



Issue #381

Monday, May 9, 2022

COVID19
VITAL SIGNS

"Strategic Advice in an Era of Unprecedented Change"

Highlights – As of May 6

Globally:

- Cases fell globally last week (-15%) from prior week. Asia posted the sharpest decline (-26%), followed by Europe (-19%). Cases jumped in Africa (+18%) and North America (+7%)
- Australia's cases per capita surpassed every other large country (greater than 15 million population), beating second- and third-highest Taiwan and Germany by 50%. Australia's rate soared 7.5 x higher than ninth-highest United States' rate
- Taiwan's rate tripled from a week earlier. Venezuela's (+47%), South Africa (+40%), and Saudi Arabia's (+37%) spiked from prior week's levels
- The Institute for Health Metrics and Evaluation (IHME) projects that cases will decline 40% during May and 60% by the end of July

Domestically:

- Surveillance confirms that the virus continues to spread across the United States: the test-positive rate exceeded 7% for the first time since February. One of every five wastewater sites measured virus levels of 60% or more of peaks recorded since December 1

- The Centers for Disease Control and Prevention (CDC) rates nine of every ten communities as “Low” for virus transmission and healthcare impact. Only 2.5% rate as “High”
- However, the CDC rates more than half of all communities as “High” or Substantial” for virus transmission
- IHME estimates that infections peaked in the United States at the end of April. Projected infections fall by one-third during May and three-fourths by the end of July
- Covid admissions (+66%) and patient days (+33%) rose since mid-April. Covid patients now occupy more than 10% of inpatient beds in Connecticut, Delaware, Maine, New York, and Vermont
- Encouragingly, IHME predicts that admissions and patient days will peak within two weeks. Within the following two weeks, IHME expects both measures to drop 10%. By the end of July, both measures decline by two-thirds
- Among the five largest states, IHME believes that infections are peaking now; patient days in these states could peak within two weeks
- Daily deaths with Covid declined further last week, despite the rise in cases over the past two months

Globally, cases fell 15% from a week earlier. Africa, North America and South America reported more cases than a week ago; Asia and Europe reported declining cases

Weekly Change in Cases By Continent

As of May 6

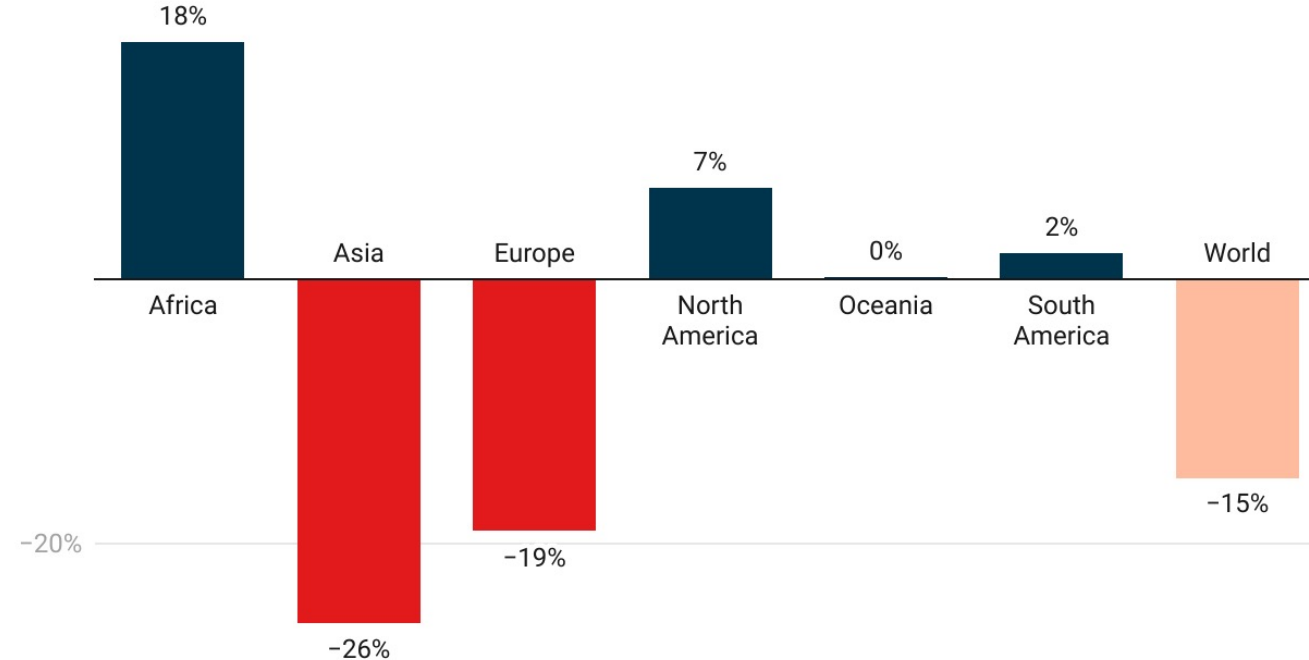
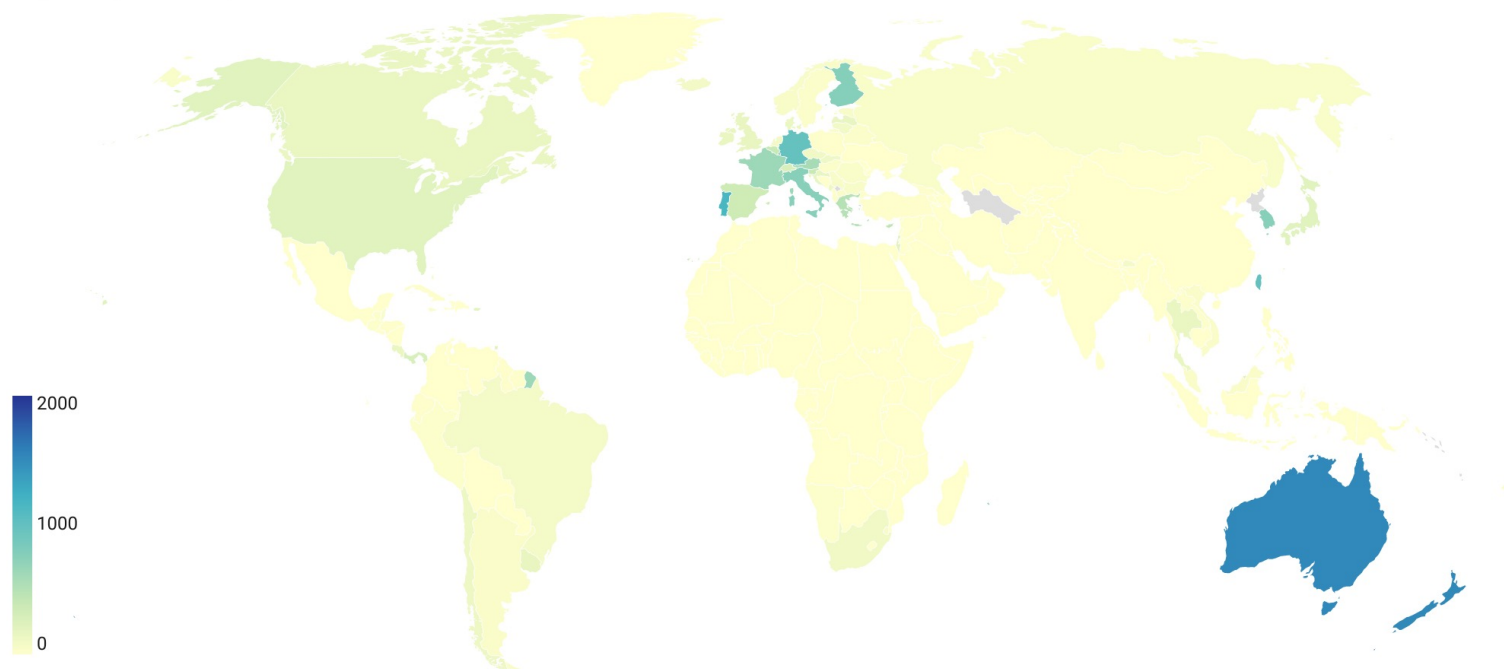


