







COVID-19 Report

Friday, July 10, 2020



Industry Advisor. IIc Today's Highlights

- New cases were high again in the United States, with 61,067 reported on Thursday. This was the second consecutive day with more than 60,000 cases.
- The same states led the surge in new cases: Texas recorded more than 11,000; Florida nearly 9,000; California more than 7,000; and, Arizona more than 4,000
- Arizona, Florida and Texas continue to report high (and, increasing) test-positive rates; California's rate is relatively low and declining
- A significant distinction has emerged in state-by-state experiences with new infection rates: 25 states have experienced their highest rate of new infections within the past week; 22 states have gone more than 45 days since their peak infection rate
- Test volume rose above 600,000 for the day and the test-positive rate dropped below 10% to 9.8% for the day

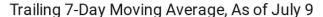
- Deaths were high (960) by recent standards, for the third consecutive day. After trending downward since mid- to late-March, the 7-day moving average has been essentially level since the third week of June.
- Recoveries to-date outnumber deaths by 10.5:1
- Hospitalizations, which had been declining since at least mid-March, have now been increasing for the past 3 weeks. These have not been increasing, however, as fast as new cases during this time.
- The age distribution of these hospitalized patients has been trending younger since the end of April
- Additionally, the severity of these hospitalizations seems to be diminishing, as the % of patients on ventilators and in the ICU are declining
- While the United States is experiencing significantly numbers of new cases each daily, its % change in cases per day ranks 8th among the 30 countries with the most total cases.
- Testing per capita in the United States over the past week is second only to the UK among the countries

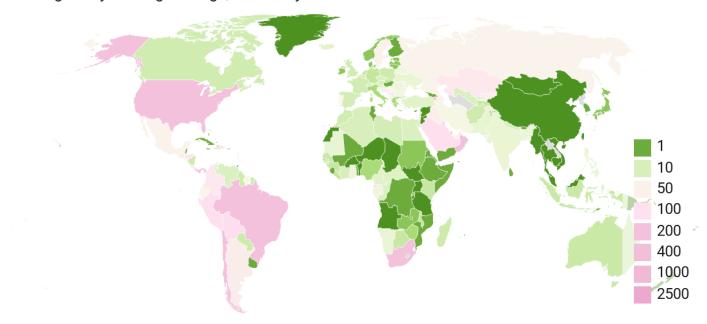


Worldwide

United States and South America are now at the center of the virus spread

New Infections / 1 Million Population





Health Industry Advisor LLC analysis

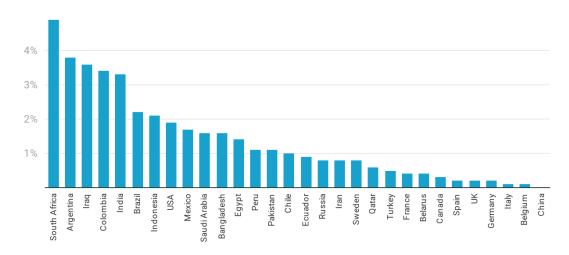


Countries With Most Total Cases

United States is testing more than all except the UK; Rate of case increase in the US is 8th highest among the top 30

