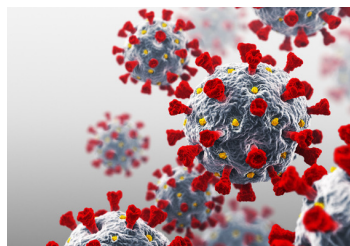


Covid-19 "Vital Signs"

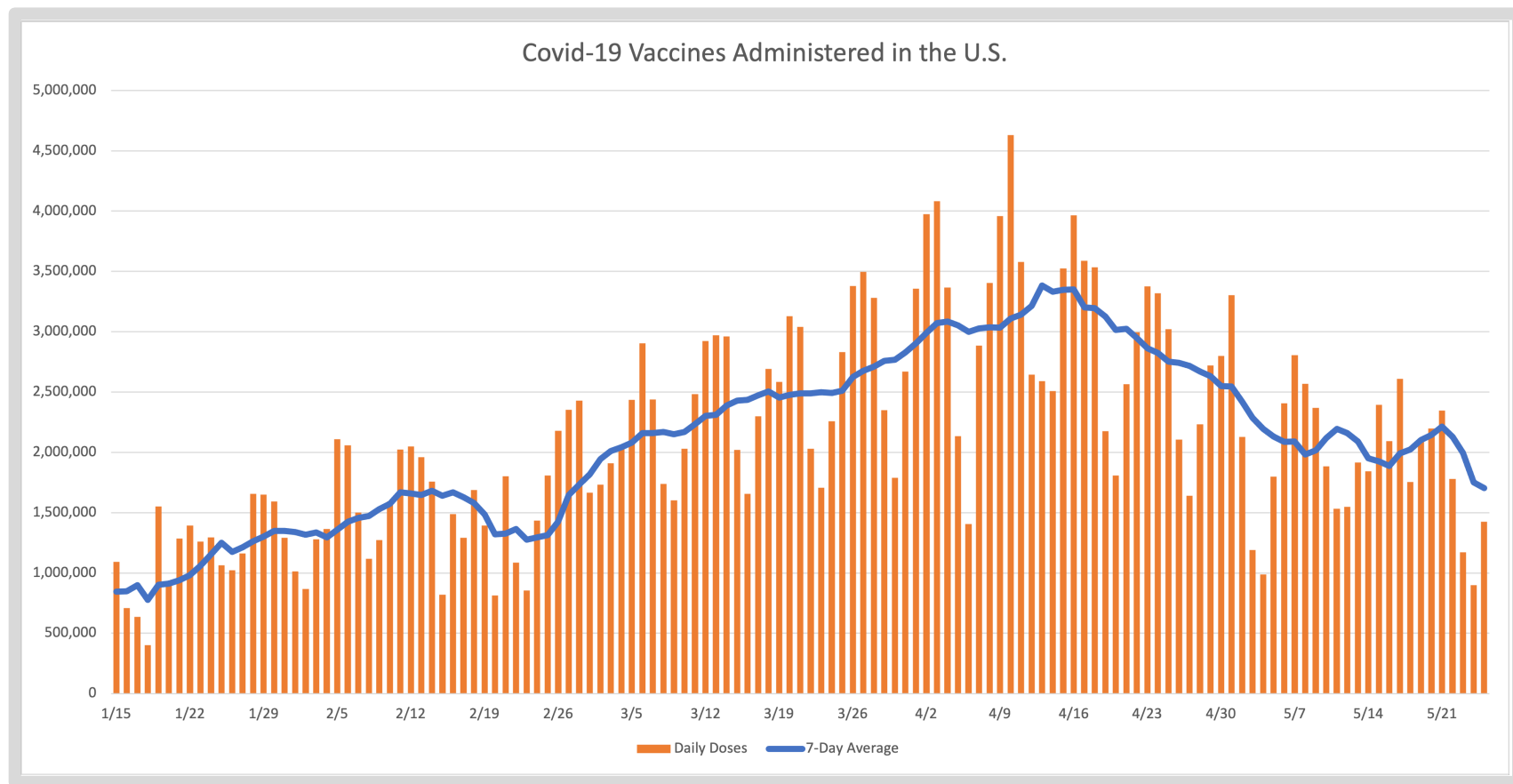
Issue # 339

May 27, 2021



Pace of Vaccinations

The 7-day average vaccination rate fell to 1.7 million, the lowest point since February 27



Covid-19 "Vital Signs"

Vaccine Tracking

To date, the US has distributed 360 million doses - more than one dose per resident. We have administered 280 million doses. 130 million people are fully inoculated.

Vaccination Progress

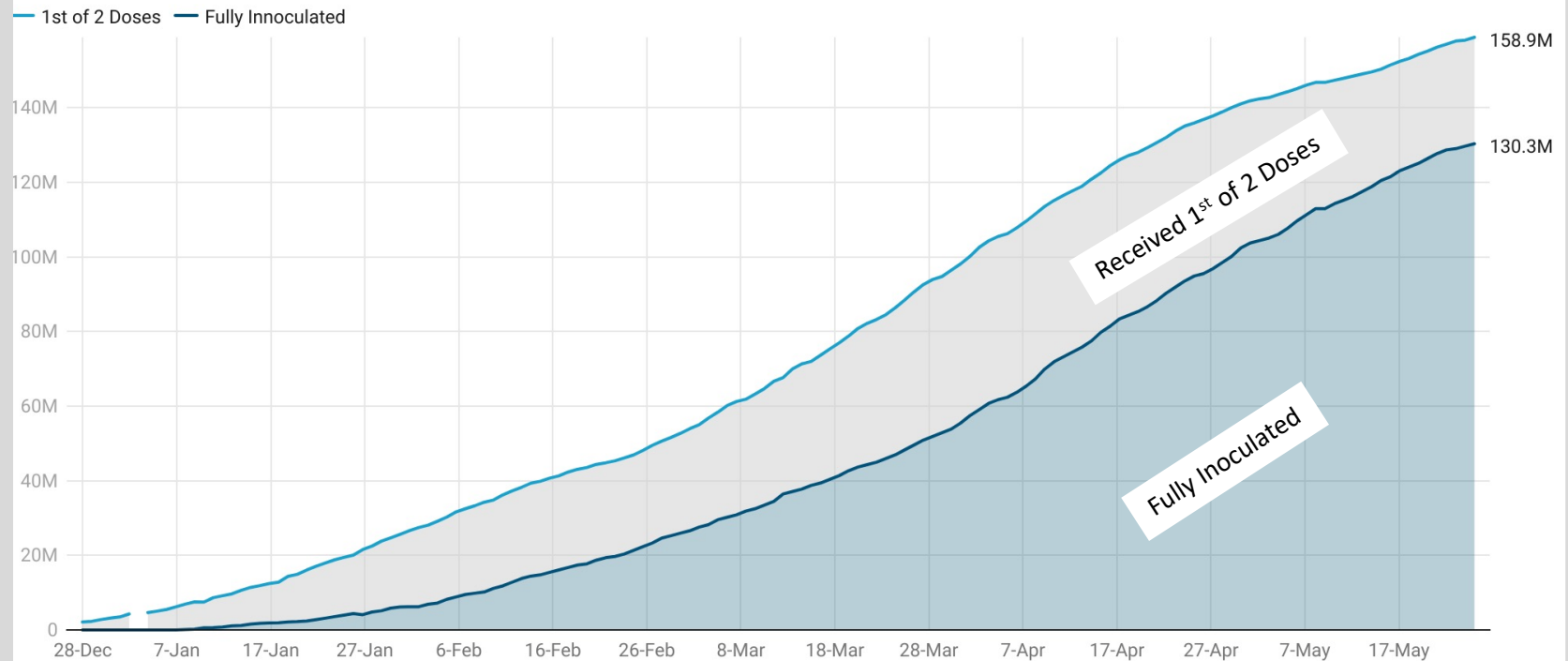


Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

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

Vaccination Status By Age

86% of seniors are participating in the vaccination process; 74% are fully vaccinated. 55% of younger adults have received at least one shot; 434% are fully vaccinated. Ten percent of 12-to-17-year-olds have started vaccinations.