Chart: Health Industry Advisor LLC • Source: world-meters.info • Created with Datawrapper

Among large countries*, Australia posted the highest case rate per capita last week, followed in order by Taiwan, Germany, Italy, South Korea, and France. The United States ranked ninth

New Daily Cases / Million

7-Day Average, As of May 6

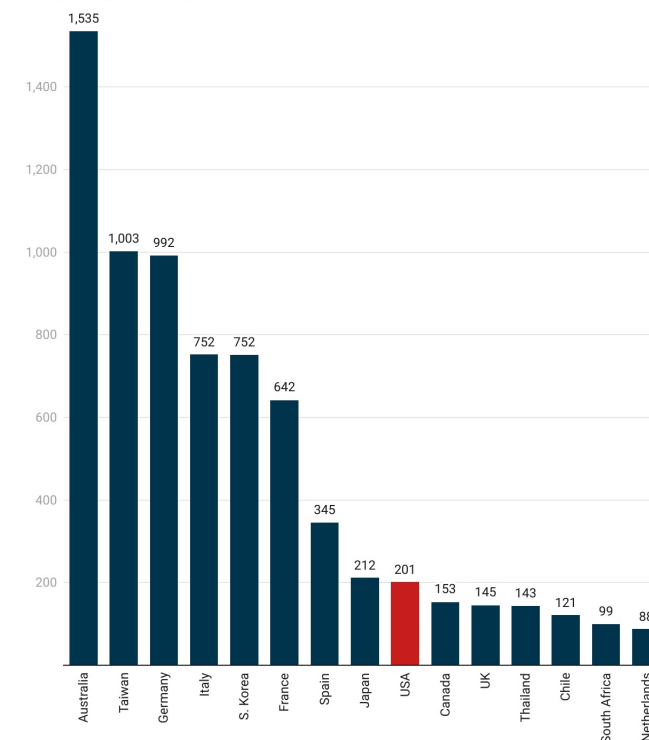


Map: Health Industry Advisor LLC • Source: worldometer.info • Created with Datawrapper

New Daily Cases Per Million

* - Population 15M or greater

7-Day Average, As of May 6



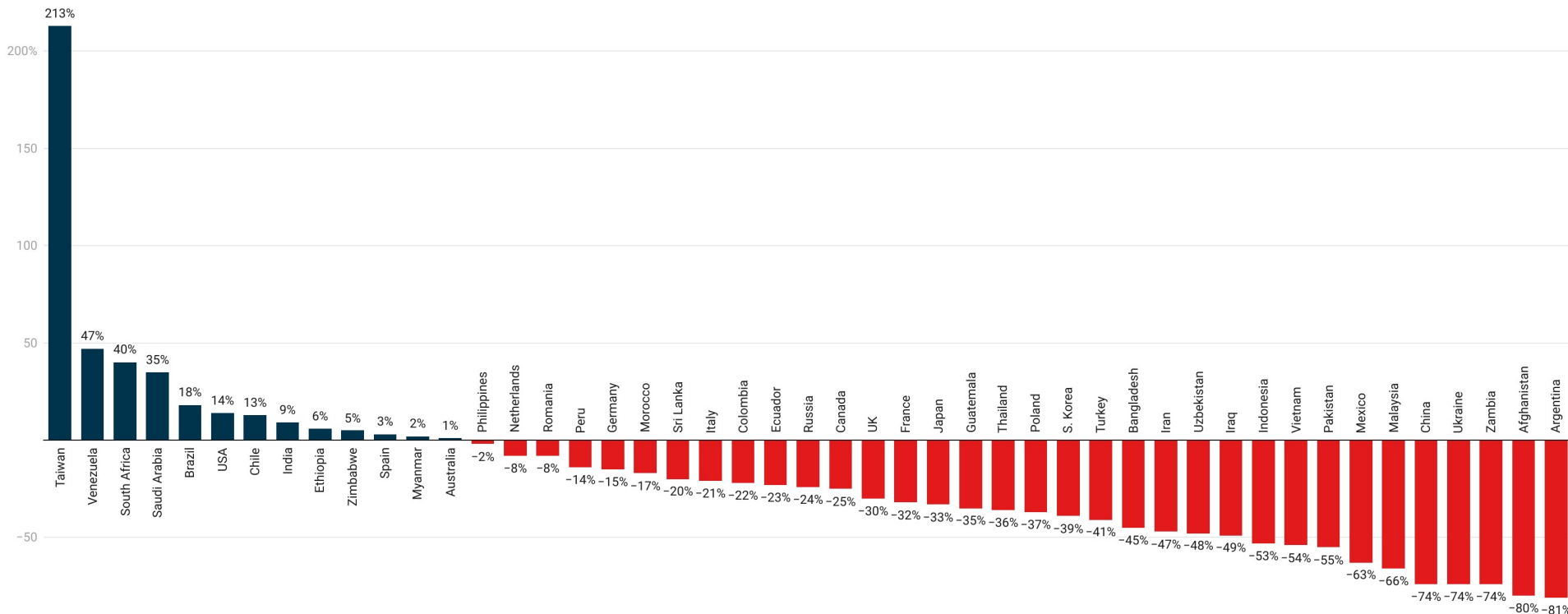
Countries with minimum 15M population

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

Taiwan outpaced large countries, with cases tripling from a week ago.
Cases grew by more than one-third in Venezuela, South Africa, and Saudi Arabia

