



*"Strategic Advice in an Era of Unprecedented Change"*

Issue #382

Monday, May 16, 2022

COVID19  
VITAL SIGNS

# Highlights – As of May 13

- Globally, newly reported cases remained flat last week compared to a week earlier. Cases fell sharply in Europe (-24%), offsetting increases in every other continent
- New cases quadrupled in Saudi Arabia week-over-week and tripled in Hungary. New cases nearly doubled in Zimbabwe and Taiwan
- For the week, Taiwan posted the most cases per capita among countries with one million or more residents, followed by Australia and New Zealand. Rates in these countries were at least double every other large country
- The United States ranked twentieth among large countries in cases per capita. Taiwan's rate soared eight times higher than the United States' rate
- Surveillance mechanisms demonstrate the continued virus spread in the United States: the test-positive rate increased to 8.7% last week. This week has spiked threefold in the past two months
- Virus levels in wastewater monitoring sites rose last week too
- The reported case fatality rate has trended lower since at least the Fall, 2020. At that time, twice as many cases resulted in death as today. This rate has fallen nearly 20% already this year
- The Centers for Disease Control and Prevention's (CDC's) Community Transmission scorecard reflects an ongoing virus spread: Last week, transmission levels rated High or Substantial in 72% of communities nationwide, up from 56% a week earlier
- CDC's Community Level scorecard adds hospital impact in evaluation the virus impact on a community. Four-in-five communities earned a Low score last week for virus impact. However, the number of communities rated High spiked 75% in a week; the number of communities rated Medium jumped 43%
- New York acts as a bellwether what to expect with the virus spread elsewhere in the country. Cases have risen in New York for two months, with no indication of cresting yet
- However, while daily cases tripled in New York in the past two months, hospitalizations grew more slowly. More critically, deaths with Covid and the case fatality rate has fallen in New York
- Vaccinations provide significant protection against hospitalization from the Omicron variant. This protection increases with age. Boosters add to the protection level
- Overall, a vaccinated and boosted person lowers the risk of hospitalization by five times compared to being unvaccinated

Globally, cases remained flat from a week earlier. Europe posted a sharp decline in cases, offsetting increases in each of the other populated continents

## Weekly Change in Cases By Continent

As of May 13

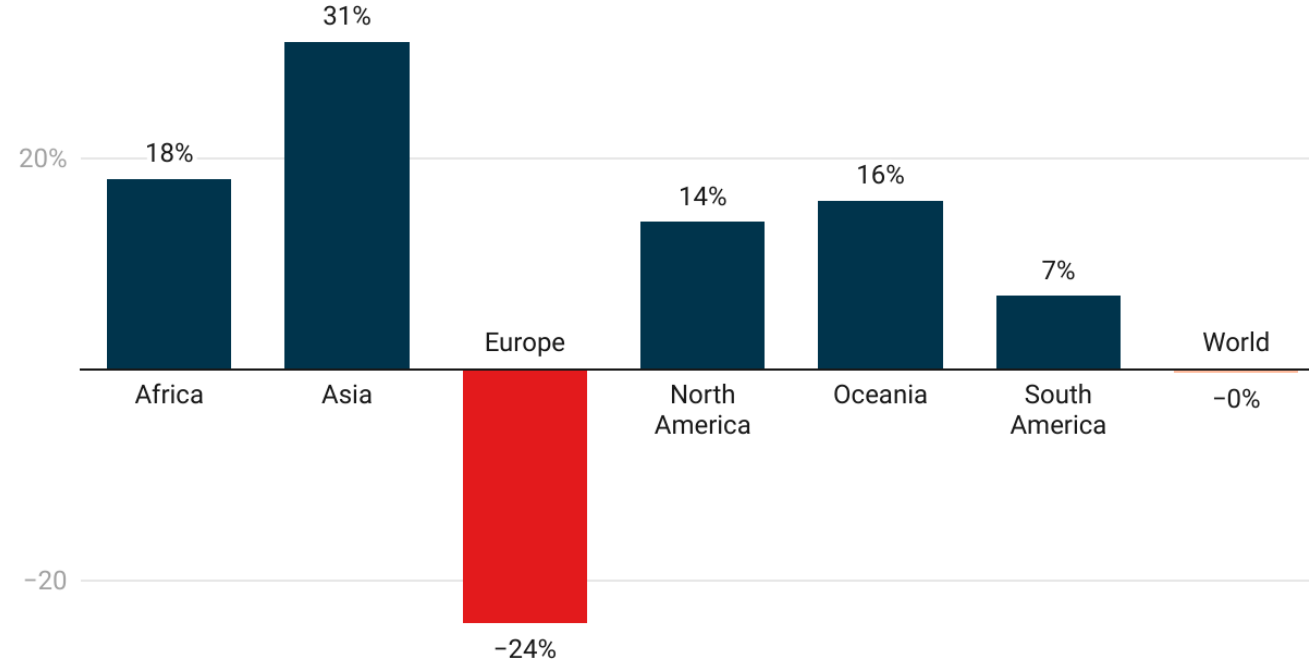
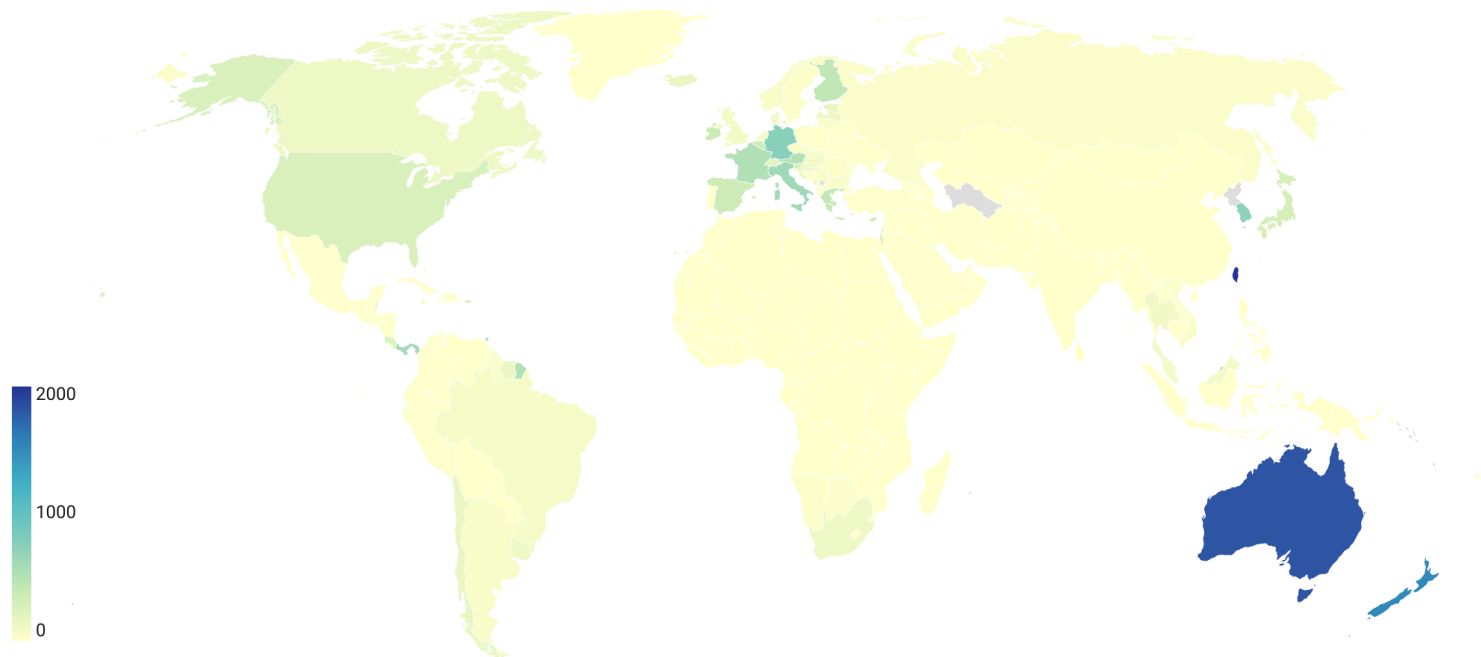


