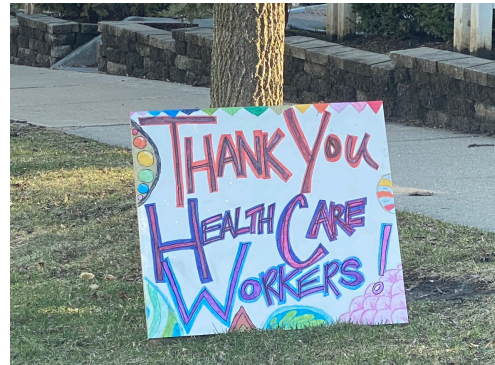
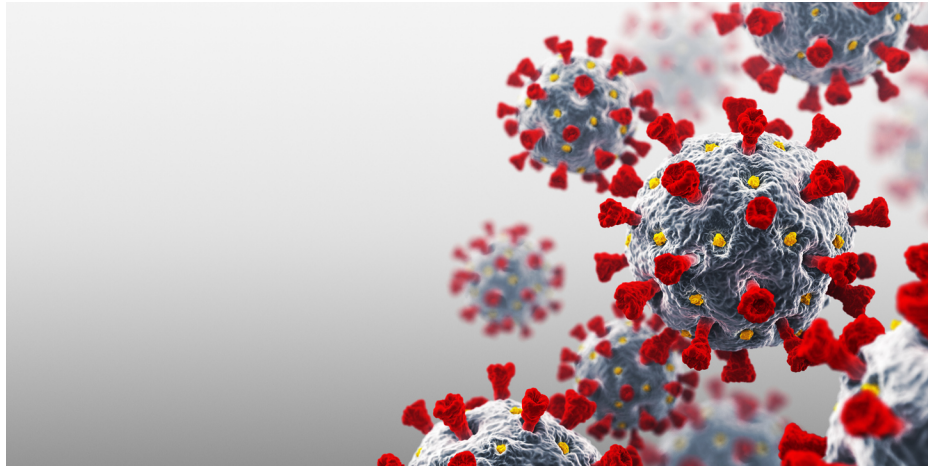
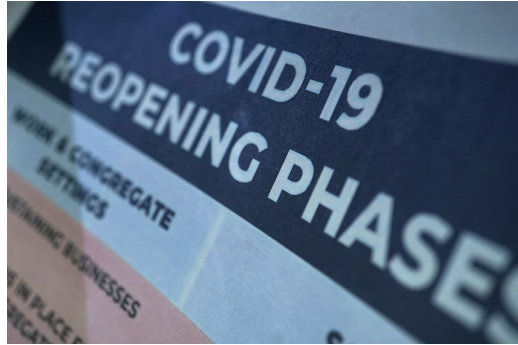




COVID-19 Report

Issue # 108

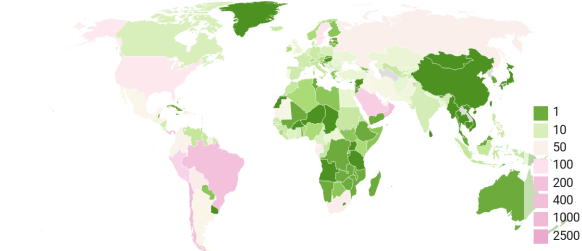
Saturday, July 18, 2020

- Starting with deaths with coronavirus, since at least 3 scientific studies (2 published in JAMA Internal Medicine ([1](#), [2](#)) and 1 by [Cambridge University Press](#)) were published this week on this topic (source: [CIDRAP](#)). Among the takeaways from these studies:
 - Risk factors for death with coronavirus: advanced age, male sex, higher-than-normal body mass index (BMI), coronary artery disease, active cancer, low oxygen levels, and kidney and liver dysfunction at admission
 - Death rates ranged widely across hospitals, with the number of pre-pandemic ICU beds in the hospital was strongly linked to death rate. Patients admitted to hospitals with fewer than 50 ICU beds had a more than three-fold higher risk of death than those admitted to hospitals with at least 100 ICU beds
- Daily deaths with the coronavirus in the United States had declined significantly from late April to the first week of July; since then, they increased for about a week before appearing to now be relatively stable day-to-day. Deaths are averaging about 1/3 what they were in late April
 - States that were hardest-hit by the virus early (New York, New Jersey, Connecticut, Rhode Island and Massachusetts) have experienced deaths per capita 2.6-13x higher than states hit more recently (Arizona, California, Florida and Texas), presumably as early identification and more-informed treatments are making a difference
 - Recoveries are far out-pacing deaths in the United States: ~ 40,000 recoveries are reported each day versus ~770 deaths
- Worldwide, the United States, India, Brazil and South Africa are being hardest-hit by the virus: these countries account for ~60% of new cases both yesterday and over the past 7 days
 - Over the past 7 days, United States has the 2nd highest rate of new infections per capita among the thirty countries with the most total cases, trailing only South Africa
 - Relative to these same countries, the United States ranks 7th in deaths per capita
- New cases in the United States on Friday were the 2nd most of any day to-date, only trailing the number of new cases reported on Thursday. On a week-over-week basis, new cases are up 16.5%
 - Five states - Arizona, California, Florida, Georgia and Texas - accounted for ~55% of new cases, both yesterday and for the past 7 days
 - The new daily infection rate per capita increased on a week-over-week basis in 45 of the 50 states; Arizona, one the states recently hard-hit by the virus has experienced a declining rate during this time (though its current rate is still 3rd highest among the states). Arizona is also seeing its test-positive rate steadily decline during the past week; it remains however, the highest in the country
- The United States continues to ramp its testing: Friday represented the 2nd most tests conducted on any day to date (Thursday was the 4th most). On a week-over-week basis, testing is up 15%. Demand is straining the system, as it appears that results are backlogged by up to a week
- With the increased testing volume, the test-positive rate appears to be stabilizing in the 8-9% range. This remains above its low of 4.4% in mid-June but, far below its peak of >20% in late March
- Hospitalizations continue to increase - particularly in Florida - but, at a slower rate than new cases. Hospitalized patients requiring a ventilator continues to decline, while hospitalized patients requiring an ICU bed has stabilized

United States, South Africa and South American countries have been hardest hit over the past 4 weeks

New Infections / 1 Million Population

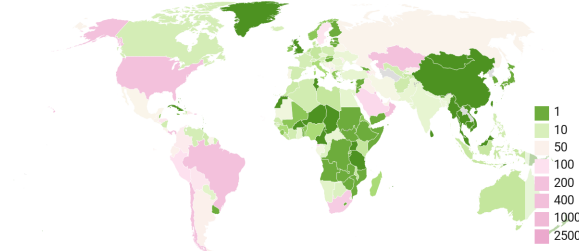
Trailing 7-Day Moving Average, As of June 19



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

New Infections / 1 Million Population

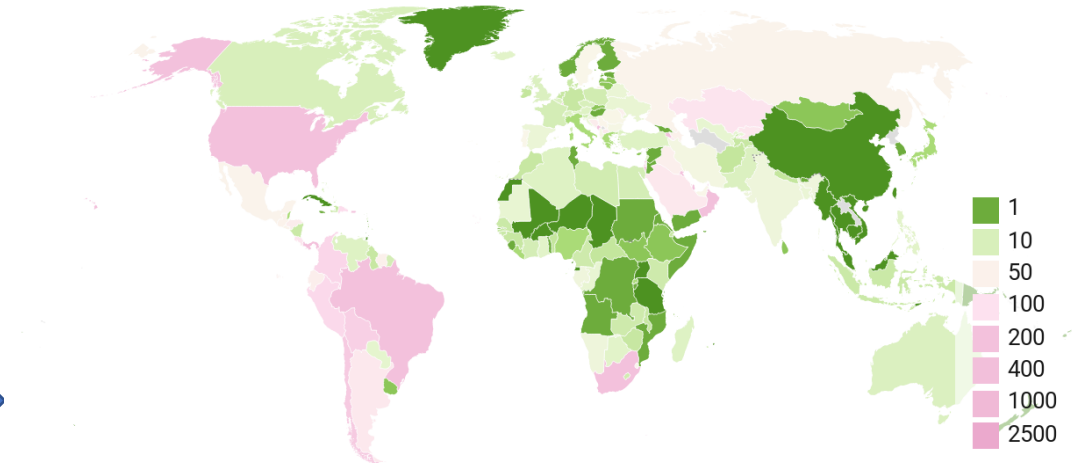
Trailing 7-Day Moving Average, As of July 3