Week-over-Week Increase in Covid Cases

As of May 6

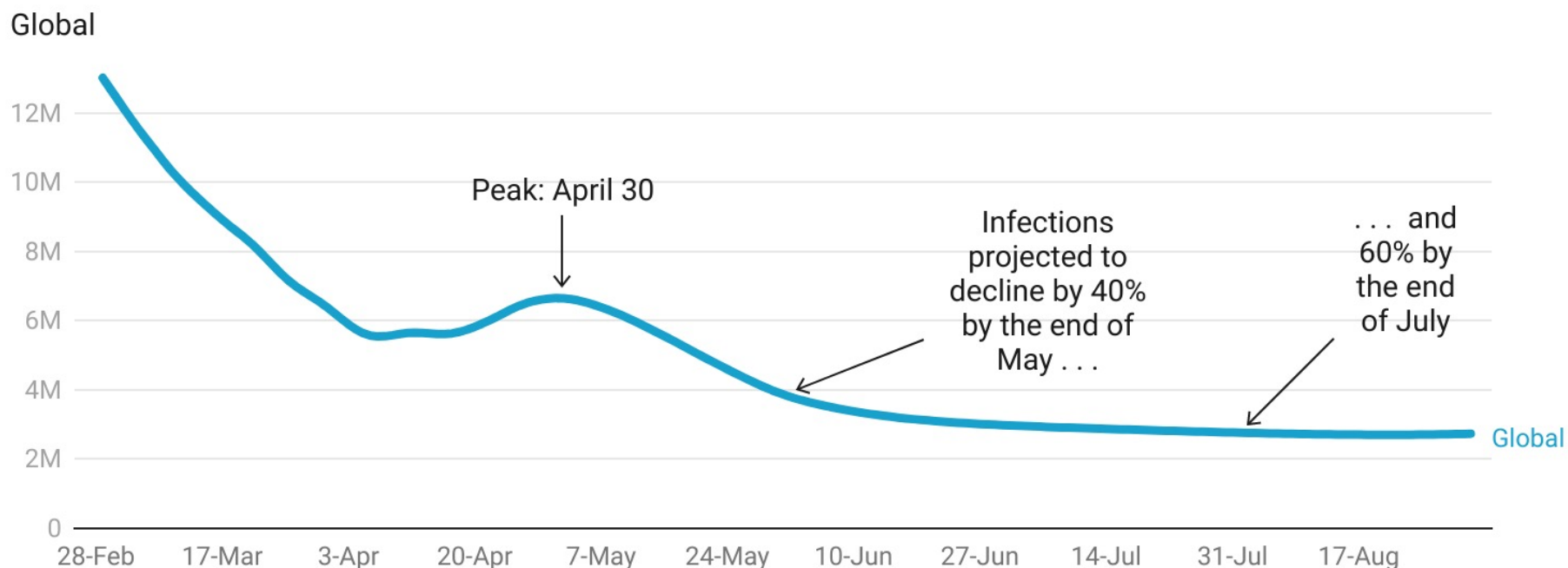


Countries with >15M population and minimum 100 cases each week

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

Globally, estimated infections reached a mini-peak at the end of April.
Projected infections fall 40% by the end of May and 60% by August

Estimated and Projected Infections



Date of Projections: May 6

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

The test-positive rate exceeds public health guidance and continues rising. Virus levels in nearly one-fifth of wastewater testing sites are 60% or more of peak levels

Test-Positivity Rate

7-Day Average, Through May 2

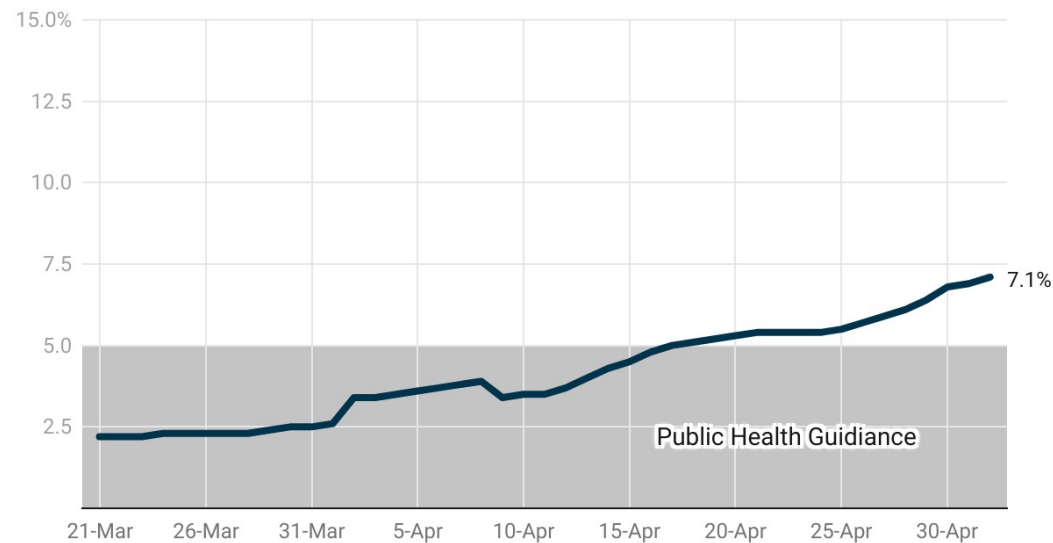
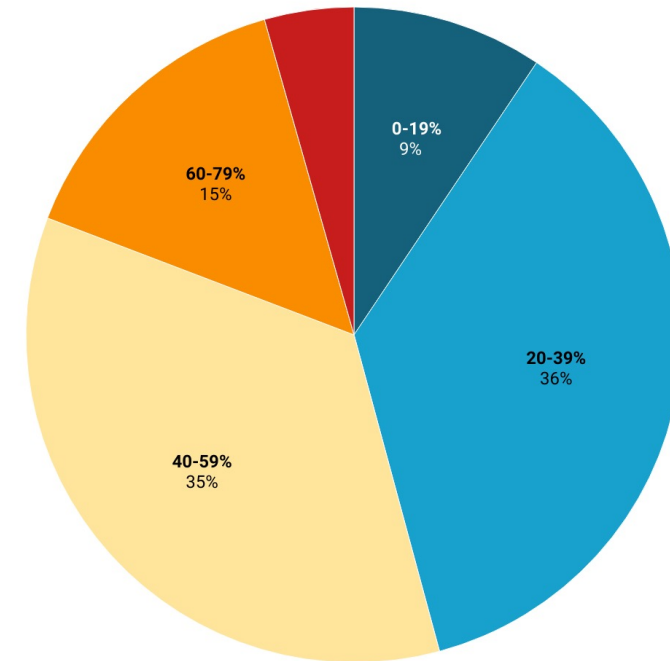