Vaccination Status By Age

As of May 25

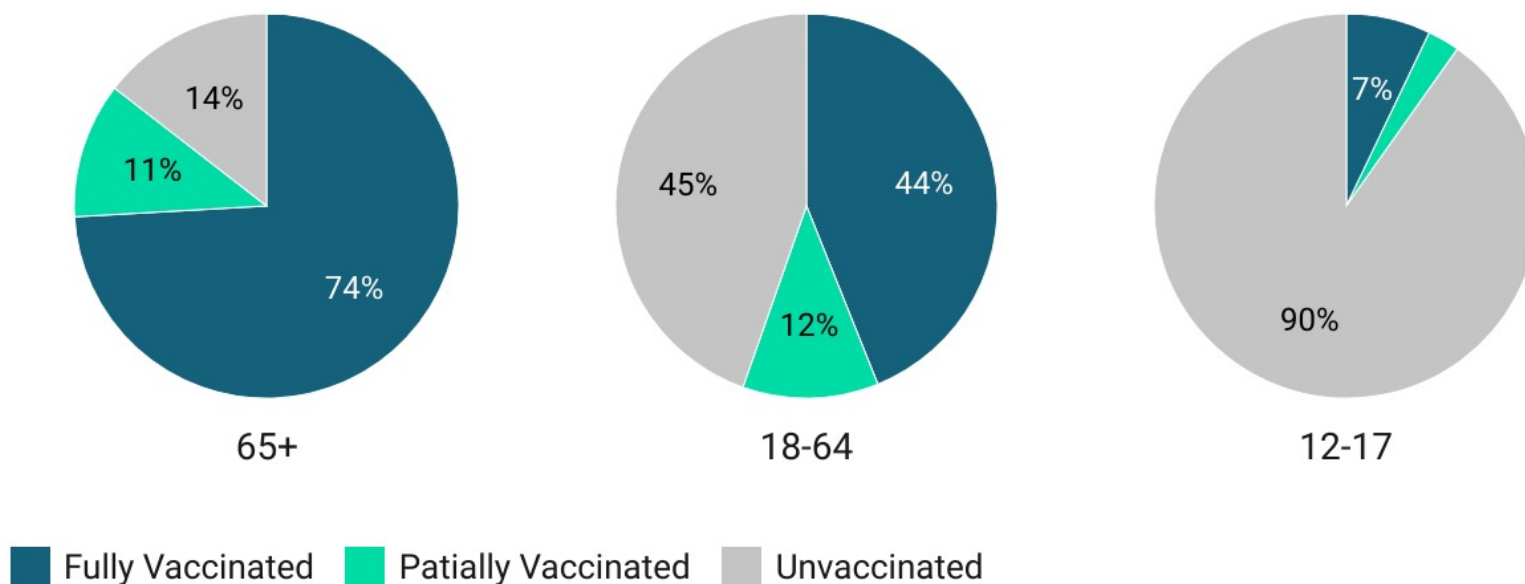


Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Covid-19 "Vital Signs"

Vaccine Tracking - % of Adult Population Vaccinated

Hawaii and Vermont are the first states to have begun vaccinating 80% of the adult population.

