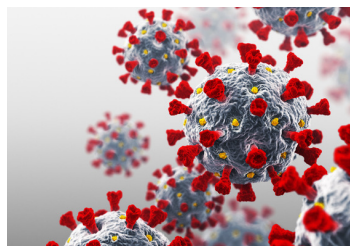


Covid-19 "Vital Signs"

Issue # 315

April 9, 2021



Covid-19 "Vital Signs"

Deaths With Coronavirus

Deaths with coronavirus (7-day average) have declined by 78% since a peak in late January. This rate fell below 800 for the first time in more than twenty-four weeks.

Deaths With Coronavirus

7-Day Average, Through April 8



Chart: Health Industry Advisor LLC • Created with Datawrapper

Deaths Reported With Coronavirus

. Deaths declined more than 15% from last week and 33% in three weeks.

Daily Deaths Reported With Coronavirus

As of April 8

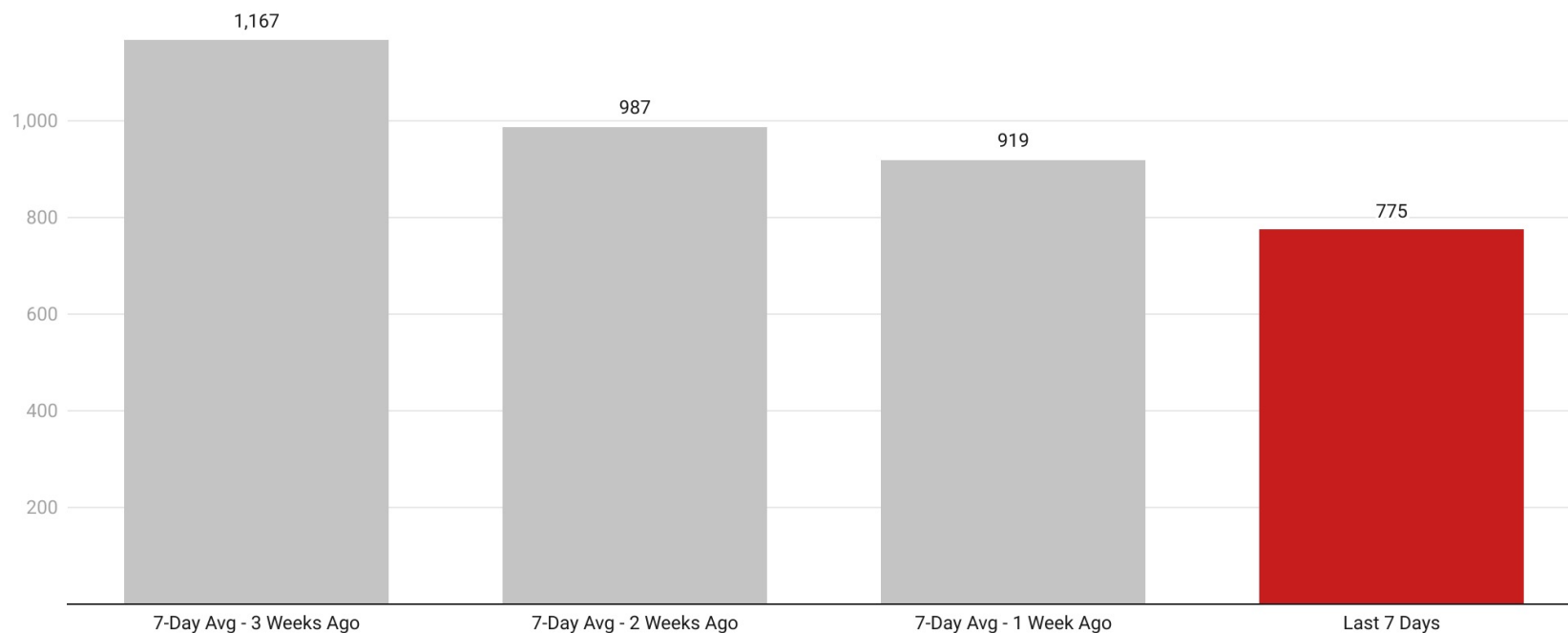
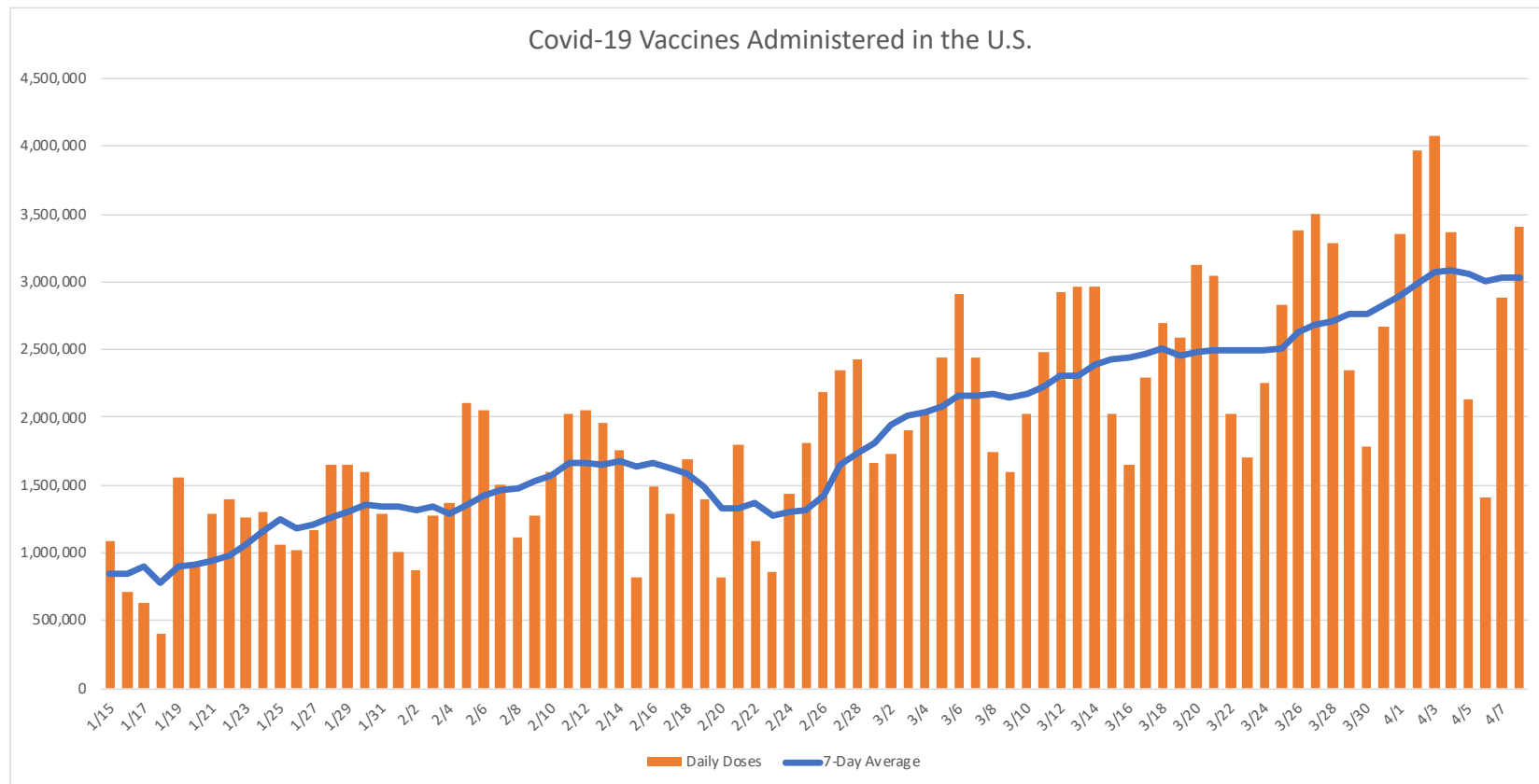


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 "Vital Signs"

Pace of Vaccinations

The vaccination pace picked back up on Tuesday and Wednesday and more than 21 million new doses were distributed to vaccination centers in the past three days.



Covid-19 "Vital Signs"

Vaccine Tracking

To date, the US has distributed nearly 230 million doses and administered nearly 175 million. 65.3 million people are fully inoculated – 25.6% of the adult population. Another 44 million people have received the first of two required doses.