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

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%

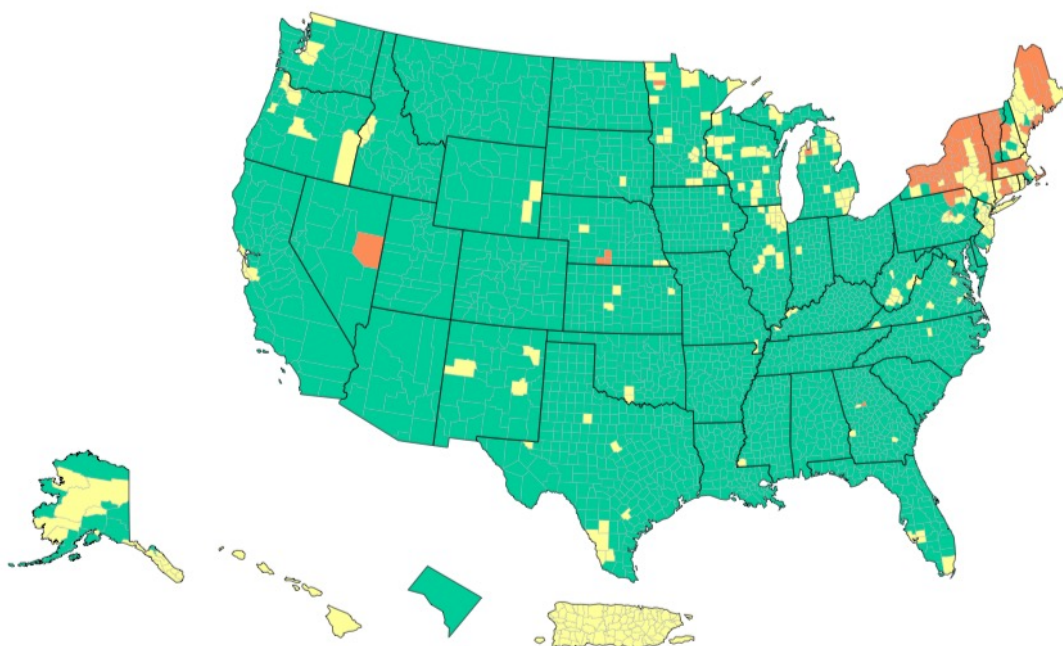


Source: <https://covid.cdc.gov/covid-data-tracker/#wastewater-surveillance>

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

Seventy-nine counties (2.5%) rate "High" in the CDC's Community Level system, which reflects virus transmission and health system impact. These are concentrated in the Northeast

April 27-May 3, 2022



Community Levels By County

As of May 4

Low Medium High

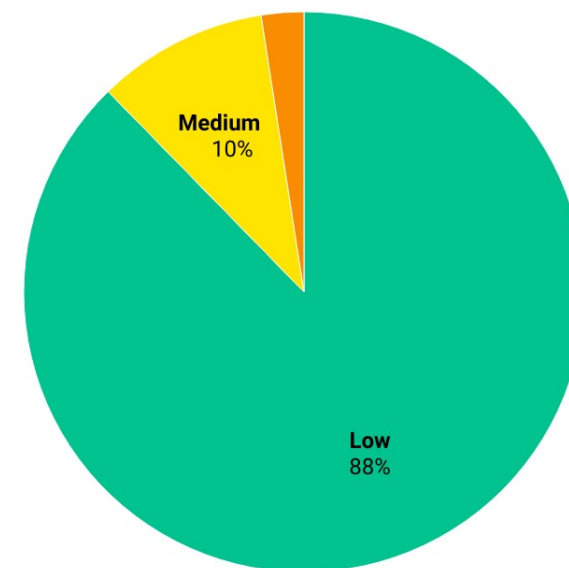
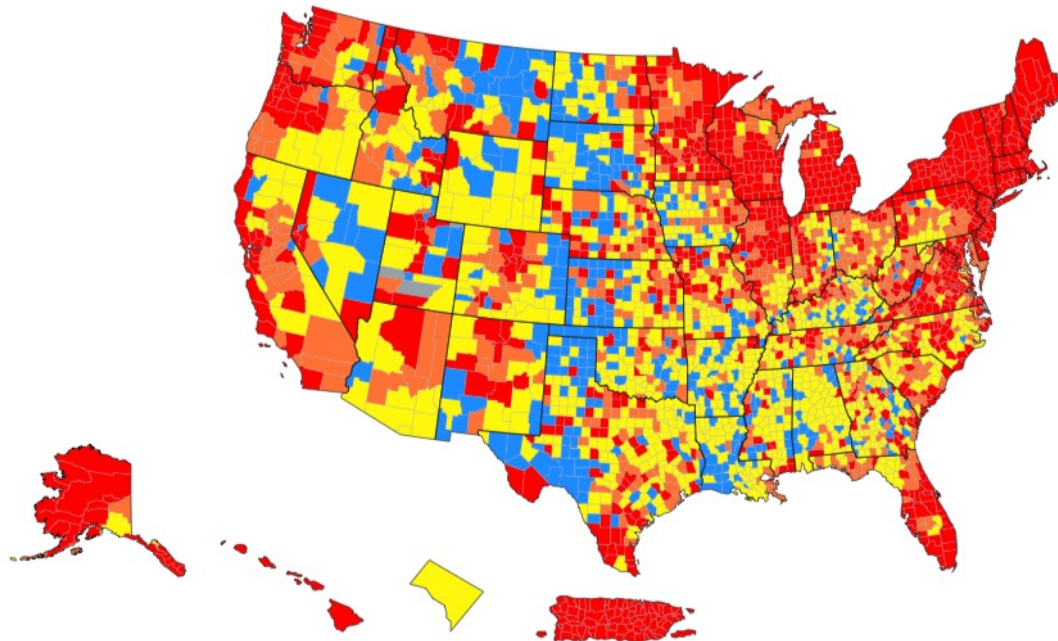


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Source: Centers for Disease Control and Prevention website; accessed May 7, 2022

Virus spread in 35% of U.S. counties rates as “Substantial”; spread is “High” in 20% of these counties

