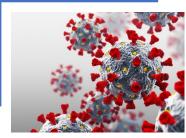


"Strategic Advice in an Era of Unprecedented Change"









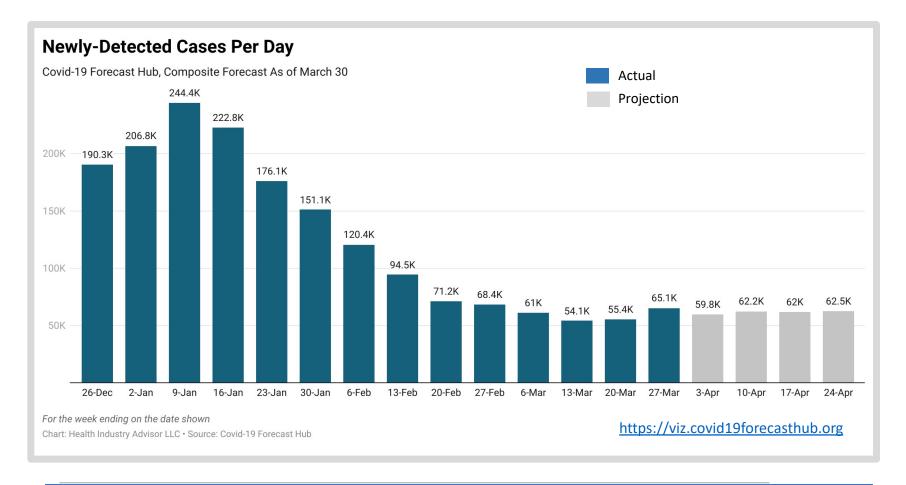
Covid-19 "Vital Signs"

Issue # 310 March 31, 2021



Covid-19 Cases: Ensemble Forecast

The most recent ensemble forecast projects that new daily cases be essentially flat over the next four weeks.

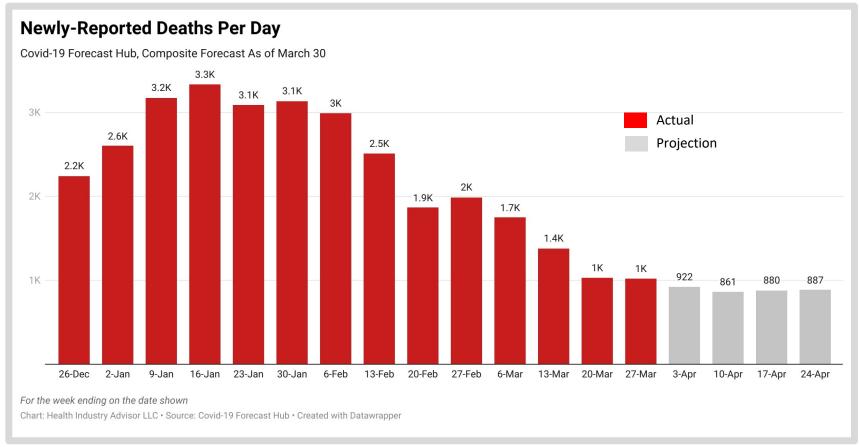






Death Projections – Ensemble Forecast

The most recent ensemble forecast projects that deaths will drop g below 1,000 daily this week, then remain fairly level for the next fee weeks.