Vaccinations of Adult Population

% Receiving 1 or 2 doses, as of May 25

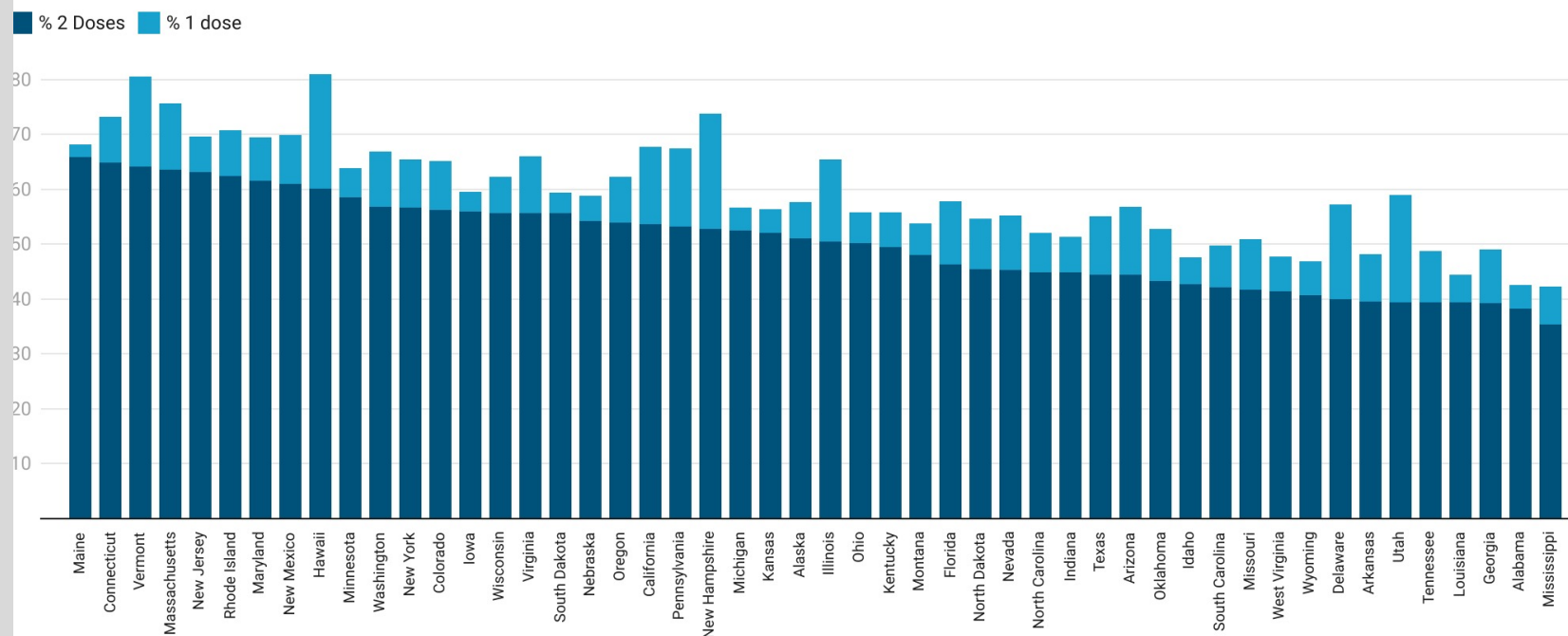


Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

Estimated Immunity By State

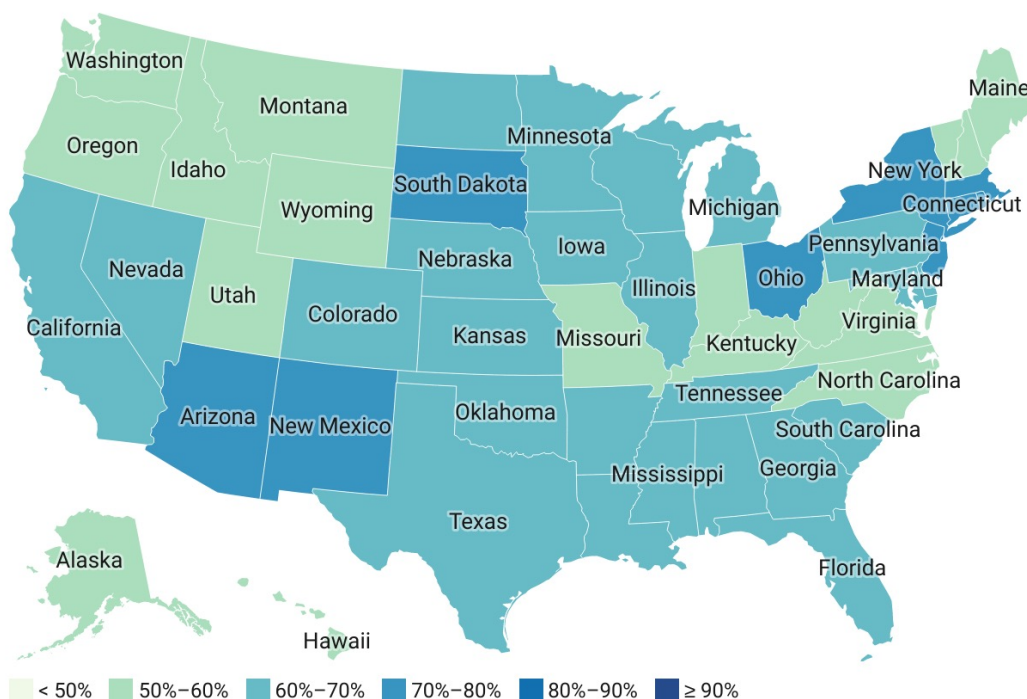
Estimated immunity is highest in Arizona, Connecticut, Massachusetts, New Jersey, New Mexico, New York, Ohio, Rhode Island, and South Dakota.

- 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 or vaccination, will last
- For purposes of this illustration, we use both reported vaccination rates and the Yale/Harvard* mean estimates of true infections

* <https://covidestim.org>

Estimated Immunity Prevalence, As of May 25

Based on Vaccinations To-Date & Harvard/Yale Estimated Infection Model



Presumed 14-day lag for immunity.

Map: Health Industry Advisor LLC • Source: Harvard/Yale Schools of Public Health • Created with Datawrapper

Newly Detected Cases

New cases declined last week, falling to the lowest point in 344 days.

Newly-Detected Cases / Million

7-Day Average

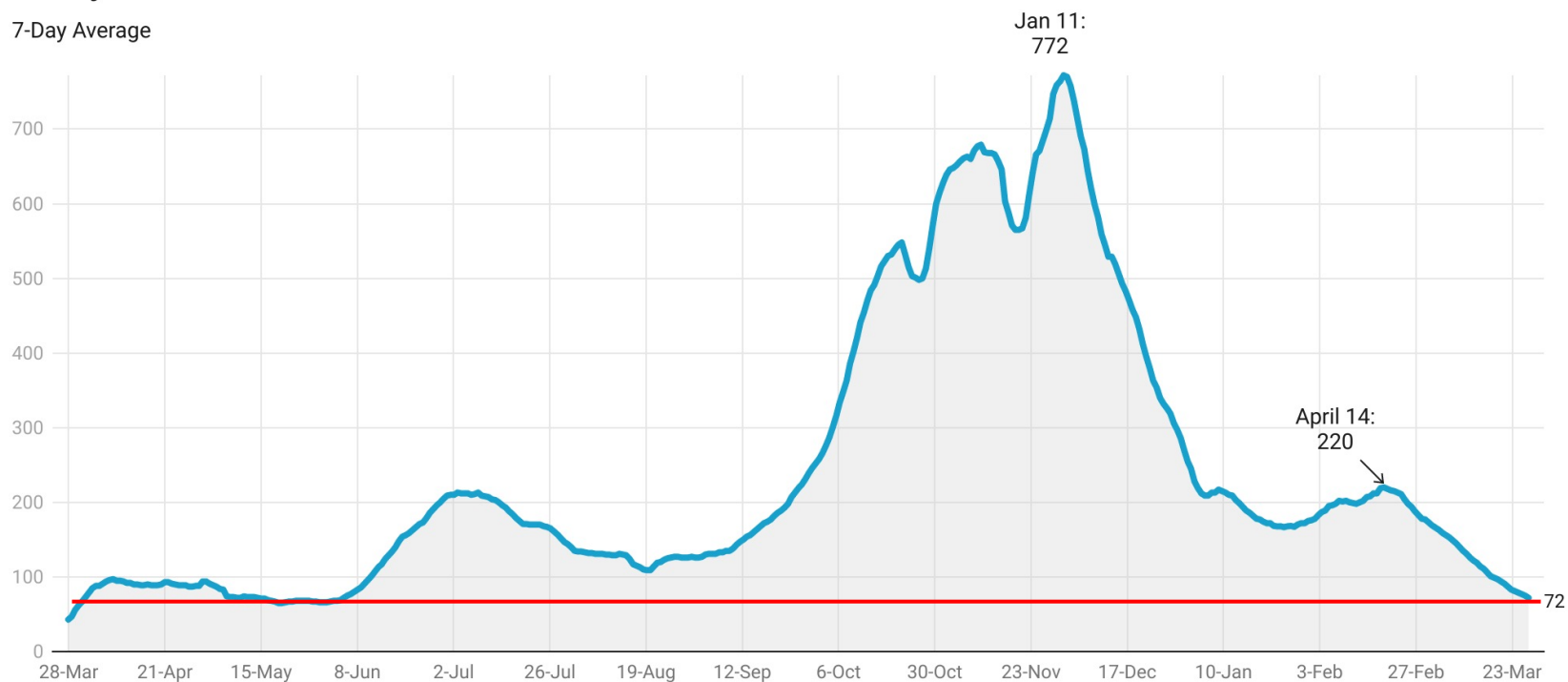


Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 “Vital Signs”

Estimated Daily Infections & New Case Rates

Estimated infections have dropped to the lowest level since March 11, 2020 – two days before the national emergency was declared.

Estimated Daily Infections v. Detected Cases

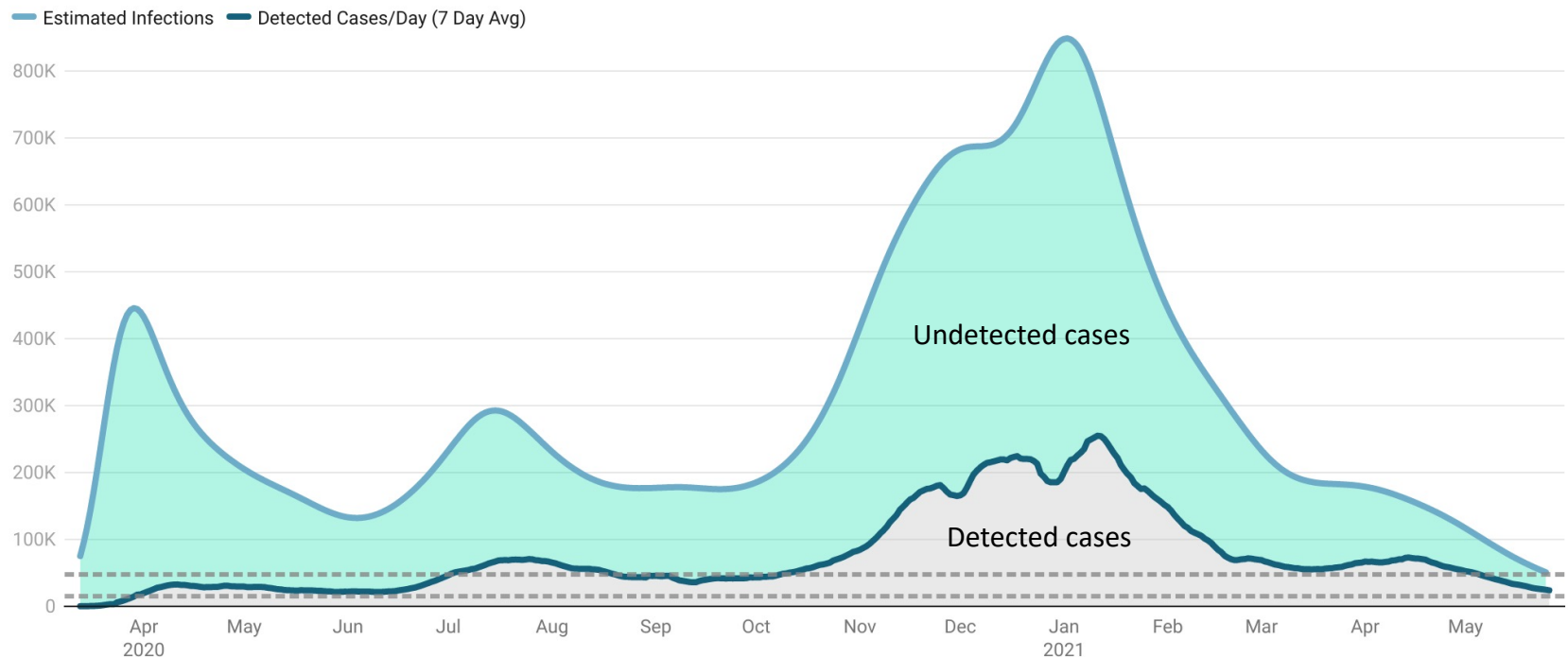


Chart: Health Industry Advisor LLC • Source: Yale School of Public Health • Created with Datawrapper

