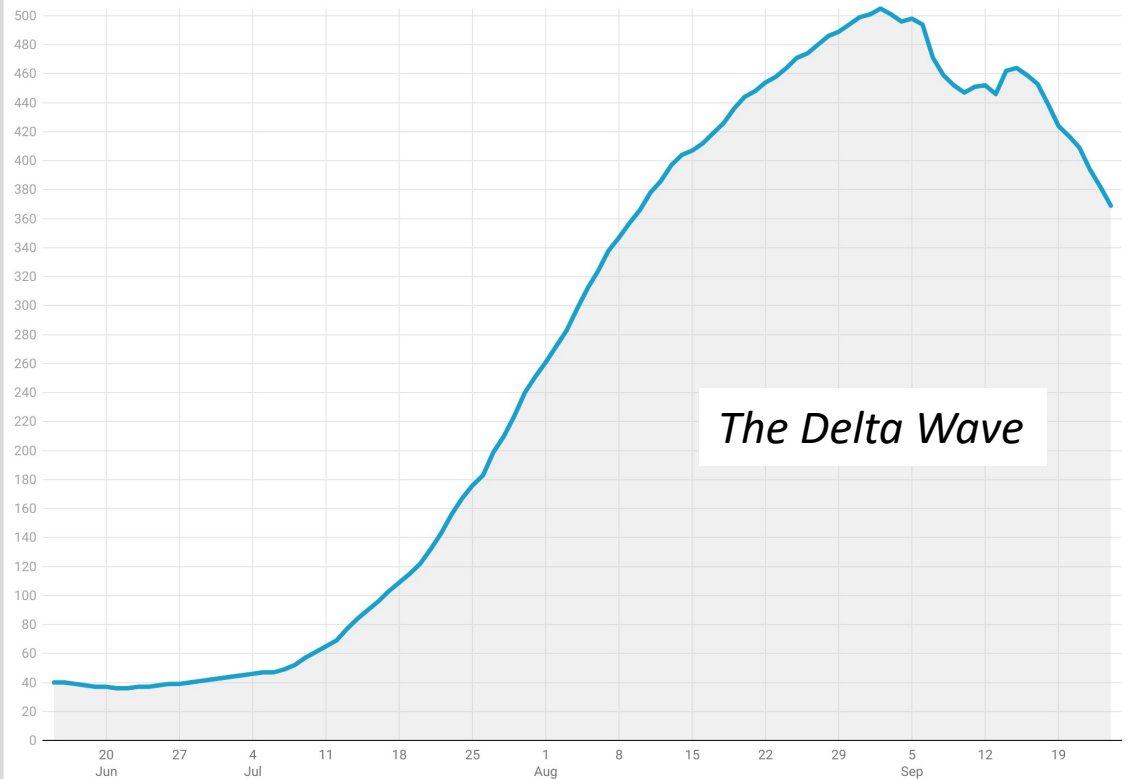
Newly Detected Cases

New cases (7-day average) fell to a six-week low on Friday.

- New cases are dropping sharply, after peaking on September 2
- This rate is 27% lower than its recent peak

New Daily Cases / Million

7-Day Average



The Delta Wave

Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

Estimated Daily Infections & New Case Rates

Estimated infections are falling too, even faster than detected cases.

- Estimated new daily cases peaked on August 28
- Since then, these infections plunged more than 50%
- Infections lower than they have been in eight-and-one-half weeks
- Detected cases have dropped 27%.