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Among large countries\*, Australia, New Zealand, and Taiwan posted the highest case rates per capita last week. The United States ranked twentieth. However, the U.S rate is eight times lower than Taiwan's

## New Daily Cases / Million

7-Day Average, As of May 13

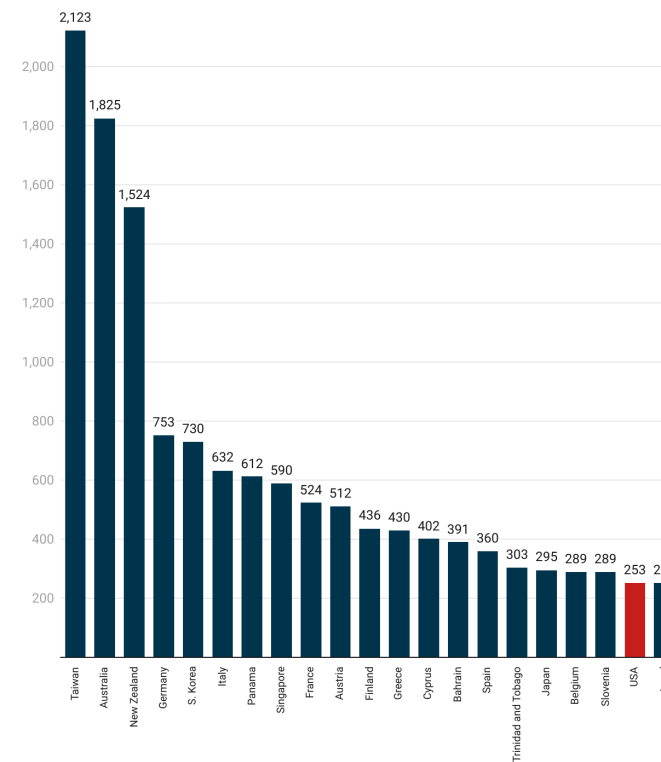


Map: Health Industry Advisor LLC • Source: worldometer.info • Created with Datawrapper