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

New Infections / 1 Million Population

Trailing 7-Day Moving Average, As of July 17



Health Industry Advisor LLC analysis

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

4 weeks ago



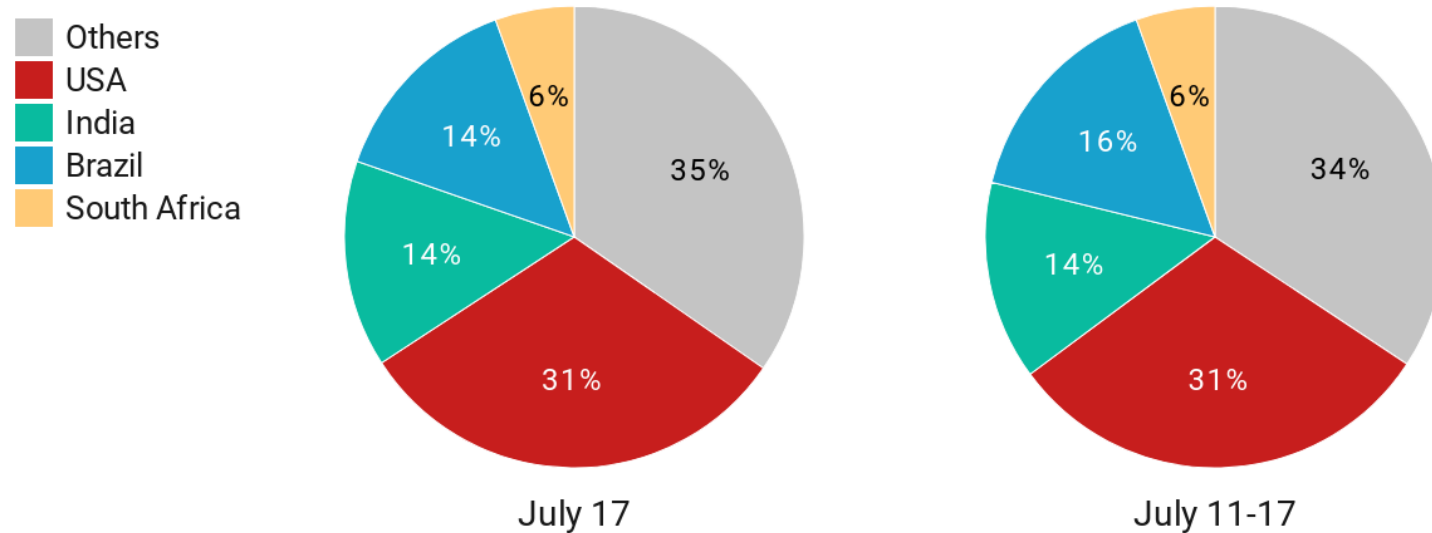
2 weeks ago



United States, India and Brazil account for ~60% of new cases worldwide, both yesterday and last week

New Cases

July 17 & Week of July 11-17



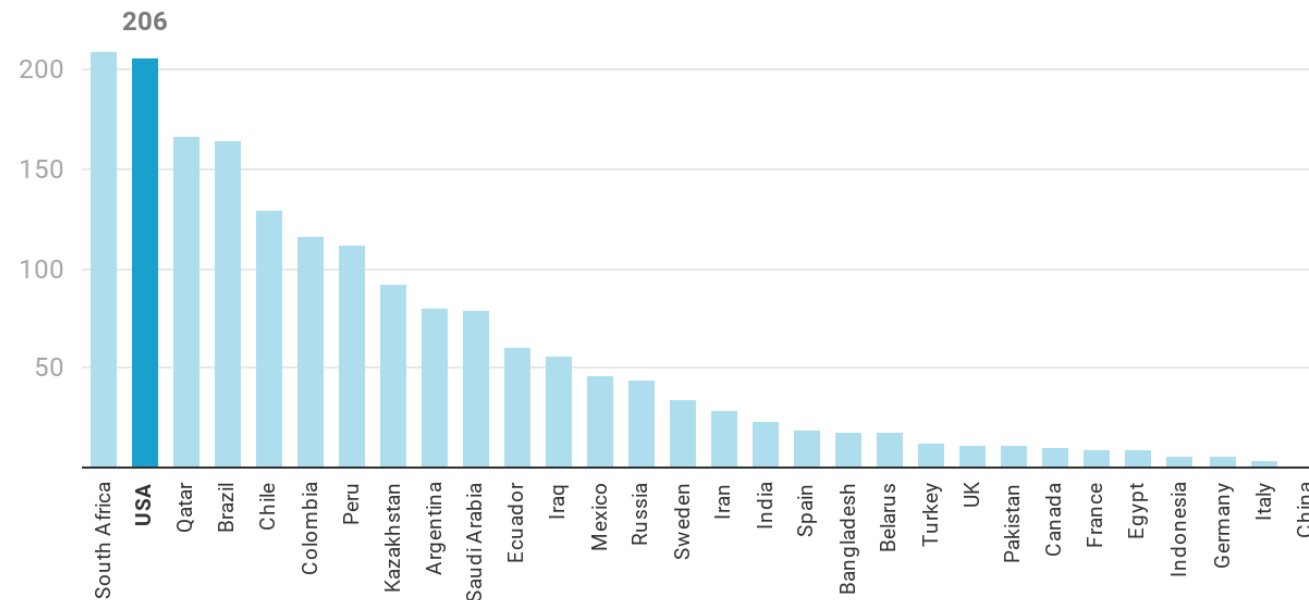
Health Industry Advisor LLC analysis

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

United States trails only South Africa in the current rate of new infections, among the 30 countries with the most total cases

New Daily Infections / 1 Million Population

Trailing 7-Day Moving Average, As of July 17



Health Industry Advisor LLC analysis

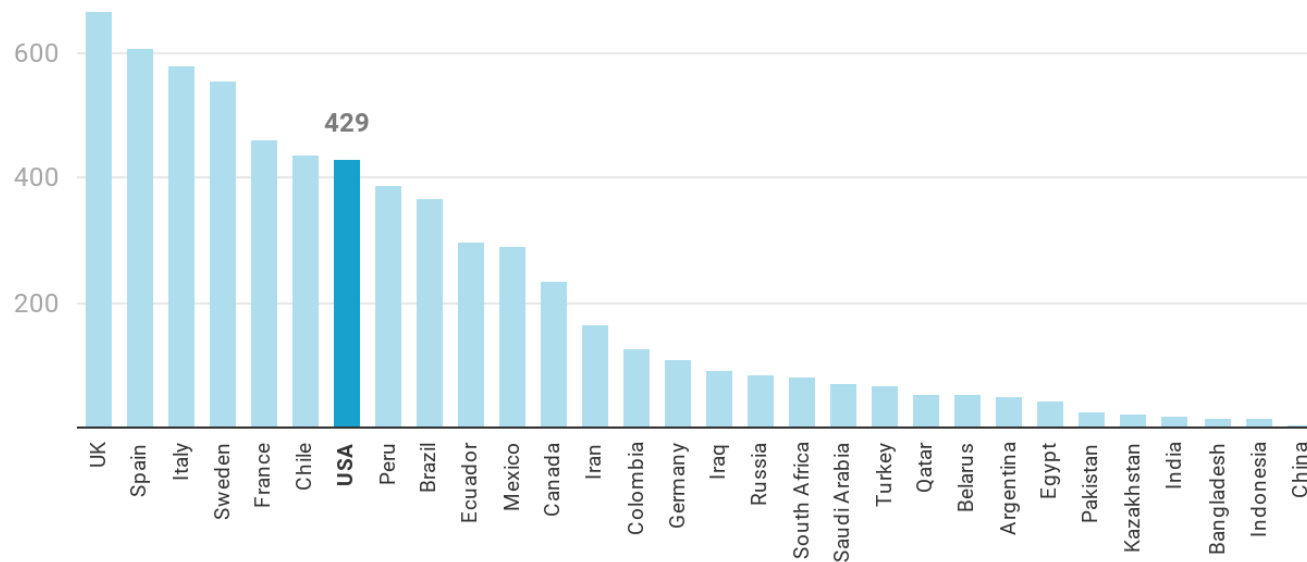
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Worldwide

United States ranks 7th in deaths per capita, among the 30 countries with the most total cases

