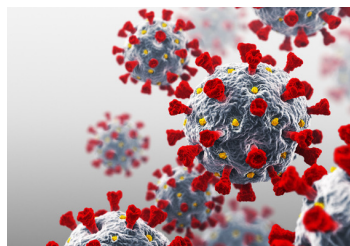


Covid-19 "Vital Signs"

Issue # 322

April 21, 2021



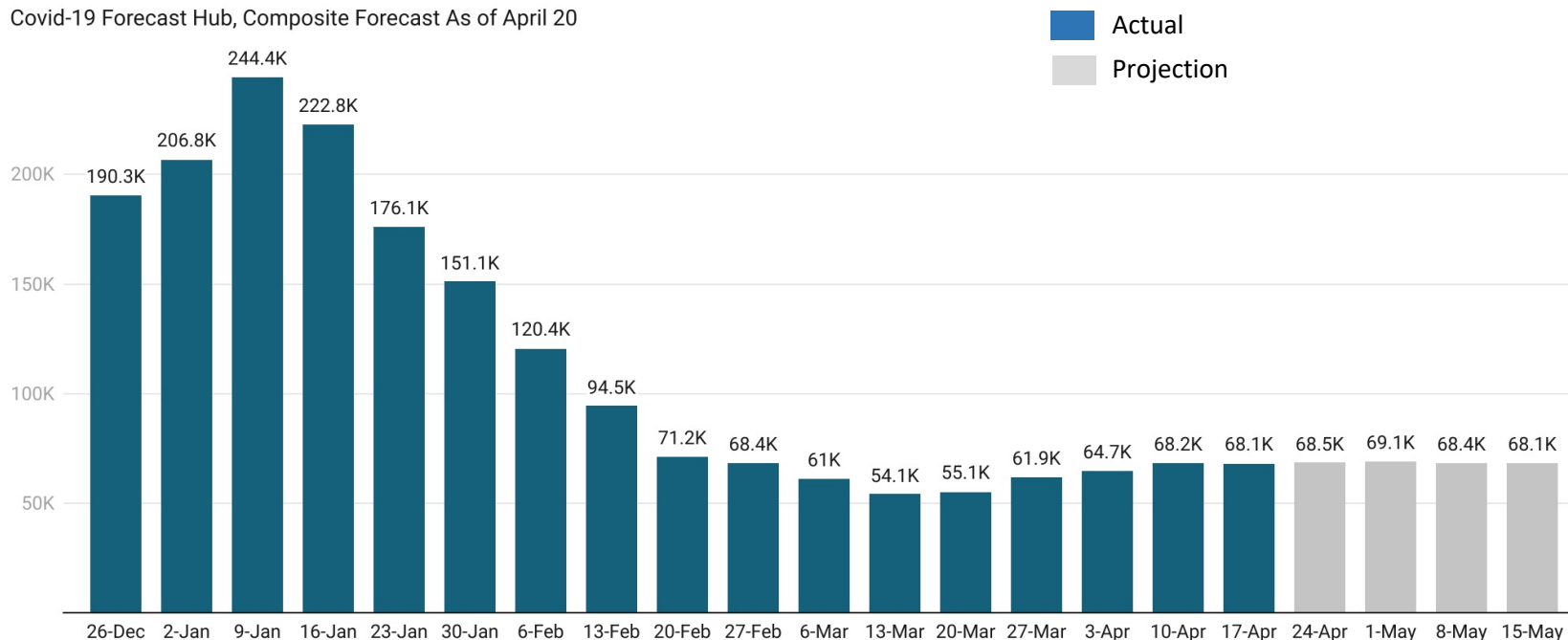
Covid-19 "Vital Signs"

Covid-19 Cases: Ensemble Forecast

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

Newly-Detected Cases Per Day

Covid-19 Forecast Hub, Composite Forecast As of April 20



For the week ending on the date shown

Chart: Health Industry Advisor LLC • Source: Covid-19 Forecast Hub • Created with Datawrapper

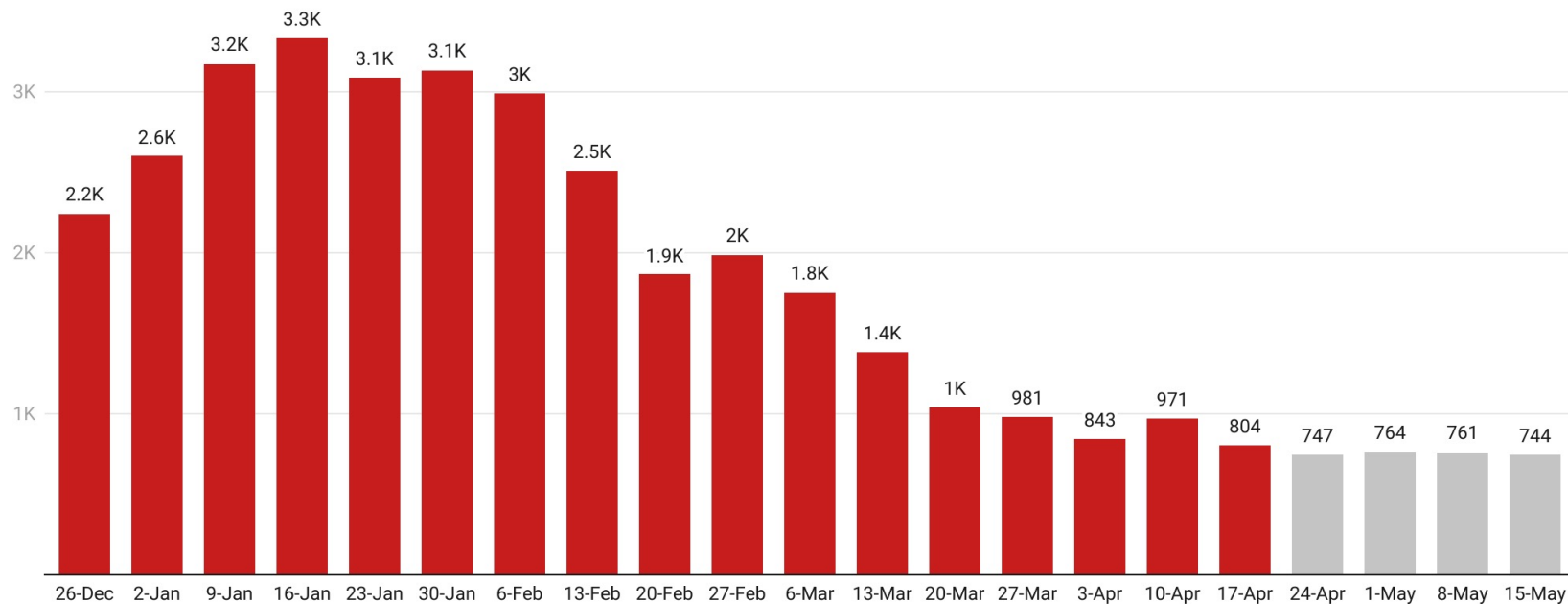
<https://viz.covid19forecasthub.org>

Death Projections – Ensemble Forecast

The most recent ensemble forecast projects that deaths drop this week and then will be relatively consistent week-over-week during the forecast period.