## New Daily Cases Per Million

\* - Population 1M or greater

7-Day Average, As of May 6



Countries with minimum 1M population

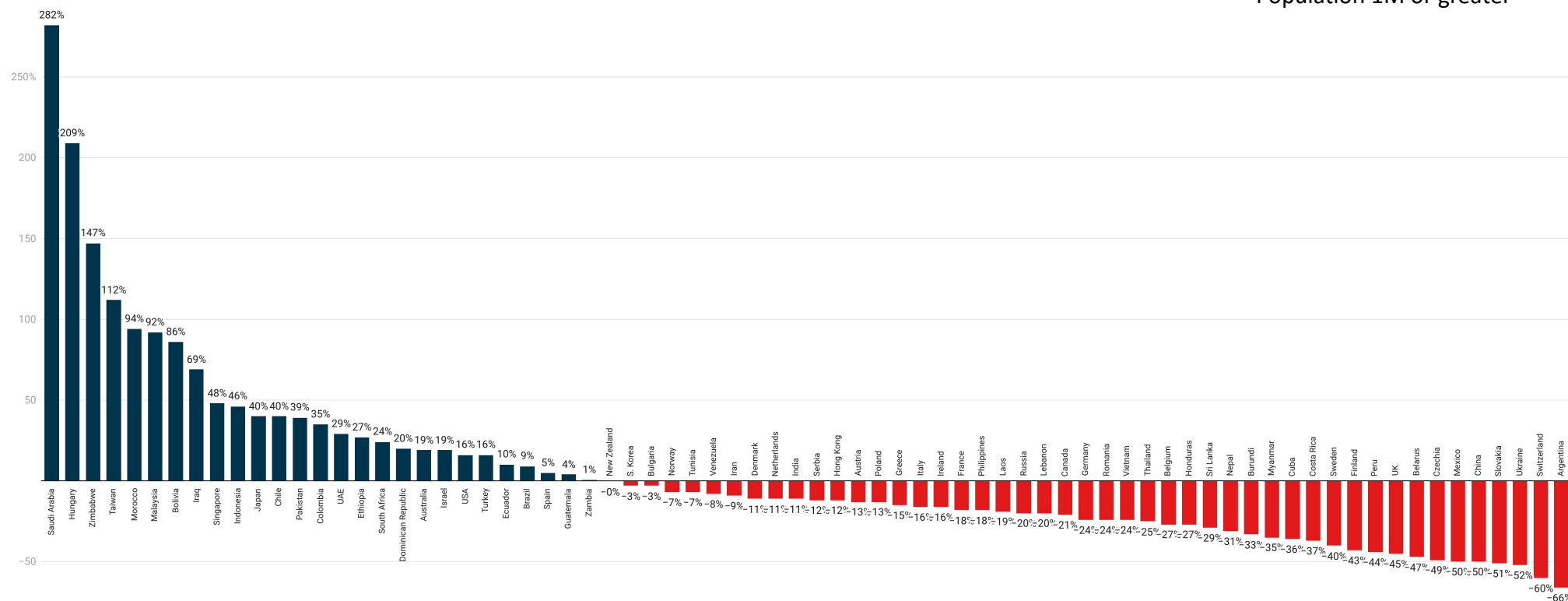
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Saudi Arabia outpaced large countries, with cases nearly quadrupling from a week ago. Cases tripled in Hungary; and more than doubled in Zimbabwe and Taiwan

### Week-over-Week Increase in Covid Cases

As of May 13

\* - Population 1M or greater



Countries with >5M population and minimum 100 cases each week

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

The test-positive rate exceeds public health guidance and continues rising. Virus levels increased in wastewater testing sites across the country

## Test-Positivity Rate

7-Day Average, Through May 9

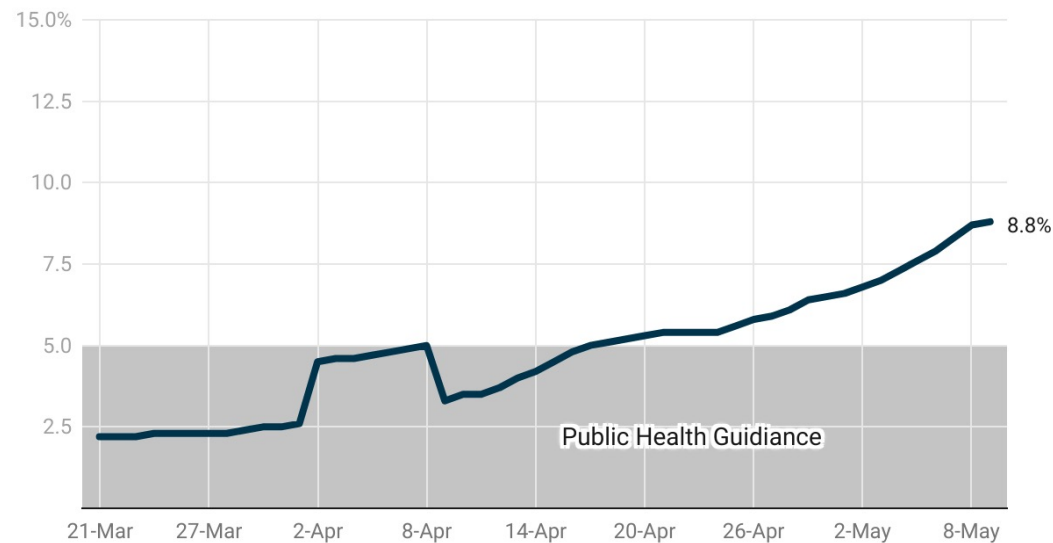
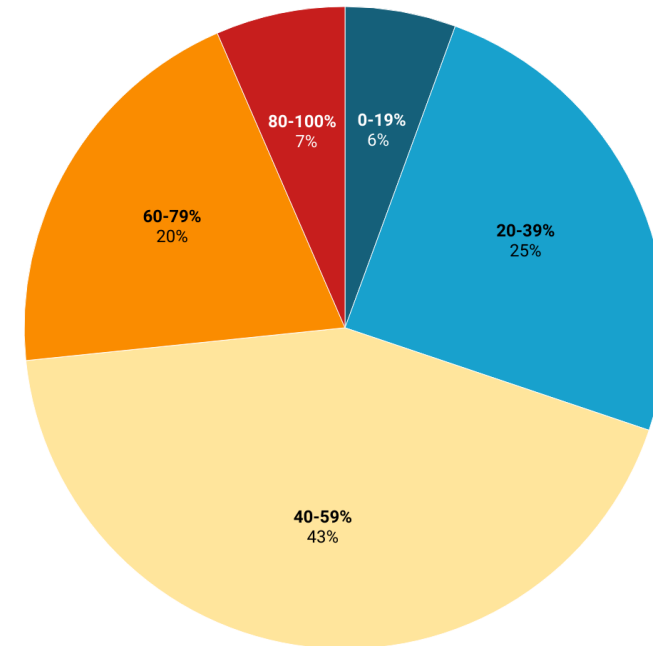