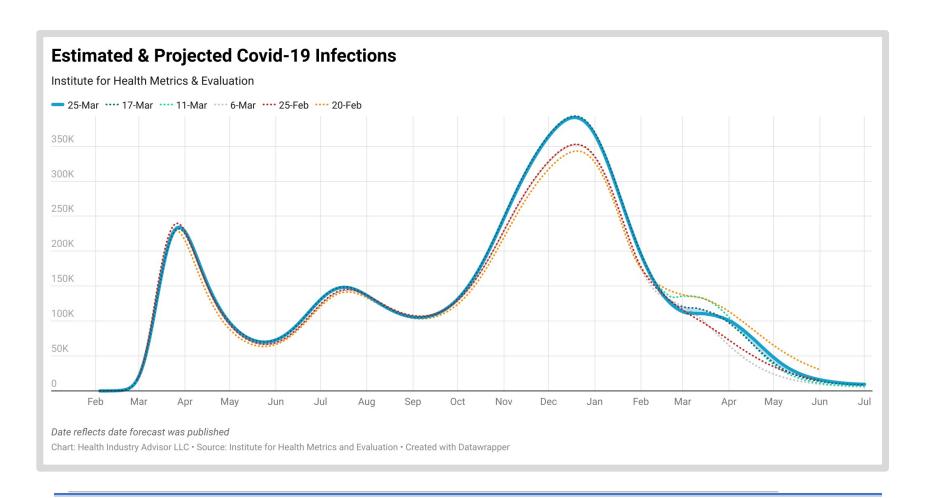


https://viz.covid19forecasthub.org



Estimated Infections IHME Projection

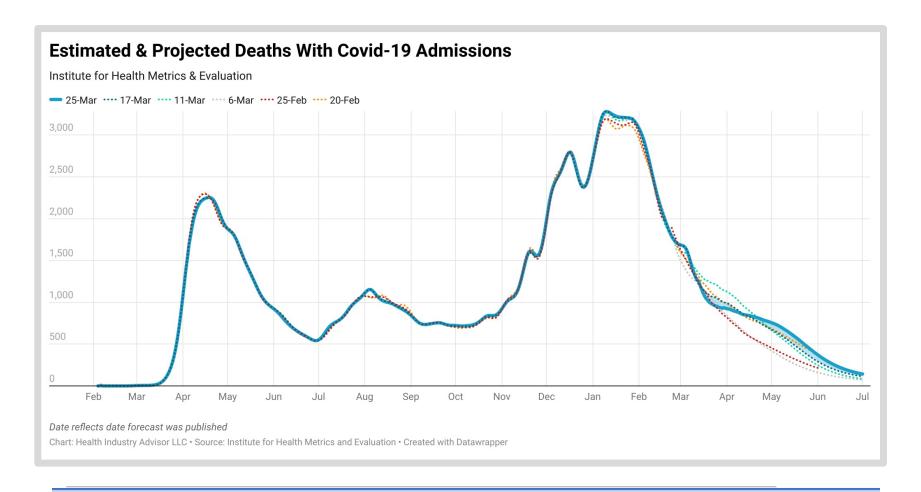
Daily infections drop by half from the end of March to the end of April and by two-thirds from the end of May to the end of June. By April 20th, projected infections fall lower than at any time since the first week in March 2020.





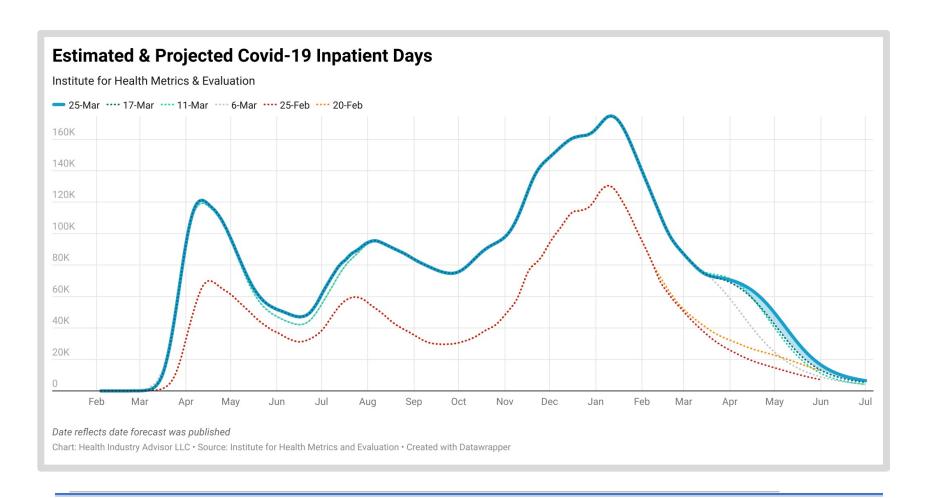
Covid-19 Inpatient Admissions – IHME Projections

Projected Covid-19 admissions decline an average of 1.6% daily in April and 3.7% in May. By May 2^{nd} , projected admissions fall lower than at any time since the pandemic surged in mid-March 2020.



