







COVID-19 Report

Issue # 145

Tuesday, August 25, 2020



Today's Highlights

Return-to-campus:

- Of the 32 areas reviewed, the metro areas encompassing the Universities of Iowa, North Carolina and Illinois raise the greatest concern. Each metro reports a high and rapidly-increasing infection rate
- Comparing conferences, the metro areas encompassing the SEC universities generally report the highest infection rates; Alabama, Georgia, Mississippi, Mississippi and Missouri campuses are each located in a metro area where the current infection rate > 200 per million per day
- Apart from Illinois and Iowa, the Big Ten fares better than the other conferences;
 Indiana, Michigan, Michigan State, Nebraska and Penn State are each located in a metro area with a current infection rate < 100
- Other metro areas with high and/or increasing rates include those that encompass Baylor University, the University of Notre Dame and the University of Oklahoma
- New Cases/Infection rates
 - New cases yesterday were higher than last Monday (by 2%) yet, lower than any previous Monday since June 22
 - New cases for the past 7 days are down 14% from the preceding 7-day period
 - New infections per capita continue to decline: as of yesterday, these are down 37% from their mid-July peak, and as low as they have been since the end of June
 - 36 states experienced declining infection rates on a week-over-week basis. Still, 5 states have a current rate > 200 per million per day; three of these Alabama, Mississippi and North Dakota experienced increases in this rate from the prior week
 - California, Delaware, Florida, Idaho, Louisiana, Nevada and Texas each experienced significant declines in infection rates relative to the prior week

Testing

- Test volume increased yesterday, although it remains down 10% the past week compared to the prior week
- Test-positive rate improved again yesterday: the daily rate was its lowest since June 17; for the past week, this rate was its lowest since June 24
- Twelve states report test-positive rates > 20% for the past 7 days; rates are highest - and increasing week-over-week - in Mississippi, South Carolina and Texas
- Eighteen states have rates < 5%, including large states Connecticut, Massachusetts, Maryland Michigan, New Jersey, New York, Ohio and Pennsylvania

Hospital use

- This continues to be an encouraging story, with COVID-19 inpatients, ICU and ventilator use each continuing their long-term decline
- ER visits for COVID-19 like illnesses dropped again on Friday (the most-recent available data)
- Additionally, we begin reporting today on ER visits for influenza-like illnesses; these similarly continued a months-long decline
- Deaths with coronavirus
 - Fewer than 500 deaths were reported yesterday the 3rd consecutive day of < 1,000 reported deaths
 - For the past 7 days, deaths have averaged 980 per day the lowest average since July 21-27



University Areas – Tracking infections as students return to campus

ACC: UNC and ND are experiencing high and increasing infections*; FSU's rate is high too Big Ten: Iowa and Illinois are concerning; Indiana, Michigan, Michigan State, Nebraska & Penn State all experiencing low infection rates

* - refers to the metro area that encompasses the University

New Daily Infections / Million: Select ACC University Areas Trailing 7-Day Moving Average North Carolina

New Daily Infections / Million: Select Big Ten University Areas Trailing 7-Day Moving Average

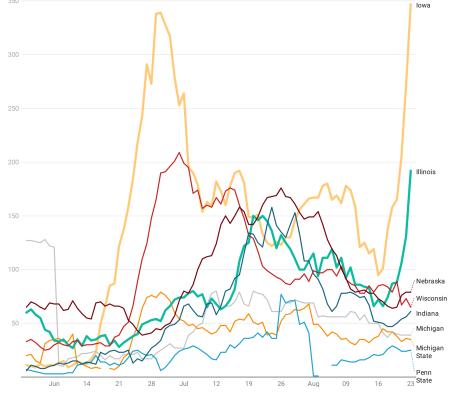


Chart: Health Industry Advisor LLC . Created with Datawrappe



University Areas – Tracking infections as students return to campus

Big 12: Baylor, Iowa State, Oklahoma and Texas Tech pose greatest concern SEC: Rates* are high near most campuses (Arkansas and Texas A&M are exceptions); Alabama, Georgia, Mississippi State and Missouri of greatest concern

* - refers to the metro area that encompasses the University

New Daily Infections / Million: Select Big 12 University Areas Trailing 7-Day Moving Average

