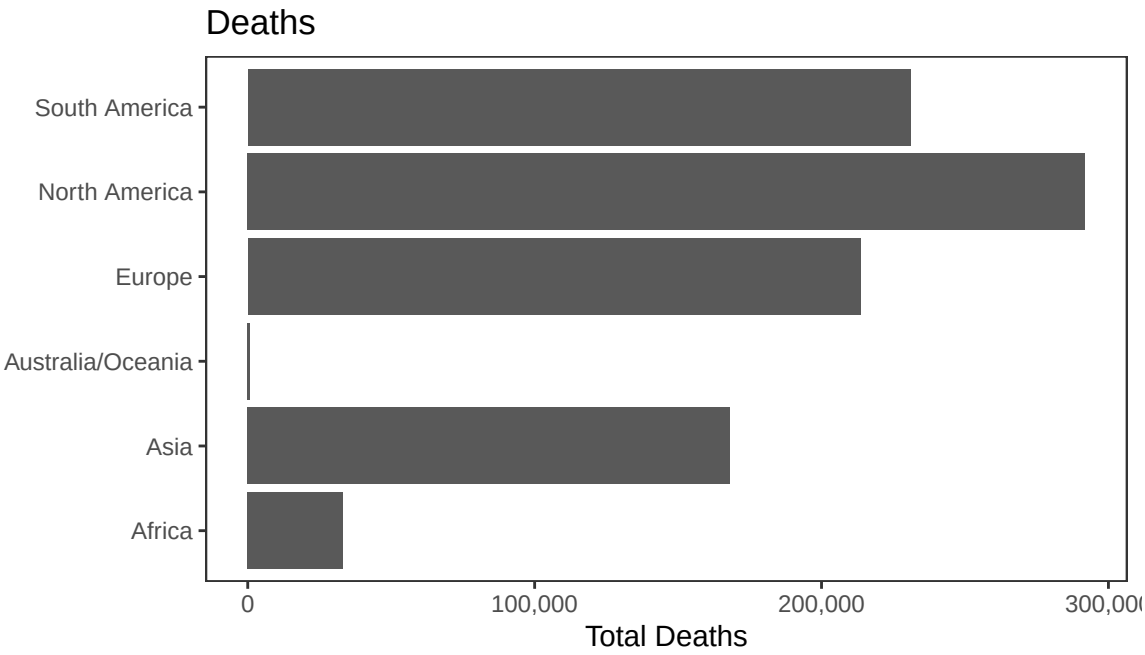
Erik's Covid-19 Chart Pack

Data updated 2020-09-16 19:24:30. 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 29,718,139 confirmed Covid-19 cases and 938,487 deaths worldwide.



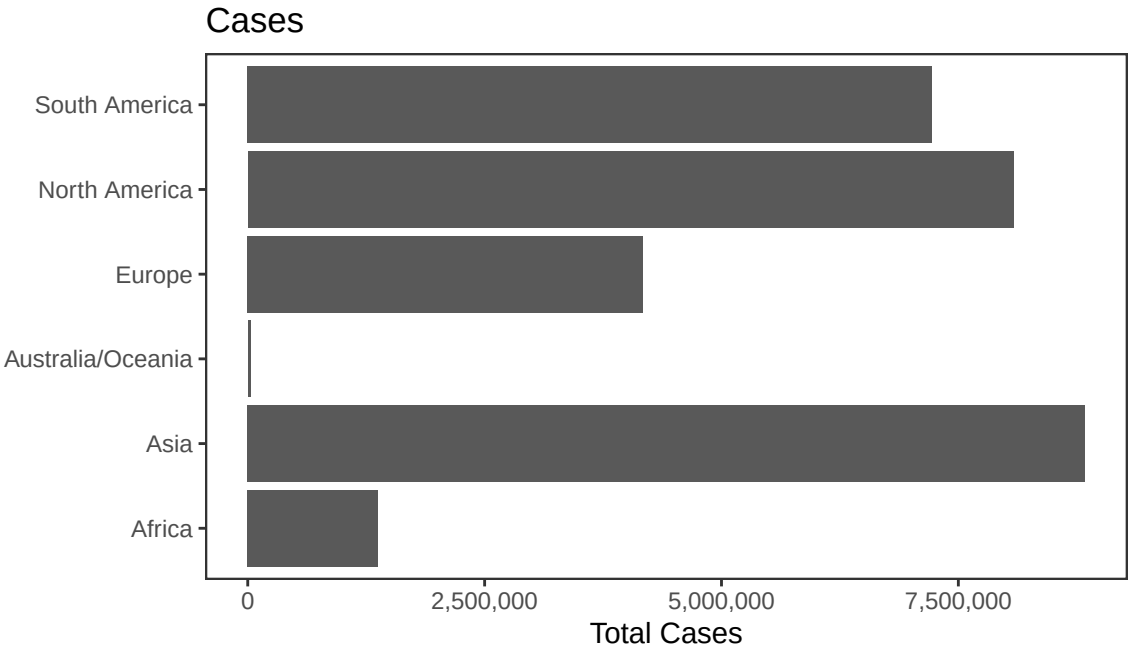
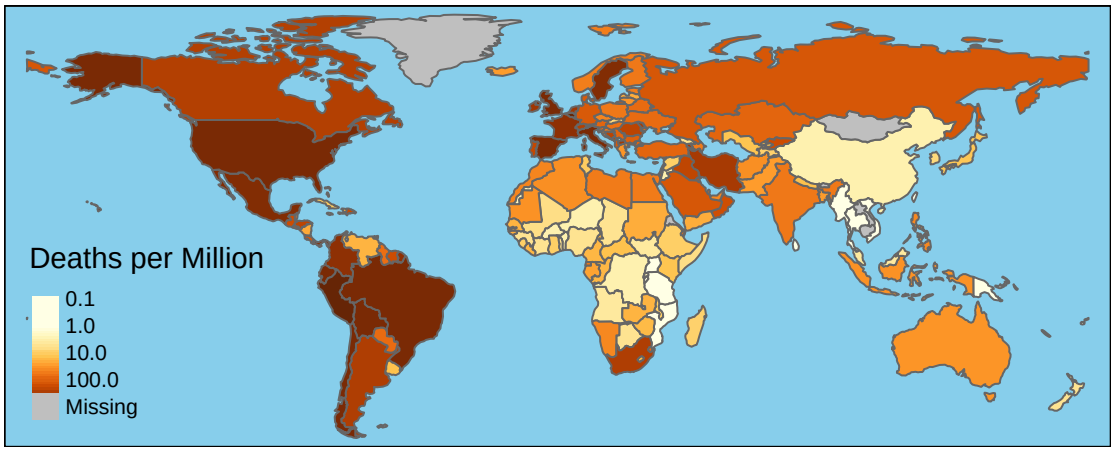
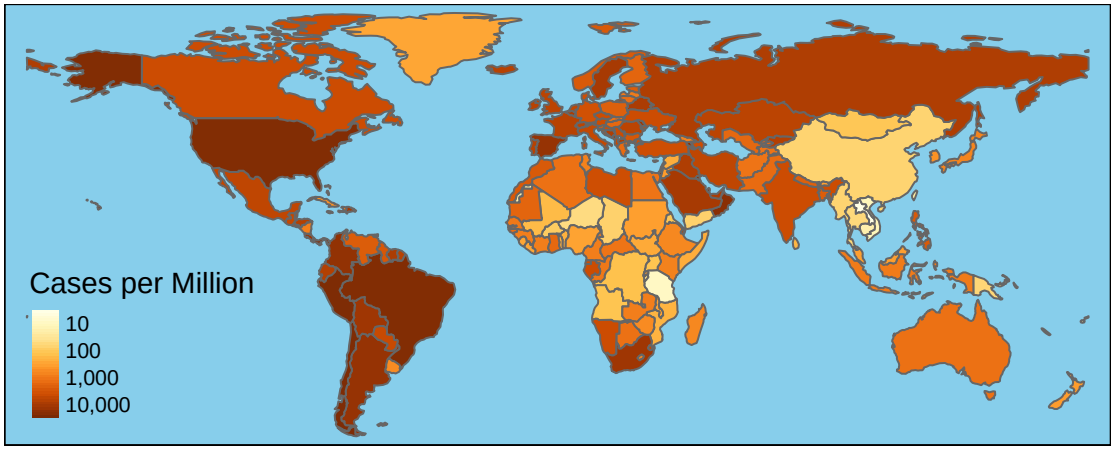
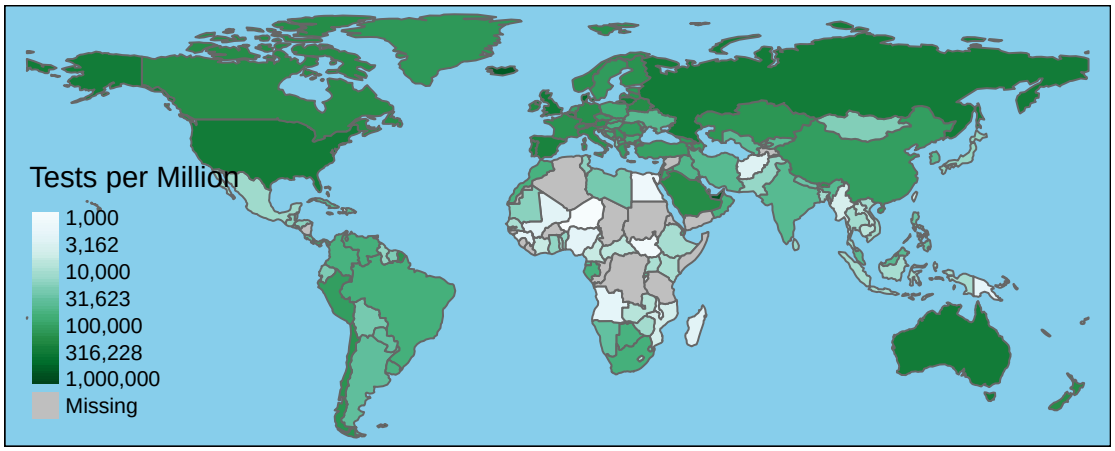


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	6,788,147	200,197	36,447	1,197
India	5,018,034	82,091	91,120	1,283
Brazil	4,384,299	133,207	34,755	1,090
Russia	1,073,849	18,785	5,529	150
Peru	738,020	30,927	4,160	115
Colombia	728,590	23,288	6,698	165
Mexico	671,716	71,049	3,335	228
South Africa	651,521	15,641	772	142
Spain	603,167	30,004	9,437	156
Argentina	577,338	11,852	11,892	185
Chile	437,983	12,040	1,536	27
Iran	407,353	23,453	2,705	140
France	395,104	30,999	7,852	49
UK	374,228	41,664	3,105	27
Bangladesh	341,056	4,802	1,724	43
Saudi Arabia	326,930	4,338	672	33
Pakistan	302,424	6,389	404	6
Iraq	298,702	8,166	4,224	80
Turkey	294,620	7,186	1,742	67
Italy	289,990	35,633	1,229	9


Deaths per Million
0.1
1.0
10.0
100.0
Missing


Cases per Million
10
100
1,000
10,000


Tests per Million
1,000
3,162
10,000
31,623
100,000
316,228
1,000,000
Missing

National Data

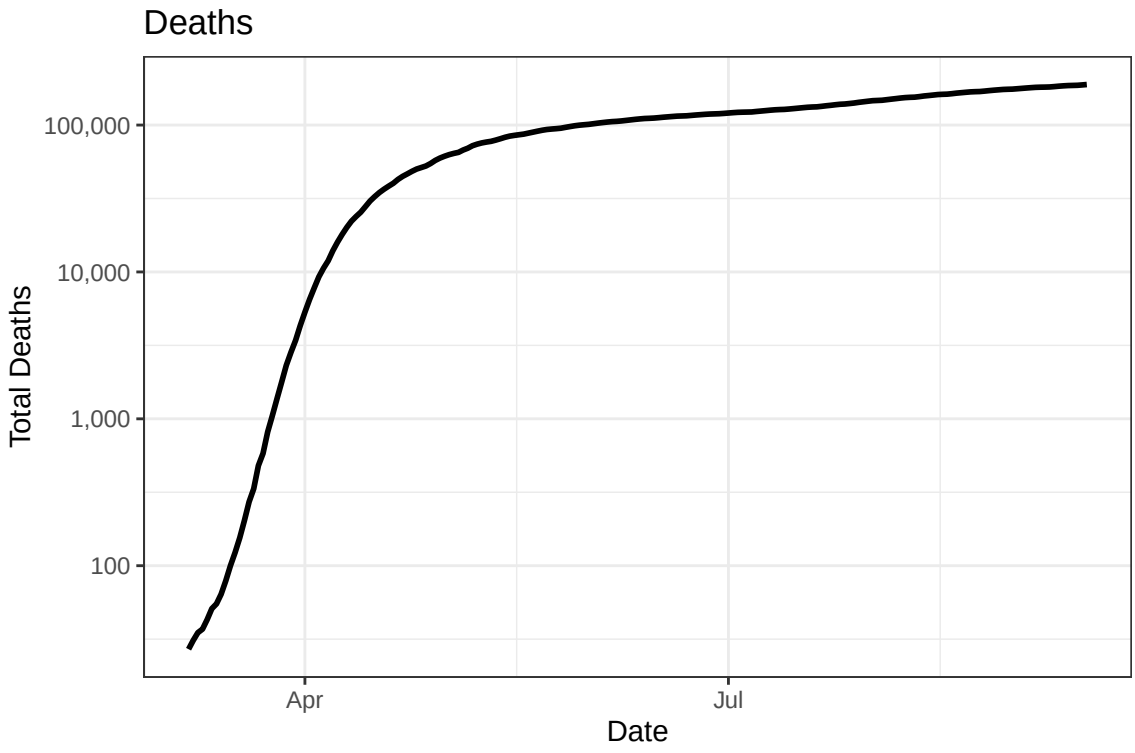
There have been 6,597,783 confirmed Covid-19 cases and 188,802 deaths in the United States.

