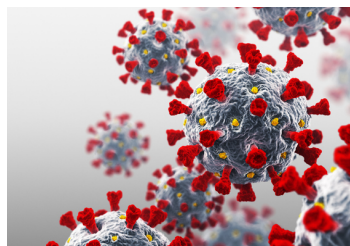


Covid-19 "Vital Signs"

Issue # 291

February 26, 2021



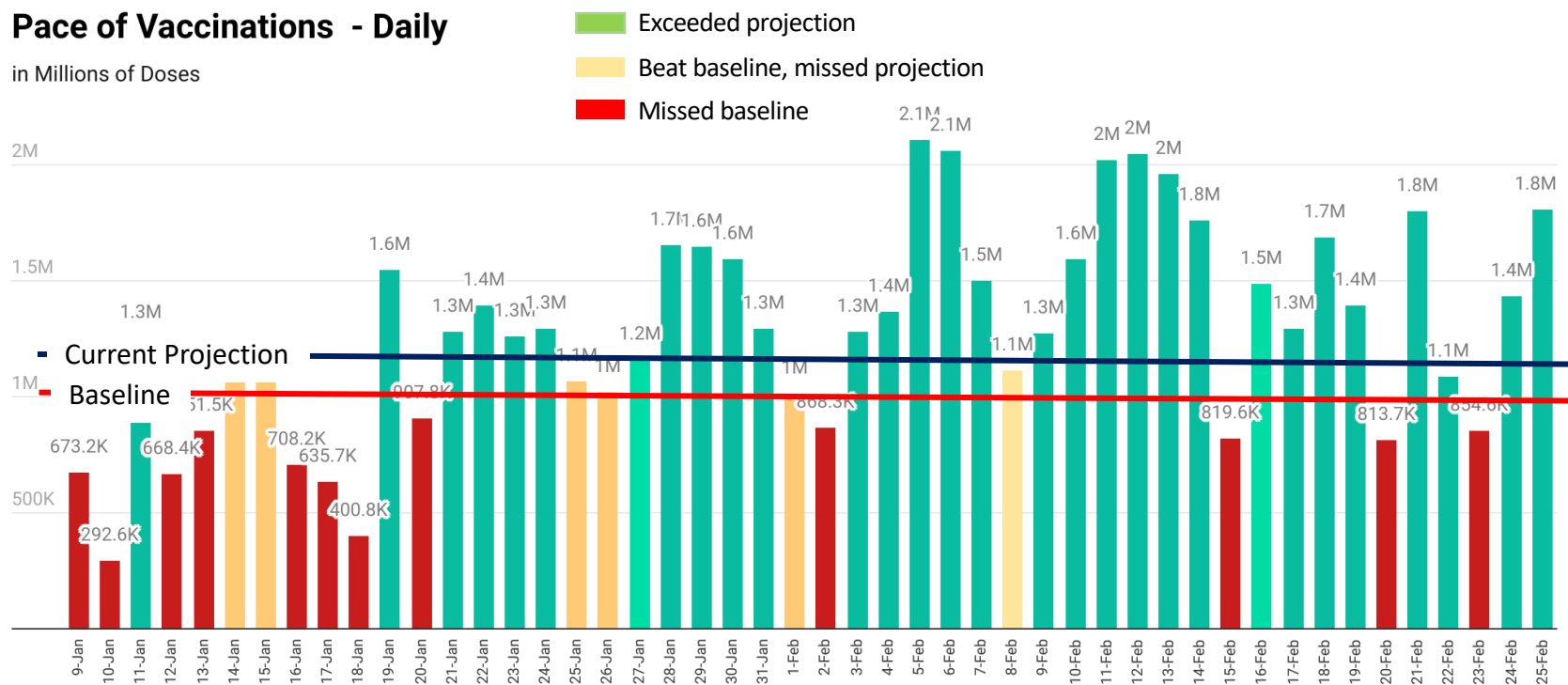
Covid-19 "Vital Signs"

Pace of Vaccinations

The US jabbed 1.4 and 1.8 million citizens on Wednesday and Thursday as it recovers from last week's distribution challenges.

Pace of Vaccinations - Daily

in Millions of Doses



Baseline: 100 Million Doses in 100 Days Current Projection: Ramped-Up Vaccinations; Additional 100M Pfizer and Moderna doses; and JNJ vaccine available on 3/1

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

“Current projection” is from Health Industry Advisor’s vaccination model, reflecting recent developments: increase pace of vaccinations; increase in Pfizer and Moderna doses to 300 million each; and anticipated availability of JNJ vaccine



Vaccine Tracking

To date, the US has administered 68 million doses, with 21.3 million people jabbed twice.

Vaccination Progress

Most Recent Two Weeks

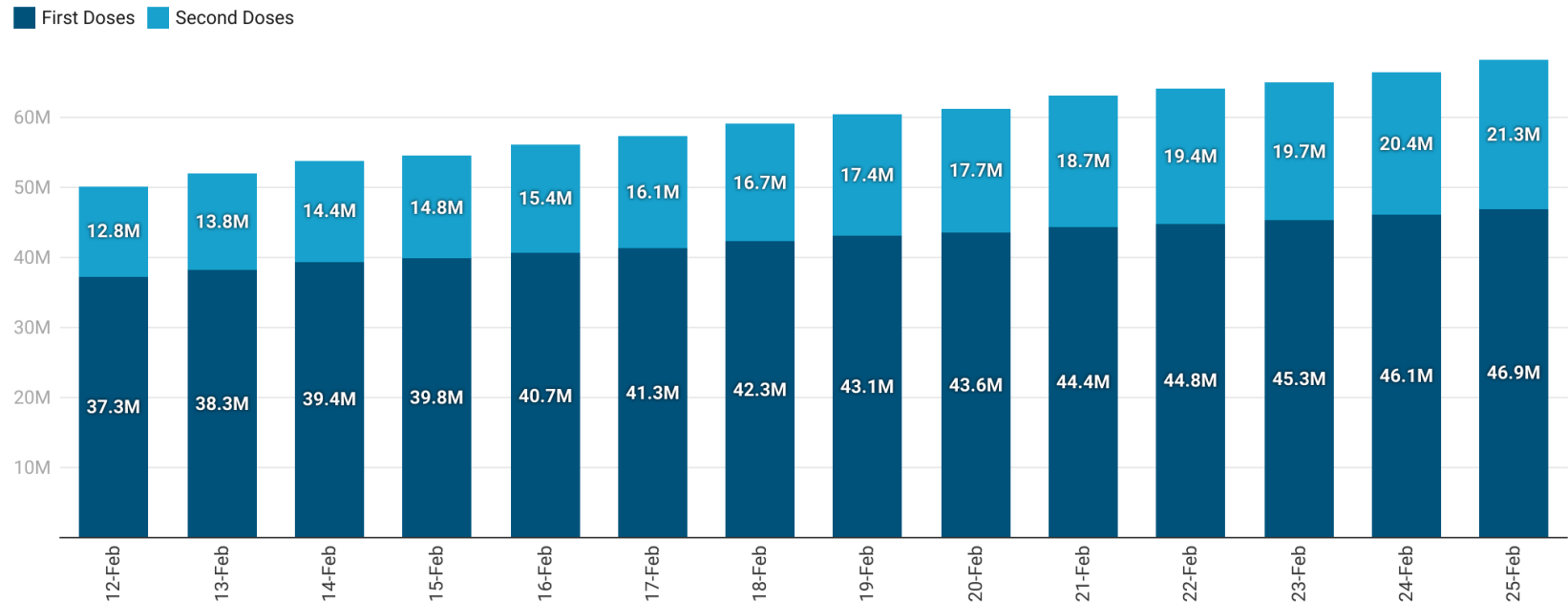


Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

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



Vaccines Distributed v. Unused

The US distributed an astounding 16.4 million additional doses in the last three days, setting up the likelihood of strong vaccine administration over the next several days.

% of Doses Distributed & % Unused - Cumulative

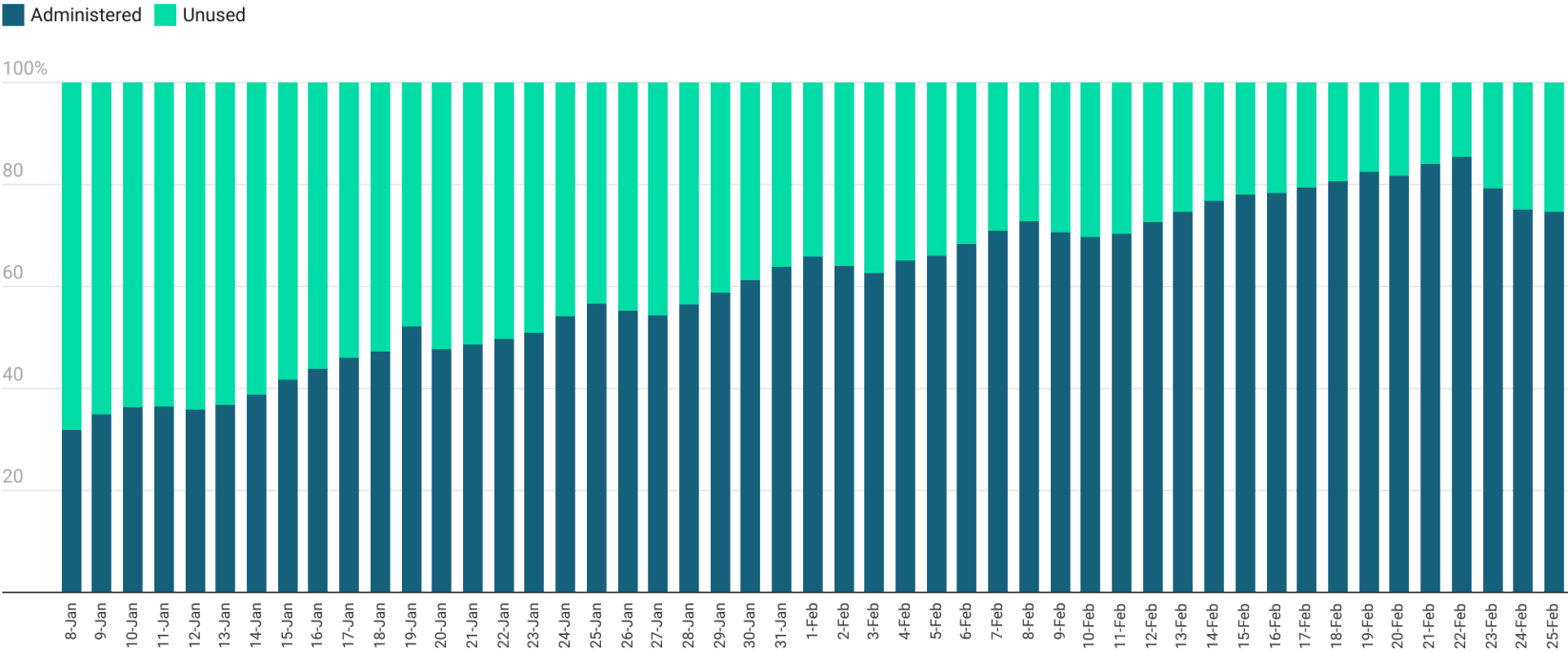


Chart: Health Industry Advisor LLC • Source: Bloomberg • Created with Datawrapper

Immunity: Projected v. Estimated

Estimated immunity levels are tracking closely to our "Current Projection" model. This model estimates 60% of the U.S. will be immune by May 30 and 70% by July 1.