Covid-19 Inpatients – IHME Projections

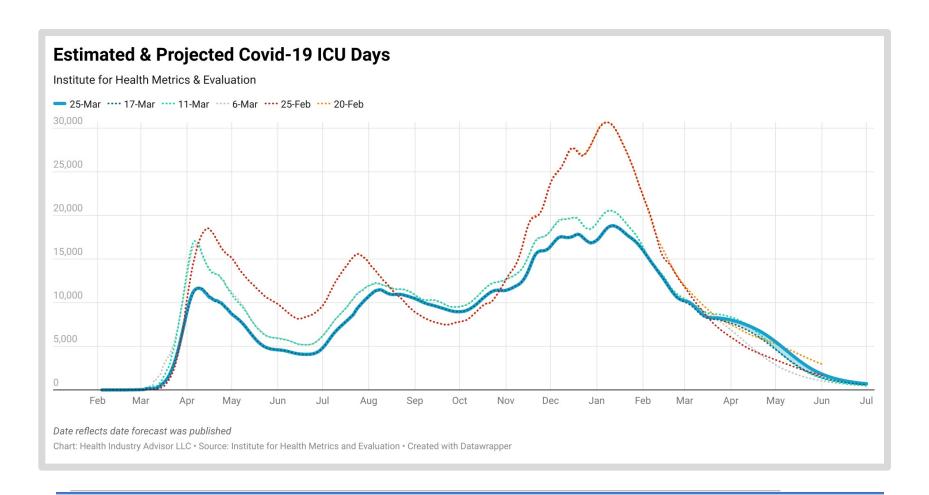
Projected Covid-19 inpatients drops in half by mid-May and in half again by the end of May. By May 4th, projected inpatient census falls lower than at any time since the last week in March 2020.





Covid-19 ICU Days – IHME Projections

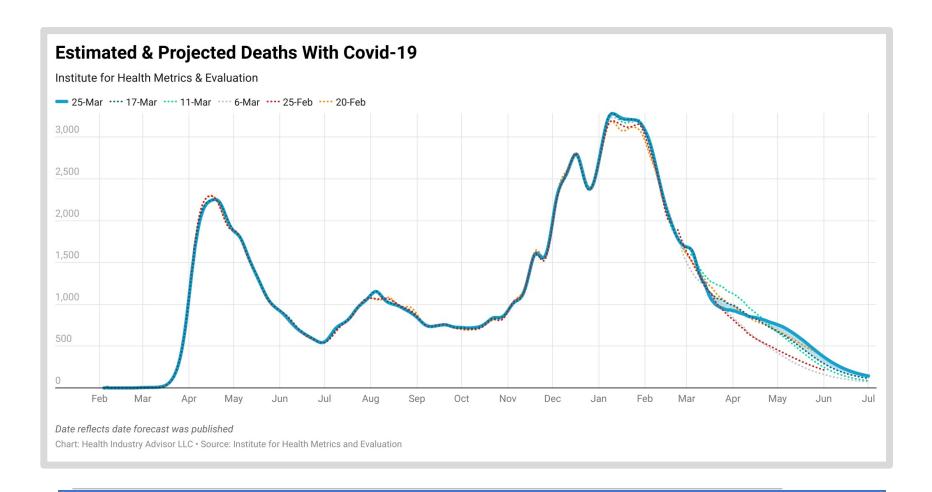
By May 12th, projected ICU census falls lower than at any time since the last week in March 2020.