Deaths / 1 Million Population

As of July 17



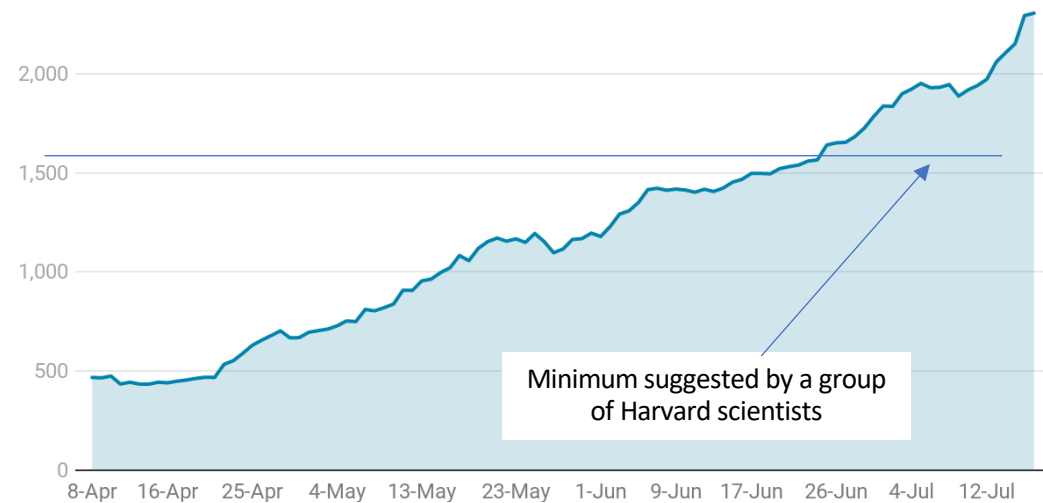
Health Industry Advisor LLC analysis

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

Testing on Friday was 2nd most of any day since pandemic began; test-positive rate is staying below 10%

Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of July 17

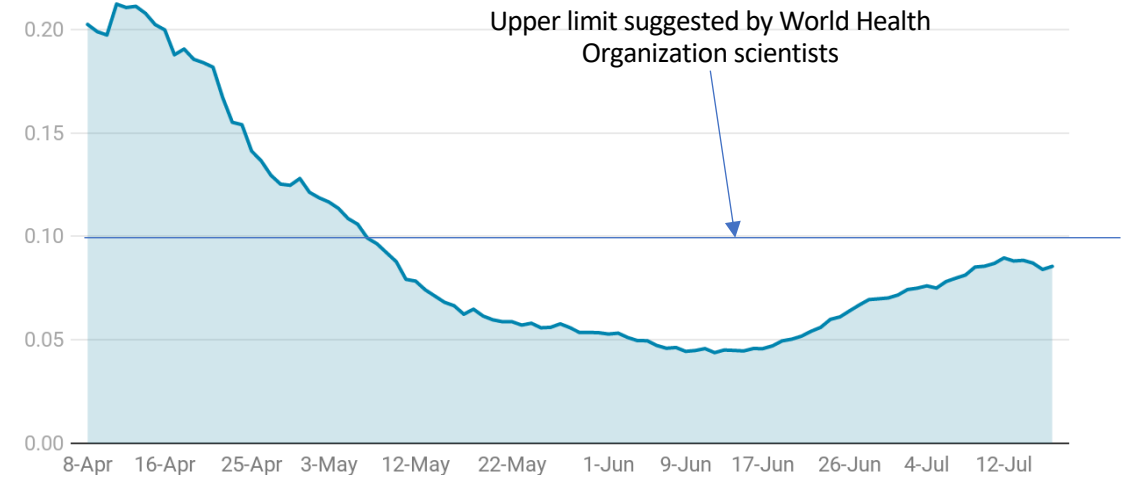


Health Industry Advisor LLC analysis

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

Test-Positive Rate - United States

Trailing 7-Day Moving Average, As of July 17

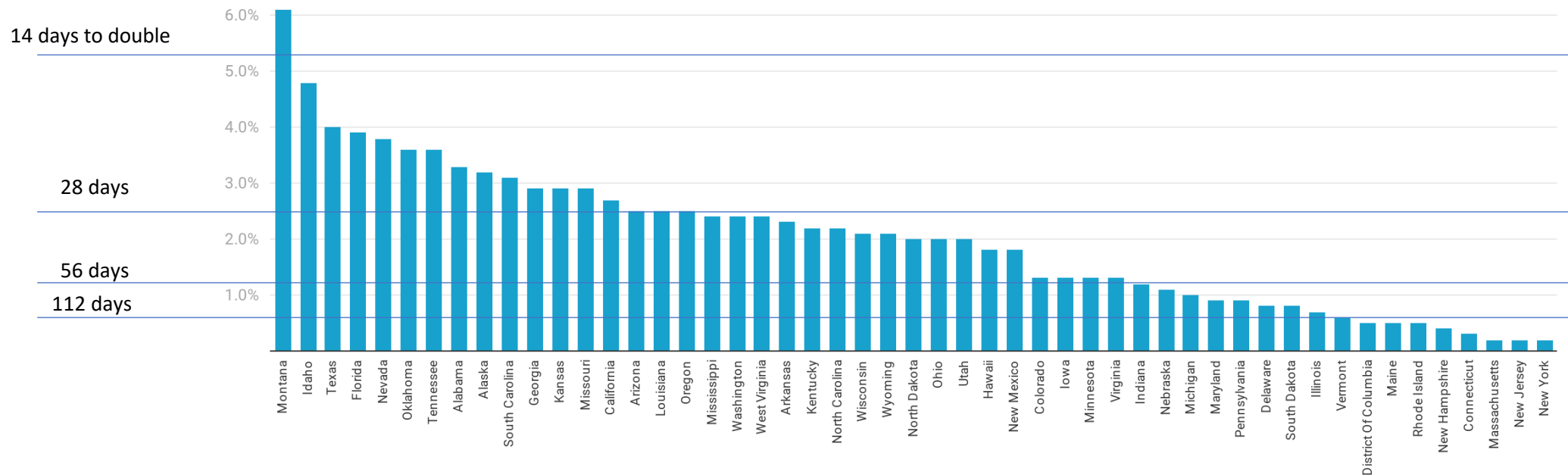


Health Industry Advisor LLC analysis

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

Growth Rate in Total Cases

Trailing 5-Day Moving Average, As of July 17



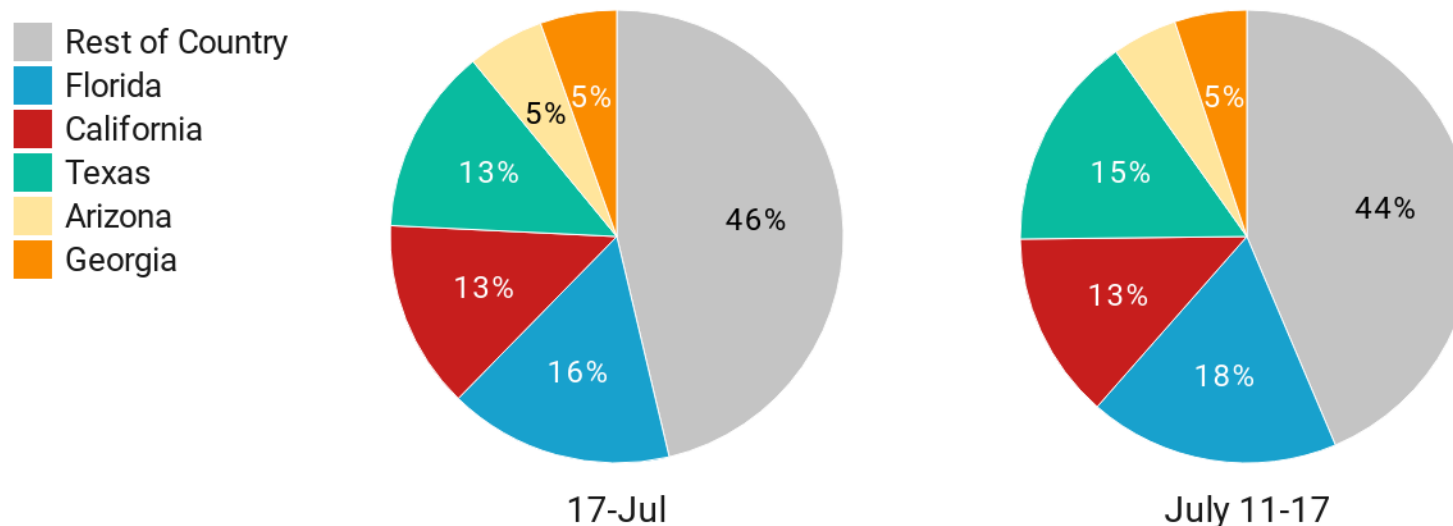
Health Industry Advisor LLC analysis

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

Five states account for ~55% of new cases in the U.S., both yesterday and last week