Estimated Immunity

Current Estimate v. HIA Projection

— Estimated — HIA Projection Model

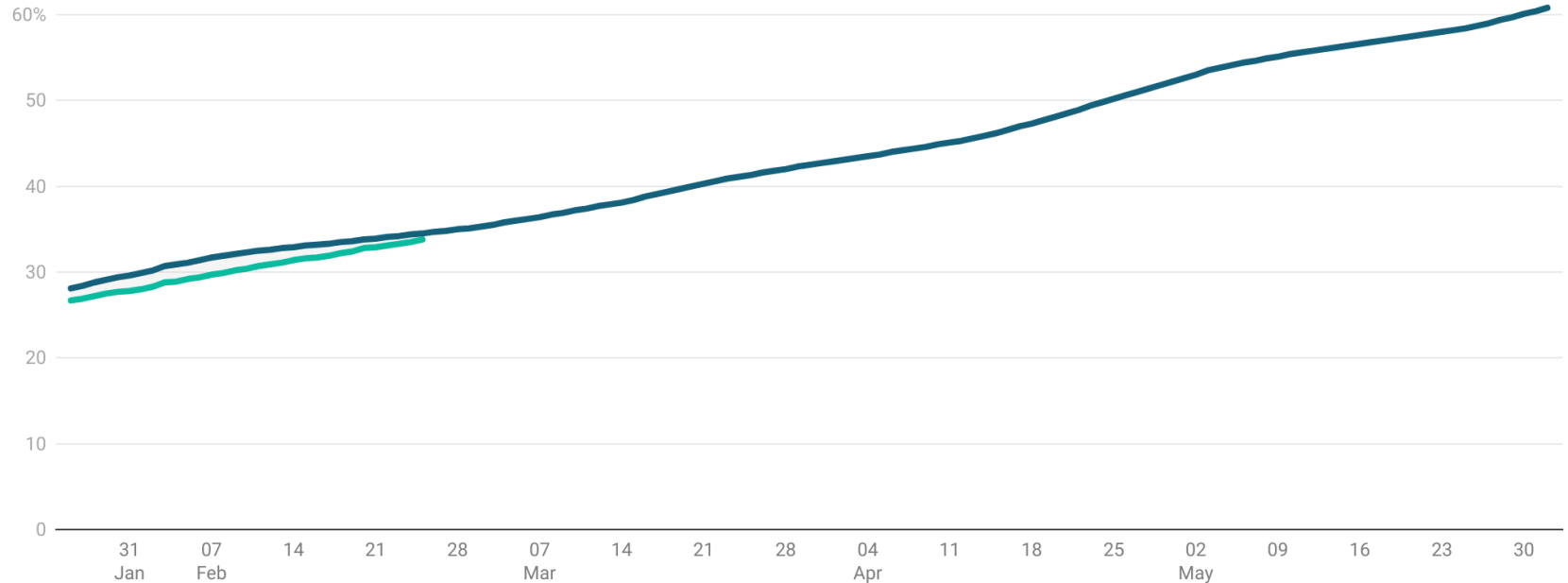


Chart: Health Industry Advisor LLC • Created with Datawrapper

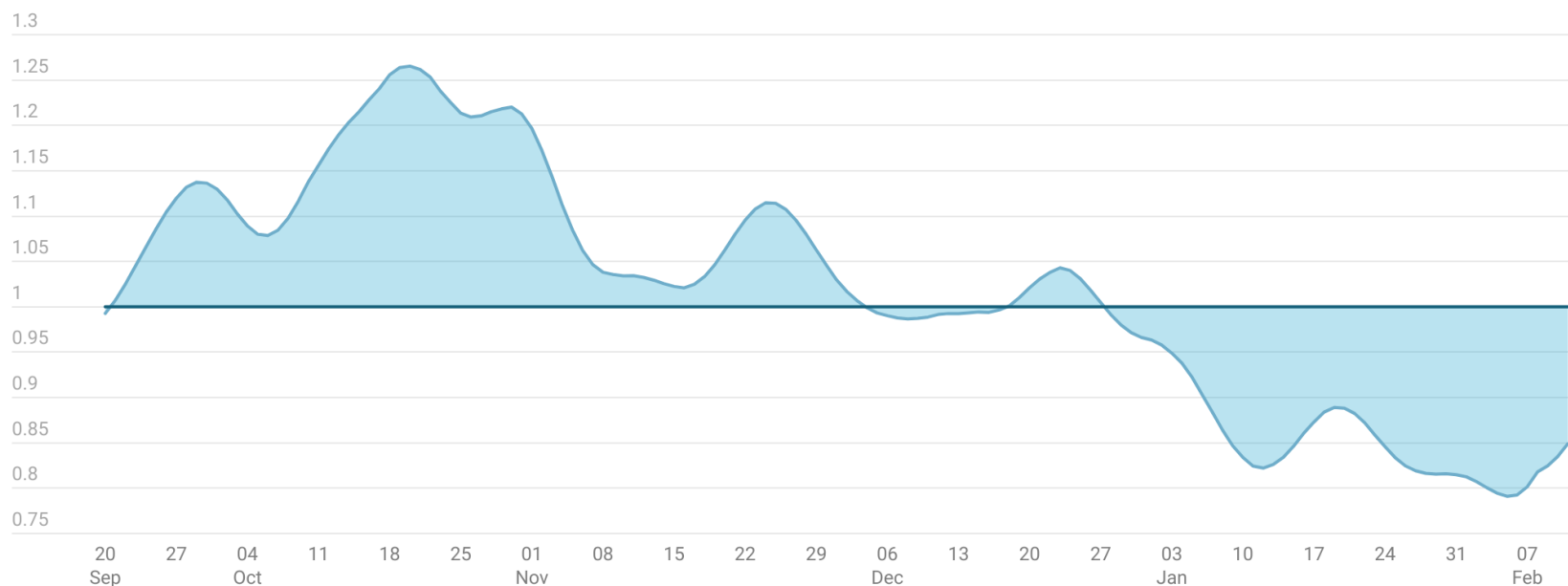
Reproduction Rate (R_t) – Gu* Model

Gu's R_t estimate signals a prolonged slowdown in infection spread.

Reproduction Rate (R_t) - US

*Youyang Gu: Covid-19projections.com

Youyang Gu Estimate, September 20, 2020 - February 11, 2021



R_t is an estimate of how many additional people a single person will infect

Chart: Health Industry Advisor LLC • Source: Youyang Gu • Created with Datawrapper

Covid-19 “Vital Signs”

Estimated Daily Infections & New Case Rates

Estimated new infections and reported cases are plunging in the US. The Yale/Harvard model suggests that the infections have plummeted 87% since peaking in early-January; Gu estimates a 76% decline

Estimated Daily Infections v. Detected Cases

Gu & Yale/Harvard Schools of Public Health Models

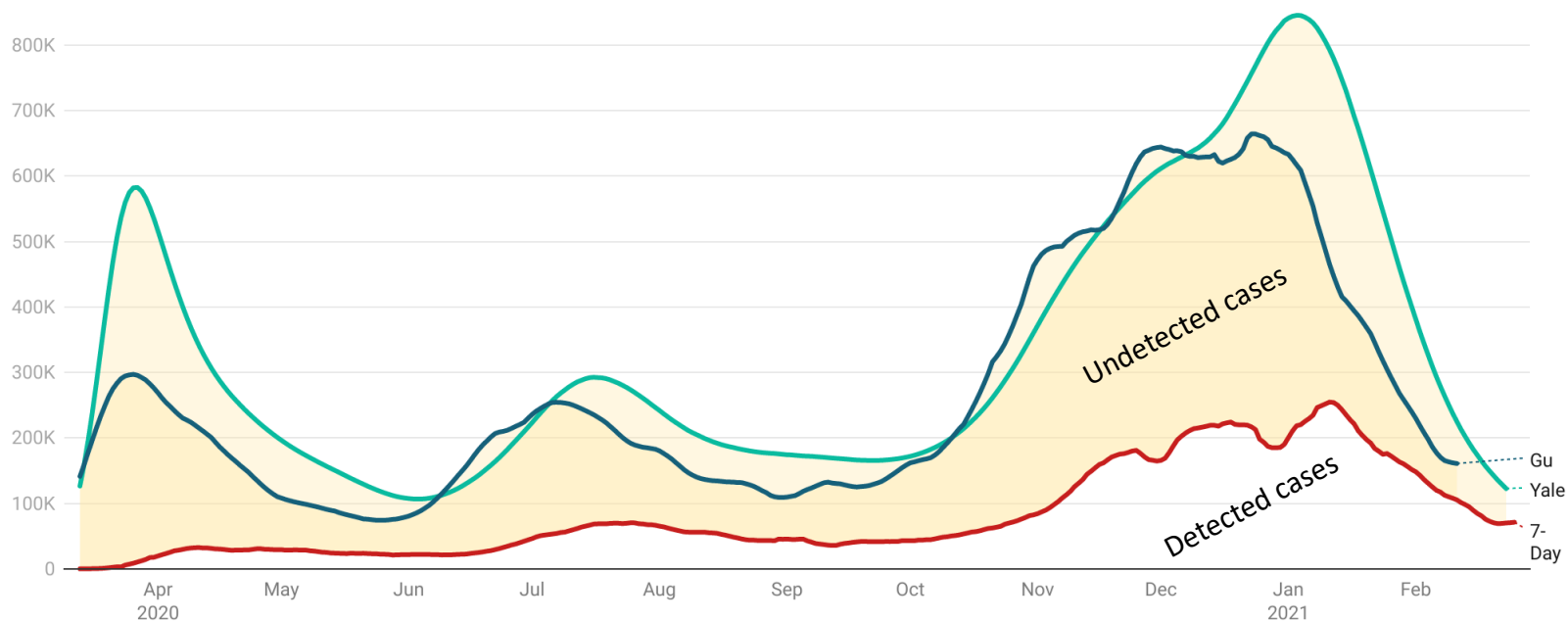


Chart: Health Industry Advisor LLC • Source: Youyang Gu, Yale School of Public Health • Created with Datawrapper

Two models:

- Youyang Gu: <https://covid19-projections.com>, lags by two weeks
- Yale School of Public Health: <https://covidestim.org>

Covid-19 "Vital Signs"

Newly Detected Cases Per Day

In the US, 7-day new case rates dropped during each of the past three weeks, plunging 45% during that time. Outside the US, rates increased week-over-week.

Newly Detected Cases Per Day

As of February 25

United States Outside the US

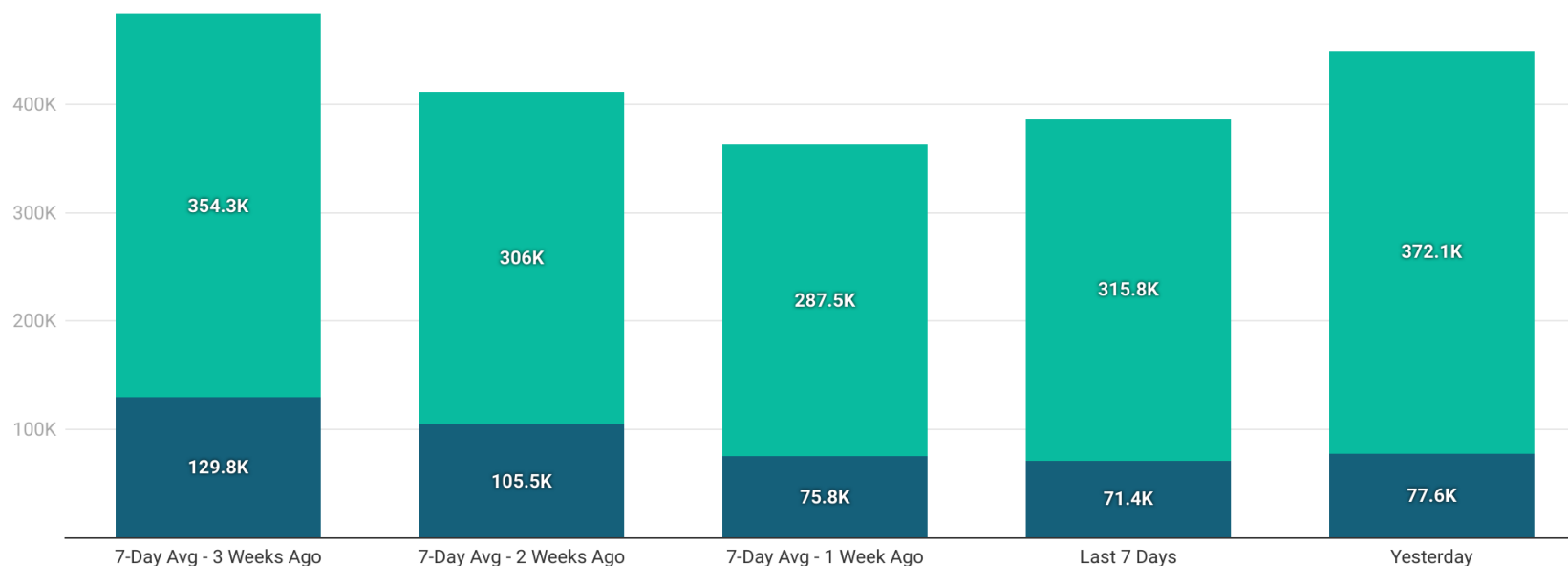


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Hospitalizations

Covid-19 hospitalizations plunged over the past month, with 80,000 fewer patients yesterday than on January 6 (60% decline). ICU and ventilator days declined each of the past three weeks.

Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks, As of February 25

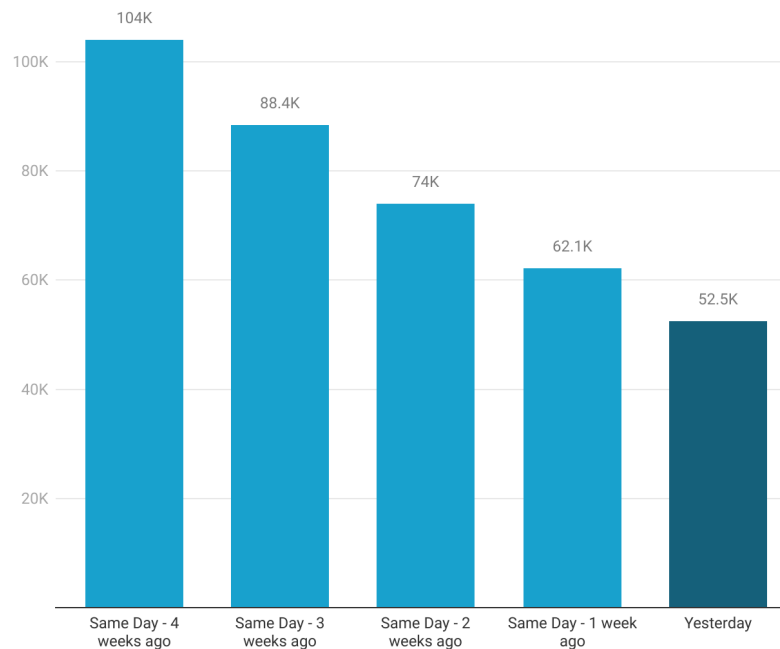


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 Patients in the ICU

Compared to Same Day, Prior Weeks, As of February 25

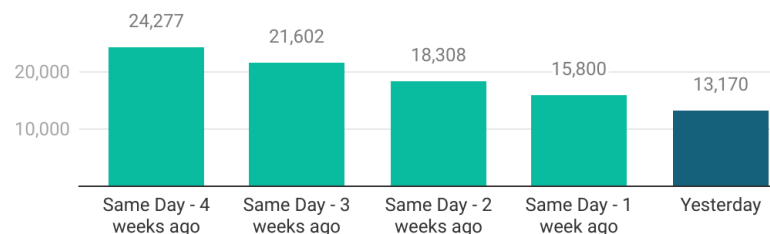


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 Patients on Ventilators

Compared to Same Day, Prior Weeks, As of February 25

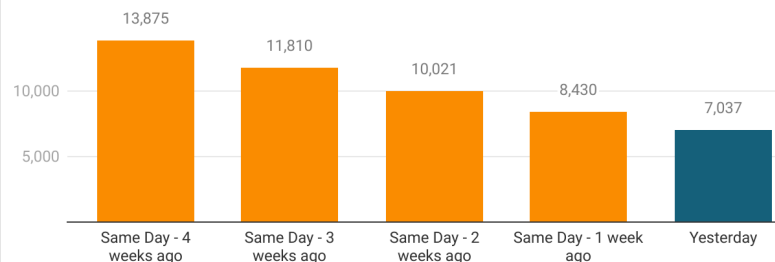


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 "Vital Signs"

Testing (US)

Test volume stabilized week-over-week and showed a solid increase yesterday. Test-positivity improved over the three preceding weeks and was quite low yesterday with the strong volume. Test-positivity is now below the WHO guideline, reinforcing the view that infections are waning.

Tests / Million / Day (US)

As of February 25

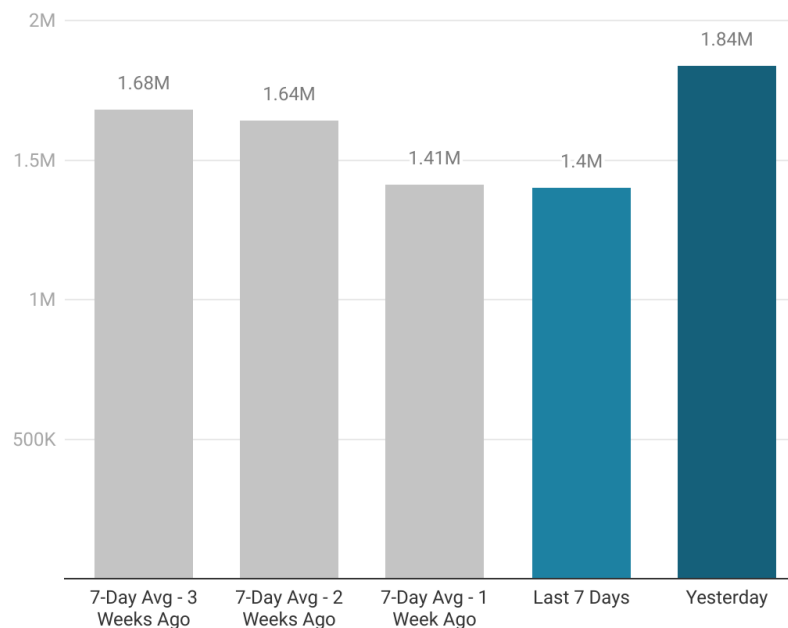


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Test-Positivity Rate

As of February 25

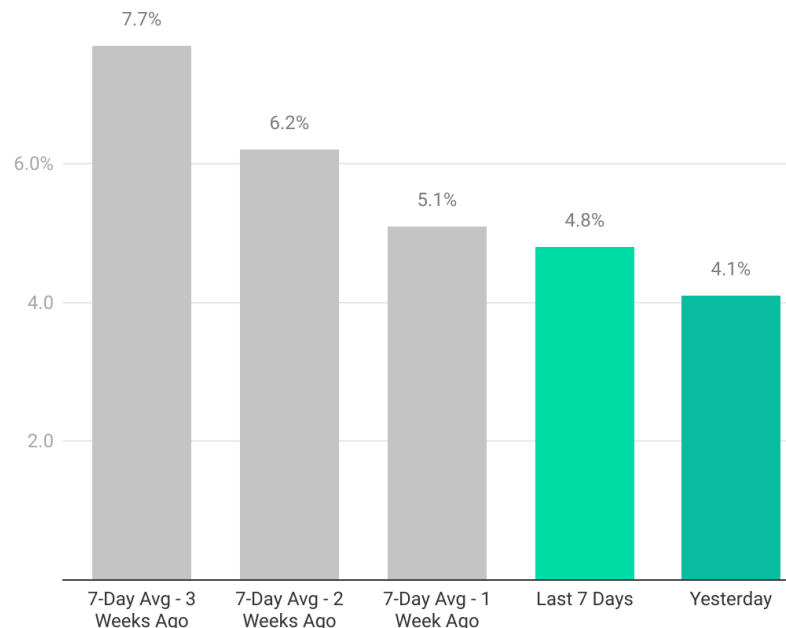


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Deaths Reported With Coronavirus

The 7-day average death rate fell each of the past three weeks.

Daily Deaths Reported With Coronavirus

As of February 25

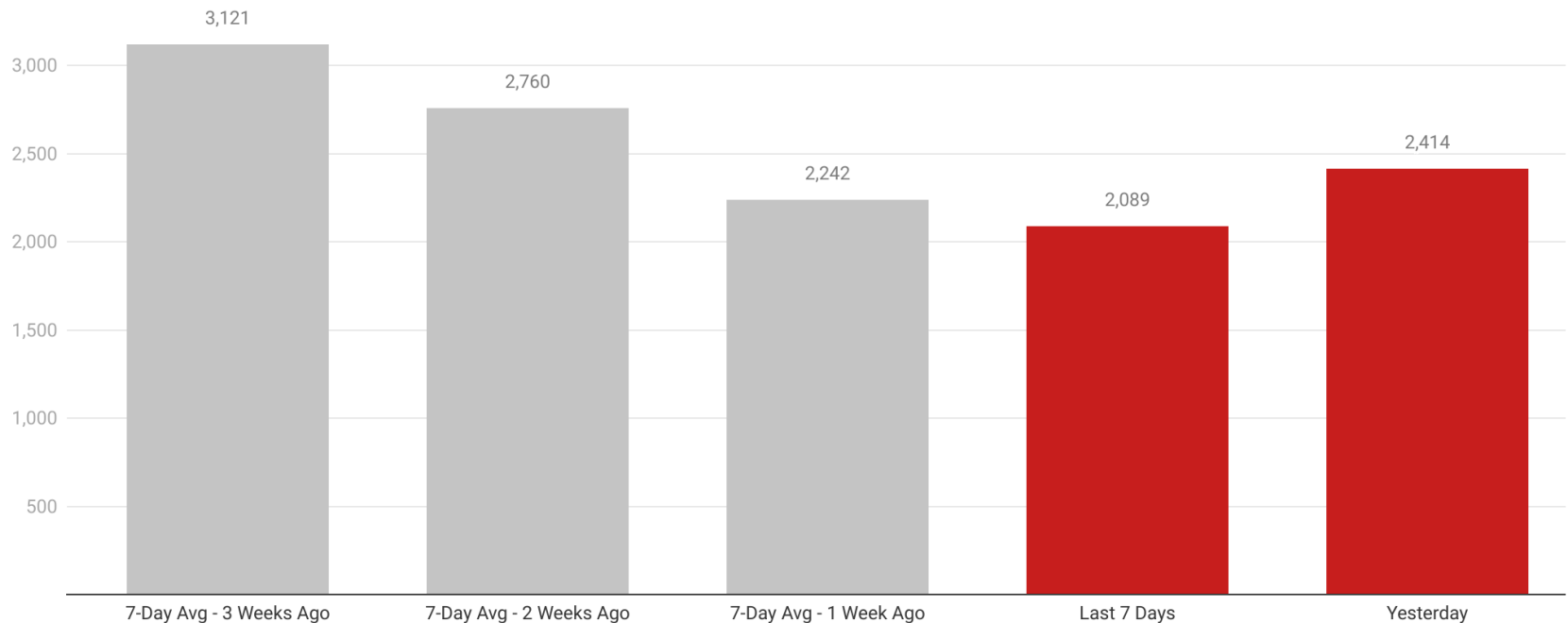


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

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; and the week-over-week changes in new cases are encouraging. The hospital crisis eased for most of the country.

State	7-Day New Infections per Capita	Week-over-Week Change in New Cases	7-Day Tests per New Case	7-Day CV-19 Census as % of all Inpatient Beds	7-Day Deaths per 1000 New Cases (14-day lag)
Alabama	Yellow	Green	Black	Green	Black
Alaska	Yellow	Yellow	Black	Blue	Blue
Arizona	Yellow	Green	Orange	Yellow	Black
Arkansas	Yellow	Yellow	Red	Green	Green
California	Green	Blue	Yellow	Yellow	Black
Colorado	Yellow	Green	Yellow	Blue	Green
Connecticut	Orange	Black	Black	Yellow	Yellow
Delaware	Yellow	Green	Orange	Yellow	Black
District Of Columbia	Yellow	Yellow	Yellow	Green	Yellow
Florida	Orange	Green	Orange	Green	Orange
Georgia	Blue	Orange	Red	Orange	Black
Hawaii	Yellow	Orange	Black	Blue	Yellow
Idaho	Yellow	Green	Yellow	Green	Orange
Illinois	Green	Green	Yellow	Green	Orange
Indiana	Yellow	Blue	Black	Blue	Green
Iowa	Yellow	Blue	Red	Green	Black
Kansas	Yellow	Blue	Red	Green	Black
Kentucky	Orange	Orange	Orange	Green	Orange
Louisiana	Yellow	Black	Orange	Blue	Orange
Maine	Green	Green	Green	Blue	Black
Maryland	Yellow	Green	Yellow	Yellow	Orange
Massachusetts	Yellow	Green	Yellow	Blue	Red
Michigan	Green	Orange	Yellow	Blue	Red
Minnesota	Yellow	Yellow	Yellow	Blue	Green
Mississippi	Yellow	Blue	Orange	Green	Yellow
Missouri	Green	Blue	Orange	Green	Black