Estimated Daily Infections v. Detected Cases

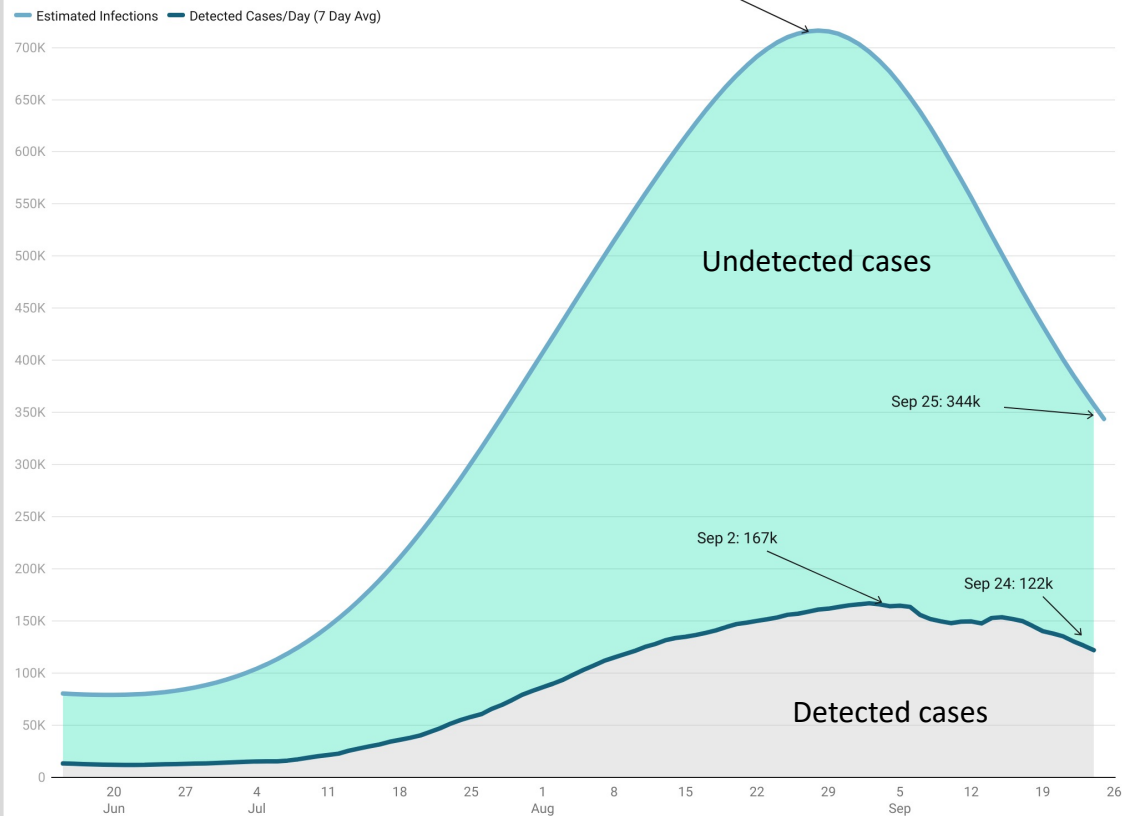


Chart: Health Industry Advisor LLC • Source: Yale School of Public Health • Created with Datawrapper

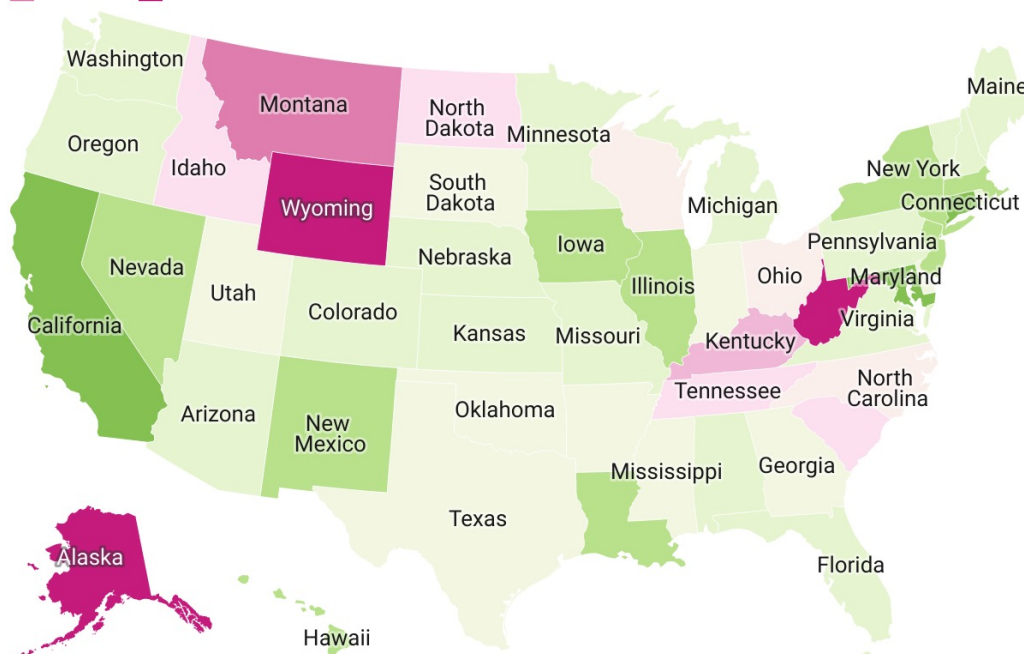
New Daily Cases per Capita By State

Pockets of high case rates are found across the country..

