



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

Issue #387

Monday, June 20, 2022

COVID19  
VITAL SIGNS

# Highlights – As of June 20

- New daily case rates fell 13% week-over-week. Cases fell in every continent, paced by a 22% decline in Europe
- Taiwan posted the highest case rate last week among countries with one million or more residents. Taiwan's rate doubled North Korea's second-highest rate
- Rates in New Zealand, Australia, and Portugal rounded-out the top five
- New cases fell week-over-week in the United States, perhaps turning a corner on the Omicron surge than launched in late March. The 7-day average rate declined nine consecutive days through Friday
- Nevertheless, substantial virus is circulating across the country:
  - The test-positive rate rose further last week. At 12.7%, this rate is nearly three times higher than recommended by public health officials
  - Nine-in-ten wastewater treatment sites detected the virus in virtually every sample tested
  - The CDC rates virus transmission as High or Substantial in nine-of-every-ten counties
- The daily case rate ranks at the 60<sup>th</sup> percentile of daily cases reported since August 2020.
- Rates in Florida, Hawaii, and Wyoming rank in the highest quintile. Rates in Alaska, Arizona, California, Colorado, Illinois, Kentucky, Louisiana, Missouri, Nevada, New Jersey, New Mexico, North Carolina, Oregon, and Washington rank in the second quintile
- Covid infections drove hospitalizations higher last week. Covid admissions rose 5% week-over-week; Patient days inched 2% higher
- Covid admissions currently rank at the 35<sup>th</sup> percentile of daily admissions since August 2020. Patient days rank at the 23<sup>rd</sup> percentile
- Deaths with Covid remain relatively low, despite the prolonged infection surge in the United States, Deaths average about 300 per day, far lower than the 2,700 daily deaths recorded in late-January
- The case fatality rate remained about 3 per thousand cases last week, ranking in the lowest 1% for this rate since August 2020

Newly reported cases in the United States reversed course nine days ago, falling 22% since.

### New Daily Cases / Million

7-Day Average

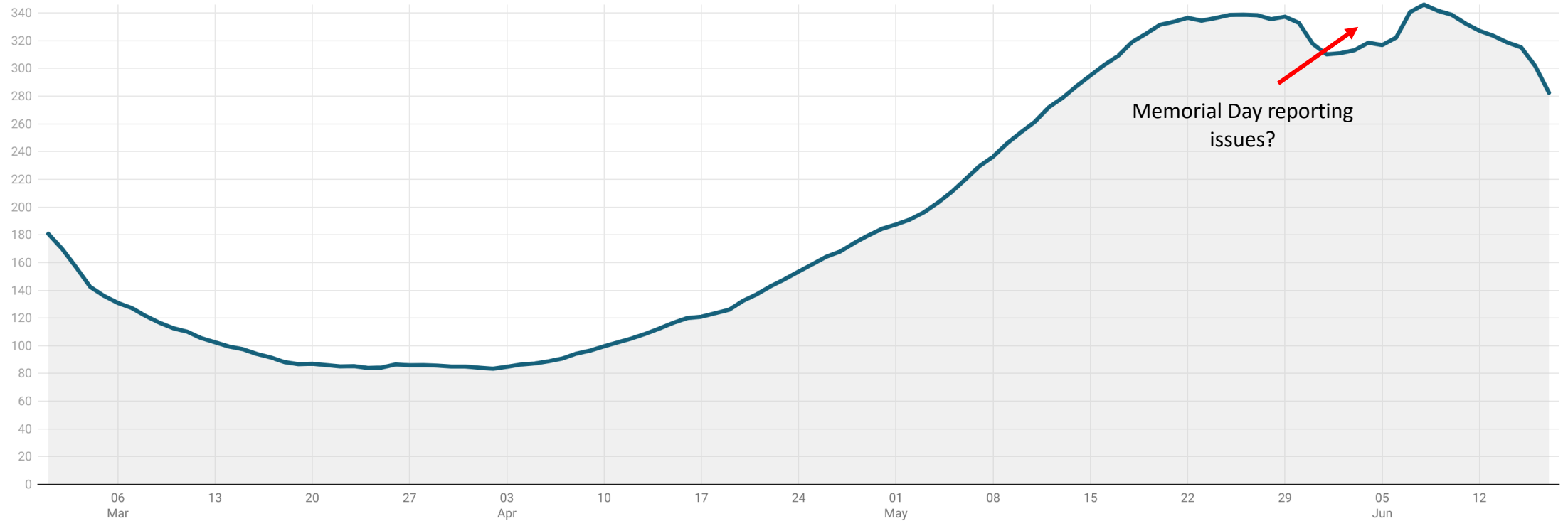


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Most wastewater testing sites (87%) across the country detect the virus in nearly all samples (80 – 100%). Only one of every forty sites found no evidence of the virus

## Test-Positivity Rate

7-Day Average, Through June 13

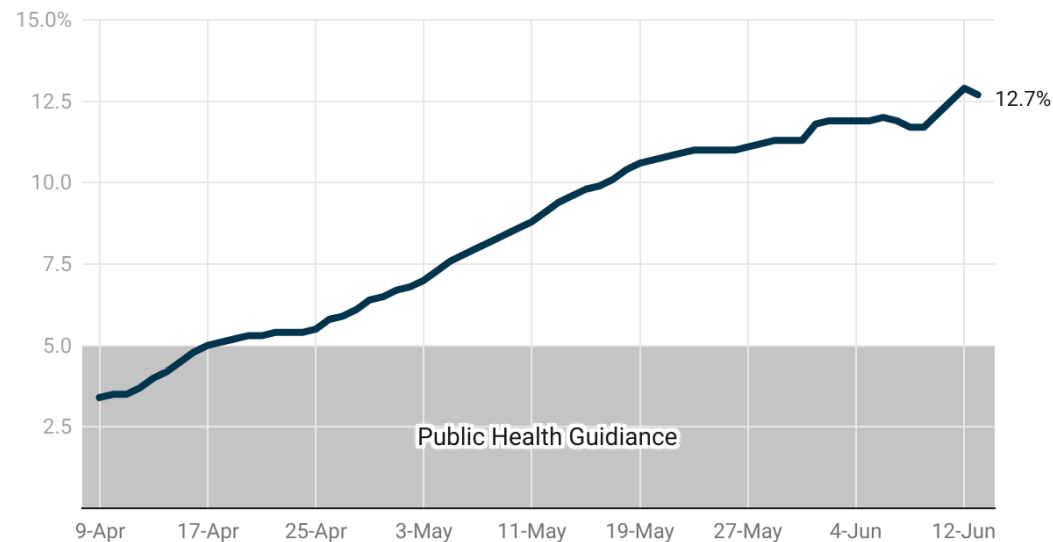
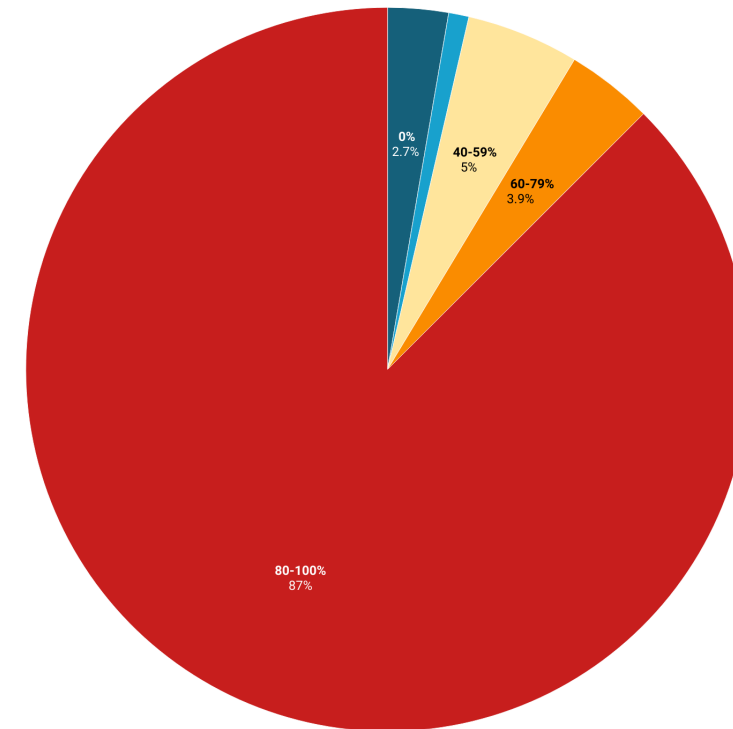


Chart: Health Industry Advisor LLC • Source: U.S. Department of Health & Human Services • Created with Datawrapper

## Percent of Samples With Detectable Virus - Number of Sites

May 31 - June 14

0% (2.7%) 20-39% (0.9%) 40-59% (5%) 60-79% (3.9%) 80-100% (87%)



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

Wastewater virus levels declined since the last testing period in more than half the monitored sites. Nevertheless, current virus levels range between 40% to 80% of peak measurement in most sites