Daily Change (%) in Total Cases

30 Countries With Most Total Cases, Trailing 5-Day Moving Average, As of July 9

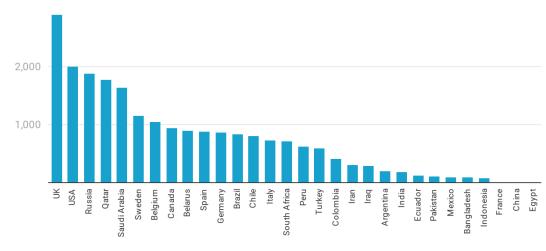


Health Industry Advisor LLC analysis

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

Daily Tests Per 1 Million Population

30 Countries With Most Total Cases, Trailing 7-Day Moving Average, As of July 9

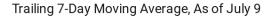


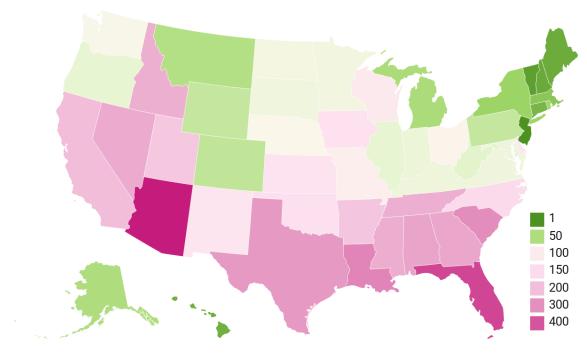
Health Industry Advisor LLC analysis



States in the South and West are experiencing the highest infection rates

New Infections Per 1 Million Population





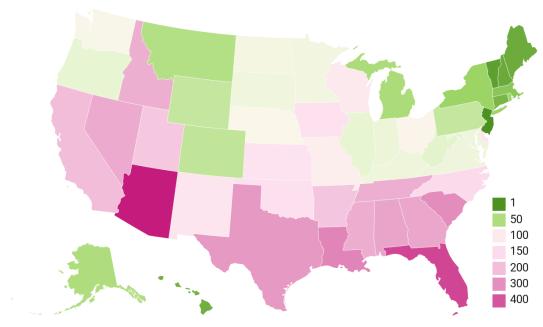
Health Industry Advisor LLC analysis



New Infections are not yet peaking in South and East; they peaked months ago in Northeast and Midwest

New Infections Per 1 Million Population

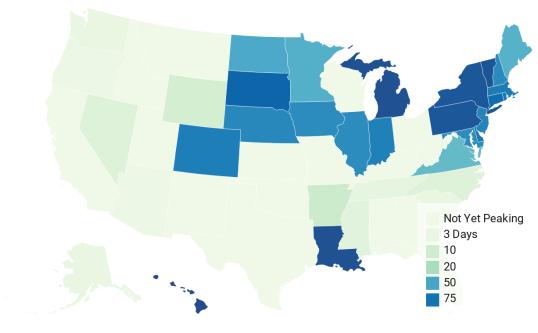
Trailing 7-Day Moving Average, As of July 9



Health Industry Advisor LLC analysis

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

Days Since Peak New Infections Per Capita



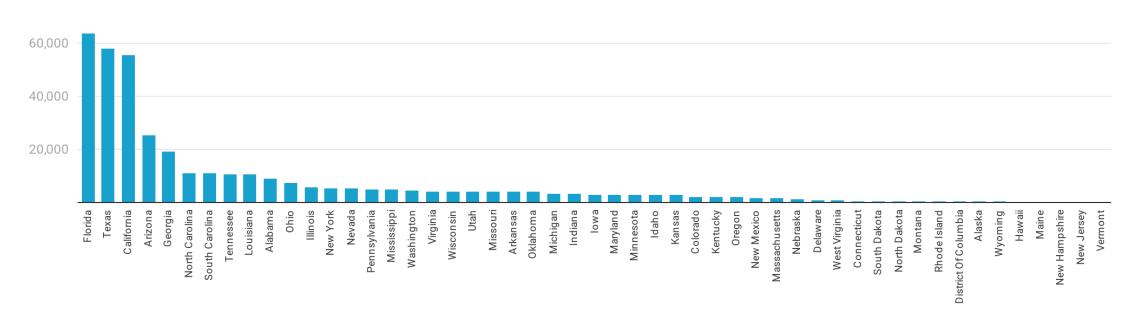
Health Industry Advisor LLC analysis



Florida, Texas, California and Arizona continue to post the majority of new cases in the United States

New Cases

July 3 - 9



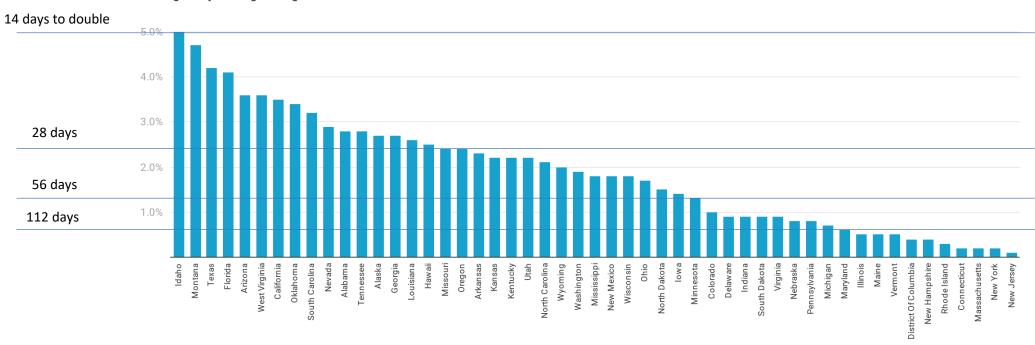
Health Industry Advisor LLC analysis



At current rates, cases are doubling every 14-15 days in Idaho; every 542 days in New Jersey