New Daily Infections / Million: Select SEC University Areas

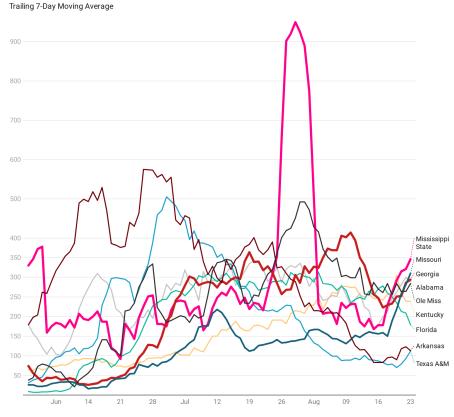


Chart: Health Industry Advisor LLC . Created with Datawrapper

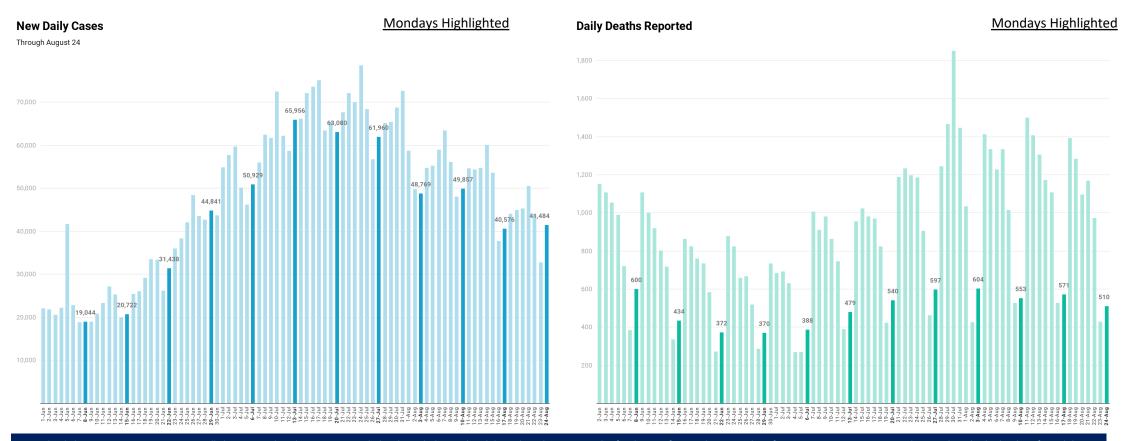
Chart: Health Industry Advisor LLC . Created with Datawrapper



This Past Weekend's Experience— New Cases & Deaths

New cases were higher than last Monday but, lower than any prior Monday since June 22

Deaths were the fewest on a Monday since July 13



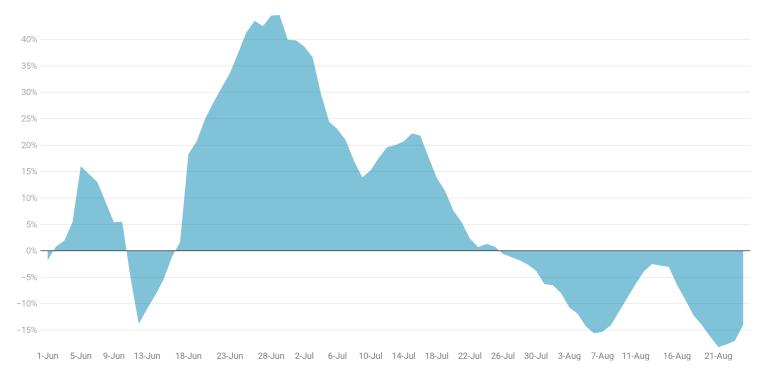
Note the daily pattern: new cases are typically low on Sunday, then increase each day through the week. While we have been noting this for the past few weeks, researchers from MIT, Boston University and Harvard Medical School confirmed this in a report published by CIDRAP on August 17