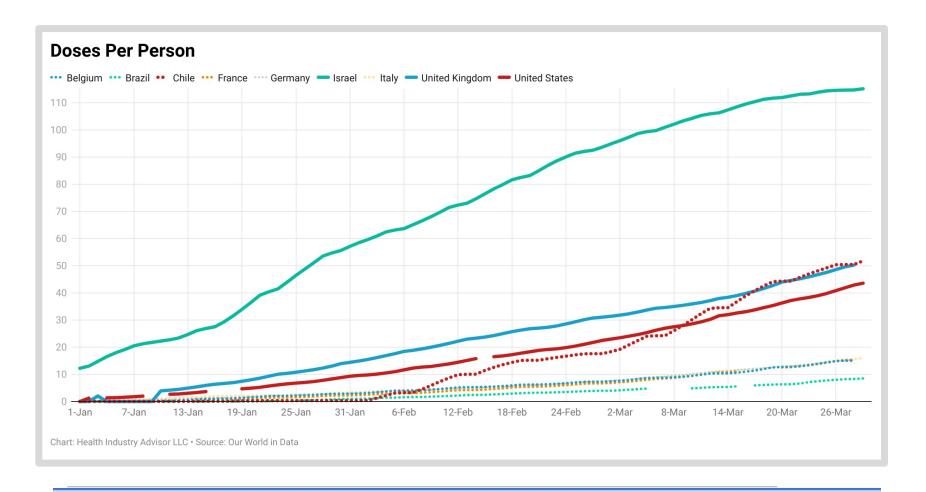
Deaths With Covid-19: IHME Projection

By May 20th, projected Covid-19 deaths fall lower than at any time since the last week in March 2020.



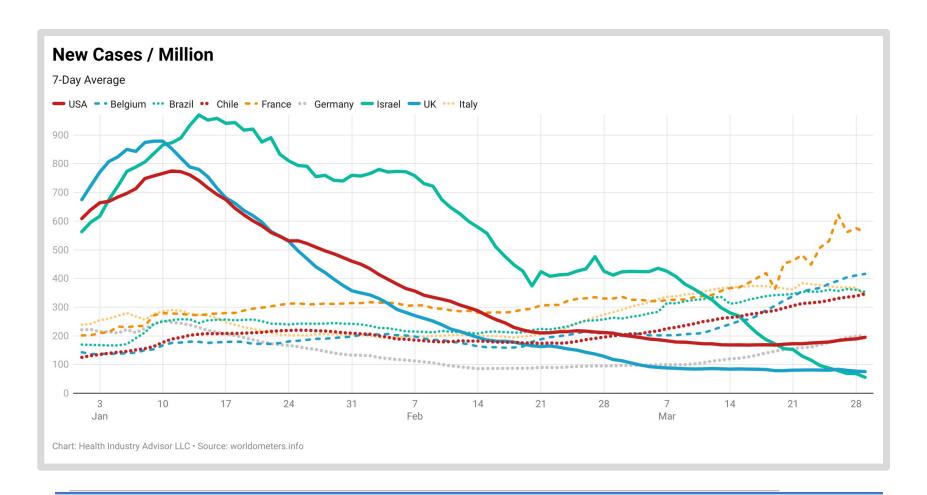
Doses Per Person

Israel ramped its vaccination process early and has administered more than 1 dose for every resident. The United Kingdom and the United States more slowly than Israel but, much faster than most countries. Chile has accelerated its pace over the past month.



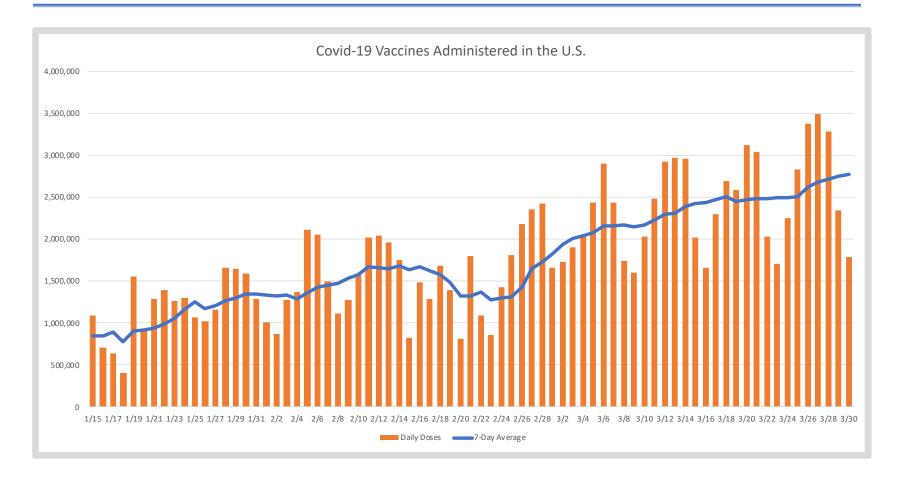
New Cases Per Million

Israel, the United Kingdom, and the United States each suffered staggering case rates early in January, followed by rapid declines through at least February. Many other European and South American countries avoided the early-January surge but are experiencing surging cases lately.