Growth Rate in Total Cases

Trailing 5-Day Moving Average

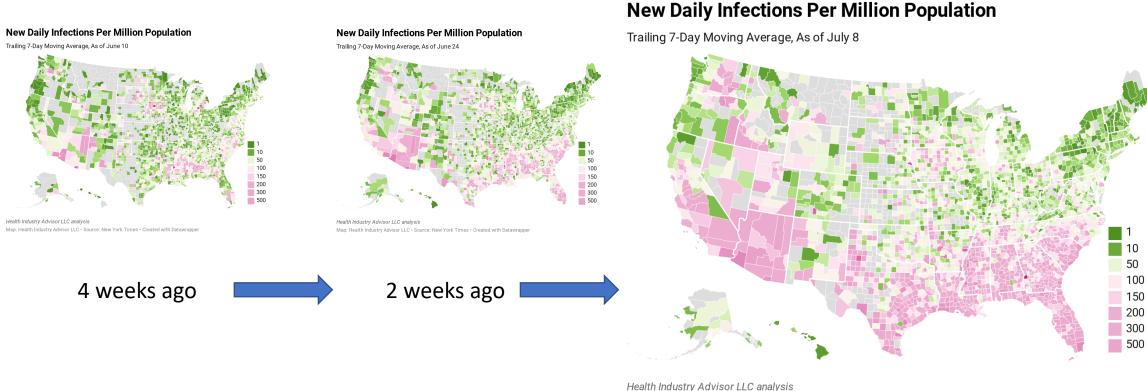


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County-By-County

New Infections have spread quickly across the South in the past few weeks. . .



Map: Health Industry Advisor LLC • Source: New York Times • Created with Datawrapper



Half the country's population resides in a state we consider of "High Concern", up from 44% last week

Map: Health Industry Advisor LLC · Created with Datawrapper

Scorecard Scorecard As of July 2 As of July 9 High Concern High Concern Moderately High Concern Moderately High Concern Moderate Concern Moderate Concern Low Concern Low Concern Scoring based on new infection, test-postive, hospitalization and case growth rates Scoring based on new infection, test-postive, hospitalization and case growth rates

Map: Health Industry Advisor LLC · Created with Datawrapper



The new infection rate continues to grow . . . New case growth had stabilized but is now increasing

New Infections Per 1 Million Population - United States

Trailing 7-Day Moving Average, As of July 9

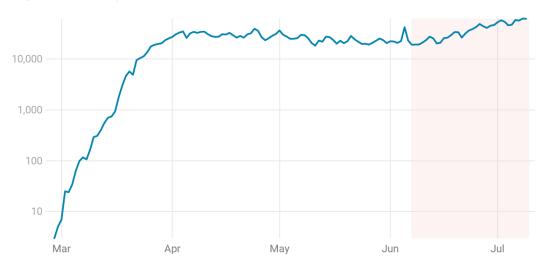


Health Industry Advisor LLC analysis

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

New Daily Cases - United States

Log Scale, As of July 9



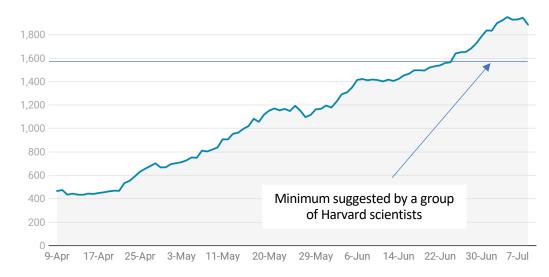
Health Industry Advisor LLC analysis



Testing volumes are increasing however, the test-positive rate also has been increasing recently