New Cases

July 17 & Week of July 11-17



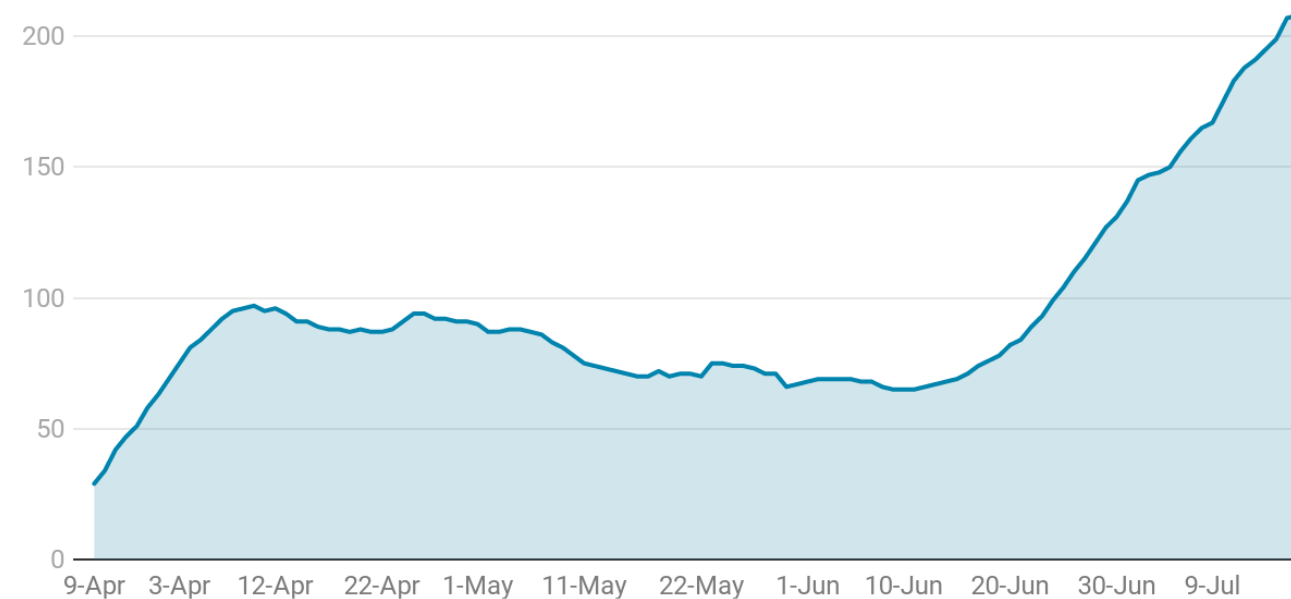
Health Industry Advisor LLC analysis

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

The new daily infection rate continued its 5-week long ascent, reaching 208 per million for the past week

New Infections Per 1 Million Population - United States

Trailing 7-Day Moving Average, As of July 17



Health Industry Advisor LLC analysis

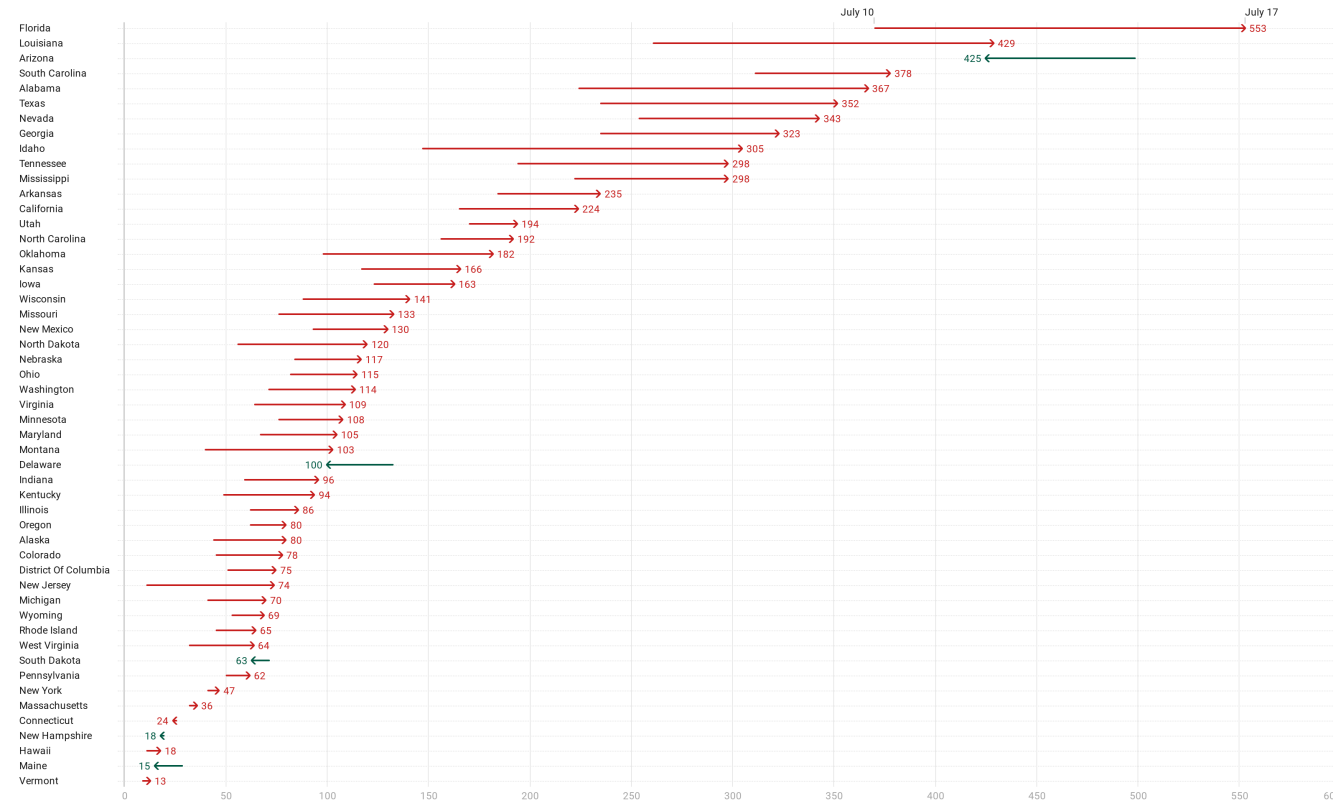
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

State-By-State

Infection rate has increased in 45 of 50 states during the past week; Arizona is most notable state with a declining rate

New Daily Infections / 1 Million Population

Trailing 7-Day Moving Average, July 10 v July 17

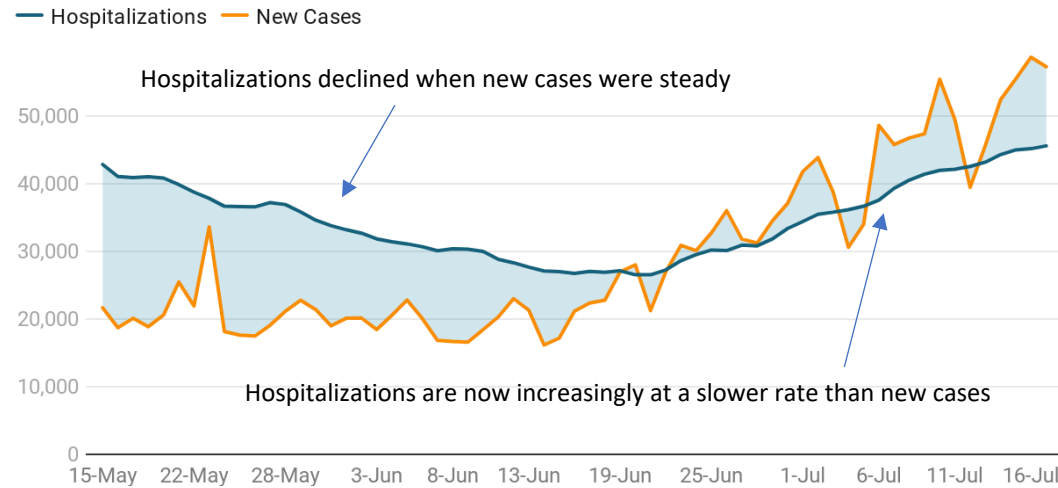


Health Industry Advisor LLC analysis
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Case severity continues to decline: Hospitalizations increasing at a slower rate than new cases; ICU and Ventilator rates also declining