### Current Wastewater Virus Levels v. Peak

May 31 - June 14

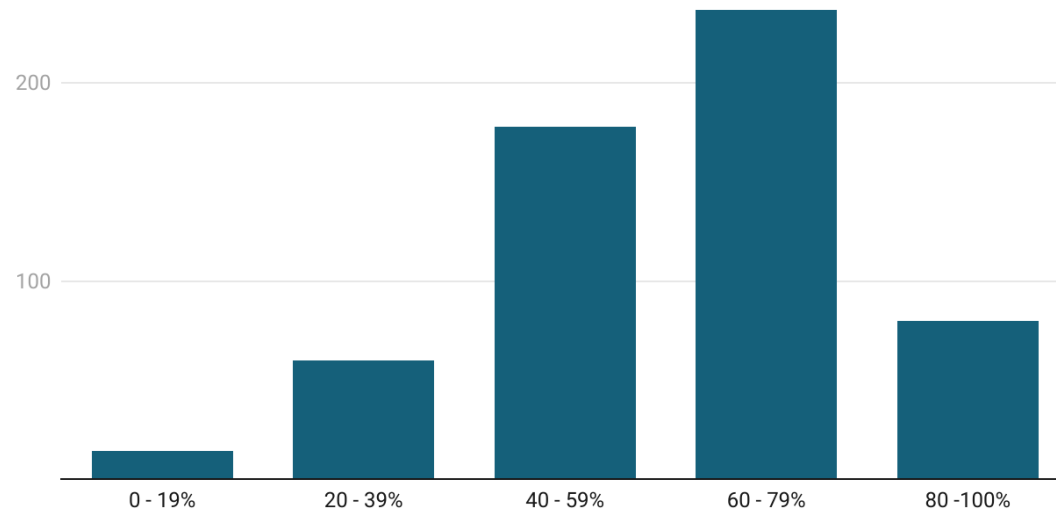


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

### Change (%) in Virus Levels Since Last Period - Number of Sites

May 31 - June 14

Legend: --100+% (Dark Green), -10 to -99% (Teal), 0 to -9% (Light Green), 1 to 9% (Light Orange), 10 to 99% (Orange), 100 to 999% (Red), 1000+% (Dark Red)

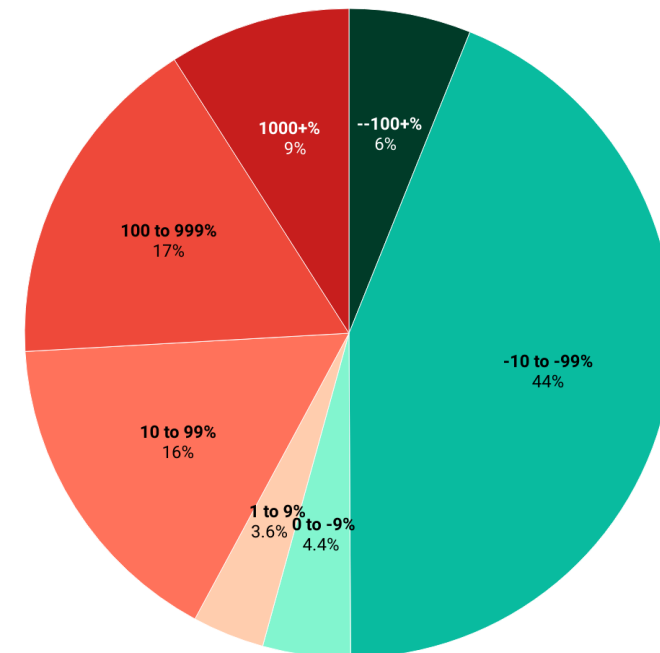
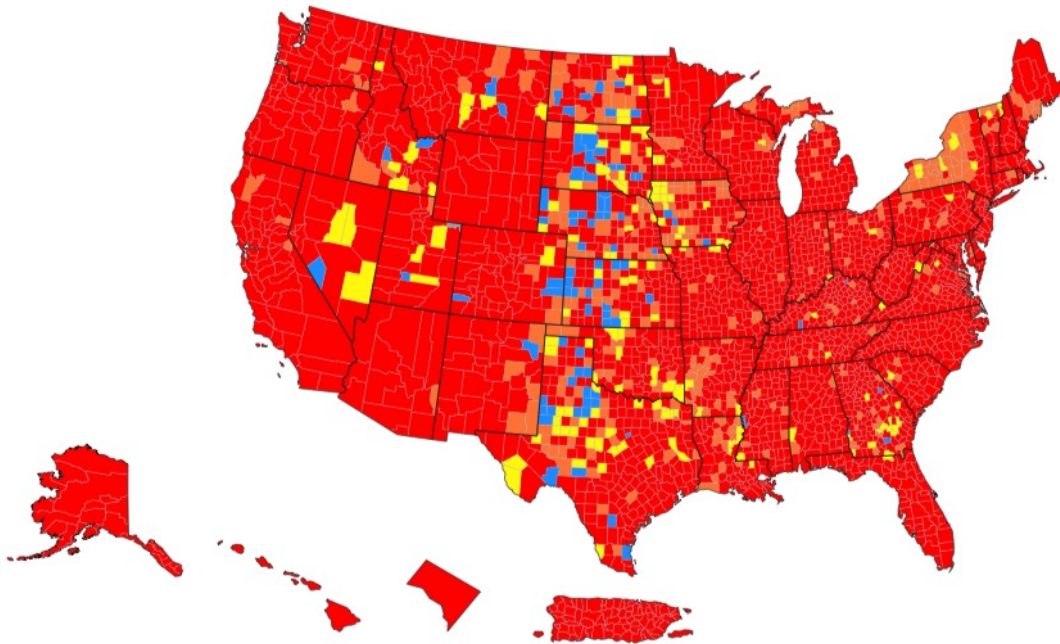


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Virus spread rated High or Substantial in nine of every ten U.S. counties last week. 82% rated High, up sharply from 58% four weeks earlier

Community Transmission  
June 10 - 16, 2022



Source: Centers for Disease Control and Prevention website; accessed June 20, 2022

**Community Transmission By County**

June 10 - 16

High Substantial Moderate Low

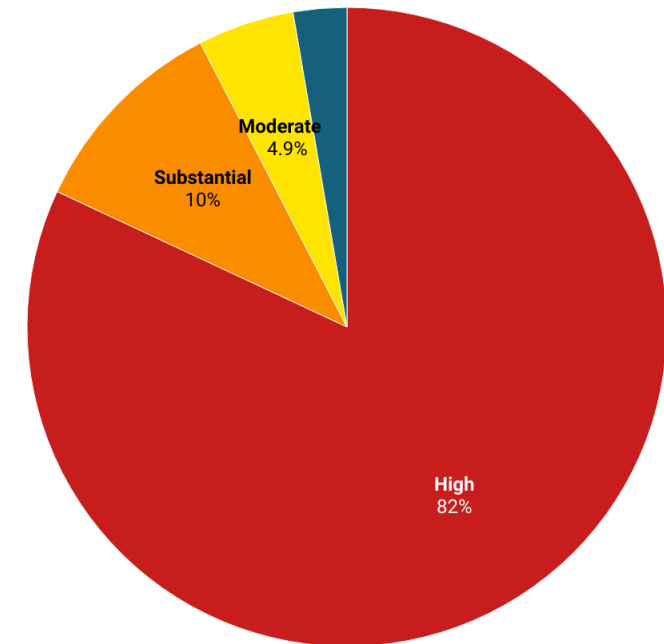


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

BA.2.12.1 showed a modest decline in prevalence in the latest week, while BA.4 and BA.5 continued to grow in prevalence