*United States*Week-over-week, new cases are down 14%

Week-Over-Week Change In New Cases

Through August 24



Health Industry Advisor LLC analysis

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

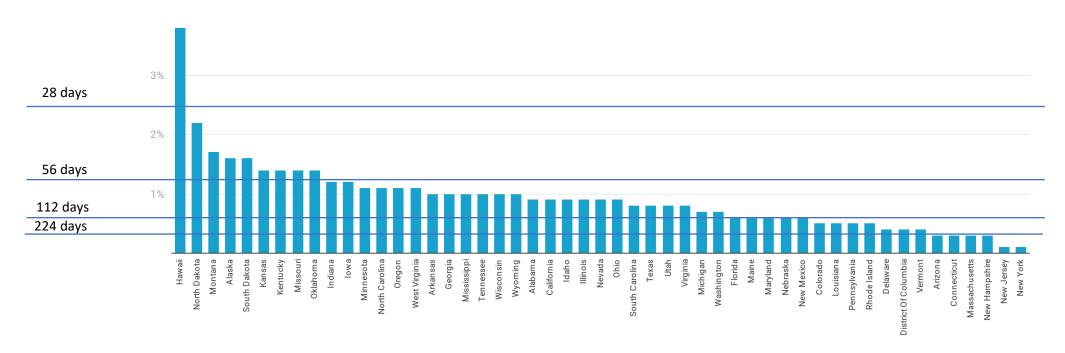


State-By-State

Case growth is slowing - even Hawaii is seeing a slowdown At current rates, cases are doubling every 18-19 days in Hawaii; every 534 days in New Jersey; every 94 days for the United States overall

Growth Rate in Total Cases

Trailing 5-Day Moving Average, Through August 24



Health Industry Advisor LLC analysis

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

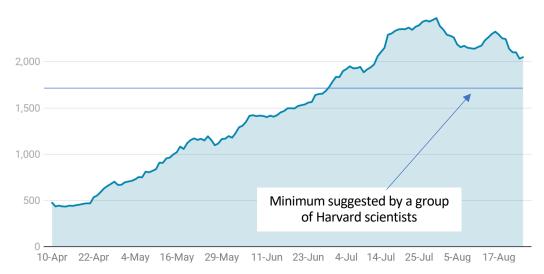


Testing volume was higher yesterday yet, still down 10% week-over-week
Test-positive rate yesterday was lowest since June 17; For the week, it was as low as it
has been since June 24

Testing refers to tests for active infection, as reported via state health agencies; does not reflect antibody testing for prior infection

Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of August 24



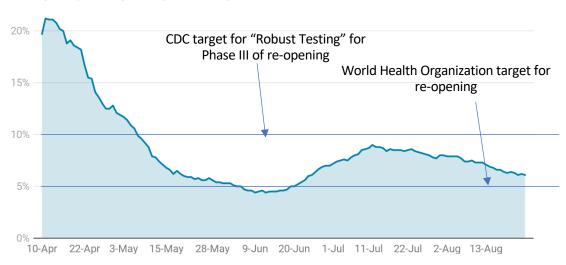
Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Note: On August 11, North Carolina made a significant adjustment, removing 220,000 tests from their YTD totals. We manually removed this negative adjustment from the August 11 data to better reflect actual testing for that date

Test-Positive Rate - United States

Trailing 7-Day Moving Average, As of August 24



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Note: Due to a computer glitch, Washington has only reported positive results since August 1. Therefore, test-positive rates from that point forward are slightly overstated by $^{\circ}0.1\%$



State-By-State Test-Positive Rates

Twelve states reported test-positive rates > 10% for past week — rates in Mississippi, South Carolina and Texas were both high and increased from the prior week