Hospitalizations v. New Cases

As of July 17



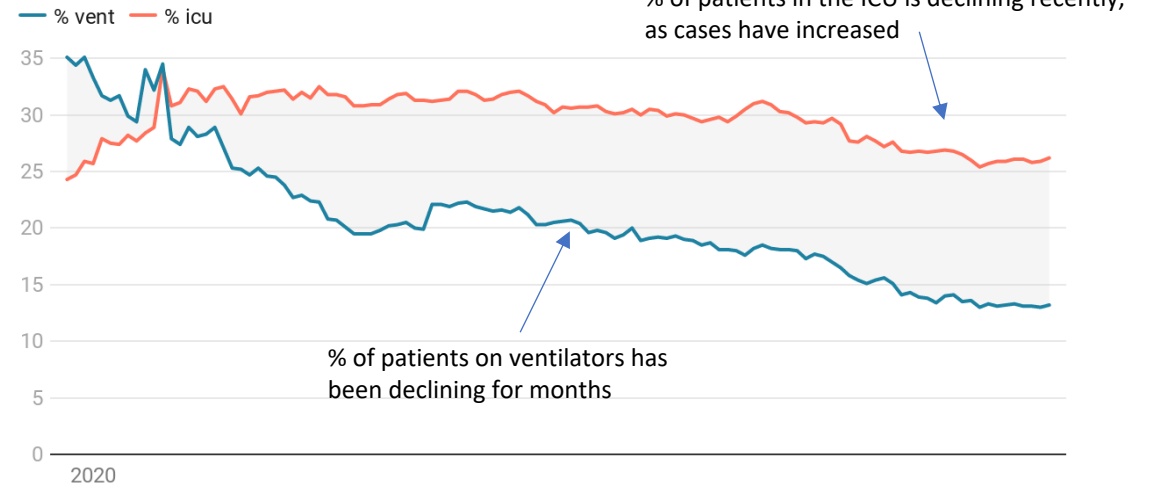
Health Industry Advisor LLC analysis

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

Data excludes: Alabama, Alaska, Florida, Hawaii, Idaho, Kansas, Nebraska and Tennessee – data either not reported or not consistently reported

Severity of Hospitalized Patients

% of patients on ventilators and in the ICU, As of July 17



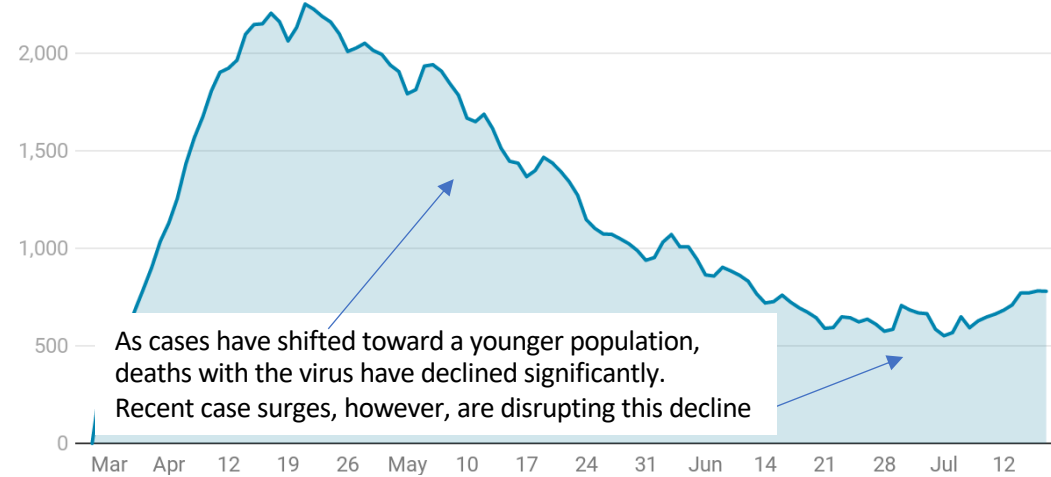
Health Industry Advisor LLC analysis

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

Is the recent increase in deaths beginning to stabilize? Recoveries (40k/day) out-pacing deaths (770/day) this week

Deaths Recorded With Coronavirus in the U.S.