Vaccination Progress

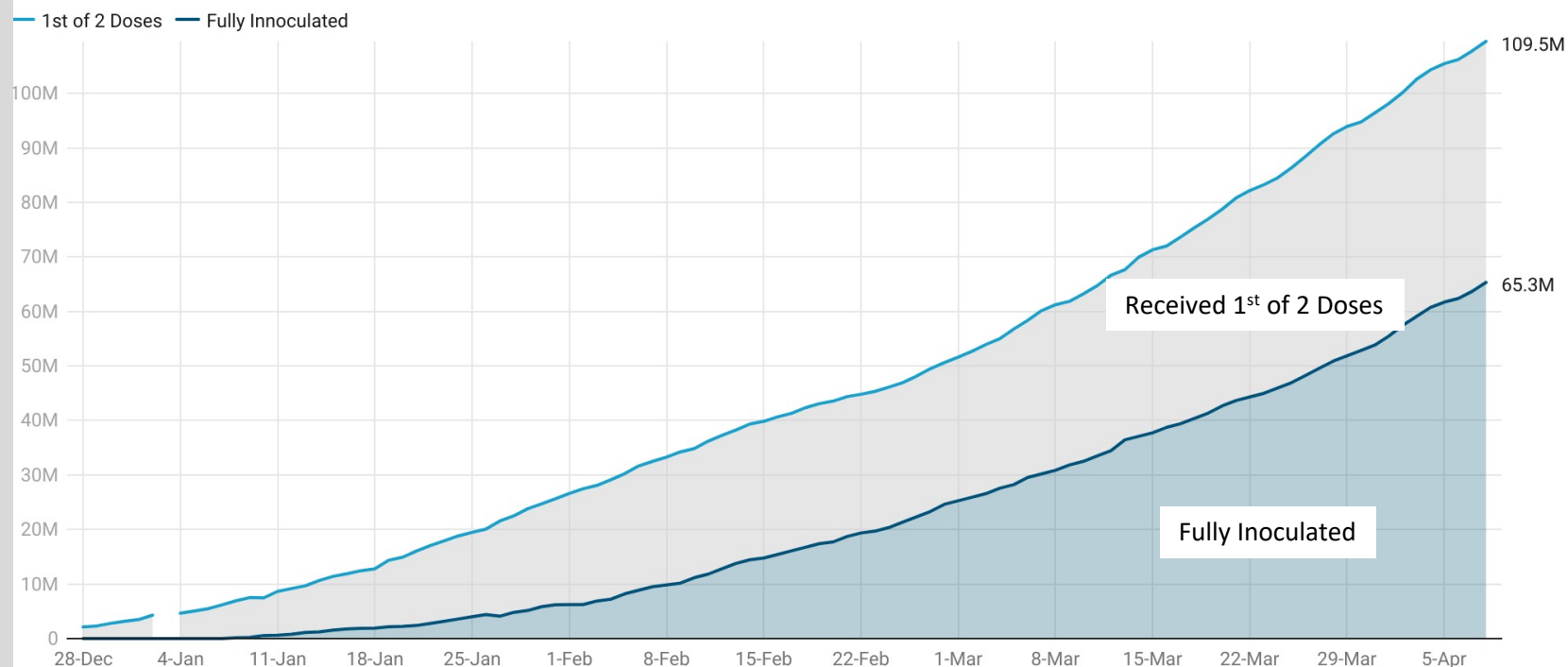


Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

Vaccine data from: [Centers for Disease Control and Prevention](#) and [Bloomberg Vaccine Tracker](#)

Covid-19 "Vital Signs"

Newly Detected Cases Per Day

In the US, 7-day new case rates declined slightly week-over-week, after growing nearly 5.8% the prior week and more than 13% a week earlier. Outside the U.S., cases also declined slightly week-over-week after increasing 11% the week prior and 14% two weeks earlier.

Newly Detected Cases

As of April 8

■ United States ■ Outside the US

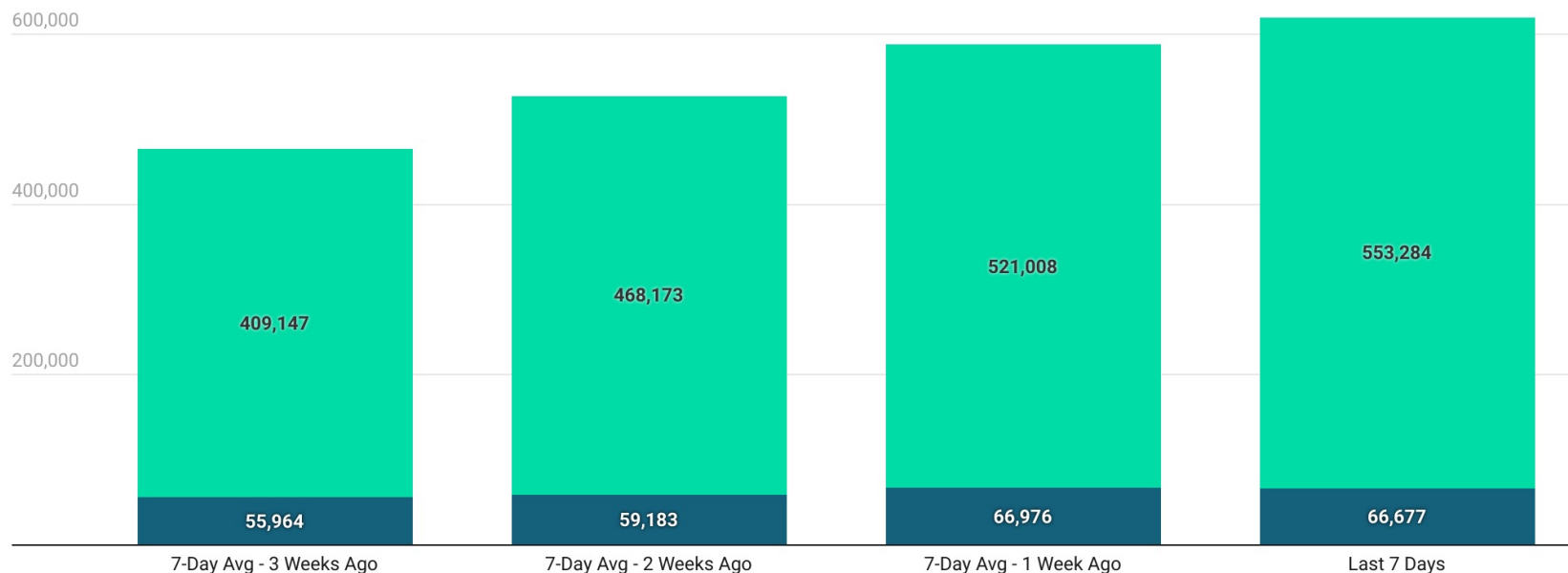


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 "Vital Signs"

Newly Detected Cases / Million - US

The 7-day new case rate in the United States has been in a holding pattern for the past eight days.

Newly-Detected Cases / Million

7-Day Average

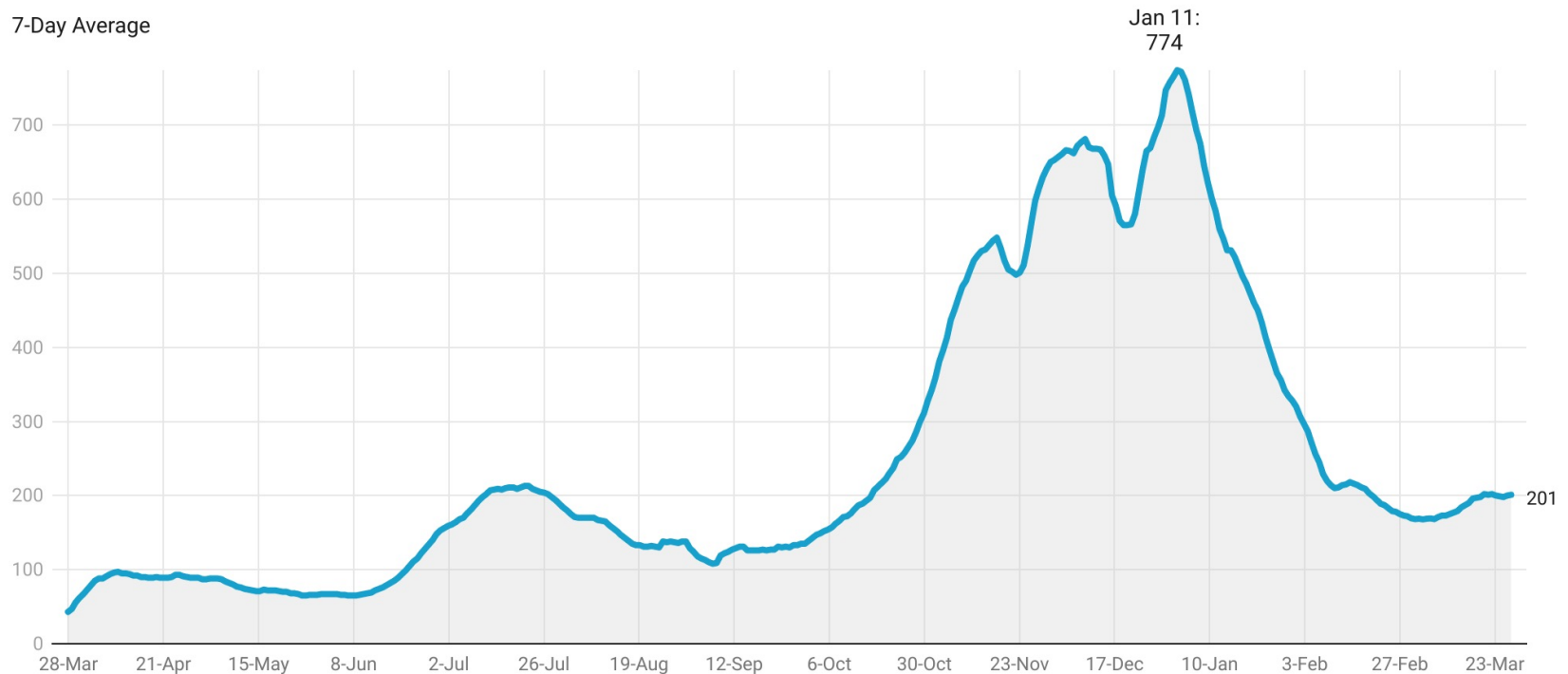


Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

New Cases / Million

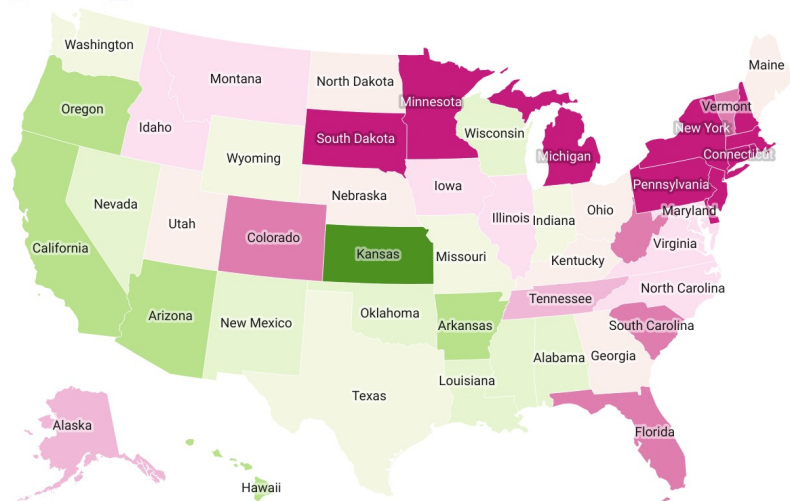
In the past two weeks, new daily case rates increased in the Upper Midwest, the Northeast, Alaska, and Florida.