Pace of Vaccinations

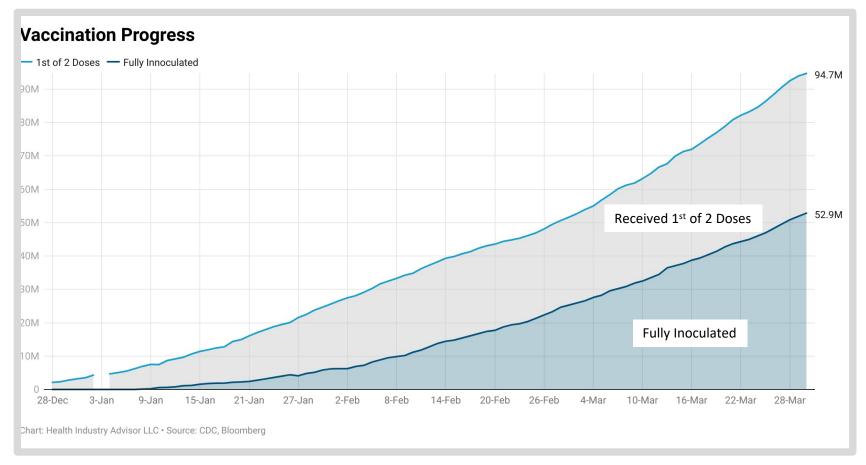
The vaccination pace accelerated over the past week. As of yesterday, the U.S. is vaccinating an average of 2.8 million people daily (7-day average). Expect this to continue, as sufficient new doses were distributed this week to vaccinate more than 3.6 million daily.





Vaccine Tracking

To date, the US has administered 148 million doses, with 53 million people fully inoculated – nearly 21% of the adult population. Another 42 million people have received the first of two required doses.



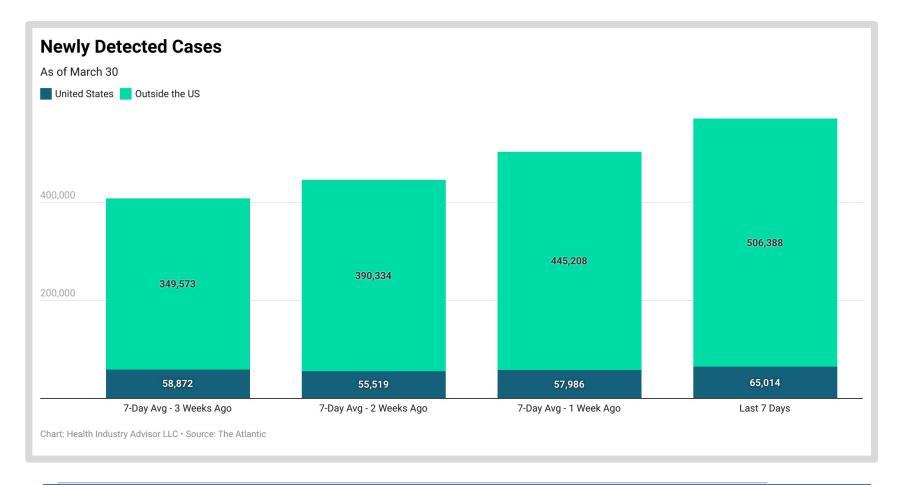
Vaccine data from: Centers for Disease Control and Prevention and Bloomberg Vaccine Tracker