## Variant Proportions in the United States

CDC's Genomic Surveillance

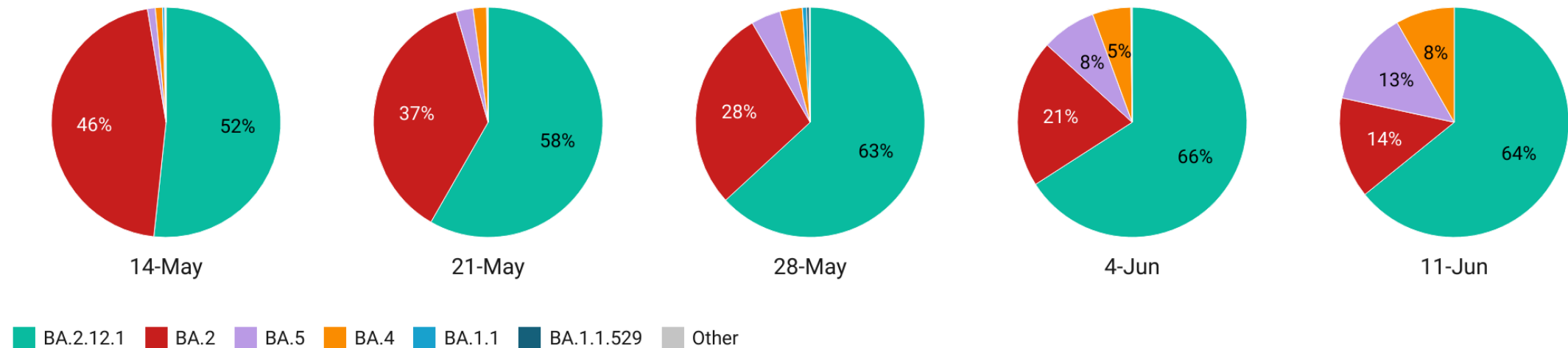
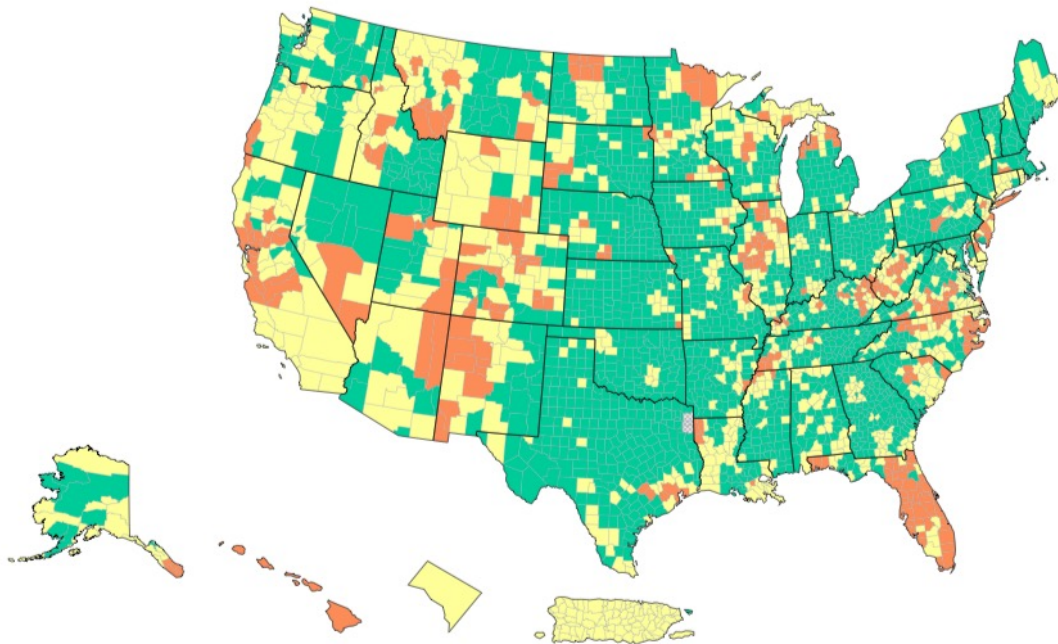


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Six-in-ten counties rated Low on the CDC's Community Level scorecard last week, down from seven-in-ten counties the prior week. However, number of counties rated High fell each of the past three weeks

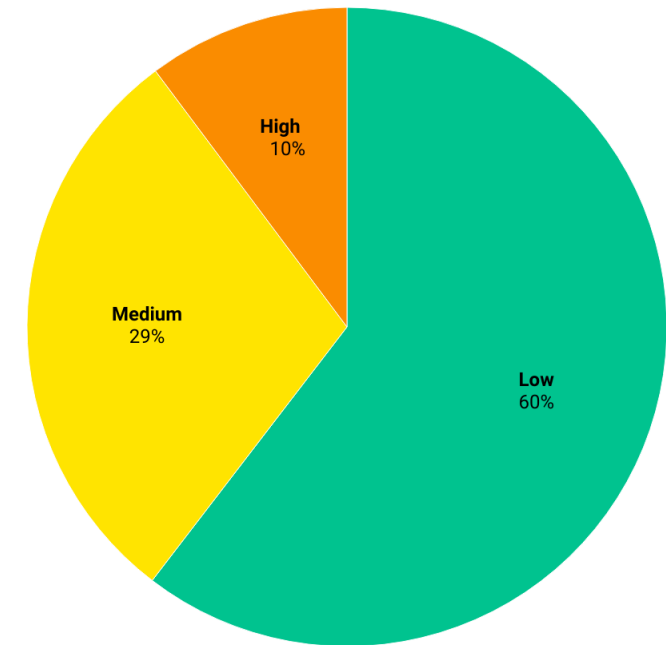
June 9 -15, 2022



### Community Levels By County

June 10 - 16

Low Medium High



Source: Centers for Disease Control and Prevention website; accessed June 20, 2022

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

Covid admissions tripled since reaching a near pandemic low in mid-April. However, hospitalizations remain substantially lower than posted earlier this year

## Covid-19 Admissions & Census

7-Day Average Thru June 15

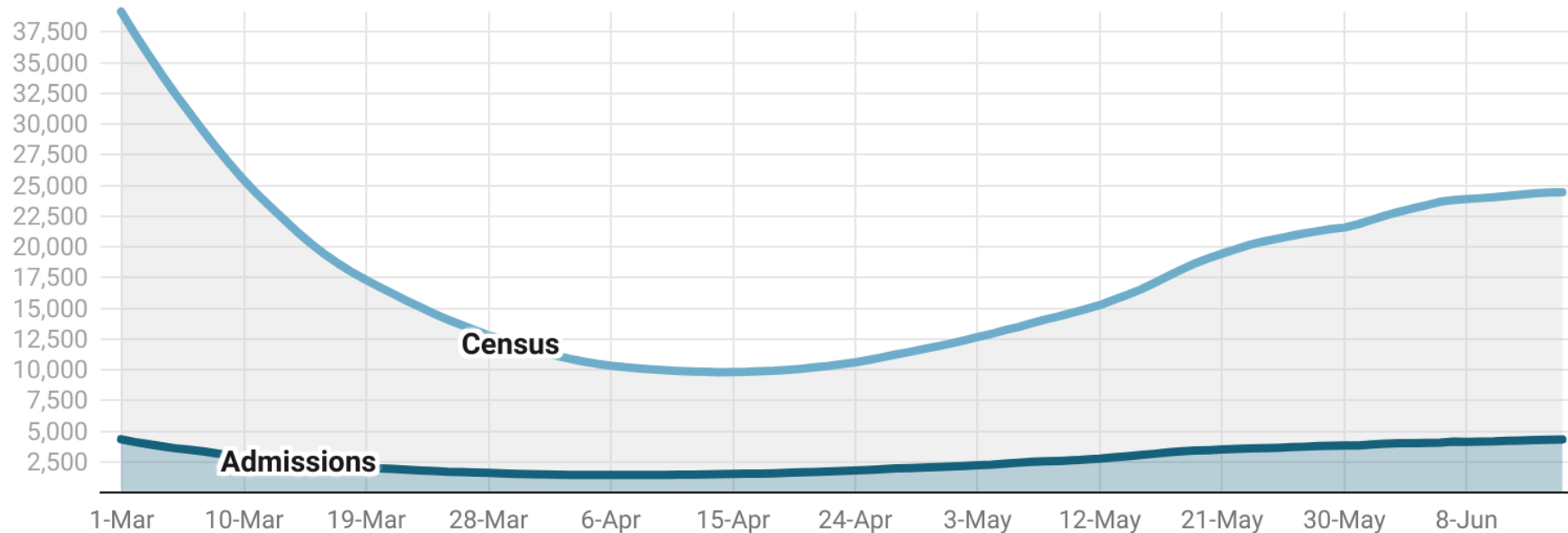
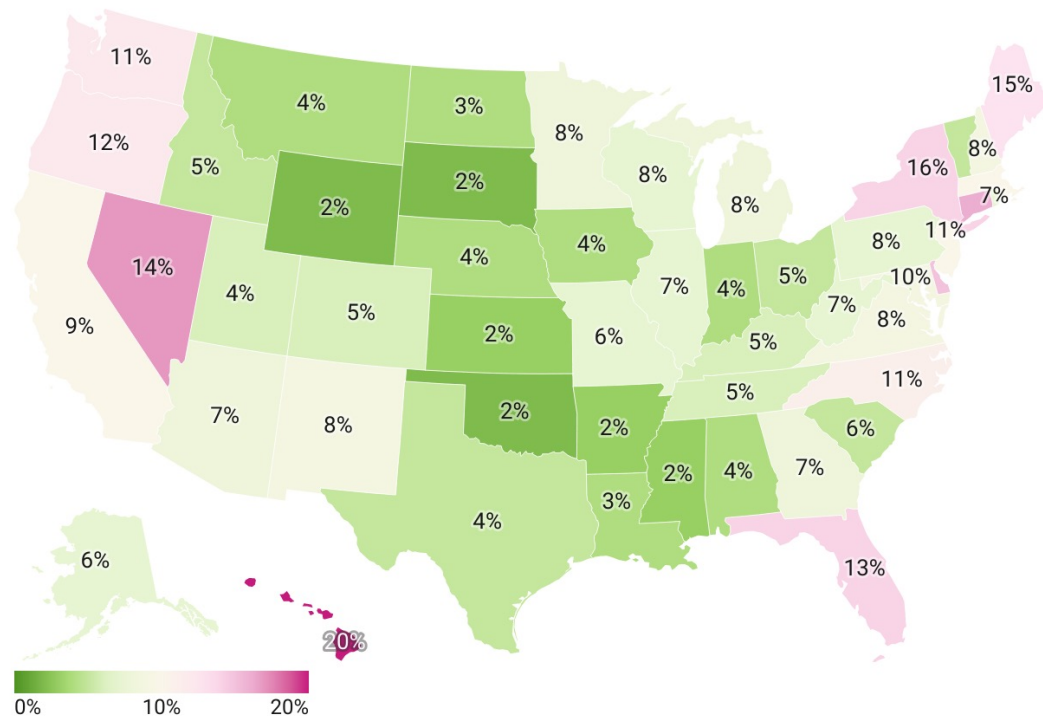