March 25

April 8

New Cases / Million

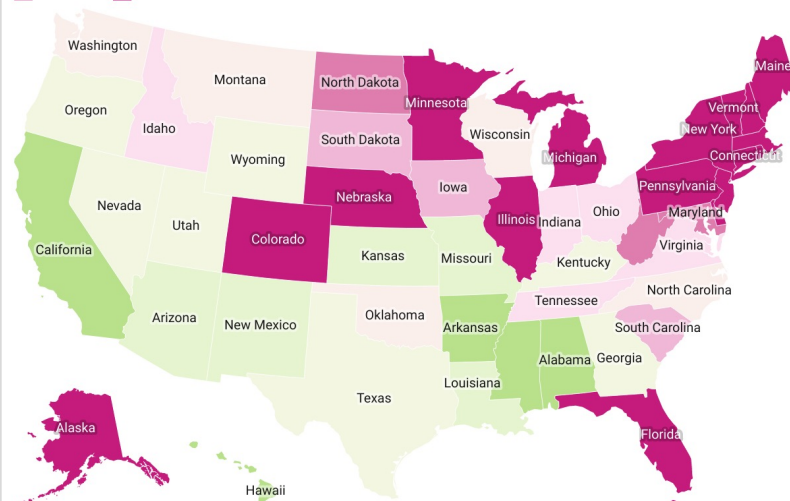
7-Day Moving Average, As of March 25



Map: Health Industry Advisor LLC • Created with Datawrapper

New Cases / Million

7-Day Moving Average, As of April 8



Map: Health Industry Advisor LLC • Created with Datawrapper

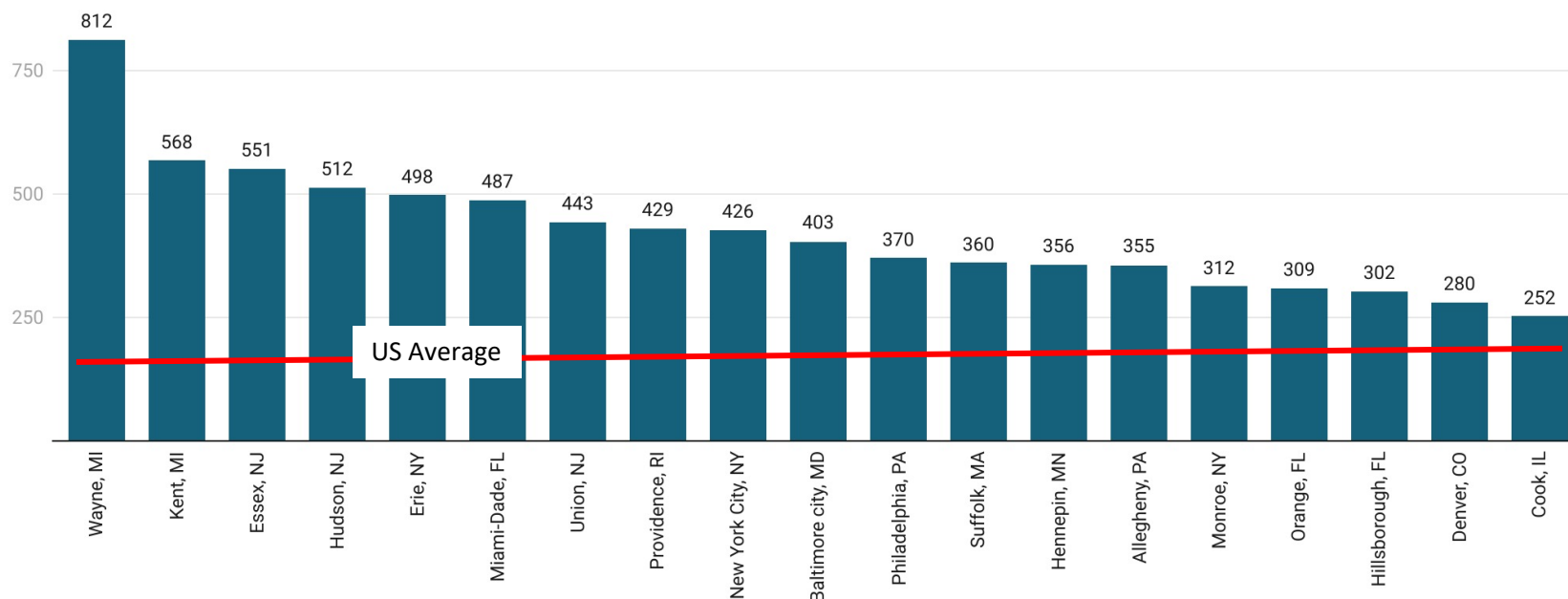
Covid-19 "Vital Signs"

Large Central Metro Areas

Large Central Metro Areas in Michigan, New Jersey and New York reported the highest new case rates over the past week.

Highest New Daily Cases / Million Population - Large Central Metro Areas

7-Day Moving Average, As of April 8



Health Industry Advisor LLC analysis

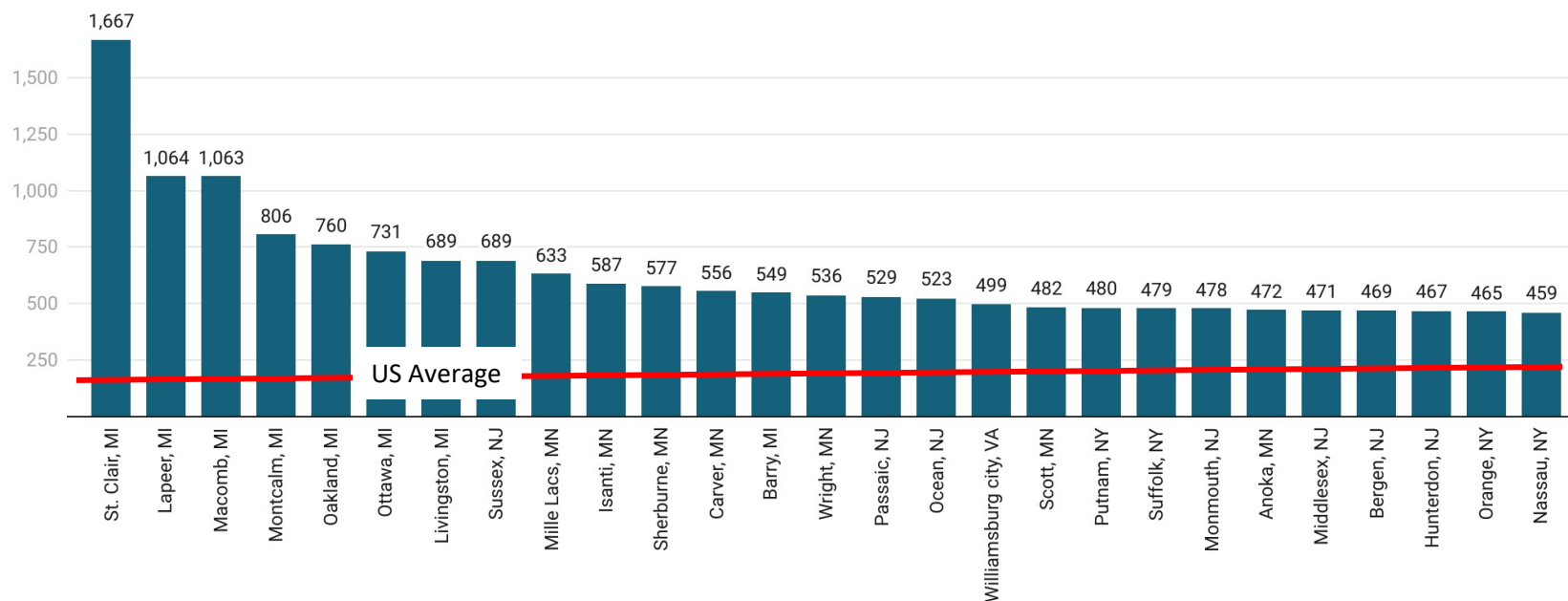
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Large Fringe Metro Areas

Large Fringe Metro Areas in Michigan reported the highest new case rates over the past week.