State	7-Day New Infections per Capita	Week-over-Week Change in New Cases	7-Day Tests per New Case	7-Day CV-19 Census as % of all Inpatient Beds	7-Day Deaths per 1000 New Cases (14-day lag)
Montana	Yellow	Yellow	Orange	Blue	Green
Nebraska	Yellow	Blue	Orange	Yellow	Black
Nevada	Green	Blue	Orange	Yellow	Black
New Hampshire	Yellow	Blue	Orange	Blue	Green
New Jersey	Orange	Green	Yellow	Yellow	Orange
New Mexico	Yellow	Green	Yellow	Green	Black
New York	Red	Green	Yellow	Red	Yellow
North Carolina	Orange	Blue	Orange	Yellow	Yellow
North Dakota	Green	Blue	Yellow	Blue	Orange
Ohio	Yellow	Green	Orange	Blue	Black
Oklahoma	Yellow	Blue	Red	Blue	Orange
Oregon	Green	Yellow	Orange	Yellow	Yellow
Pennsylvania	Yellow	Blue	Orange	Green	Orange
Rhode Island	Orange	Green	Yellow	Yellow	Black
South Carolina	Black	Blue	Orange	Yellow	Red
South Dakota	Yellow	Yellow	Black	Blue	Yellow
Tennessee	Yellow	Yellow	Red	Green	Orange
Texas	Orange	Black	Orange	Yellow	Yellow
Utah	Yellow	Blue	Orange	Blue	Yellow
Vermont	Yellow	Blue	Green	Blue	Yellow
Virginia	Yellow	Blue	Orange	Yellow	Black
Washington	Green	Green	Yellow	Green	Orange
West Virginia	Yellow	Blue	Yellow	Blue	Orange
Wisconsin	Green	Green	Yellow	Blue	Black
Wyoming	Yellow	Red	Orange	Blue	Orange

Covid-19 "Vital Signs"

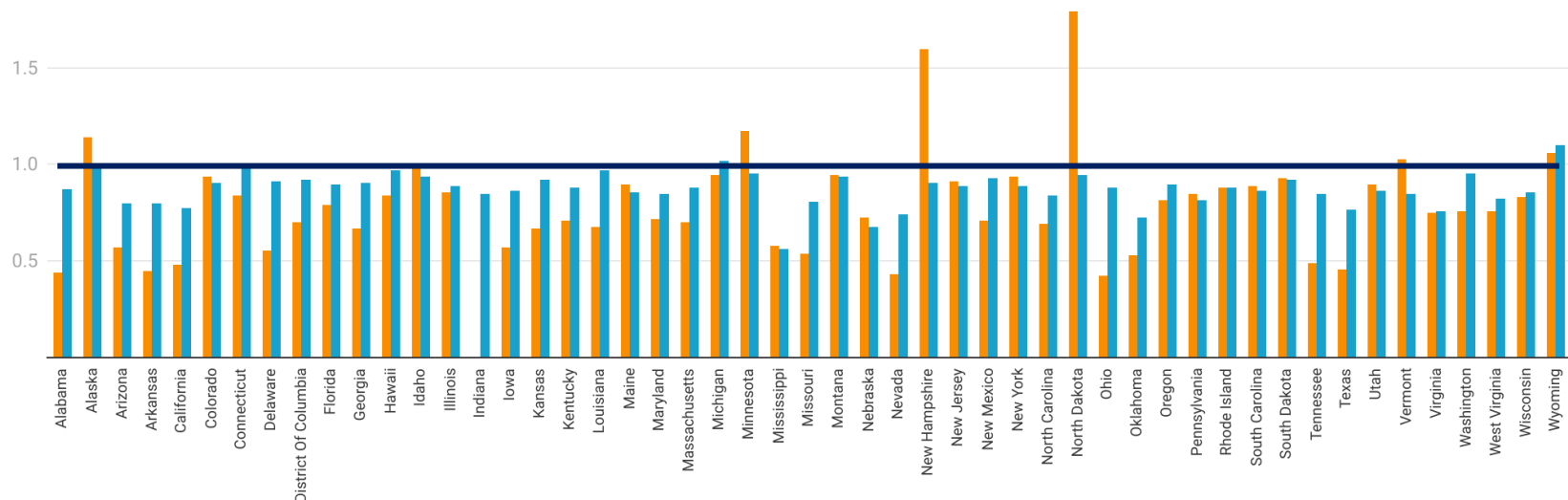
Reproduction Rate (R_t) Estimates By State

Estimated Reproduction Rates (R_t) suggest that infection spread is slowing across the US. Yale's estimate shows only Alaska, Minnesota, New Hampshire, North Dakota, Vermont, and Wyoming with increasing spread. Gu's estimate points only to only Michigan and Wyoming for increasing spread.

Reproduction Rate (R_t)

Gu and Yale/Harvard Schools of Public Health

Yale Gu



Gu as of February 11; Yale/Harvard as of February 23

Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

New Cases / Million

Much of the US rebounded from the high infection rates seen in early-January.

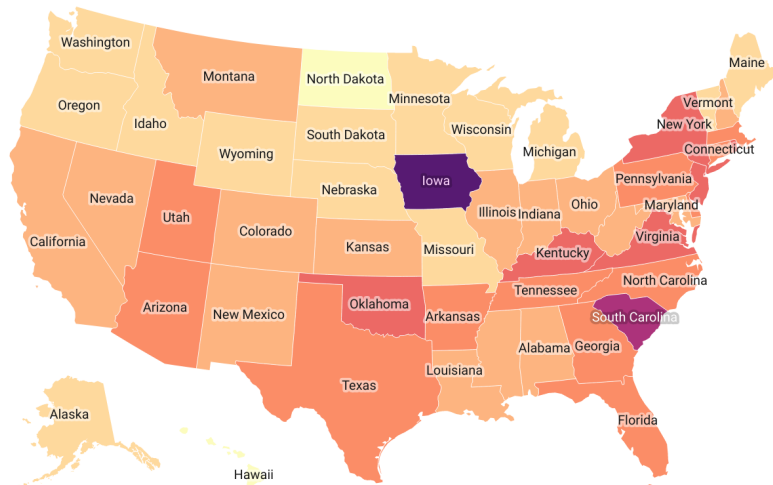
February 11

February 25

New Cases / Million

7-Day Moving Average, As of February 11

< 100 100-200 200-300 300-400 400-500 500-600 600-700 700-800
 800-900 ≥ 900

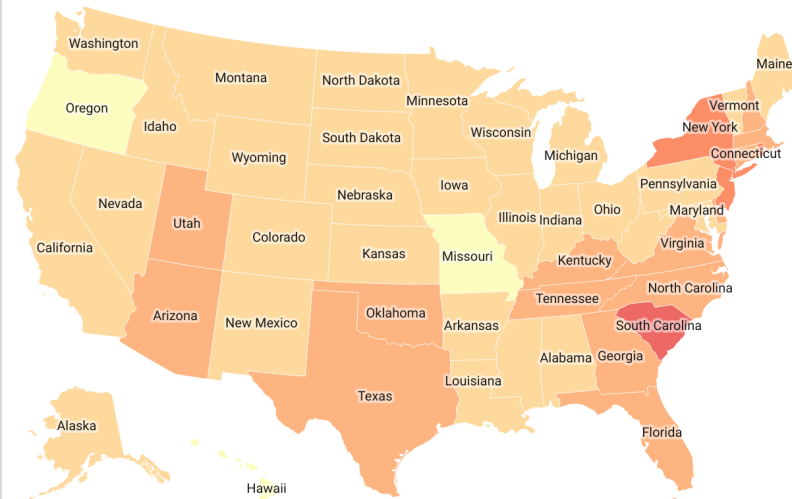


Map: Health Industry Advisor LLC • Created with Datawrapper

New Cases / Million

7-Day Moving Average, As of February 25

< 100 100-200 200-300 300-400 400-500 500-600 600-700 700-800
 800-900 ≥ 900



Map: Health Industry Advisor LLC • Created with Datawrapper

Estimated Immunity By State

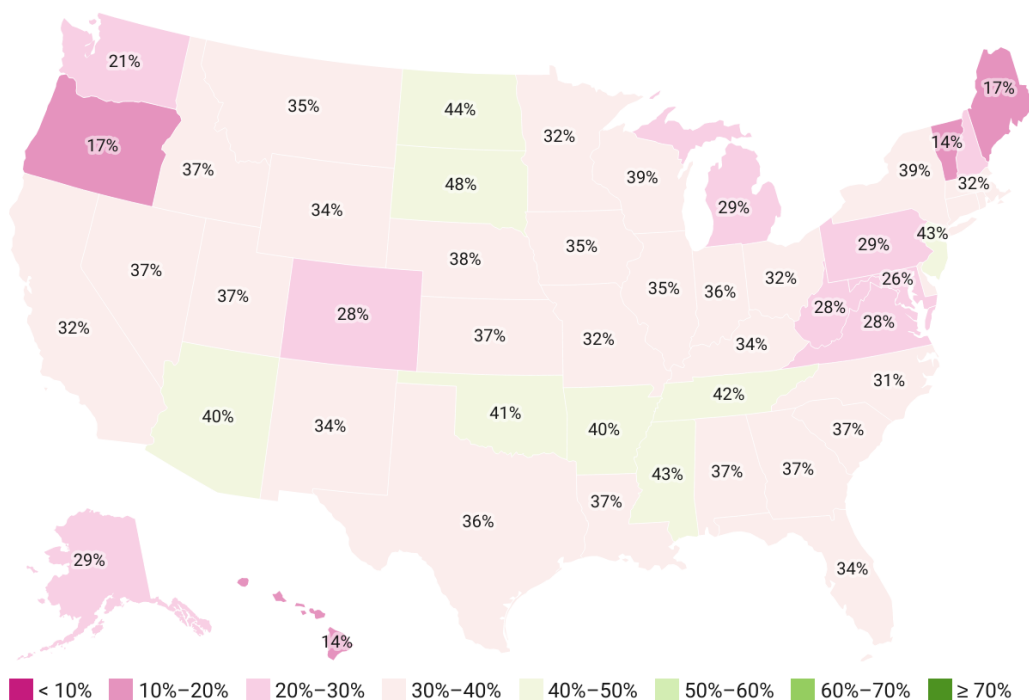
Estimated immunity exceeds 40% in eight states – Arizona, Arkansas, Mississippi, New jersey, Oklahoma, South Dakota, and Tennessee

- Public health experts have suggested that 60-80% of the population would need immunity, for herd immunity to be reached
- Immunity could result from an infection or via vaccination
- It is not established how long immunity, from either infection of vaccination, will last
- For purposes of this illustration, we use both reported vaccination rates and Youyang Gu’s* mean estimates of true infections

* <https://covid19-projections.com>

Estimated Immunity Prevalence, As of February 25

Based on Vaccinations To-Date & Gu's Estimated Infection Model



Vaccinations as of February 18; Estimated Infections as of February 4. Presumed 14-day lag for immunity.

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

Covid-19 "Vital Signs"

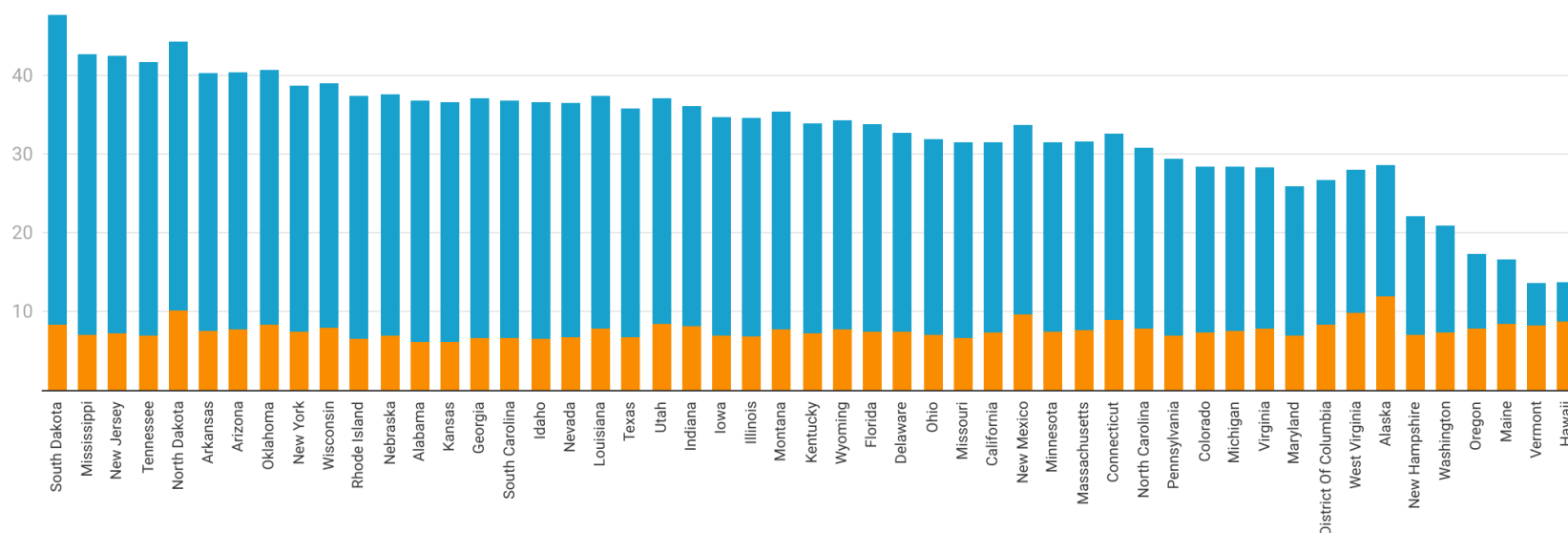
Estimated Immunity Levels By State

North and South Dakota continue to set the pace toward herd immunity. To-date, immunity is largely driven by prior infection rather than vaccinations. Alaska, Hawaii, and Vermont are exceptions, with immunity via vaccinations exceeding that from infection.