Trailing 7-Day Moving Average, As of July 17

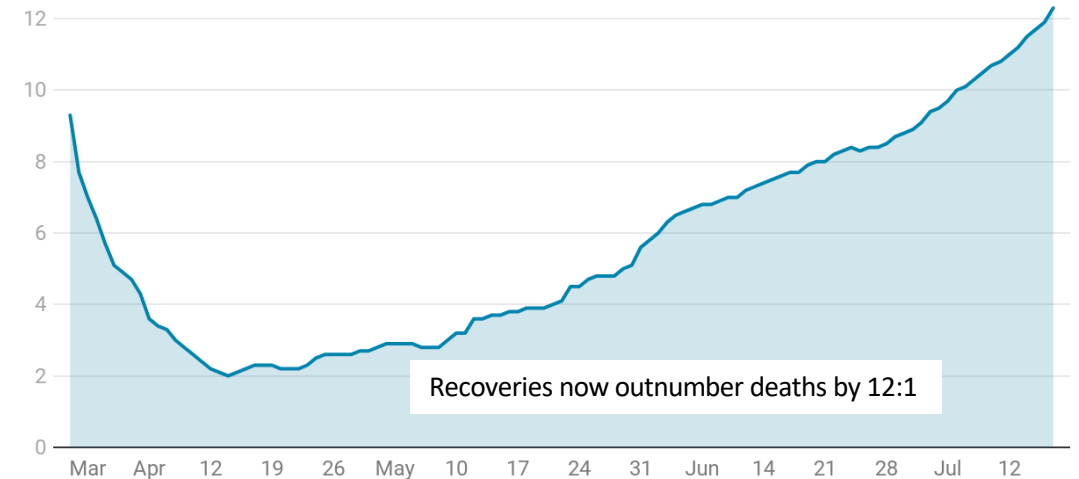


Health Industry Advisor LLC analysis

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

Recoveries: Deaths - United States

As of July 17

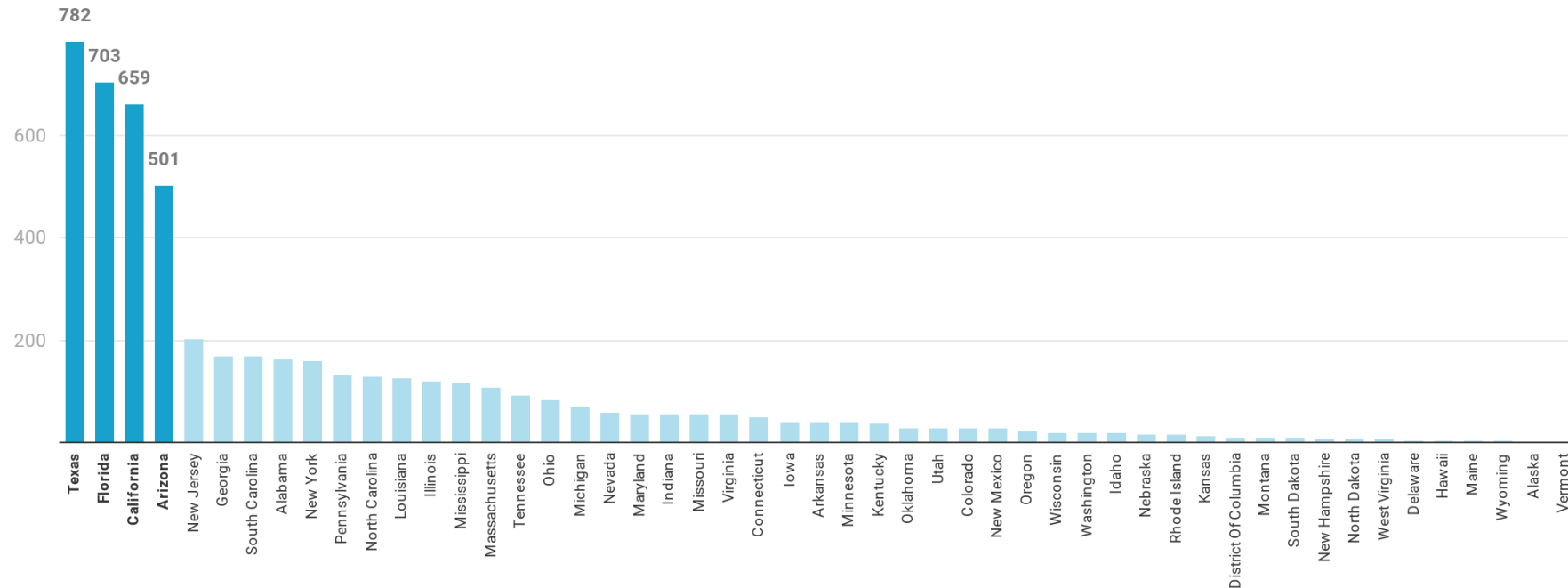


Health Industry Advisor LLC analysis

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

Deaths With Coronavirus

Week of July 11-17



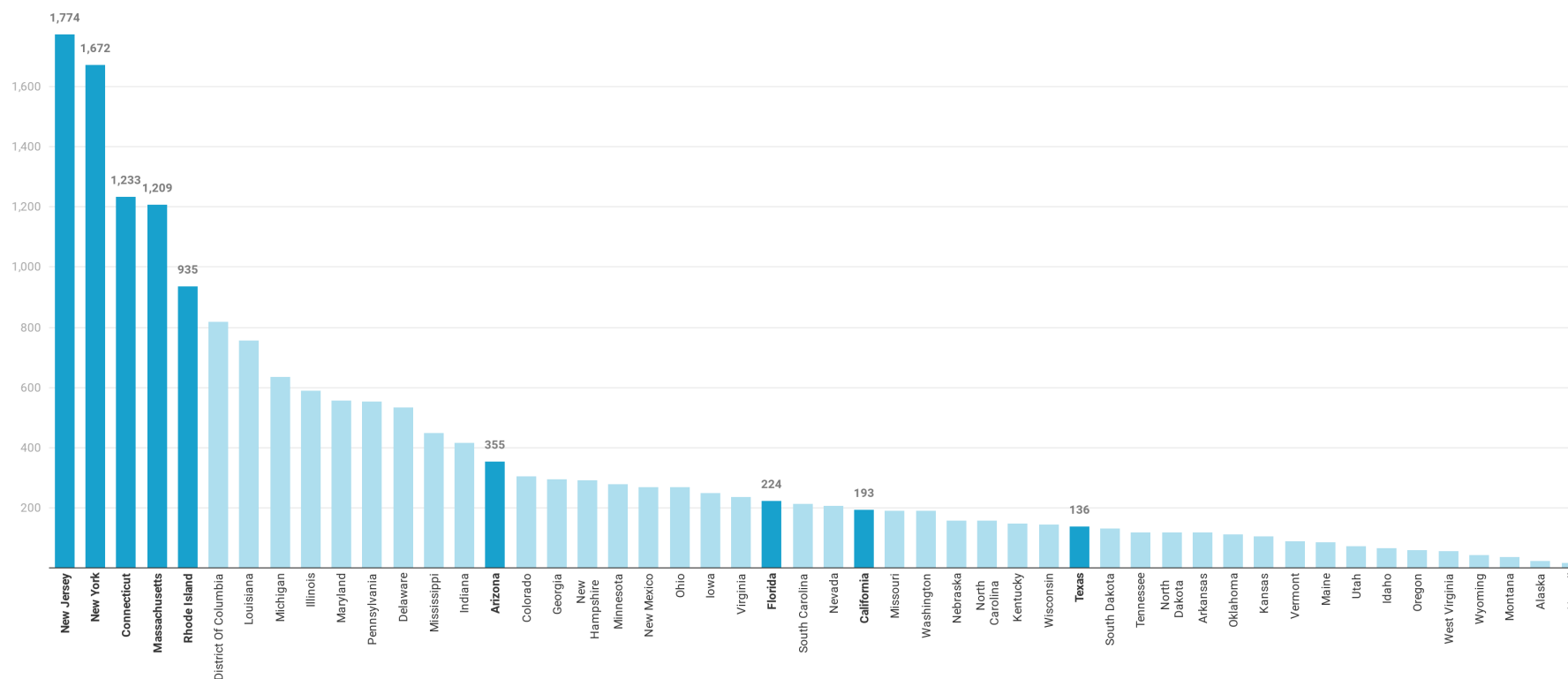
Health Industry Advisor LLC analysis

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

States hit early by the coronavirus experienced significantly higher rates of deaths per capita (2.6x -13x) than recently-hit states

Deaths / 1 Million Population

As of July 17



Health Industry Advisor LLC analysis

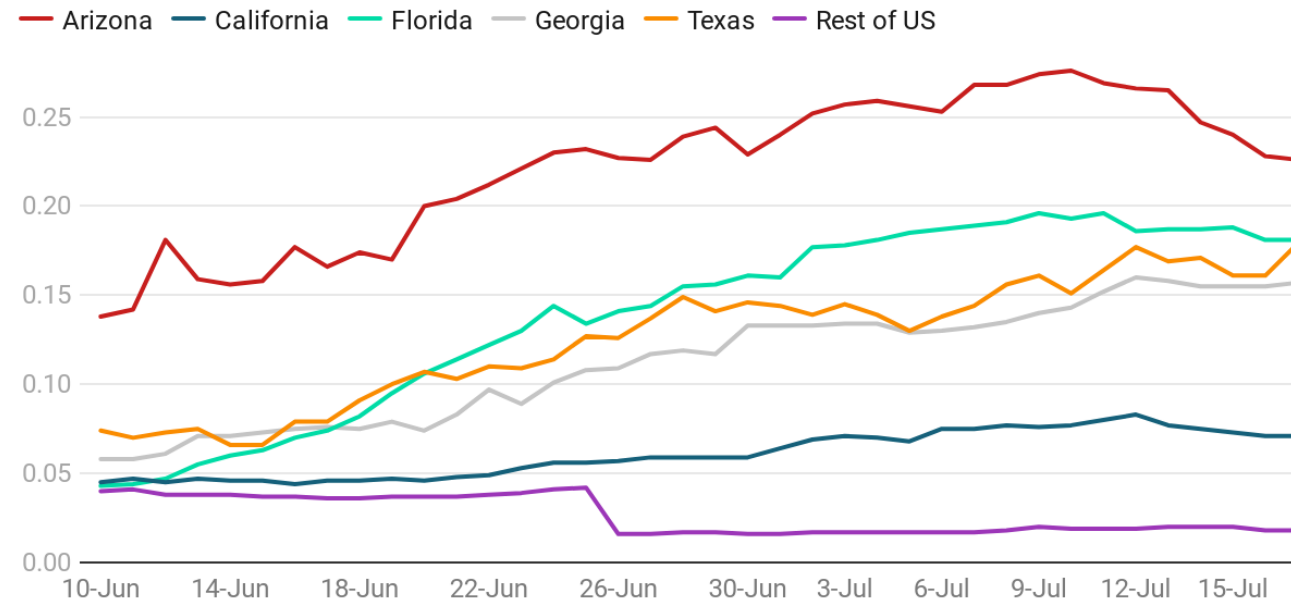
Chart: Health Industry Advisor LLC • Source: worldometers.info • Created with Datawrapper

Arizona, California, Florida, Georgia and Texas

Arizona's test-positive rate continues to decline, while Texas' rate is moving up. Rate is stable but, high in Florida and Georgia

Test Positive Rate

Trailing 7-Day Moving Average, As of July 17



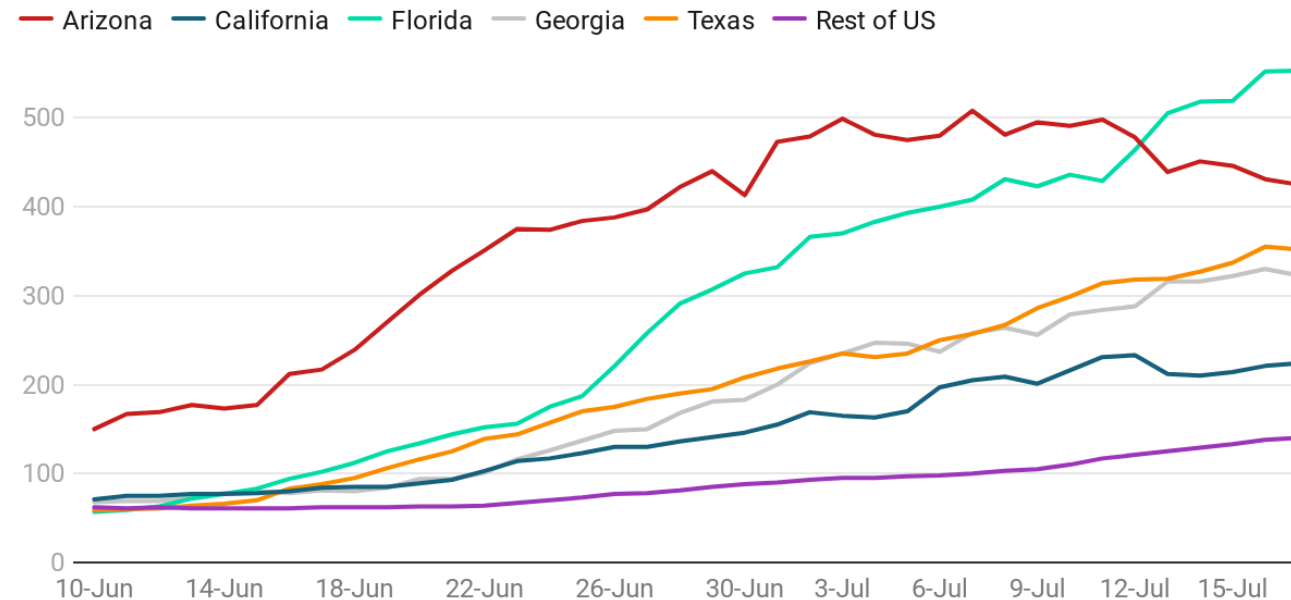
Health Industry Advisor LLC analysis

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

Infection rate improving in Arizona; situation worsening in Florida, Texas, Georgia and Texas