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

## Current SARS-CoV-2 virus levels by site, United States

Compared to Highest Level Since December 1, 2021

0-19% 20-39% 40-59% 60-79% 80-100%



Source: <https://covid.cdc.gov/covid-data-tracker/#wastewater-surveillance>

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

New York serves as a bellwether for the virus spread in the United States. Cases have yet to crest in New York, two months into the current wave. Fortunately, hospitalizations have grown more slowly than cases and deaths have declined

**Covid Daily Cases/Million - New York**

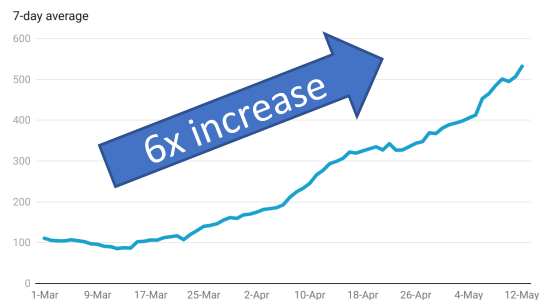


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

**Covid Inpatient Admits - New York**

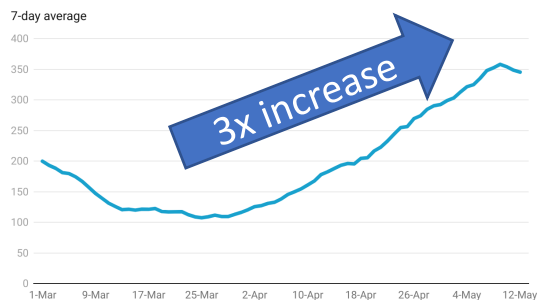


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health and Human Services • Created with Datawrapper

**Covid Inpatient Census - New York**

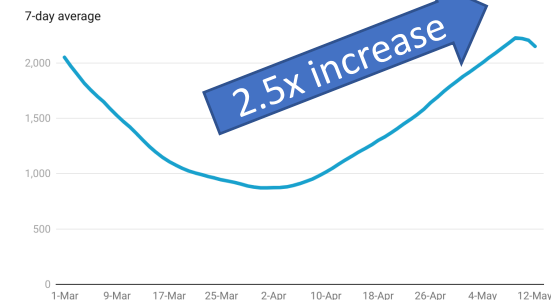


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health and Human Services • Created with Datawrapper

**Covid Daily Deaths/Million - New York**



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

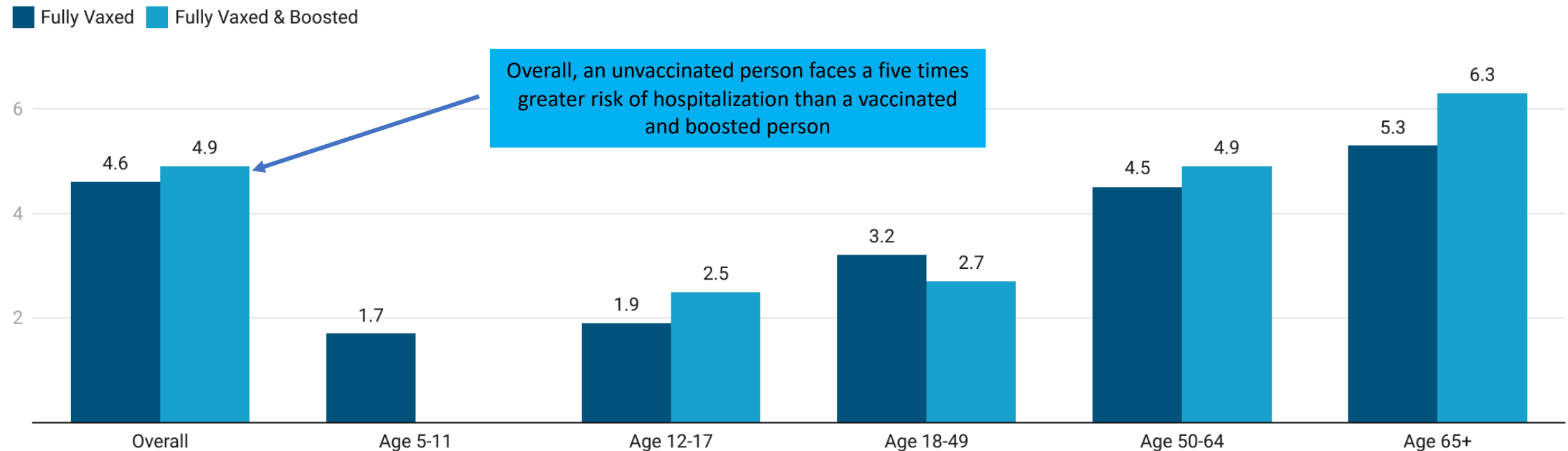
**Covid Deaths per 1000 Cases, 3-Week Lag - New York**



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

Vaccinations provide significant protection against hospitalizations;  
protection increases with age