Newly-Reported Deaths Per Day

Covid-19 Forecast Hub, Composite Forecast As of April 20



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>

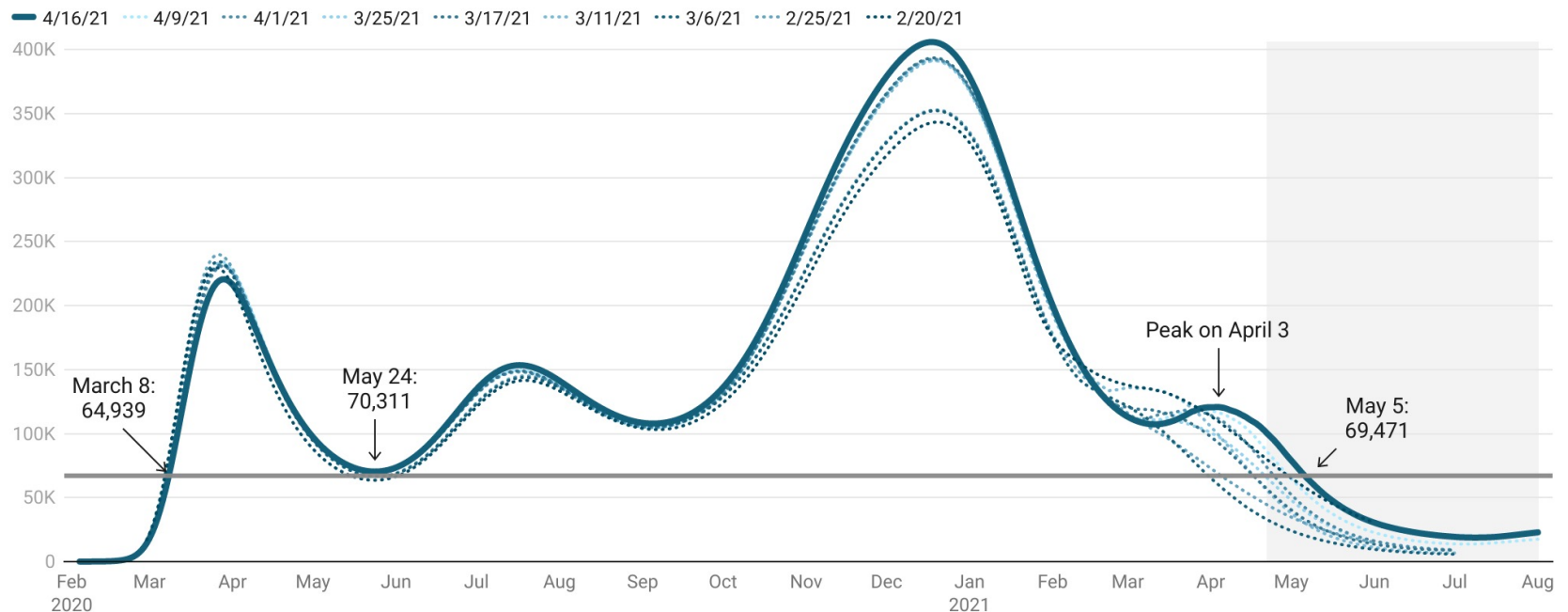
Covid-19 “Vital Signs”

Estimated Infections IHME Projection

The anticipated fourth wave crested earlier this month, according to the latest IHME model. Estimated daily infections decline an average of 1.7% daily in the next six weeks. By May 5, estimated new infections fall to the lowest point since March 8, 2020.

Estimated and Projected Infections

Institute For Health Metrics and Evaluation, Date Key Reflects Date that Forecast Was Published



Covid-19 "Vital Signs"

Covid-19 Inpatient Admissions – IHME Projections

Projected Covid-19 admissions peaked ten days ago according to the latest IHME model. Estimated admissions decline an average of 2.7% daily in the next six weeks. By May 19th, projected admissions drop lower than at any time since mid-March 2020.

Estimated & Projected Hospital Covid-19 Admissions

Institute for Health Metrics and Evaluation, Date Key Reflects the Date of the Forecast

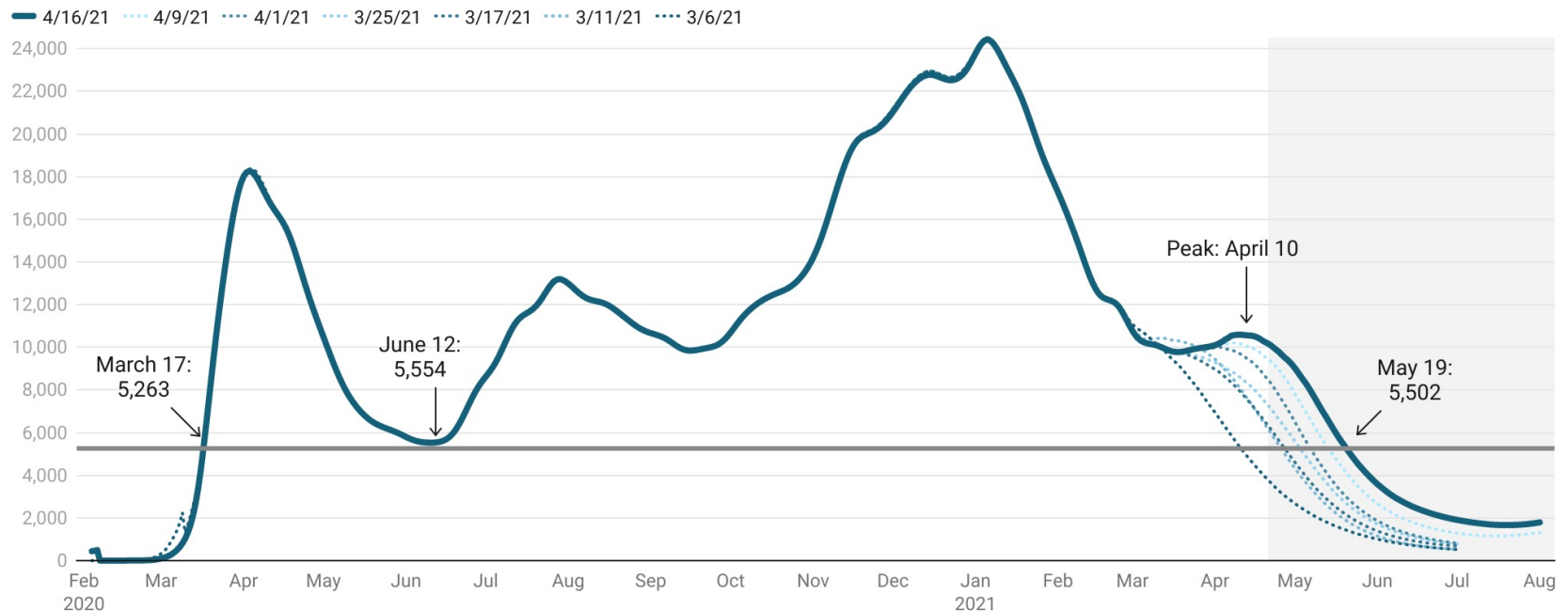


Chart: Health Industry Advisor LLC • Source: Institute for Health Metrics and Evaluation • Created with Datawrapper

Covid-19 "Vital Signs"

Deaths With Covid-19: IHME Projection

Projected deaths with Covid-19 increase until May 5th then decline for the remainder of the forecast period, according to the latest IHME model. By June 6th, projected Covid-19 deaths fall lower than at any time since the last week in March 2020. Estimated daily deaths decline an average of 2.9% daily in the next six weeks.