New Daily Infections / 1 Million Population

Trailing 7-Day Moving Average, As of July 17



Health Industry Advisor LLC analysis

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

Worldwide Statistical Summary

Top 30 Countries By Total Cases
As of July 17

Country	Total Cases	Rank	Cases per 1M Population	Rank2	Deaths	Rank3	Death Rate	Rank4	Deaths per 1 Million Population	Rank5	5-day Moving Average Case Growth Rate	Rank6	Tests per 1M Population - Past 7 Days	Rank7	New Daily Infections Per 1M Population (7-Day M.A.)	Rank8
USA	3,770,012	(1)	11,387	(3)	142,064	(1)	3.8%	(16)	429.1	(7)	2.0%	(7)	2,414	(3)	206.3	(2)
Brazil	2,048,697	(2)	9,635	(5)	77,932	(2)	3.8%	(15)	366.5	(9)	1.9%	(9)	266	(20)	164.2	(4)
India	1,040,457	(3)	754	(28)	26,285	(8)	2.5%	(20)	19.0	(27)	3.4%	(4)	212	(23)	22.5	(17)
Russia	759,203	(4)	5,202	(11)	12,123	(11)	1.6%	(24)	83.1	(17)	0.9%	(18)	1,934	(4)	44.3	(14)
Peru	345,537	(5)	10,474	(4)	12,799	(10)	3.7%	(17)	388.0	(8)	1.2%	(13)	607	(15)	112.1	(7)
South Africa	337,594	(6)	5,689	(10)	4,804	(20)	1.4%	(25)	81.0	(18)	4.1%	(1)	759	(13)	209.2	(1)
Chile	326,539	(7)	17,075	(2)	8,347	(14)	2.6%	(19)	436.5	(6)	0.7%	(19)	859	(11)	129.0	(5)
Mexico	324,041	(8)	2,512	(22)	37,574	(4)	11.6%	(4)	291.3	(11)	1.9%	(10)	91	(26)	46.2	(13)
Spain	307,335	(9)	6,573	(9)	28,420	(7)	9.2%	(5)	607.8	(2)	0.4%	(24)	892	(9)	19.4	(18)
UK	293,239	(10)	4,319	(12)	45,233	(3)	15.4%	(2)	666.1	(1)	0.2%	(27)	2,846	(1)	10.7	(22)
Iran	269,440	(11)	3,206	(17)	13,791	(9)	5.1%	(10)	164.1	(13)	0.9%	(16)	256	(21)	28.4	(16)
Pakistan	259,999	(12)	1,176	(26)	5,475	(17)	2.1%	(22)	24.8	(25)	0.9%	(17)	104	(25)	10.6	(23)
Saudi Arabia	245,851	(13)	7,057	(7)	2,407	(26)	1.0%	(27)	69.1	(19)	1.1%	(14)	1,291	(6)	79.4	(10)
Italy	243,967	(14)	4,035	(14)	35,028	(5)	14.4%	(3)	579.4	(3)	0.1%	(29)	708	(14)	3.1	(29)
Turkey	217,799	(15)	2,581	(21)	5,458	(18)	2.5%	(21)	64.7	(20)	0.4%	(22)	523	(18)	11.6	(21)
Germany	202,345	(16)	2,415	(23)	9,160	(12)	4.5%	(13)	109.3	(15)	0.2%	(28)	866	(10)	4.7	(28)
Bangladesh	199,357	(17)	1,210	(25)	2,547	(25)	1.3%	(26)	15.5	(28)	1.6%	(11)	74	(28)	18.1	(19)
Colombia	182,140	(18)	3,578	(15)	6,288	(15)	3.5%	(18)	123.5	(14)	3.9%	(2)	536	(17)	116.1	(6)
France	174,674	(19)	2,676	(19)	30,152	(6)	17.3%	(1)	461.9	(5)	0.5%	(21)	2,701	(2)	8.6	(26)
Argentina	119,301	(20)	2,639	(20)	2,178	(27)	1.8%	(23)	48.2	(23)	3.6%	(3)	232	(22)	79.8	(9)
Canada	109,669	(21)	2,905	(18)	8,839	(13)	8.1%	(6)	234.1	(12)	0.4%	(25)	1,115	(8)	9.6	(24)
Qatar	105,898	(22)	37,716	(1)	153	(30)	0.1%	(30)	54.5	(21)	0.4%	(23)	1,563	(5)	166.3	(3)
Iraq	88,171	(23)	2,190	(24)	3,616	(24)	4.1%	(14)	89.8	(16)	2.6%	(6)	296	(19)	55.8	(12)
Egypt	86,474	(24)	844	(27)	4,188	(22)	4.8%	(11)	40.9	(24)	1.1%	(15)	(0)	(30)	8.7	(25)
China	83,622	(25)	58	(30)	4,634	(21)	5.5%	(9)	3.2	(30)	0.0%	(30)	-	(29)	0.0	(30)
Indonesia	83,130	(26)	304	(29)	3,957	(23)	4.8%	(12)	14.5	(29)	1.9%	(8)	83	(27)	5.6	(27)
Sweden	77,281	(27)	7,650	(6)	5,619	(16)	7.3%	(7)	556.2	(4)	0.6%	(20)	1,156	(7)	33.7	(15)
Ecuador	72,444	(28)	4,104	(13)	5,250	(19)	7.2%	(8)	297.4	(10)	1.3%	(12)	197	(24)	60.1	(11)
Kazakhstan	66,895	(29)	3,561	(16)	375	(29)	0.6%	(29)	20.0	(26)	2.8%	(5)	590	(16)	92.4	(8)
Belarus	65,782	(30)	6,962	(8)	491	(28)	0.7%	(28)	52.0	(22)	0.3%	(26)	766	(12)	17.8	(20)

State-By-State Statistical Summary (page 1 of 2)