Daily Tests Per 1 Million - United States

Trailing 7-Day Moving Average, As of July 9

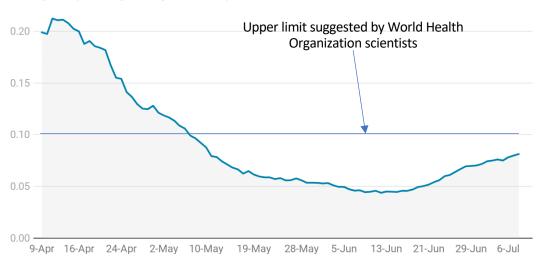


Health Industry Advisor LLC analysis

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 9

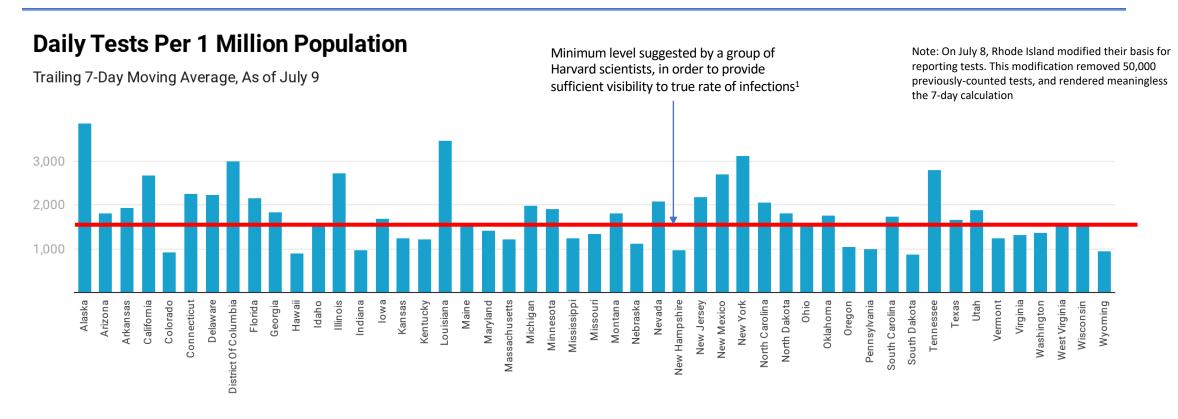


Health Industry Advisor LLC analysis

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



Not all states are testing at the minimum level suggested by a group of Harvard scientists



Health Industry Advisor LLC analysis

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

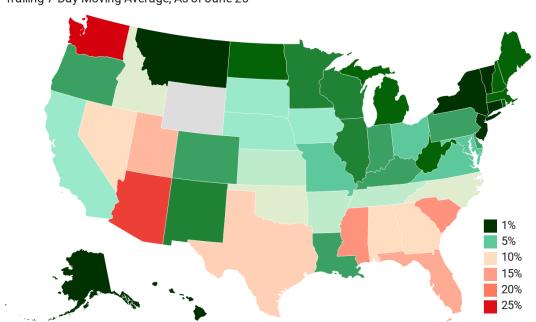
1 – source: (source: https://www.kff.org/coronavirus-policy-watch/what-testing-capacity-do-we-need/



Test-Positive Rates are both high and increasing in several states in the South and West

Test-Positive Rate

Trailing 7-Day Moving Average, As of June 25

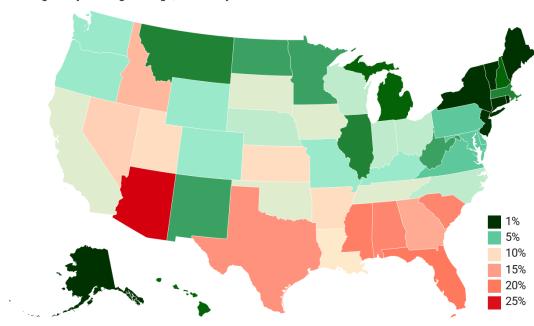


Health Industry Advisor LLC analysis

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

Test-Positive Rate

Trailing 7-Day Moving Average, As of July 9

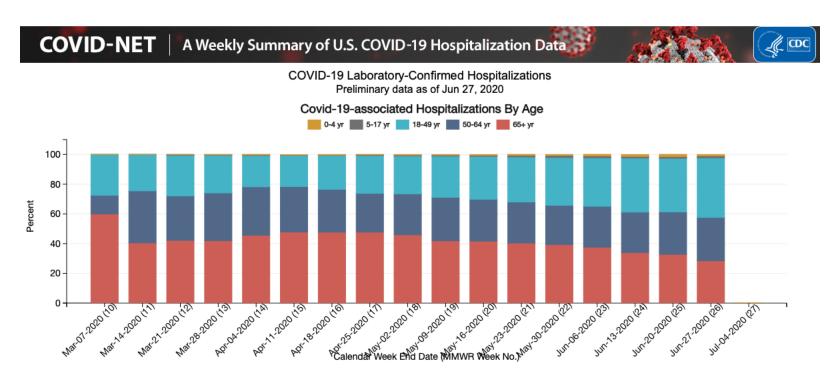


Health Industry Advisor LLC analysis

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



Hospitalized patients are trending younger

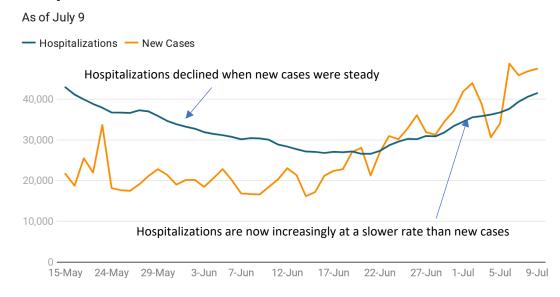


The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. As data are received each week, prior case counts and rates are updated accordingly.