Eighteen states had rates < 5%

Test-Positive %

Trailing 7-Day Moving Average

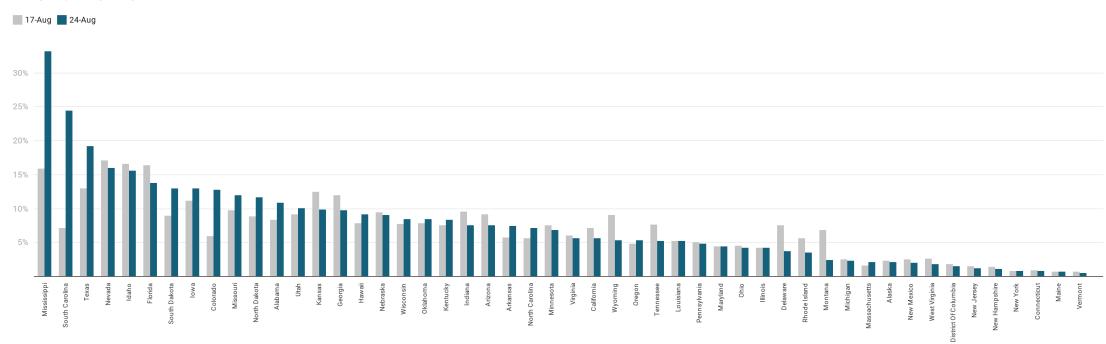


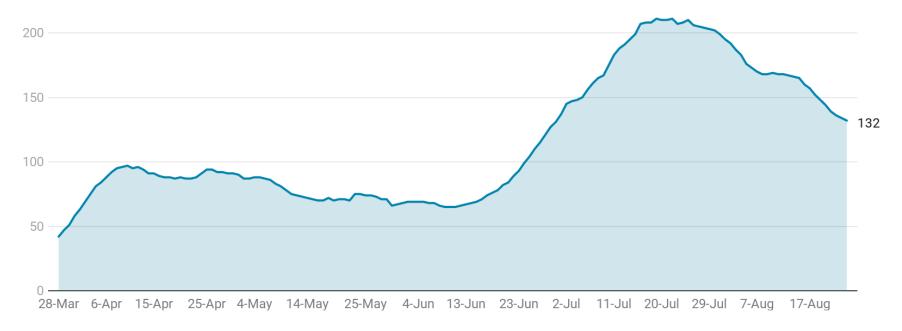
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracing Project • Created with Datawrapper



New infections per capita* has declined 37% since its peak during the third week of July; Now at its lowest point since June 30

New Infections Per 1 Million Population - United States

Trailing 7-Day Moving Average, Through August 24



Health Industry Advisor LLC analysis

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

* - per million per day, trailing 7-day moving average



State-By-State - New Infections per Capita

Five states had new daily infection rates* >200 for the past week; Of these, Alabama, Mississippi and North Dakota had increasing rates v. the prior week Significant rate declines in California, Delaware, Florida, Idaho, Louisiana, Nevada and Texas; 36 states in total experienced declines

New Daily Infections / Million



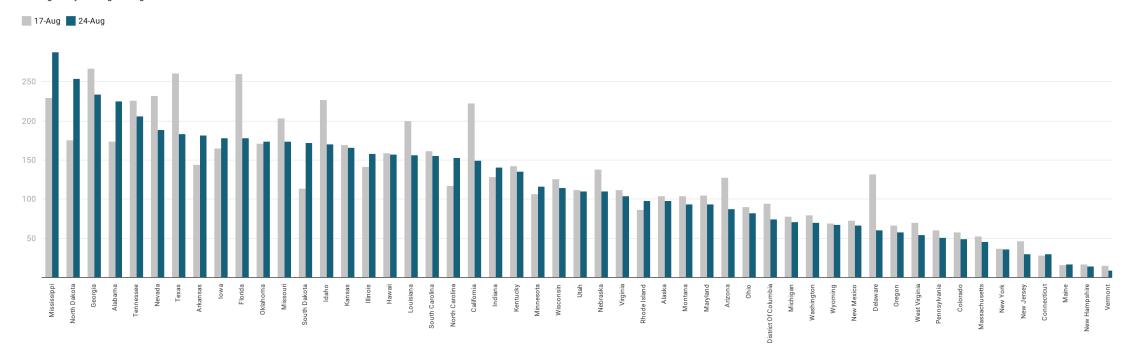


Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

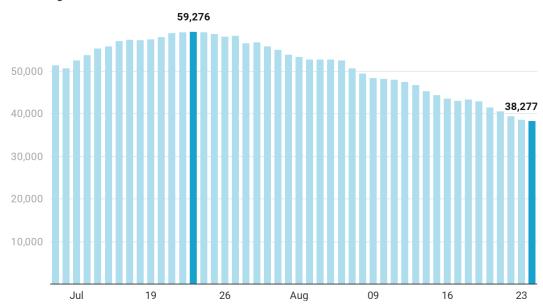
* - per million per day, trailing 7-day moving average



COVID-19 inpatient declined again yesterday, continuing a trend for at least the past month; Census declines in California, Florida and Texas leading the charge

Hospital Census: COVID-19 Patients

As of August 24



Florida data first available on July 10

Chart: Health Industry Advisor LLC • Source: he Atlantic's Covid Tracking Project • Created with Datawrapper

Week-Over-Week Change in COVID-19 Hospital Census

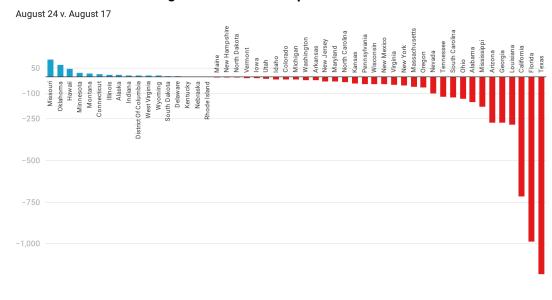
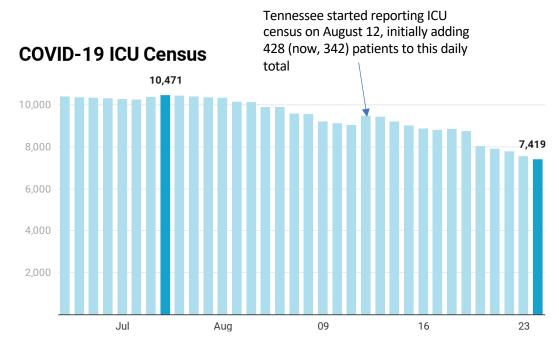