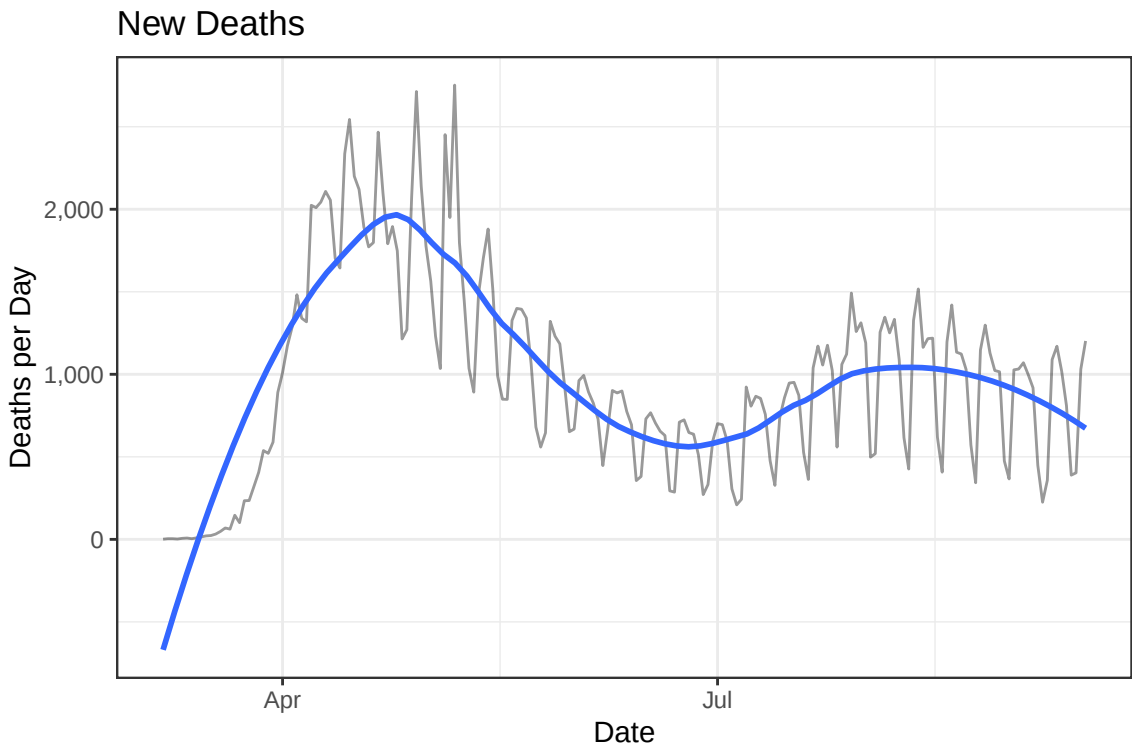
Table 2: U.S. Deaths and Cases over the Last Two Weeks

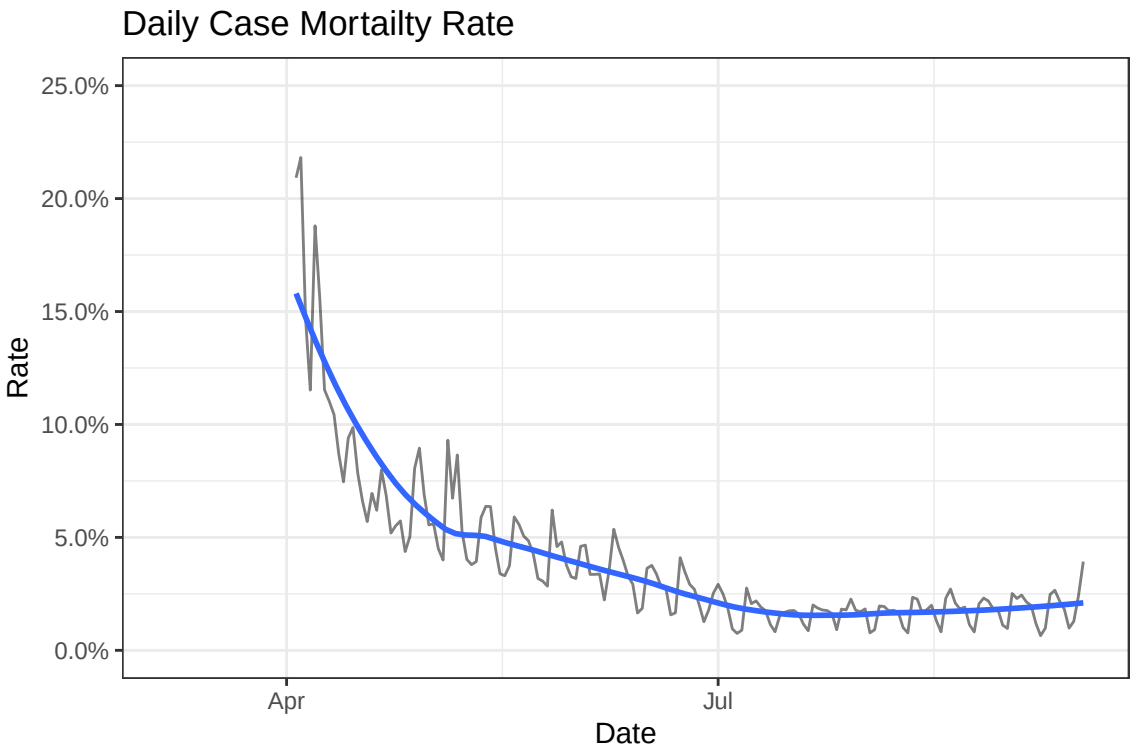
Date	Cases	Deaths	New Cases	New Deaths
2020-09-16	6,597,783	188,802	40,021	1,202
2020-09-15	6,557,762	187,600	35,445	1,031
2020-09-14	6,522,317	186,569	33,864	403
2020-09-13	6,488,453	186,166	34,453	389
2020-09-12	6,454,000	185,777	42,087	810
2020-09-11	6,411,913	184,967	44,927	1,018
2020-09-10	6,366,986	183,949	37,581	1,170
2020-09-09	6,329,405	182,779	30,983	1,089
2020-09-08	6,298,422	181,690	22,223	358
2020-09-07	6,276,199	181,332	28,682	225
2020-09-06	6,247,517	181,107	33,117	449
2020-09-05	6,214,400	180,658	44,905	918
2020-09-04	6,169,495	179,740	51,591	998
2020-09-03	6,117,904	178,742	44,714	1,070

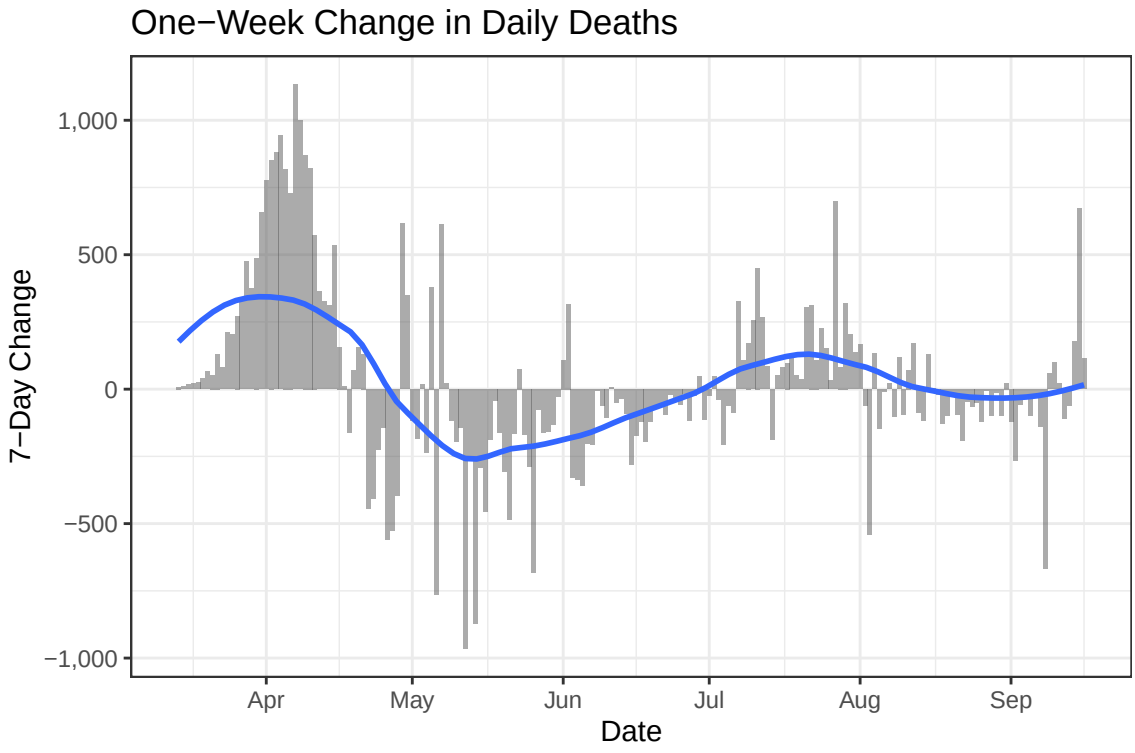
Deaths

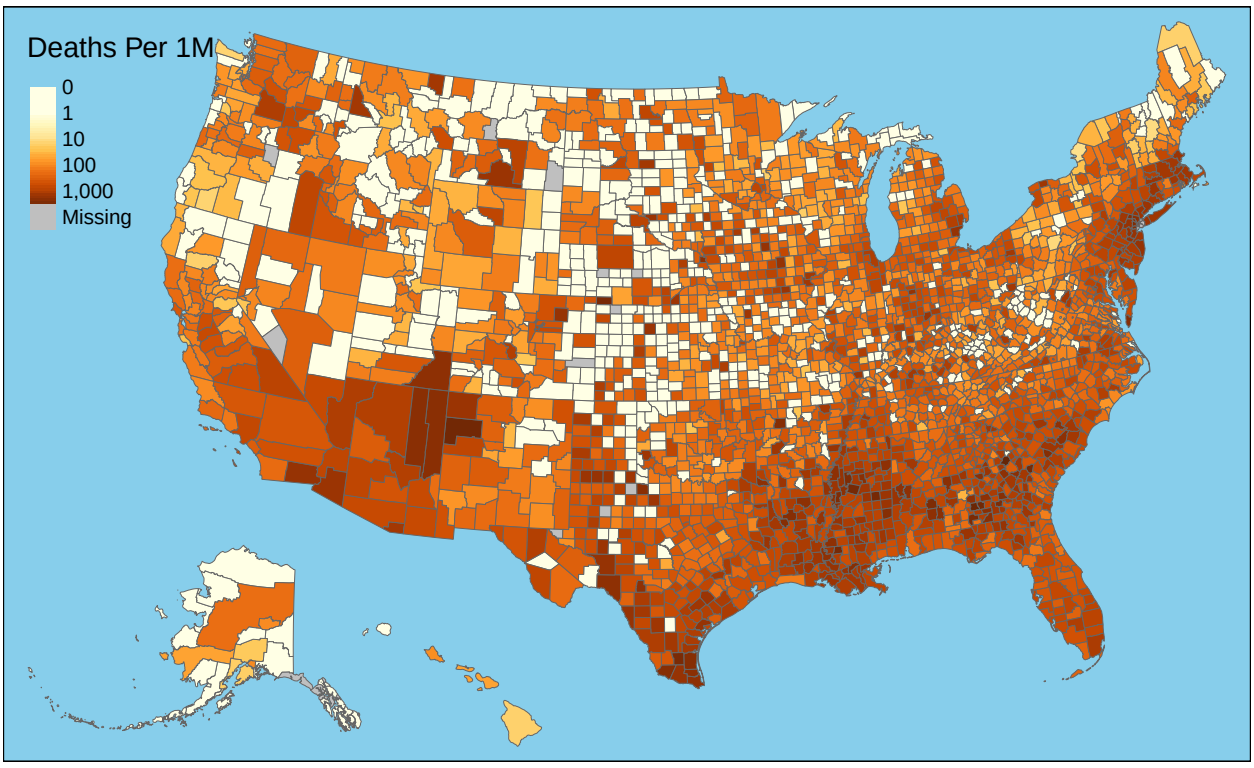
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator 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.