Highest New Daily Cases / Million Population - Large Fringe Metro Areas

7-Day Moving Average, As of April 8



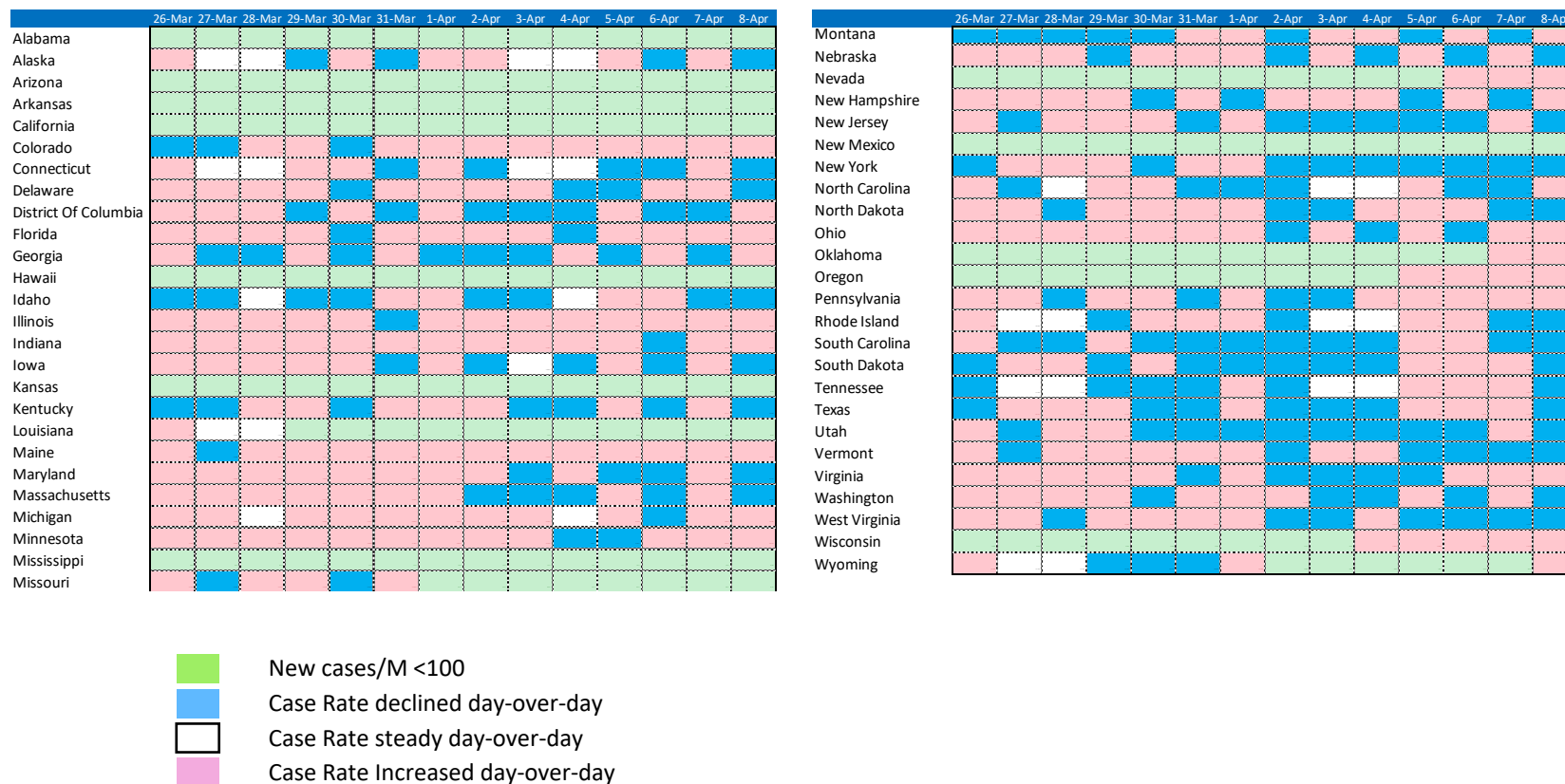
Health Industry Advisor LLC analysis

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

Covid-19 "Vital Signs"

Trends in New Case Rates

Colorado, Florida, Illinois, Indiana, Maine, Michigan, Oregon, Pennsylvania, and Wisconsin are riding streaks of consecutive daily increases in new case rates. Alabama, Arizona, Arkansas, California, Hawaii, Kansas, Louisiana, Mississippi, Missouri, and New Mexico are riding streaks of new cases < 100/M/Day.



Covid-19 “Vital Signs”

Test-Positivity Rate

The test-positivity rate increased slightly last week and is just higher than the suggested WHO target.

Test-Positivity Rate

As of April 4

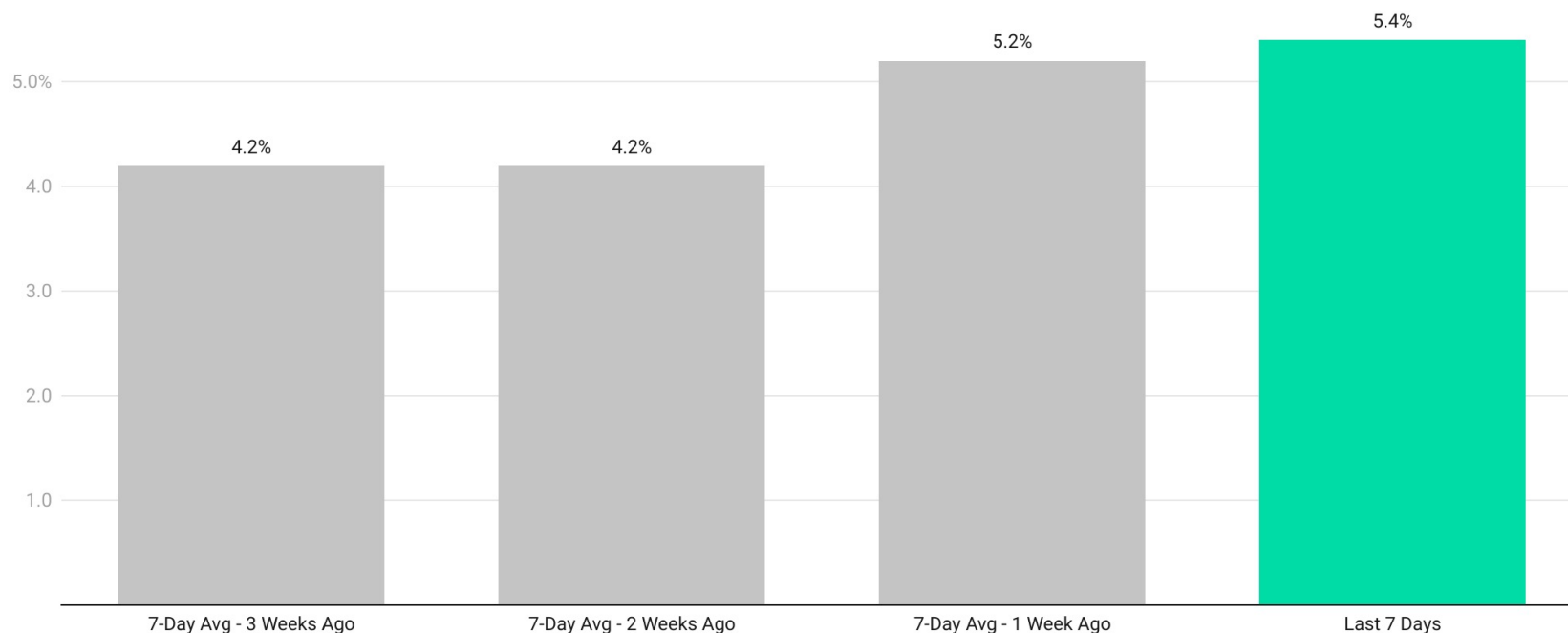


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 "Vital Signs"

Test-Positivity %

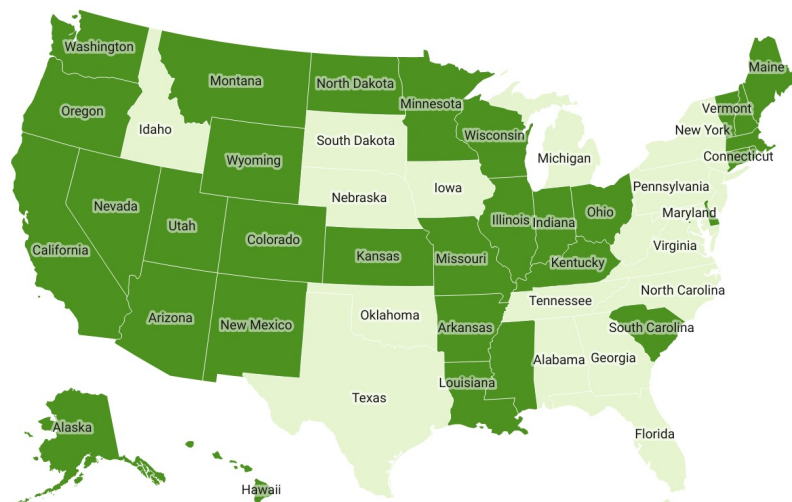
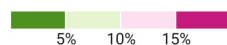
Michigan is the only state where test-positivity exceeds 10%

March 20

April 3

Test Positivity %

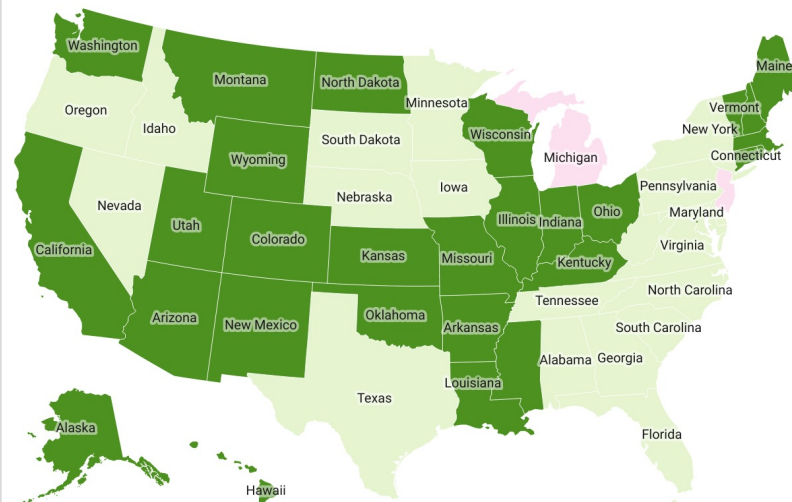
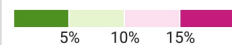
As of March 20



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

Test Positivity %

As of April 3



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

Note: With the recent decline in case detection rates, we have lowered the scale used for these charts.