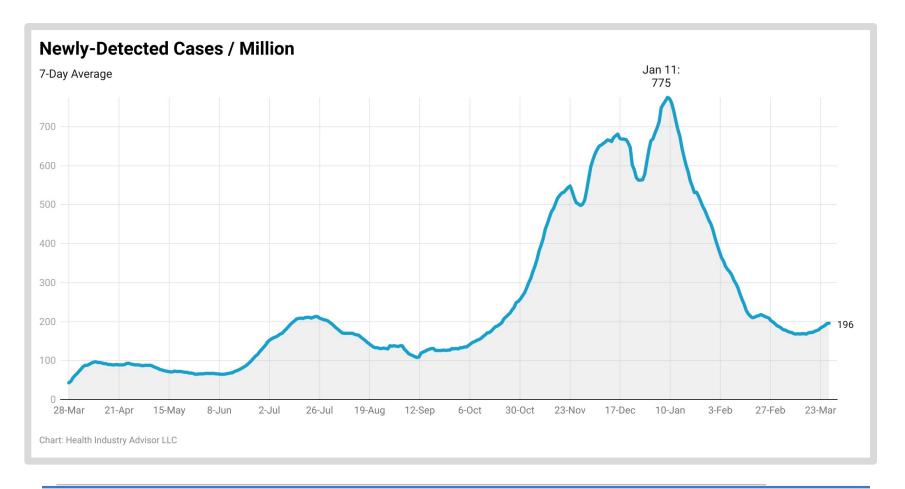
Newly Detected Cases Per Day

In the US, 7-day new case rates increased 12% week-over-week (10% relative to three weeks ago). Outside the U.S., cases increased 14% week-over-week and more than 40% over the last three weeks.





Newly Detected Cases / Million - US *New case rates in the United States rose over the past week but thus far* remain lower than during November through February and lower than the late-July peak.







Test-Positivity Rate

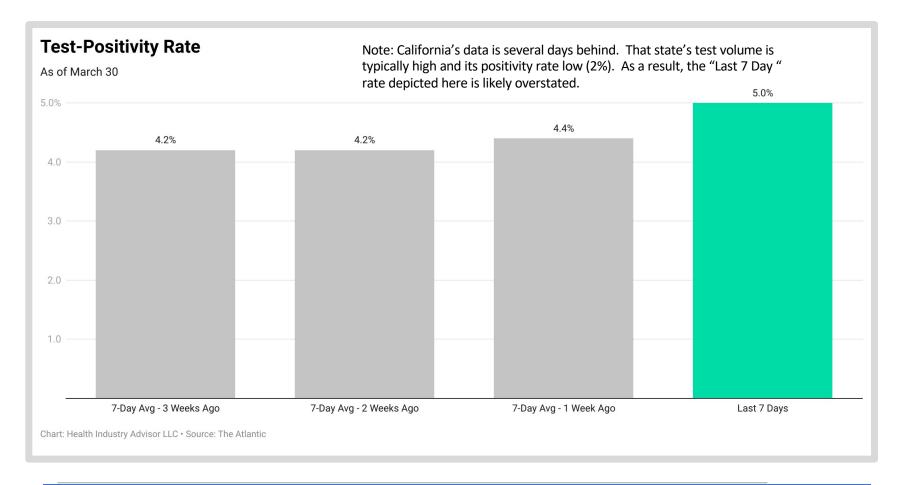
The 7-day test-positivity rate increase over the last several days. However, this rate remains strong by historical levels and below the target set by the World Health Organization.





Test-Positivity Rate

The test-positivity rate increased slightly last week yet remains at or below the suggested WHO target.