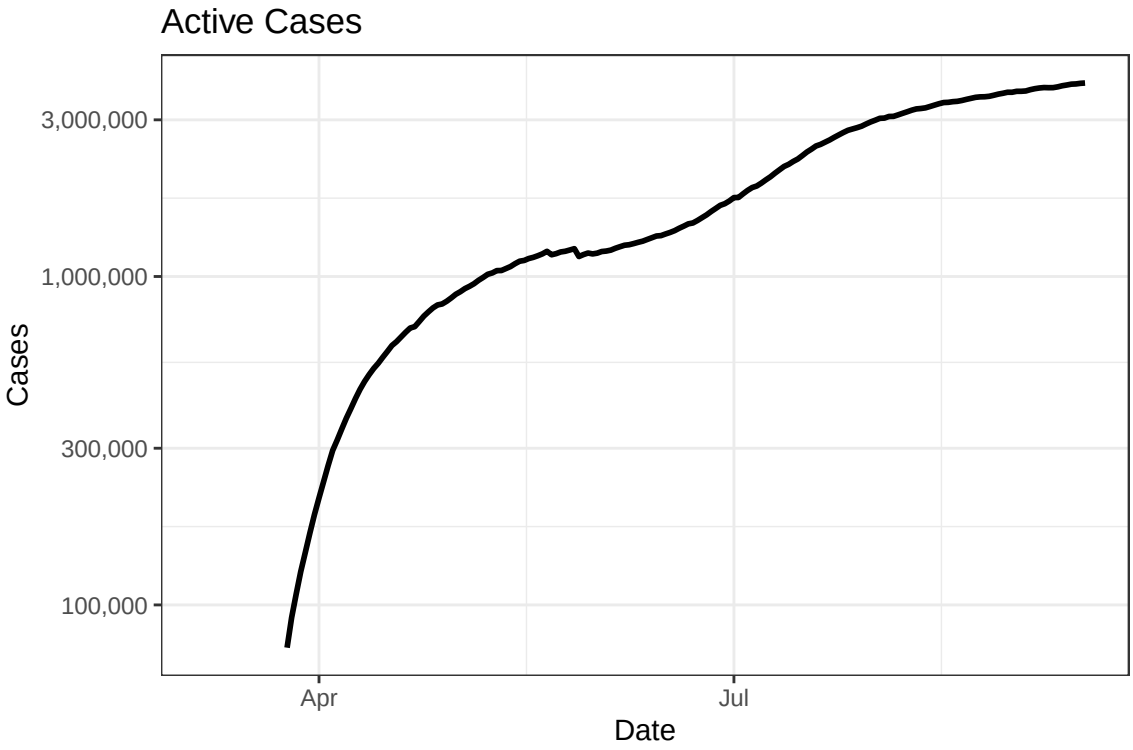

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Apr
Jul
Date

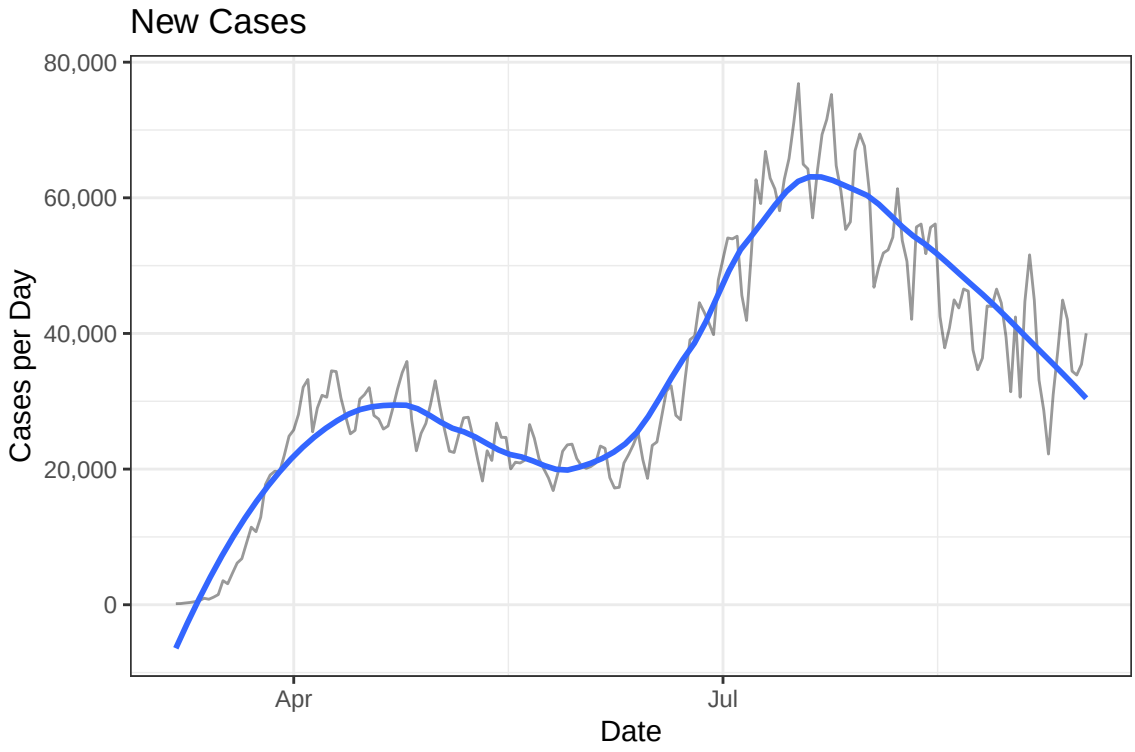

One−Week Change in Daily Deaths
1,000
500
0
−500
−1,000
7−Day Change
Apr
May
Jun
Jul
Aug
Sep
Date

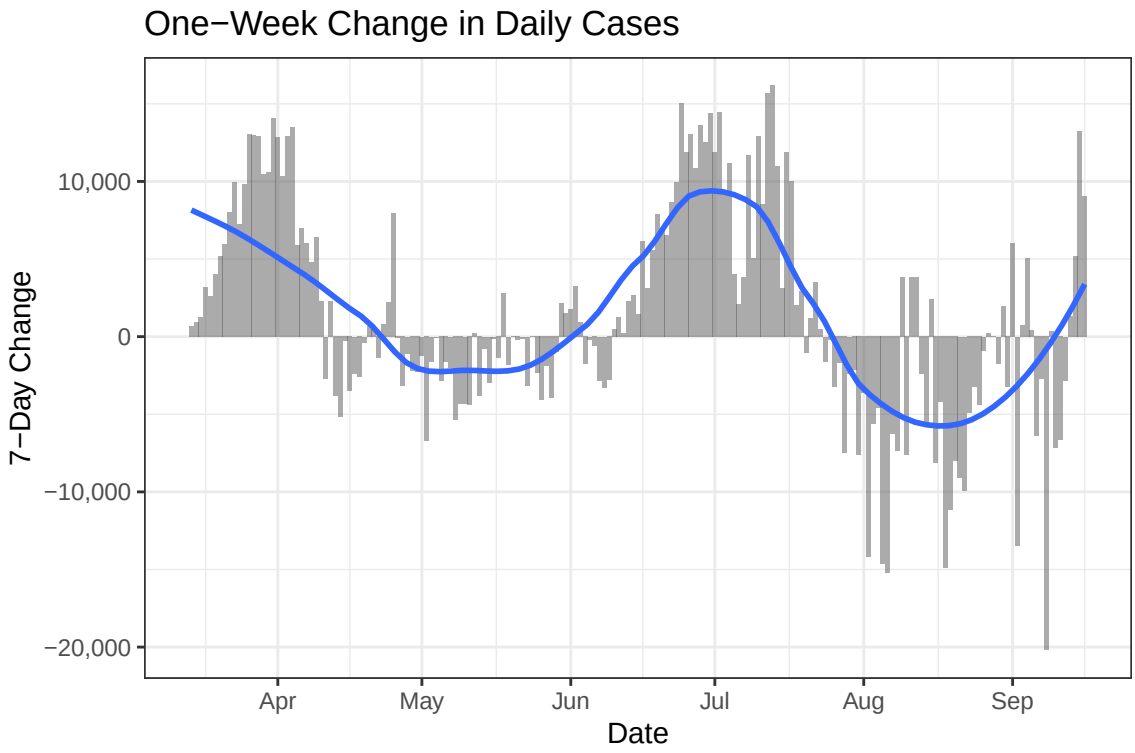

Deaths Per 1M
0
1
10
100
1,000
Missing

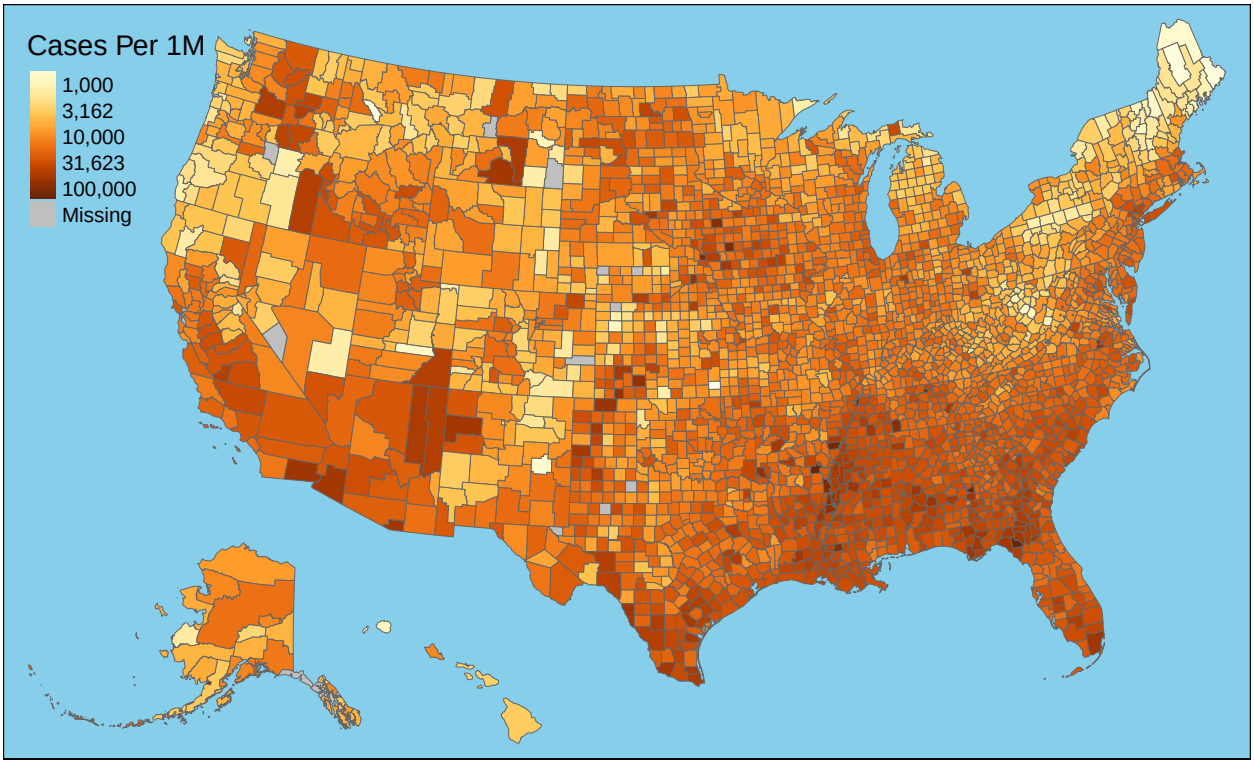
Cases

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



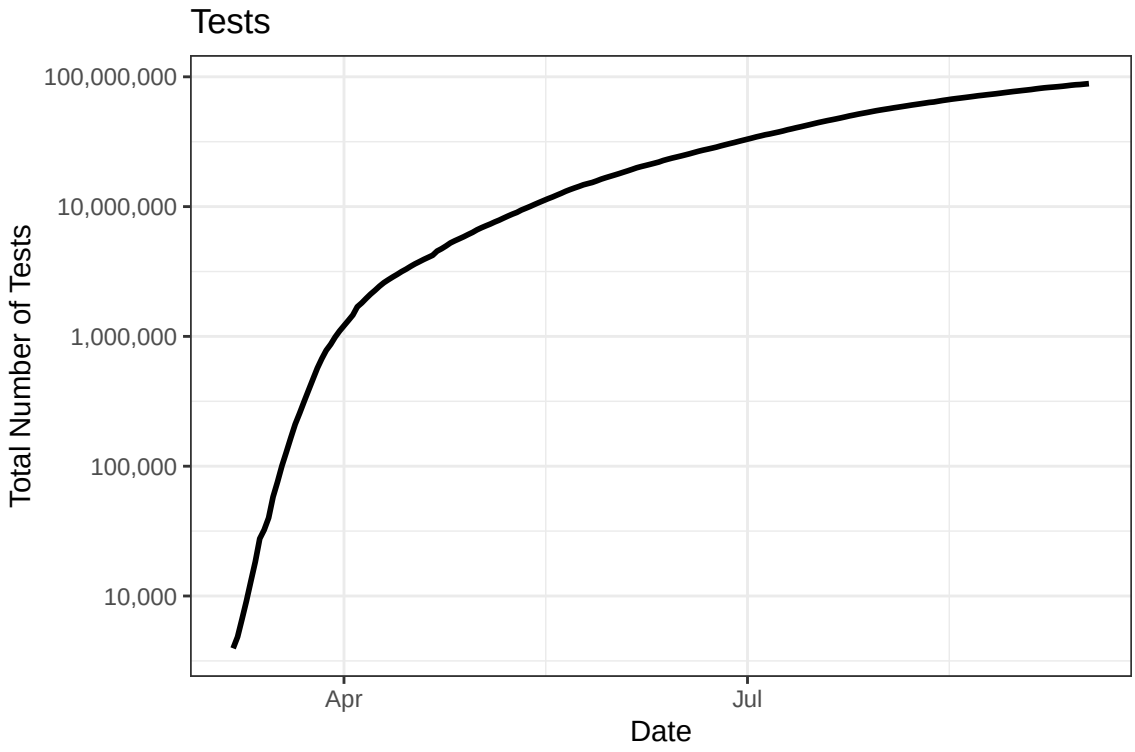


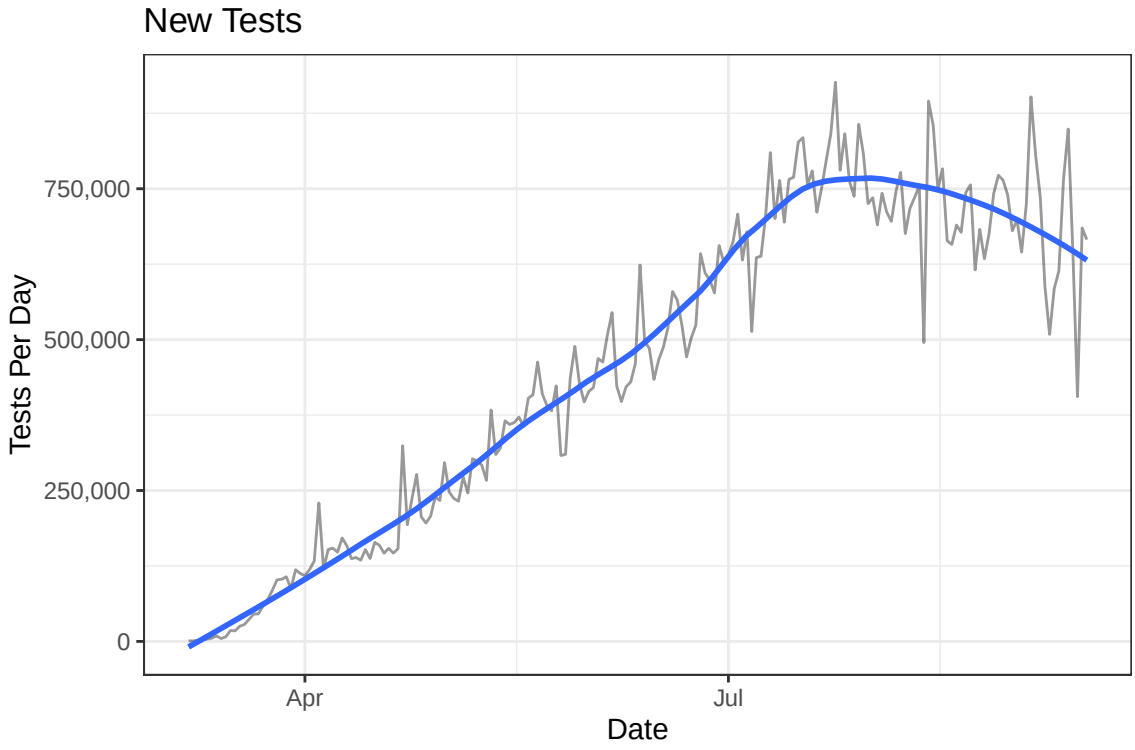

One−Week Change in Daily Cases
10,000
0
−10,000
−20,000
7−Day Change
Apr
May
Jun
Jul
Aug
Sep
Date

