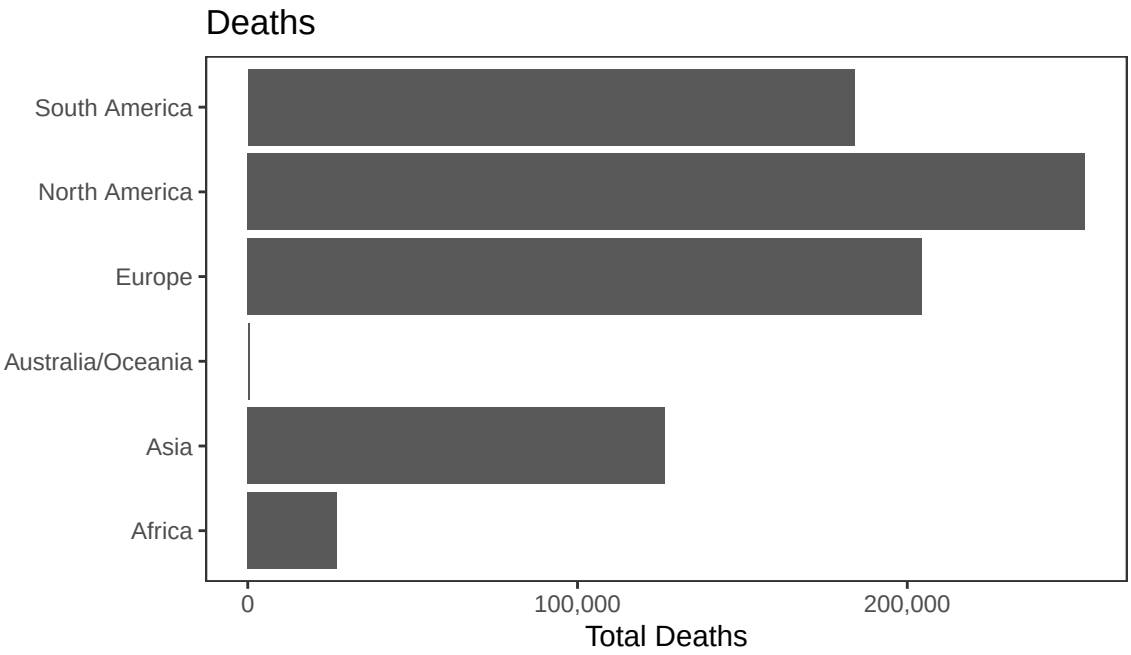
Erik's Covid-19 Chart Pack

Data updated 2020-08-21 14:53:45. World data are from Worldometers. National and state-level mortality, case, and testing data are from Johns-Hopkins University. County and city-level mortality and case data are from the New York Times. Most data presented in this report were accessed through APIs provided by The COVID Tracking Project and NovelCOVID API.

World Data

There have been 22,850,102 confirmed Covid-19 cases and 796,376 deaths worldwide.



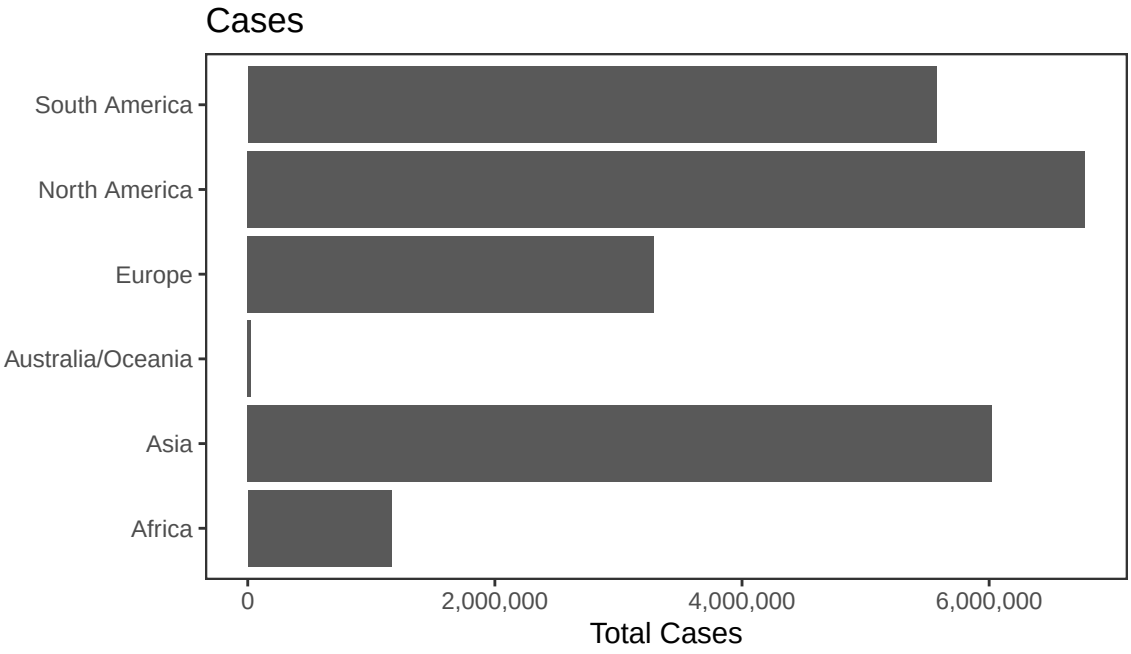
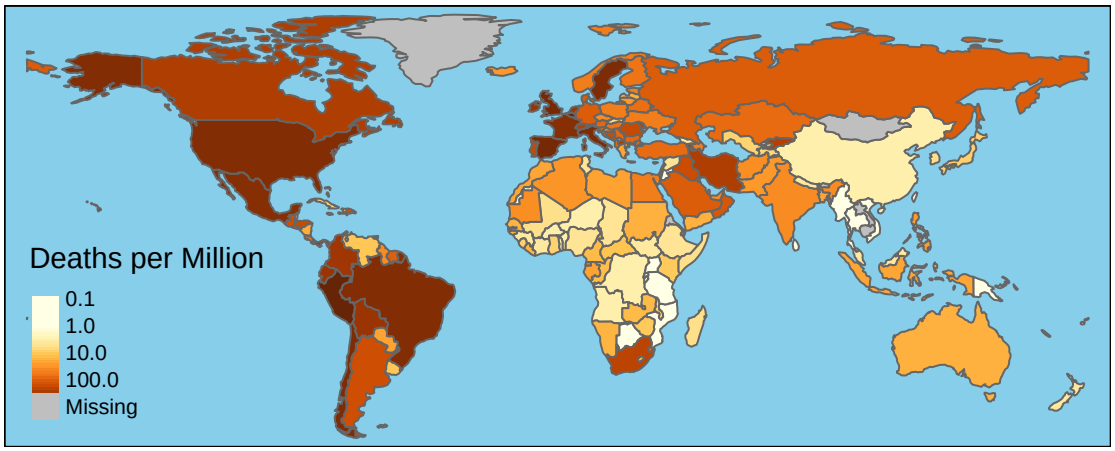
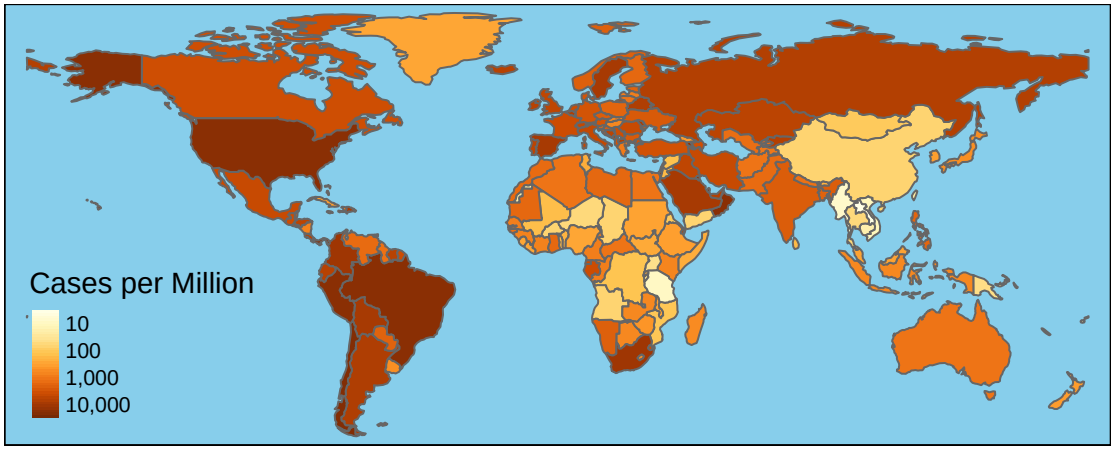
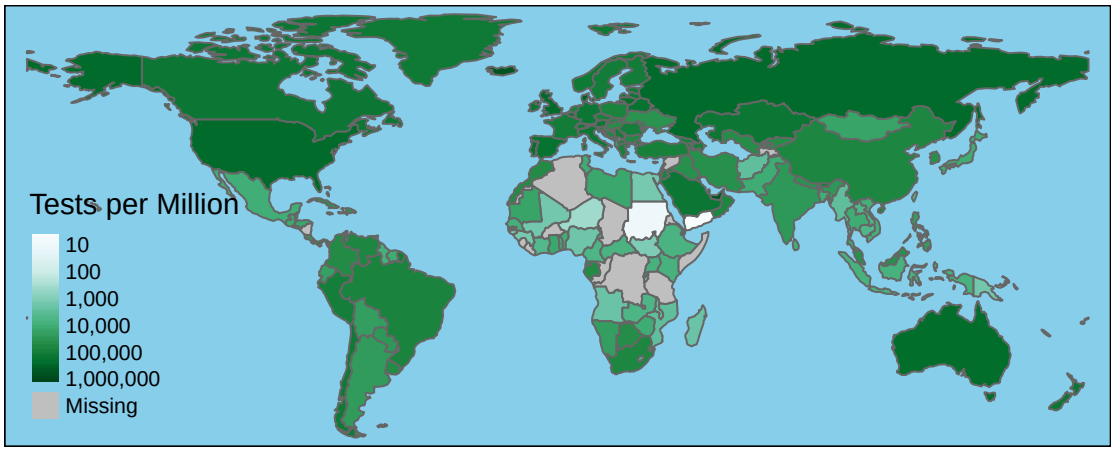


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	5,746,272	177,424	45,341	1,090
Brazil	3,505,097	112,423	44,684	1,234
India	2,904,329	54,975	68,507	981
Russia	942,106	16,099	4,785	110
South Africa	599,940	12,618	3,880	195
Peru	567,059	27,034	8,639	200
Mexico	537,031	58,481	5,792	707
Colombia	513,719	16,183	11,541	204
Spain	404,229	28,813	3,349	16
Chile	391,849	10,671	1,812	93
Iran	352,558	20,264	2,279	139
UK	322,280	41,403	1,182	6
Argentina	320,884	6,517	8,225	187
Saudi Arabia	303,973	3,548	1,287	42
Pakistan	290,958	6,209	513	8
Bangladesh	287,959	3,822	2,868	41
Italy	256,118	35,418	840	6
Turkey	254,520	6,058	1,412	19
Germany	231,284	9,324	1,584	10
France	229,814	30,480	4,771	12


Deaths per Million
0.1
1.0
10.0
100.0
Missing


Cases per Million
10
100
1,000
10,000


Tests per Million
10
100
1,000
10,000
100,000
1,000,000
Missing

National Data

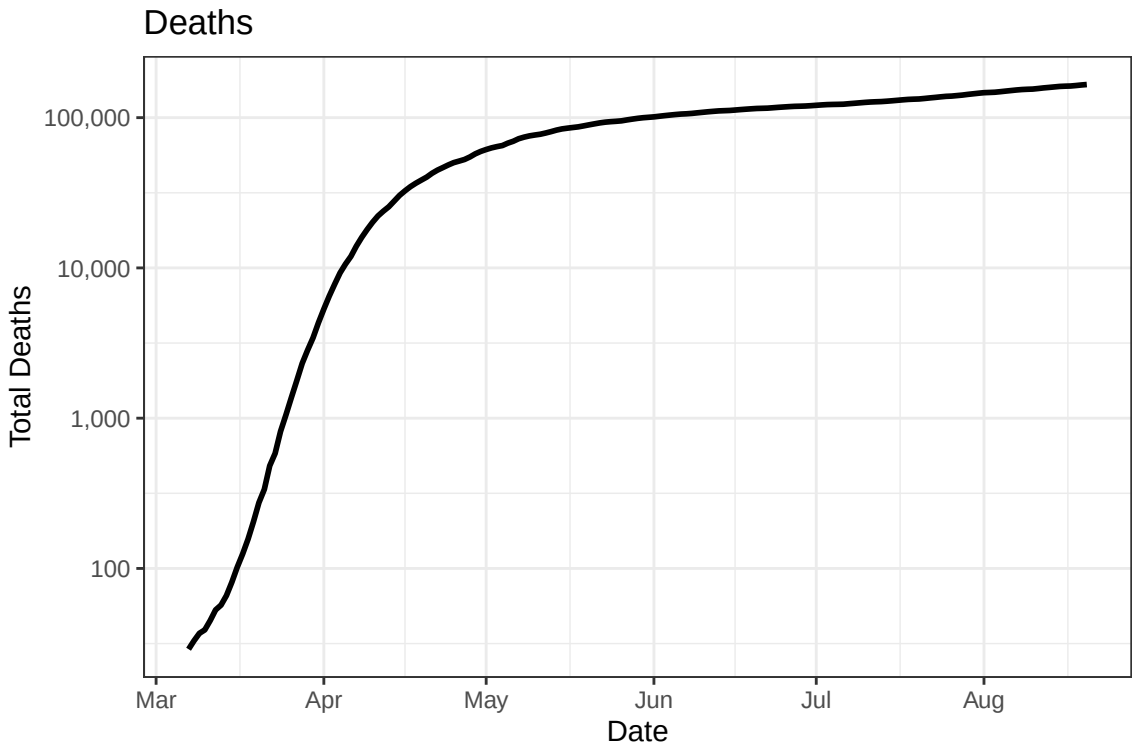
There have been 5,546,699 confirmed Covid-19 cases and 166,144 deaths in the United States.

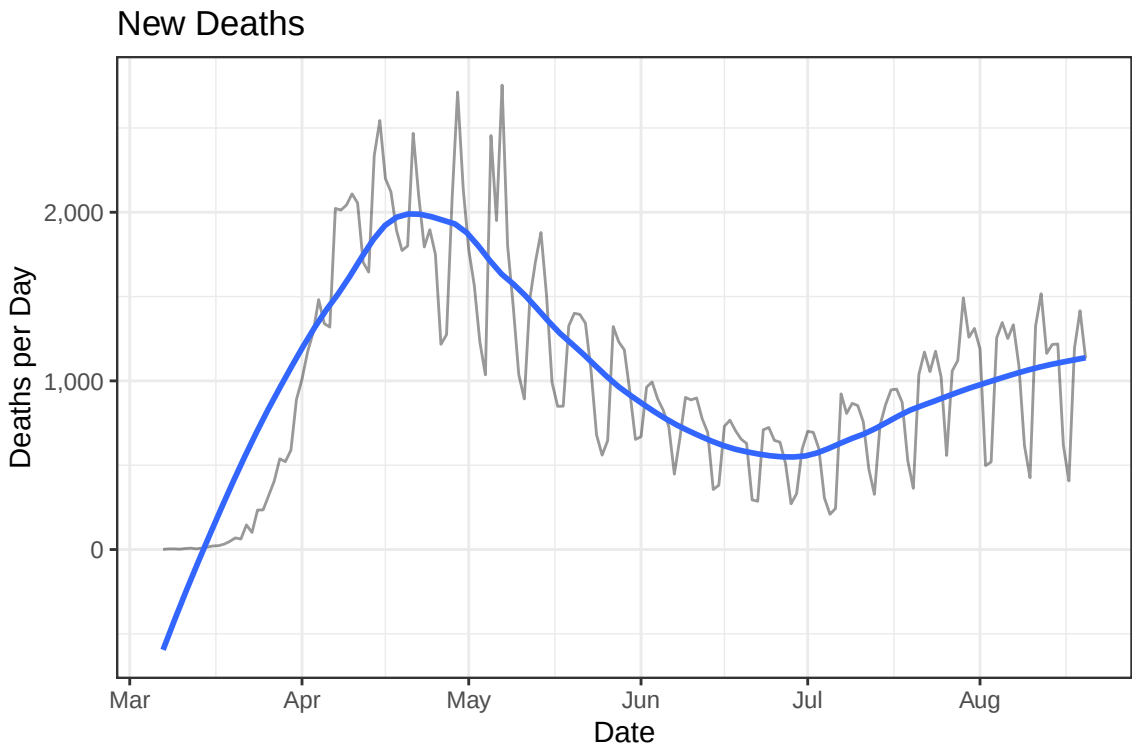
Table 2: U.S. Deaths and Cases over the Last Two Weeks