Cases have been trending to be less severe . . . in terms of hospitalization rate, % on ventilators and % in the ICU

Hospitalizations v. New Cases

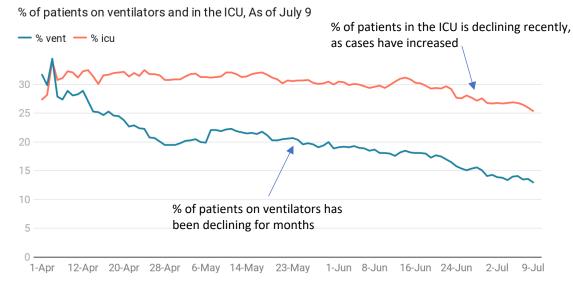


Health Industry Advisor LLC analysis

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



Health Industry Advisor LLC analysis

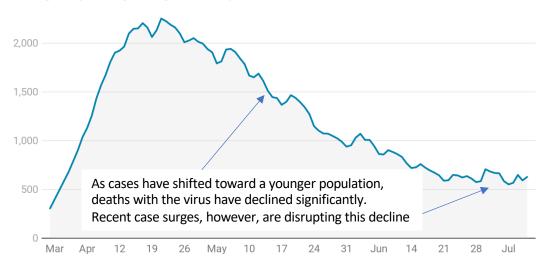
Chart: Health Industry Advisor LLC • Source: The Atlantic's Covid Tracking Project • Created with Datawrapper



Deaths had been declining since mid-April but, may be leveling following the recent surge in new cases

Deaths Recorded With Coronavirus in the U.S.

Trailing 7-Day Moving Average, As of July 9

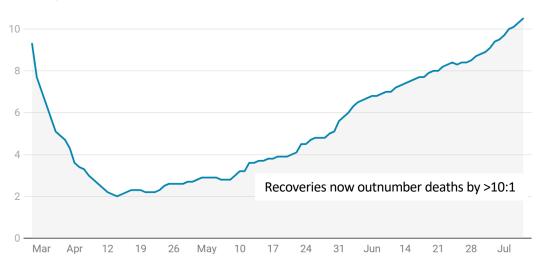


Health Industry Advisor LLC analysis

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

Recoveries: Deaths - United States

As of July 9



Health Industry Advisor LLC analysis

 $\textbf{Chart: Health Industry Advisor LLC \cdot Source: worldometers.info \cdot Created with Datawrapper}$