- Alaska, West Virginia, and Wyoming posted the highest rates of new cases per capita, as of Friday
- Rates are high in Idaho, Kentucky, Montana, North Dakota, Ohio, South Carolina, Tennessee, and Wisconsin too
- California and Maryland have the lowest rates in the country, followed by Hawaii, Illinois, Iowa, Louisiana, Massachusetts, Nevada, and New York

New Cases / Million

7-Day Average, As of September 24



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

Covid-19 "Vital Signs"

Week-Over-Week Change in New Daily Cases per Capita

New cases are spiking in Alaska, as well as Montana and Wisconsin. Cases are plunging in most of the states, led by Alabama, Florida and Tennessee.

Change in New Daily Cases / Million - Past Two Weeks

7-Day Average

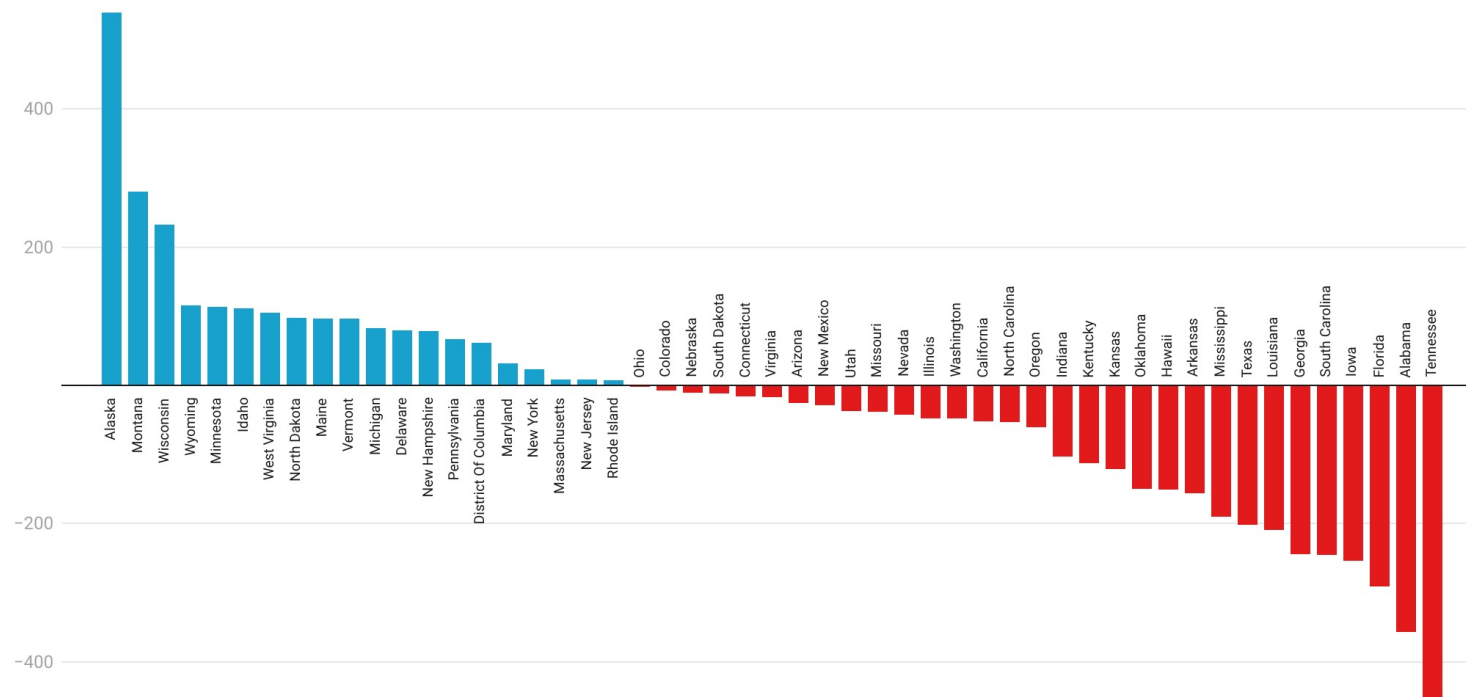


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

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Inpatient Covid Census

Inpatient census is declining for the United States to total.