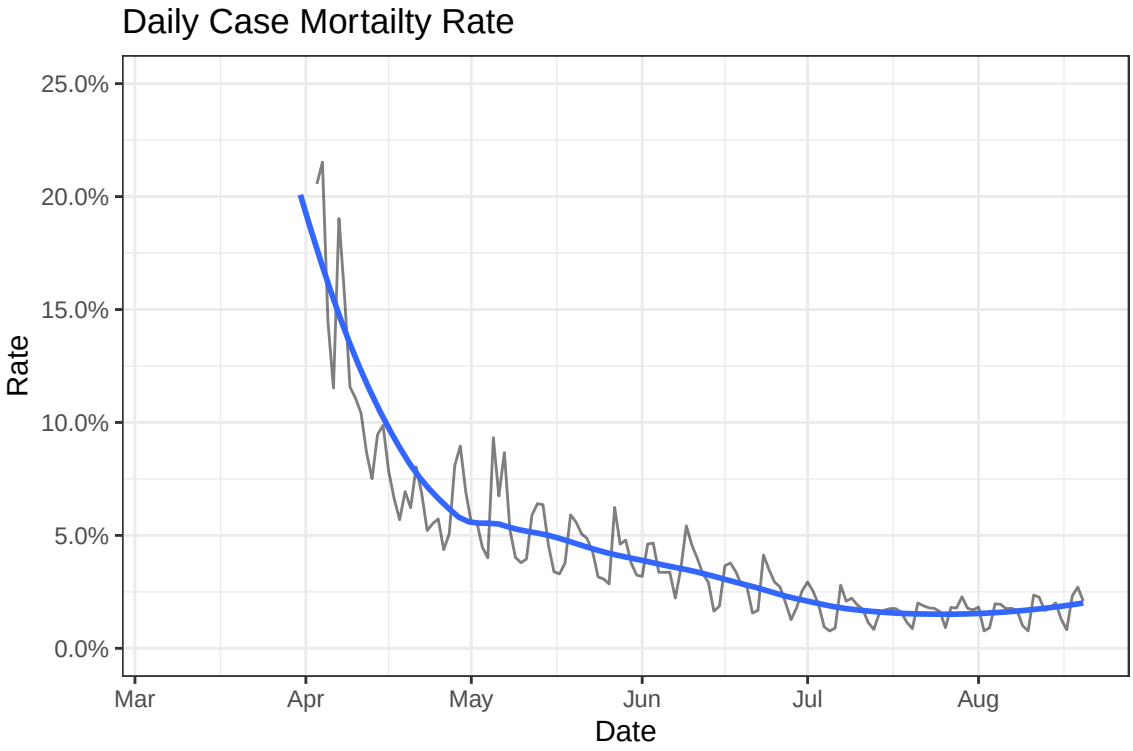
Date	Cases	Deaths	New Cases	New Deaths
2020-08-20	5,546,699	166,144	43,772	1,133
2020-08-19	5,502,927	165,011	45,103	1,416
2020-08-18	5,457,824	163,595	40,458	1,195
2020-08-17	5,417,366	162,400	37,817	407
2020-08-16	5,379,549	161,993	43,083	619
2020-08-15	5,336,466	161,374	56,603	1,219
2020-08-14	5,279,863	160,155	55,649	1,216
2020-08-13	5,224,214	158,939	51,705	1,163
2020-08-12	5,172,509	157,776	56,035	1,517
2020-08-11	5,116,474	156,259	55,594	1,326
2020-08-10	5,060,880	154,933	41,835	426
2020-08-09	5,019,045	154,507	51,365	616
2020-08-08	4,967,680	153,891	54,017	1,089
2020-08-07	4,913,663	152,802	61,520	1,333

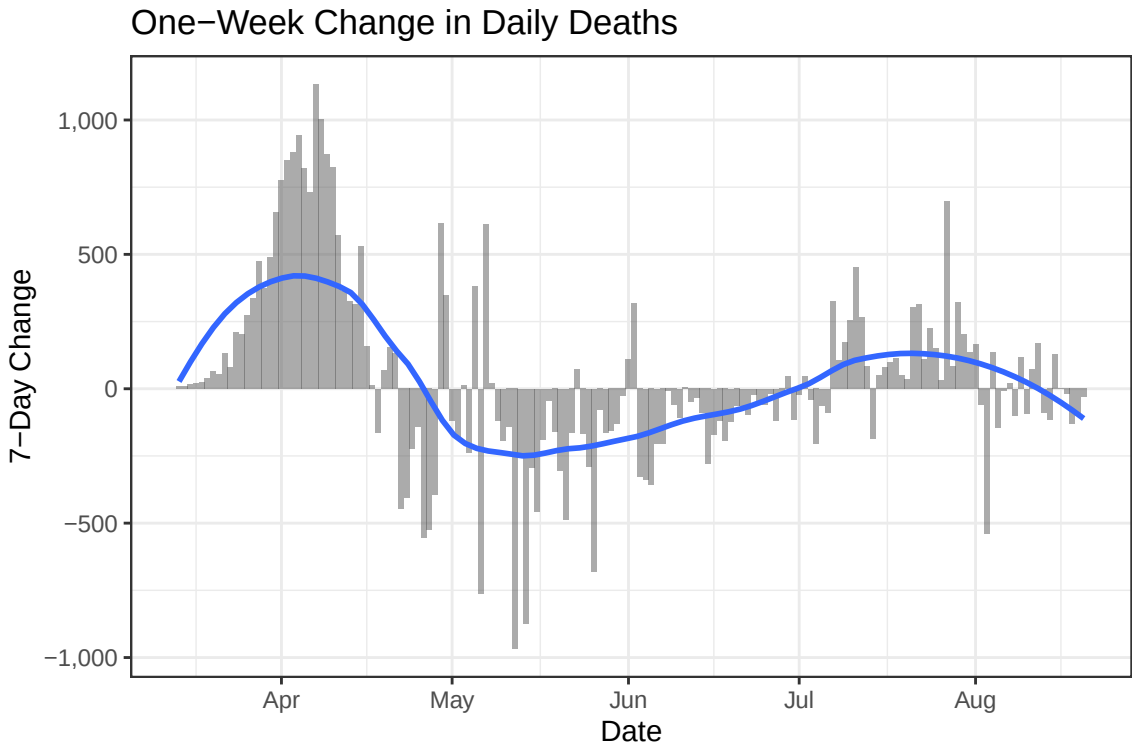
Deaths

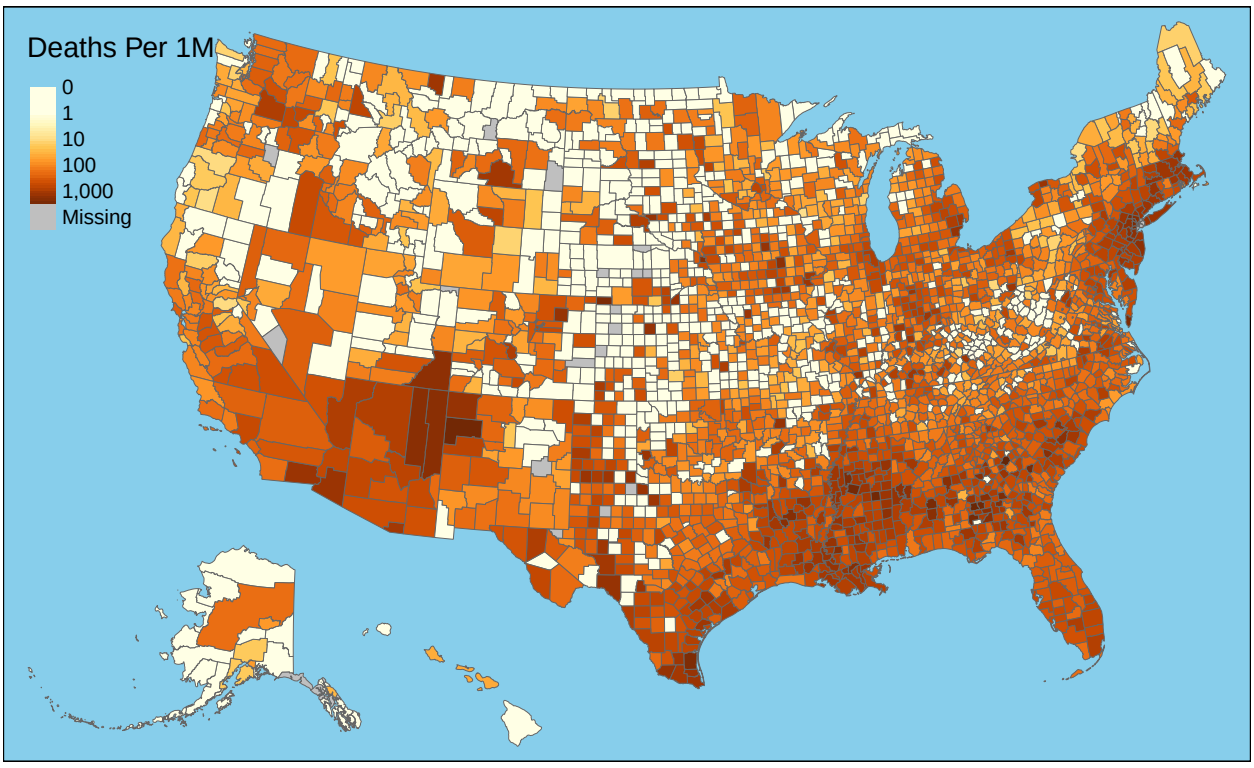
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator of lethality because a large numbers of non-lethal cases are likely never detected. A declining case mortality rate is indicative of more widespread testing.





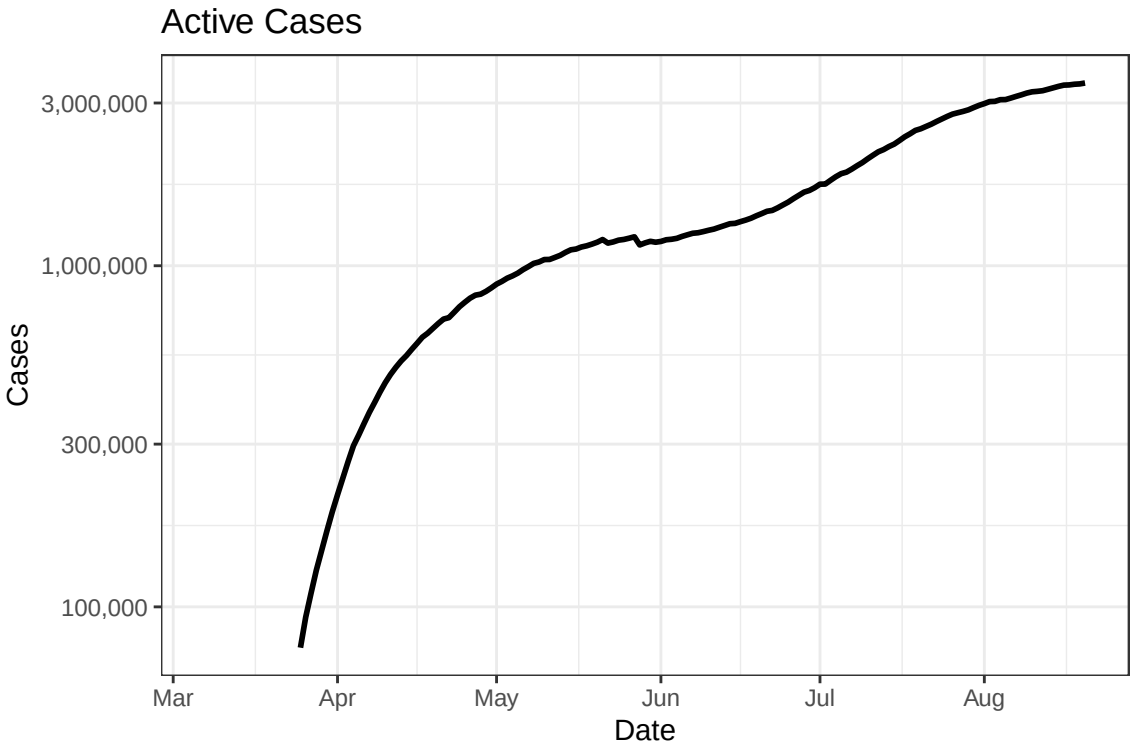

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Mar
Apr
May
Jun
Jul
Aug
Date

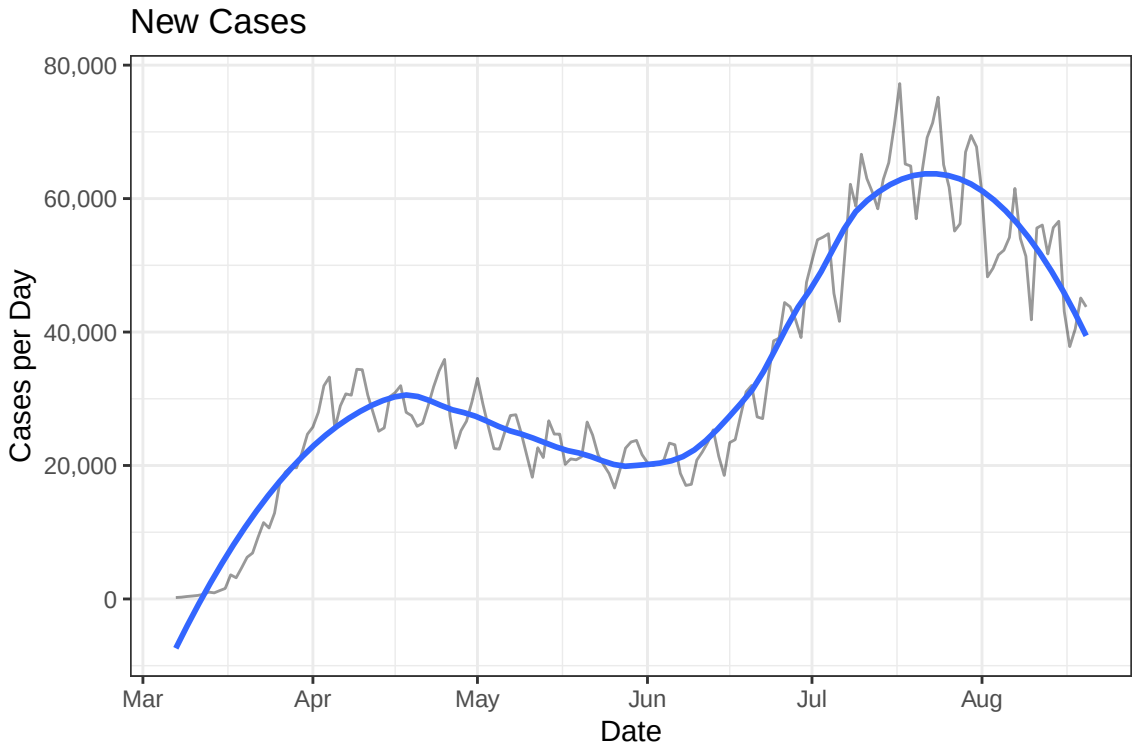

One−Week Change in Daily Deaths
1,000
500
0
−500
−1,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