Estimated & Projected Deaths With Covid-19

Institute for Health Metrics and Evaluation, Date Key Reflects Date The Forecast Was Published

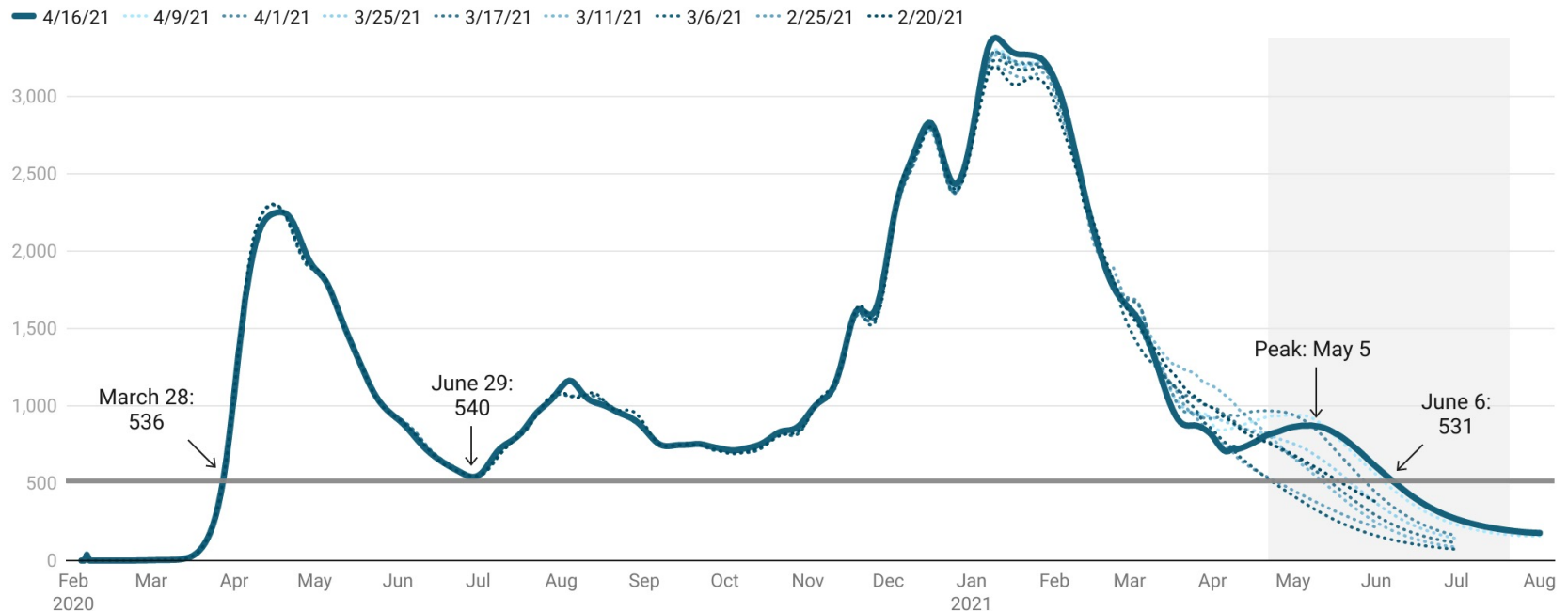


Chart: Health Industry Advisor LLC • Source: Institute for Health Metrics and Evaluation • Created with Datawrapper

Covid-19 "Vital Signs"

Vaccine Tracking

To date, the US has distributed 258 million doses and administered 213 million. 85.4 million people are fully inoculated – 32.7% of the adult population. Another 43 million people have received the first of two required doses.