Chart: Health Industry Advisor LLC • Source: Centers for Disease Control and Prevention • Created with Datawrapper

Covid patients occupy one of every fourteen inpatient beds in the United States. Occupancy rates are highest in Connecticut, Delaware, Hawaii, Maine, and New York. Rates fell in ten states last week

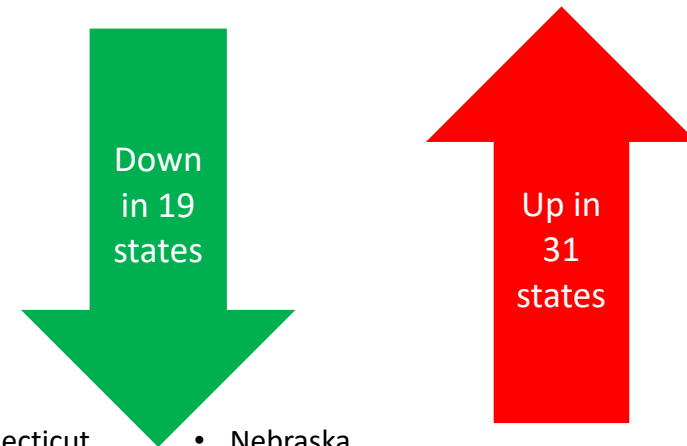
## Covid-19 Patients As % of All Inpatient Beds

As of June 16



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

## Week-over-Week Change



- Connecticut
- Delaware
- Illinois
- Indiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Montana
- Nebraska
- New Jersey
- New York
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- Vermont
- Wisconsin

## Deaths with Covid remain relatively low during this Omicron infection wave

### Deaths With Coronavirus

7-Day Average, Through June 17

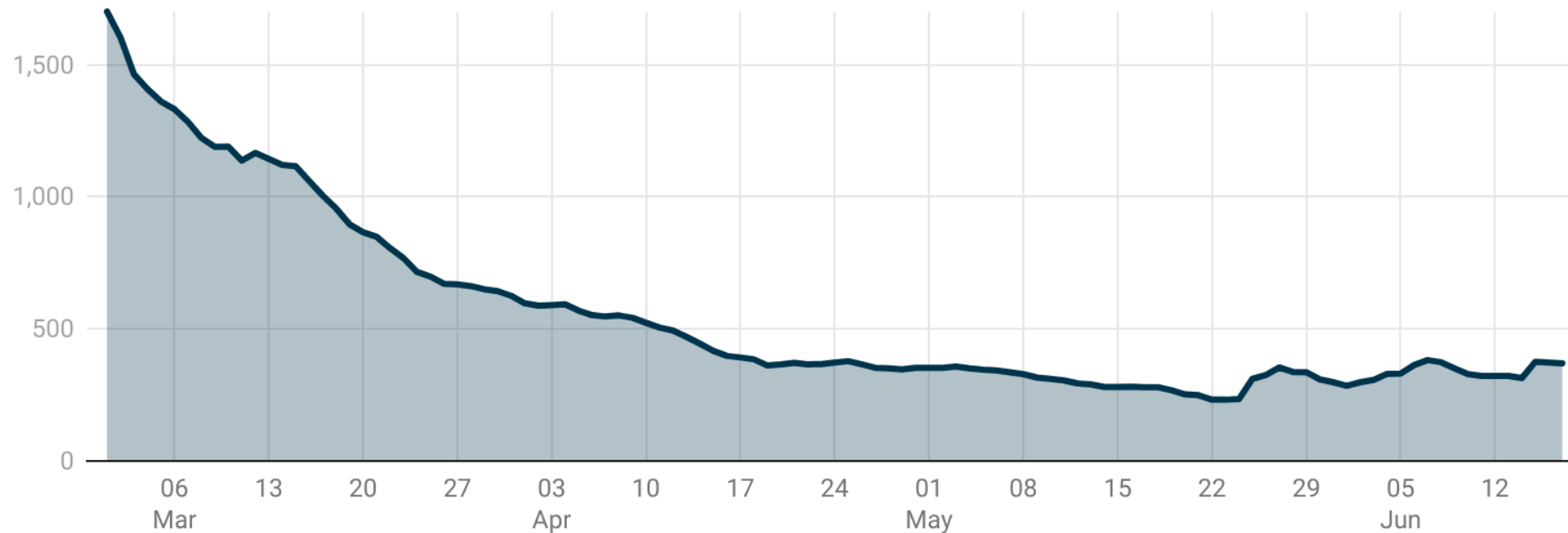


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

The reported case fatality rate has trended lower since at least the Fall, 2020. Moreover, last week's rate fell further below the long-term trend line

### Deaths per 1000 Cases, 3 week lag

7-day average

Deaths/1000 New Cases    Trend

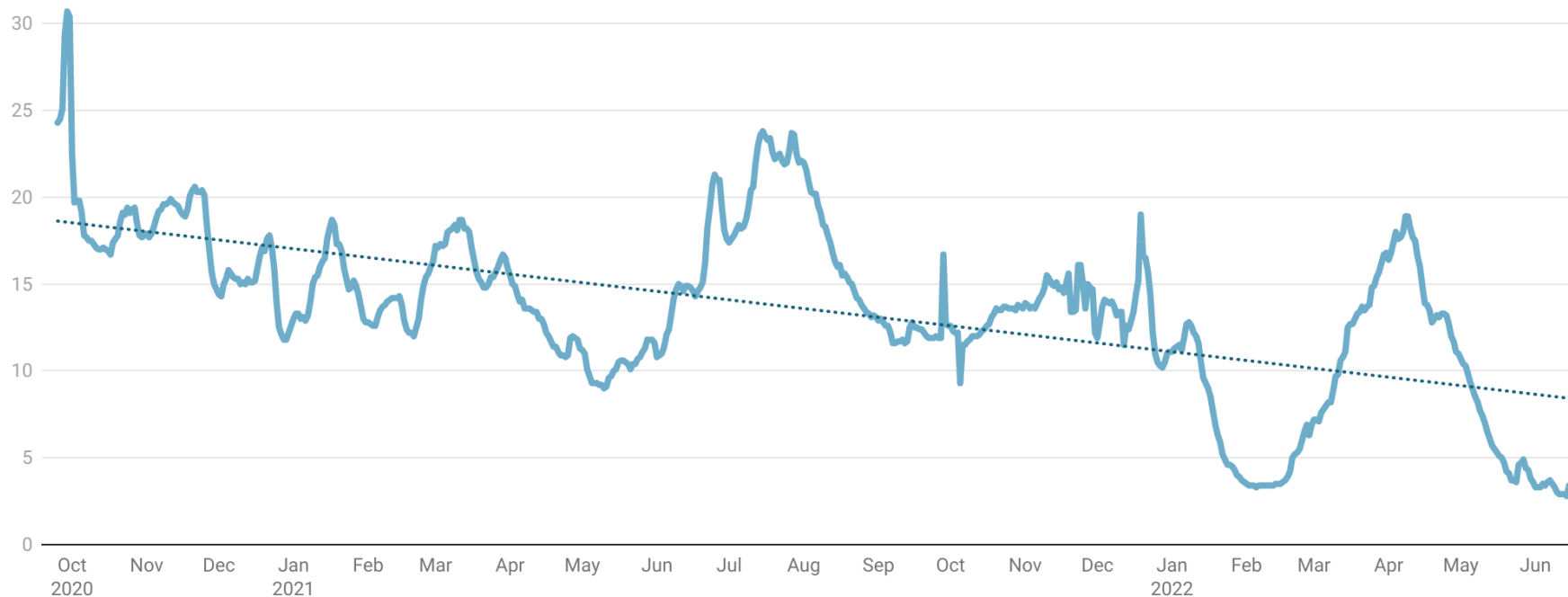


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

The new case rate fell in the United States last week, after increasing since late March. Comparatively, the current rate sits at the 60<sup>th</sup> percentile (for rates posted since August 2020)