- Covid census recently peaked on September 4
- Since then, census dropped 15%.

Covid Hospital Census - Per CDC

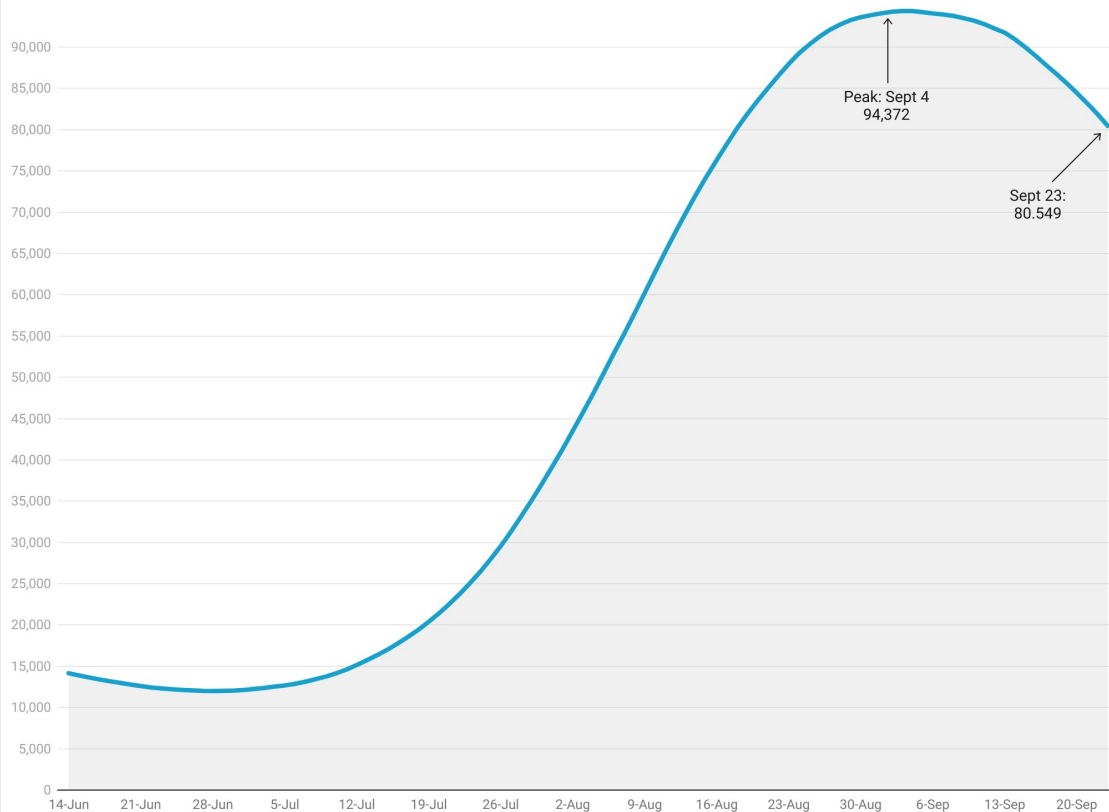


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

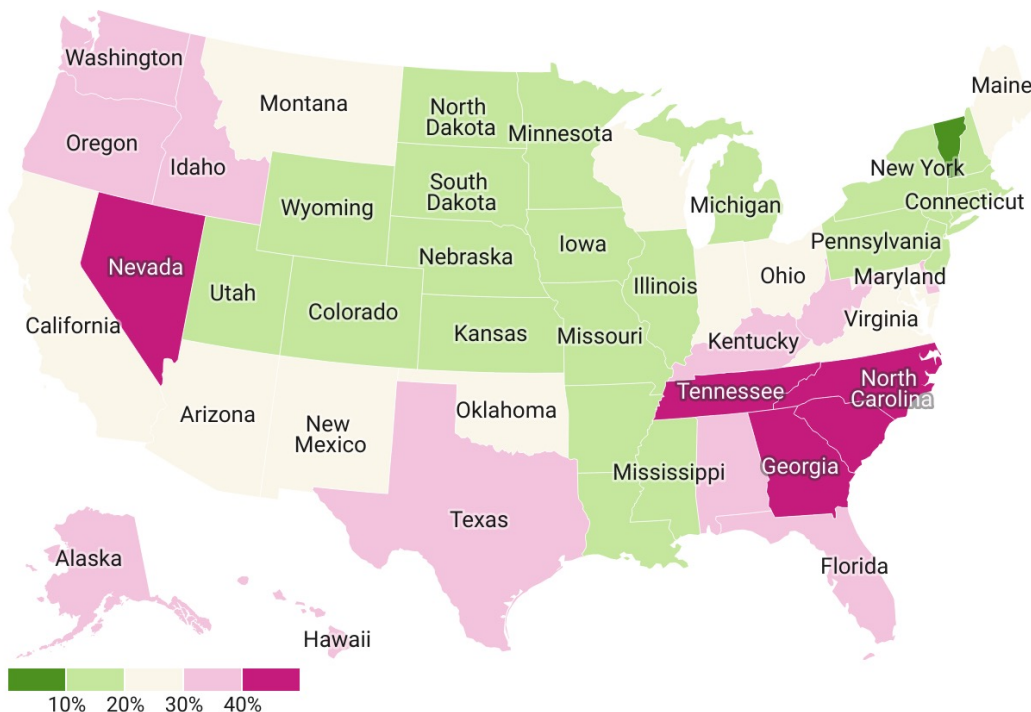
Covid Hospital Occupancy By State

Covid inpatient census is falling but, remains too high in several states.

- Covid patients account for more than 40% of available beds in Georgia, Nevada, North Carolina, South Carolina, and Tennessee
- Eleven states are using at least 30% of their beds for treating Covid patients:
 - Alabama, Alaska, Delaware, Florida, Hawaii, Idaho, Kentucky, Oregon, Texas, Washington, and West Virginia
- In Vermont, Covid patients occupy less than 10% of available beds
- Twenty-four additional states are using fewer than one of every five beds for Covid patients:
 - Arkansas, Colorado, Connecticut, Illinois, Iowa, Kansas, Louisiana, Massachusetts, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, and Wyoming.

Covid-19 Patients As % of All Inpatient Beds

As of September 23



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-19 are dropping, following an extended rise in late-Summer.