Top 30 Countries By Total Cases As of July 9

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	3,219,999	(1)	9,727	(3)	135,822	(1)	4.2%	(15)	410.3	(7)	1.9%	(8)	1,993	(2)	165.2	(4)
Brazil	1,759,103	(2)	8,274	(5)	69,254	(2)	3.9%	(17)	325.8	(10)	2.2%	(6)	834	(12)	173.2	(2)
India	794,842	(3)	576	(28)	21,623	(8)	2.7%	(20)	15.7	(27)	3.3%	(5)	174	(22)	17.4	(18)
Russia	707,301	(4)	4,847	(11)	10,843	(11)	1.5%	(26)	74.3	(17)	0.8%	(19)	1,870	(3)	45.2	(13)
Peru	316,448	(5)	9,595	(4)	11,314	(10)	3.6%	(18)	343.0	(9)	1.1%	(13)	617	(16)	105.9	(6)
Chile	306,216	(6)	16,016	(2)	6,682	(15)	2.2%	(22)	349.5	(8)	1.0%	(15)	795	(13)	161.9	(5)
Spain	300,136	(7)	6,419	(8)	28,401	(7)	9.5%	(6)	607.4	(3)	0.2%	(27)	872	(10)	9.0	(22)
UK	287,621	(8)	4,236	(12)	44,602	(3)	15.5%	(3)	656.9	(2)	0.2%	(25)	2,885	(1)	8.1	(24)
Mexico	275,003	(9)	2,132	(22)	32,796	(5)	11.9%	(5)	254.3	(12)	1.7%	(9)	98	(25)	47.9	(12)
Iran	250,458	(10)	2,981	(16)	12,305	(9)	4.9%	(11)	146.5	(14)	0.8%	(17)	303	(19)	29.9	(15)
Italy	242,363	(11)	4,009	(14)	34,926	(4)	14.4%	(4)	577.7	(4)	0.1%	(29)	728	(14)	3.3	(29)
Pakistan	240,848	(12)	1,090	(25)	4,983	(18)	2.1%	(23)	22.6	(26)	1.1%	(14)	106	(24)	14.9	(19)
South Africa	238,339	(13)	4,018	(13)	3,720	(22)	1.6%	(25)	62.7	(20)	4.9%	(1)	708	(15)	169.2	(3)
Saudi Arabia	223,327	(14)	6,413	(9)	2,100	(27)	0.9%	(28)	60.3	(21)	1.6%	(10)	1,628	(5)	105.5	(7)
Turkey	209,962	(15)	2,489	(20)	5,300	(17)	2.5%	(21)	62.8	(19)	0.5%	(21)	590	(17)	13.0	(20)
Germany	199,198	(16)	2,377	(21)	9,125	(13)	4.6%	(13)	108.9	(15)	0.2%	(26)	856	(11)	4.2	(28)
Bangladesh	175,494	(17)	1,065	(26)	2,238	(26)	1.3%	(27)	13.6	(28)	1.6%	(11)	88	(26)	19.3	(17)
France	170,094	(18)	2,606	(19)	29,979	(6)	17.6%	(1)	459.3	(6)	0.4%	(22)	0	(28)	8.1	(23)
Colombia	133,973	(19)	2,632	(18)	4,714	(20)	3.5%	(19)	92.6	(16)	3.4%	(4)	412	(18)	78.2	(8)
Canada	106,805	(20)	2,829	(17)	8,749	(14)	8.2%	(7)	231.8	(13)	0.3%	(24)	944	(8)	7.7	(25)
Qatar	102,110	(21)	36,366	(1)	142	(30)	0.1%	(30)	50.6	(22)	0.6%	(20)	1,764	(4)	214.4	(1)
Argentina	90,693	(22)	2,006	(23)	1,720	(28)	1.9%	(24)	38.0	(24)	3.8%	(2)	198	(21)	65.6	(9)
China	83,581	(23)	58	(30)	4,634	(21)	5.5%	(10)	3.2	(30)	0.0%	(30)	0	(28)	0.0	(30)
Egypt	79,254	(24)	774	(27)	3,617	(23)	4.6%	(14)	35.3	(25)	1.4%	(12)	0	(28)	11.1	(21)
Sweden	74,333	(25)	7,359	(6)	5,500	(16)	7.4%	(9)	544.5	(5)	0.8%	(18)	1,143	(6)	52.2	(11)
Indonesia	70,736	(26)	259	(29)	3,417	(24)	4.8%	(12)	12.5	(29)	2.1%	(7)	75	(27)	5.9	(27)
Iraq	69,612	(27)	1,730	(24)	2,882	(25)	4.1%	(16)	71.6	(18)	3.6%	(3)	288	(20)	56.5	(10)
Belarus	64,411	(28)	6,817	(7)	449	(29)	0.7%	(29)	47.5	(23)	0.4%	(23)	891	(9)	25.9	(16)
Ecuador	64,221	(29)	3,639	(15)	4,900	(19)	7.6%	(8)	277.6	(11)	0.9%	(16)	125	(23)	38.5	(14)
Belgium	62,210	(30)	5,367	(10)	9,778	(12)	15.7%	(2)	843.6	(1)	0.1%	(28)	1,038	(7)	7.5	(26 <u>)</u>



Statistical Summary (page 1 of 2)