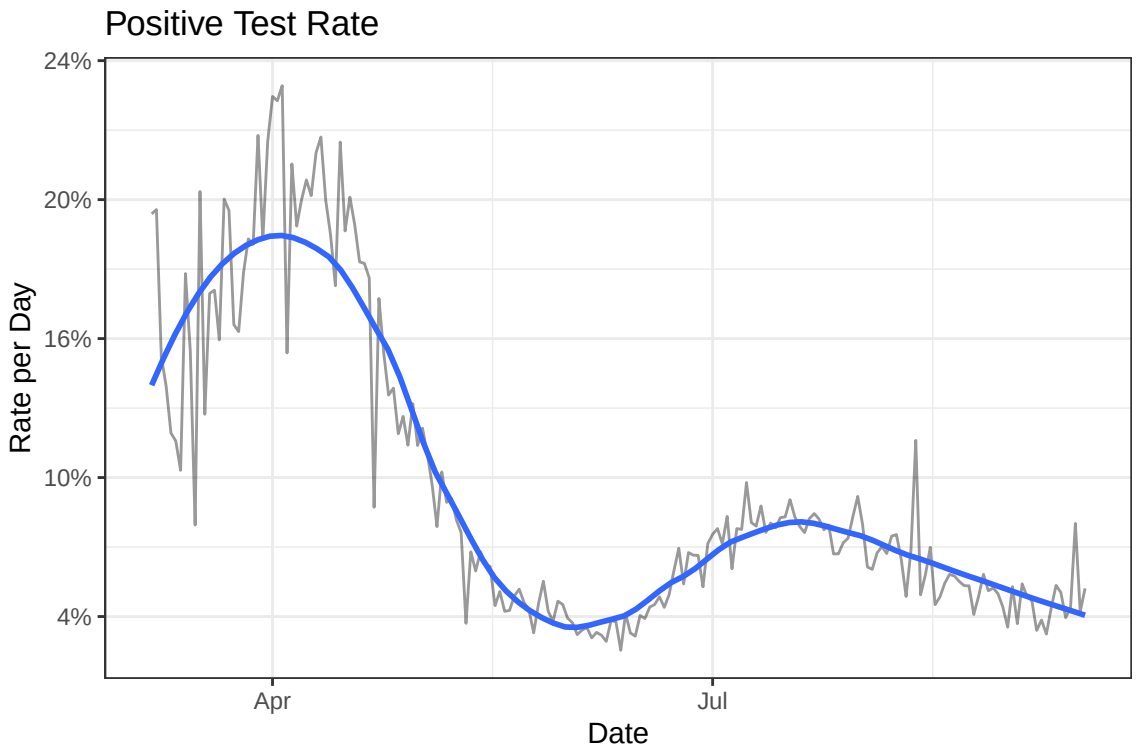

Cases Per 1M
1,000
3,162
10,000
31,623
100,000
Missing

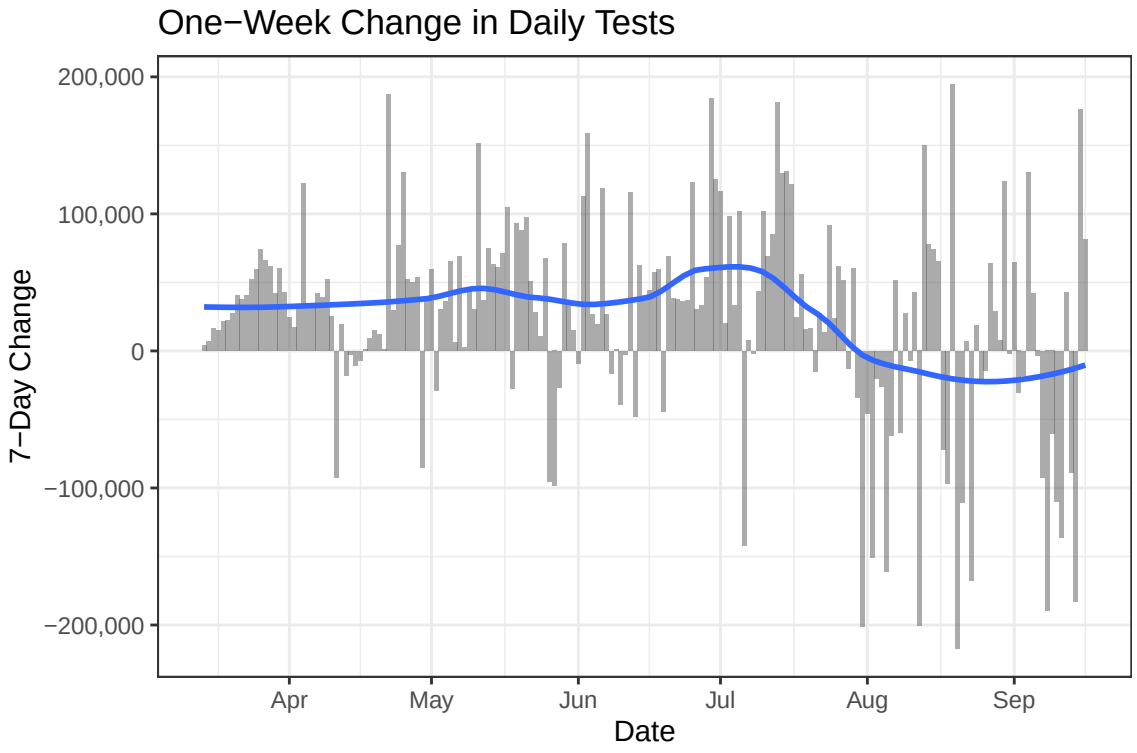
Testing

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.





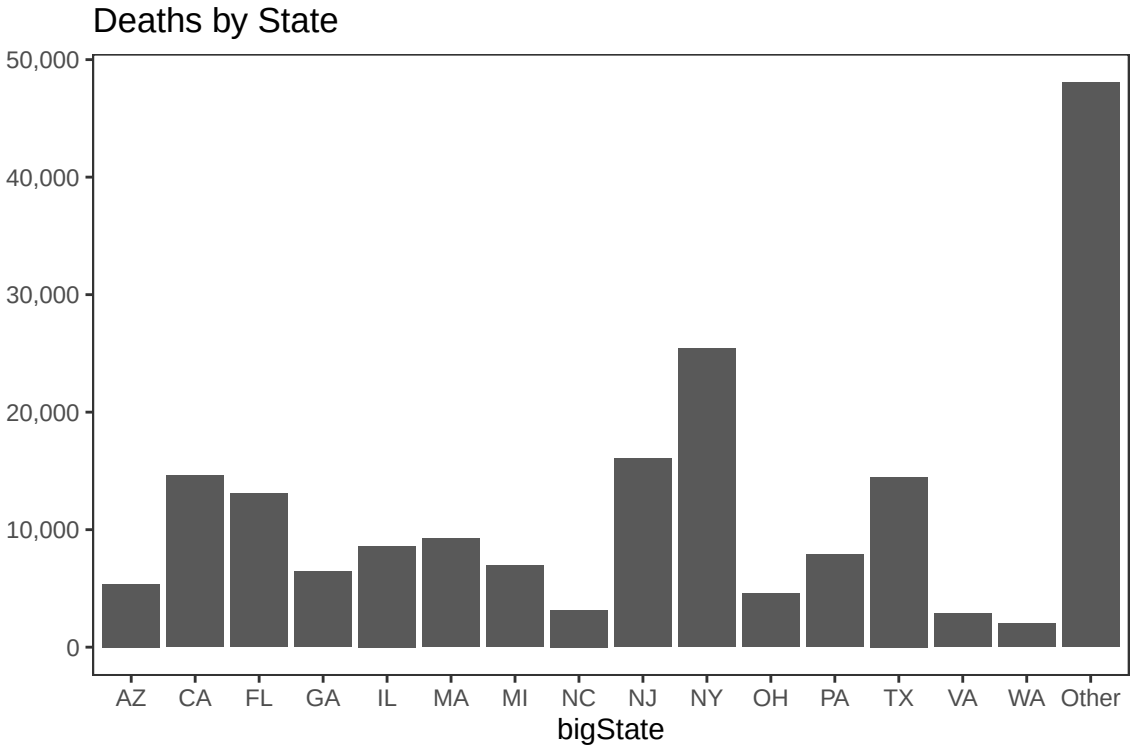

Positive Test Rate
24%
20%
16%
10%
4%
Rate per Day
Apr
Jul
Date

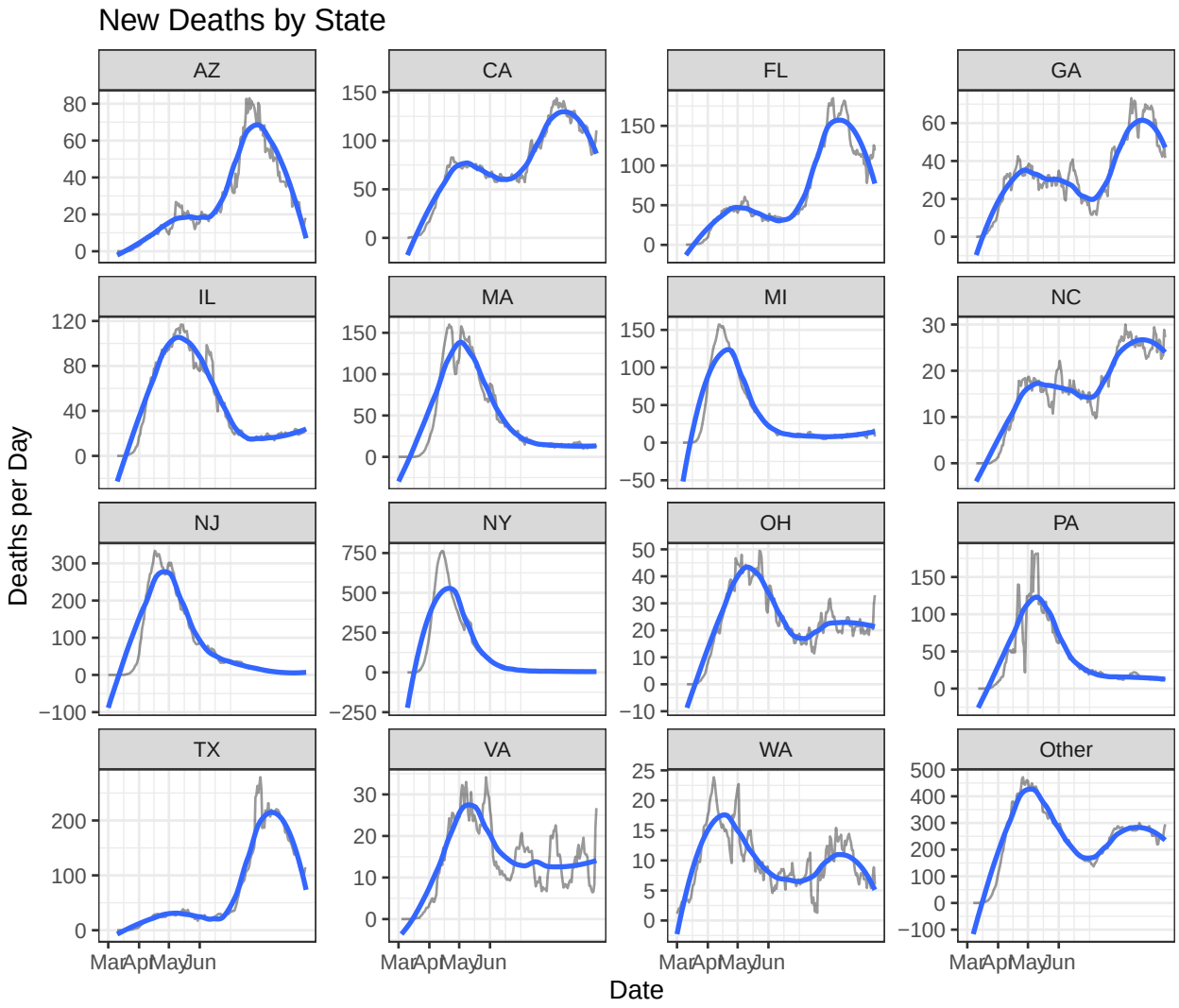

One−Week Change in Daily Tests
200,000
100,000
0
−100,000
−200,000
7−Day Change
Apr
May
Jun
Jul
Aug
Sep
Date