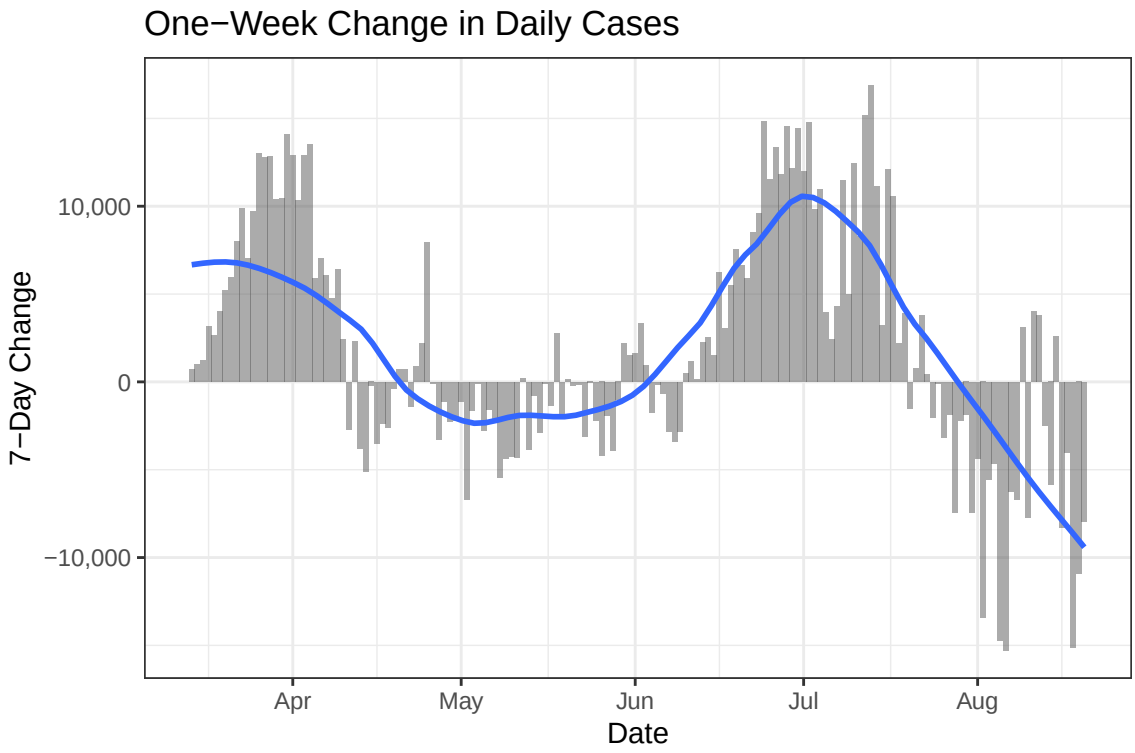

Deaths Per 1M
0
1
10
100
1,000
Missing

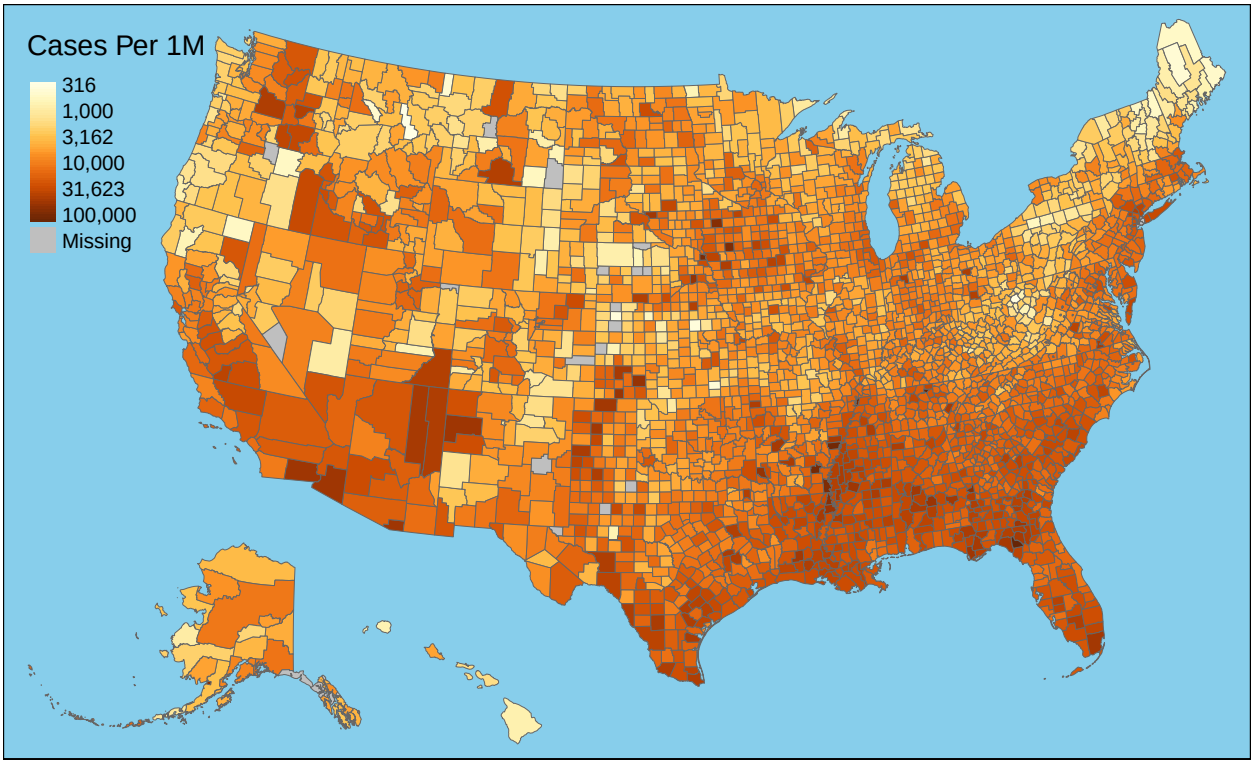
Cases

Reported cases are a function of both the spread of the disease and the prevalence of testing.



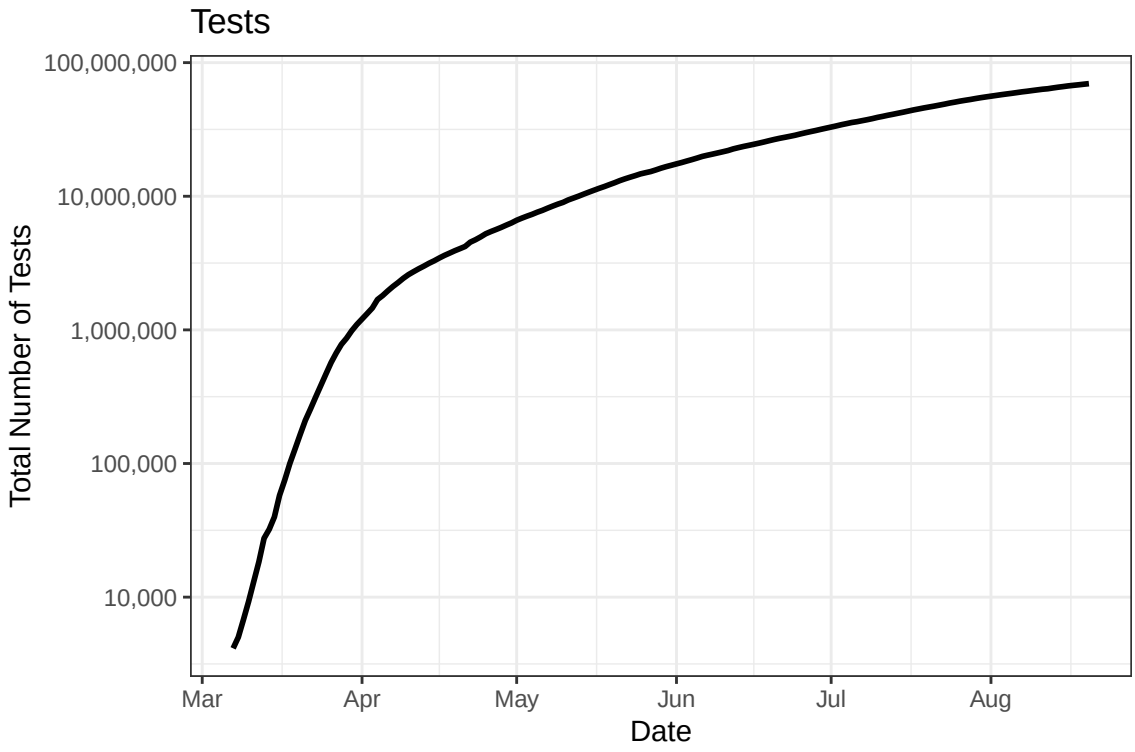


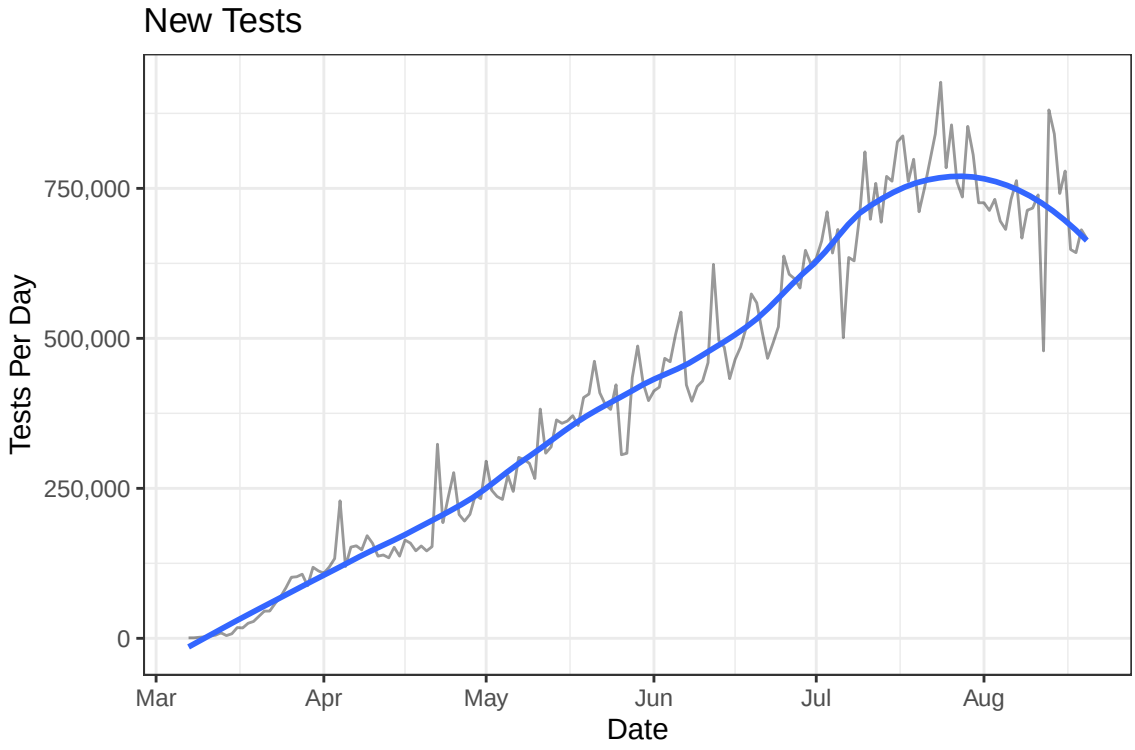

One−Week Change in Daily Cases
10,000
0
−10,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

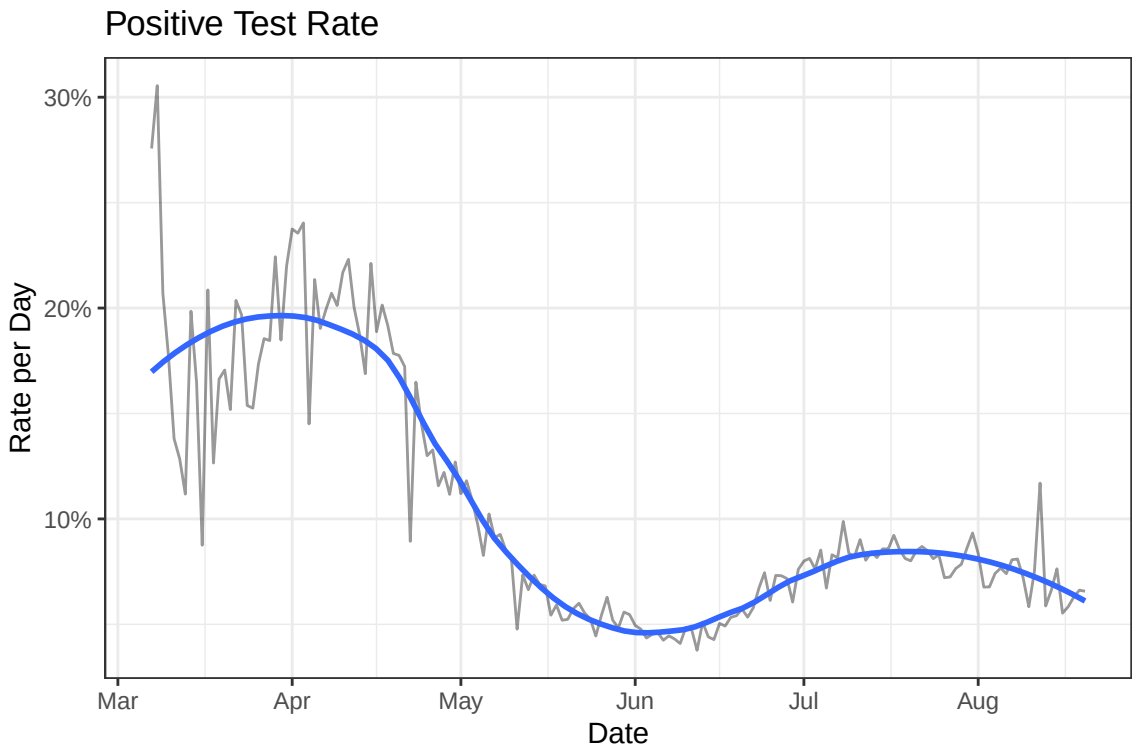

Cases Per 1M
316
1,000
3,162
10,000
31,623
100,000
Missing

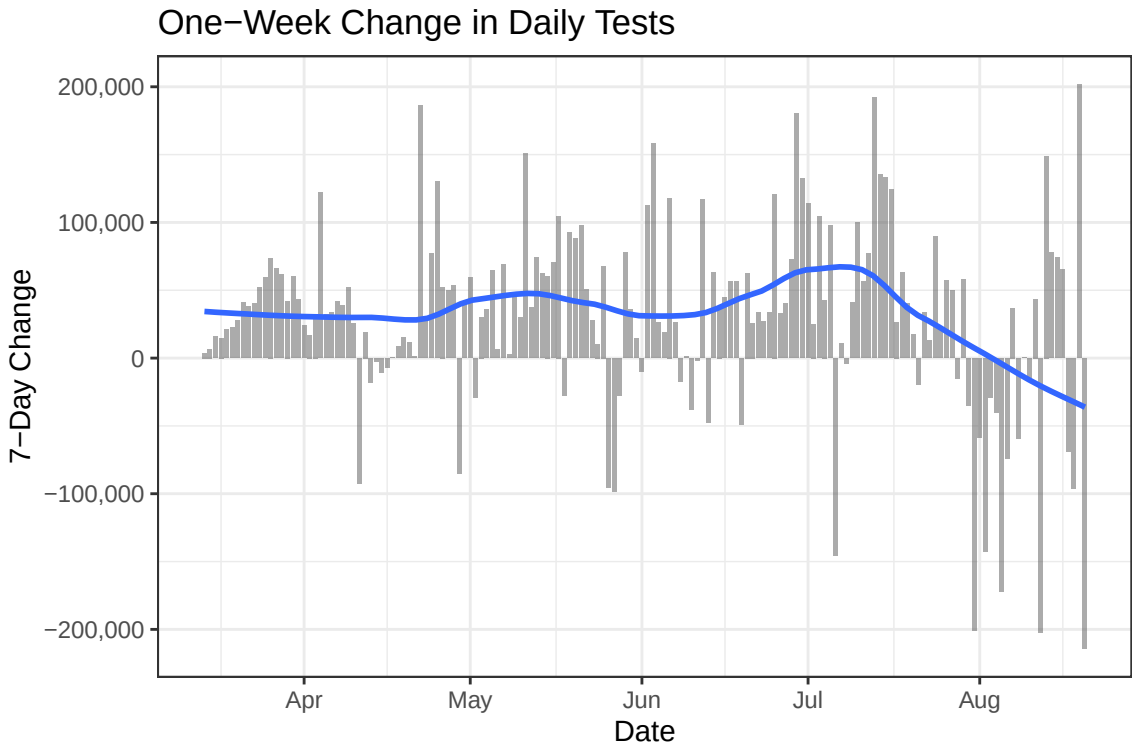
Testing

Widespread testing is necessary for managing the spread of the disease. The following charts show how testing in the United States has changed over time. When the supply of available tests is limited, they are typically only used for patients whose symptoms suggest they are likely to have contracted the virus. A high positive test rate indicates that testing capacity is constrained.