Deaths With Coronavirus

7-Day Average, Through September 24

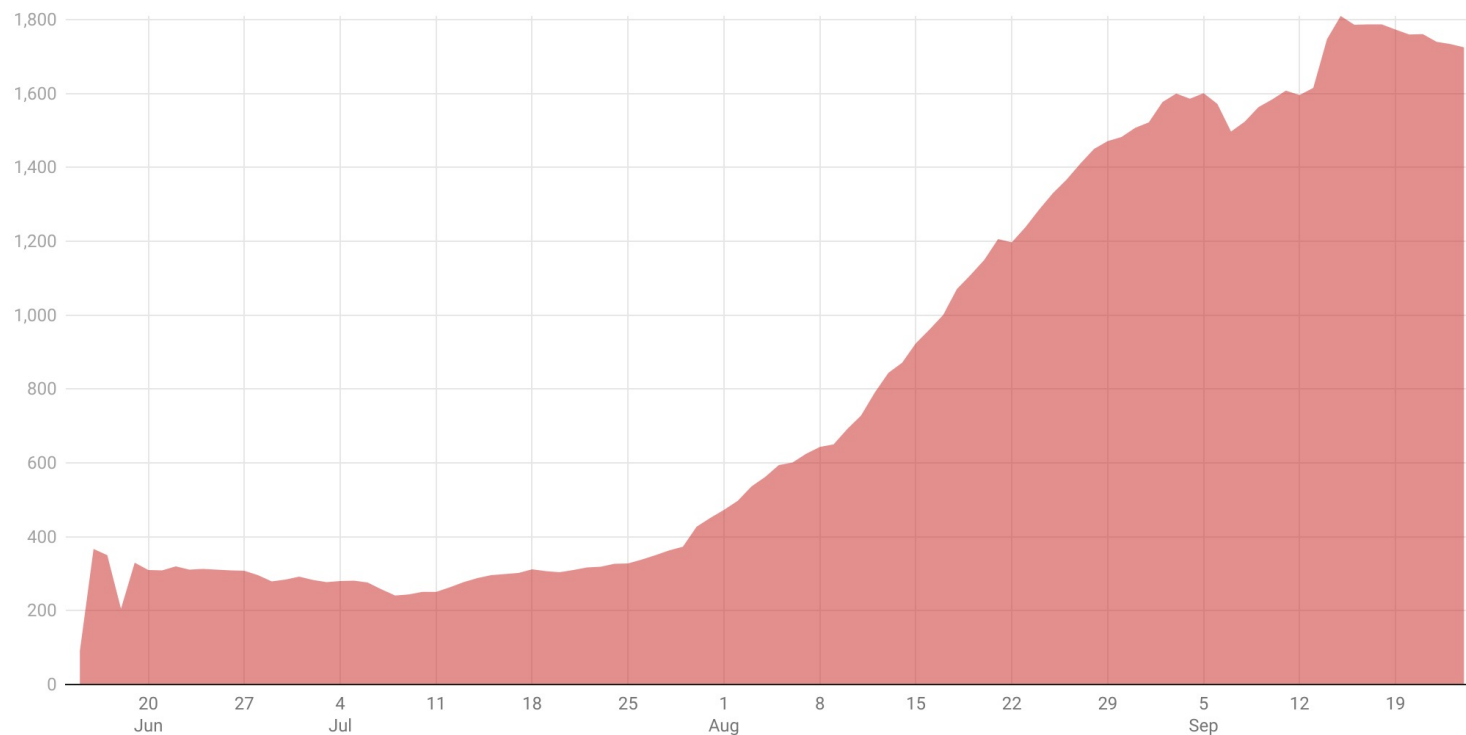