Covid-19 "Vital Signs"

Covid-19 Hospitalizations

Covid-19 hospital census is of concern in Connecticut, Delaware, Maryland, Michigan, New Jersey, and New York.

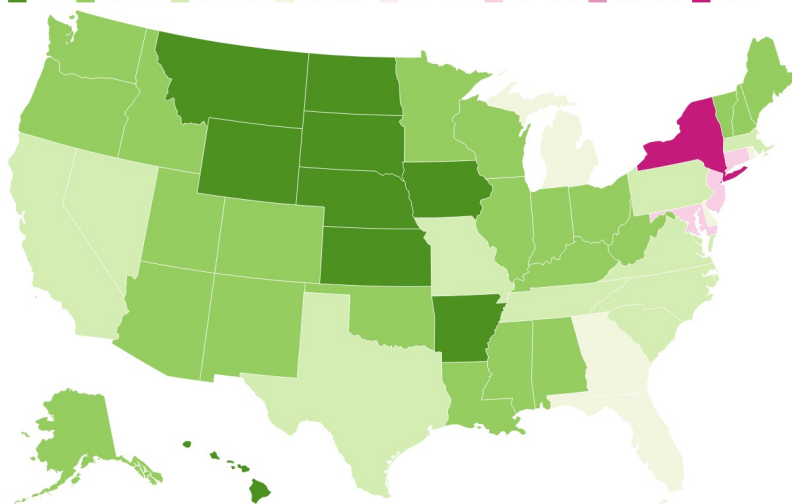
March 23

April 6

Covid-19 Patients As % of All Inpatient Beds

As of March 23

■ < 5%
 ■ 5%–10%
 ■ 10%–15%
 ■ 15%–20%
 ■ 20%–25%
 ■ 25%–30%
 ■ 30%–35%
 ■ ≥ 35%

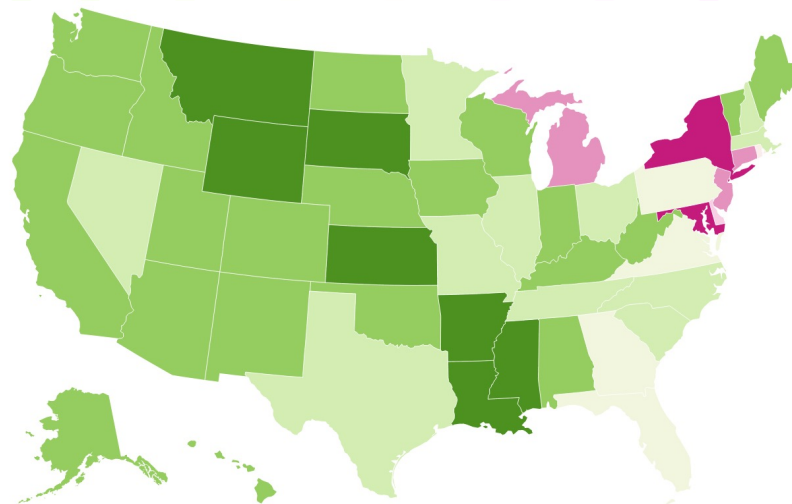


Map: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Covid-19 Patients As % of All Inpatient Beds

As of April 6

■ < 5%
 ■ 5%–10%
 ■ 10%–15%
 ■ 15%–20%
 ■ 20%–25%
 ■ 25%–30%
 ■ 30%–35%
 ■ ≥ 35%



Map: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Inpatient Census

While increasing slightly week-over-week recently, Covid-19 inpatient census was relatively stable over the past four weeks.

Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks

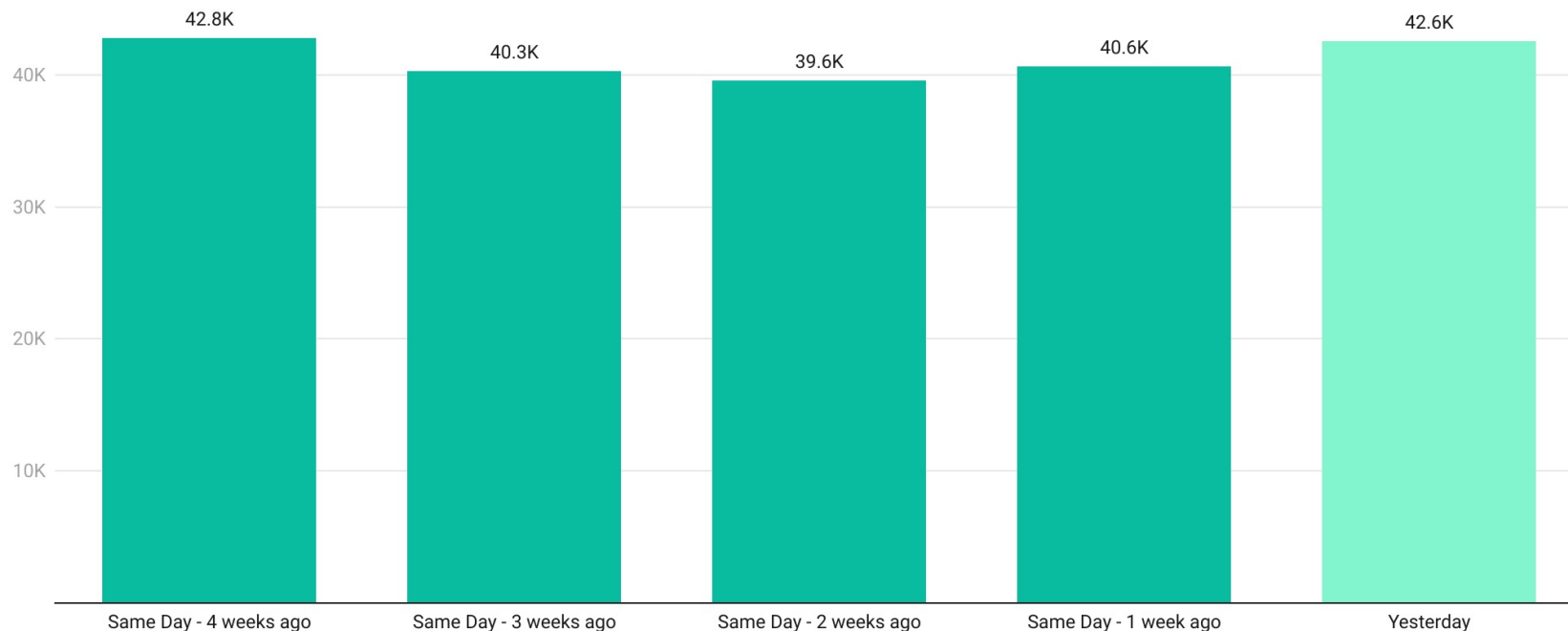


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Covid-19 "Vital Signs"

Projected Covid-19 Admission Trends

Projected Covid-19 admissions rise sharply in Maryland, Michigan, and Pennsylvania over the next three weeks. For the U.S. overall, projected Covid-19 admissions increase 12% in this time.