## Daily Cases / Million

7-day Average

2022 2021 2020

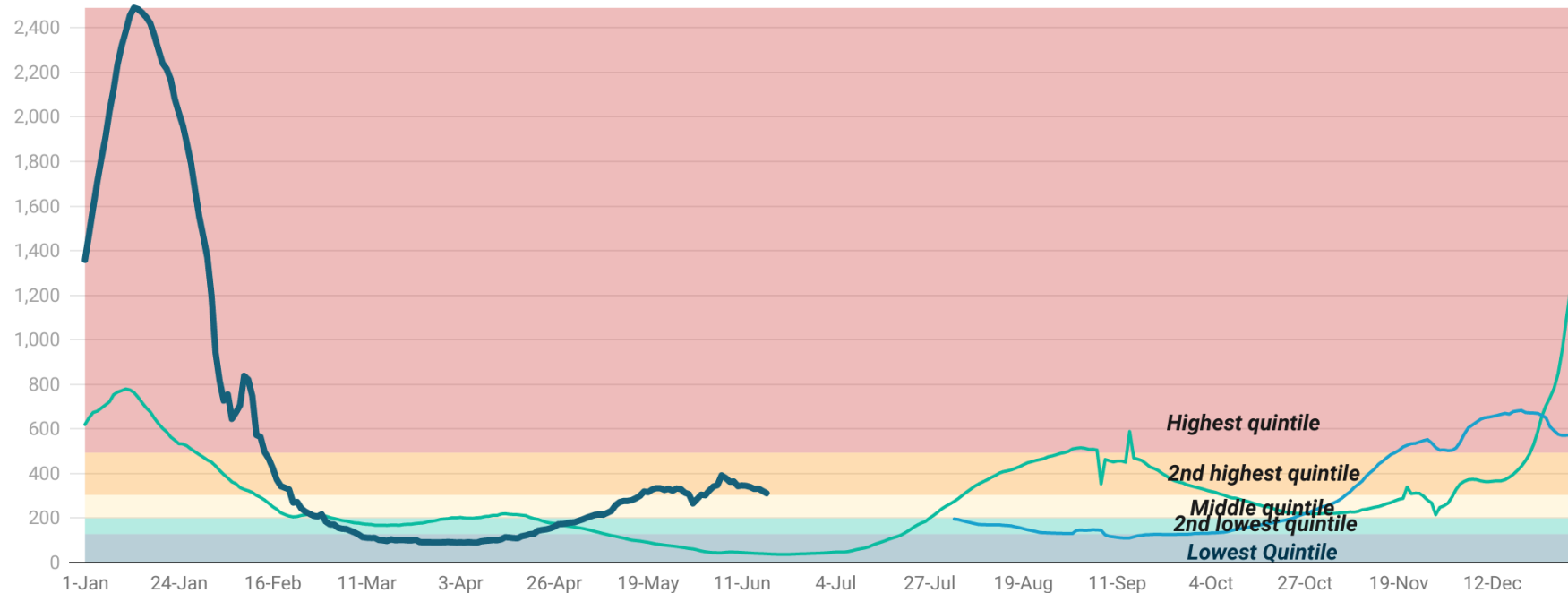


Chart: CHealth Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Quintiles calculated from United States experience from August 1, 2020 – June 17, 2022

The per capita admission rate for the United States climbed last week.  
The current rate rests in the second quintile (35% percentile)

## Admissions / 100,000 Population

7-day Average

2022 2021 2020

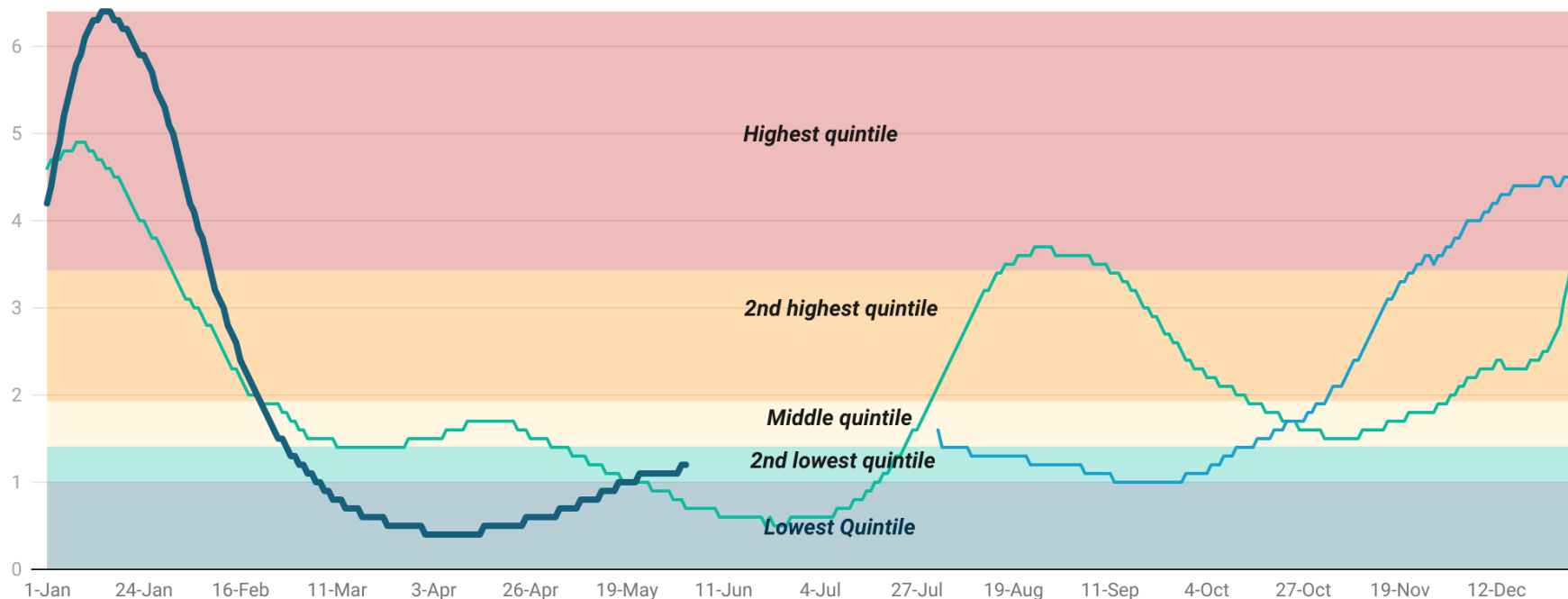


Chart: CHealth Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Quintiles calculated from United States experience from August 1, 2020 – June 13, 2022

Covid occupancy rates moved into the second quintile, compared to levels posted since August 2020

### Covid Inpatients as % of Inpatient Beds

7-day Average

2022 2021 2020

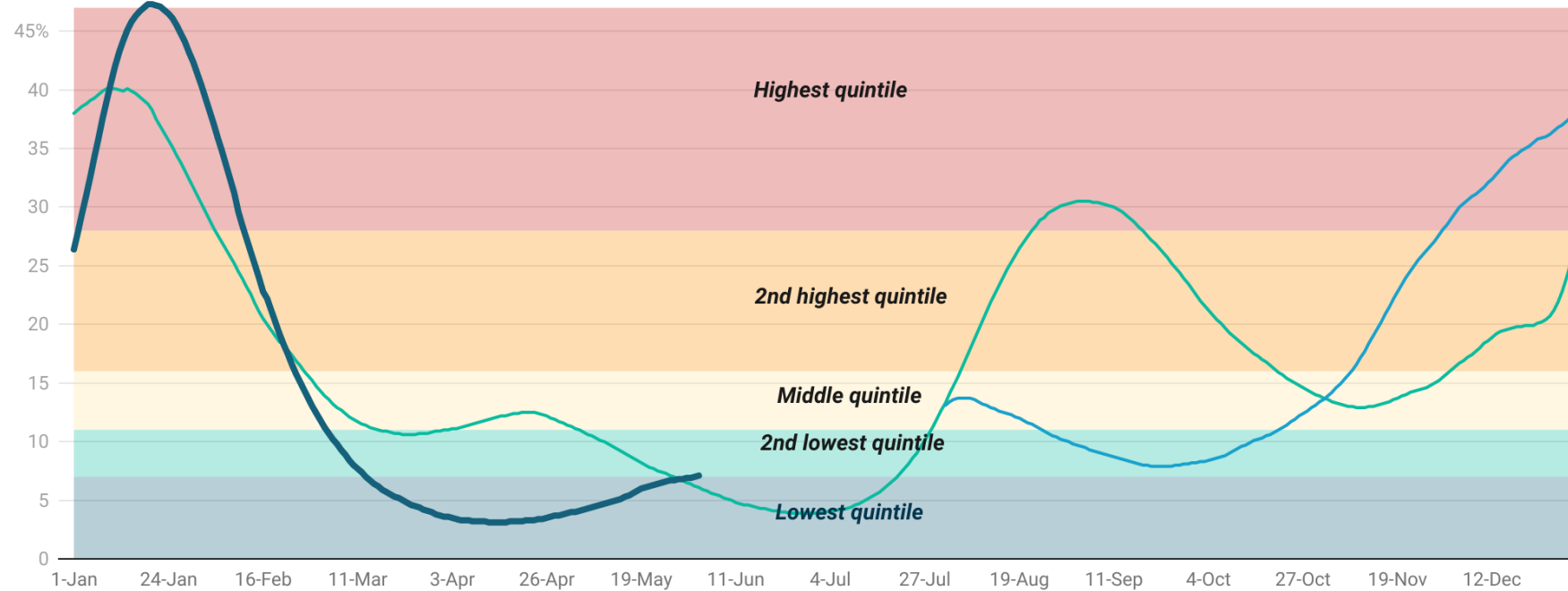


Chart: CHealth Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

, 2022

The case fatality rate continues to at or near the lowest level experienced during the pandemic