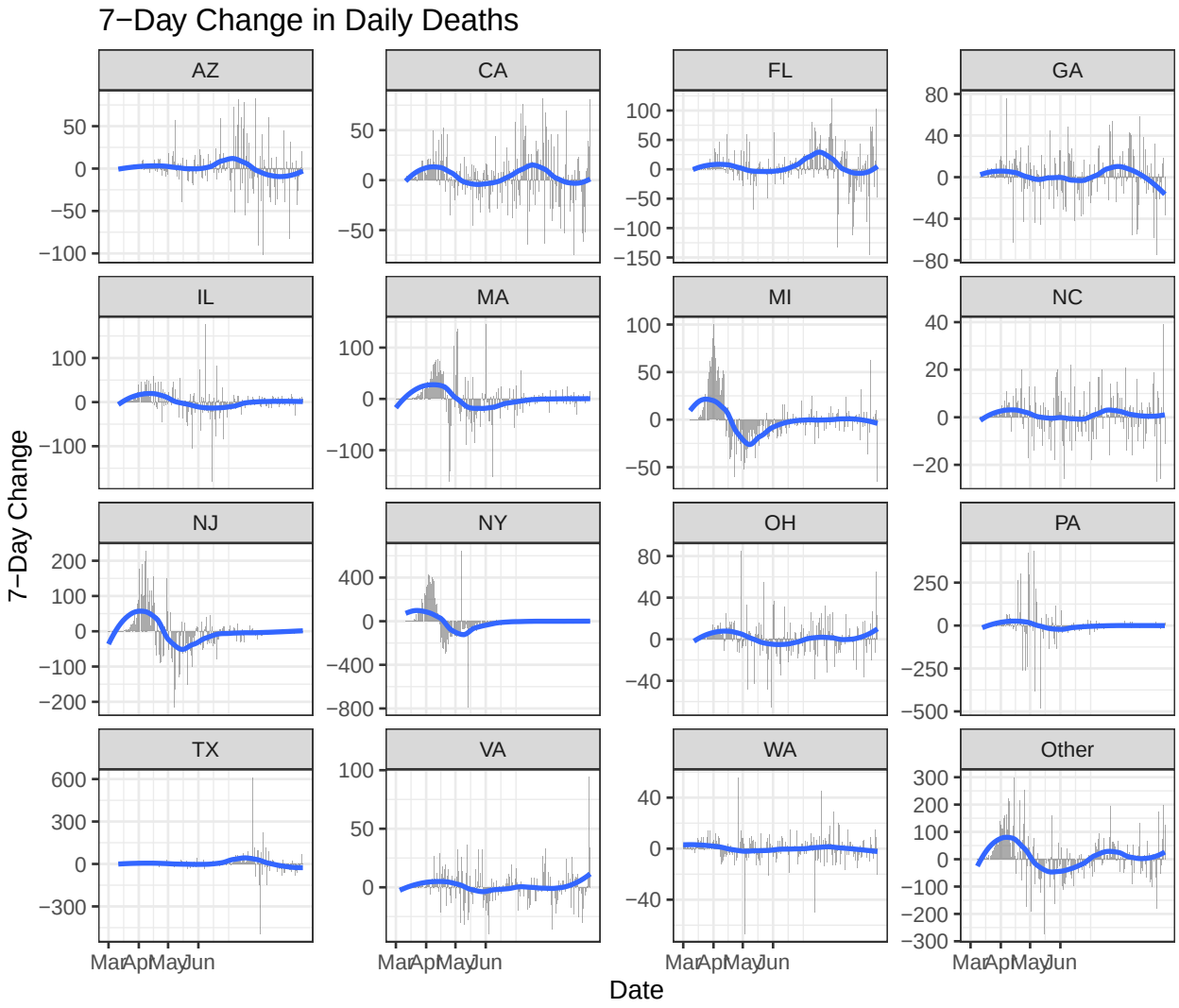
State Data

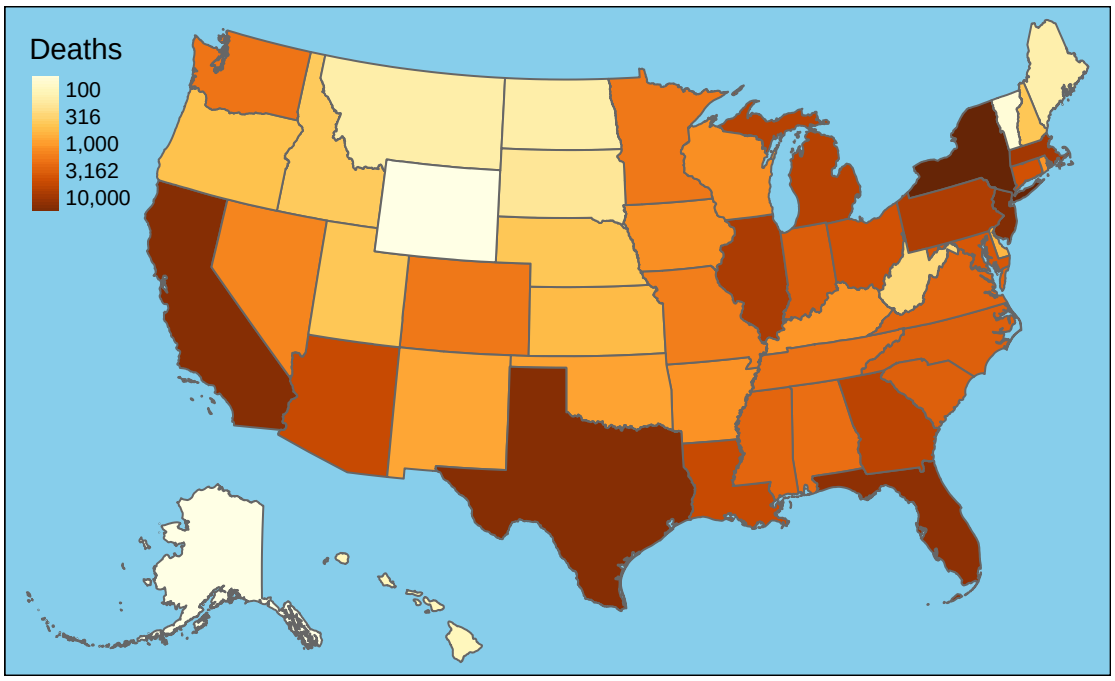
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