Covid-19 "Vital Signs"

Newly Detected Cases Per Day

*In the US, 7-day new case rate have been halved in the past three weeks.
Outside the U.S., new cases have increased each of the last two weeks.*

Newly Detected Cases

As of May 26

■ United States ■ Outside the US

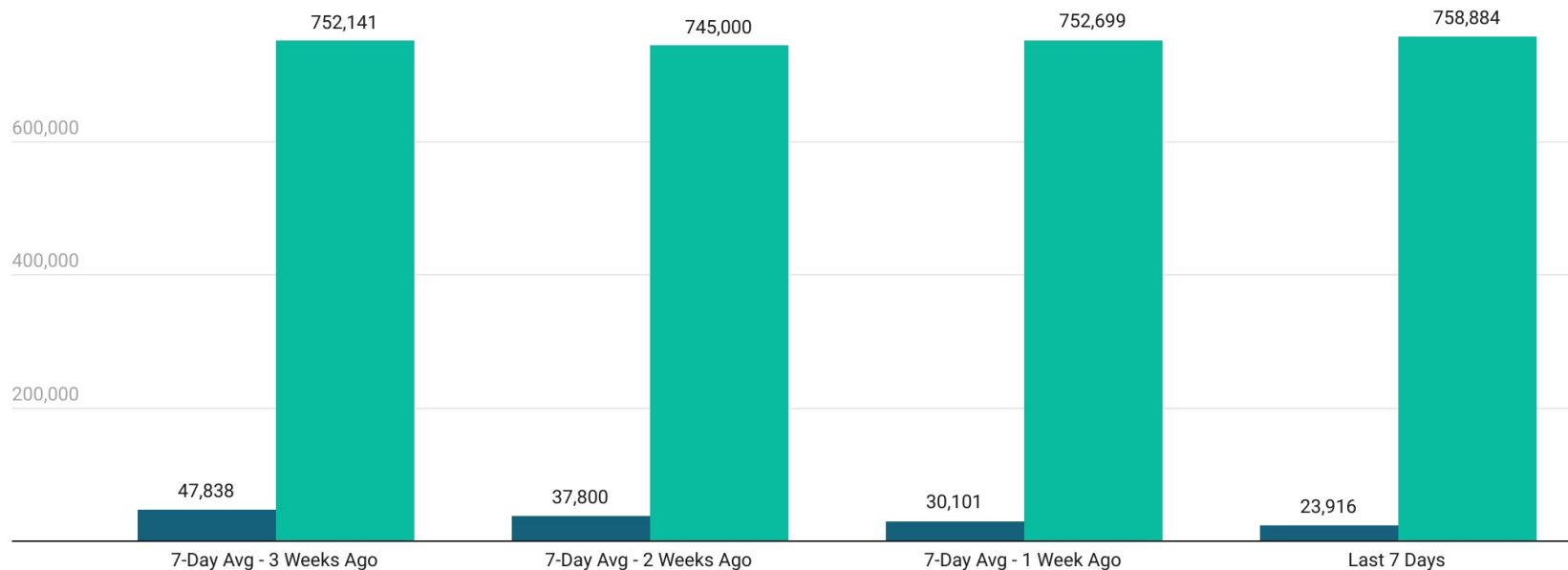


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

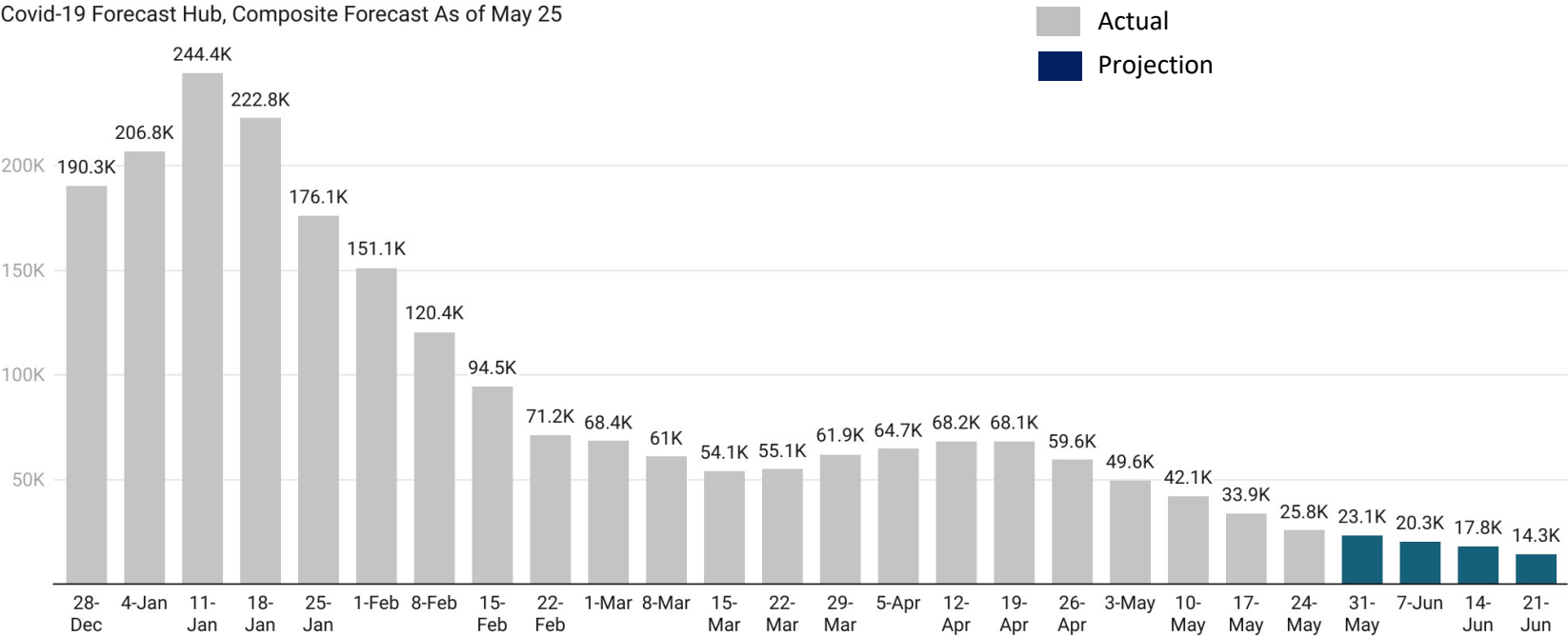


Covid-19 Cases: Ensemble Forecast

The most recent ensemble forecast projects that new daily cases decline 14% per week over the next four weeks.

Newly-Detected Cases Per Day

Covid-19 Forecast Hub, Composite Forecast As of May 25



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”

Deaths With Coronavirus

The U.S. is reporting fewer deaths with coronavirus (7-day average) than all but three days since March 2020.