Vaccination Progress

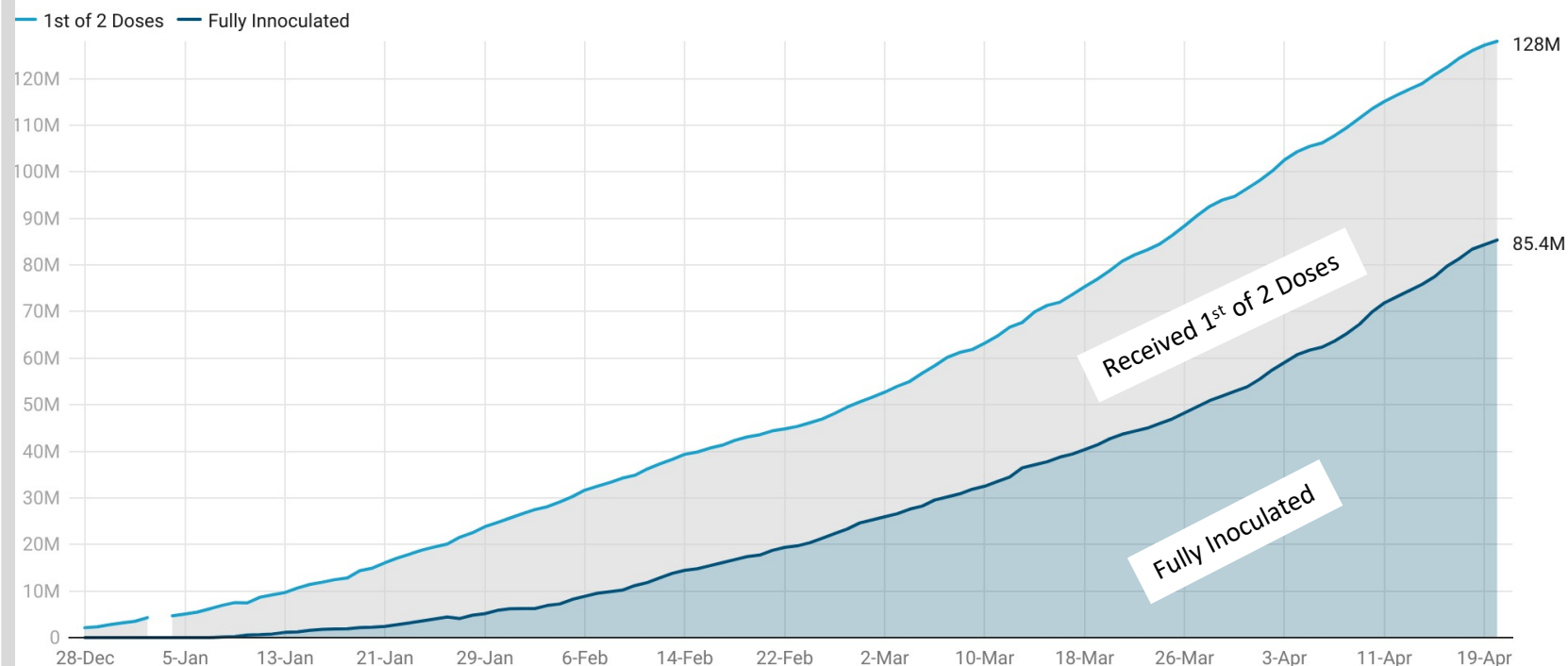


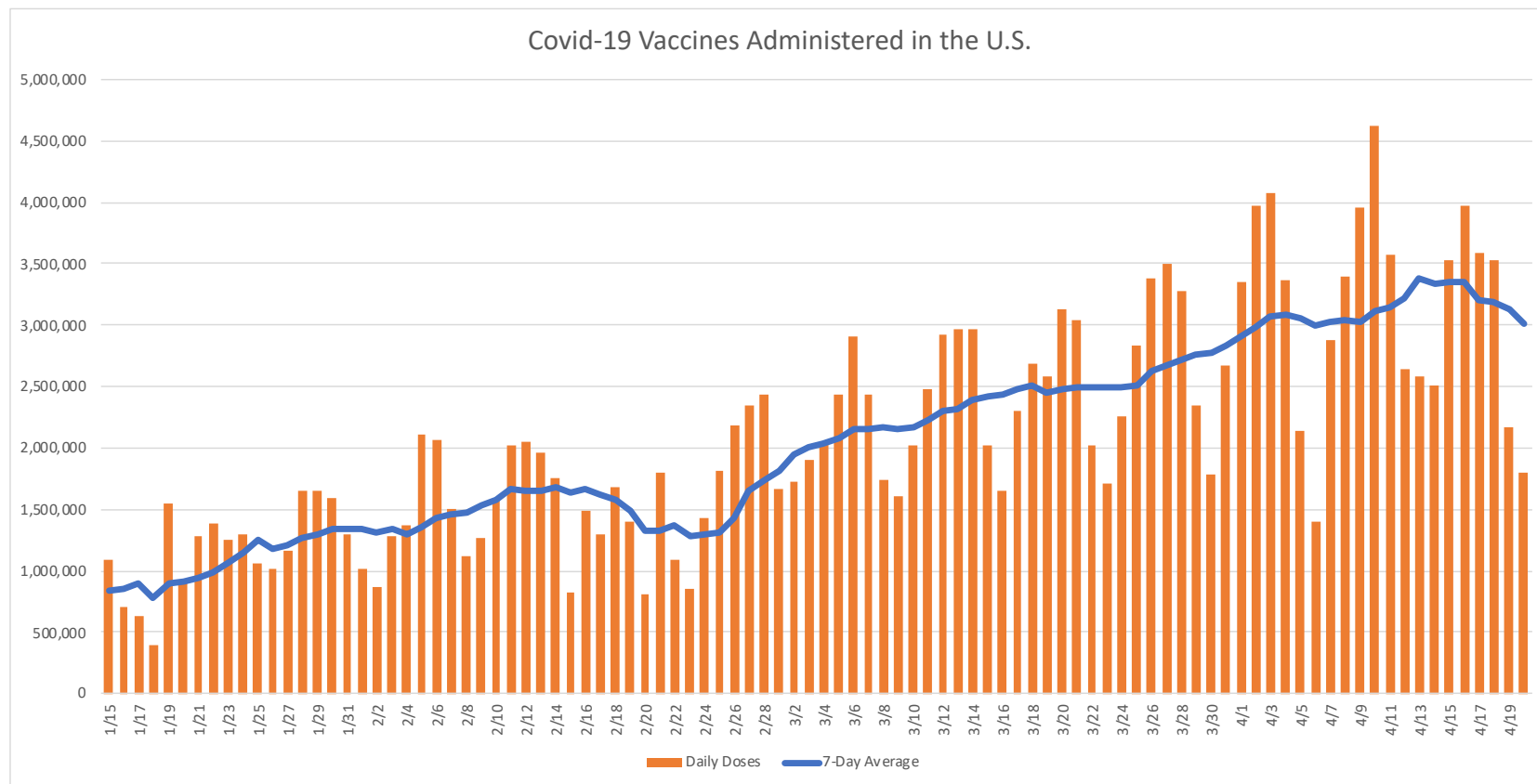
Chart: Health Industry Advisor LLC • Source: CDC, Bloomberg • Created with Datawrapper

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

Covid-19 "Vital Signs"

Pace of Vaccinations

The 7-day average rate declined each of the past four days. Is this a reflection of the JNJ/Janssen vaccine pause or, vaccine hesitancy?



Vaccination Status By Age

Seniors are participating in the process at strong levels. Only one-in-five have yet to be jabbed. Younger adults have participated at good rates since becoming eligible. Only one-in-five have yet to be jabbed. Younger adults have participated at good rates since becoming eligible.

Vaccination Status By Age

As of April 17

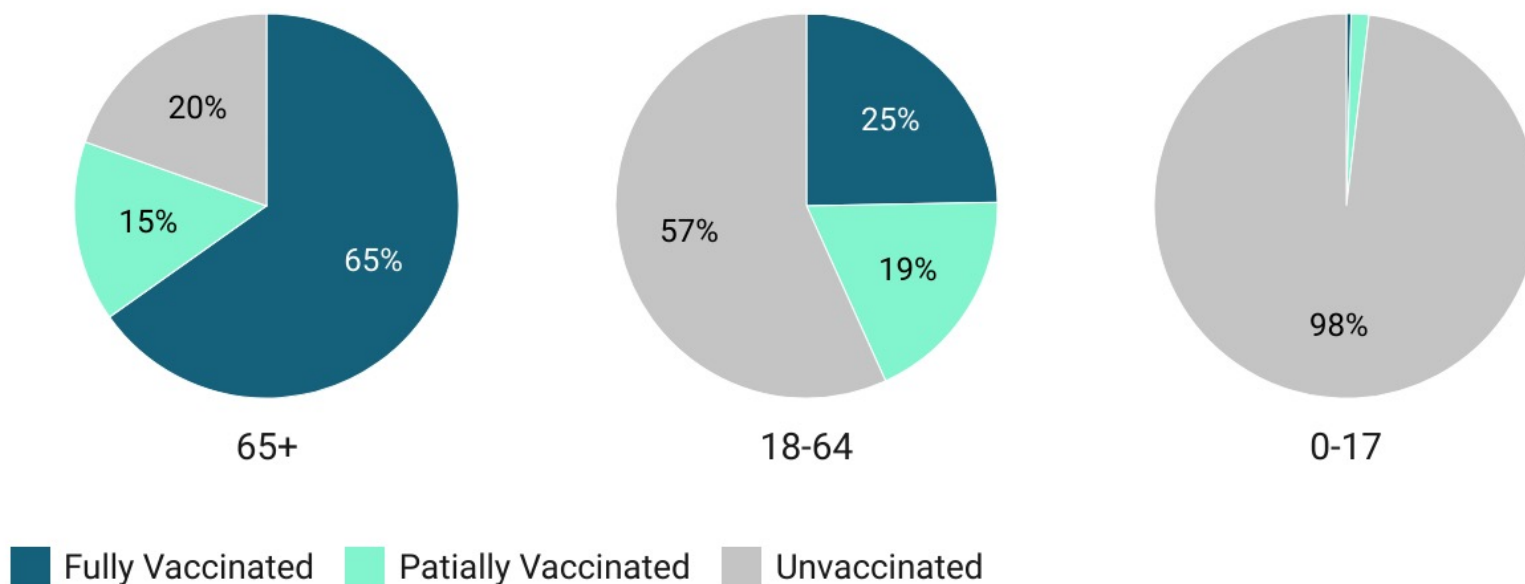


Chart: Health Industry Advisor LLC • Source: CDC • Created with Datawrapper

Covid-19 "Vital Signs"

Newly Detected Cases Per Day

In the US, 7-day new case rates declined week-over-week, reversing the trend from recent weeks. Outside the U.S., cases continue increasing at an alarming rate.