## Rate of Hospitalization of Unvaccinated v. Vaccinated and v. Vaccinated and Boosted Persons, By Age

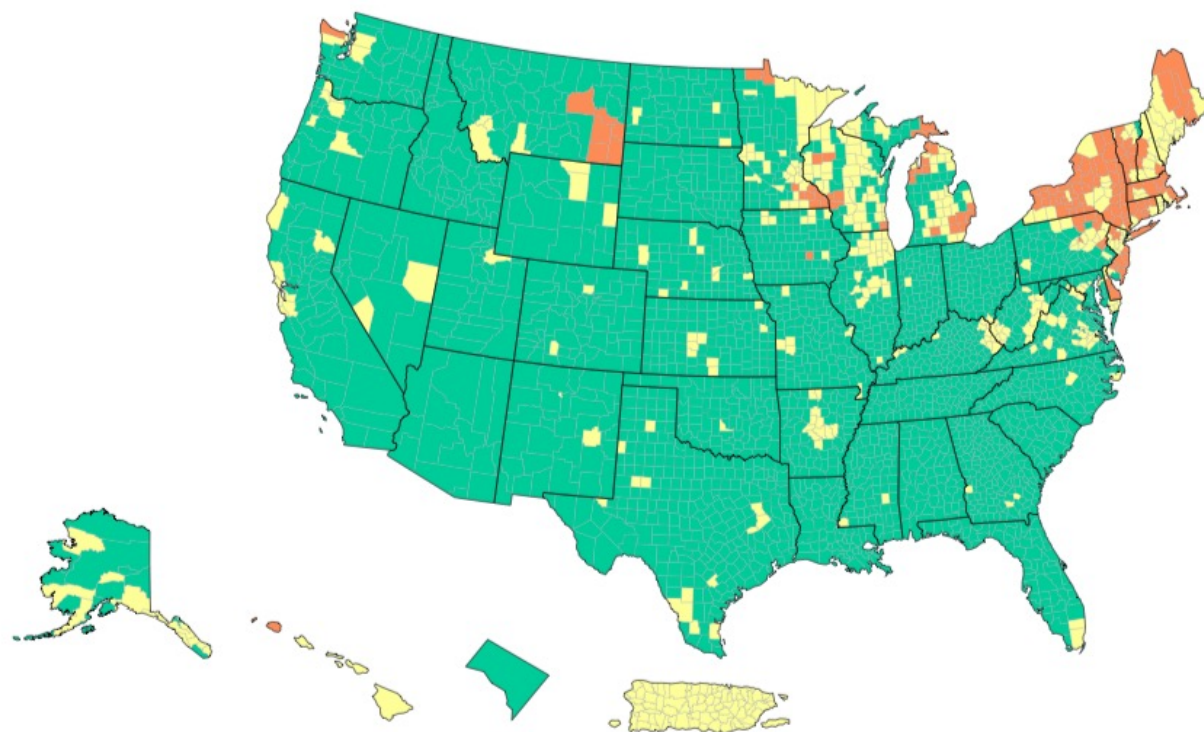


CDC Website, accessed May 14, 2022; reflected March results

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

137 counties (4%) rate "High" in the CDC's Community Level system, an increase from 79 a week earlier. Nonetheless, four of five communities rated Low