## Case Fatality Rate

7-day Average, 3-week lag from case to death

2022 2021 2020

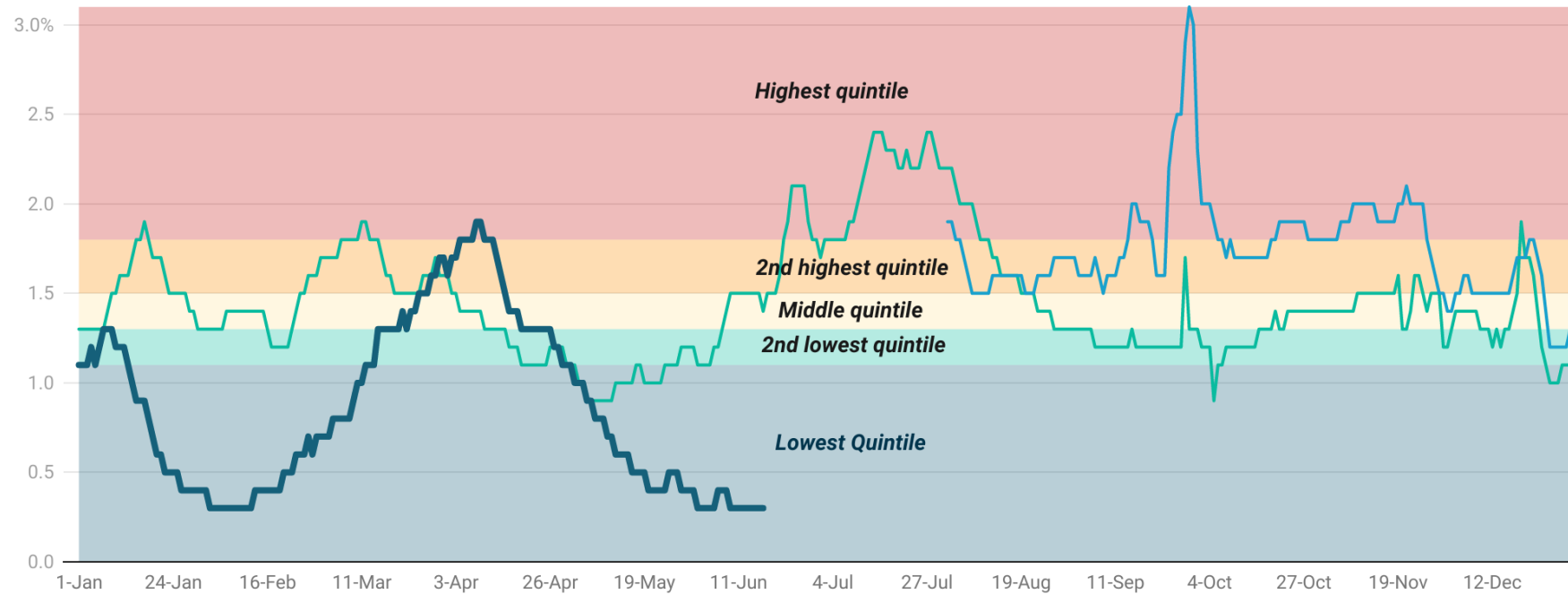


Chart: CHealth Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

, 2022

While new daily infection rates in many states are high by pandemic standards, most report low hospitalization and death rates

| State                | New Daily Infections / Million |       | Admissions/100,000 |       | Covid Occupancy % |       | Case Fatality Rate |       | State          | New Daily Infections / Million |       | Admissions/100,000 |       | Covid Occupancy % |       | Case Fatality Rate |       |
|----------------------|--------------------------------|-------|--------------------|-------|-------------------|-------|--------------------|-------|----------------|--------------------------------|-------|--------------------|-------|-------------------|-------|--------------------|-------|
|                      | 7-Day                          | Trend | 7-Day              | Trend | 7-Day             | Trend | 7-Day              | Trend |                | 7-Day                          | Trend | 7-Day              | Trend | 7-Day             | Trend | 7-Day              | Trend |
| Alabama              | 280                            |       | 1.04               |       | 4%                |       | 0.3%               |       | Montana        | 279                            |       | 1.90               |       | 4%                |       | 1.0%               |       |
| Alaska               | 359                            |       | 1.09               |       | 7%                |       | 0.0%               |       | Nebraska       | 198                            |       | 0.85               |       | 4%                |       | 0.2%               |       |
| Arizona              | 321                            |       | 1.32               |       | 8%                |       | 0.2%               |       | Nevada         | 430                            |       | 1.79               |       | 17%               |       | 0.5%               |       |
| Arkansas             | 230                            |       | 0.97               |       | 3%                |       | 0.9%               |       | New Hampshire  | 144                            |       | 1.22               |       | 9%                |       | 0.4%               |       |
| California           | 378                            |       | 1.22               |       | 10%               |       | 0.2%               |       | New Jersey     | 311                            |       | 1.45               |       | 10%               |       | 0.3%               |       |
| Colorado             | 359                            |       | 1.51               |       | 6%                |       | 0.0%               |       | New Mexico     | 460                            |       | 1.19               |       | 9%                |       | 0.1%               |       |
| Connecticut          | 181                            |       | 1.45               |       | 16%               |       | 0.2%               |       | New York       | 280                            |       | 1.29               |       | 14%               |       | 0.3%               |       |
| Delaware             | 254                            |       | 1.26               |       | 15%               |       | 0.2%               |       | North Carolina | 333                            |       | 1.10               |       | 11%               |       | 1.6%               |       |
| District Of Columbia | 273                            |       | 2.31               |       | 5%                |       | 0.0%               |       | North Dakota   | 183                            |       | 1.56               |       | 4%                |       | 0.3%               |       |
| Florida              | 494                            |       | 2.65               |       | 14%               |       | 0.4%               |       | Ohio           | 198                            |       | 1.21               |       | 5%                |       | 0.0%               |       |
| Georgia              | 260                            |       | 1.16               |       | 8%                |       | 0.5%               |       | Oklahoma       | 177                            |       | 0.69               |       | 2%                |       | 0.6%               |       |
| Hawaii               | 726                            |       | 2.43               |       | 22%               |       | 0.1%               |       | Oregon         | 344                            |       | 1.24               |       | 12%               |       | 0.3%               |       |
| Idaho                | 198                            |       | 1.14               |       | 5%                |       | 0.5%               |       | Pennsylvania   | 196                            |       | 1.22               |       | 7%                |       | 0.5%               |       |
| Illinois             | 306                            |       | 1.40               |       | 7%                |       | 0.3%               |       | Rhode Island   | 283                            |       | 0.71               |       | 7%                |       | 0.3%               |       |
| Indiana              | 180                            |       | 1.04               |       | 4%                |       | 0.4%               |       | South Carolina | 287                            |       | 1.23               |       | 5%                |       | 0.3%               |       |
| Iowa                 | 235                            |       | 1.01               |       | 4%                |       | 0.0%               |       | South Dakota   | 157                            |       | 0.97               |       | 2%                |       | 0.5%               |       |
| Kansas               | 194                            |       | 0.87               |       | 3%                |       | -0.1%              |       | Tennessee      | 265                            |       | 0.98               |       | 6%                |       | 0.5%               |       |
| Kentucky             | 363                            |       | 1.34               |       | 6%                |       | 0.7%               |       | Texas          | 236                            |       | 1.08               |       | 5%                |       | 0.2%               |       |
| Louisiana            | 312                            |       | 1.50               |       | 4%                |       | 0.3%               |       | Utah           | 291                            |       | 1.33               |       | 6%                |       | 0.1%               |       |
| Maine                | 161                            |       | 1.12               |       | 13%               |       | 0.2%               |       | Vermont        | 168                            |       | 1.01               |       | 5%                |       | 0.1%               |       |
| Maryland             | 236                            |       | 0.95               |       | 9%                |       | 0.3%               |       | Virginia       | 298                            |       | 1.21               |       | 9%                |       | 0.0%               |       |
| Massachusetts        | 237                            |       | 1.31               |       | 10%               |       | 0.3%               |       | Washington     | 330                            |       | 0.99               |       | 12%               |       | 0.3%               |       |
| Michigan             | 223                            |       | 1.21               |       | 8%                |       | 0.5%               |       | West Virginia  | 283                            |       | 1.66               |       | 7%                |       | 0.4%               |       |
| Minnesota            | 258                            |       | 1.10               |       | 8%                |       | 0.3%               |       | Wisconsin      | 264                            |       | 1.15               |       | 7%                |       | 0.3%               |       |
| Mississippi          | 273                            |       | 0.86               |       | 3%                |       | 0.4%               |       | Wyoming        | 605                            |       | 1.09               |       | 2%                |       | 0.0%               |       |
| Missouri             | 370                            |       | 1.37               |       | 7%                |       | 0.2%               |       | United States  | 312                            |       | 1.29               |       | 8%                |       | 0.3%               |       |