% Change in Hospital Admissions

Week Ending May 3 v. Week Ending April 12

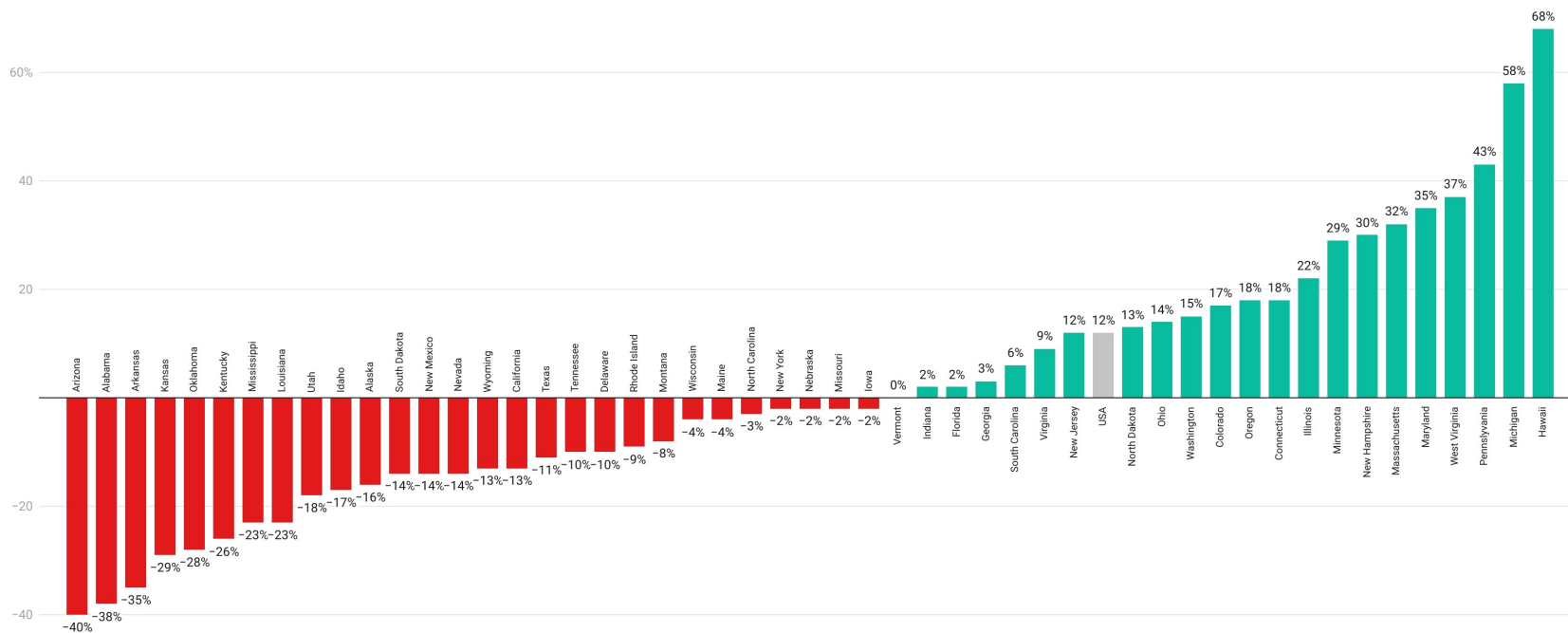
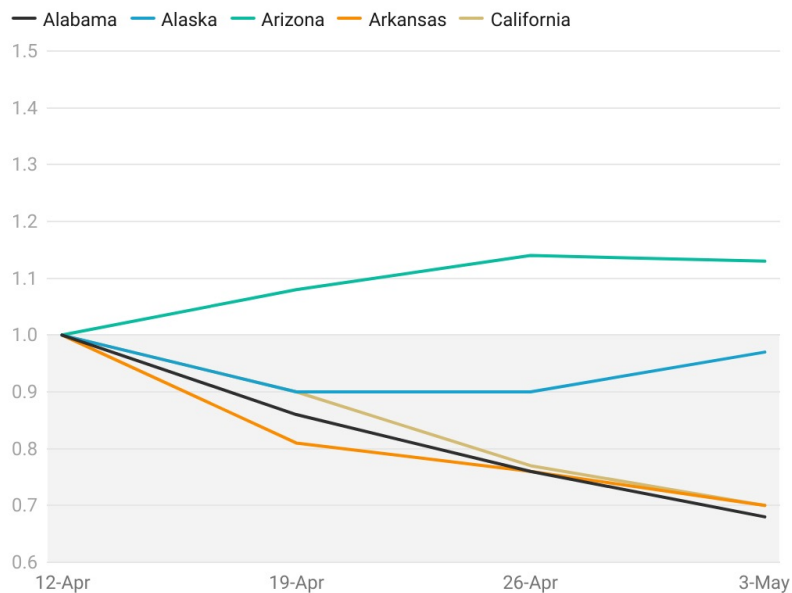


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Projections of Hospital Admissions (US) – 1 of 5