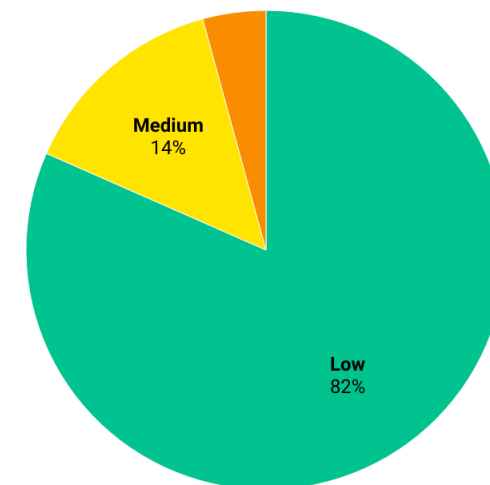
May 4-10, 2022



### Community Levels By County

As of May 10

Low Medium High

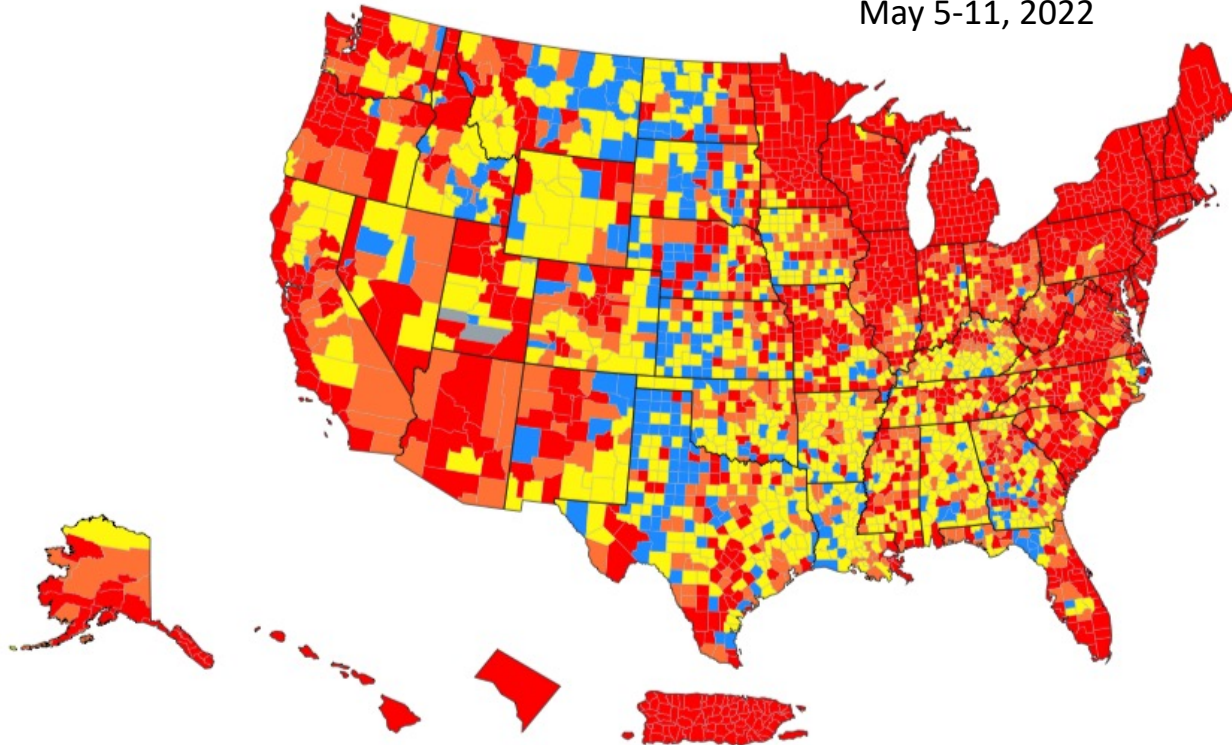


Source: Centers for Disease Control and Prevention website; accessed May 14, 2022

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

Virus spread in 46% of U.S. counties rates as “High”, up from 35% a week earlier; spread is “Substantial” in 26% of these counties, up from 20% last week

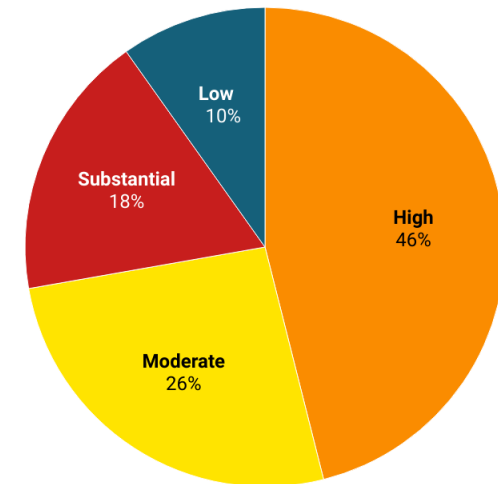
Community Transmission  
May 5-11, 2022



**Community Transmission By County**

As of May 11

High Moderate Substantial Low



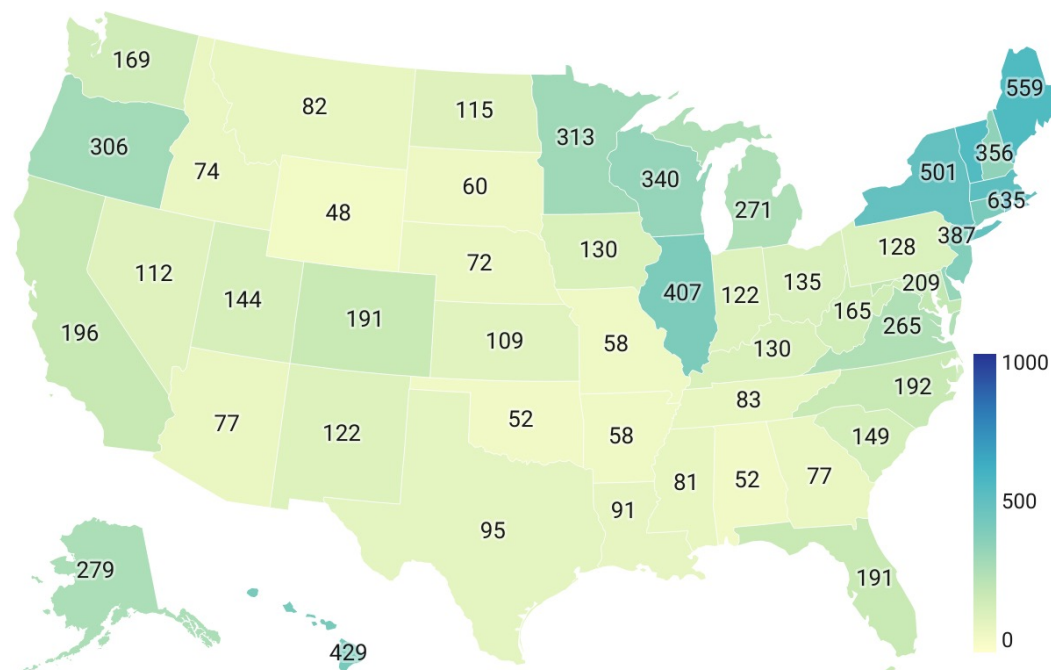
Source: Centers for Disease Control and Prevention website; accessed May 14, 2022

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

Case rates moved higher in the last two weeks all but seven states. Rates remain highest in the Northeast, where the current wave has yet to crest. The Midwest strained with new cases last week