Deaths With Coronavirus

7-Day Average, Through May 26



Chart: Health Industry Advisor LLC • Created with Datawrapper

Deaths Reported With Coronavirus

The 7-day death rate declined 11% week-over-week and 22% in the last three weeks.

Daily Deaths Reported With Coronavirus

As of May 26

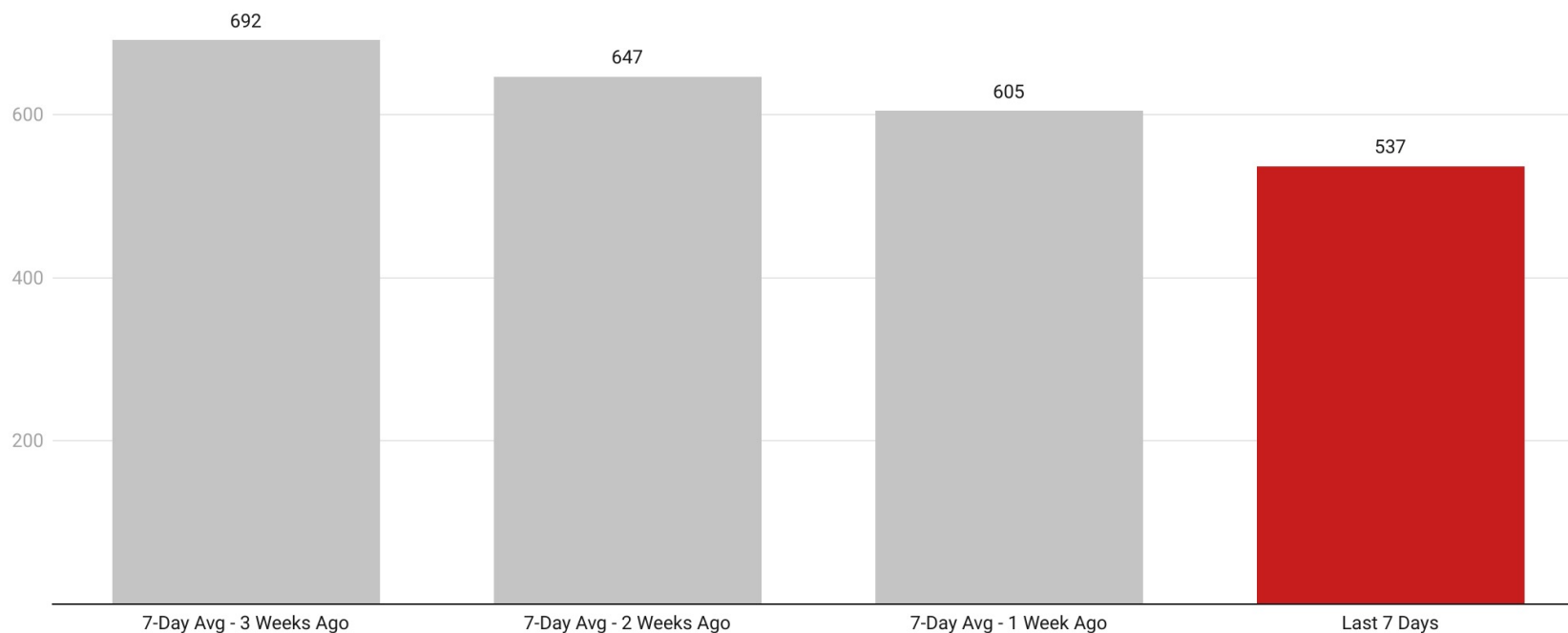


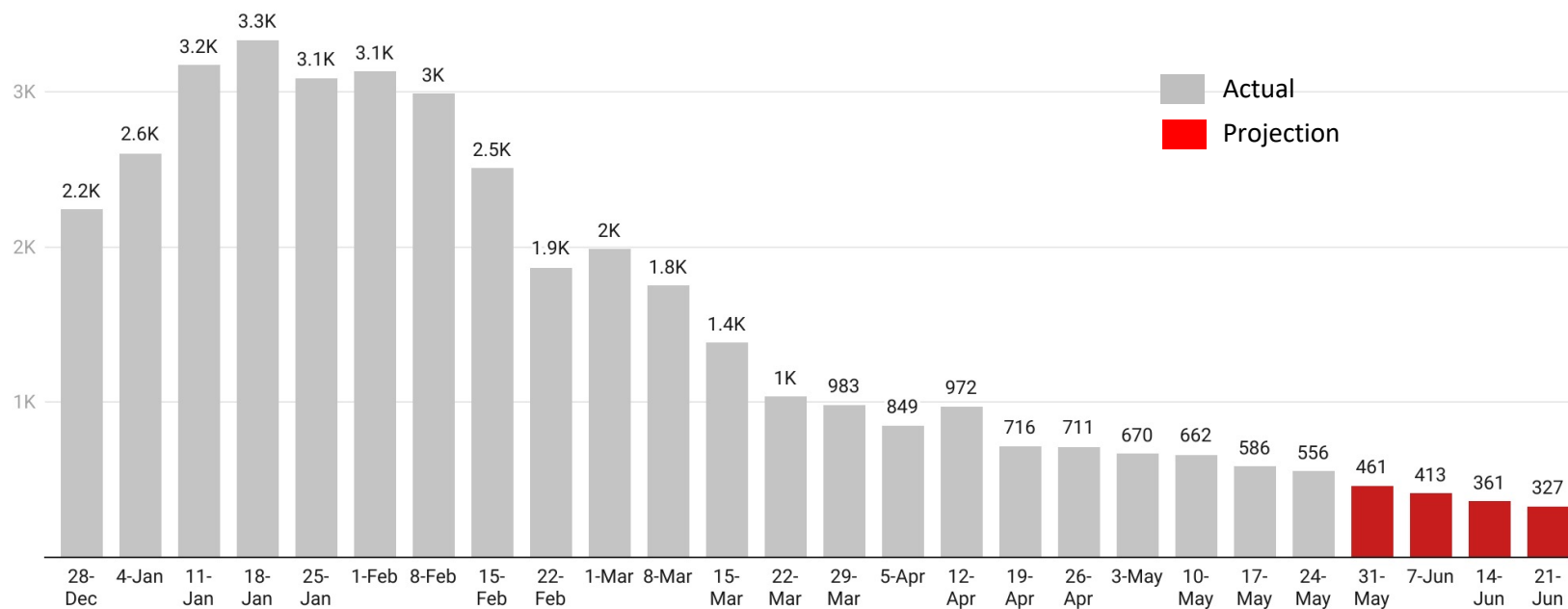
Chart: Health Industry Advisor LLC • Source: worldometer.info • Created with Datawrapper

Death Projections – Ensemble Forecast

The most recent ensemble forecast projects that deaths decline 12% per week over the next four weeks.

Newly-Reported Deaths Per Day

Covid-19 Forecast Hub, Composite Forecast As of May 25



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 Inpatient Census

Covid-19 inpatient census has declined 11% in the last week and 37% in the last four weeks.

Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks

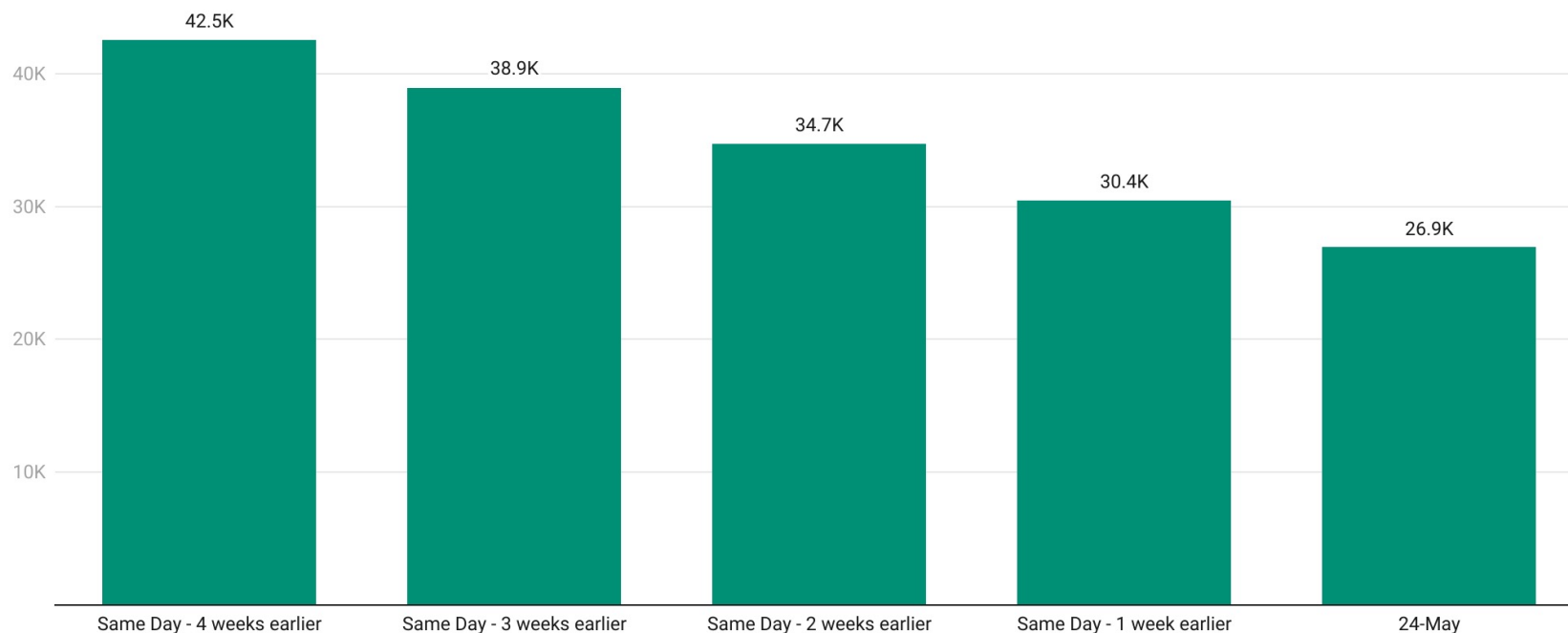


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Inpatient Census

Covid-19 inpatient census has dropped to levels unseen since these data were reported back in July 2020.

Covid-19 Inpatient Census

Through May 24

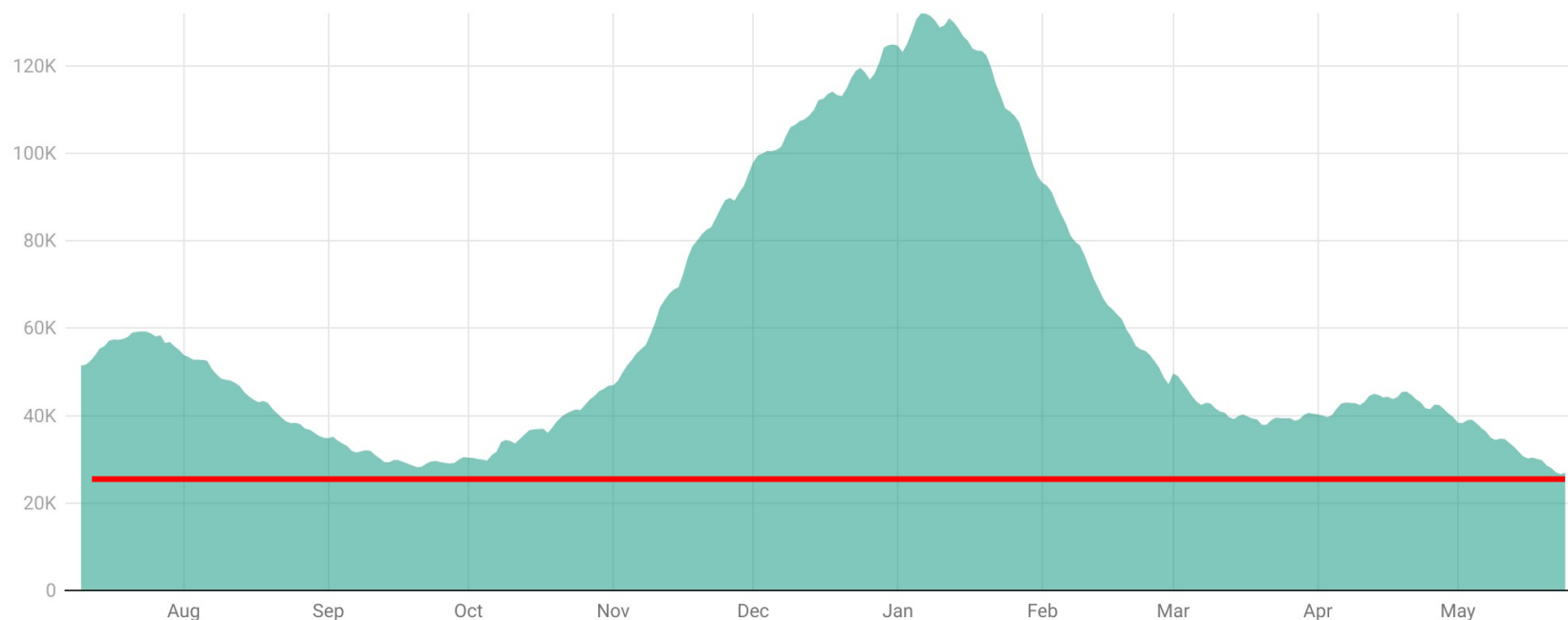


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Covid-19 "Vital Signs"

Projected Covid-19 Admission Trends

For the U.S. overall, projected Covid-19 admissions drop 53% in the next three weeks. Several states – Connecticut, New Jersey, and South Dakota – are expected to see 70+% declines.