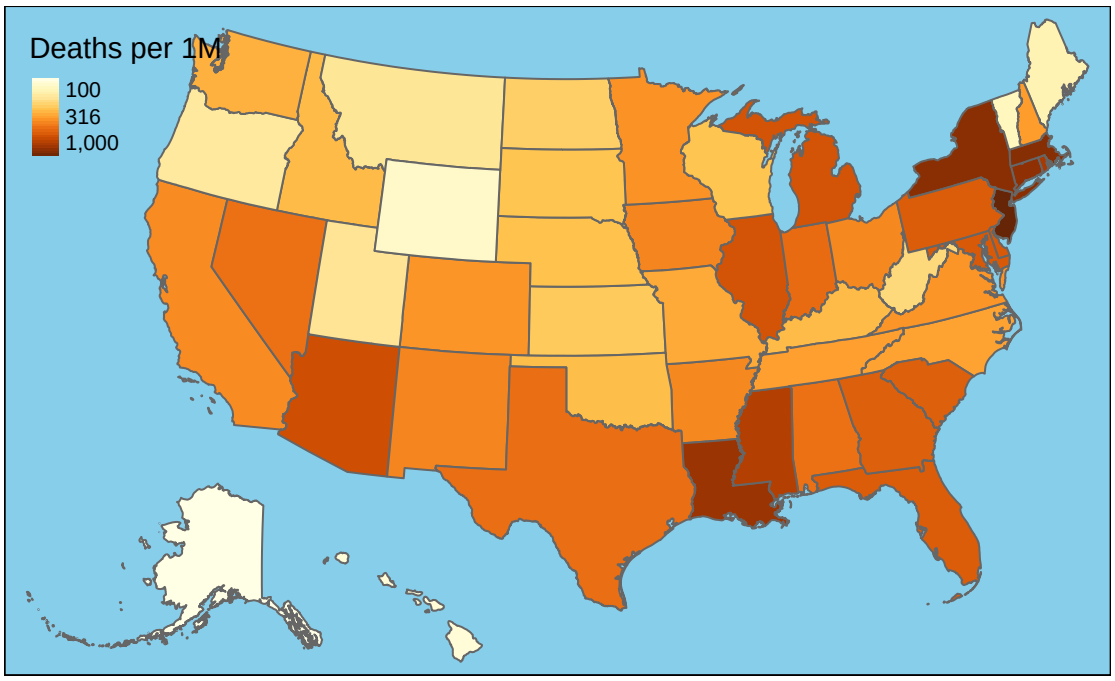
Deaths



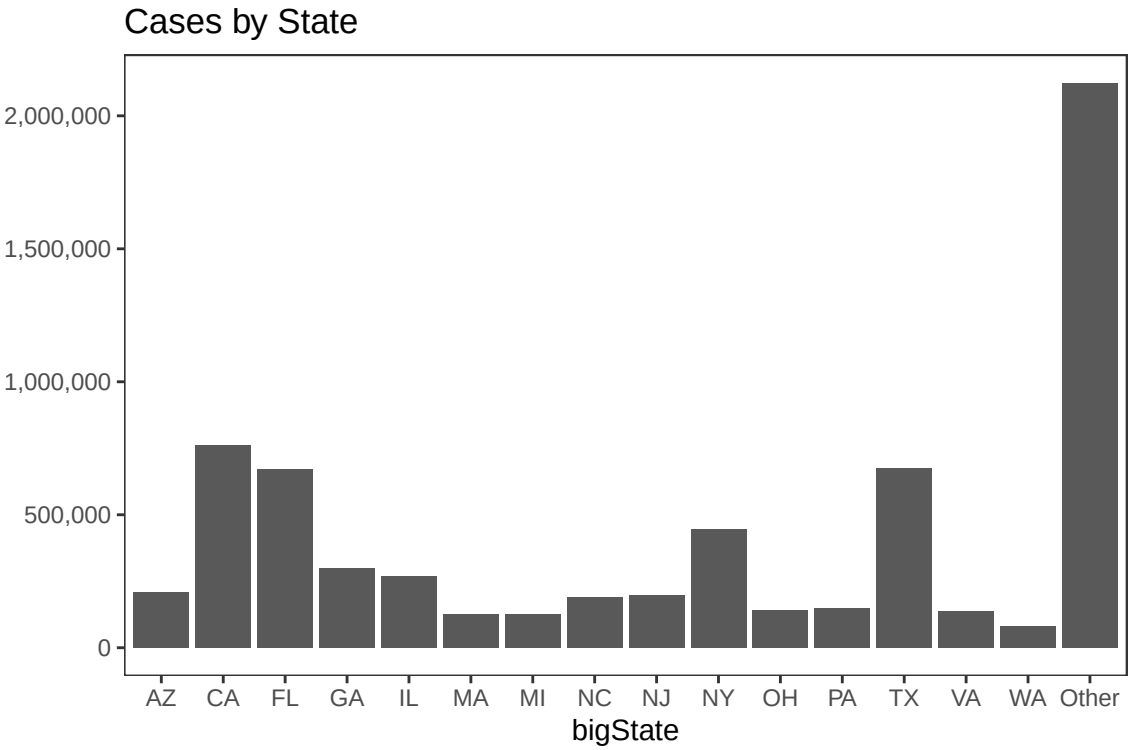

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Mar
Apr
May
Jun
Date

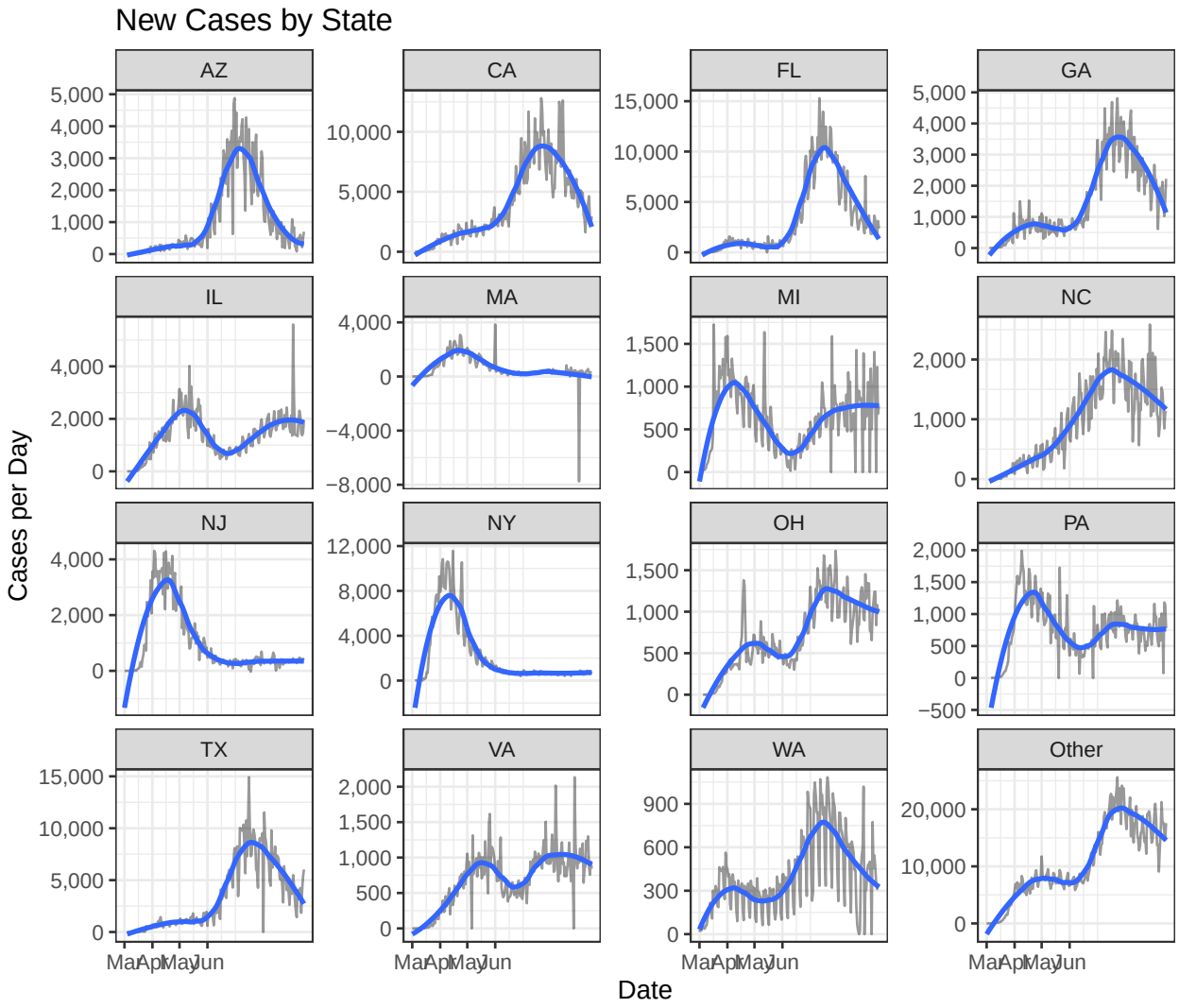

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Mar
Apr
May
Jun
Date

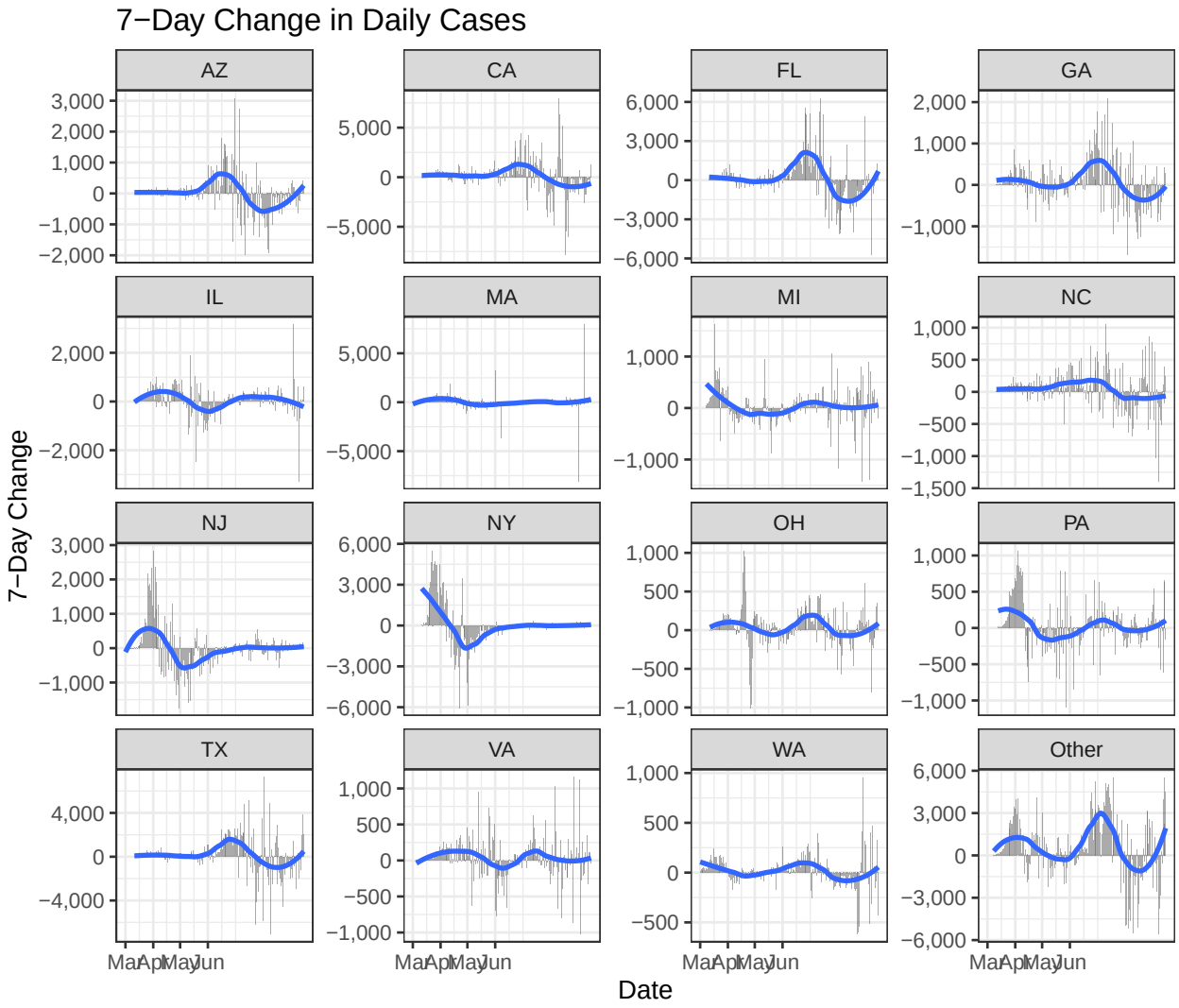

Deaths
100
316
1,000
3,162
10,000

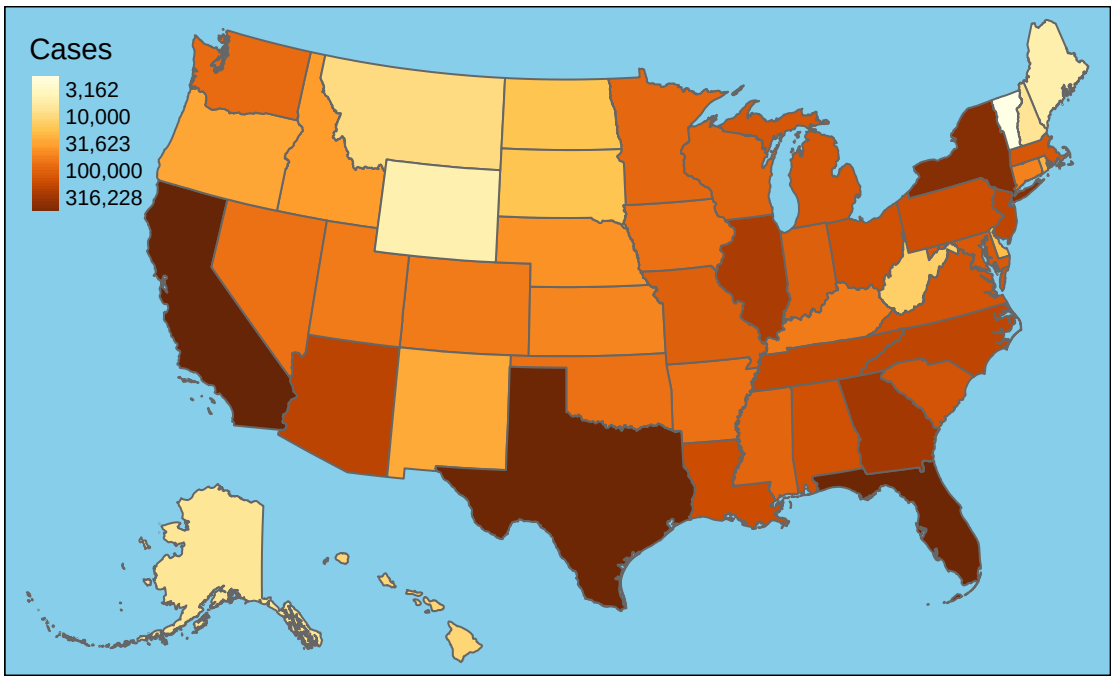

Deaths per 1M
100
316
1,000

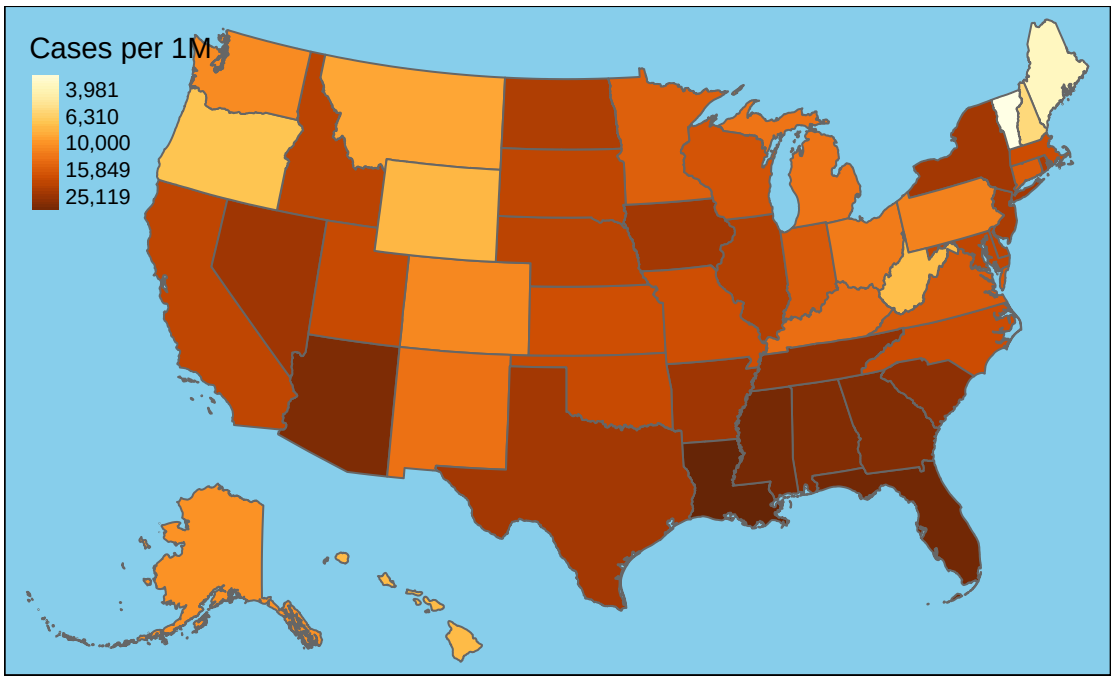
Cases


Cases by State
2,000,000
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

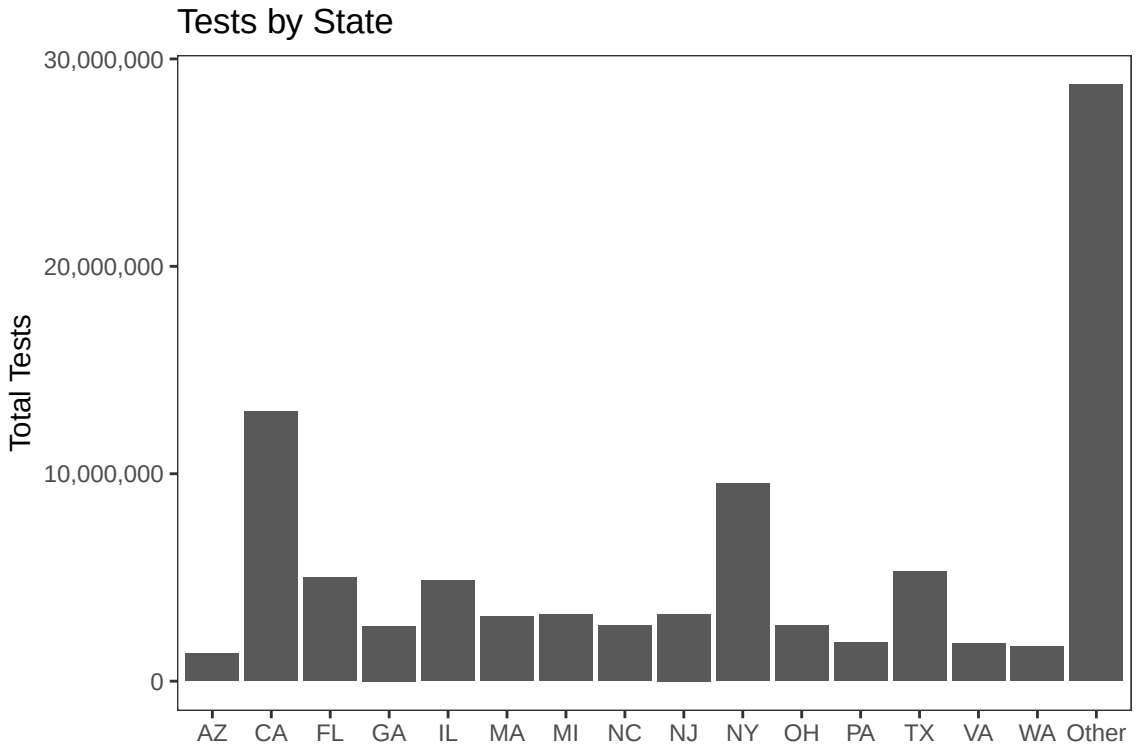

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Date
Mar
Apr
May
Jun

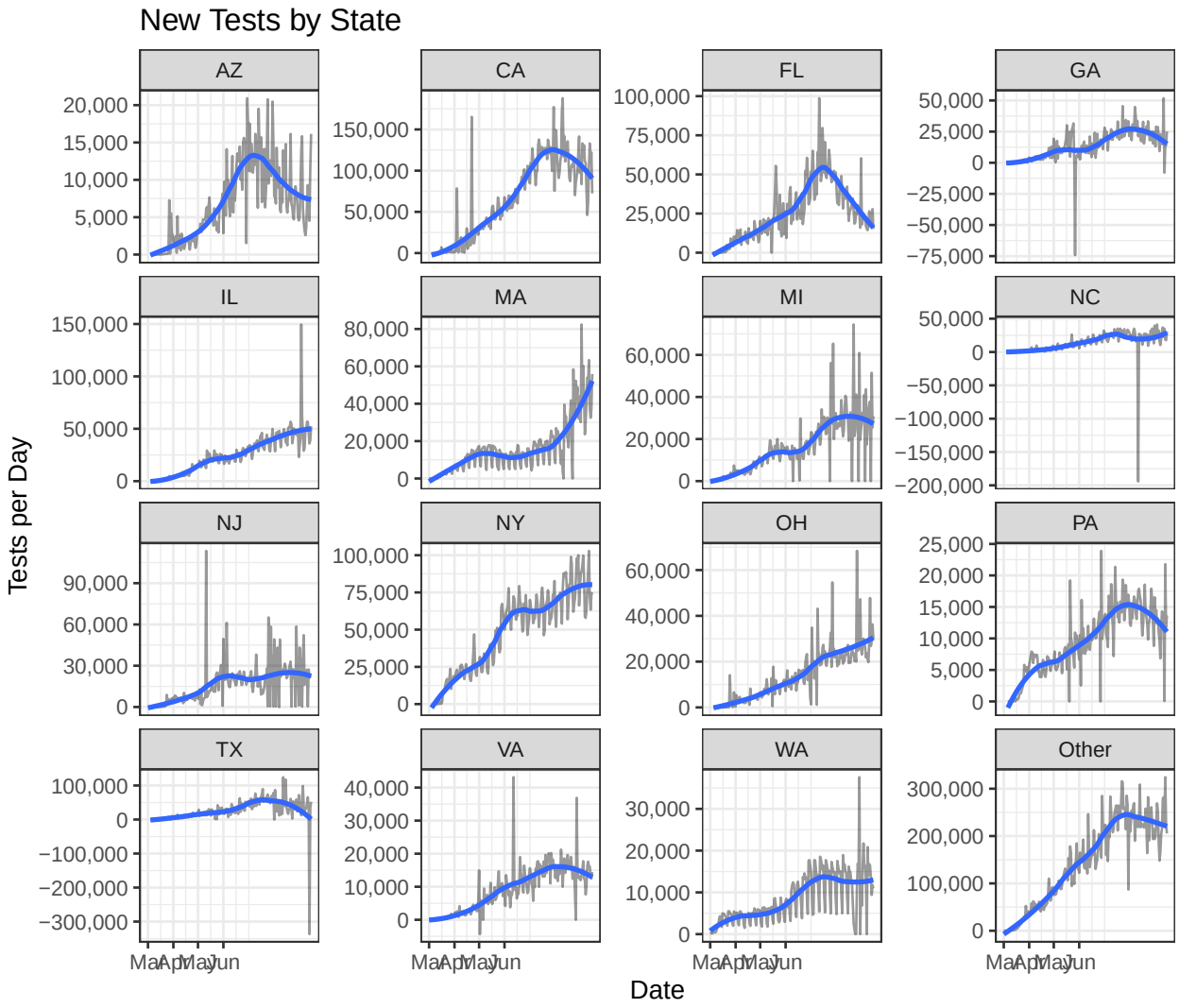