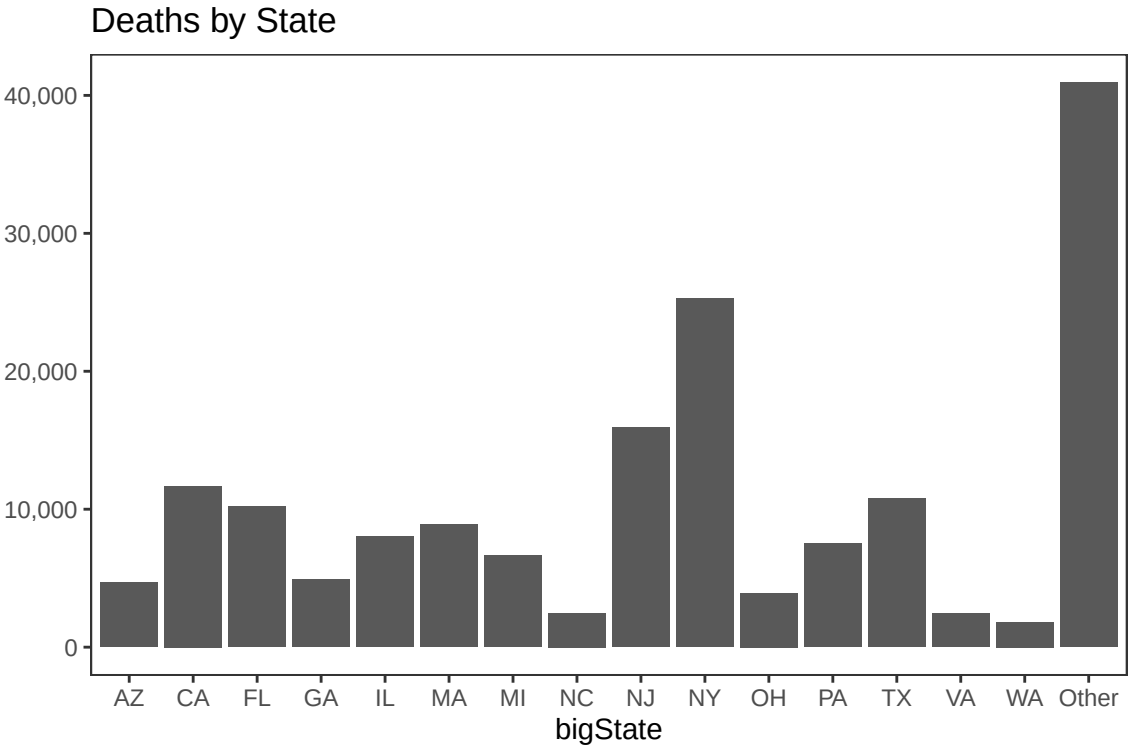

Positive Test Rate
30%
20%
10%
Rate per Day
Mar
Apr
May
Jun
Jul
Aug
Date

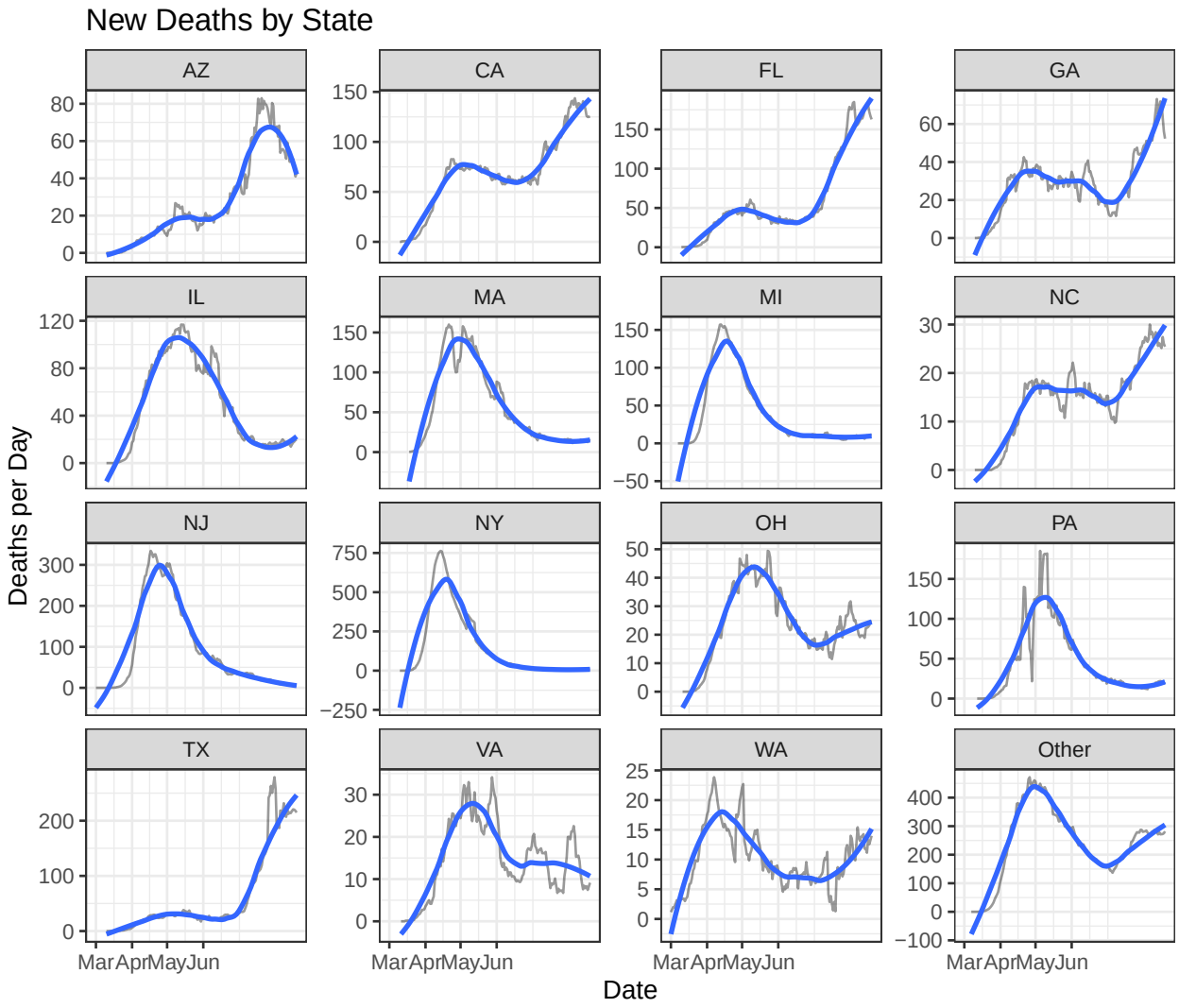

One−Week Change in Daily Tests
200,000
100,000
0
−100,000
−200,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

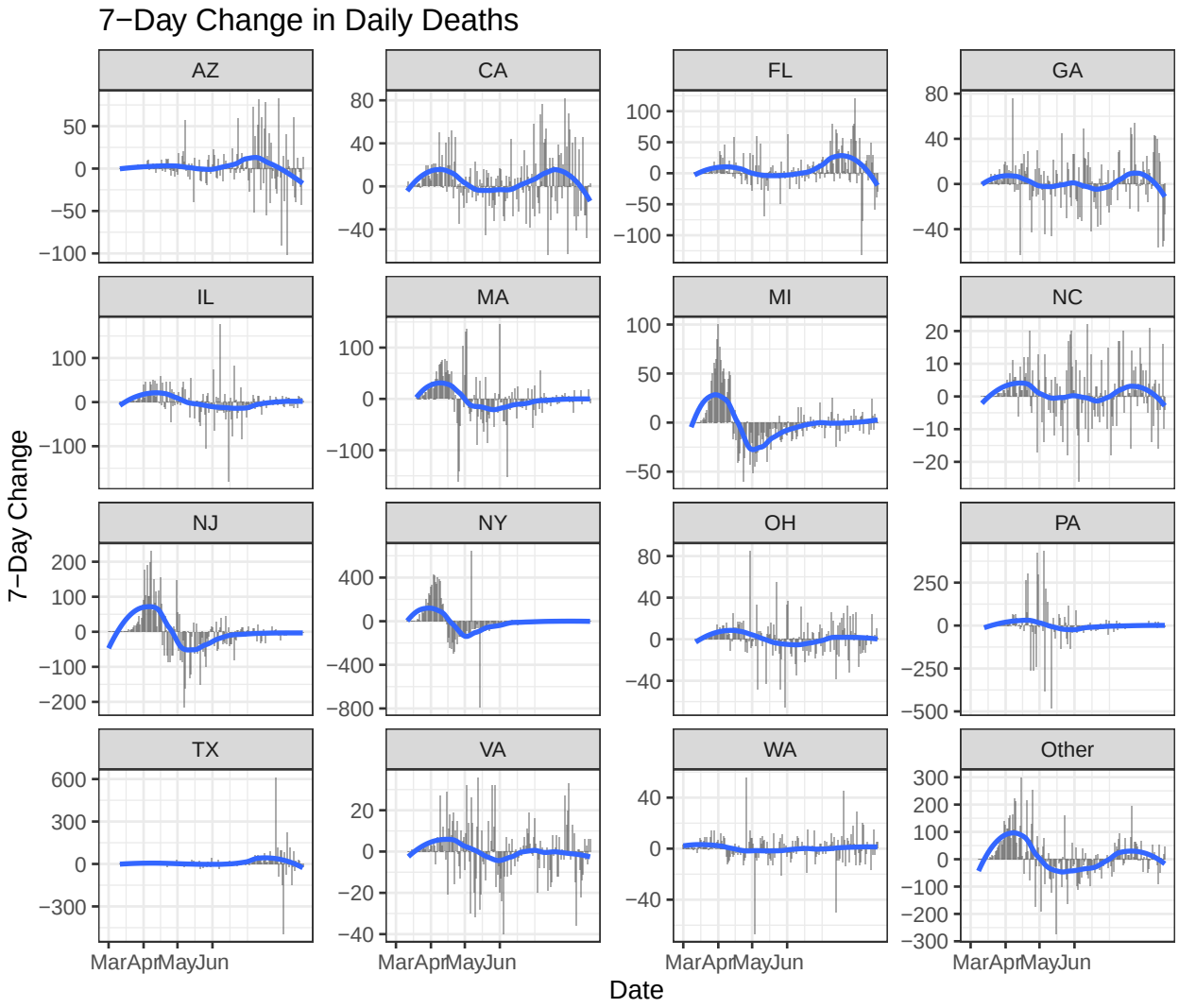
State Data

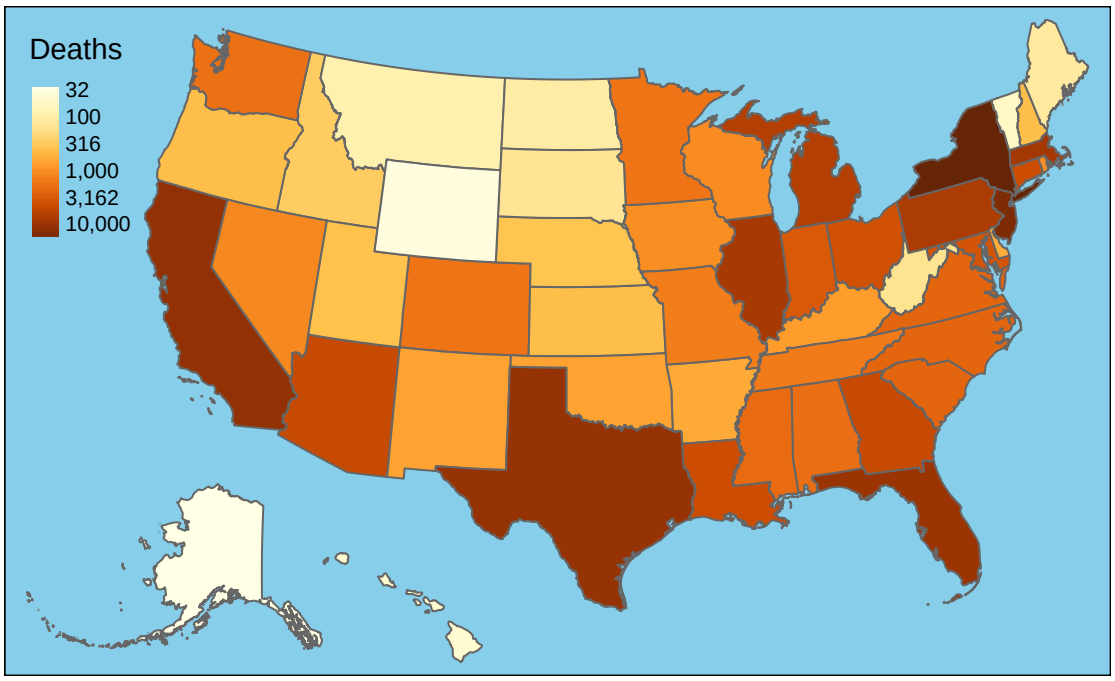
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