% Change in Hospital Admissions

Week Ending June 21 v. Week Ending May 31

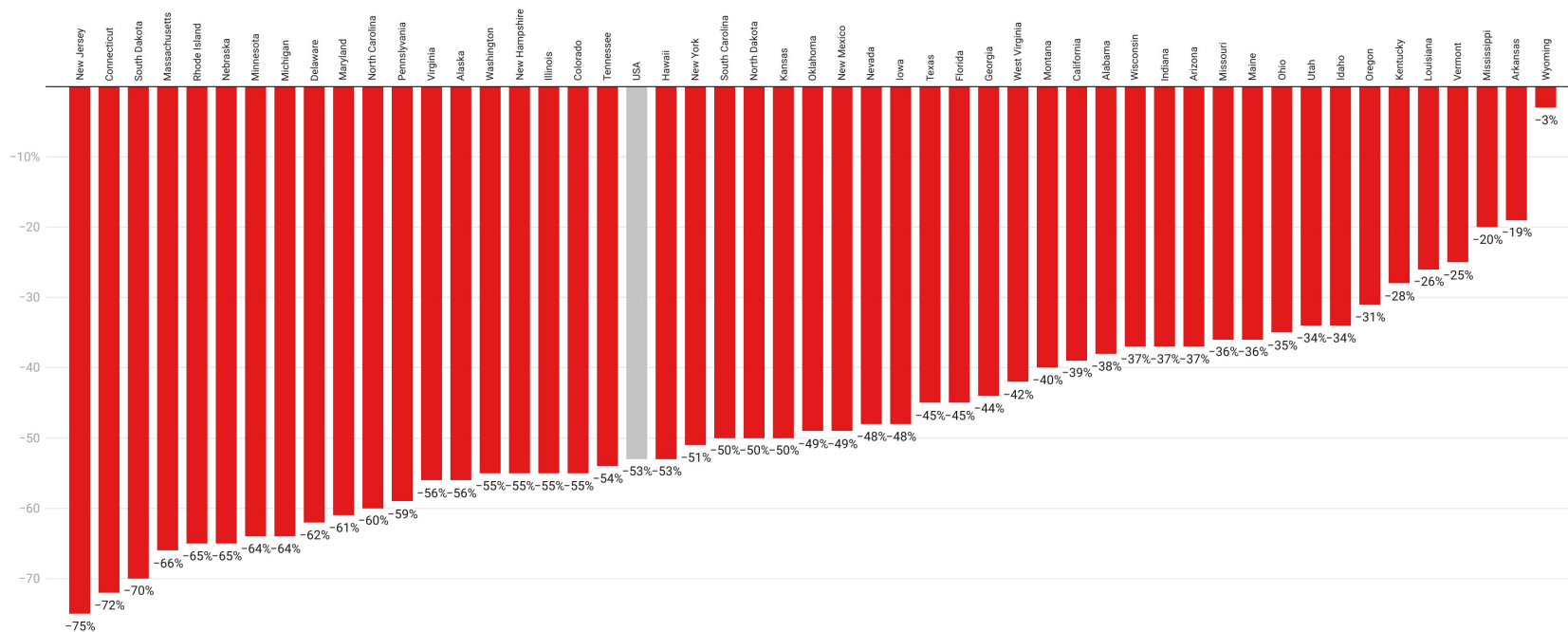
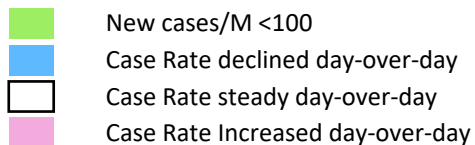
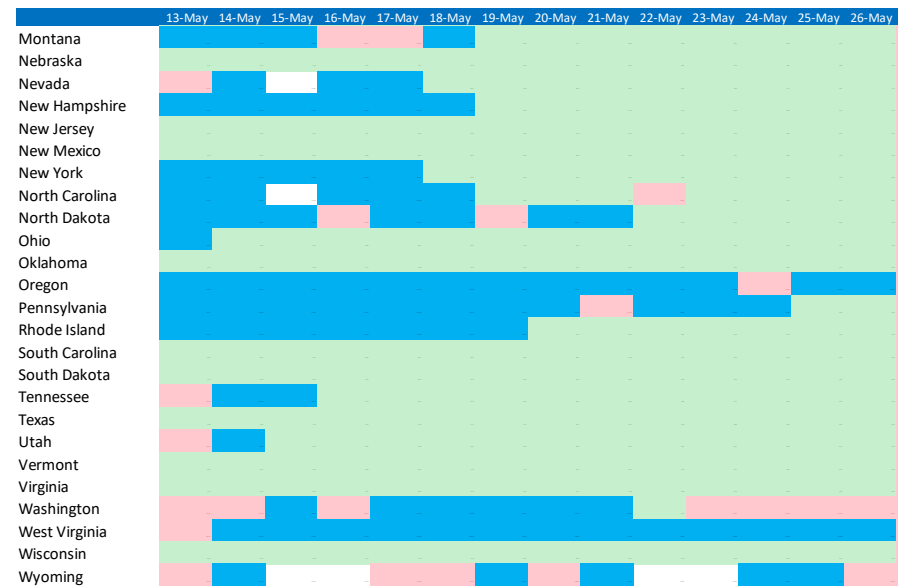
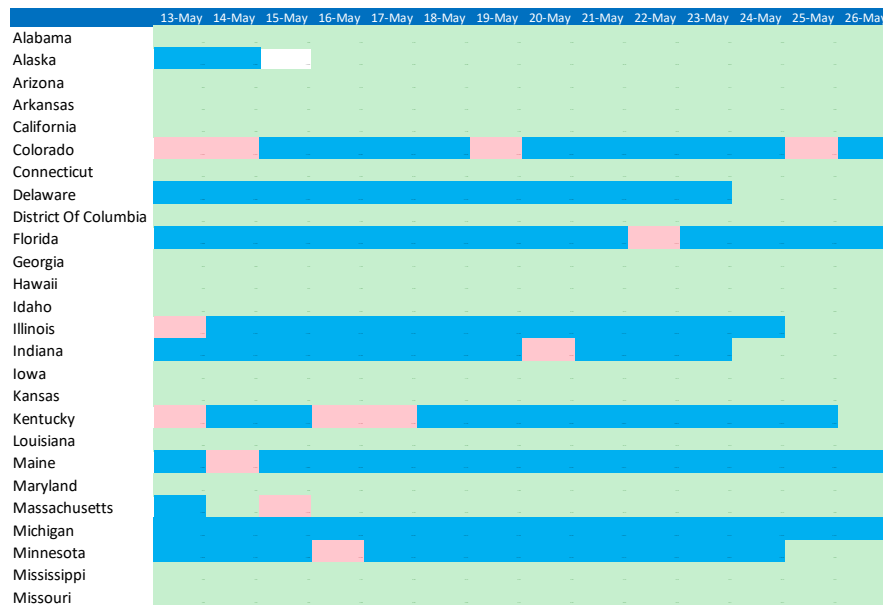


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper



Trends in New Case Rates

Only nine states have rates <100 per million per day. Yet, eight of these states report that rates are declining. Washington is the sole exception.



Covid-19 "Vital Signs"

New Cases / Million

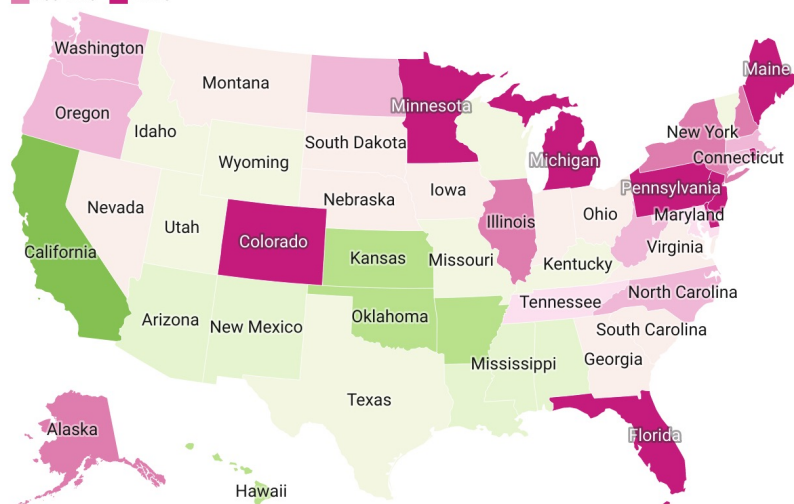
New daily case rates have plummeted across the country in the past month.

April 28

May 26

New Cases / Million

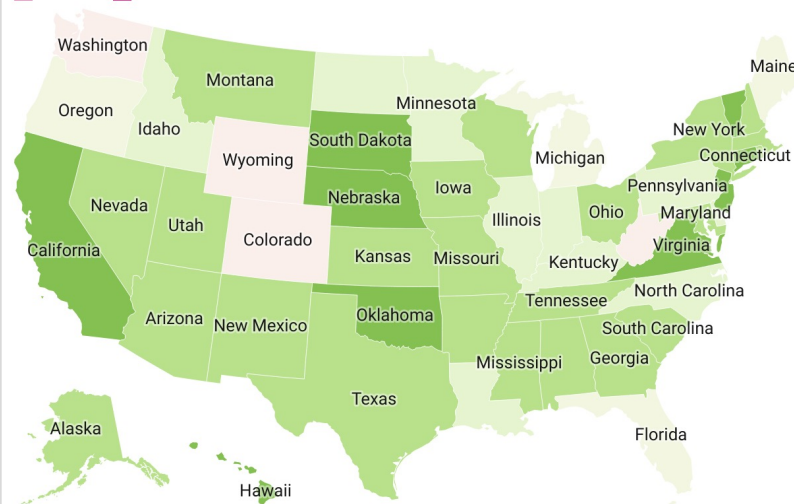
7-Day Moving Average, As of April 28



Map: Health Industry Advisor LLC • Created with Datawrapper

New Cases / Million

7-Day Moving Average, As of May 26



Map: Health Industry Advisor LLC • 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 dropped below 50 per million per day in ten states, including California and New Jersey. Further, rates declined week-over-week in every state except Alabama, Missouri, Oklahoma, Texas, Washington, and Wyoming.