Newly Detected Cases

As of April 20

■ United States ■ Outside the US

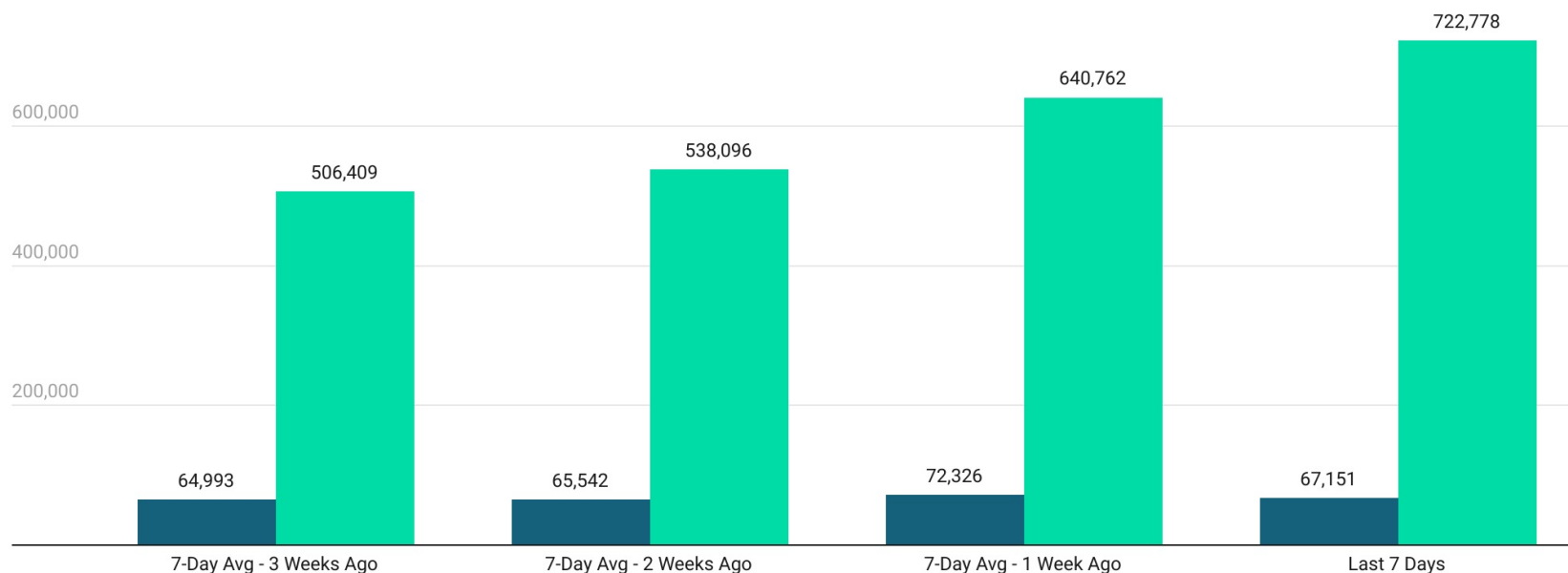


Chart: Health Industry Advisor LLC • Source: The Atlantic • Created with Datawrapper

Covid-19 "Vital Signs"

Week-Over-Week Changes in New Cases

The rate of change in new cases has slowed recently. In the U.S., this rate declined for the eighth straight day and turned negative two days ago. Worldwide, this rate for the sixth straight day.

Week-Over-Week Changes in Newly-Detected Cases: USA v. Worldwide

7-Day Moving Average, As of April 20

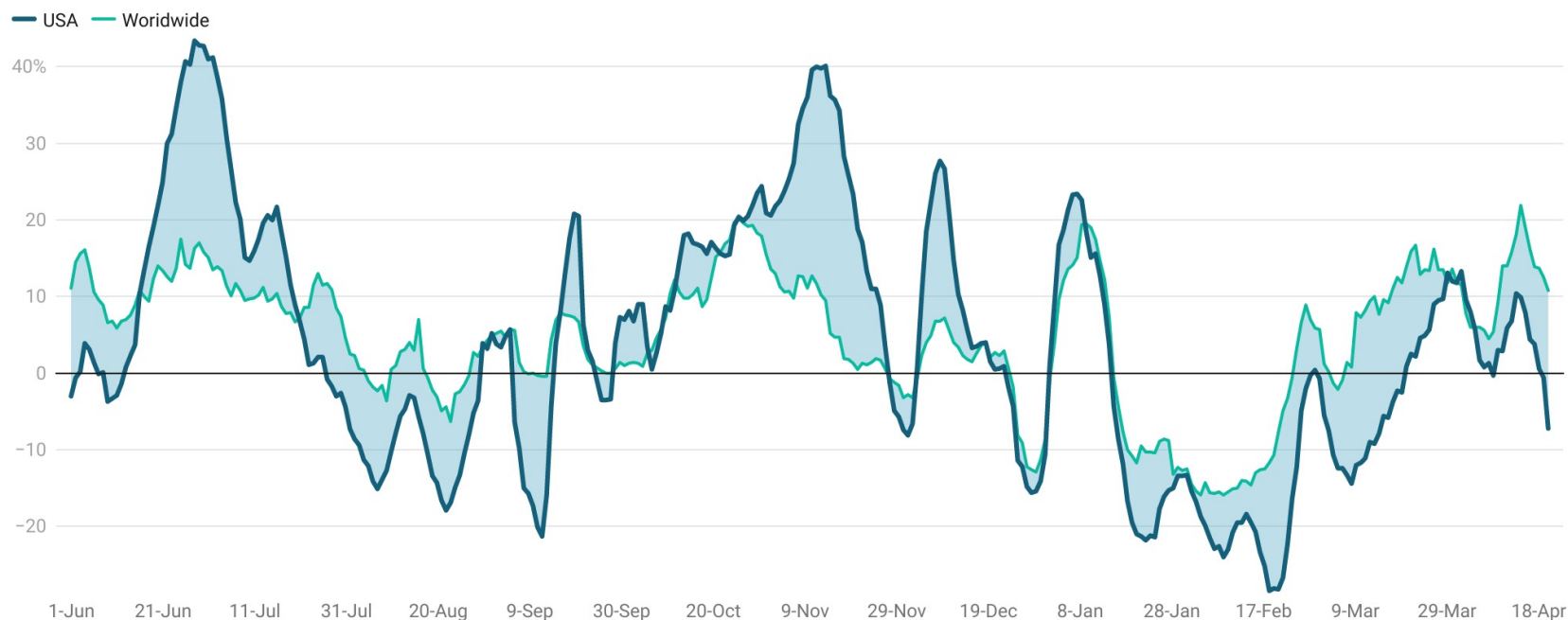


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Case Trends – Select Countries of Interest

Cases are spiking in India and Turkey. Rates are high and trending up in the Netherlands and Sweden.