## New Cases / Million / Day

7-Day Average, As of May 13



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

## Change % in Cases v. Two Weeks Ago

7-day average

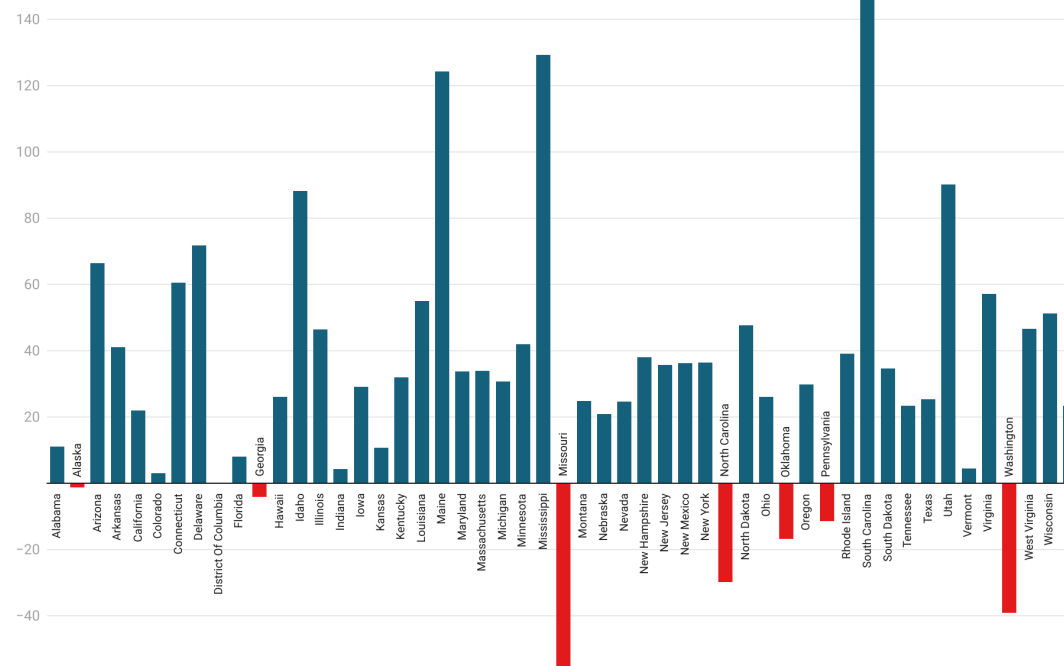


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Covid patient days increased 14% in the last week. Covid admissions increased 16% in this time. Patient days rose by 50% from an early-April low. However, this census remains at 10% of its peak earlier this year

### Covid-19 Admissions & Census

7-Day Average Thru May 13

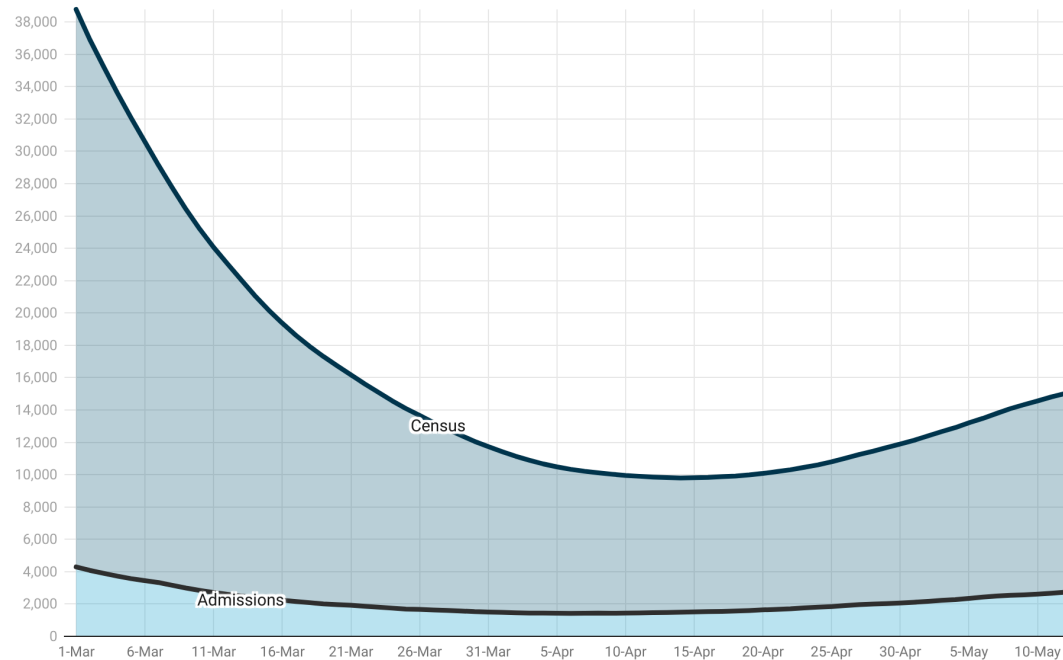
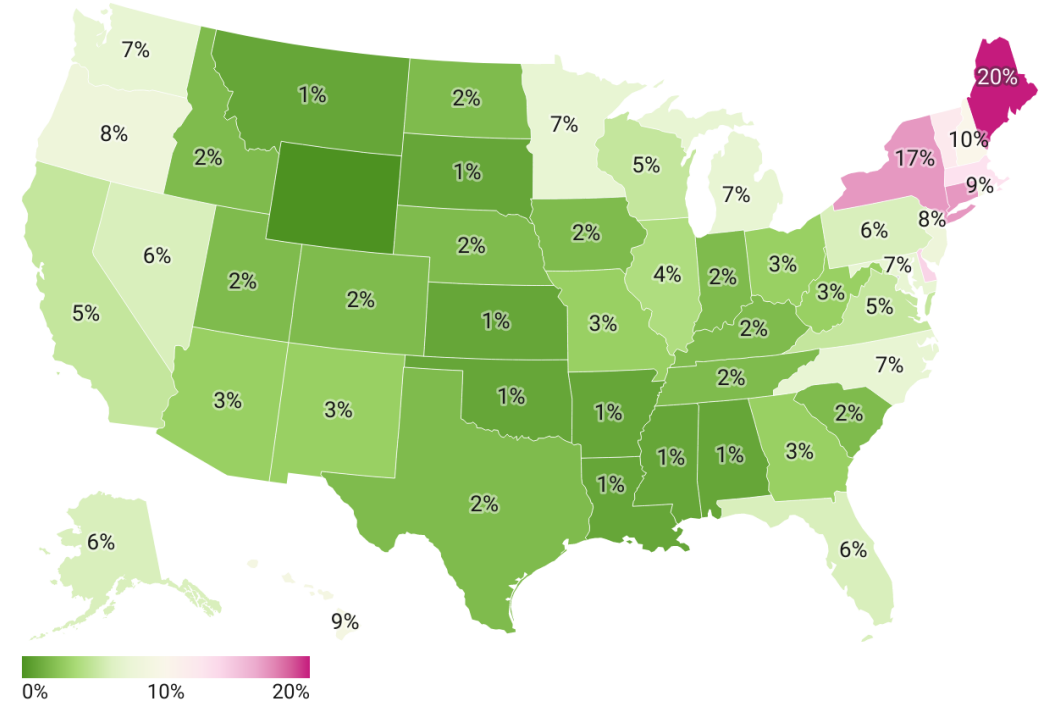