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	Green	Red	Orange	Blue	Black
Alaska	Green	Blue	Blue	Blue	Blue
Arizona	Green	Green	Orange	Blue	Orange
Arkansas	Green	Green	Orange	Blue	Orange
California	Blue	Green	Blue	Blue	Red
Colorado	Green	Blue	Yellow	Green	Yellow
Connecticut	Green	Blue	Blue	Blue	Green
Delaware	Green	Blue	Yellow	Green	Green
District Of Columbia	Blue	Blue	Blue	Green	Red
Florida	Green	Blue	Yellow	Green	Yellow
Georgia	Blue	Blue	Blue	Blue	Black
Hawaii	Blue	Blue	Blue	Blue	Green
Idaho	Green	Green	Orange	Blue	Yellow
Illinois	Green	Blue	Yellow	Blue	Yellow
Indiana	Green	Blue	Orange	Blue	Green
Iowa	Green	Blue	Yellow	Blue	Yellow
Kansas	Green	Blue	Yellow	Blue	Yellow
Kentucky	Green	Blue	Orange	Blue	Orange
Louisiana	Green	Blue	Orange	Blue	Orange
Maine	Green	Blue	Yellow	Green	Green
Maryland	Blue	Blue	Blue	Blue	Red
Massachusetts	Green	Green	Blue	Blue	Yellow
Michigan	Green	Blue	Yellow	Green	Orange
Minnesota	Green	Blue	Green	Blue	Green
Mississippi	Green	Blue	Orange	Blue	Red
Missouri	Green	Yellow	Orange	Blue	Yellow

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	Green	Blue	Yellow	Blue	Green
Nebraska	Green	Blue	Orange	Blue	Blue
Nevada	Green	Blue	Orange	Blue	Green
New Hampshire	Green	Blue	Green	Blue	Blue
New Jersey	Blue	Blue	Blue	Blue	Black
New Mexico	Green	Blue	Yellow	Blue	Black
New York	Green	Blue	Blue	Green	Yellow
North Carolina	Green	Blue	Orange	Blue	Green
North Dakota	Green	Blue	Yellow	Blue	Blue
Ohio	Green	Green	Yellow	Blue	Yellow
Oklahoma	Blue	Yellow	Orange	Blue	Black
Oregon	Green	Blue	Orange	Green	Green
Pennsylvania	Green	Blue	Yellow	Green	Yellow
Rhode Island	Green	Blue	Blue	Blue	Blue
South Carolina	Green	Blue	Orange	Blue	Yellow
South Dakota	Blue	Blue	Yellow	Blue	Red
Tennessee	Green	Orange	Orange	Blue	Orange
Texas	Green	Orange	Yellow	Blue	Orange
Utah	Green	Blue	Yellow	Blue	Green
Vermont	Blue	Blue	Yellow	Blue	Red
Virginia	Green	Yellow	Orange	Green	Green
Washington	Green	Yellow	Orange	Green	Green
West Virginia	Green	Blue	Orange	Blue	Green
Wisconsin	Green	Red	Orange	Blue	Yellow
Wyoming	Green	Red	Orange	Blue	Yellow

Covid-19 "Vital Signs"

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	11.1%	2,272	1,179	6.6%	57	21	7%	48
Alaska	9.2%	495	6,424	2.0%	69	93	2%	-
Arizona	12.1%	2,415	1,758	4.8%	73	24	10%	17
Arkansas	11.3%	1,931	850	3.4%	61	14	4%	17
California	9.6%	1,595	4,107	1.1%	30	136	5%	21
Colorado	9.4%	1,162	3,649	5.0%	142	26	12%	11
Connecticut	9.7%	2,308	5,638	1.6%	41	136	10%	9
Delaware	11.1%	1,705	4,295	3.7%	89	48	12%	8
District Of Columbia	6.9%	1,603	6,512	1.4%	38	171	11%	24
Florida	10.8%	1,706	3,033	6.3%	110	28	13%	15
Georgia	10.6%	1,953	1,357	4.4%	54	25	13%	26
Hawaii	2.5%	350	3,753	1.5%	39	96	6%	7
Idaho	10.7%	1,165	1,525	4.4%	82	19	6%	12
Illinois	10.9%	1,977	4,236	3.2%	91	47	10%	14
Indiana	11.0%	2,016	1,997	5.6%	94	21	9%	8
Iowa	12.7%	1,916	1,715	4.9%	53	32	5%	12
Kansas	10.8%	1,739	1,451	3.7%	55	26	3%	11

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	7-Day Deaths /1000 New Cases , 14-Day Lag
Kentucky	10.2%	1,510	1,979	4.2%	97	21	6%	18
Louisiana	10.1%	2,272	1,949	3.0%	86	23	3%	17
Maine	5.0%	614	4,404	2.5%	104	42	11%	10
Maryland	7.6%	1,495	4,133	4.0%	50	83	16%	22
Massachusetts	10.2%	2,567	7,816	1.4%	67	117	5%	11
Michigan	9.9%	2,027	3,039	7.9%	109	28	14%	17
Minnesota	10.6%	1,325	5,538	5.4%	94	59	9%	9
Mississippi	10.7%	2,454	565	4.3%	56	10	4%	23
Missouri	9.7%	1,568	1,727	4.3%	71	24	8%	11
Montana	10.4%	1,504	1,590	4.8%	62	26	4%	6
Nebraska	11.5%	1,163	1,205	7.5%	38	31	3%	4
Nevada	10.5%	1,808	1,759	4.9%	71	25	12%	10
New Hampshire	7.2%	990	3,492	2.9%	52	68	5%	5
New Jersey	11.4%	2,945	3,759	3.6%	45	84	9%	28
New Mexico	9.7%	2,029	2,312	2.9%	74	31	8%	91
New York	11.0%	2,751	6,163	2.1%	69	90	15%	11
North Carolina	9.5%	1,242	2,029	5.2%	82	25	10%	10

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	7-Day Deaths / 1000 New Cases, 14-Day Lag
North Dakota	14.4%	1,980	2,060	2.6%	78	26	6%	4
Ohio	9.4%	1,690	2,055	3.7%	74	28	8%	12
Oklahoma	11.4%	1,843	701	6.0%	37	19	4%	292
Oregon	4.7%	626	2,430	5.3%	102	24	12%	8
Pennsylvania	9.4%	2,127	2,597	5.5%	95	27	10%	13
Rhode Island	14.3%	2,556	7,412	1.4%	65	114	15%	5
South Carolina	11.5%	1,886	1,544	4.1%	66	23	6%	11
South Dakota	14.0%	2,265	1,094	7.9%	40	27	2%	22
Tennessee	12.6%	1,816	1,111	5.8%	64	17	8%	15
Texas	10.2%	1,779	1,543	4.4%	60	26	9%	17
Utah	12.6%	715	1,897	4.3%	74	26	5%	7
Vermont	3.9%	409	7,499	1.7%	40	188	2%	-
Virginia	7.9%	1,305	1,496	4.2%	46	32	8%	21
Washington	5.7%	761	2,934	4.3%	136	22	12%	8
West Virginia	9.0%	1,560	2,604	6.6%	130	20	8%	9
Wisconsin	10.5%	1,203	2,610	3.4%	53	49	5%	8
Wyoming	10.4%	1,242	1,867	3.8%	144	13	5%	13

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>