Newly Detected Cases Per Million: Select Countries of Interest

7-Day Moving Average

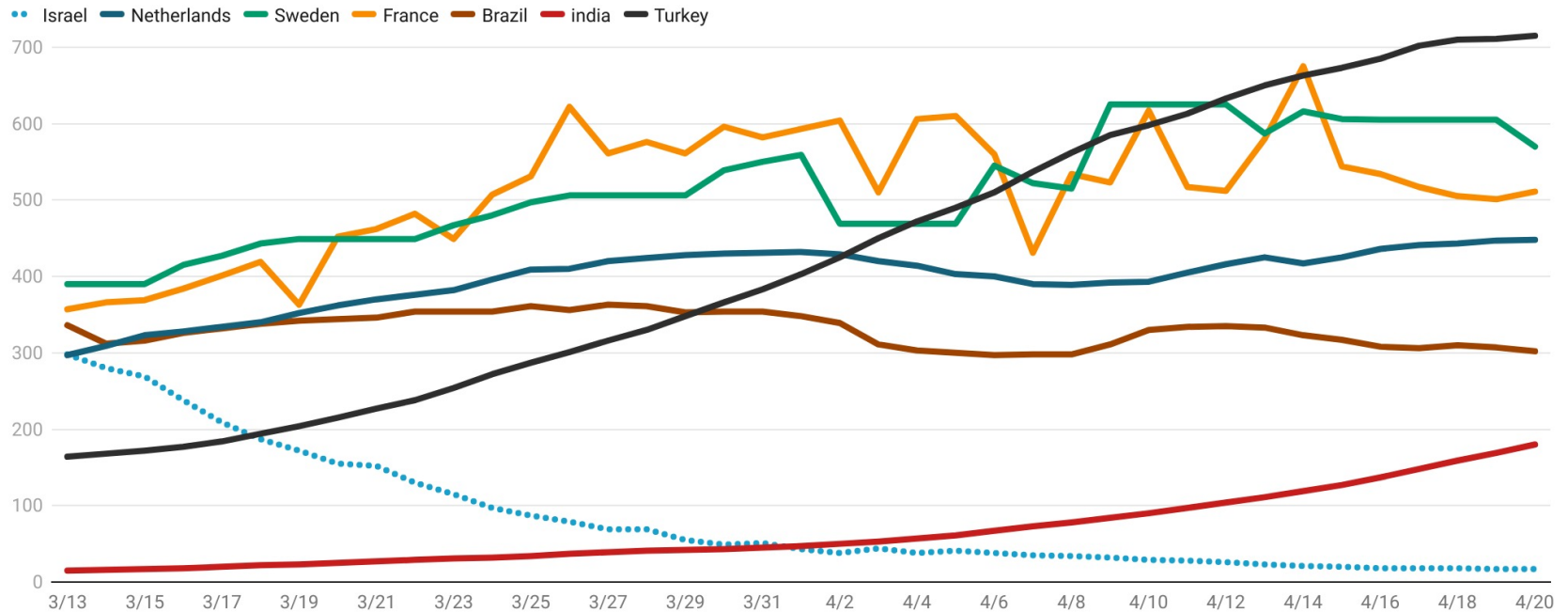


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid-19 "Vital Signs"

Newly Detected Cases / Million - US

The U.S. 7-day new case rate declined for the sixth straight day. This rate is lower than it has been in twelve days.

Newly-Detected Cases / Million

7-Day Average

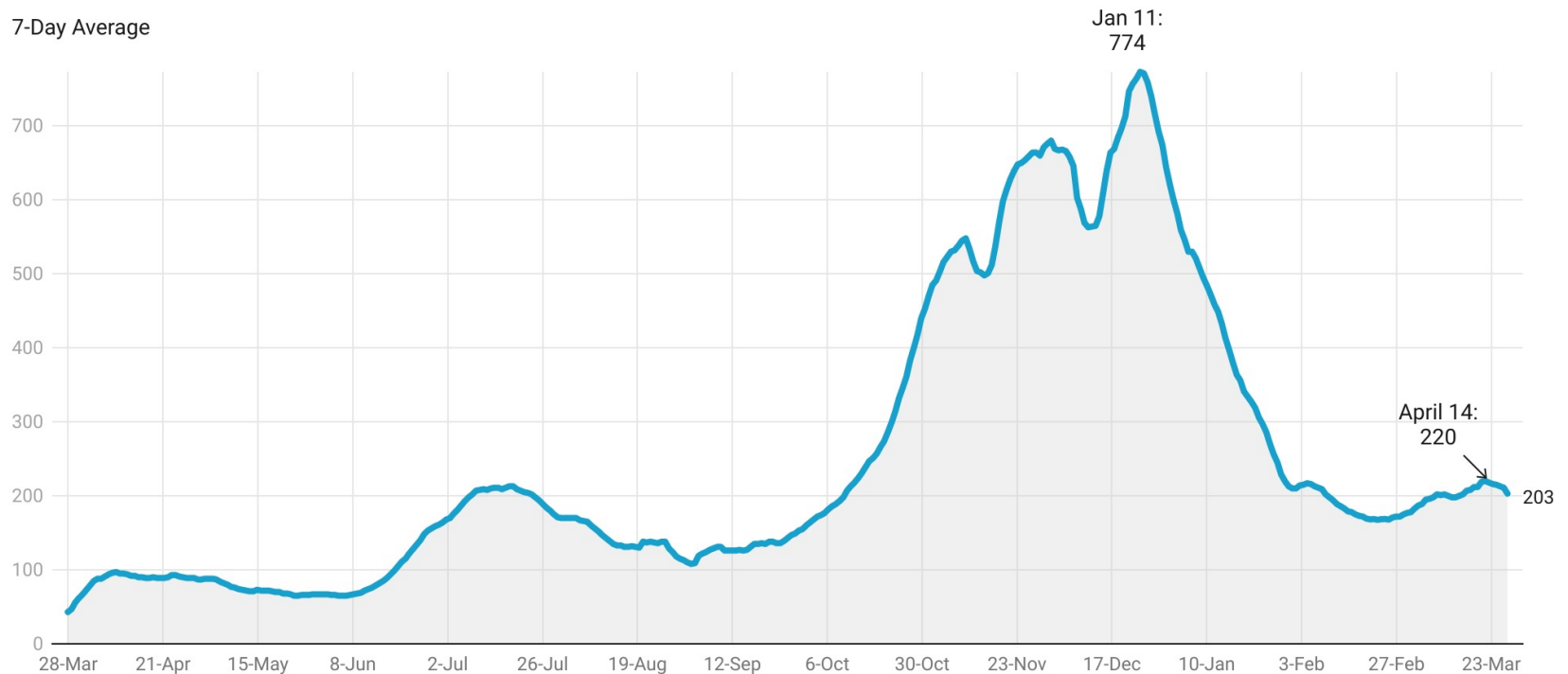


Chart: Health Industry Advisor LLC • Created with Datawrapper

Covid-19 "Vital Signs"

Covid-19 Inpatient Census

Covid-19 inpatient census seems to have stabilized in the past several days.