Estimated Immunity Levels

As of February 25

■ Via Vaccine ■ Via Infection



2-week lag from infection or vaccination to immunity. Based on Gu's mean infection estimates

Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Hospitalizations

Covid-19 hospital census plunged in the past six weeks. Covid-19 patients occupied less than 17% of US beds yesterday versus 42% six weeks ago. Only New York is above 40% currently.

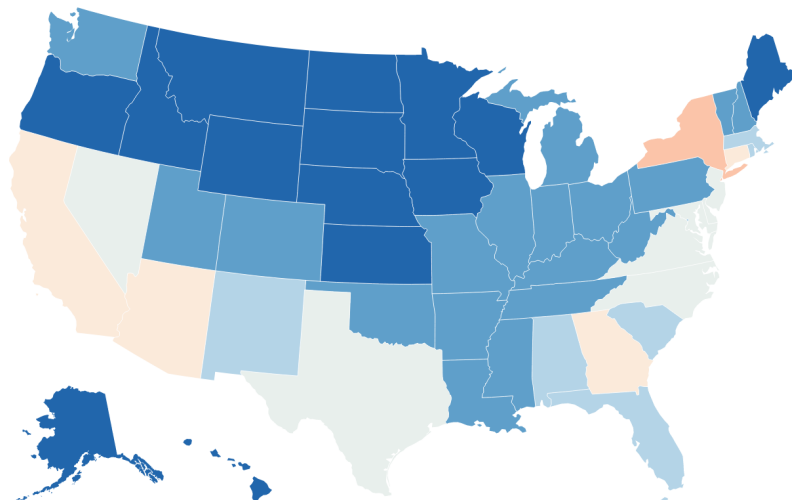
February 11

February 25

Covid-19 Patients As % of All Inpatient Beds

As of February 11

■ < 10% ■ 10%-20% ■ 20%-30% ■ 30%-40% ■ 40%-50% ■ 50%-60% ■ 60%-70% ■ ≥ 70%

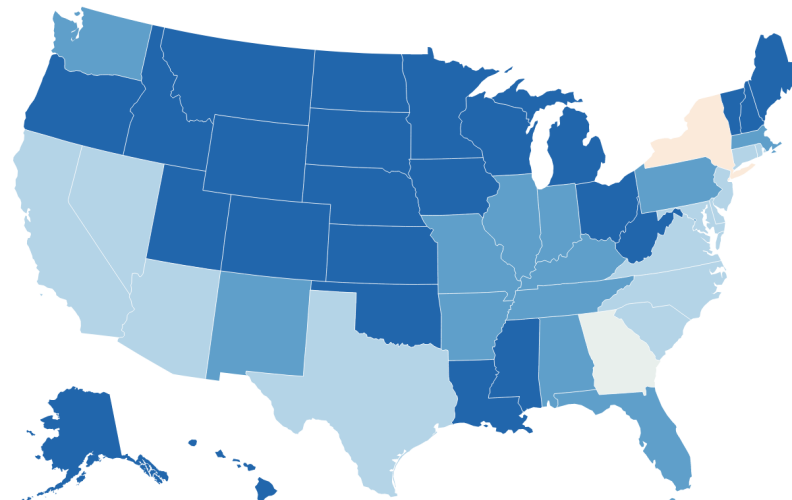


Map: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Covid-19 Patients As % of All Inpatient Beds

As of February 25

■ < 10% ■ 10%-20% ■ 20%-30% ■ 30%-40% ■ 40%-50% ■ 50%-60% ■ 60%-70% ■ ≥ 70%



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



Projected Covid-19 Admission Trends

Projected Covid-19 hospital admissions decline in every state over the next three weeks. For the U.S. overall, projected Covid-19 admissions drop 45% in this time.

% Decline in Hospital Admissions

Week Ending March 23 v. Week Ending March 1

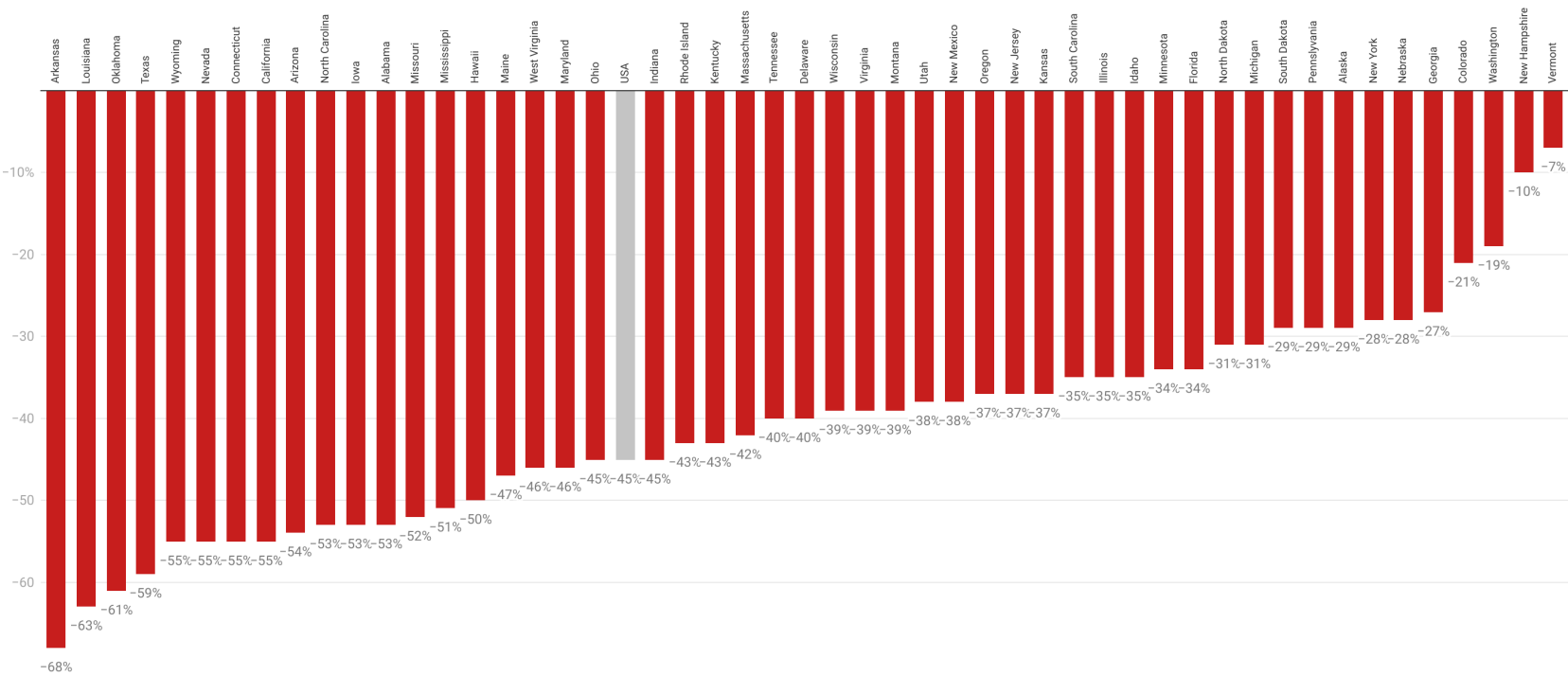


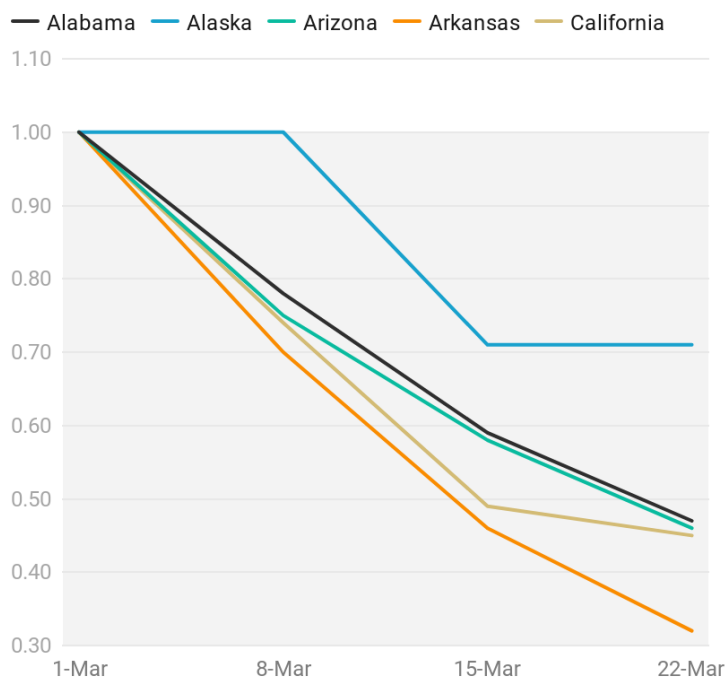
Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Projections of Hospital Admissions (US) – 1 of 5

Projected hospital admissions decline over the next few weeks in every state, in most cases by 30% or more.

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

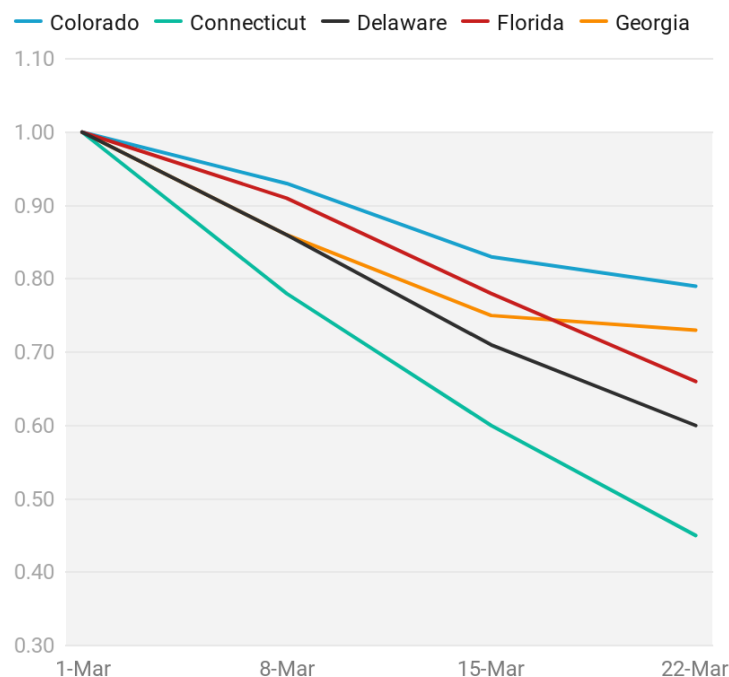


Updated February 23

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



Updated February 23

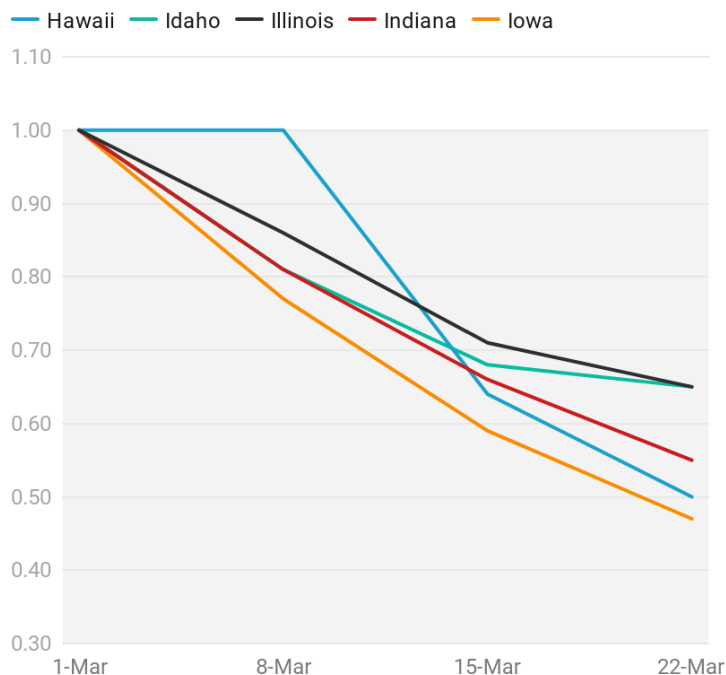
Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Projections of Hospital Admissions (US) – 2 of 5

Projected hospital admissions decline over the next few weeks in every state, in most cases by 30% or more.