| %-iles               | New Infections | Admissions | Occupancy | Case Fatality |
|----------------------|----------------|------------|-----------|---------------|
| Lowest Quintile      | 128            | 1.00       | 7%        | 1.1%          |
| 2nd Lowest Quintile  | 199            | 1.41       | 11%       | 1.3%          |
| Middle Quintile      | 304            | 1.93       | 16%       | 1.5%          |
| 2nd Highest Quintile | 493            | 3.43       | 28%       | 1.8%          |
| Highest Quintile     | > 493          | > 3.43     | > 28%     | > 1.8%        |

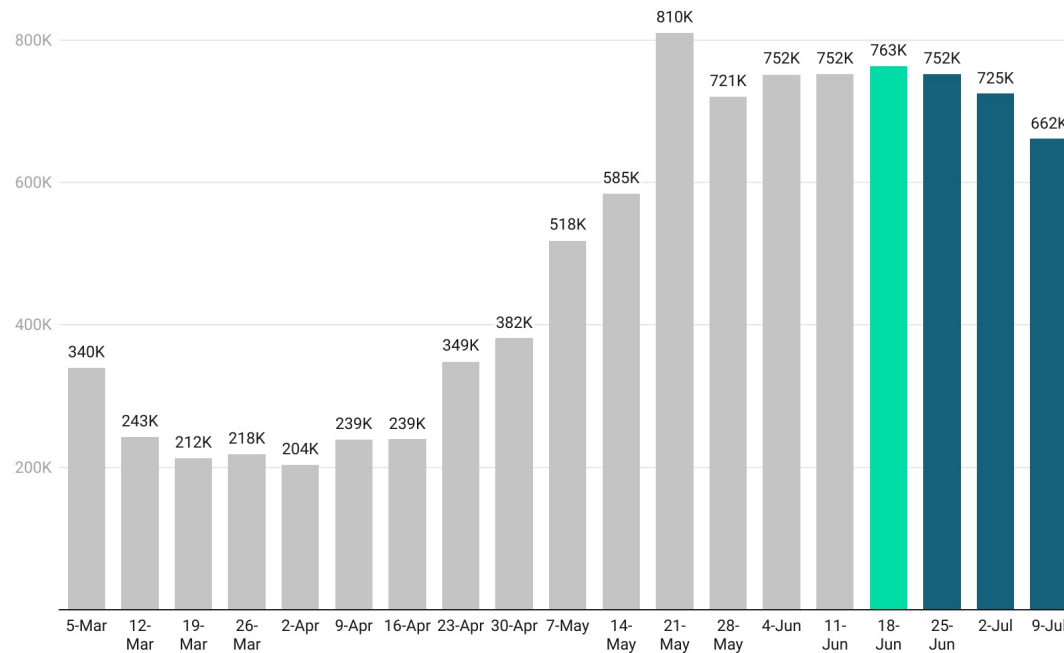
Quintiles calculated from United States experience from August 1, 2020 – June 17, 2022

Trend reflects change from prior week: Red flag = Increase; Green flag = Decline

New infections could fall in the next few weeks, according to the latest composite forecast. Deaths could stabilize over the next several weeks

### Newly-Reported Cases Per Week

Covid-19 Forecast Hub, Composite Forecast As of June 11

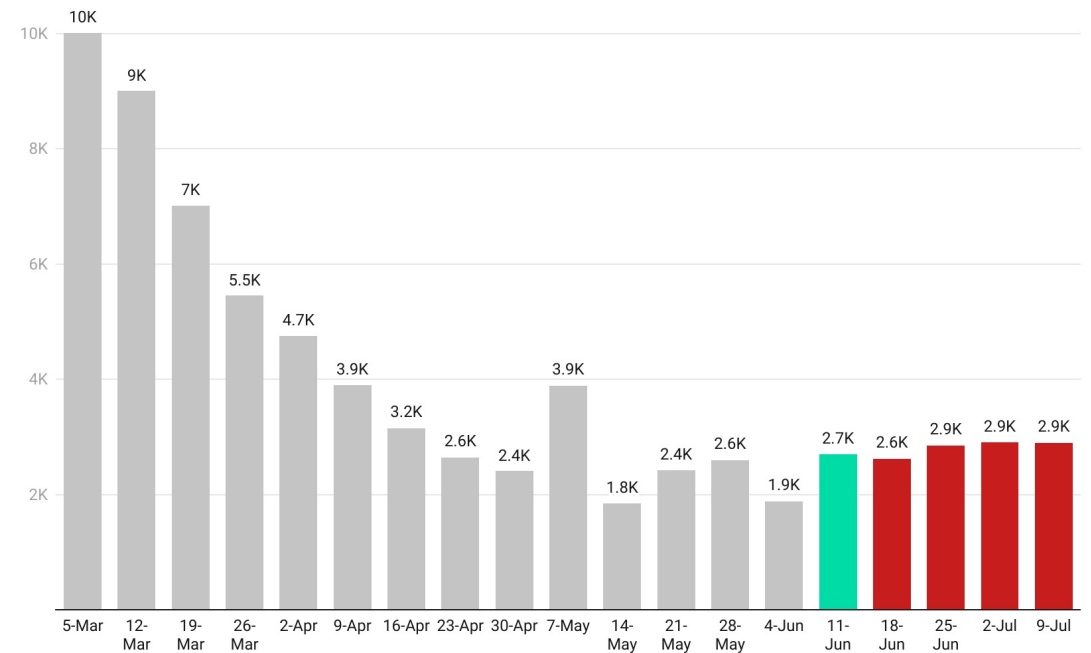


For the week ending on the date shown

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

### Newly-Reported Deaths Per Week

Covid-19 Forecast Hub, Composite Forecast As of June 11



For the week ending on the date shown

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

Globally, cases plunged 13% from a week earlier. Every continent participated in the decline in cases