Chart: Health Industry Advisor LLC • Created with Datawrapper

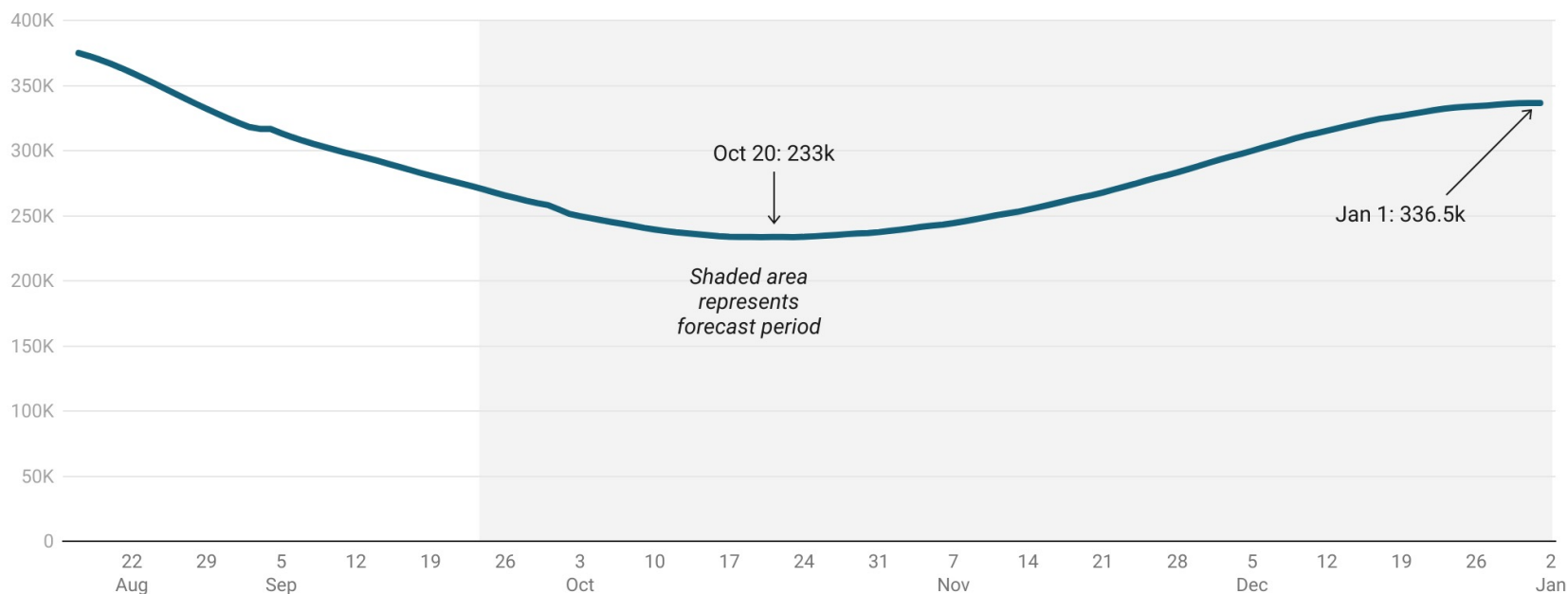
Covid-19 "Vital Signs"