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

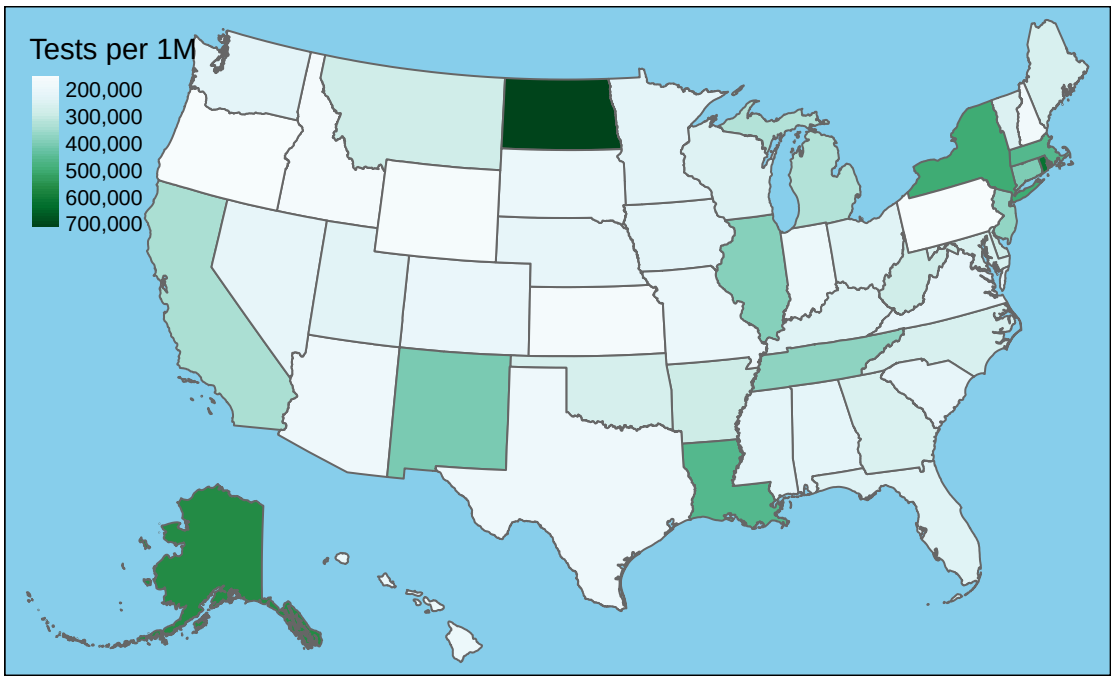

Cases
3,162
10,000
31,623
100,000
316,228

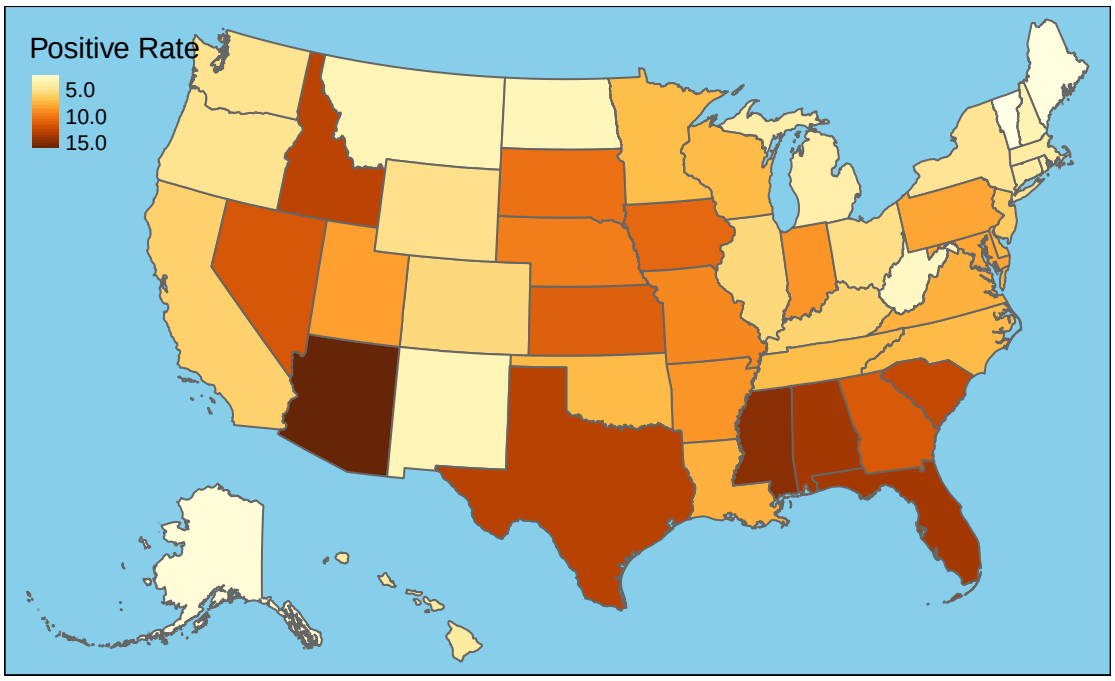

Cases per 1M
3,981
6,310
10,000
15,849
25,119

Testing

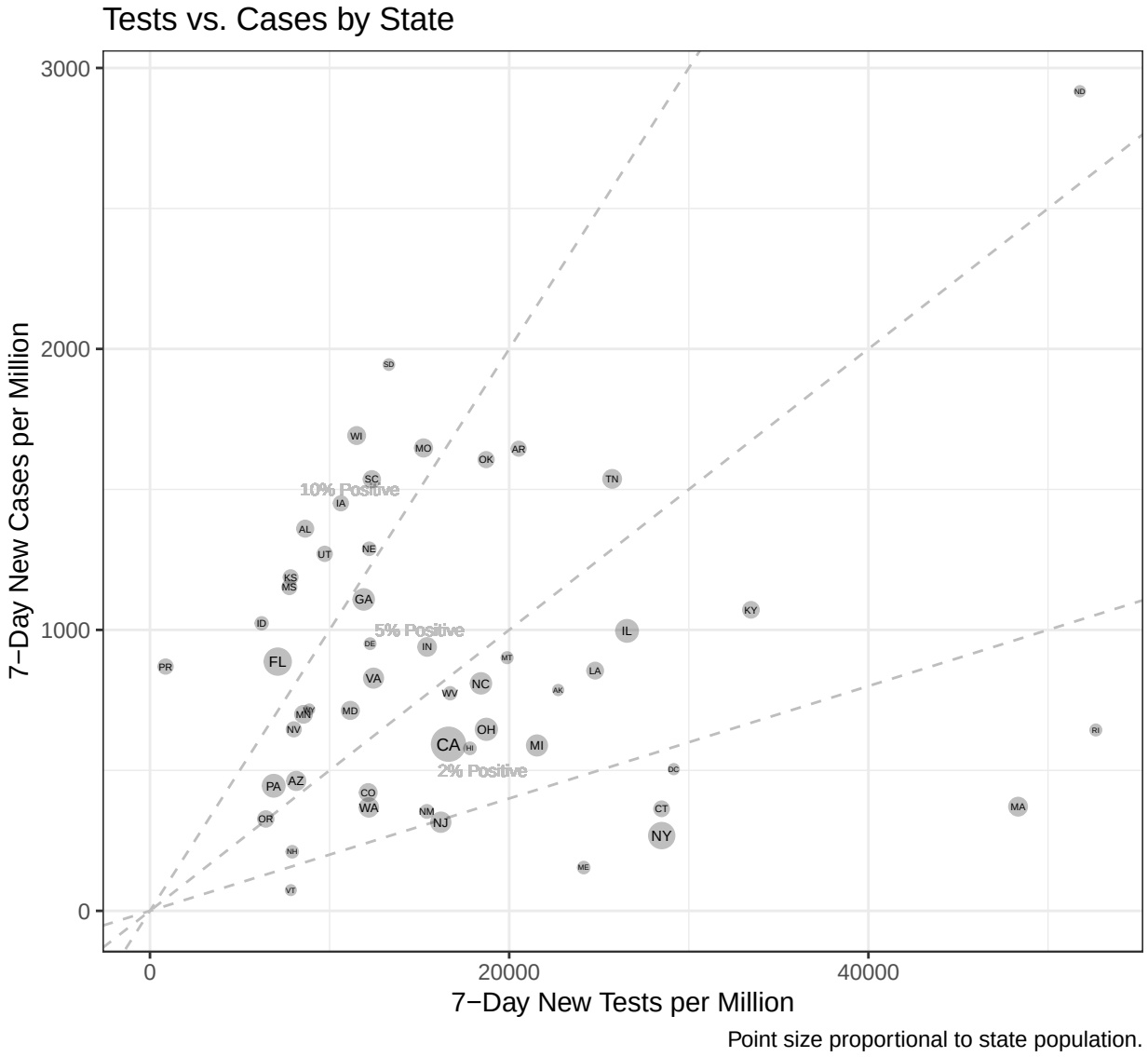

Tests by State
Total Tests
30,000,000
20,000,000
10,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


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
200,000
300,000
400,000
500,000
600,000
700,000


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.



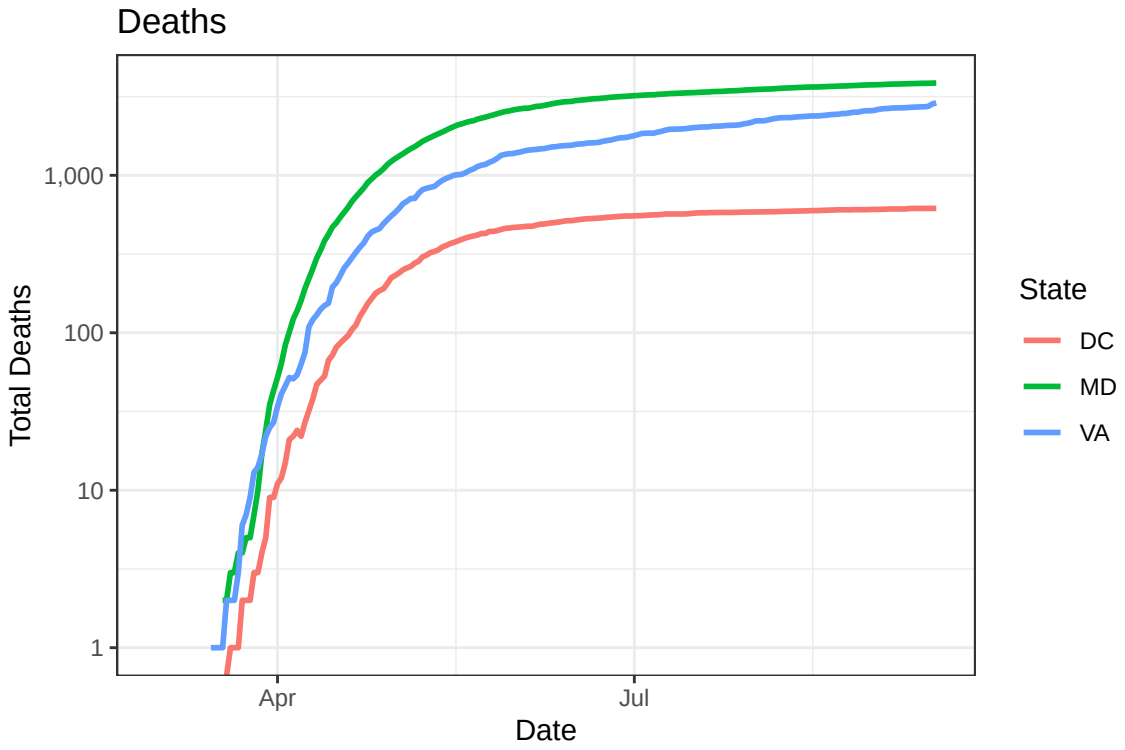
Local Data

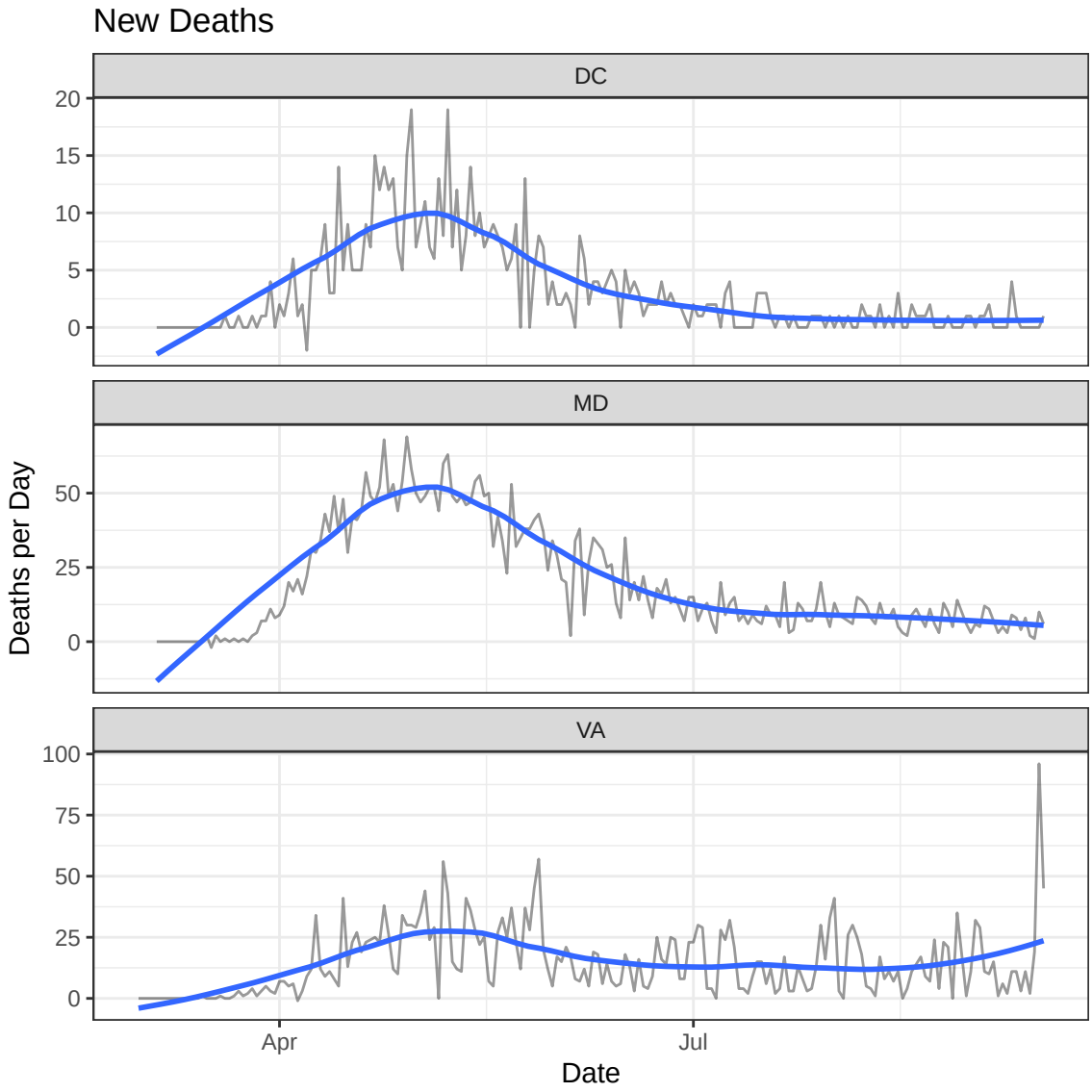
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