Community Transmission
April 28-May 4, 2022



Source: Centers for Disease Control and Prevention website; accessed May 7, 2022

Community Transmission By County

As of May 4

■ Substantial ■ Moderate ■ High ■ Low

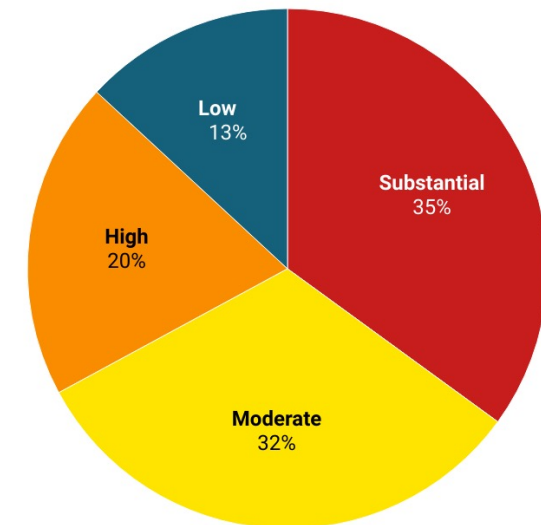
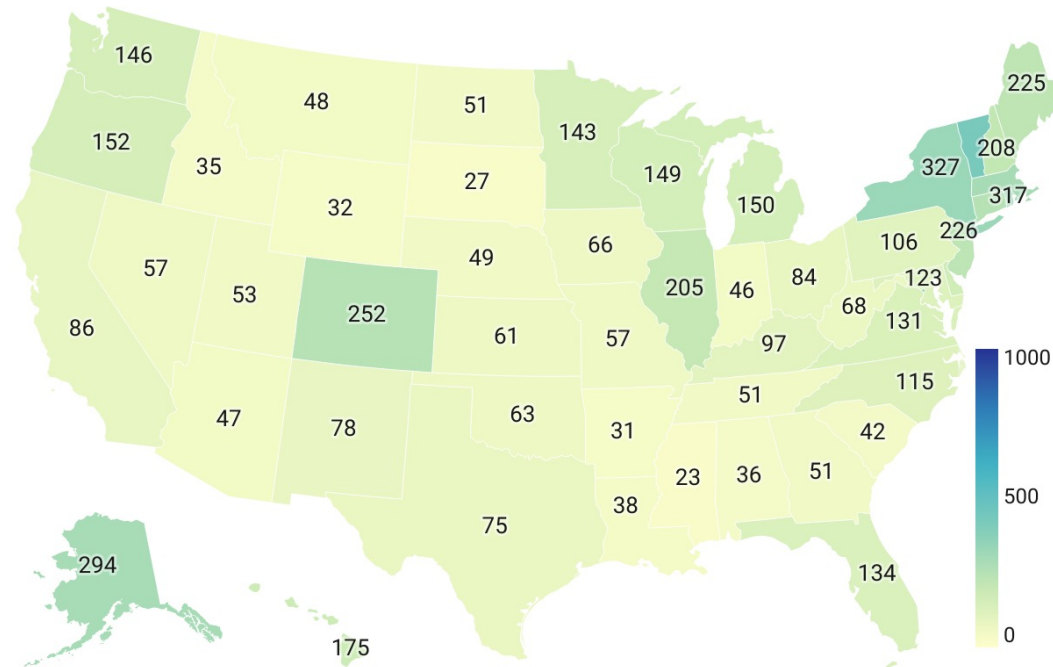


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Case rates moved higher in the last two weeks in many states. Rates remain highest in the Northeast, where the current wave has yet to crest