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

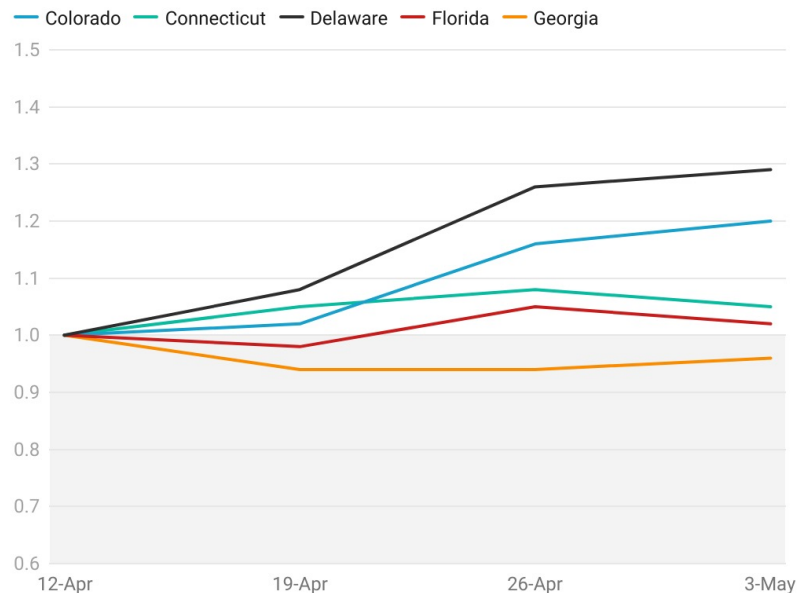


Updated April 7

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



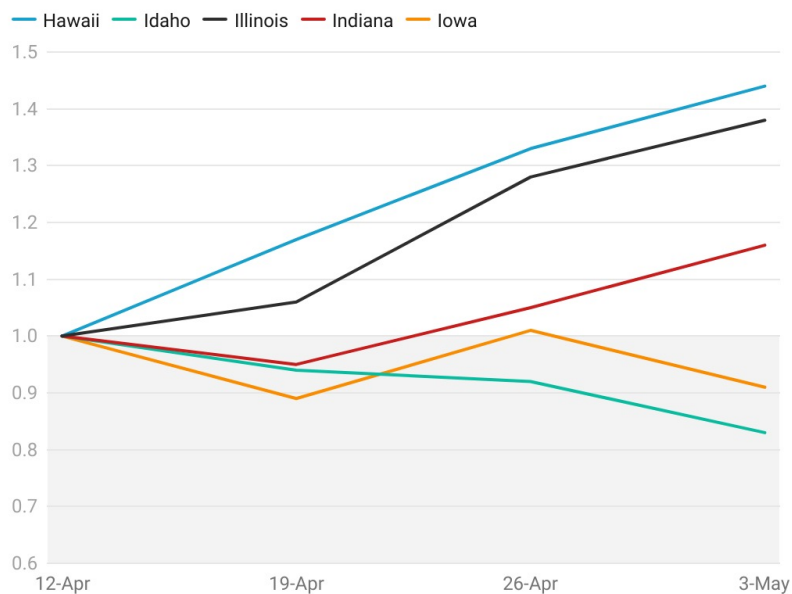
Updated April 7

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

Projections of Hospital Admissions (US) – 2 of 5

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

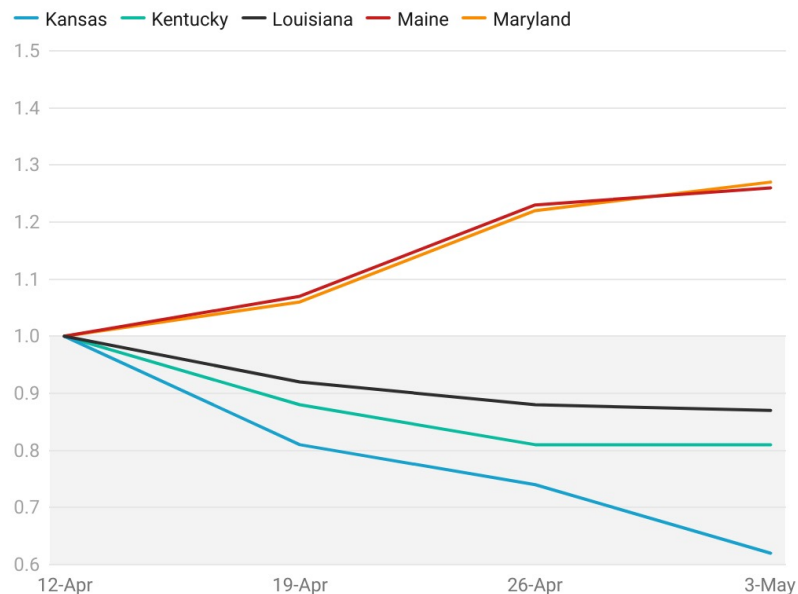


Updated April 7

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



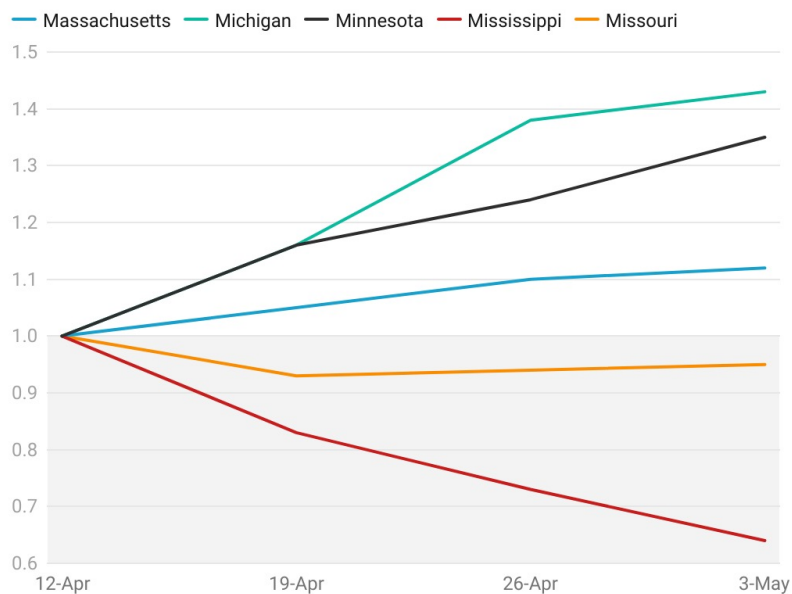
Updated April 7

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

Projections of Hospital Admissions (US) – 3 of 5

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

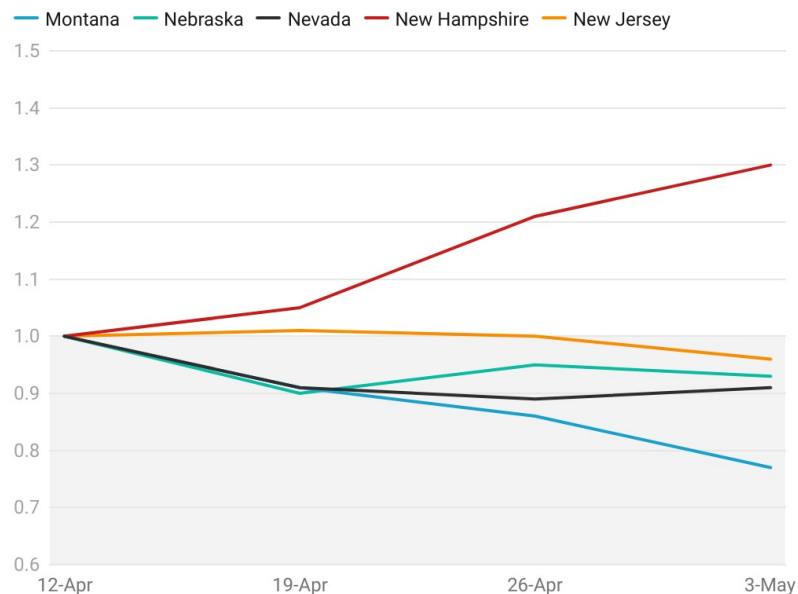


Updated April 7

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



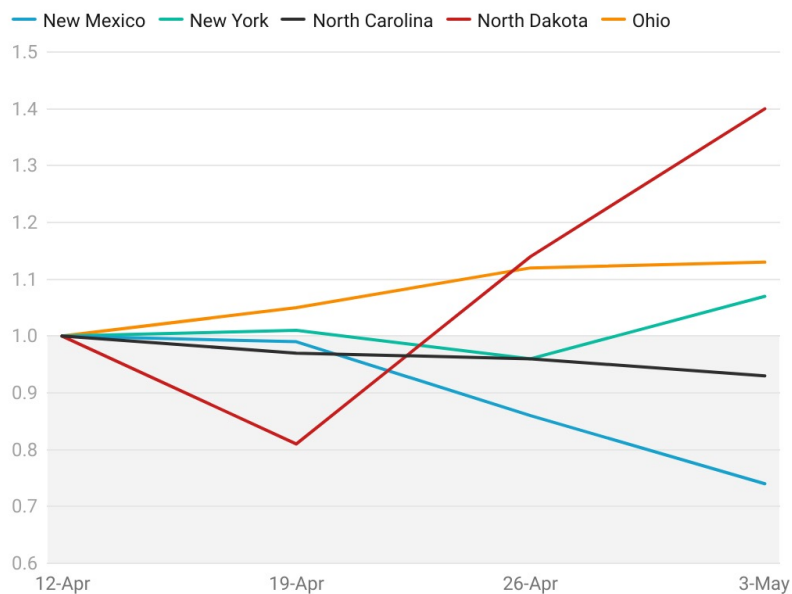
Updated April 7

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

Projections of Hospital Admissions (US) - 4 of 5

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

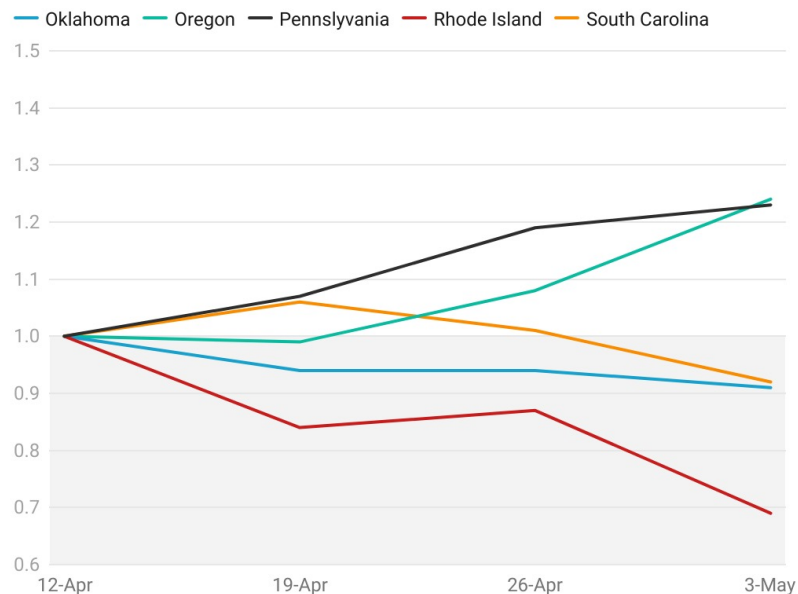


Updated April 7

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



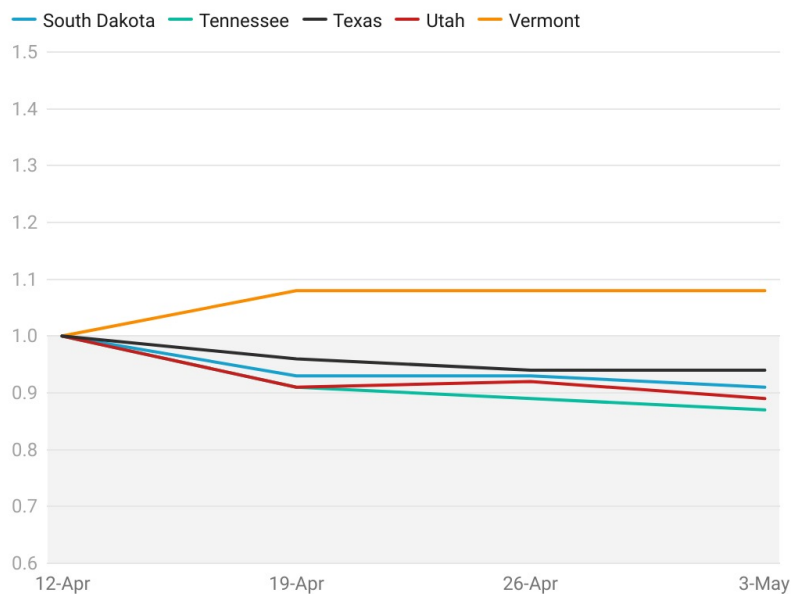
Updated April 7

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

Projections of Hospital Admissions (US) – 5 of 5

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

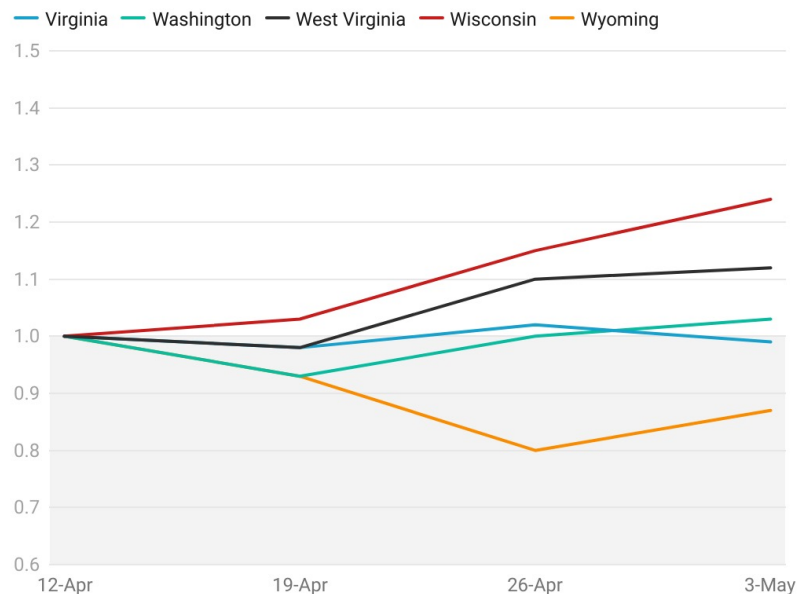


Updated April 7

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



Updated April 7

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

Covid-19 "Vital Signs"

State-By-State Scorecard: Scoring Grid

Designed to reflect five critical measures of a state's current experience with Covid-19