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

### Covid-19 Patients As % of All Inpatient Beds

As of May 12



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

Deaths with Covid declined slightly last week, despite rising cases for the past two months

## Deaths With Coronavirus

7-Day Average, Through May 13

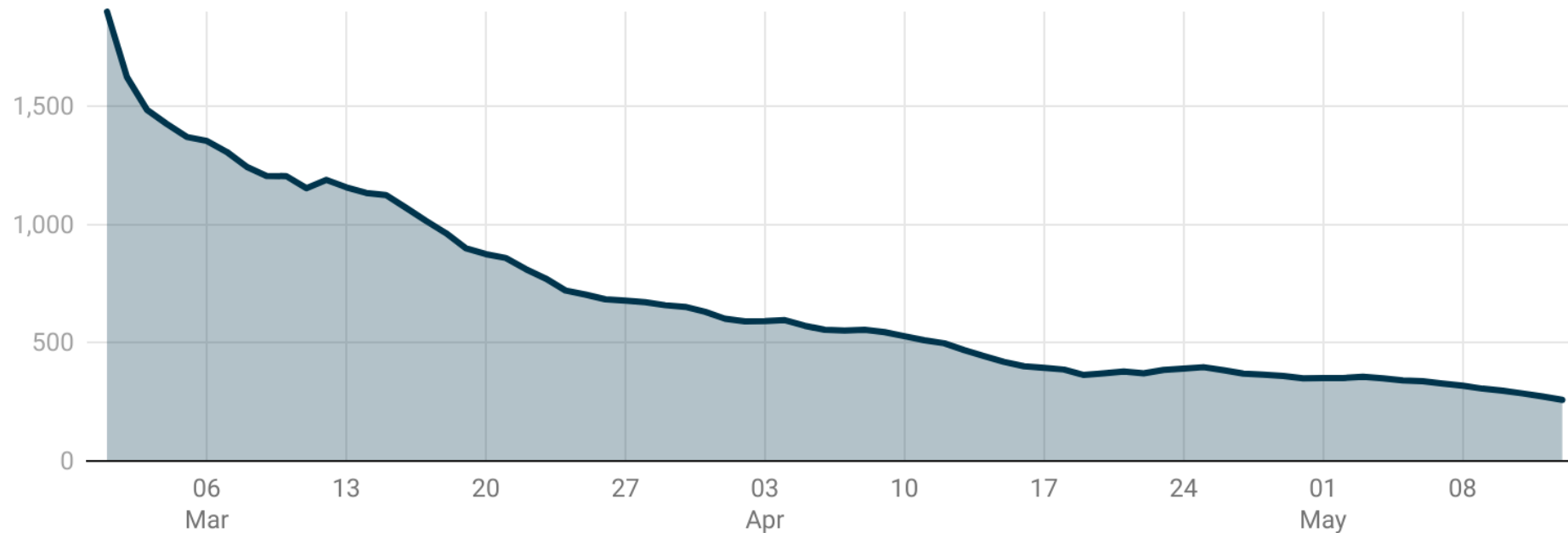


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

The reported case fatality rate has trended lower since at least the Fall, 2020. Twice as many reported cases resulted in death in October 2020 as today. The rate fell nearly 20% this year

### Deaths per 1000 Cases, 3 week lag

7-day average

Deaths/1000 New Cases    Trend



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

## Sources

- Bloomberg Vaccine Trackers, <https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/?sref=Z0b6TmH>
- 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, COVID-19 Laboratory-Confirmed Hospitalizations [https://gis.cdc.gov/grasp/COVIDNet/COVID19\\_5.html](https://gis.cdc.gov/grasp/COVIDNet/COVID19_5.html)
- 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, Vaccines, <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/index.html>
- 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 Forecast Hub, <https://viz.covid19forecasthub.org>
- COVID-19 Projections Using Machine Learning, <https://covid19-projections.com>
- 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>
- Our World In Data, <https://ourworldindata.org/covid-vaccinations>
- U.S. Department of Health & Human Services <https://beta.healthdata.gov/dataset/COVID-19-Diagnostic-Laboratory-Testing-PCR-Testing/j8mb-icvb>
- U.S. Department of Health & Human Services: <https://healthdata.gov/dataset/covid-19-estimated-patient-impact-and-hospital-capacity-state>
- Worldometers.info: <https://www.worldometers.info/coronavirus/>
- Yale School of Public Health & Harvard TH Chan School of Public Health, <https://covidestim.or>