As of July 17

State	Total Cases	Rank	Cases per 1M Population	Rank2	Deaths	Rank3	Death Rate	Rank4	Deaths per 1 Million Population	Rank5	5-day Moving Average Case Growth Rate	Rank6	Tests per 1M Population Past 7 days	Rank7	New Daily Cases Per 1M Population (5-Day M.A.)	Rank8
Alabama	63,091	(19)	12,867.4	(12)	1,265	(23)	2.0%	(31)	258.0	(22)	3.3%	(8)	2,066	(19)	366.6	(5)
Alaska	1,733	(49)	2,369.0	(48)	17	(51)	1.0%	(49)	23.2	(50)	3.2%	(9)	4,586	(1)	80.1	(34)
Arizona	138,523	(7)	19,031.2	(4)	2,583	(16)	1.9%	(34)	354.9	(15)	2.5%	(17)	1,879	(29)	424.5	(3)
Arkansas	31,762	(31)	10,524.8	(22)	353	(37)	1.1%	(47)	117.0	(39)	2.3%	(21)	1,992	(23)	234.7	(12)
California	374,162	(2)	9,469.5	(24)	7,611	(4)	2.0%	(30)	192.6	(28)	2.7%	(14)	3,140	(7)	224.4	(13)
Colorado	39,344	(26)	6,832.1	(36)	1,751	(18)	4.5%	(12)	304.1	(16)	1.3%	(33)	1,171	(46)	78.2	(36)
Connecticut	47,893	(21)	13,433.1	(11)	4,396	(9)	9.2%	(1)	1,233.0	(3)	0.3%	(48)	2,875	(9)	24.3	(47)
Delaware	13,337	(40)	13,696.3	(10)	521	(34)	3.9%	(17)	535.0	(12)	0.8%	(40)	2,333	(16)	100.5	(30)
District Of Columbia	11,115	(41)	15,749.2	(7)	577	(32)	5.2%	(9)	817.6	(6)	0.5%	(46)	4,195	(3)	75.3	(37)
Florida	327,241	(3)	15,236.3	(8)	4,805	(8)	1.5%	(42)	223.7	(25)	3.9%	(4)	3,054	(8)	552.7	(1)
Georgia	135,183	(8)	12,732.2	(14)	3,132	(13)	2.3%	(26)	295.0	(17)	2.9%	(11)	2,050	(21)	322.5	(8)
Hawaii	1,334	(51)	942.2	(51)	23	(50)	1.7%	(37)	16.2	(51)	1.8%	(30)	1,070	(50)	17.8	(49)
Idaho	13,752	(39)	7,673.8	(33)	118	(42)	0.9%	(50)	65.8	(45)	4.8%	(2)	1,773	(35)	304.8	(9)
Illinois	160,509	(6)	12,666.6	(15)	7,465	(5)	4.7%	(11)	589.1	(9)	0.7%	(42)	2,870	(10)	85.8	(33)
Indiana	54,813	(20)	8,141.9	(28)	2,803	(15)	5.1%	(10)	416.4	(14)	1.2%	(35)	1,147	(47)	95.8	(31)
Iowa	37,777	(27)	11,973.4	(17)	784	(29)	2.1%	(28)	248.5	(23)	1.3%	(31)	1,820	(33)	163.3	(18)
Kansas	22,116	(34)	7,591.4	(34)	305	(38)	1.4%	(43)	104.7	(41)	2.9%	(13)	1,548	(42)	166.4	(17)
Kentucky	21,605	(35)	4,835.9	(42)	658	(30)	3.0%	(24)	147.3	(33)	2.2%	(23)	1,611	(39)	93.8	(32)
Louisiana	88,590	(12)	19,056.6	(3)	3,511	(11)	4.0%	(16)	755.2	(7)	2.5%	(16)	4,262	(2)	428.8	(2)
Maine	3,636	(46)	2,704.9	(46)	115	(44)	3.2%	(22)	85.6	(43)	0.5%	(45)	1,598	(40)	14.6	(50)
Maryland	76,371	(14)	12,632.3	(16)	3,359	(12)	4.4%	(13)	555.6	(10)	0.9%	(38)	2,059	(20)	105.4	(28)
Massachusetts	112,879	(9)	16,242.7	(6)	8,402	(3)	7.4%	(5)	1,209.0	(4)	0.2%	(49)	1,562	(41)	36.4	(46)
Michigan	80,593	(13)	8,069.9	(30)	6,355	(7)	7.9%	(3)	636.3	(8)	1.0%	(37)	2,556	(12)	70.2	(39)
Minnesota	45,013	(23)	7,981.5	(31)	1,573	(20)	3.5%	(18)	278.9	(19)	1.3%	(34)	2,373	(14)	107.6	(27)
Mississippi	40,829	(24)	13,718.7	(9)	1,332	(22)	3.3%	(21)	447.6	(13)	2.4%	(19)	1,975	(24)	297.9	(11)

State-By-State Statistical Summary (page 2 of 2)

As of July 17

State	Total Cases	Rank	Cases per 1M Population	Rank2	Deaths	Rank3	Death Rate	Rank4	Deaths per 1 Million Population	Rank5	5-day Moving Average Case Growth Rate	Rank6	Tests per 1M Population Past 7 days	Rank7	New Daily Cases Per 1M Population (5-Day M.A.)	Rank8
Missouri	33,586	(28)	5,472.3	(41)	1,158	(24)	3.4%	(19)	188.7	(30)	2.9%	(12)	1,934	(26)	133.4	(20)
Montana	2,366	(47)	2,213.7	(49)	37	(48)	1.6%	(40)	34.6	(49)	6.1%	(1)	2,436	(13)	103.3	(29)
Nebraska	22,361	(33)	11,559.6	(18)	301	(39)	1.3%	(44)	155.6	(32)	1.1%	(36)	1,860	(31)	117.0	(23)
Nevada	33,295	(29)	10,809.5	(20)	637	(31)	1.9%	(32)	206.8	(27)	3.8%	(5)	1,926	(27)	342.6	(7)
New Hampshire	6,165	(43)	4,534.1	(43)	395	(36)	6.4%	(7)	290.5	(18)	0.4%	(47)	1,128	(48)	18.3	(48)
New Jersey	182,804	(5)	20,581.0	(2)	15,756	(2)	8.6%	(2)	1,773.9	(1)	0.2%	(51)	2,344	(15)	73.8	(38)
New Mexico	16,456	(37)	7,848.0	(32)	565	(33)	3.4%	(20)	269.5	(20)	1.8%	(29)	3,235	(6)	129.9	(21)
New York	432,412	(1)	22,227.9	(1)	32,535	(1)	7.5%	(4)	1,672.4	(2)	0.2%	(50)	3,362	(4)	47.0	(45)
North Carolina	95,572	(11)	9,112.4	(25)	1,634	(19)	1.7%	(38)	155.8	(31)	2.2%	(22)	2,634	(11)	191.7	(15)
North Dakota	4,792	(44)	6,288.2	(37)	90	(46)	1.9%	(33)	118.1	(38)	2.0%	(26)	1,852	(32)	119.6	(22)
Ohio	72,321	(17)	6,187.0	(38)	3,119	(14)	4.3%	(14)	266.8	(21)	2.0%	(28)	1,914	(28)	115.3	(24)
Oklahoma	24,140	(32)	6,100.6	(40)	445	(35)	1.8%	(35)	112.5	(40)	3.6%	(6)	1,948	(25)	182.2	(16)
Oregon	13,802	(38)	3,272.4	(45)	254	(40)	1.8%	(36)	60.2	(46)	2.5%	(15)	1,268	(43)	79.5	(35)
Pennsylvania	104,172	(10)	8,137.2	(29)	7,068	(6)	6.8%	(6)	552.1	(11)	0.9%	(39)	1,124	(49)	62.5	(44)
Rhode Island	17,793	(36)	16,796.0	(5)	990	(26)	5.6%	(8)	934.5	(5)	0.5%	(44)	1,692	(38)	64.9	(41)
South Carolina	66,060	(18)	12,830.4	(13)	1,096	(25)	1.7%	(39)	212.9	(26)	3.1%	(10)	2,168	(18)	378.5	(4)
South Dakota	7,789	(42)	8,804.5	(27)	116	(43)	1.5%	(41)	131.1	(36)	0.8%	(41)	1,200	(45)	62.7	(43)
Tennessee	73,819	(16)	10,803.0	(21)	815	(28)	1.1%	(48)	119.3	(37)	3.6%	(7)	3,263	(5)	298.4	(10)
Texas	322,556	(4)	11,124.2	(19)	3,932	(10)	1.2%	(45)	135.6	(35)	4.0%	(3)	1,860	(30)	352.2	(6)
Utah	32,572	(30)	10,159.8	(23)	235	(41)	0.7%	(51)	73.3	(44)	2.0%	(27)	2,310	(17)	193.8	(14)
Vermont	1,334	(51)	2,137.9	(50)	56	(47)	4.2%	(15)	89.7	(42)	0.6%	(43)	1,206	(44)	13.0	(51)
Virginia	75,433	(15)	8,837.5	(26)	2,013	(17)	2.7%	(25)	235.8	(24)	1.3%	(32)	1,807	(34)	108.8	(26)
Washington	46,506	(22)	6,107.2	(39)	1,442	(21)	3.1%	(23)	189.4	(29)	2.4%	(20)	1,742	(36)	113.9	(25)
West Virginia	4,783	(45)	2,676.3	(47)	100	(45)	2.1%	(27)	56.0	(47)	2.4%	(18)	1,707	(37)	63.9	(42)
Wisconsin	40,507	(25)	6,957.1	(35)	833	(27)	2.1%	(29)	143.1	(34)	2.1%	(24)	2,030	(22)	141.2	(19)
Wyoming	2,069	(48)	3,574.9	(44)	24	(49)	1.2%	(46)	41.5	(48)	2.1%	(25)	1,019	(51)	68.9	(40)
United States	3,770,012		11,389.7		142,064		3.8%		429.1		2.0%		2,305		206.3	

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>