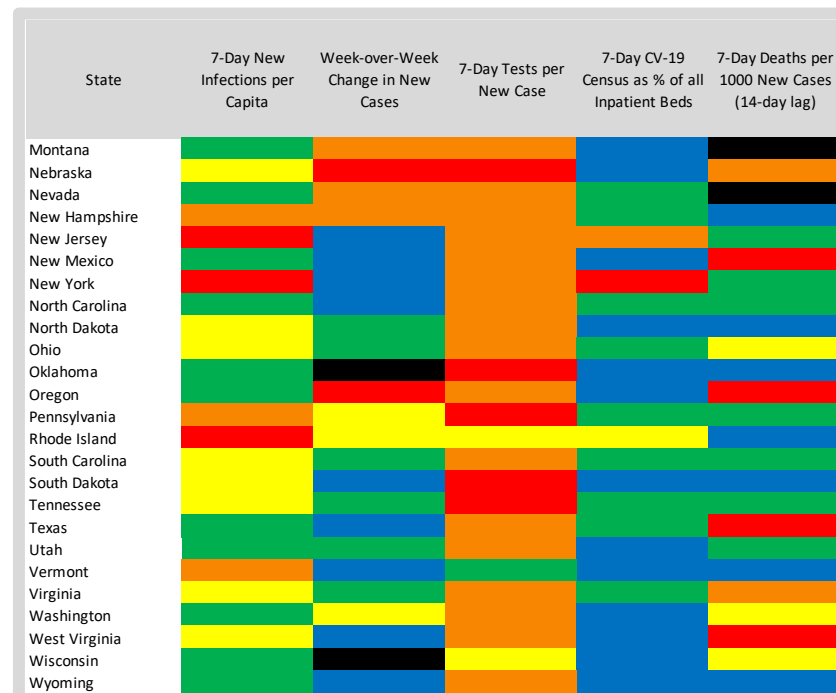
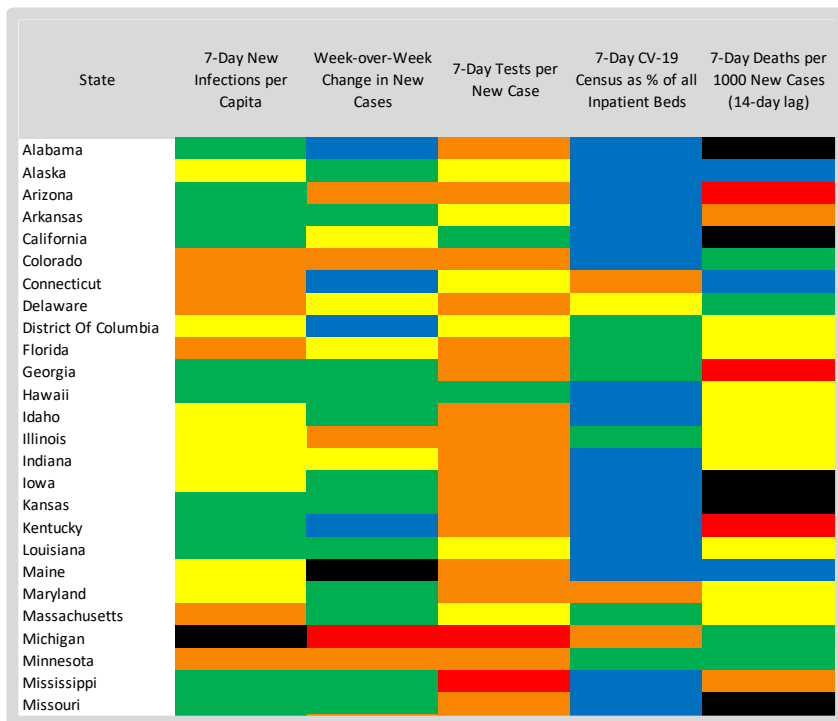


Metric		Black	Red	Orange	Yellow	Green	Blue
7-Day Average New Daily Reported Infections per Capita	Greater than	450	350	250	150	50	0
Week-over-Week Change in Newly Reported Cases	Greater than	30%	20%	10%	0%	-10%	N/A
7-Day Average Viral Tests per 7-Day Average Newly Reported Cases	Less than	5	10	25	50	75	N/A
Covid-19 Inpatient Census as % of All Inpatient Beds	Greater than	50%	40%	30%	20%	10%	0%
7-Day Deaths per 1000 New Cases (14-day lag)	Greater than	25	20	15	10	5	0

Covid-19 "Vital Signs"

State-By-State Scorecard:

New case rates are "cautious" to "good" across many parts of the country, with Connecticut, Delaware, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont being the outliers.



State-By-State Data Table (1 of 3)

State-By-State Comparisons

State ▲	Infection Prevalence	Deaths per 1 Million Population	Tests per 1M Population Past 7 days	Test-Positive % (7-Day Moving Average)	New Daily Cases Per 1M Population (7-Day M.A.)	Tests / New Case	Covid-19 Census % of All Beds	7-Day Deaths /1000 New Cases , 14-Day Lag
Alabama	10.6%	2,177	1,216	5.6%	60	20	7%	39
Alaska	8.5%	422	8,560	3.0%	233	37	6%	-
Arizona	11.6%	2,343	2,186	3.8%	92	24	9%	23
Arkansas	11.0%	1,876	1,367	2.0%	52	26	4%	18
California	9.3%	1,522	3,473	1.7%	67	52	9%	40
Colorado	8.2%	1,093	3,946	5.2%	257	15	9%	5
Connecticut	9.0%	2,227	7,699	4.1%	293	26	34%	5
Delaware	10.0%	1,610	5,892	5.3%	325	18	26%	6
District Of Columbia	6.4%	1,526	7,862	3.0%	170	46	17%	14
Florida	9.8%	1,579	3,461	8.2%	267	13	17%	12
Georgia	10.1%	1,825	1,352	5.1%	117	12	16%	24
Hawaii	2.2%	332	4,148	1.9%	70	59	6%	12
Idaho	10.2%	1,110	1,923	5.8%	155	12	10%	12
Illinois	10.0%	1,873	4,376	4.3%	238	18	12%	10
Indiana	10.3%	1,948	2,934	4.7%	151	19	9%	12
Iowa	12.2%	1,852	2,177	6.7%	177	12	5%	25
Kansas	10.5%	1,702	1,814	3.1%	89	20	4%	697

Covid-19 "Vital Signs"

State-By-State Data Table (2 of 3)

State-By-State Comparisons

State	Infection Prevalence	Deaths per 1 Million Population	Tests per 1M Population Past 7 days	Test-Positive % (7-Day Moving Average)	New Daily Cases Per 1M Population (7-Day M.A.)	Tests / New Case	Covid-19 Census % of All Beds	Week-Over-Week Change in New Cases	7-Day Deaths / 1000 New Cases, 14-Day Lag
Kentucky	9.7%	1,391	2,289	3.6%	117		20	6%	25
Louisiana	9.6%	2,194	2,038	2.6%	81		25	4%	13
Maine	3.9%	556	2,753	4.0%	235		12	9%	3
Maryland	7.0%	1,391	4,721	6.8%	210		22	36%	15
Massachusetts	9.4%	2,499	12,508	2.6%	301		42	14%	11
Michigan	8.1%	1,747	3,869	15.1%	724		5	35%	10
Minnesota	9.5%	1,239	5,728	7.0%	342		17	12%	7
Mississippi	10.3%	2,380	512	3.4%	69		7	4%	17
Missouri	9.5%	1,498	1,641	4.7%	98		17	10%	25
Montana	9.9%	1,398	1,972	4.6%	137		14	2%	46
Nebraska	11.0%	1,141	2,005	8.4%	243		8	5%	15
Nevada	9.9%	1,725	1,863	6.5%	102		18	14%	32
New Hampshire	6.4%	920	5,275	3.9%	305		17	11%	3
New Jersey	10.6%	2,790	5,183	9.9%	449		12	30%	7
New Mexico	9.2%	1,895	1,995	2.4%	89		22	5%	24
New York	10.2%	2,631	6,984	5.7%	386		18	40%	9
North Carolina	8.8%	1,166	2,484	5.4%	146		17	15%	7

Covid-19 "Vital Signs"

State-By-State Data Table (3 of 3)

State-By-State Comparisons

State	Infection Prevalence	Deaths per 1 Million Population	Tests per 1M Population Past 7 days	Test-Positive % (7-Day Moving Average)	New Daily Cases Per 1M Population (7-Day M.A.)	Tests / New Case	Covid-19 Census % of All Beds	Week-Over-Week Change in New Cases	7-Day Deaths /1000 New Cases , 14-Day Lag
North Dakota	13.7%	1,926	2,796	3.4%	200		14	5%	3
Ohio	8.8%	1,603	2,540	4.3%	166		15	11%	13
Oklahoma	11.2%	1,685	760	4.6%	130		6	6%	-
Oregon	4.0%	578	2,699	6.4%	111		24	9%	25
Pennsylvania	8.3%	1,987	3,367	8.9%	337		10	20%	9
Rhode Island	13.3%	2,488	12,307	2.3%	362		34	24%	4
South Carolina	10.9%	1,794	2,695	5.3%	192		14	11%	8
South Dakota	13.5%	2,192	1,558	9.7%	195		8	5%	1
Tennessee	12.0%	1,756	1,021	7.0%	154		7	11%	9
Texas	9.7%	1,698	1,730	5.6%	113		15	12%	22
Utah	12.1%	670	2,667	3.8%	124		22	5%	8
Vermont	3.3%	369	14,580	2.9%	262		56	5%	3
Virginia	7.4%	1,223	2,061	6.5%	172		12	16%	17
Washington	4.9%	705	2,217	4.8%	138		16	10%	11
West Virginia	8.1%	1,530	3,550	6.9%	207		17	10%	21
Wisconsin	10.0%	1,145	3,440	3.6%	126		27	6%	13
Wyoming	9.8%	1,211	2,284	3.5%	102		22	2%	2

Table: Health Industry Advisor LLC • 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>