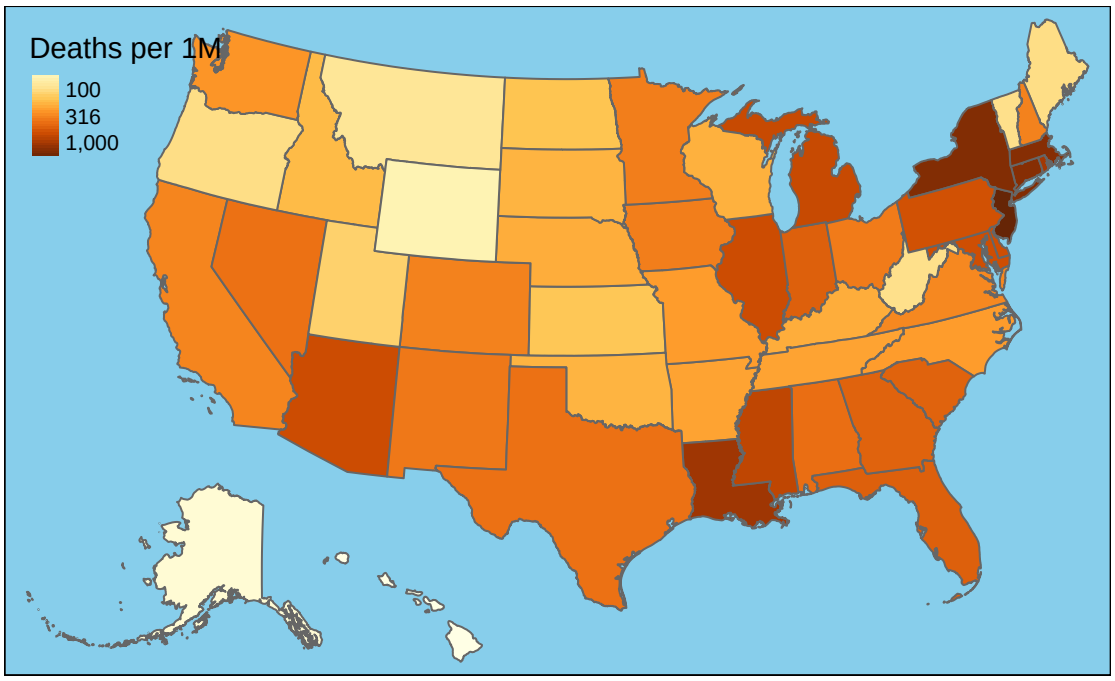
Deaths



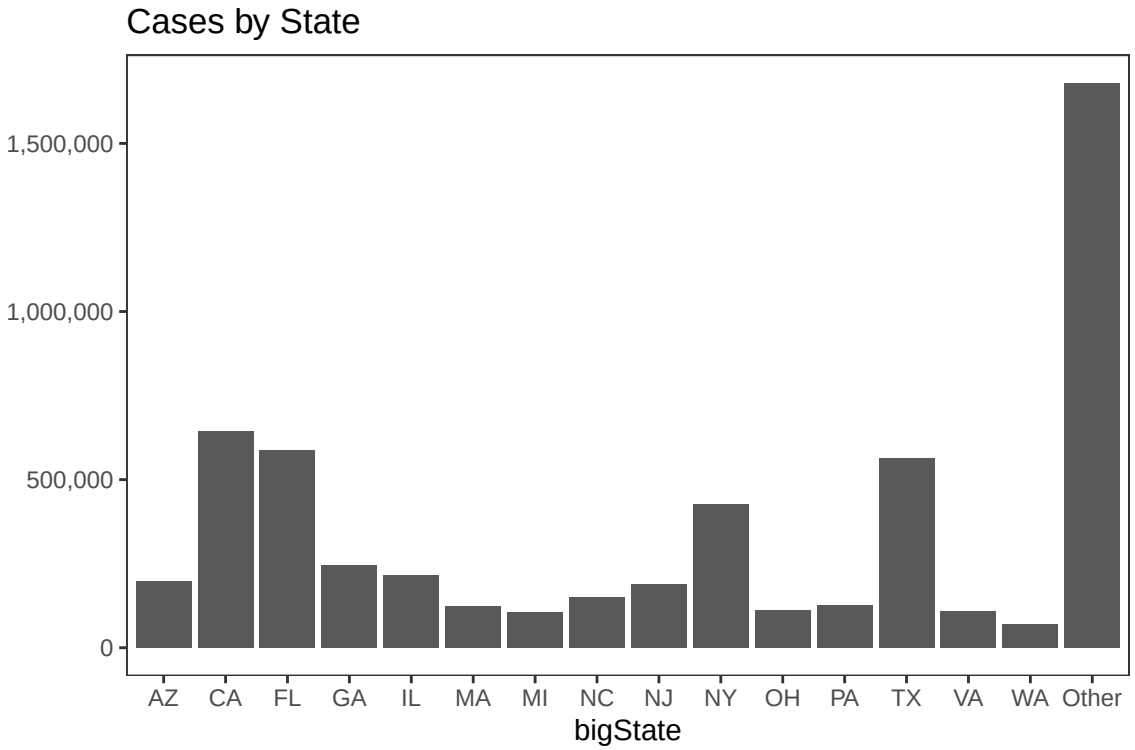

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Mar
Apr
May
Jun
Date

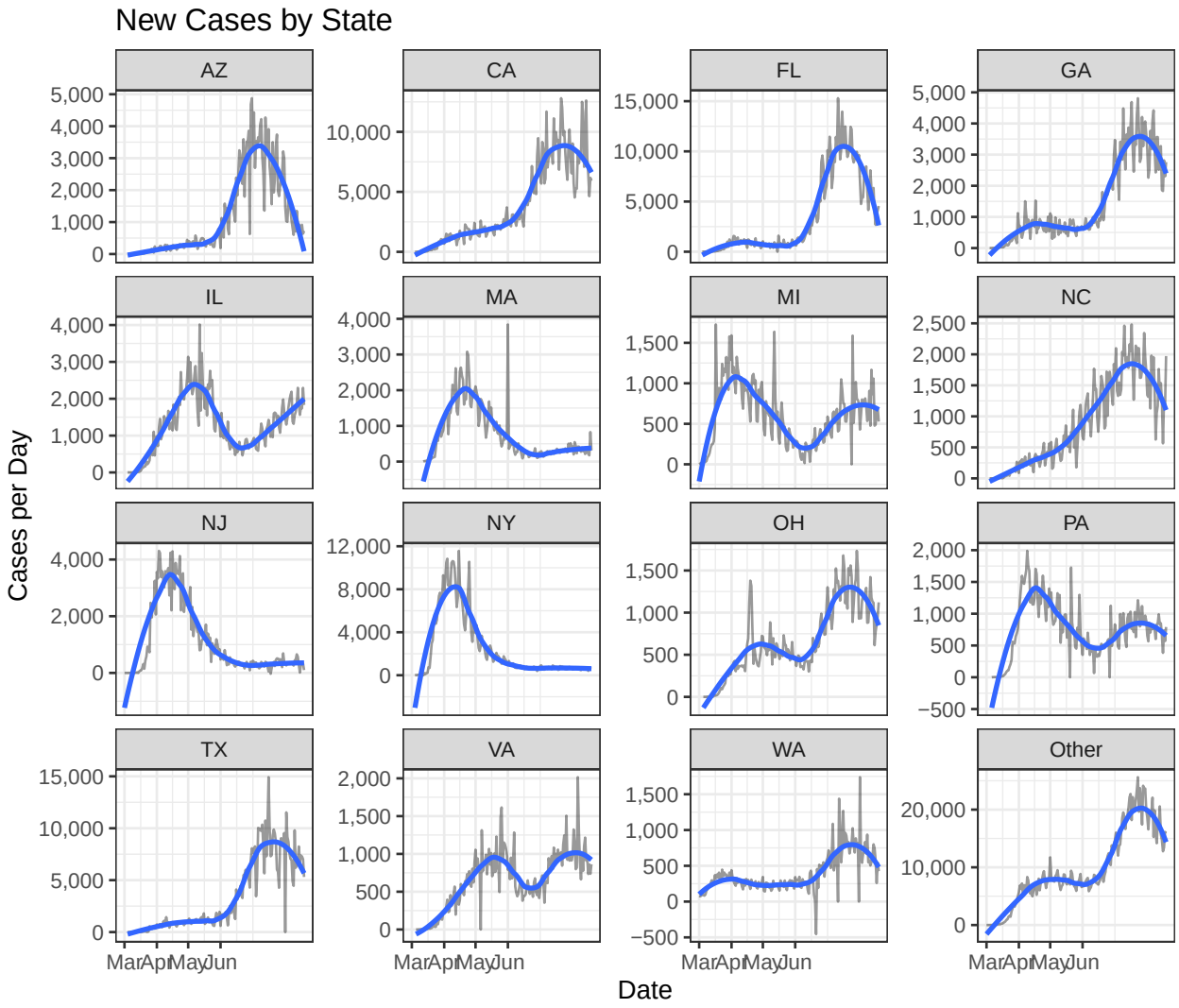

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

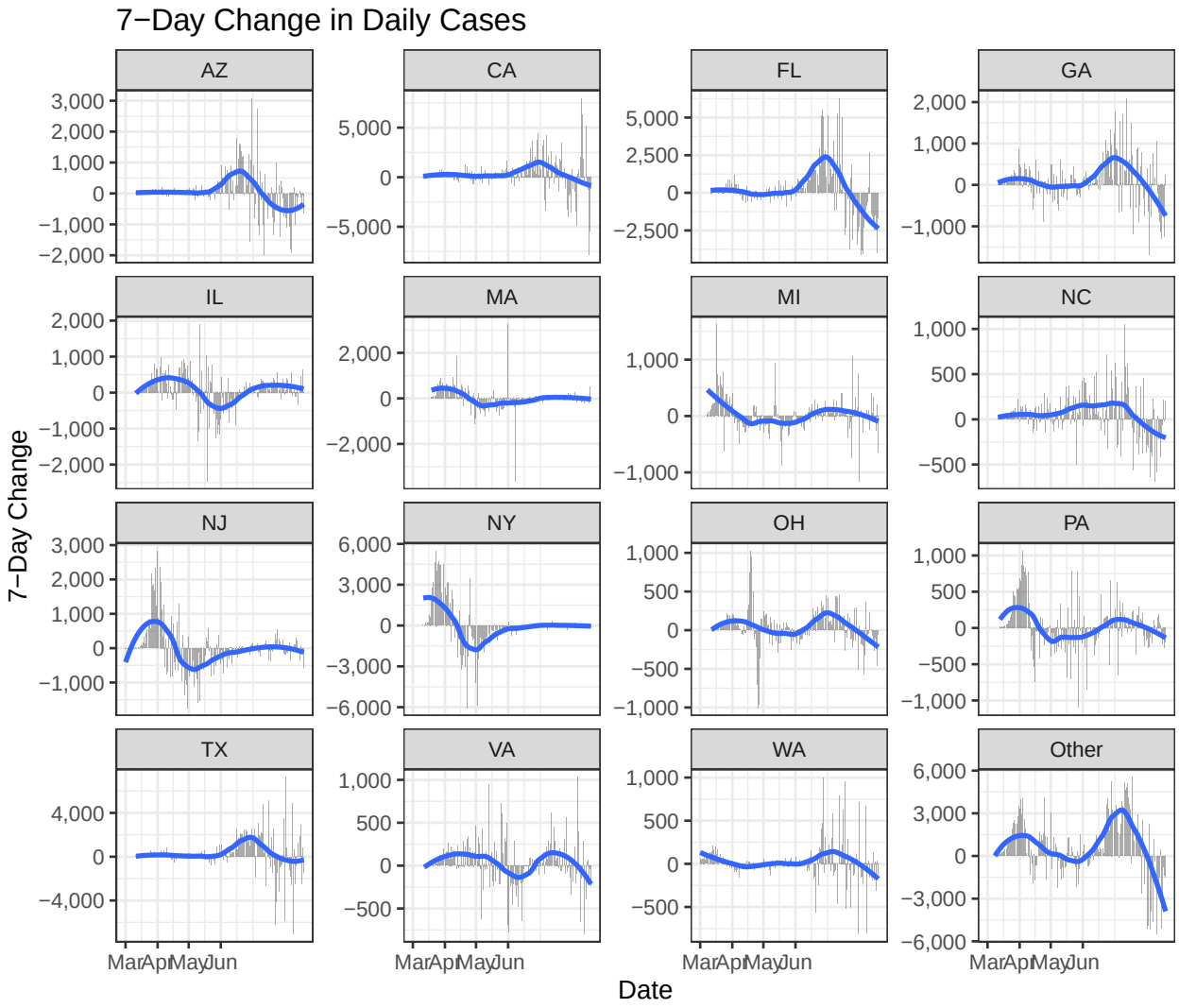

Deaths
32
100
316
1,000
3,162
10,000

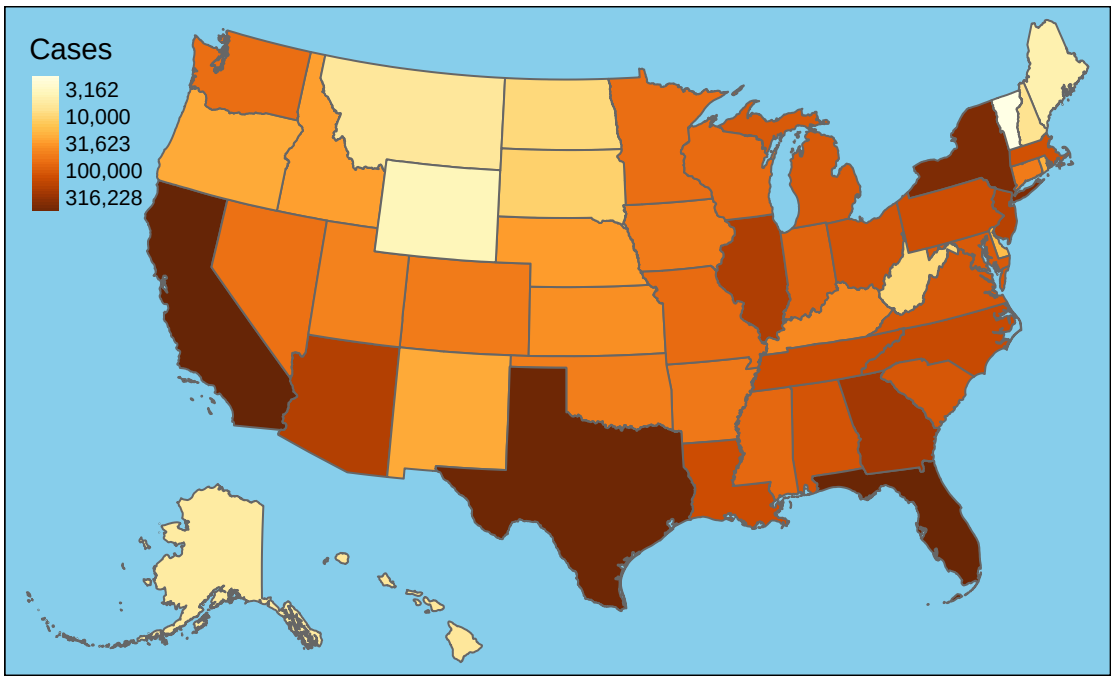

Deaths per 1M
100
316
1,000

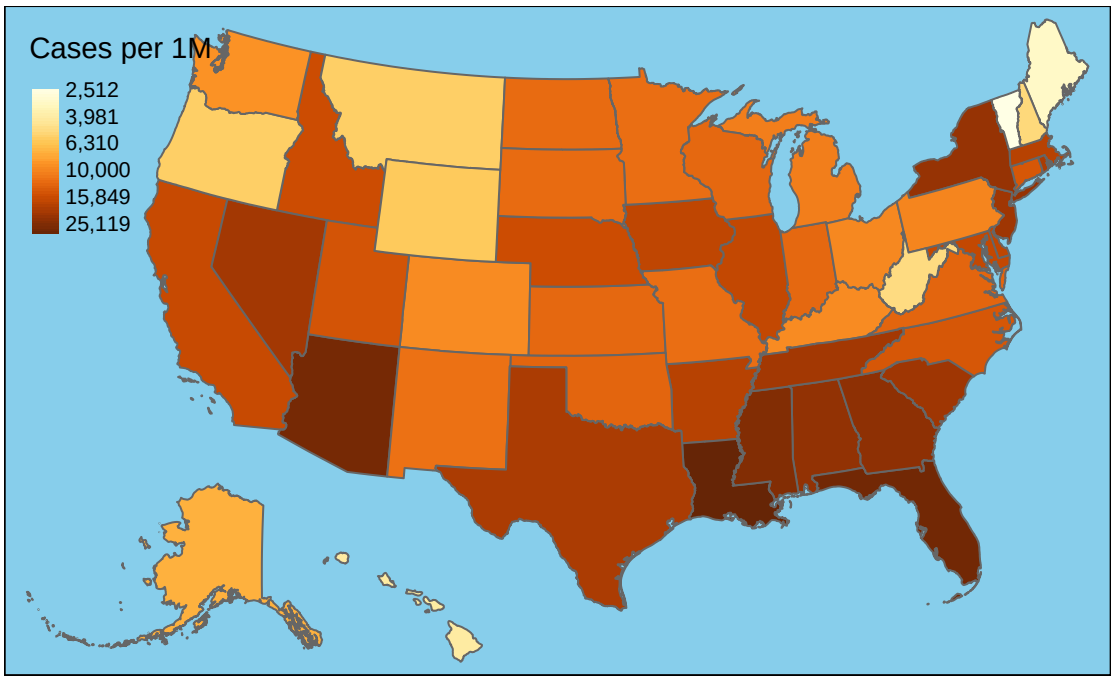
Cases


Cases by State
1,500,000
1,000,000
500,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
bigState