Estimated Infections- IHME Projections

IHME's latest model (published September 23) anticipates that infections will decline for another month, then increase through New Year's Day..

Estimated and Projected Infections - U.S.

Institute For Health Metrics and Evaluation



Forecast Date: September 23

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

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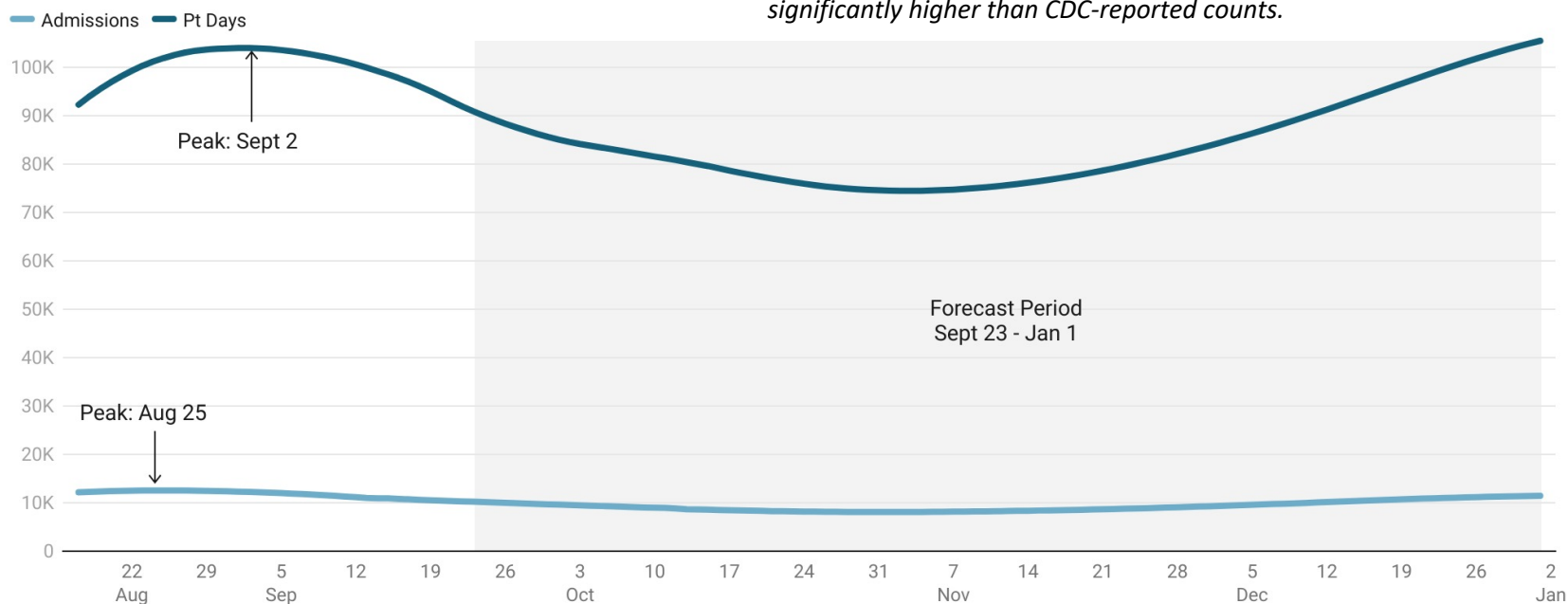
Covid-19 Inpatient Admissions & Census – IHME

IHME suggests that Covid hospital admissions peaked one month ago and Covid hospital census peaked three weeks ago. Both measures are expected to increase in November and December.