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

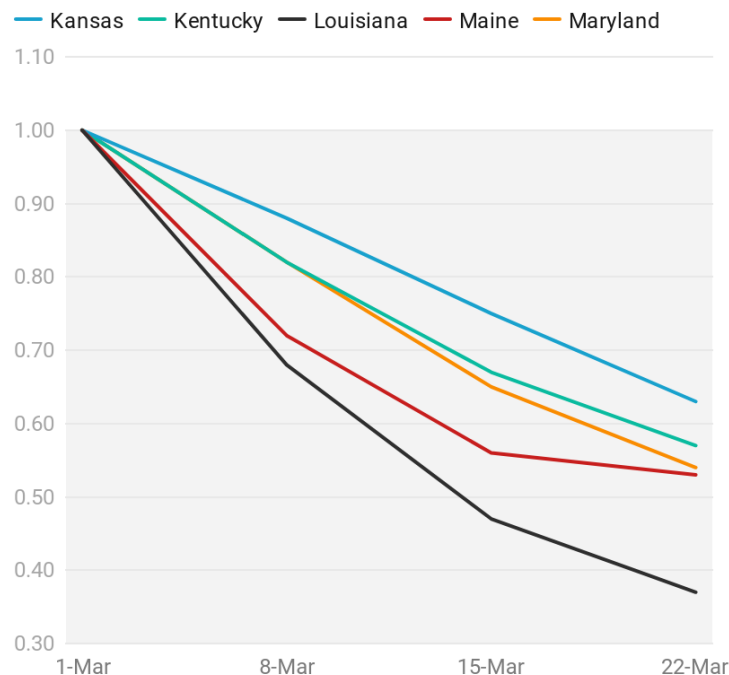


Updated February 23

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



Updated February 23

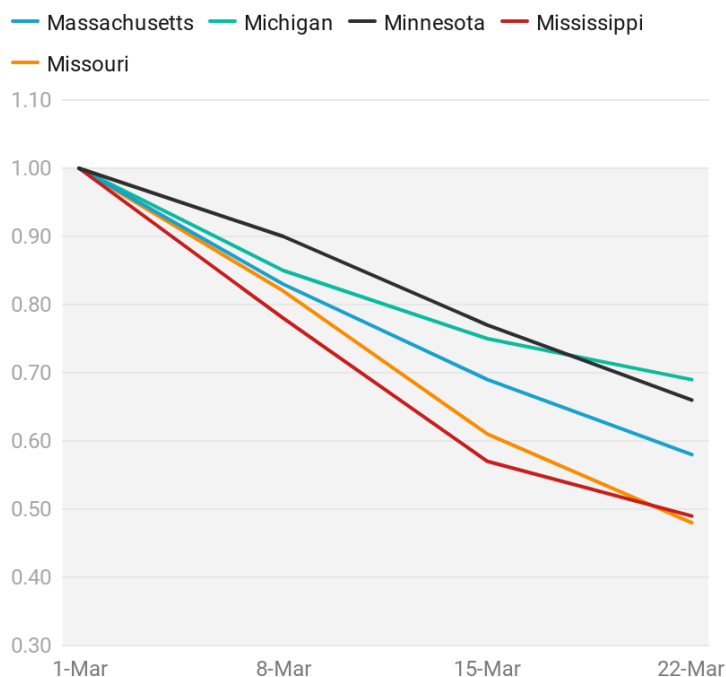
Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Projections of Hospital Admissions (US) – 3 of 5

Projected hospital admissions decline over the next few weeks in every state, in most cases by 30% or more.

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

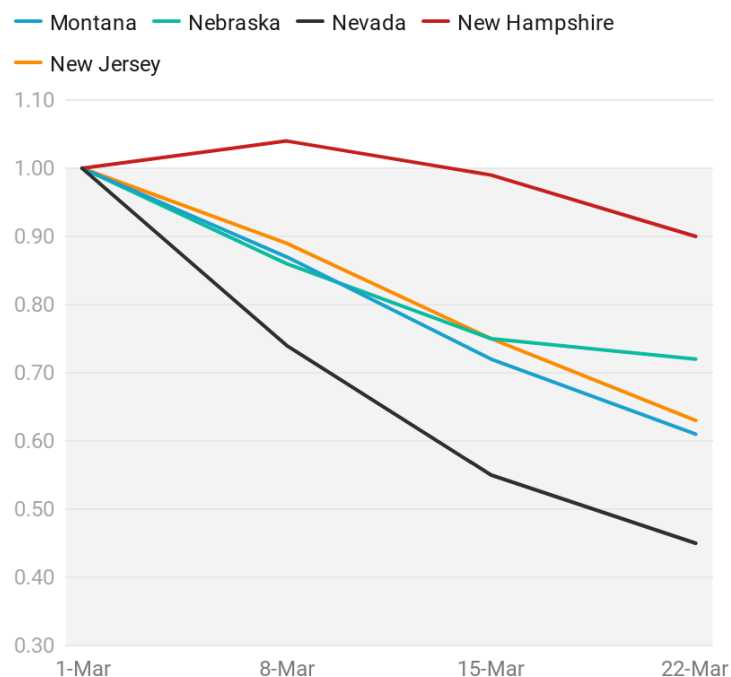


Updated February 23

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



Updated February 23

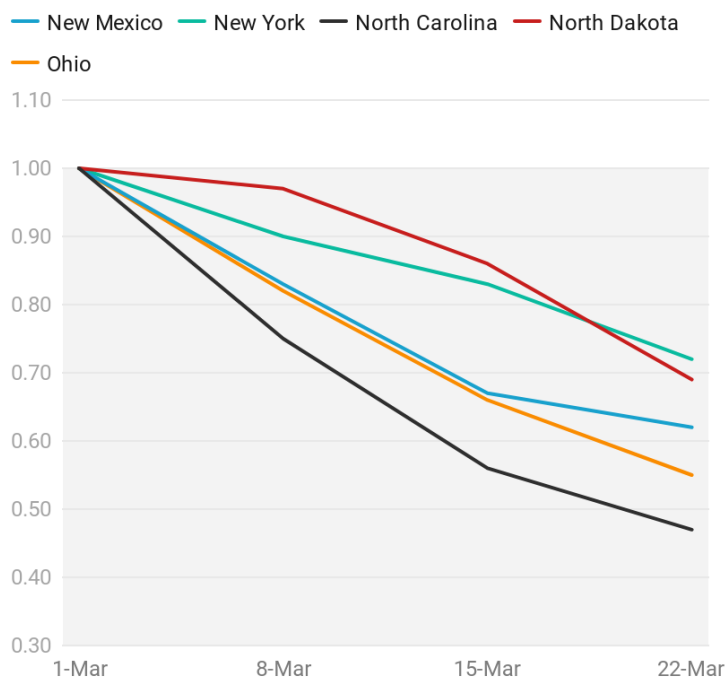
Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Projections of Hospital Admissions (US) - 4 of 5

Projected hospital admissions decline over the next few weeks in every state, in most cases by 30% or more.

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

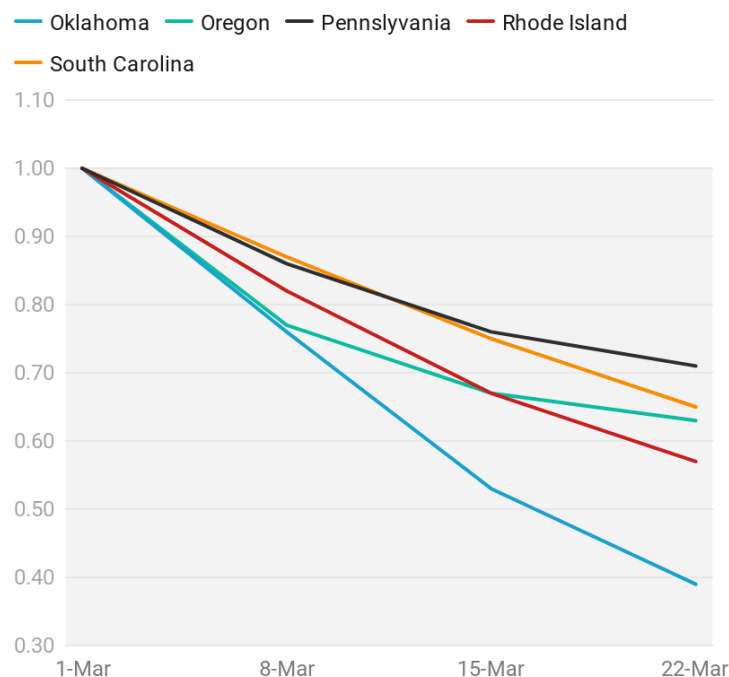


Updated February 23

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



Updated February 23

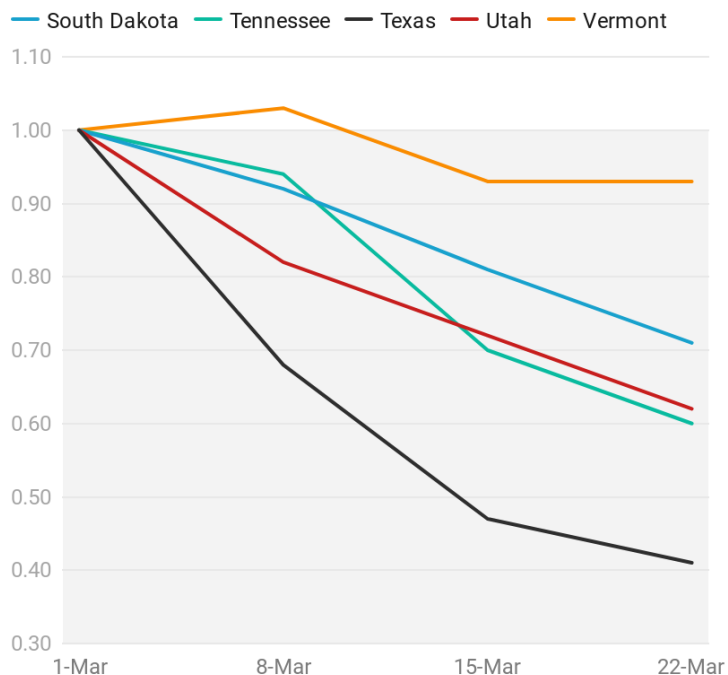
Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Projections of Hospital Admissions (US) – 5 of 5

Projected hospital admissions decline over the next few weeks in every state, in most cases by 30% or more.