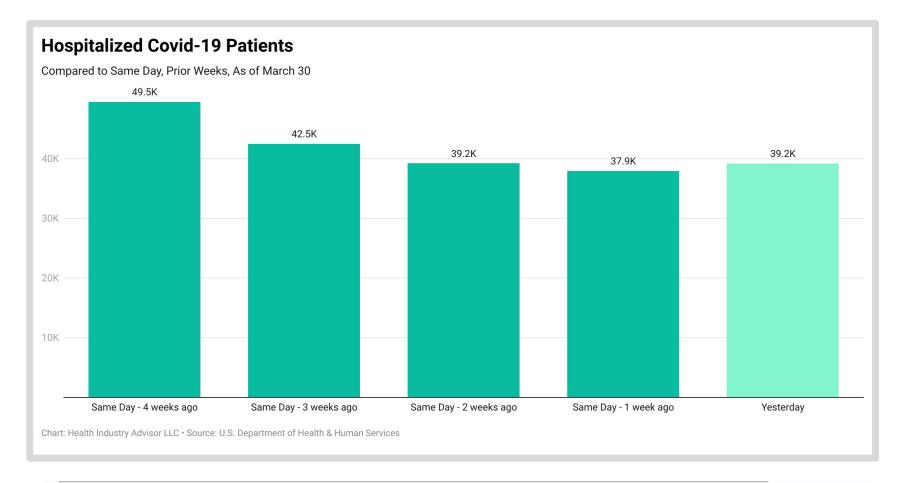






Covid-19 Inpatient Census

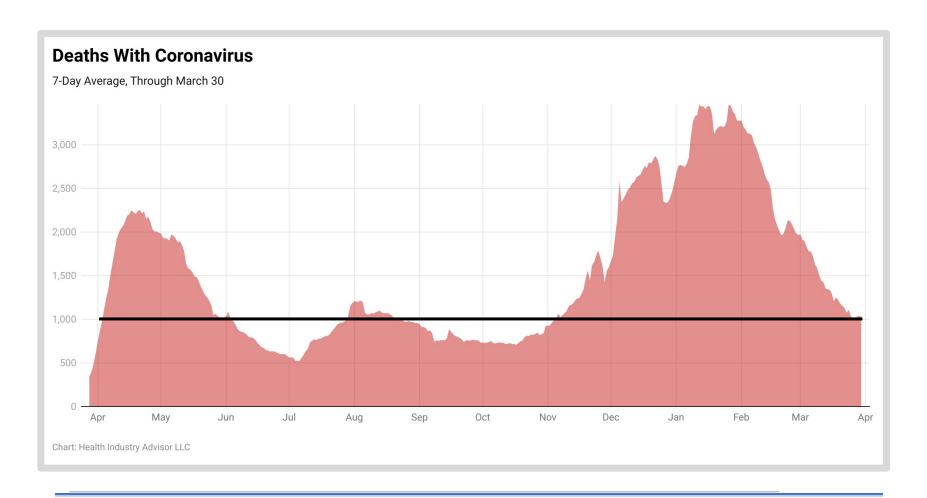
Covid-19 inpatient census was relatively stable over the past two weeks, despite the increase in new cases.





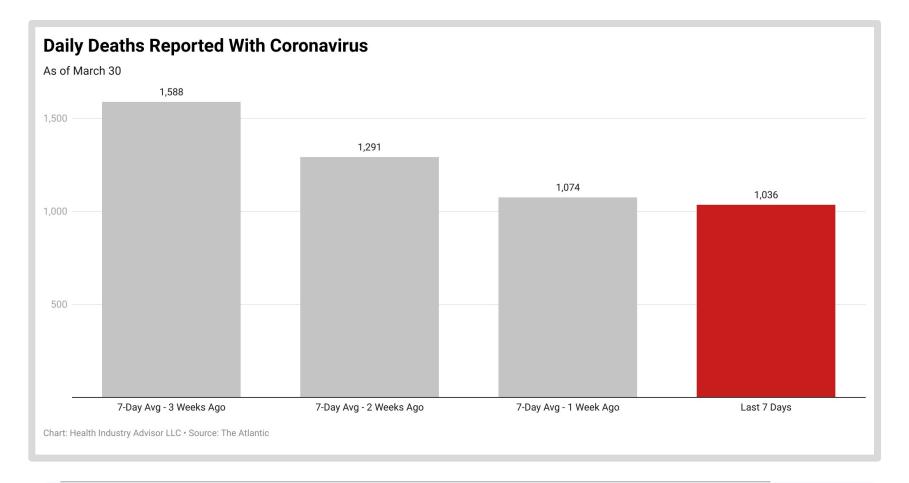
Deaths With Coronavirus

Deaths with coronavirus (7-day average) have declined by 70% since a peak in late January. This rate is lower than at any time in the last twenty weeks.





Deaths Reported With Coronavirus
The 7-day average death rate fell 4% from last week and 35% in three weeks. This 7-day rate has not been lower than 1,000 since the beginning of November.







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
- 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