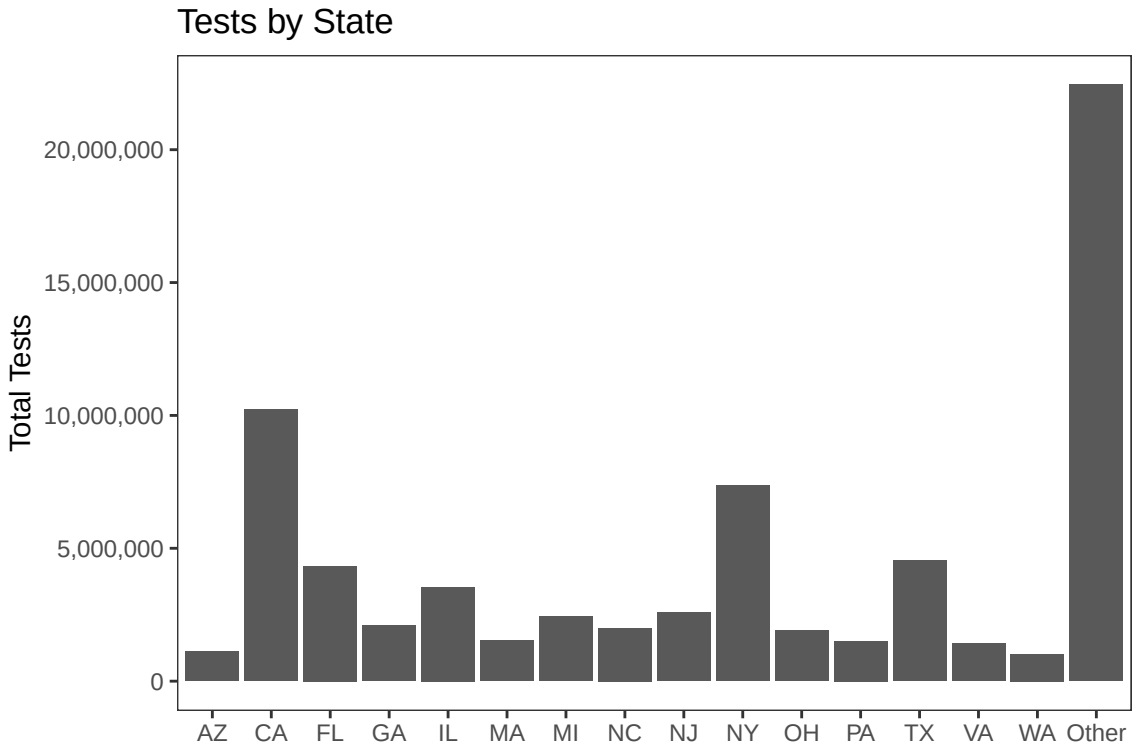

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Mar
Apr
May
Jun
Date

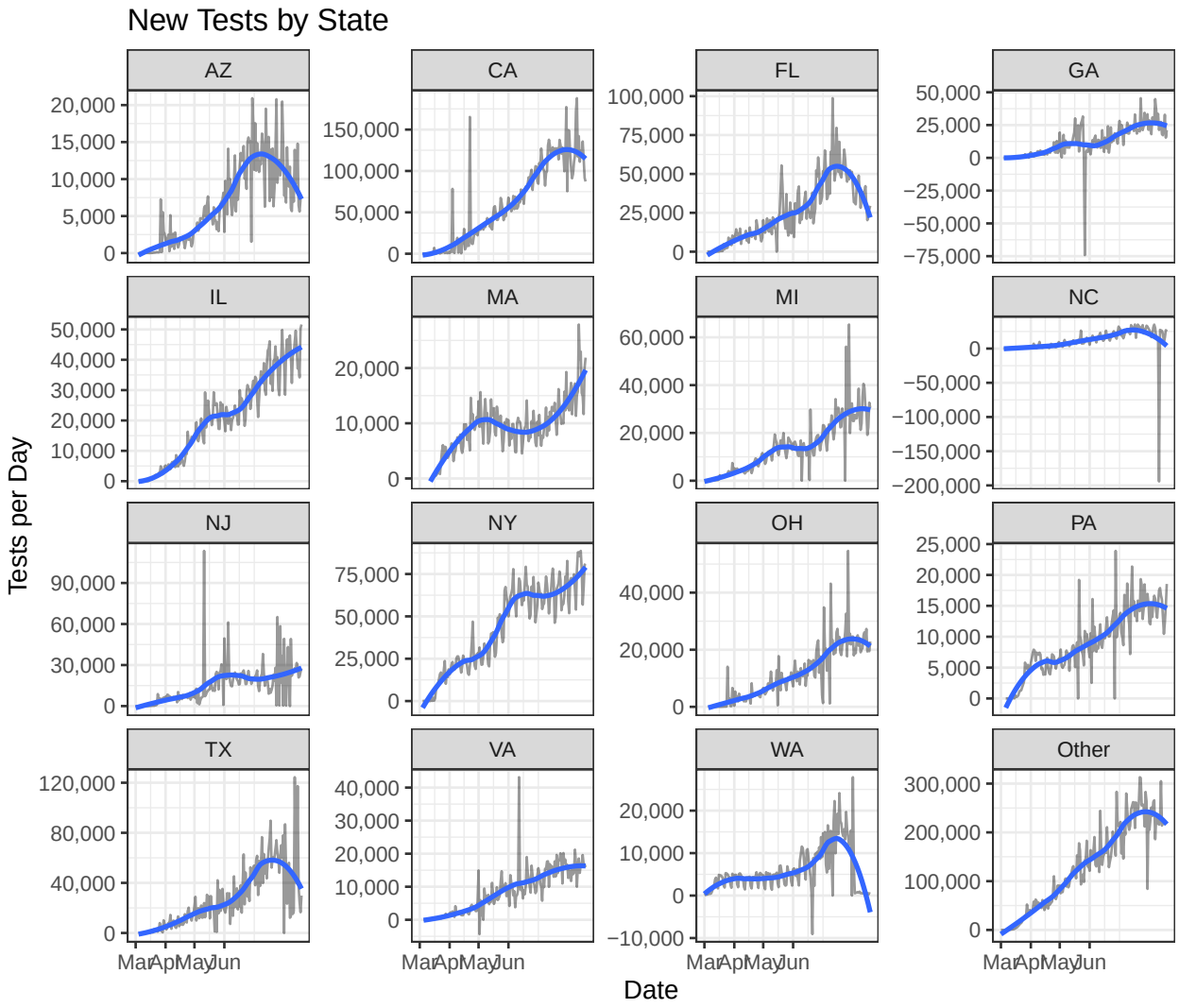

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

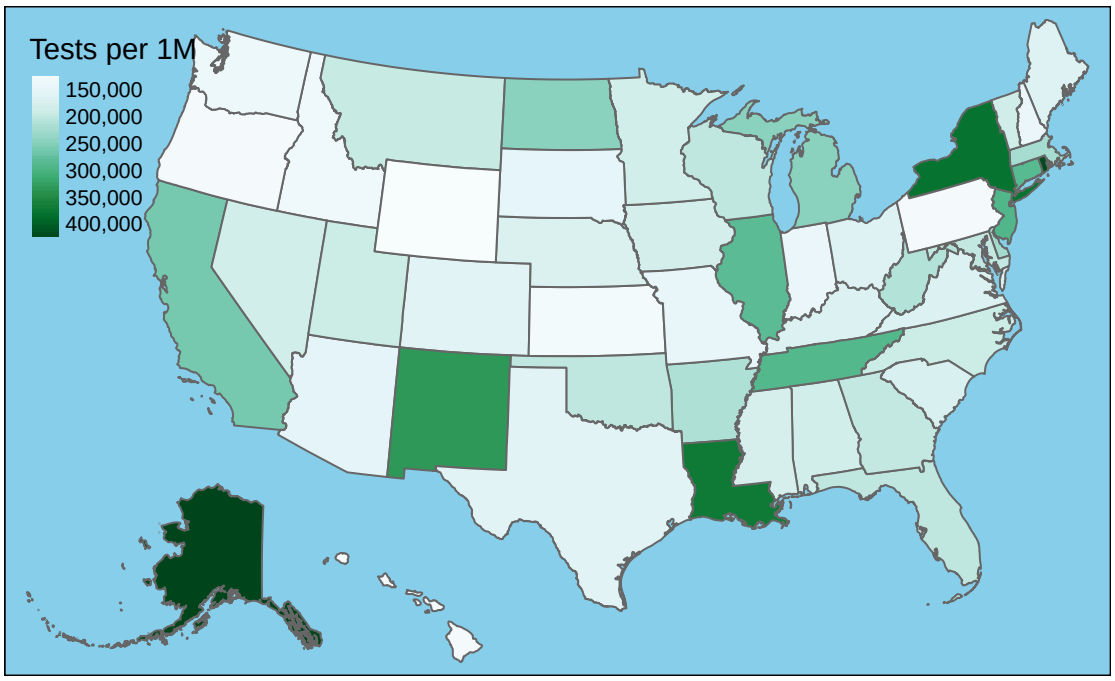

Cases
3,162
10,000
31,623
100,000
316,228

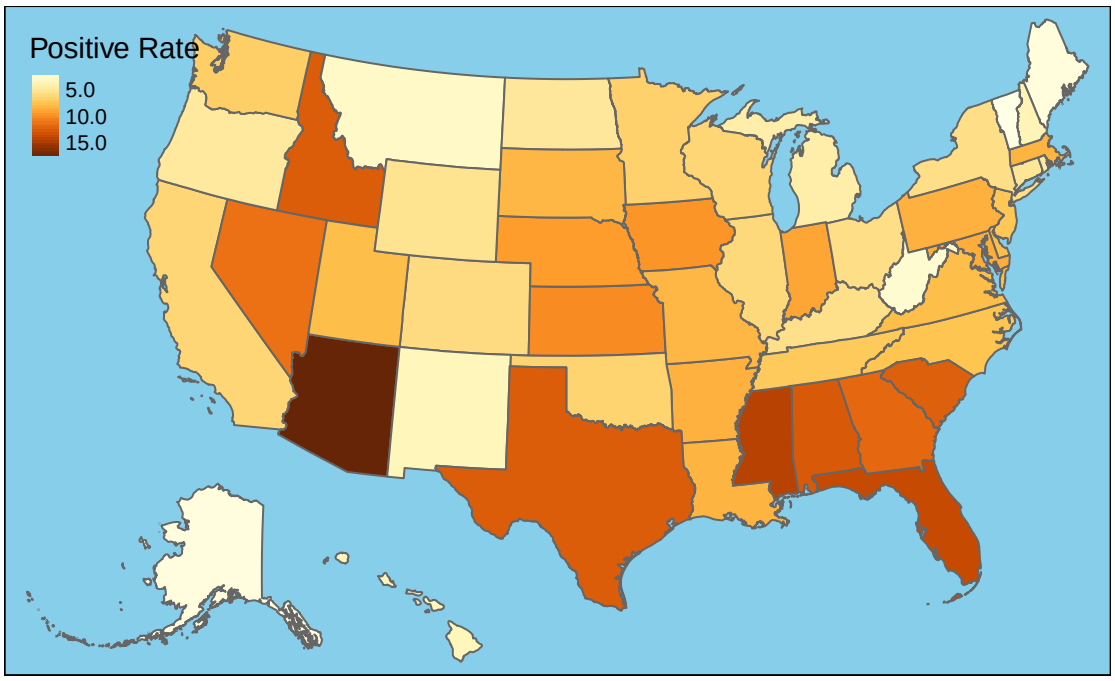

Cases per 1M
2,512
3,981
6,310
10,000
15,849
25,119

Testing

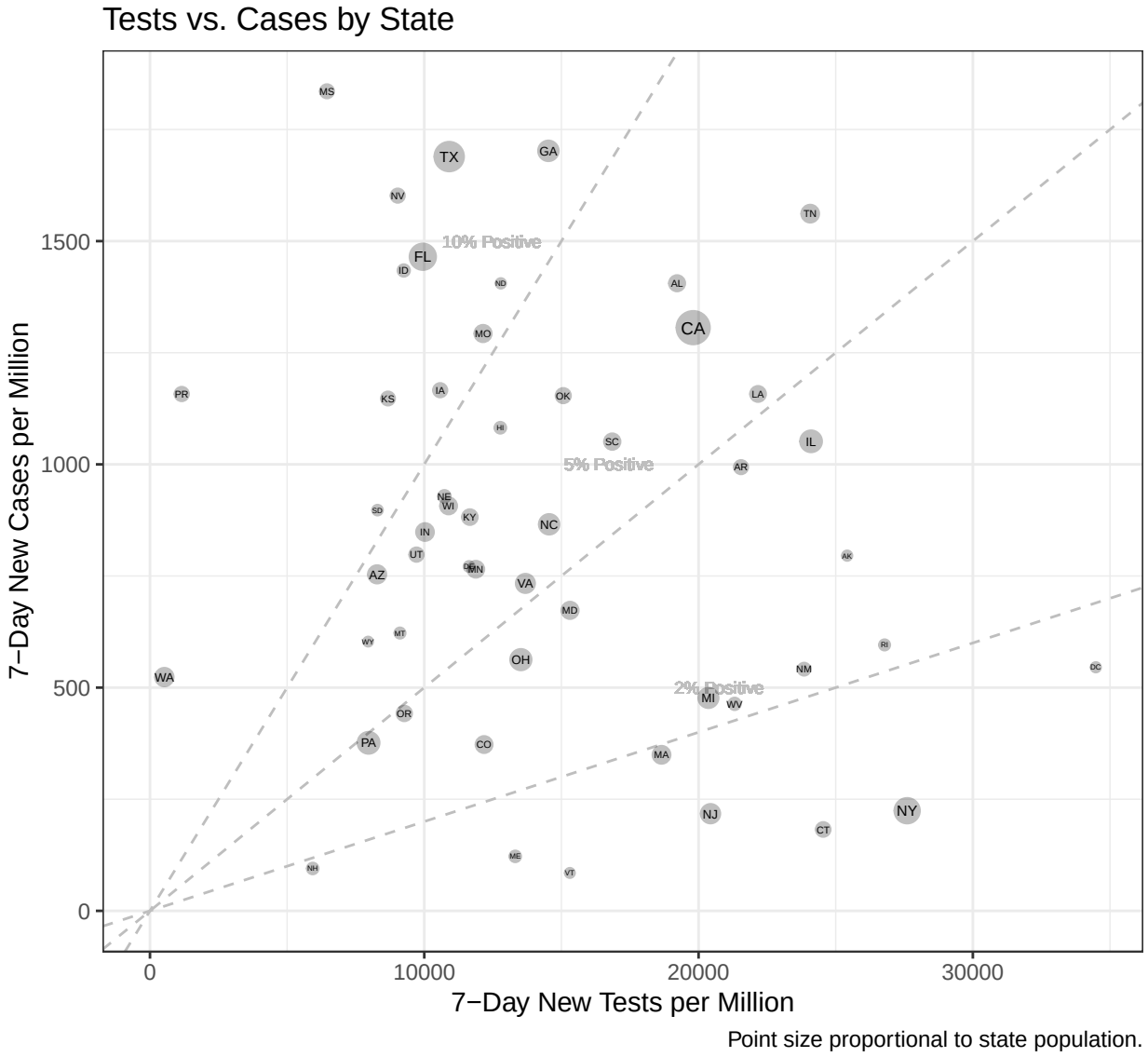

Tests by State
Total Tests
20,000,000
15,000,000
10,000,000
5,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


New Tests by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Tests per Day
Date
Mar
Apr
May
Jun


Tests per 1M
150,000
200,000
250,000
300,000
350,000
400,000


Positive Rate
5.0
10.0
15.0

Interpretation of differences in case rates across states is complicated by the fact that those states that do more thorough testing will invariably uncover more cases. A lower positive test rate is an indication that a state is doing more comprehensive testing since, when testing is rationed, only those individuals who are more likely to test positive are typically tested. The following chart compares the one-week increase in detected cases to the the number of tests administered by each state relative to population. The states of greatest current concern are those with both a large increase in detected cases and a relatively small increase in tests. These states lie in the upper-left of the chart.



Point size proportional to state population.

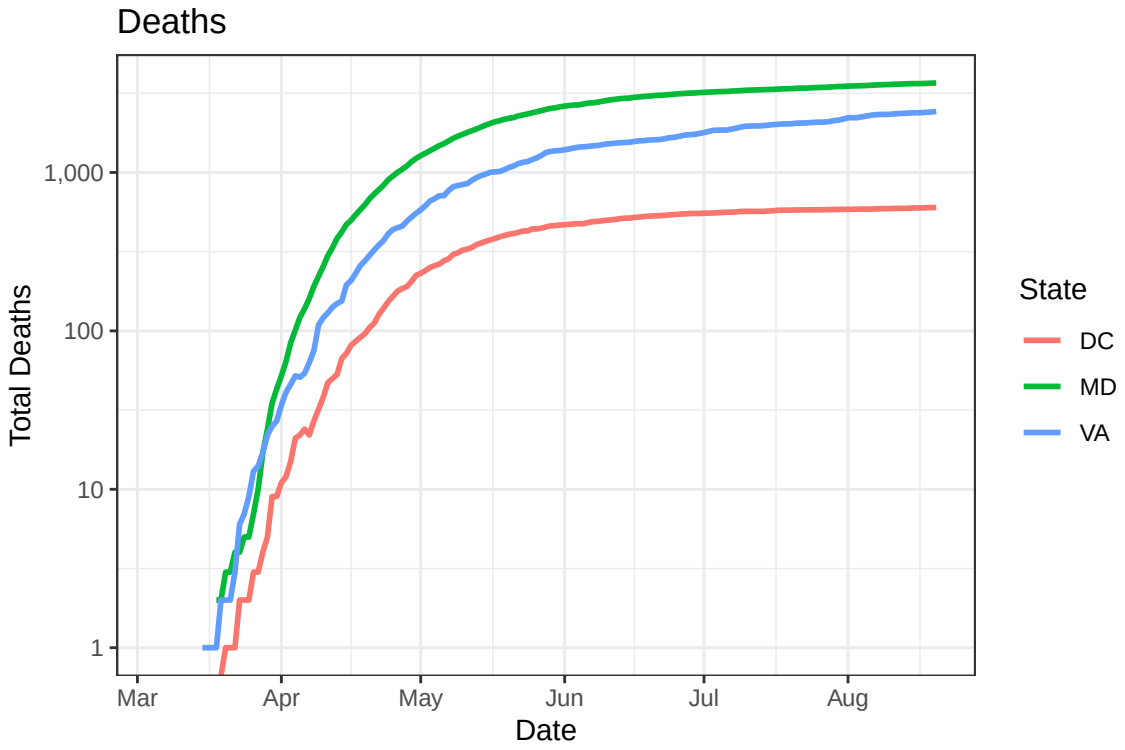
Local Data

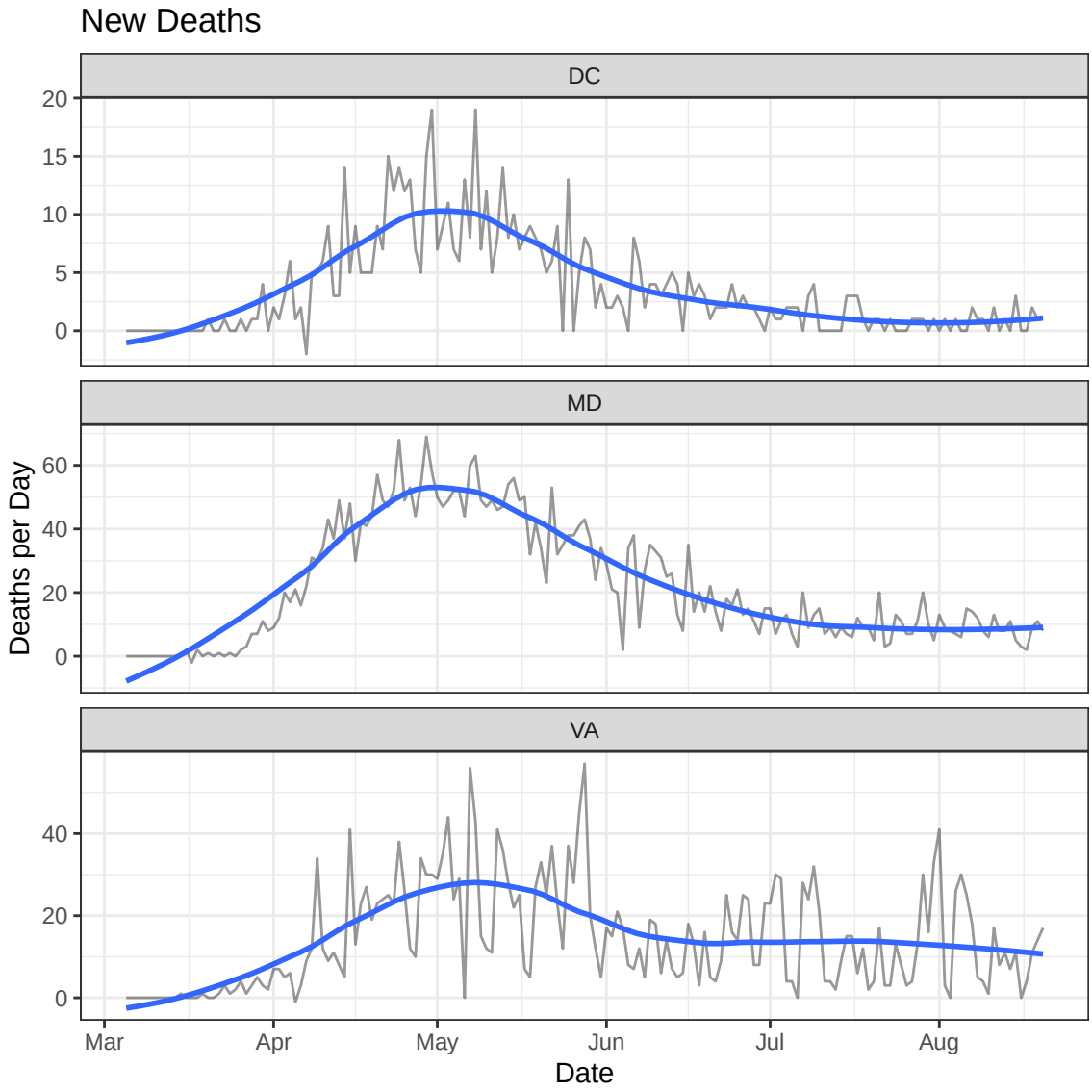
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