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	49,174	(20)	10,029.0	(17)	1,068	(24)	2.2%	(33)	217.8	(24)	2.8%	(12)	1,479	(32)	233.1	(9)
Alaska	1,272	(50)	1,738.8	(49)	17	(51)	1.3%	(45)	23.2	(50)	2.7%	(13)	3,873	(1)	48.4	(41)
Arizona	112,671	(7)	15,479.5	(6)	2,038	(16)	1.8%	(37)	280.0	(17)	3.6%	(6)	1,810	(21)	481.3	(1)
Arkansas	26,052	(30)	8,632.7	(19)	309	(37)	1.2%	(48)	102.4	(40)	2.3%	(19)	1,925	(16)	191.7	(13)
California	303,323	(2)	7,676.7	(26)	6,850	(6)	2.3%	(30)	173.4	(30)	3.5%	(7)	2,674	(8)	208.6	(11)
Colorado	35,525	(24)	6,168.9	(33)	1,706	(18)	4.8%	(13)	296.2	(15)	1.0%	(33)	929	(48)	51.8	(39)
Connecticut	47,209	(21)	13,241.3	(8)	4,348	(8)	9.2%	(1)	1,219.5	(3)	0.2%	(48)	2,260	(9)	21.5	(46)
Delaware	12,531	(38)	12,868.6	(9)	517	(34)	4.1%	(17)	530.9	(12)	0.9%	(35)	2,243	(10)	139.7	(17)
District Of Columbia	10,679	(40)	15,131.4	(7)	568	(32)	5.3%	(10)	804.8	(6)	0.4%	(45)	3,008	(4)	56.1	(37)
Florida	232,718	(4)	10,835.3	(13)	4,009	(9)	1.7%	(39)	186.7	(25)	4.1%	(4)	2,163	(12)	430.9	(2)
Georgia	106,727	(9)	10,052.1	(16)	2,930	(14)	2.7%	(26)	276.0	(18)	2.7%	(14)	1,832	(19)	264.4	(6)
Hawaii	1,130	(51)	798.1	(51)	19	(50)	1.7%	(41)	13.4	(51)	2.5%	(16)	894	(49)	17.0	(48)
Idaho	9,428	(41)	5,261.0	(37)	100	(44)	1.1%	(50)	55.8	(45)	5.0%	(1)	1,554	(29)	207.2	(12)
Illinois	151,572	(6)	11,961.3	(10)	7,329	(4)	4.8%	(12)	578.4	(9)	0.5%	(44)	2,737	(6)	61.9	(34)
Indiana	49,575	(19)	7,363.8	(30)	2,739	(15)	5.5%	(9)	406.8	(13)	0.9%	(34)	965	(46)	66.0	(32)
Iowa	33,248	(27)	10,538.0	(15)	740	(28)	2.2%	(31)	234.5	(22)	1.4%	(31)	1,681	(25)	141.2	(16)
Kansas	17,893	(35)	6,141.8	(34)	294	(38)	1.6%	(42)	100.9	(41)	2.2%	(21)	1,241	(37)	130.0	(19)
Kentucky	18,245	(34)	4,083.8	(43)	612	(30)	3.4%	(23)	137.0	(34)	2.2%	(22)	1,222	(41)	66.4	(31)
Louisiana	71,994	(13)	15,486.6	(5)	3,360	(10)	4.7%	(14)	722.8	(7)	2.6%	(15)	3,465	(2)	306.5	(3)
Maine	3,486	(46)	2,593.3	(46)	111	(42)	3.2%	(24)	82.6	(43)	0.5%	(43)	1,588	(27)	17.6	(47)
Maryland	71,447	(14)	11,817.9	(11)	3,288	(11)	4.6%	(15)	543.9	(10)	0.6%	(41)	1,404	(33)	69.5	(28)
Massachusetts	110,897	(8)	15,957.5	(4)	8,268	(3)	7.5%	(5)	1,189.7	(4)	0.2%	(49)	1,223	(40)	30.0	(45)
Michigan	75,063	(12)	7,516.2	(29)	6,271	(7)	8.4%	(3)	627.9	(8)	0.7%	(40)	1,980	(15)	49.5	(40)
Minnesota	40,163	(22)	7,121.6	(31)	1,528	(19)	3.8%	(19)	270.9	(19)	1.3%	(32)	1,900	(17)	72.8	(26)
Mississippi	33,591	(26)	11,286.7	(12)	1,204	(22)	3.6%	(21)	404.5	(14)	1.8%	(26)	1,237	(39)	239.4	(8)



Statistical Summary (page 1 of 2)