Covid-19 Inpatient Census

Through April 18

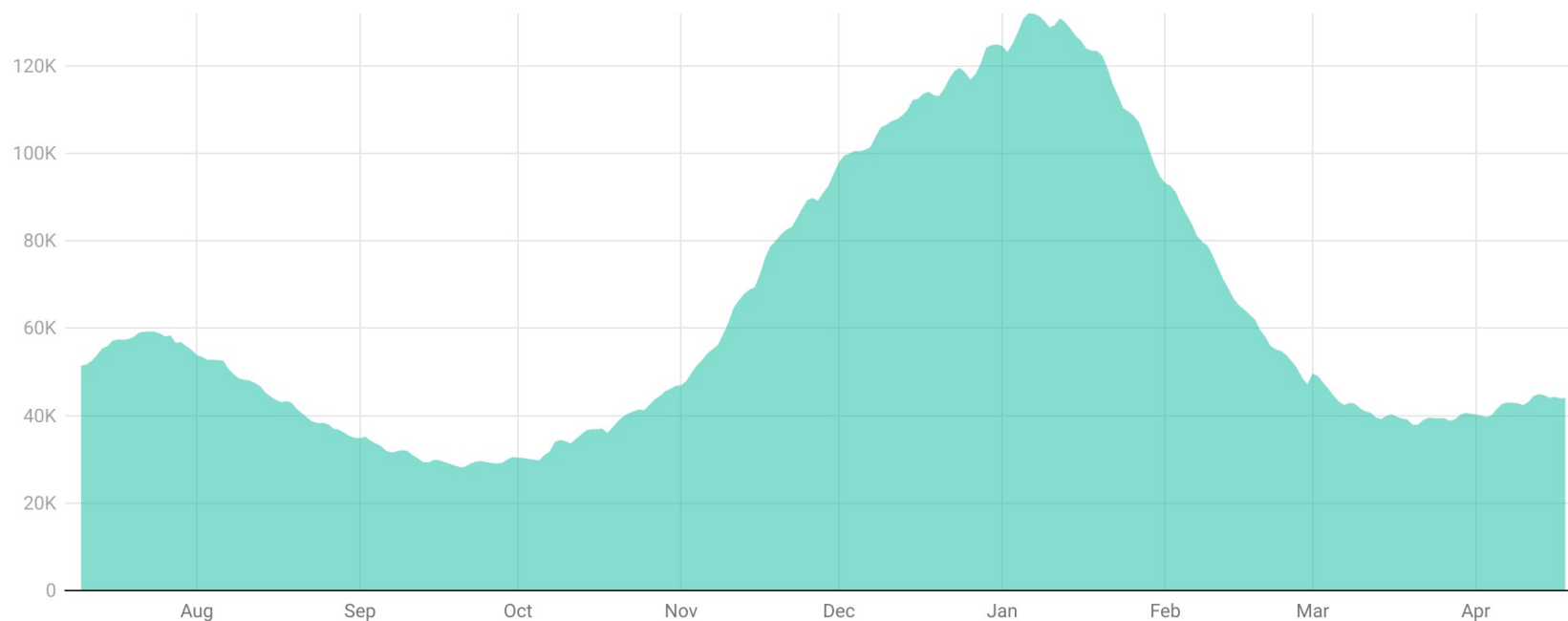


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper



Covid-19 Inpatient Census

Covid-19 inpatient census increased each of the past three Mondays on a week-over-week basis.

Hospitalized Covid-19 Patients

Compared to Same Day, Prior Weeks

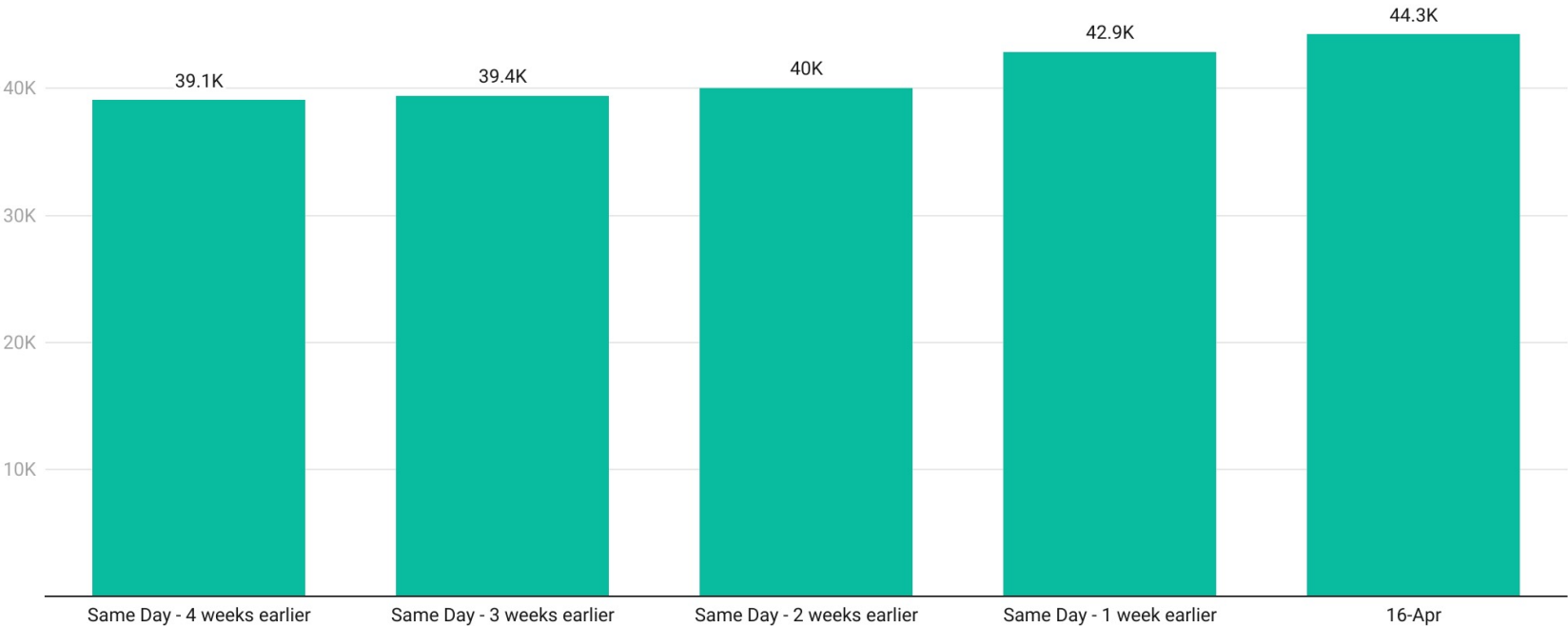


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

Deaths With Coronavirus

Deaths with coronavirus (7-day average) increased for the fourth consecutive day.