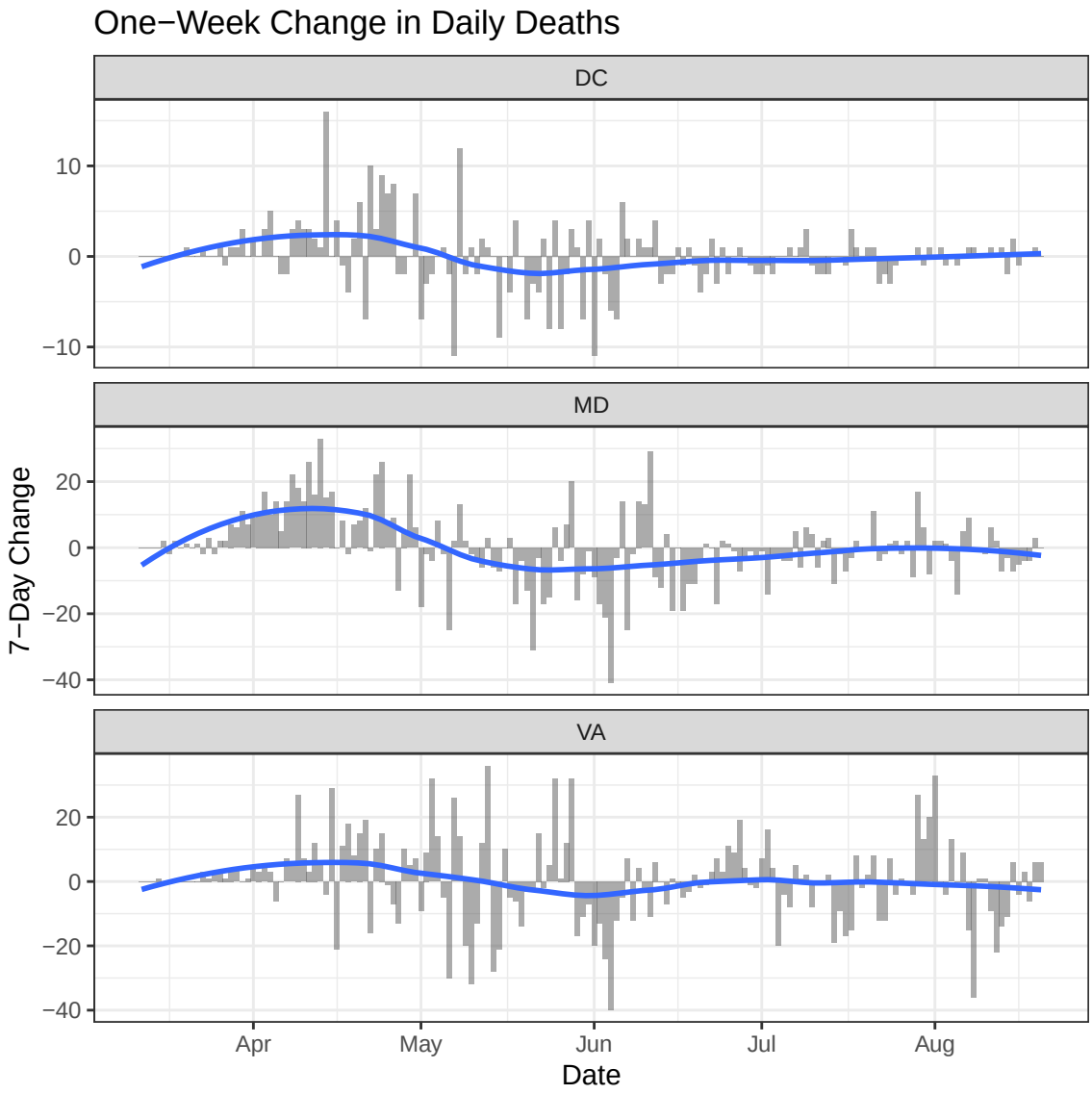
Table 3: Latest Local Data

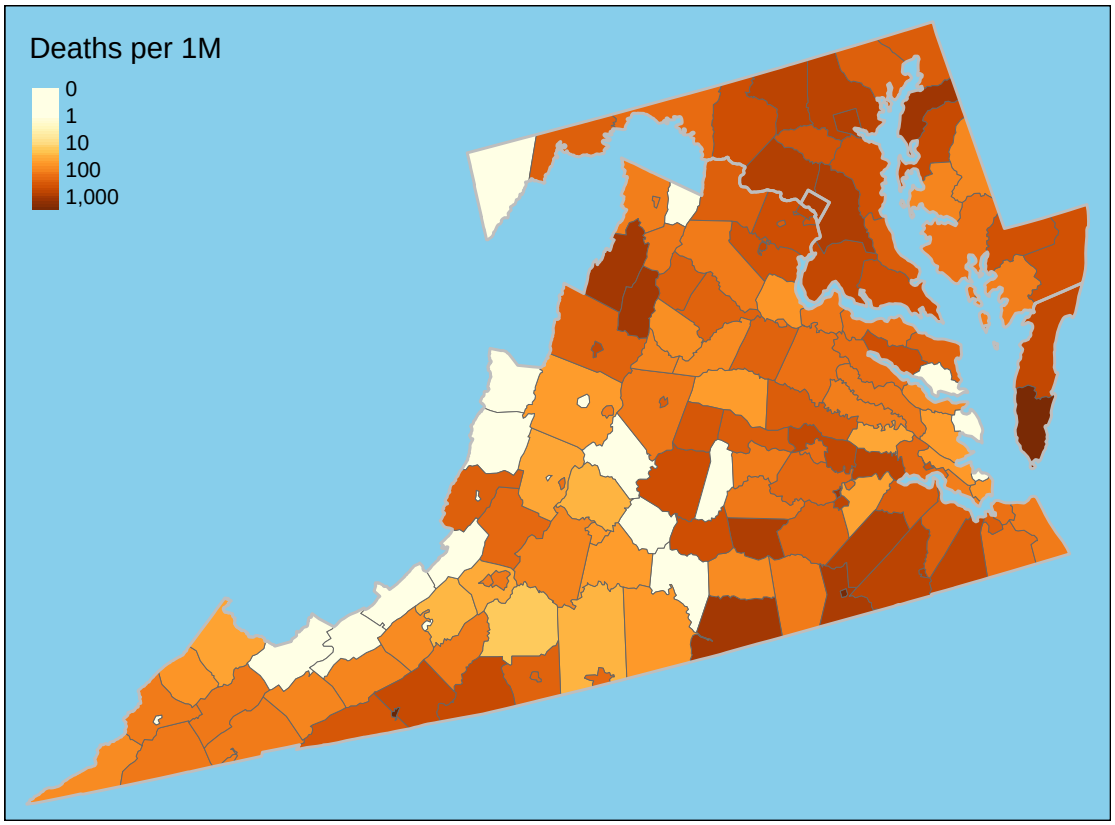
State	Cases	Deaths	New Cases	New Deaths
DC	13,409	601	55	1
MD	102,229	3,669	580	8
VA	109,882	2,427	863	17

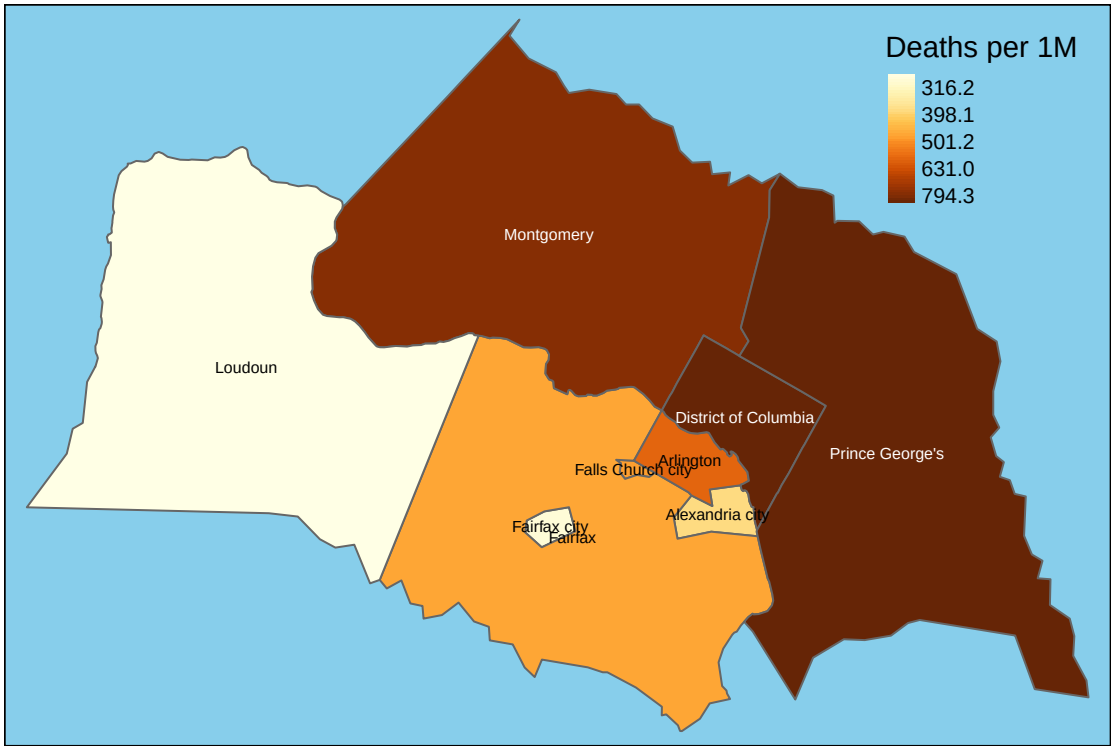
Deaths


Deaths
Total Deaths
1,000
100
10
1
Mar
Apr
May
Jun
Jul
Aug
Date
State
DC
MD
VA

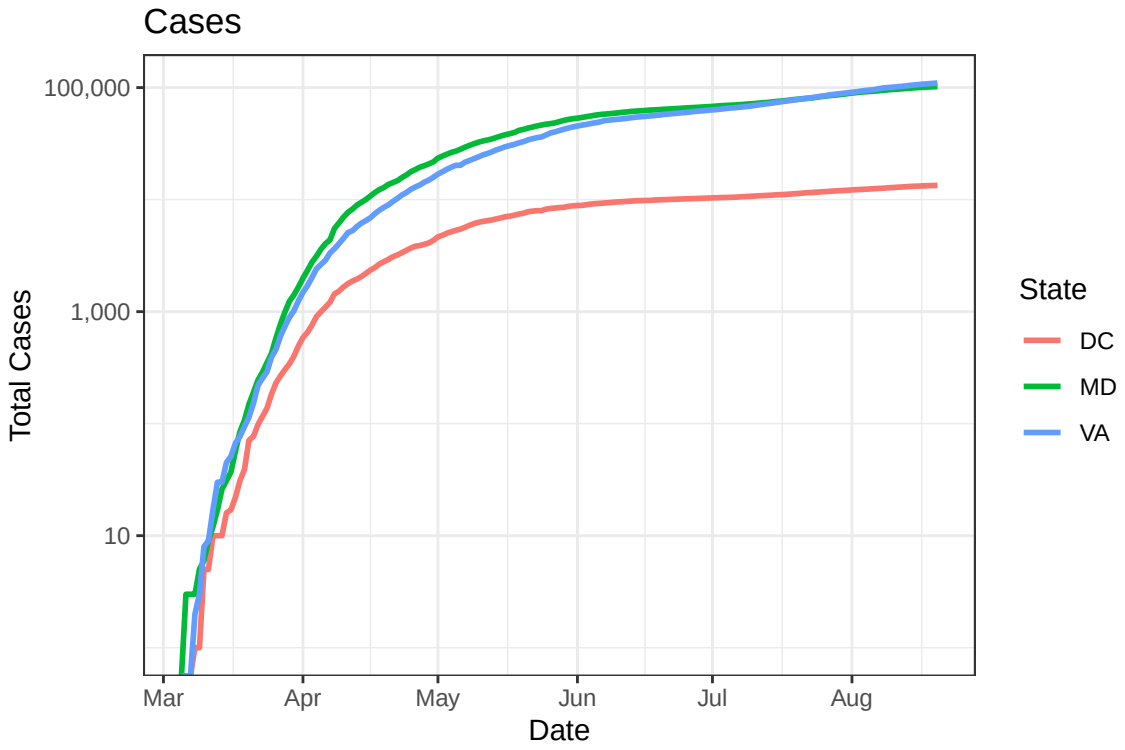

New Deaths
DC
MD
VA
Deaths per Day
Date
Mar
Apr
May
Jun
Jul
Aug

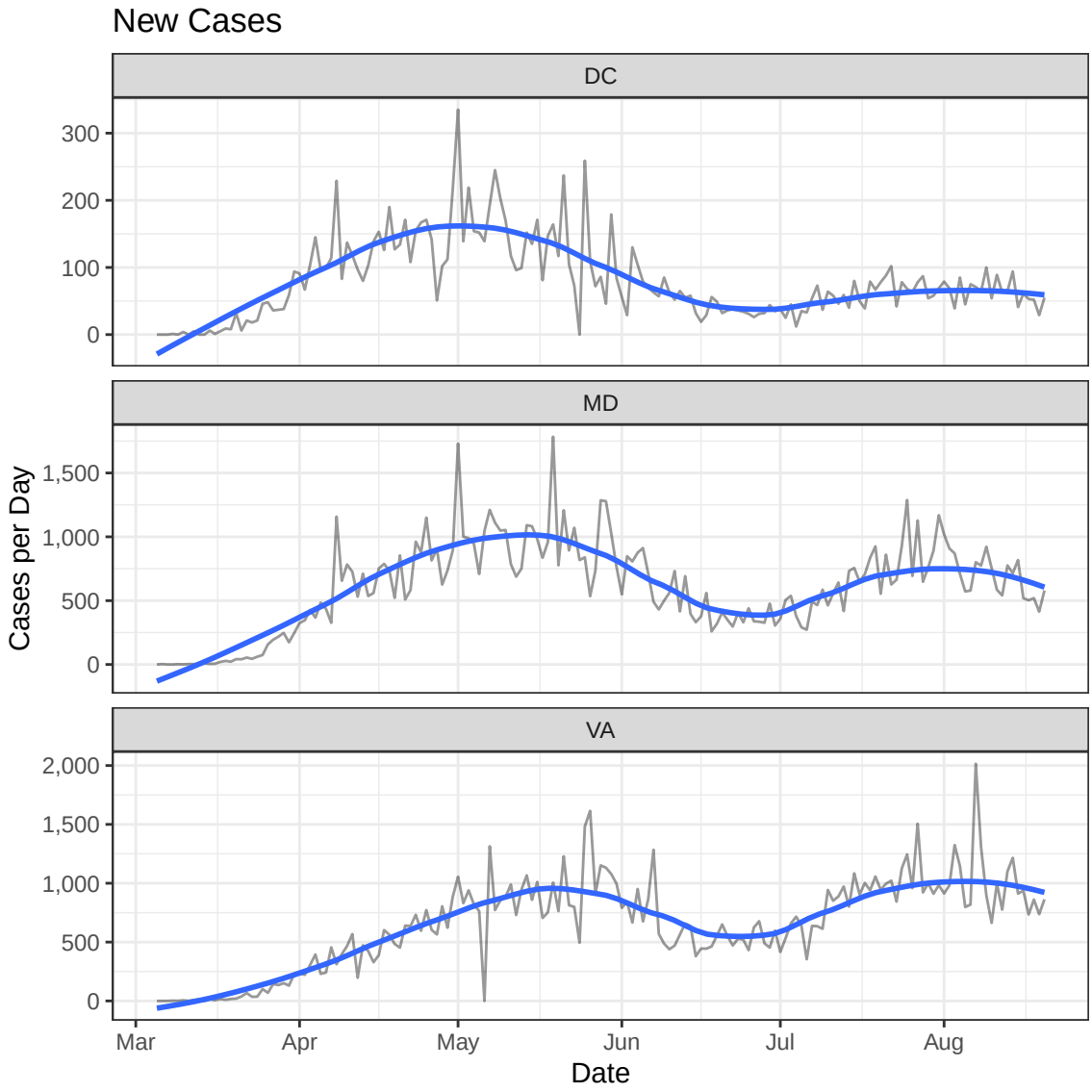

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
7−Day Change
Apr
May
Jun
Jul
Aug
Date