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week

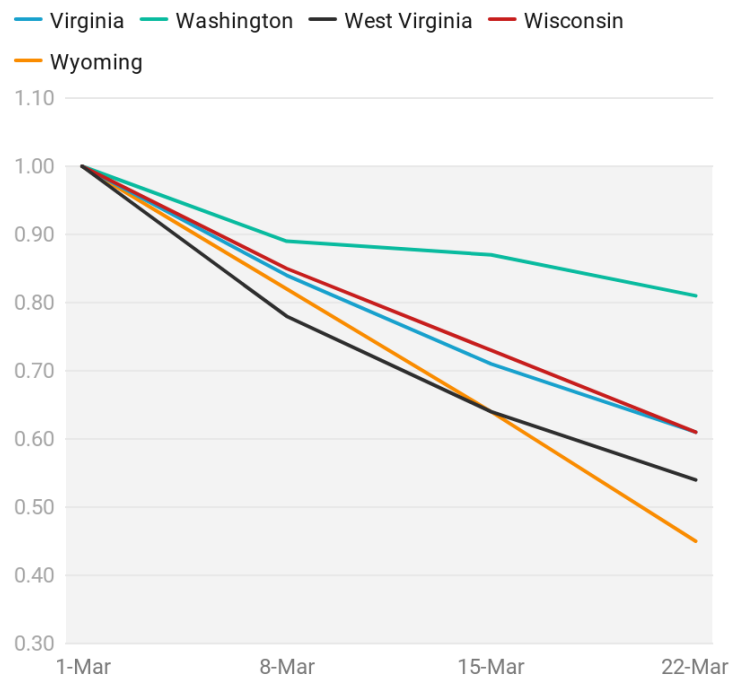


Updated February 23

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

Projected Hospital Admissions

Next Three Weeks, Indexed To This Week



Updated February 23

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

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	Week-Over-Week Change in New Cases	7-Day Deaths /1000 New Cases , 14-Day Lag
Alabama	10.0%	2,005	956	20.6%	197	5	13%	-1%	42
Alaska	7.6%	392	10,073	1.7%	171	59	7%	0%	1
Arizona	11.2%	2,173	4,771	4.4%	210	23	23%	-4%	28
Arkansas	10.5%	1,788	1,549	11.2%	174	9	10%	8%	9
California	9.0%	1,300	4,736	2.9%	148	32	25%	-21%	38
Colorado	7.4%	1,029	4,777	3.8%	180	27	9%	-6%	7
Connecticut	7.8%	2,136	~5,078	~5.7%	291	~17	28%	34%	14
Delaware	8.8%	1,444	5,275	5.4%	286	18	30%	-1%	30
District Of Columbia	5.7%	1,424	5,767	2.9%	166	35	15%	7%	11
Florida	8.8%	1,419	4,290	6.4%	283	15	20%	-1%	19
Georgia	9.4%	1,620	2,180	12.7%	278	8	31%	-5%	29
Hawaii	1.9%	307	3,170	1.2%	36	88	4%	10%	14
Idaho	9.5%	1,032	689	22.4%	156	4	8%	11%	10
Illinois	9.3%	1,784	5,721	2.5%	141	40	10%	-2%	17
Indiana	9.8%	1,856	5,344	2.7%	147	36	11%	-4%	19
Iowa	11.5%	1,724	586	20.5%	180	3	5%	-74%	6
Kansas	10.1%	1,622	955	21.2%	174	5	4%	-21%	33
Kentucky	9.0%	1,023	2,949	9.8%	288	10	14%	1...	15

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
Louisiana	9.2%	2,057	4,389	4.1%	180	24	9%	32%	18
Maine	3.3%	521	6,856	1.6%	109	63	6%	-1%	30
Maryland	6.3%	1,291	4,749	2.7%	130	37	24%	-10%	16
Massachusetts	8.3%	2,299	13,440	1.8%	247	54	18%	-5%	17
Michigan	6.4%	1,646	3,455	3.7%	127	27	8%	19%	21
Minnesota	8.5%	1,156	4,300	3.3%	140	31	5%	1%	8
Mississippi	9.8%	2,222	2,212	7.1%	157	14	9%	-33%	13
Missouri	8.5%	1,383	1,990	4.2%	85	23	15%	-42%	39
Montana	9.3%	1,263	3,880	4.6%	180	22	5%	7%	8
Nebraska	10.3%	1,066	4,220	3.6%	152	28	5%	-32%	15
Nevada	9.5%	1,602	2,493	5.1%	128	20	24%	-21%	27
New Hampshire	5.5%	855	5,228	4.4%	228	23	10%	-22%	5
New Jersey	8.8%	2,606	4,405	7.5%	330	13	26%	-7%	16
New Mexico	8.8%	1,751	5,214	3.1%	159	33	14%	-3%	29
New York	8.5%	2,442	11,141	3.3%	388	29	44%	-1%	13
North Carolina	8.1%	1,062	4,406	6.0%	266	17	21%	-15%	13

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	13.1%	1,891	2,967	3.7%	110	27	2%	-14%	19
Ohio	8.2%	1,465	2,482	7.4%	184	14	9%	-6%	25
Oklahoma	10.7%	1,087	1,906	10.8%	205	9	9%	-20%	15
Oregon	3.7%	523	3,194	3.0%	96	33	7%	8%	15
Pennsylvania	7.2%	1,872	2,831	6.7%	190	15	14%	-19%	17
Rhode Island	11.8%	2,356	15,418	2.0%	314	49	21%	-6%	42
South Carolina	9.9%	1,640	5,009	9.1%	458	11	20%	-12%	13
South Dakota	12.7%	2,116	766	23.0%	177	4	6%	8%	24
Tennessee	11.3%	1,657	1,955	10.3%	202	10	15%	4%	17
Texas	9.1%	1,498	2,696	8.6%	250	11	24%	37%	19
Utah	11.5%	590	2,575	8.7%	224	11	9%	-14%	11
Vermont	2.4%	325	9,758	1.6%	158	62	6%	-23%	13
Virginia	6.7%	933	2,521	8.7%	219	12	23%	-23%	35
Washington	4.5%	658	3,185	3.4%	107	30	11%	-8%	18
West Virginia	7.3%	1,281	4,587	3.6%	164	28	9%	-12%	16
Wisconsin	9.7%	1,098	5,545	2.3%	109	51	7%	-4%	26
Wyoming	9.4%	1,159	3,988	4.2%	166	24	2%	22%	18

Table: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

Metro Areas in the US

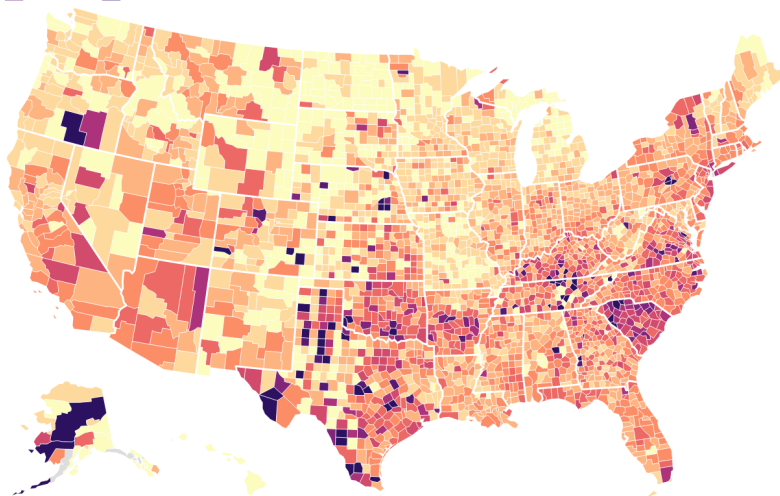
The improved case rate over the past several weeks can be seen at the Metro Area-level

February 11

New Daily Infections / Million

7-Day Moving Average, As of February 11

< 100 100-200 200-300 300-400 400-500 500-600 600-700 700-800
800-900 ≥ 900



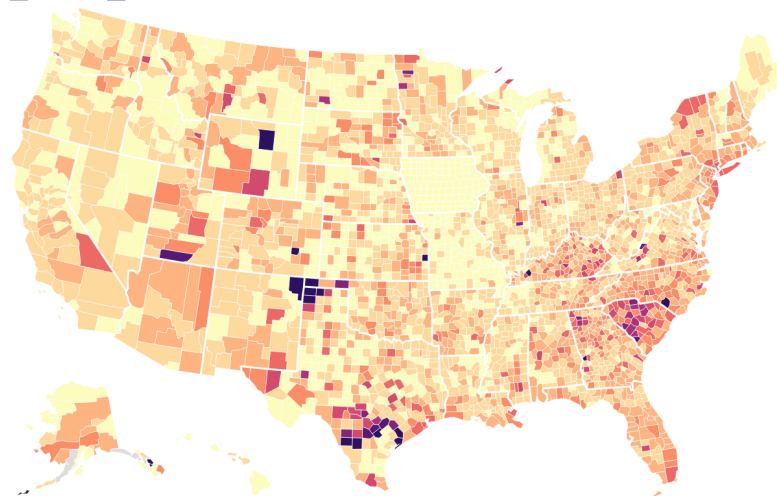
Map: Health Industry Advisor LLC • Created with Datawrapper

February 25

New Daily Infections / Million

7-Day Moving Average, As of February 25

< 100 100-200 200-300 300-400 400-500 500-600 600-700 700-800
800-900 ≥ 900



Map: Health Industry Advisor LLC • Created with Datawrapper

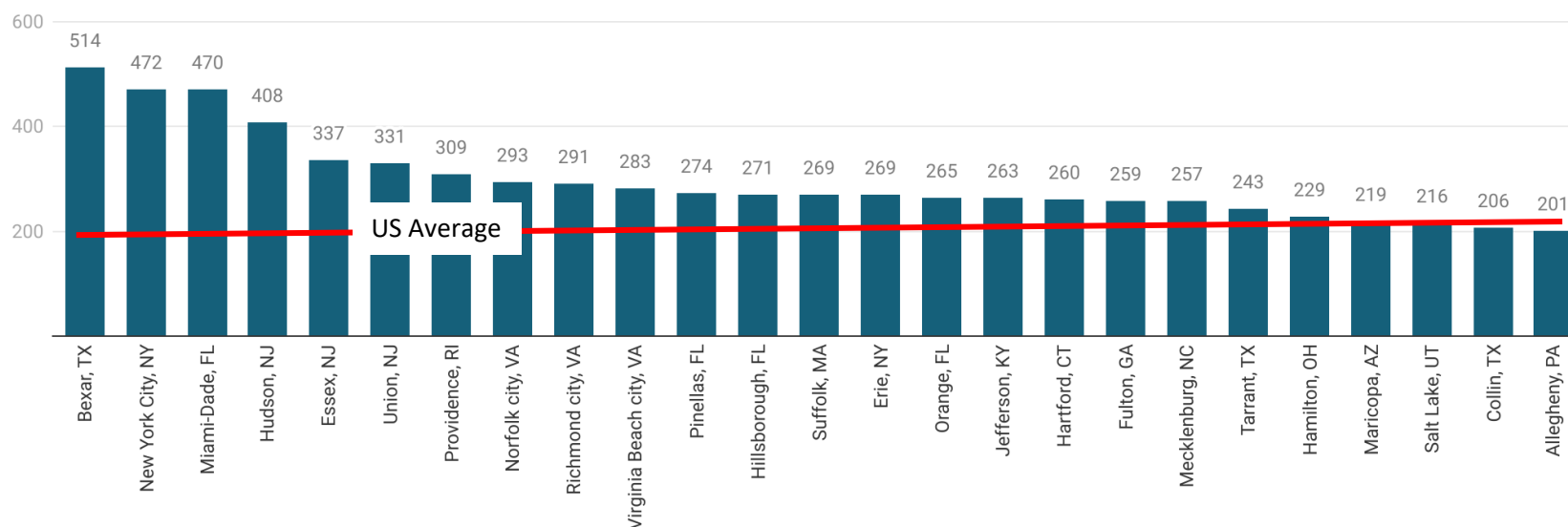
Covid-19 "Vital Signs"

Large Central Metro Areas

Bexar, Texas, New York City, Miami-Dade, Florida and Hudson, New Jersey led all Large Central Metro Areas in 7-day new cases per capita. Bexar and several other Texas counties, however, seemed to experience delayed case reporting between February 12-24, coinciding with the recent deep freeze.

New Daily Cases / Million Population - Large Central Metro Areas

7-Day Moving Average, As of February 25



Health Industry Advisor LLC analysis

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

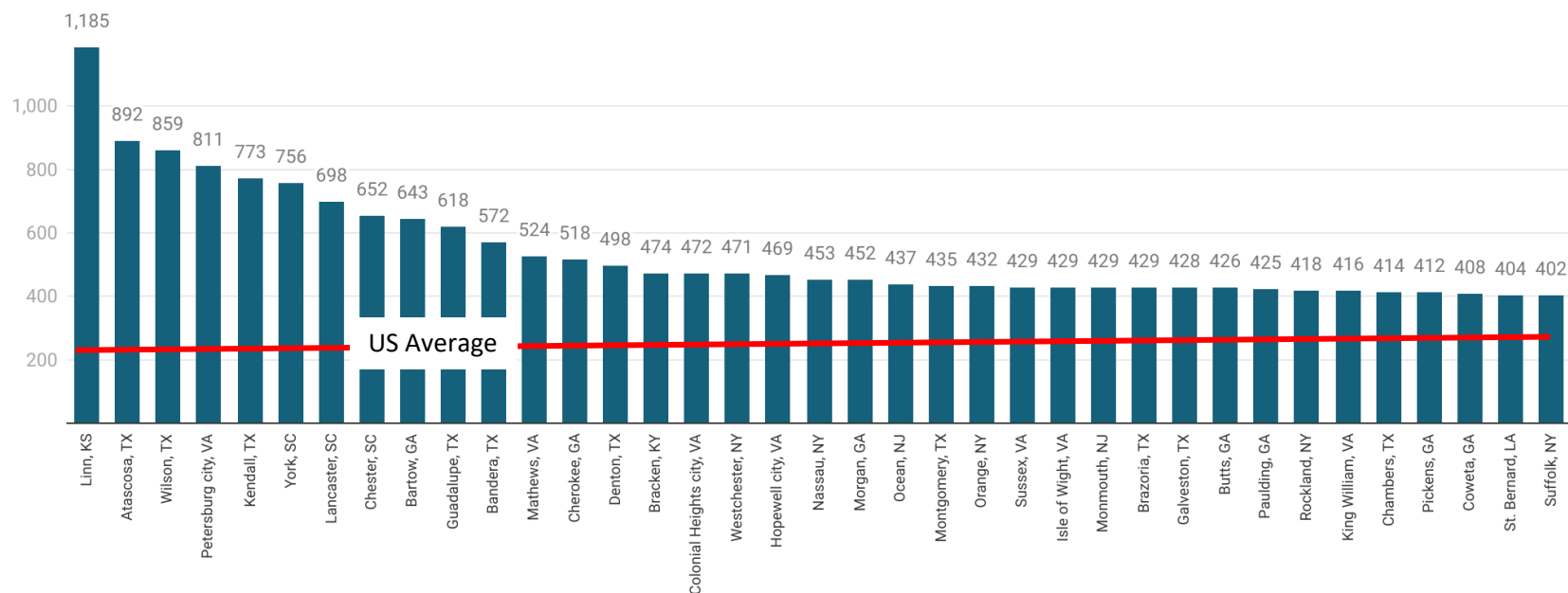
Covid-19 "Vital Signs"

Large Fringe Metro Areas

Several Large Fringe Texas counties experienced high case rates this week – a week after the deep freeze. The deep freeze may have delayed new case reporting.