New Cases / Million / Day

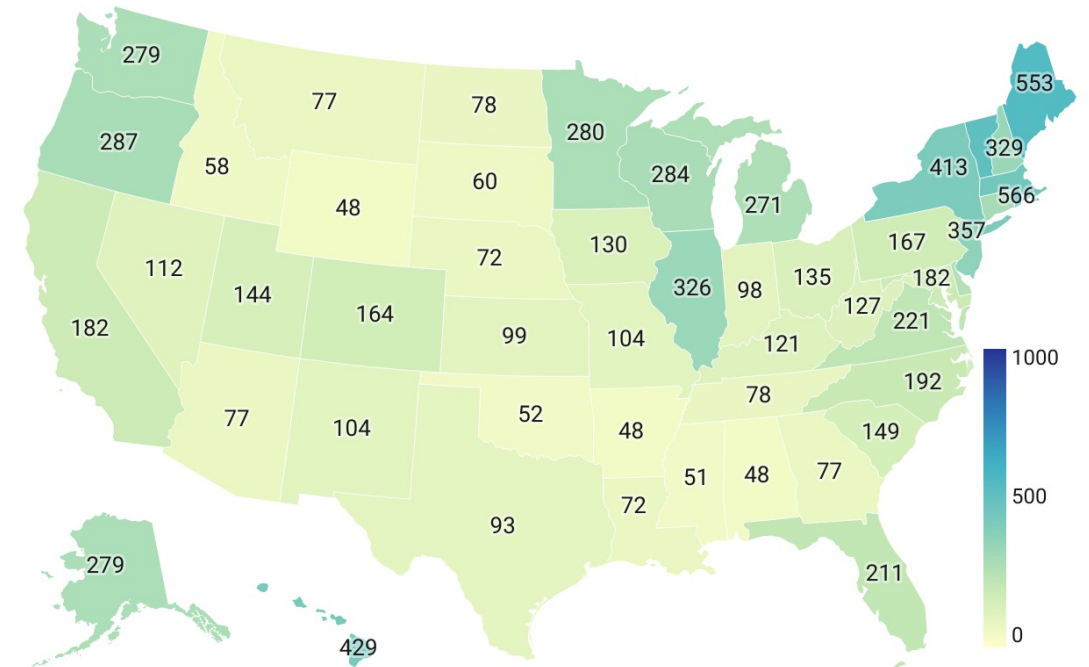
7-Day Average, As of April 21



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

New Cases / Million / Day

7-Day Average, As of May 5

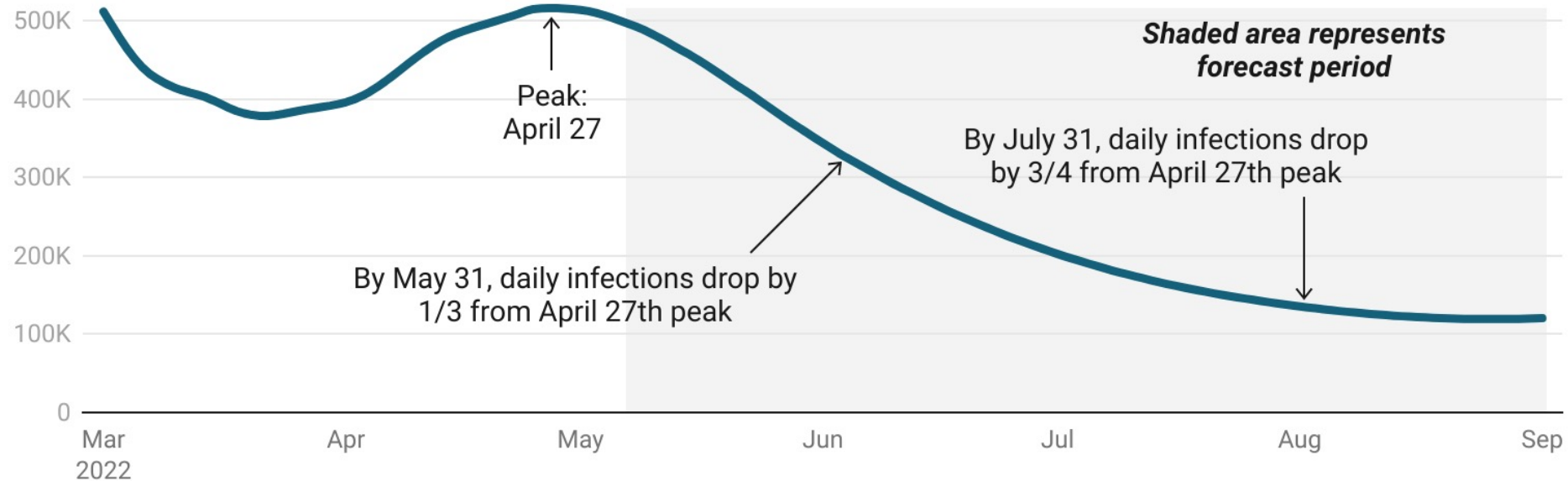


Map: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

IHME projects infections will decline by one-third in the United States during April and three-fourths before August

Estimated and Projected Infections - U.S.

Institute For Health Metrics and Evaluation



Forecast Date: May 6

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

Covid patient days increased 28% over the last two weeks. Covid admissions increased 42% in this time.

Covid-19 Admissions & Census

7-Day Average Thru May 5

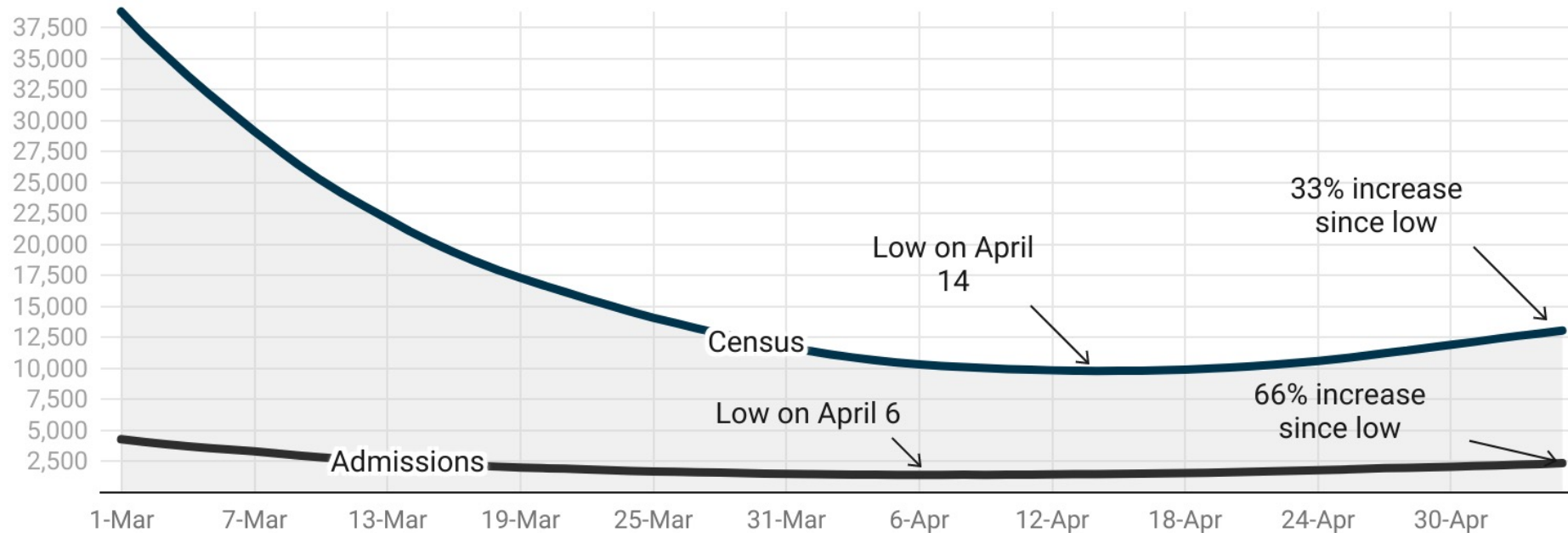


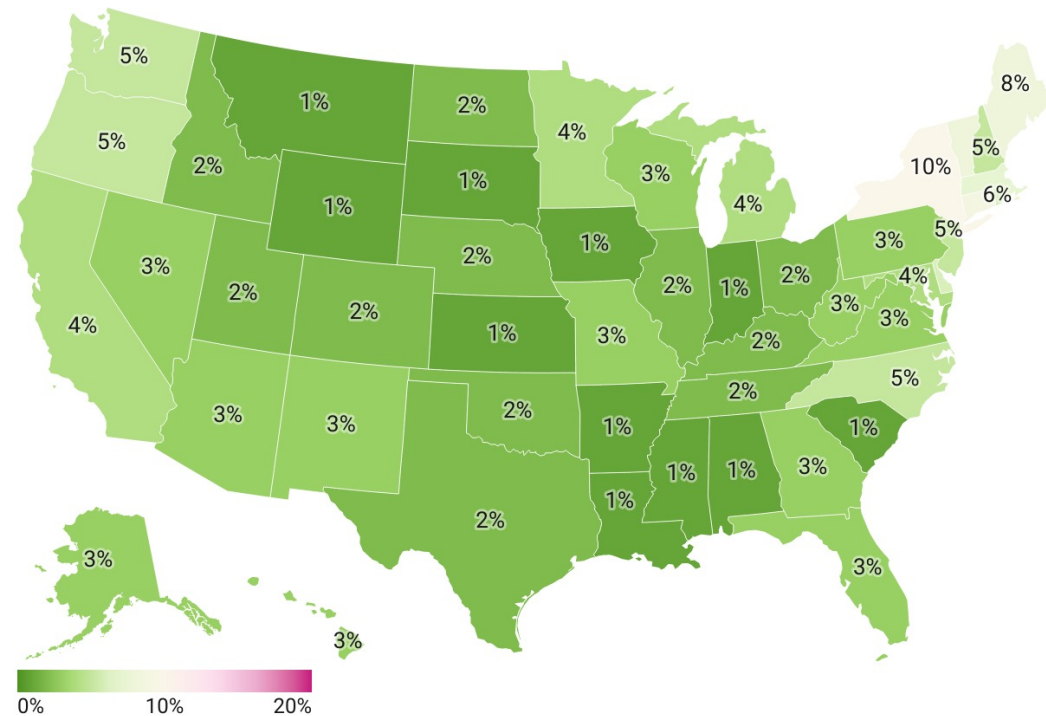
Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Hospitalizations with Covid remain low. However, Covid patients now occupy more than 10% of inpatient beds in Connecticut, Delaware, Maine, New York, and Vermont