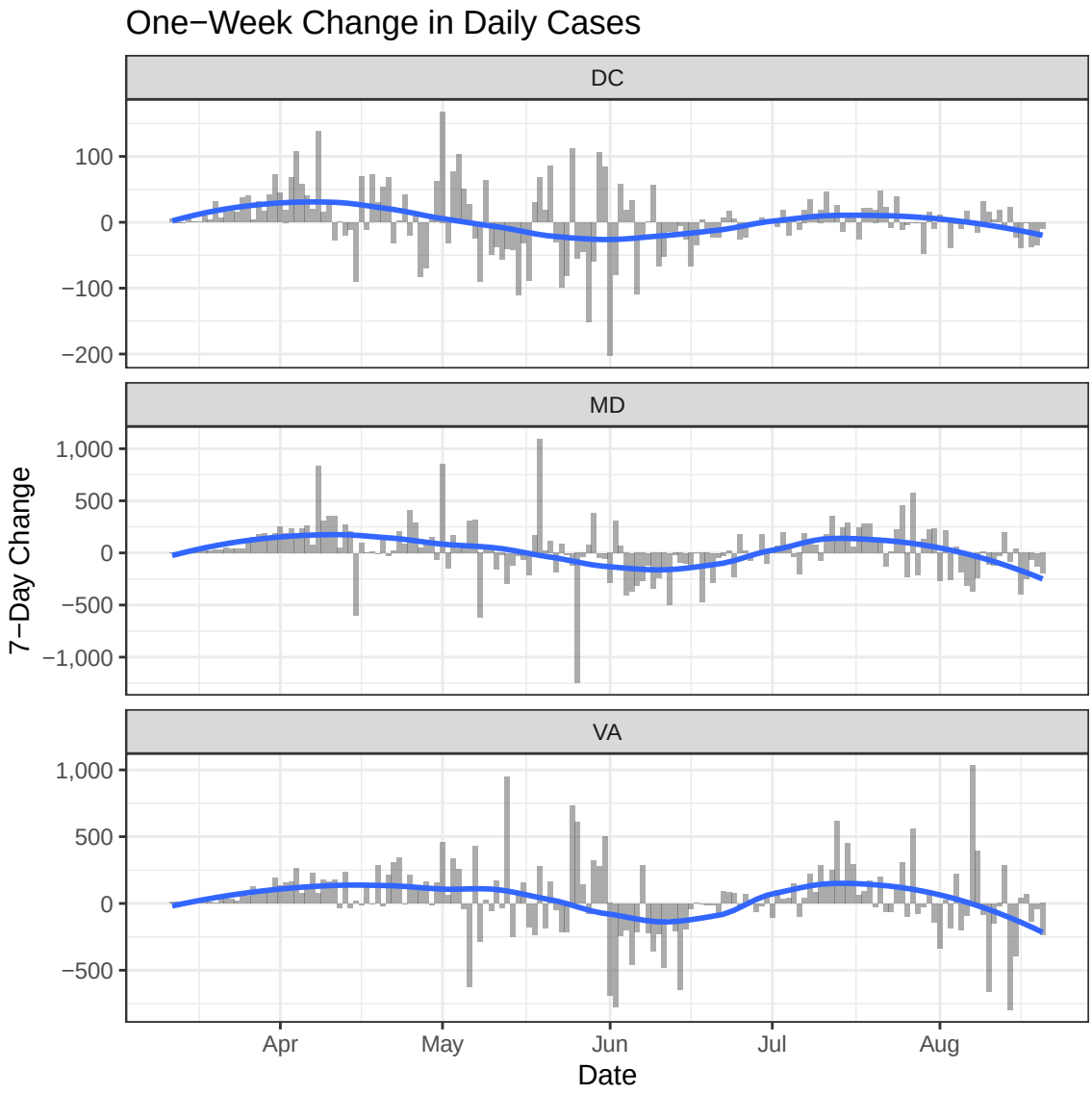

Deaths per 1M
0
1
10
100
1,000

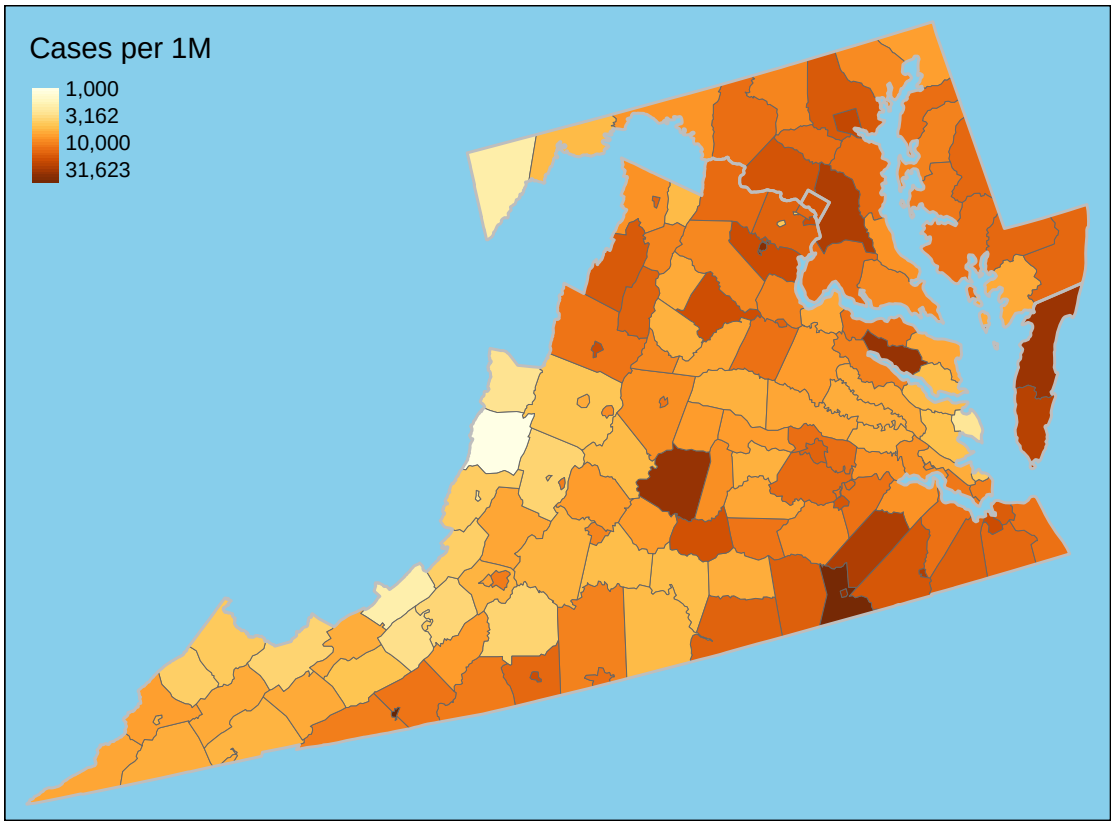

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

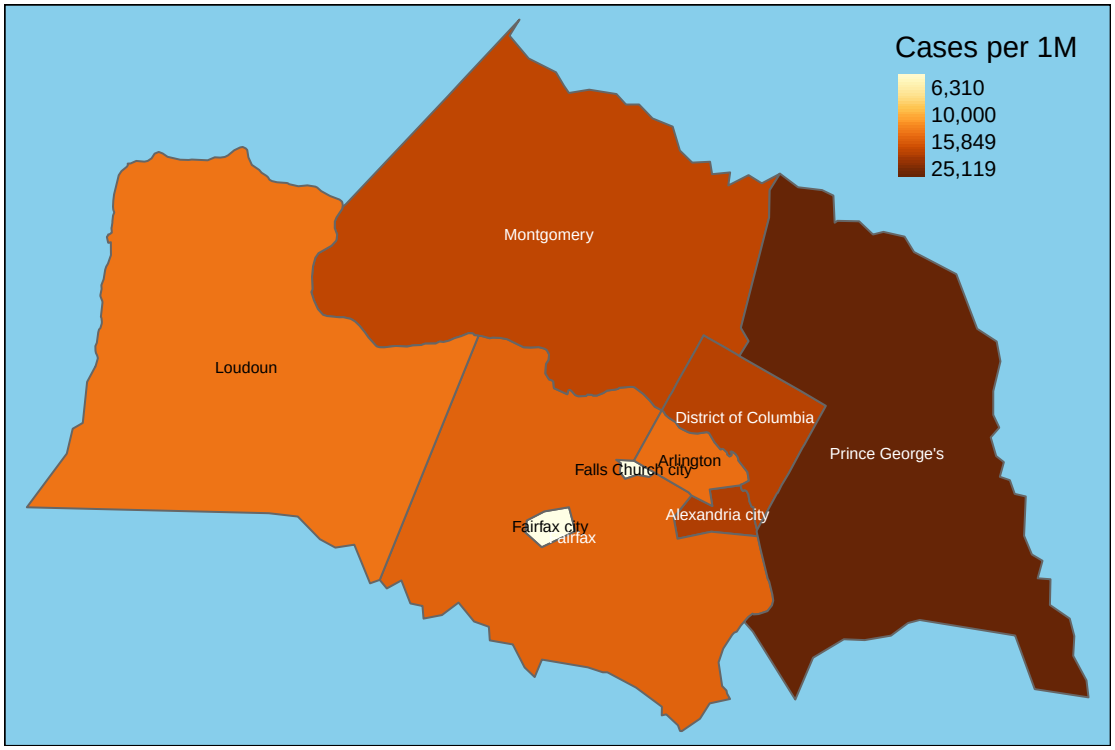
Cases


Cases
100,000
1,000
10
Total Cases
Mar
Apr
May
Jun
Jul
Aug
Date
State
DC
MD
VA

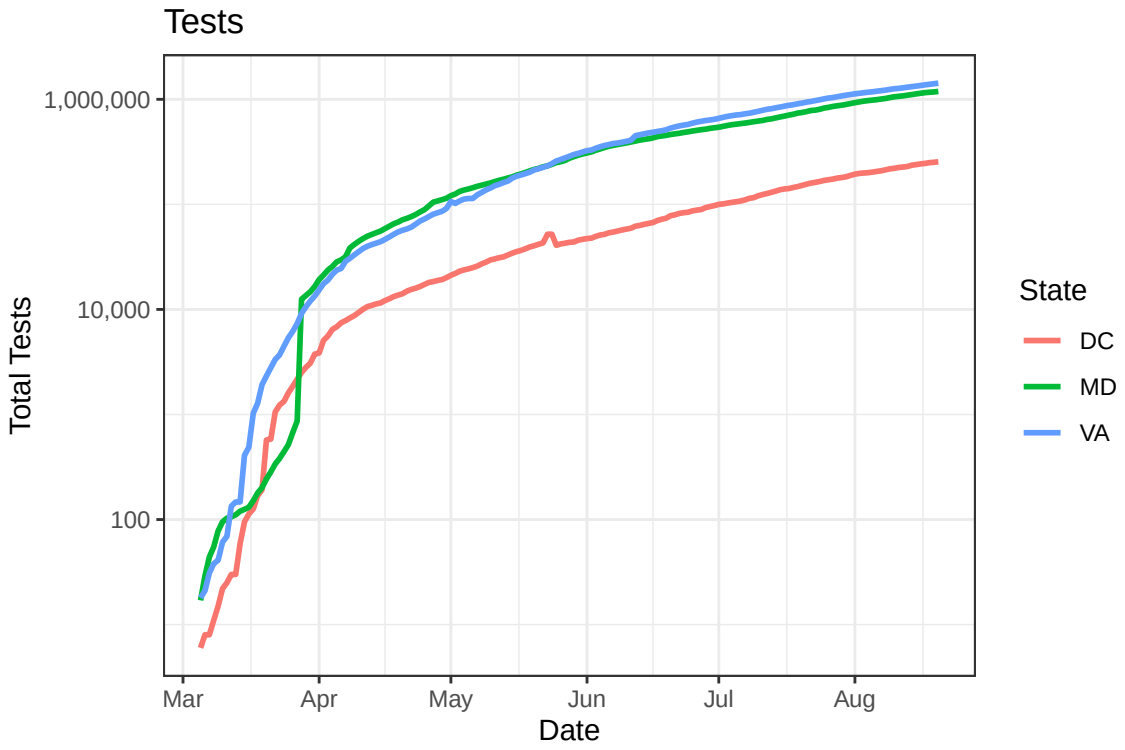

New Cases
DC
MD
VA
Cases per Day
300
200
100
0
1,500
1,000
500
0
2,000
1,500
1,000
500
0
Mar
Apr
May
Jun
Jul
Aug
Date

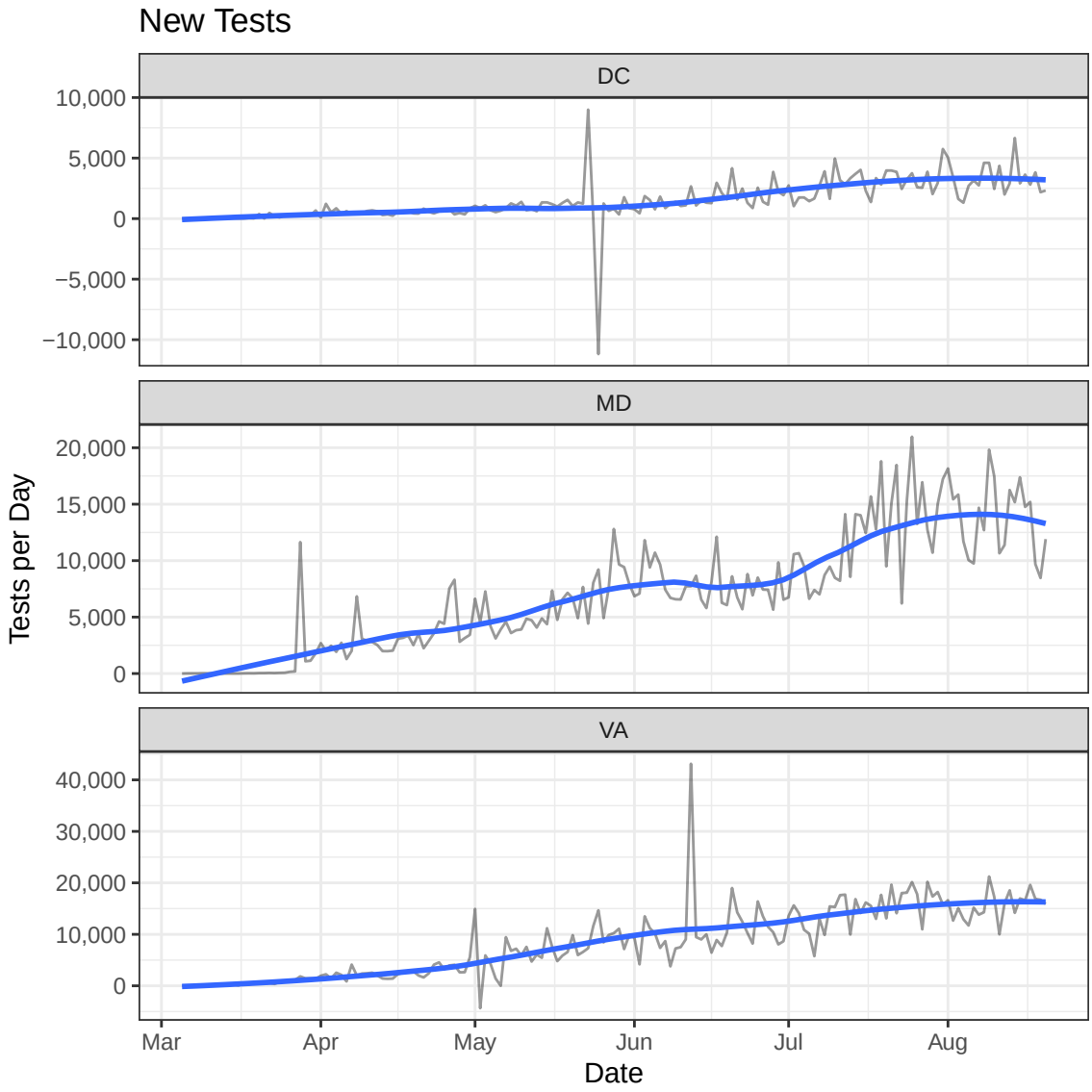

One−Week Change in Daily Cases
DC
MD
VA
100
0
−100
−200
1,000
500
0
−500
−1,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

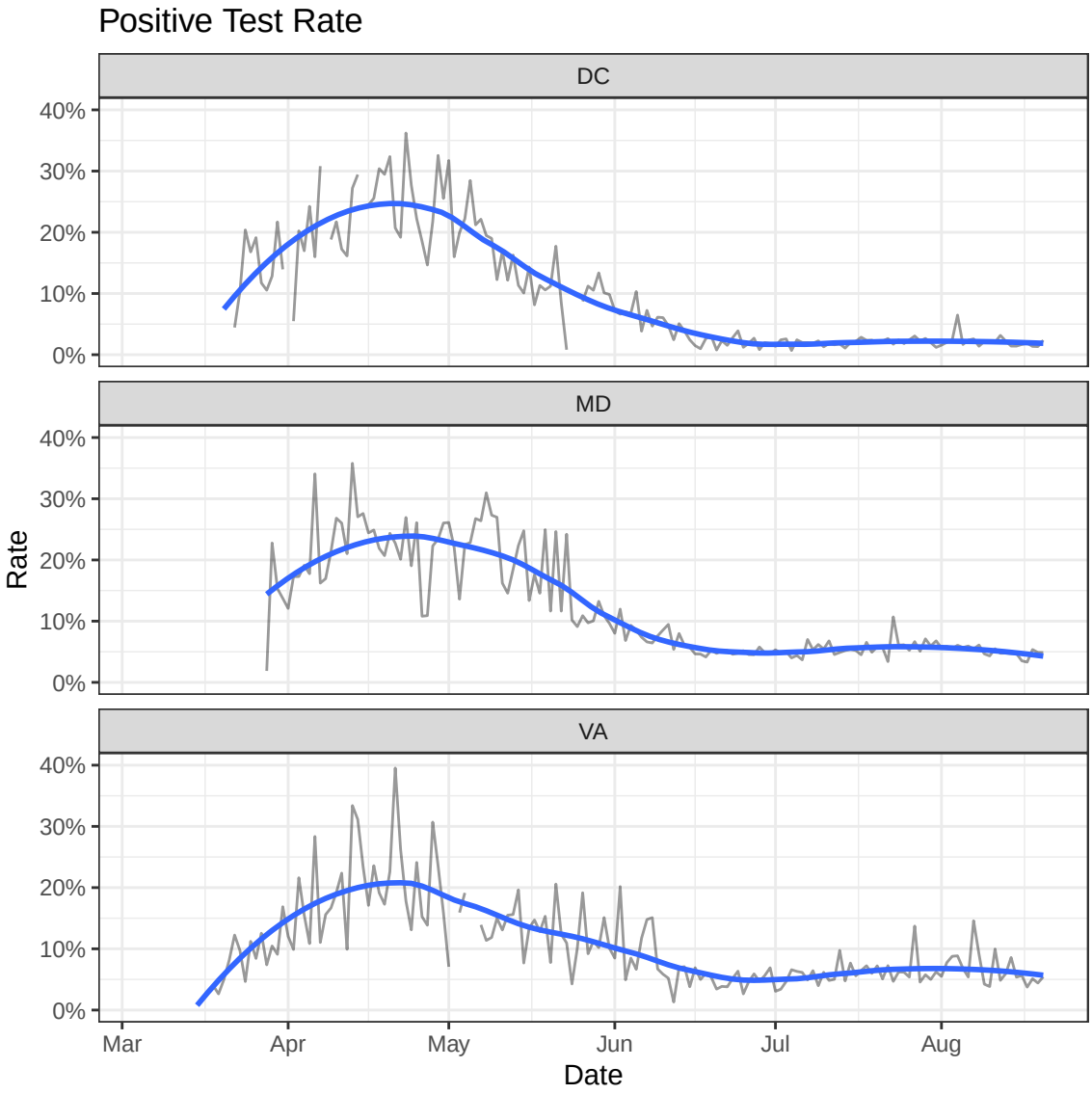

Cases per 1M
1,000
3,162
10,000
31,623


Cases per 1M
6,310
10,000
15,849
25,119
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

Testing


Tests
1,000,000
10,000
100
Total Tests
Mar
Apr
May
Jun
Jul
Aug
Date
State
DC
MD
VA


New Tests
DC
MD
VA
10,000
5,000
0
−5,000
−10,000
20,000
15,000
10,000
5,000
0
40,000
30,000
20,000
10,000
0
Tests per Day
Mar
Apr
May
Jun
Jul
Aug
Date


Positive Test Rate
DC
MD
VA
40%
30%
20%
10%
0%
Rate
Mar
Apr
May
Jun
Jul
Aug
Date