New Daily Cases / Million Population - Large Fringe Metro Areas

7-Day Moving Average, As of February 25



Health Industry Advisor LLC analysis

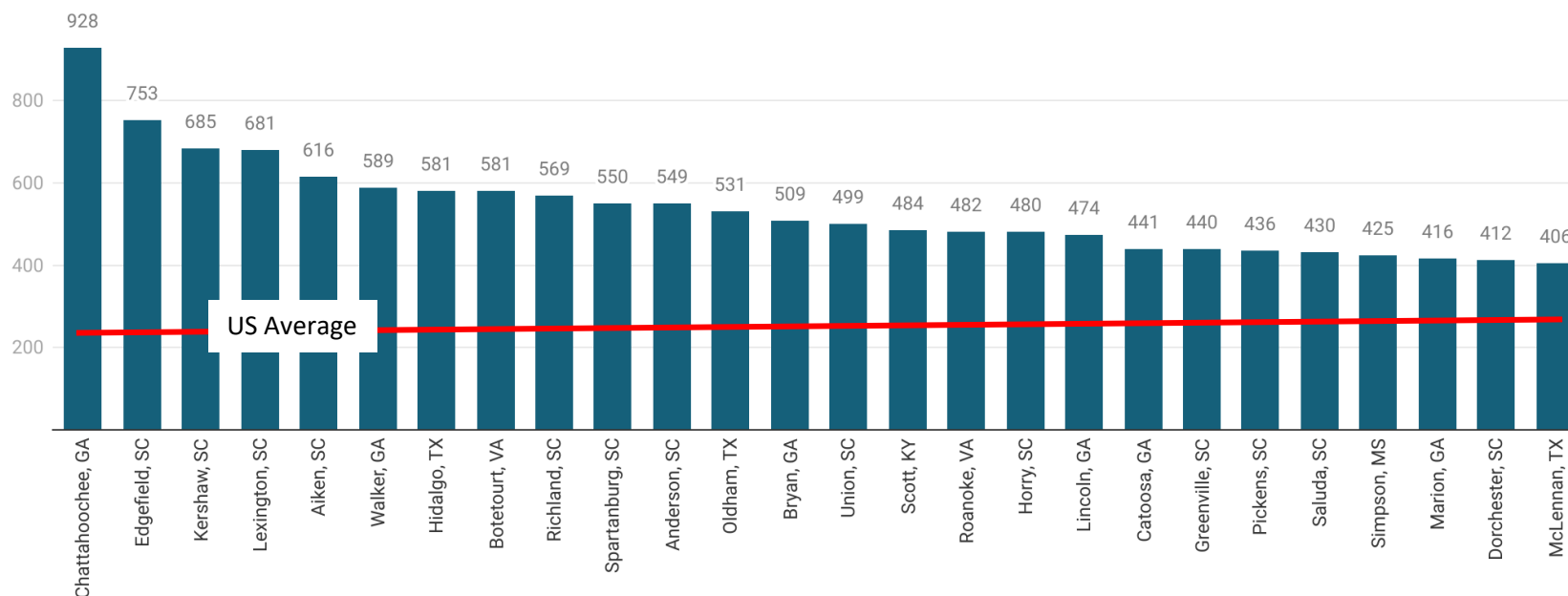
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Medium Metro Areas in the US

South Carolina outpaced other states with the highest case rates among Medium Metro counties.

New Daily Cases / Million Population - Medium Metro Areas

7-Day Moving Average, As of February 25



Health Industry Advisor LLC analysis

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

Metro Areas With Major Universities

Montgomery County County, home to Virginia Tech, reported the highest new case rate of the 33 such areas we track.

Metro Areas With Major Universities: New Daily Cases / 1M Population

7-Day Average, As of February 18

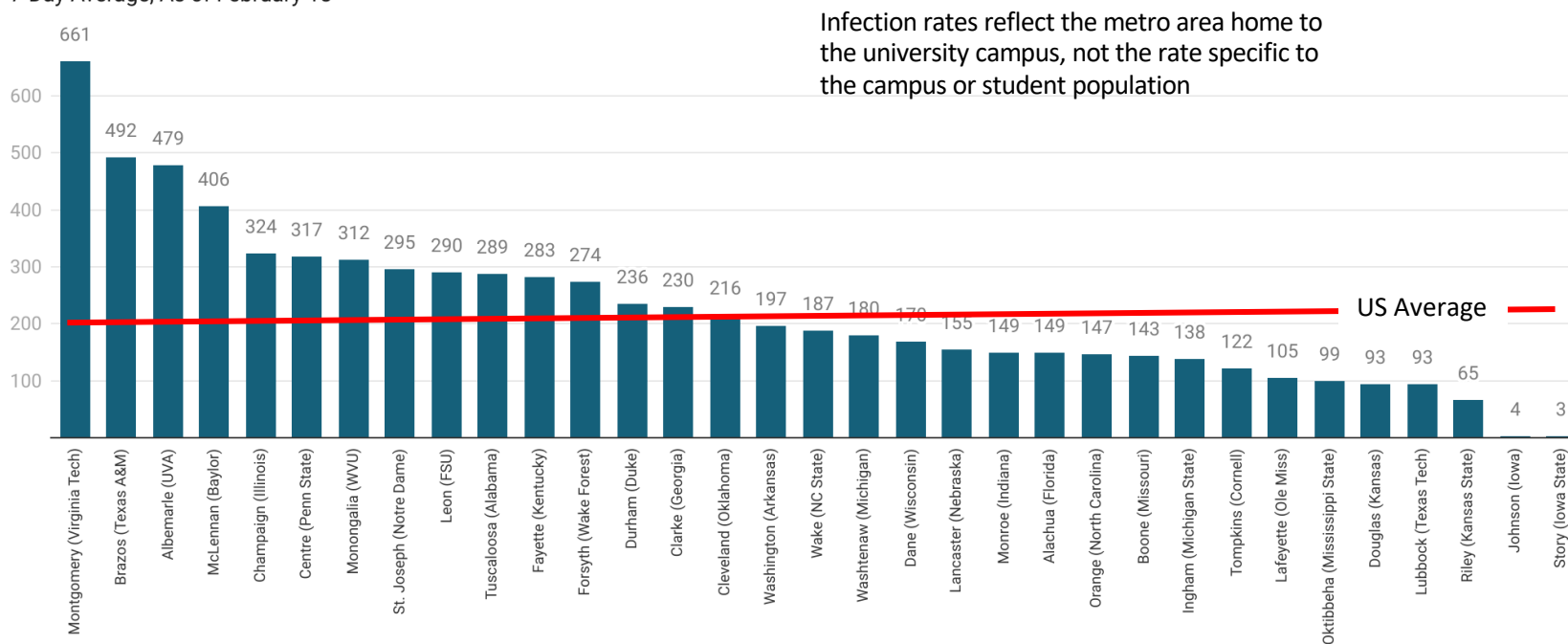


Chart: Health Industry Advisor LLC • Created with Datawrapper

Metro Areas With Major Universities

Brazos and McLennan counties in Texas outpaced other University communities in new case rates last week. As noted earlier, however, the recent deep freeze in Texas likely caused reporting delays.

Metro Areas With Major Universities: Week-Over-Week Change In New Daily Cases / 1M Population

7-Day Average, February 25 v February 18

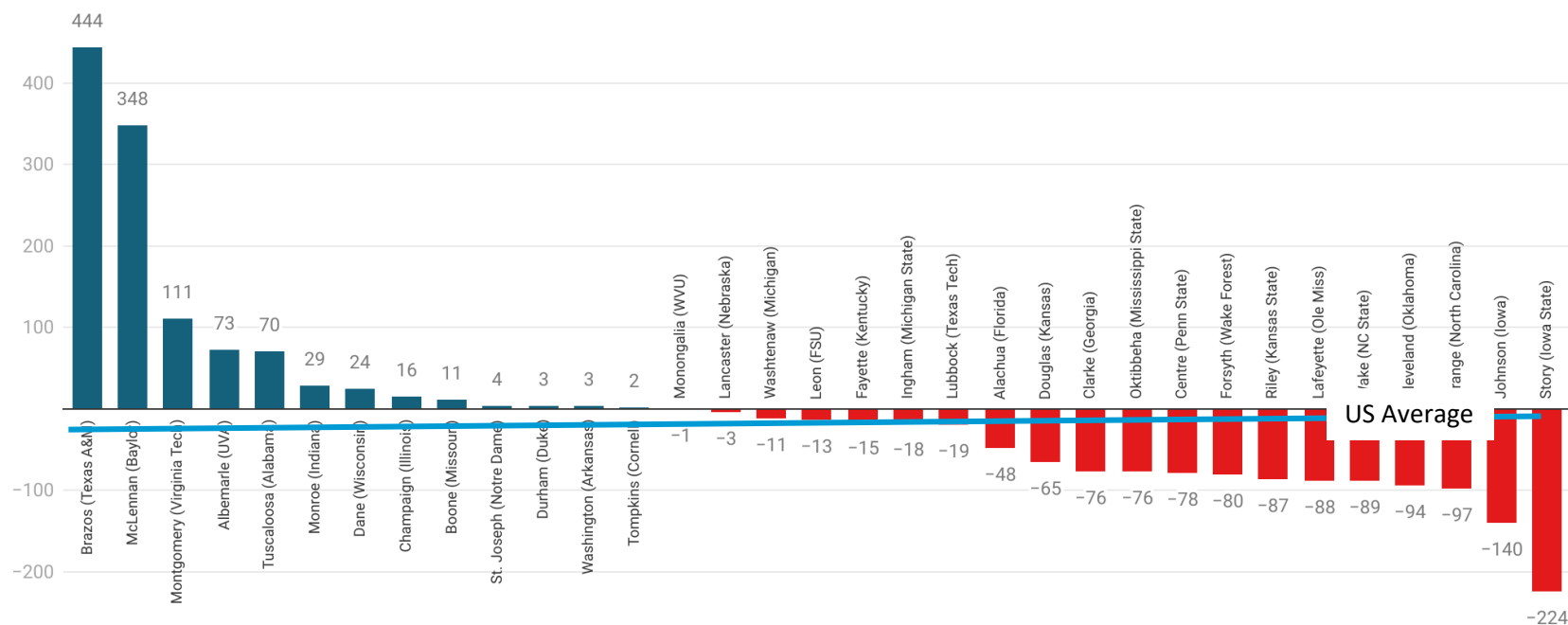


Chart: Health Industry Advisor LLC • Created with Datawrapper

Sources

The following data sources are accessed on a daily or weekly basis

- The Atlantic's Covid Tracking Project: <https://covidtracking.com>
- 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>
- Covid-19 Forecast Hub, <https://viz.covid19forecasthub.org>
- Oliver Wyman Pandemic Navigator, <https://pandemicnavigator.oliverwyman.com/forecast?mode=country®ion=United%20States&panel=mortality>
- [Rt.live](https://rt.live)
- 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=Z0b6TmHW>