Covid-19 Patients As % of All Inpatient Beds

April 21

As of April 21

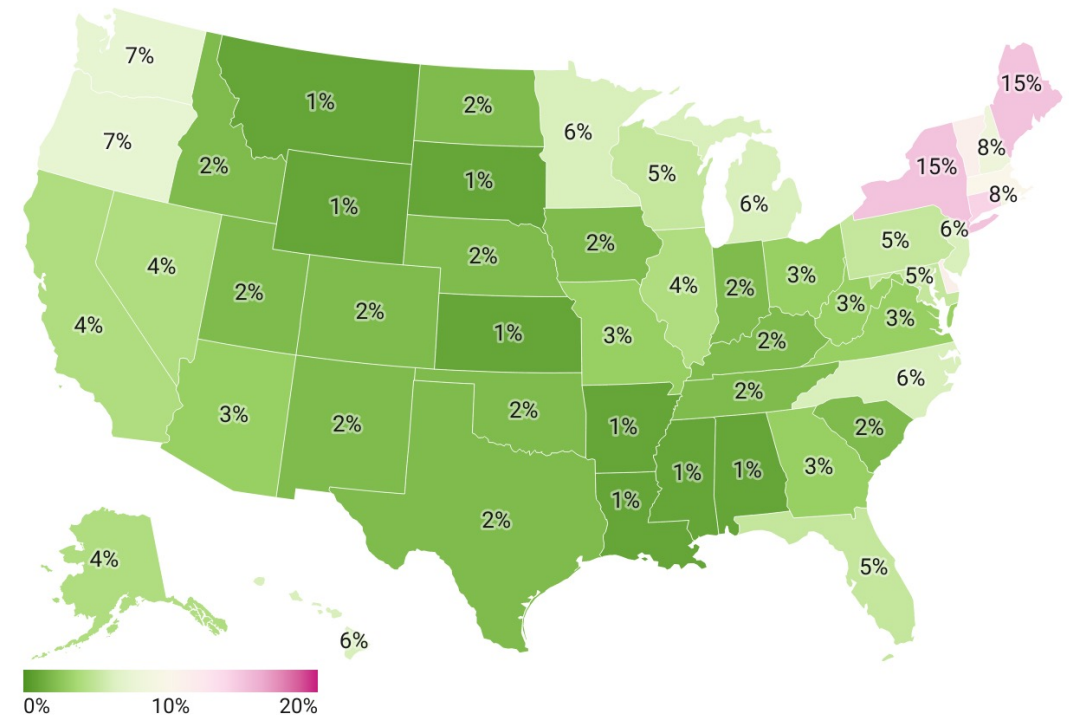


Map: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid-19 Patients As % of All Inpatient Beds

May 5

As of May 5

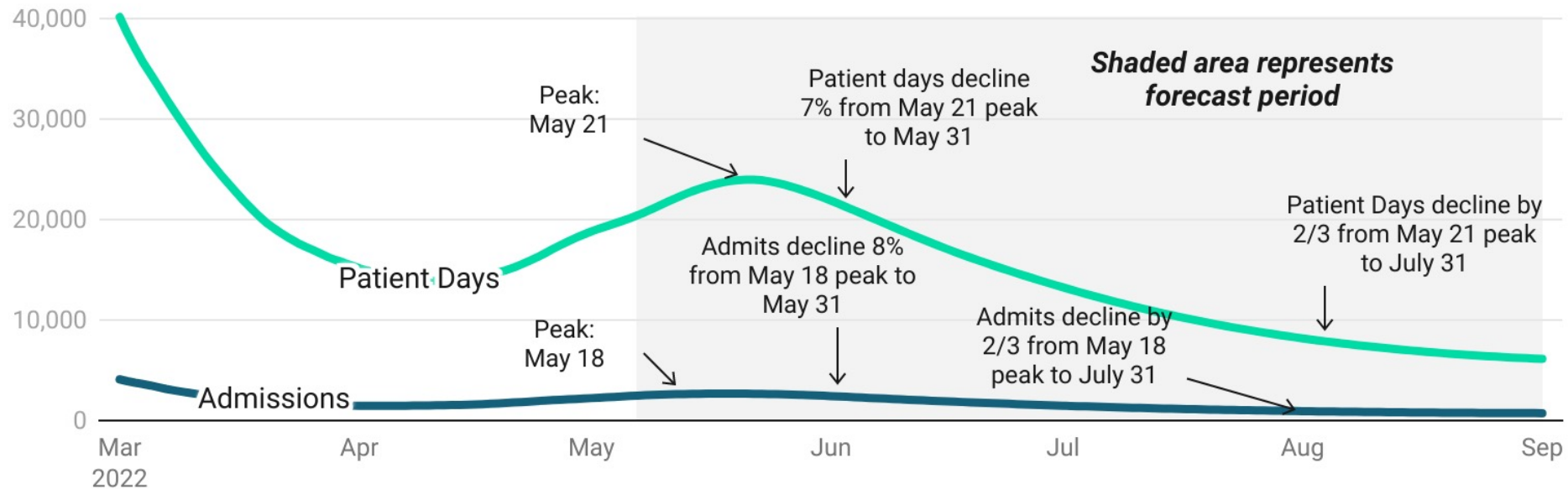


Map: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

IHME anticipates Covid admissions and patient days peak within two weeks, then fall by two-thirds by the end of July