Deaths With Coronavirus

7-Day Average, Through April 20

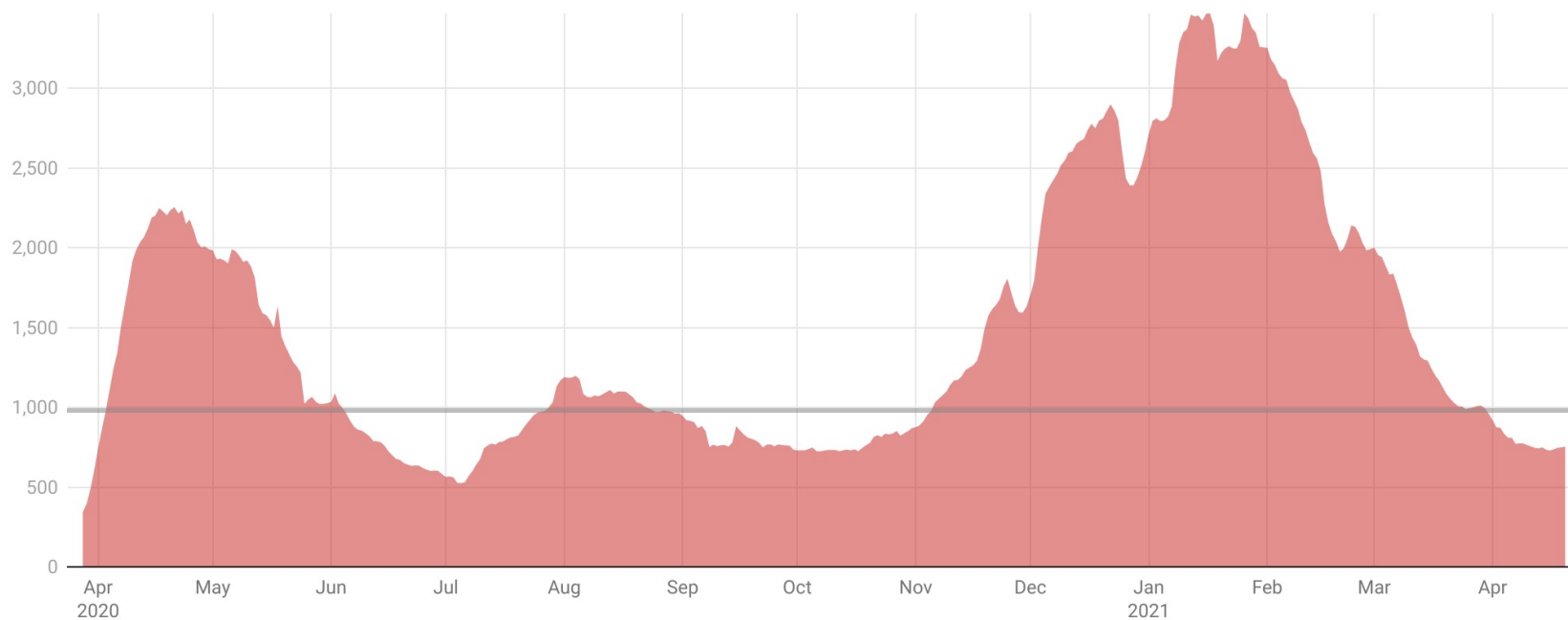


Chart: Health Industry Advisor LLC • Created with Datawrapper

Deaths Reported With Coronavirus

Deaths increased slightly week-over-week, after falling 19% and 8% the prior two weeks.

Daily Deaths Reported With Coronavirus

As of April 20

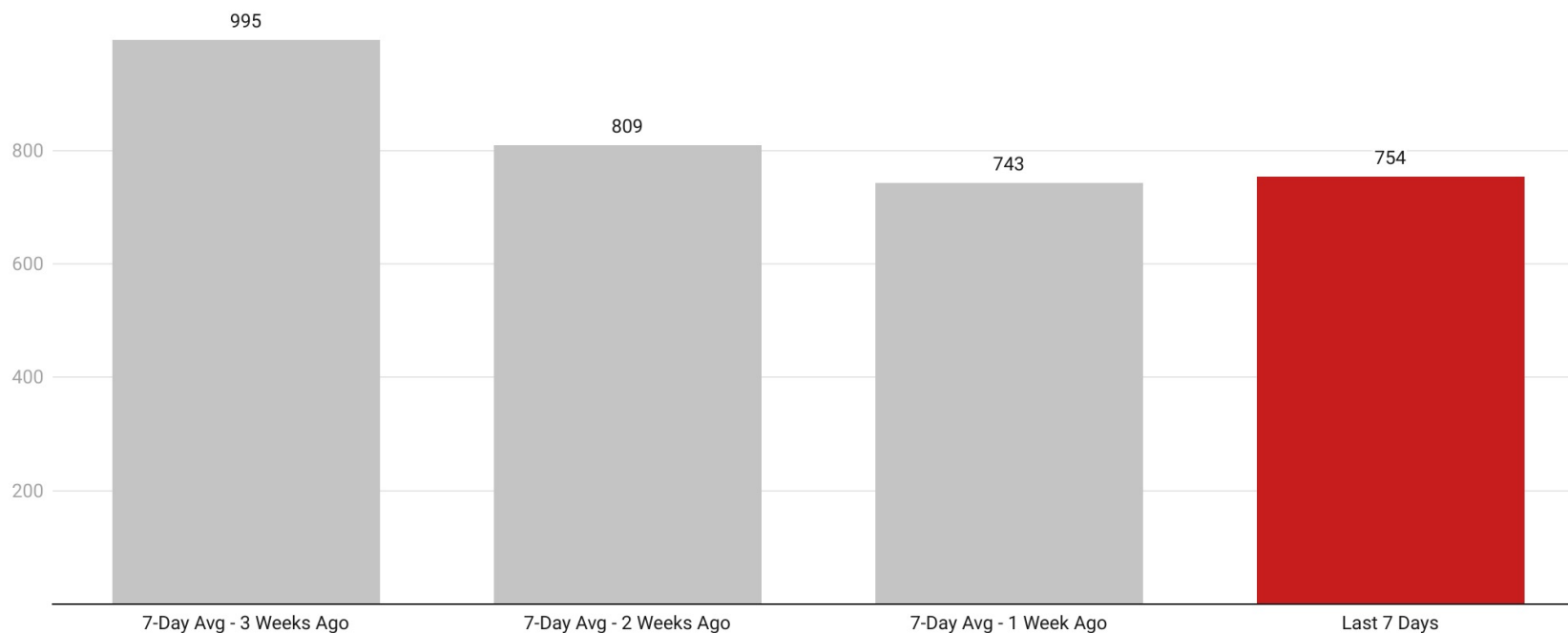


Chart: Health Industry Advisor LLC • Source: worldometer.info • Created with Datawrapper

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>