## Weekly Change in Cases By Continent

As of June 17

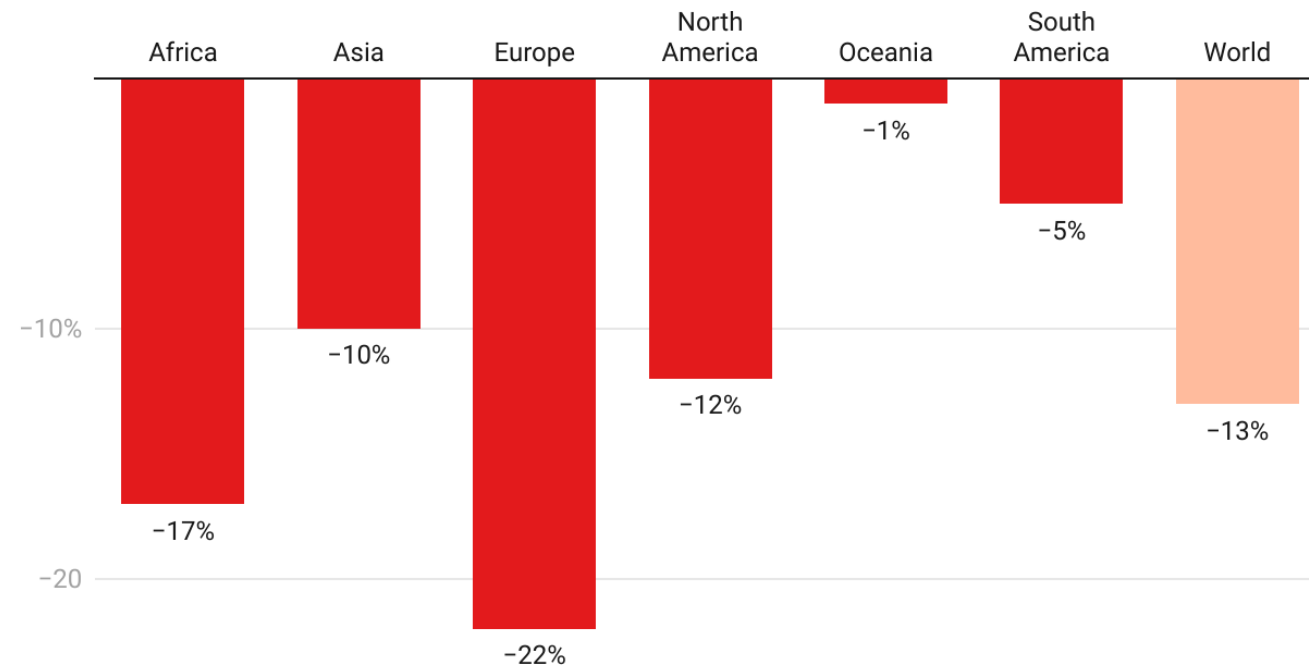


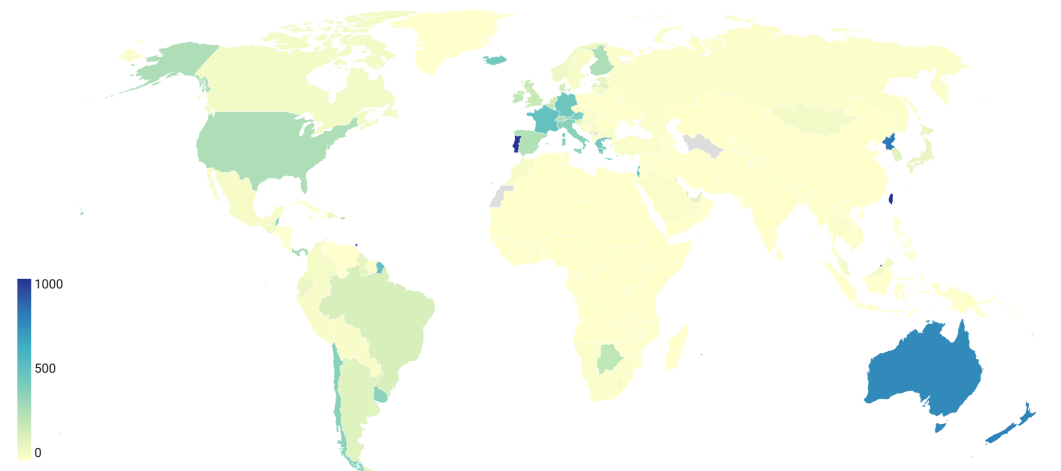
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Among large countries, Taiwan posted the highest case rate per capita last week, followed by North Korea, New Zealand, Australia, and Portugal. The United States ranked sixteenth

\* - Population 1M or greater

### New Daily Cases / Million

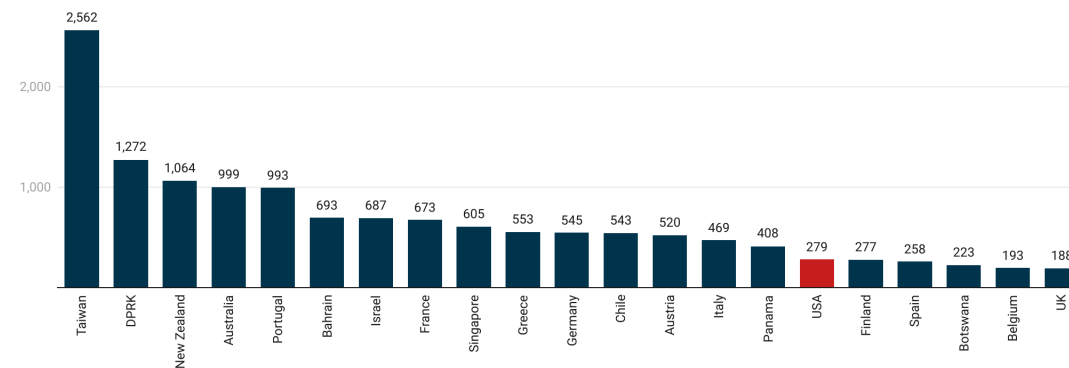
7-Day Average, As of June 17



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

### New Daily Cases Per Million

7-Day Average, As of June 17



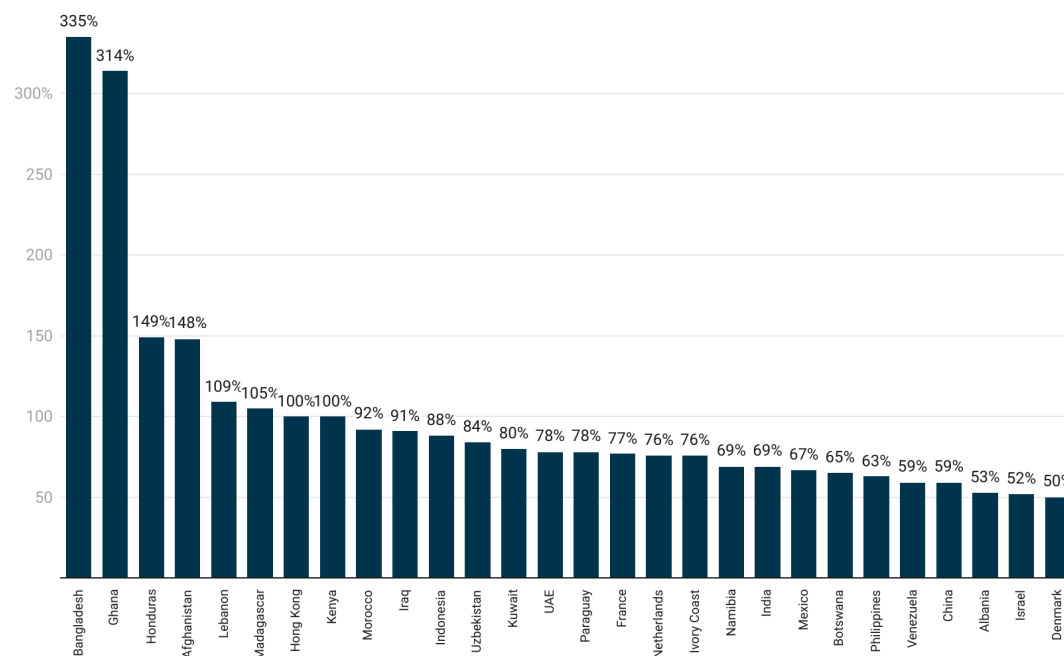
Countries with 1M population or more

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

Week-over-week case growth exploded in the Bangladesh and Ghana, while more than doubling in Honduras and Afghanistan. Argentina, Turkey, and Romania enjoyed the steepest week-over-week declines

### Largest Week-over-Week Increases in Covid Cases

Week ending June 17

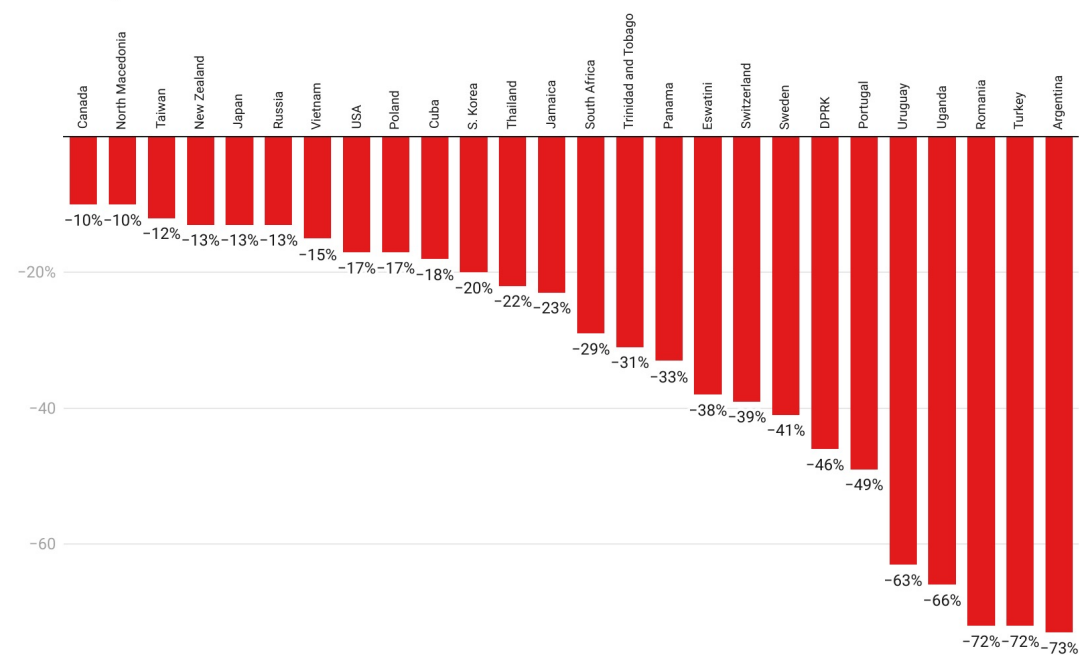


Countries with 1M population or more; Cases per week >100

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

### Largest Week-over-Week Declines in Covid Cases

Week ending June 17



Countries with 1M population or more; Cases per week >100

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

\* - Population 1M or greater

## 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>