Chart: Health Industry Advisor LLC · Created with Datawrapper



Stress on ICU beds and ventilators continues to ease: Daily ICU census has declined since mid-July; % of inpatients in the ICU or on ventilators are both decreasing slightly

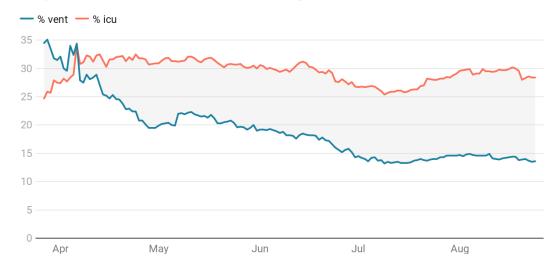


For states reporting these data: AZ, CA, ID, IL, IN, IA, KS, KY, ME, MD, MA, MI, MN, MS, NV, NJ, NY, NC, OH, OK, OR, RI, SC, TX, UT, VA, WI & WY

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

Severity of Hospitalized Patients

% of patients on ventilators and in the ICU, As of August 24



Health Industry Advisor LLC analysis

Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper

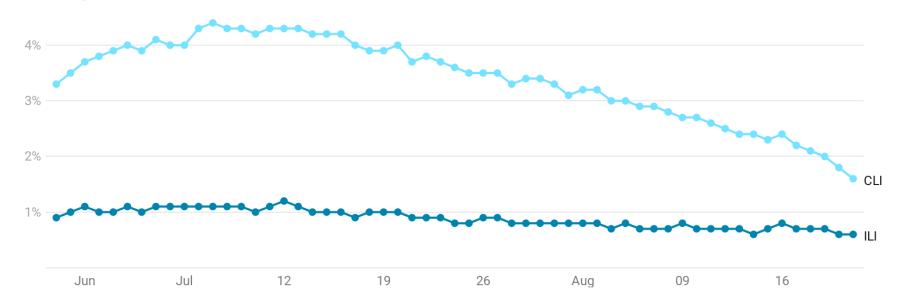


United States - ER Visits for Flu and COVID-19

COVID-19 and Influenza-Like Visits to the ER have been declining all summer – COVID-19 quite dramatically

% of Emergency Department Visits for COVID-Like Illness (CLI) and Infuenza-Like Illness (ILI)

As of August 20



Health Industry Advisor LLC analysis

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

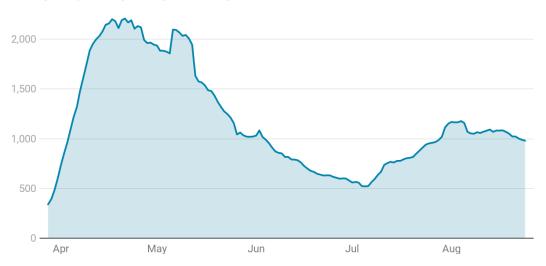


United States – Deaths with Coronavirus

With 500 deaths reported yesterday, it marks 3rd consecutive day < 1,000 Deaths for the past week were the lowest since July 21-27 Deaths per reported case now <3.1%

Deaths Recorded With Coronavirus in the U.S.

Trailing 7-Day Moving Average, As of August 24



Health Industry Advisor LLC analysis

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

Deaths Per Case

As of August 24



Health Industry Advisor LLC analysis

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



Data Sources

The following data sources are accessed on a daily or weekly basis:

- The Atlantic's Covid Tracking Project: https://covidtracking.com
- Worldometers.info: https://www.worldometers.info/coronavirus/
- Centers for Disease Control, National, Regional, and State Level Outpatient Illness and Viral Surveillance https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html
- Centers for Disease Control, COVID-19 Laboratory-Confirmed Hospitalizations https://gis.cdc.gov/grasp/COVIDNet/COVID19 5.html
- Centers for Disease Control, COVID Data Tracker https://www.cdc.gov/covid-data-tracker/index.html#mobility
- 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