Estimated & Projected Hospital Covid-19 Admissions & Patient Days

Institute for Health Metrics and Evaluation



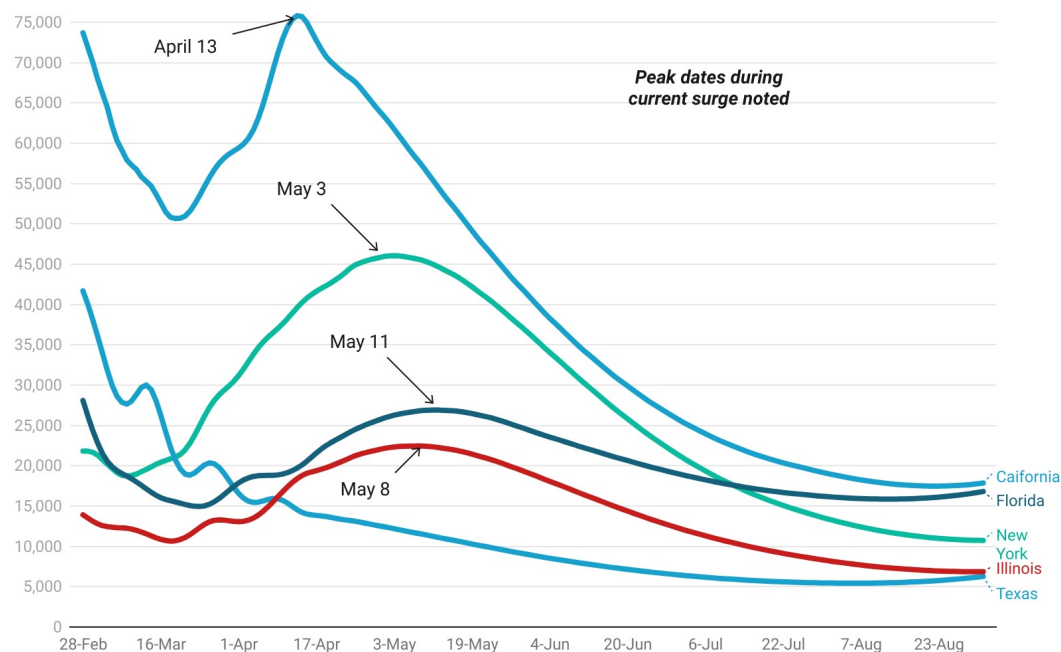
Forecast Date: May 6

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

Infection rates in the five largest states peaked or are peaking, per the IHME. Projected Covid patient days peak in these states in the next two weeks

Estimated and Projected Infections

Five Largest States

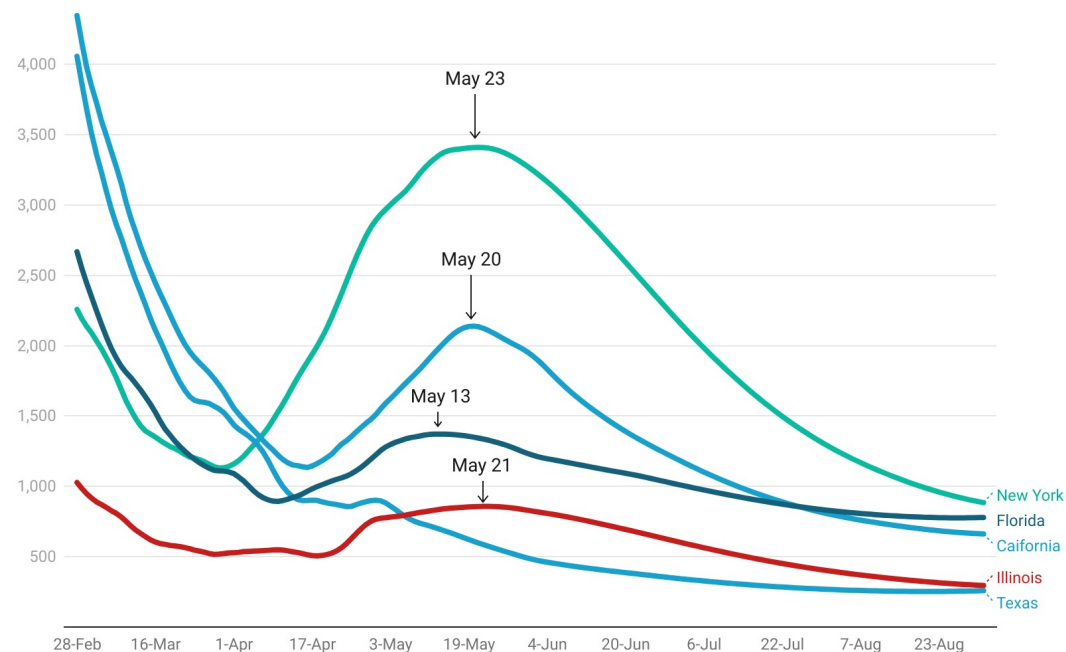


Date of Projections: May 6

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

Estimated and Projected Covid Patient Days

Five Largest States



Date of Projections: May 6

Chart: Health Industry Advisor LLC • Source: Institute for Health Metrics and Evaluation • 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 5

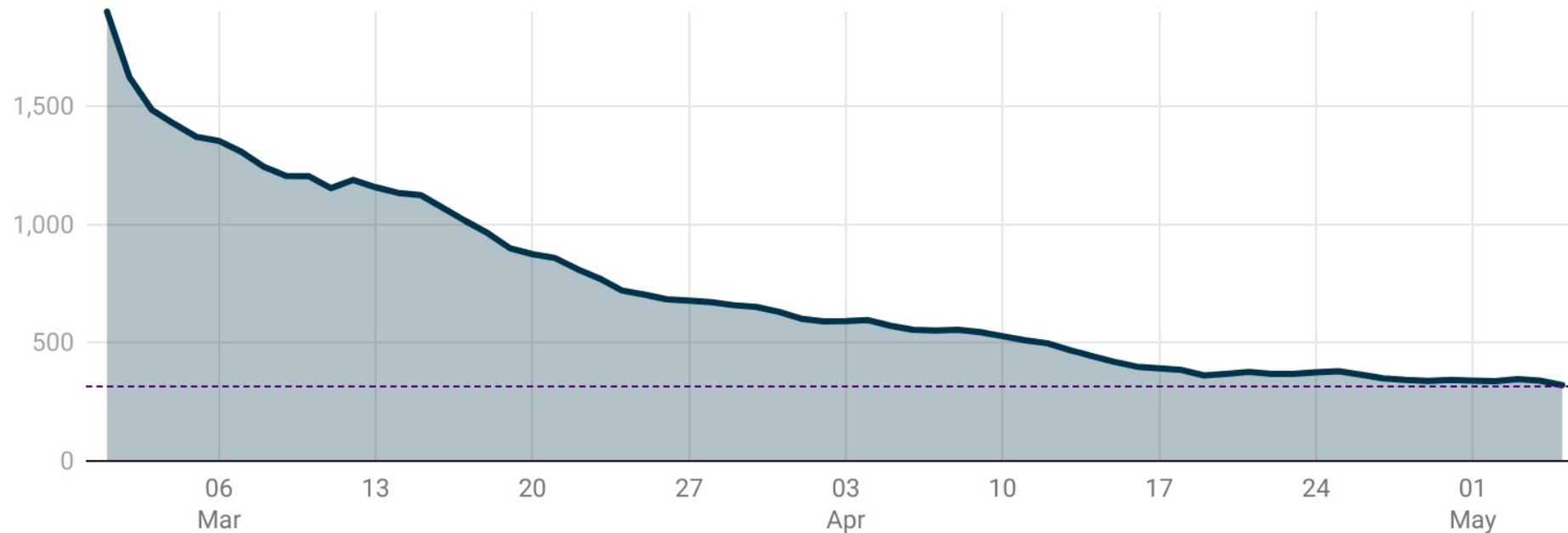


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

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
- 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>