As of July 9

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Missouri	27,183	(29)	4,429.1	(41)	1,101	(23)	4.1%	(18)	179.4	(28)	2.4%	(18)	1,339	(35)	84.7	(22)
Montana	1,466	(48)	1,371.7	(50)	25	(48)	1.7%	(40)	23.4	(49)	4.7%	(2)	1,820	(20)	47.5	(42)
Nebraska	20,623	(32)	10,661.1	(14)	284	(39)	1.4%	(43)	146.8	(31)	0.8%	(38)	1,121	(42)	82.3	(25)
Nevada	24,904	(31)	8,085.3	(24)	571	(31)	2.3%	(29)	185.4	(26)	2.9%	(10)	2,089	(13)	241.2	(7)
New Hampshire	5,973	(43)	4,392.8	(42)	387	(36)	6.5%	(7)	284.6	(16)	0.4%	(46)	979	(45)	15.8	(49)
New Jersey	177,795	(5)	20,017.0	(2)	15,522	(2)	8.7%	(2)	1,747.5	(1)	0.1%	(51)	2,179	(11)	3.6	(51)
New Mexico	14,251	(37)	6,796.5	(32)	533	(33)	3.7%	(20)	254.2	(21)	1.8%	(28)	2,700	(7)	118.6	(20)
New York	425,072	(1)	21,850.6	(1)	32,343	(1)	7.6%	(4)	1,662.6	(2)	0.2%	(50)	3,131	(3)	41.5	(44)
North Carolina	79,669	(11)	7,596.1	(28)	1,491	(20)	1.9%	(36)	142.2	(32)	2.1%	(23)	2,053	(14)	149.2	(15)
North Dakota	4,070	(44)	5,340.8	(36)	85	(46)	2.1%	(34)	111.5	(36)	1.5%	(30)	1,810	(22)	66.7	(30)
Ohio	61,331	(16)	5,246.9	(38)	3,006	(13)	4.9%	(11)	257.2	(20)	1.7%	(29)	1,520	(30)	84.1	(23)
Oklahoma	18,496	(33)	4,674.3	(40)	410	(35)	2.2%	(32)	103.6	(39)	3.4%	(8)	1,758	(23)	136.5	(18)
Oregon	11,188	(39)	2,652.6	(45)	230	(40)	2.1%	(35)	54.5	(46)	2.4%	(17)	1,051	(43)	63.9	(33)
Pennsylvania	97,634	(10)	7,626.5	(27)	6,904	(5)	7.1%	(6)	539.3	(11)	0.8%	(39)	1,002	(44)	56.4	(36)
Rhode Island	17,243	(36)	16,276.8	(3)	974	(25)	5.6%	(8)	919.4	(5)	0.3%	(47)	(11,210)	(51)	47.3	(43)
South Carolina	50,691	(18)	9,845.4	(18)	905	(26)	1.8%	(38)	175.8	(29)	3.2%	(9)	1,730	(24)	304.9	(4)
South Dakota	7,336	(42)	8,292.5	(23)	101	(43)	1.4%	(44)	114.2	(35)	0.9%	(37)	867	(50)	67.2	(29)
Tennessee	57,591	(17)	8,428.1	(21)	710	(29)	1.2%	(47)	103.9	(38)	2.8%	(11)	2,807	(5)	223.1	(10)
Texas	241,013	(3)	8,312.0	(22)	3,046	(12)	1.3%	(46)	105.0	(37)	4.2%	(3)	1,662	(26)	266.6	(5)
Utah	27,356	(28)	8,532.9	(20)	205	(41)	0.7%	(51)	63.9	(44)	2.2%	(20)	1,887	(18)	180.0	(14)
Vermont	1,272	(50)	2,038.5	(48)	56	(47)	4.4%	(16)	89.7	(42)	0.5%	(42)	1,238	(38)	10.5	(50)
Virginia	67,988	(15)	7,965.3	(25)	1,937	(17)	2.8%	(25)	226.9	(23)	0.9%	(36)	1,325	(36)	69.8	(27)
Washington	39,686	(23)	5,211.6	(39)	1,409	(21)	3.6%	(22)	185.0	(27)	1.9%	(25)	1,372	(34)	82.6	(24)
West Virginia	3,826	(45)	2,140.8	(47)	95	(45)	2.5%	(27)	53.2	(47)	3.6%	(5)	1,507	(31)	58.2	(35)
Wisconsin	33,908	(25)	5,823.7	(35)	809	(27)	2.4%	(28)	138.9	(33)	1.8%	(27)	1,571	(28)	97.0	(21)
Wyoming	1,774	(47)	3,065.2	(44)	21	(49)	1.2%	(49)	36.3	(48)	2.0%	(24)	938	(47)	55.8	(38)
United States	3,219,999		9,728.0		135,822		4.2%		410.3		1.9%		1,887		165.2	



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