Estimated & Projected Hospital Covid-19 Admissions & Patient Days

Institute for Health Metrics and Evaluation

Note: IHME's estimates of hospital admissions and census are significantly higher than CDC-reported counts.



Forecast Date: Sept 23

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

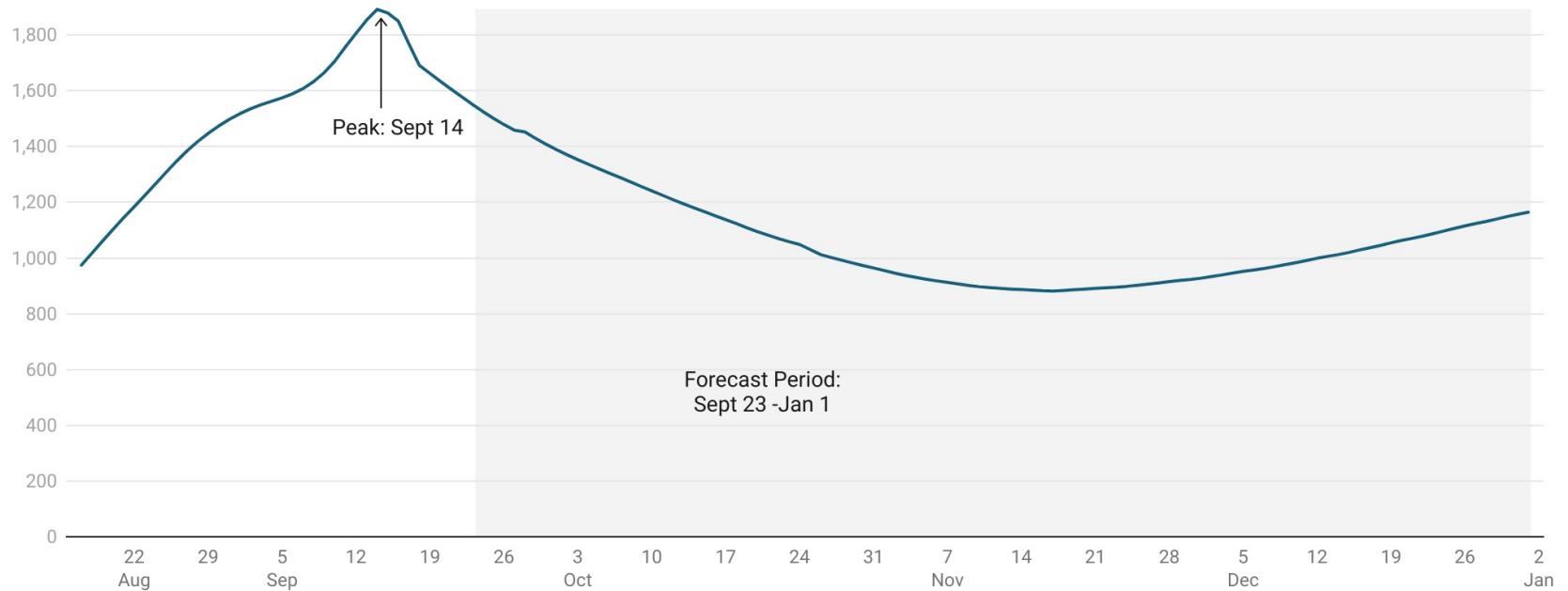
Covid-19 "Vital Signs"

Deaths With Covid-19: IHME Projection

IHME's model suggests that we have seen the peak of daily deaths from the Delta variant. Deaths are expected to drop through mid-November, before rising again in the last six weeks of the year.

Estimated and Projected Covid Deaths - U.S.

Institute For Health Metrics and Evaluation



Forecast Date: September 23

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

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>