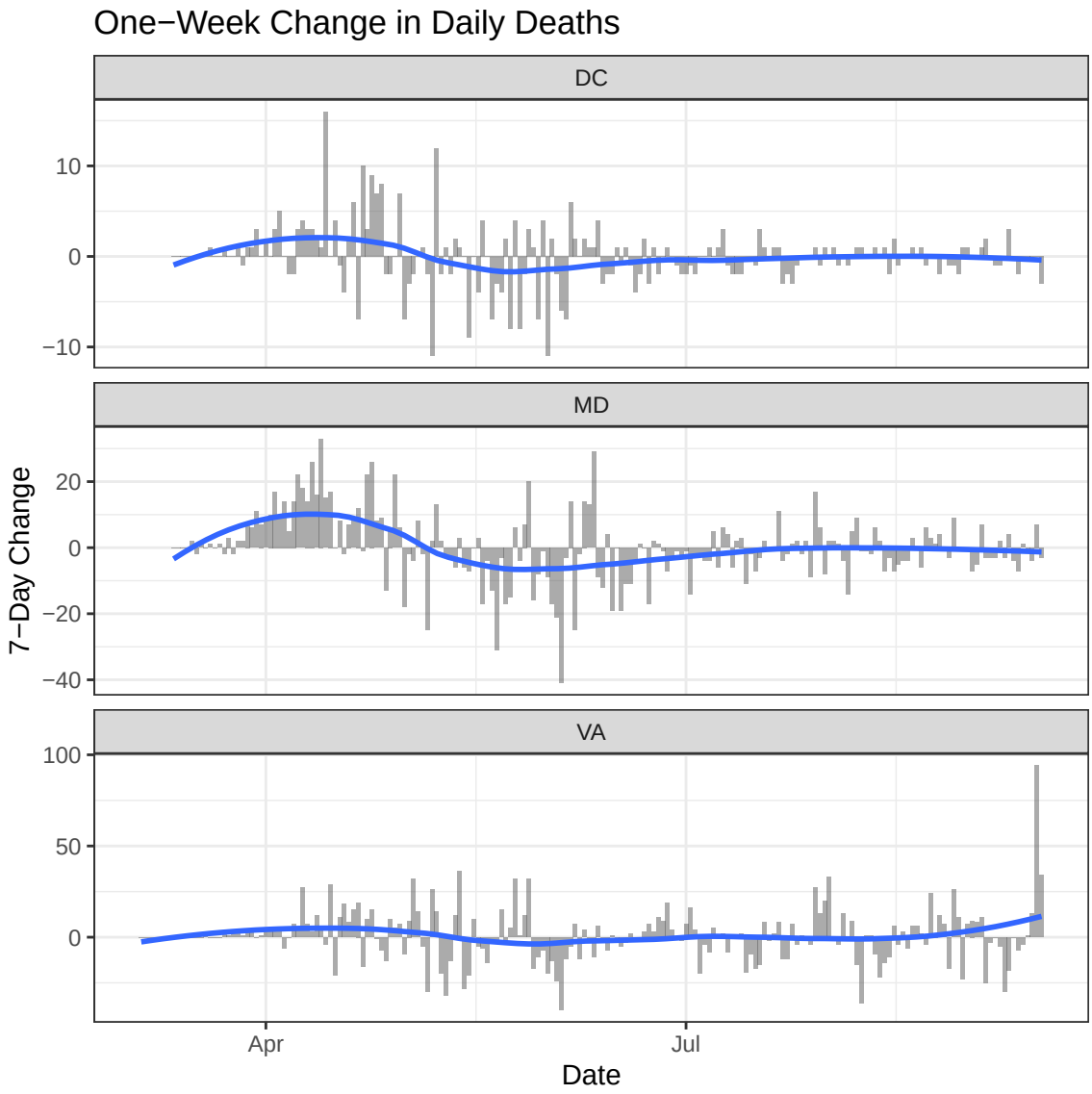
Table 3: Latest Local Data

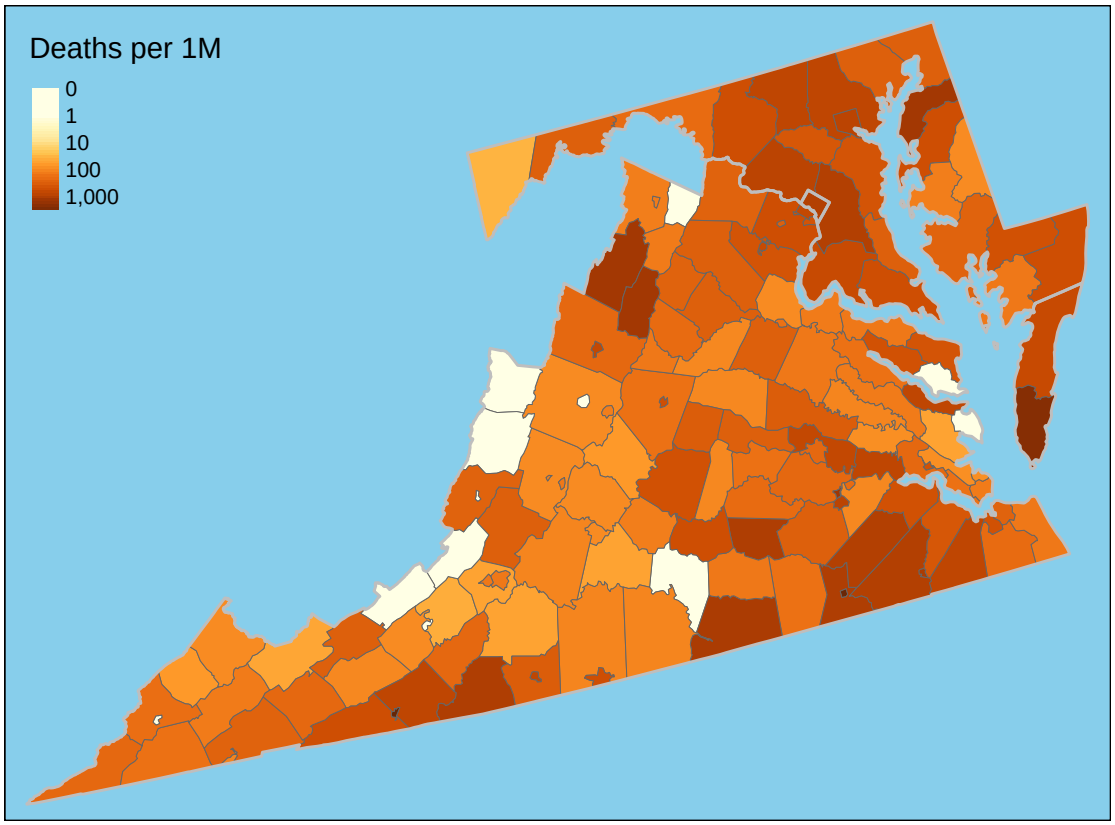
State	Cases	Deaths	New Cases	New Deaths
DC	14,743	617	56	1
MD	117,888	3,855	643	6
VA	136,359	2,884	845	45

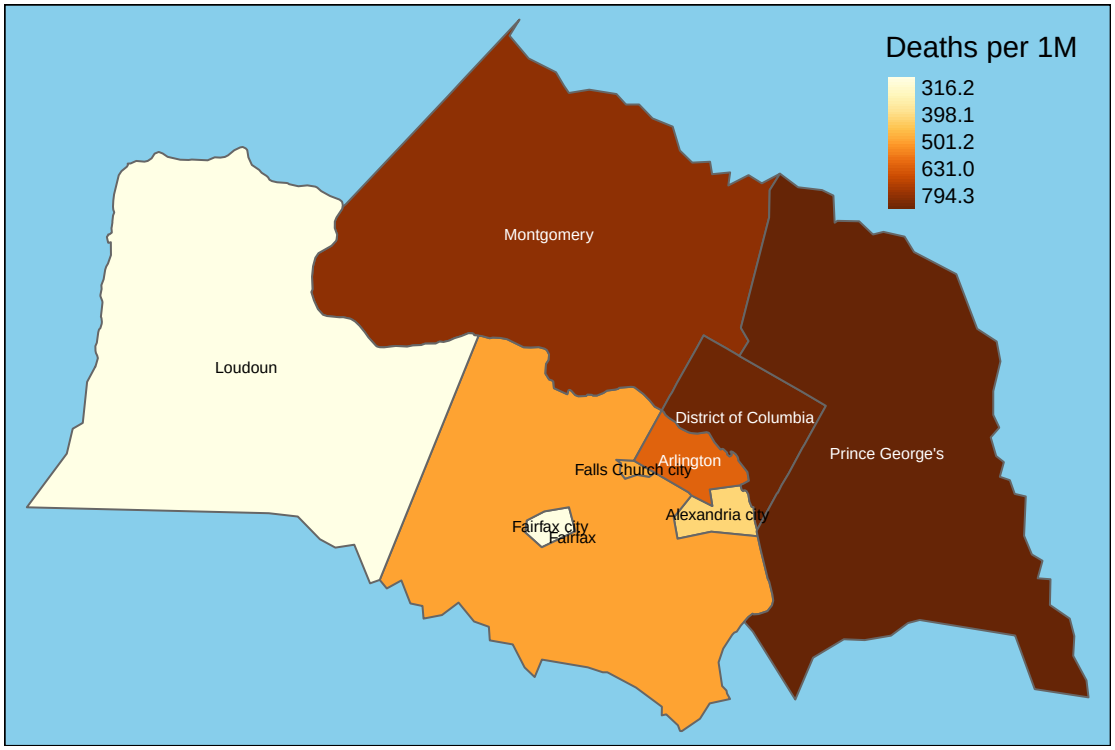
Deaths



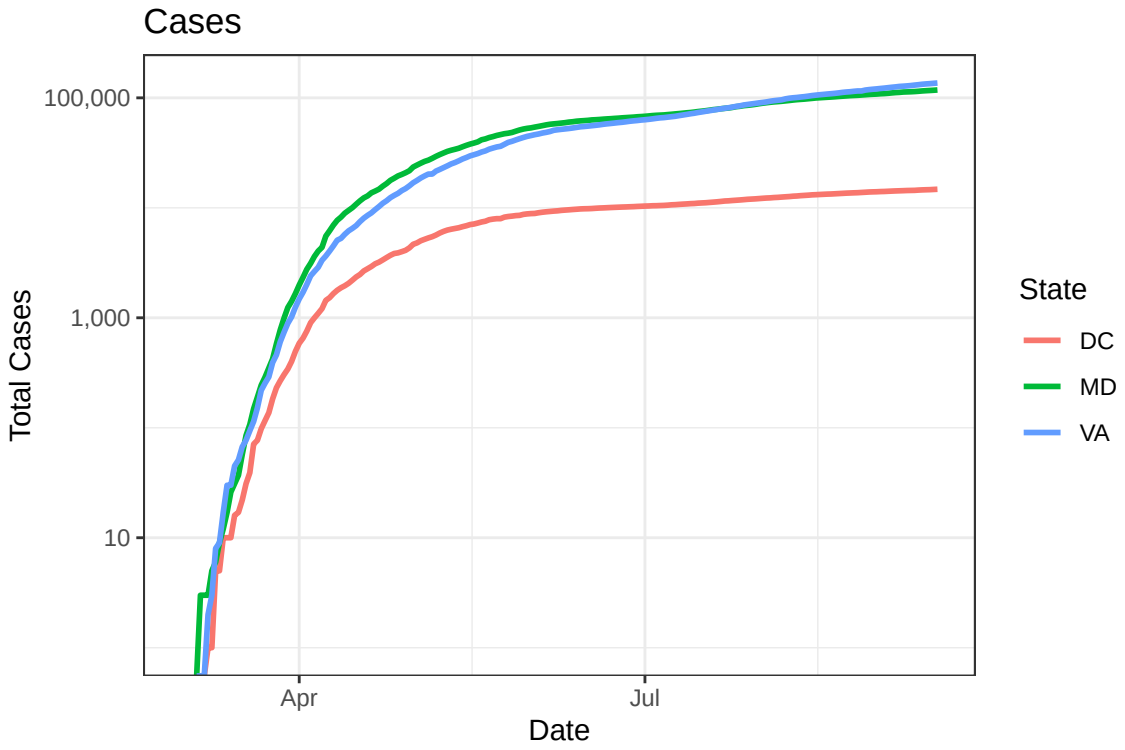

New Deaths
DC
MD
VA
Deaths per Day
Date
Apr
Jul
0
5
10
15
20
25
50
75
100

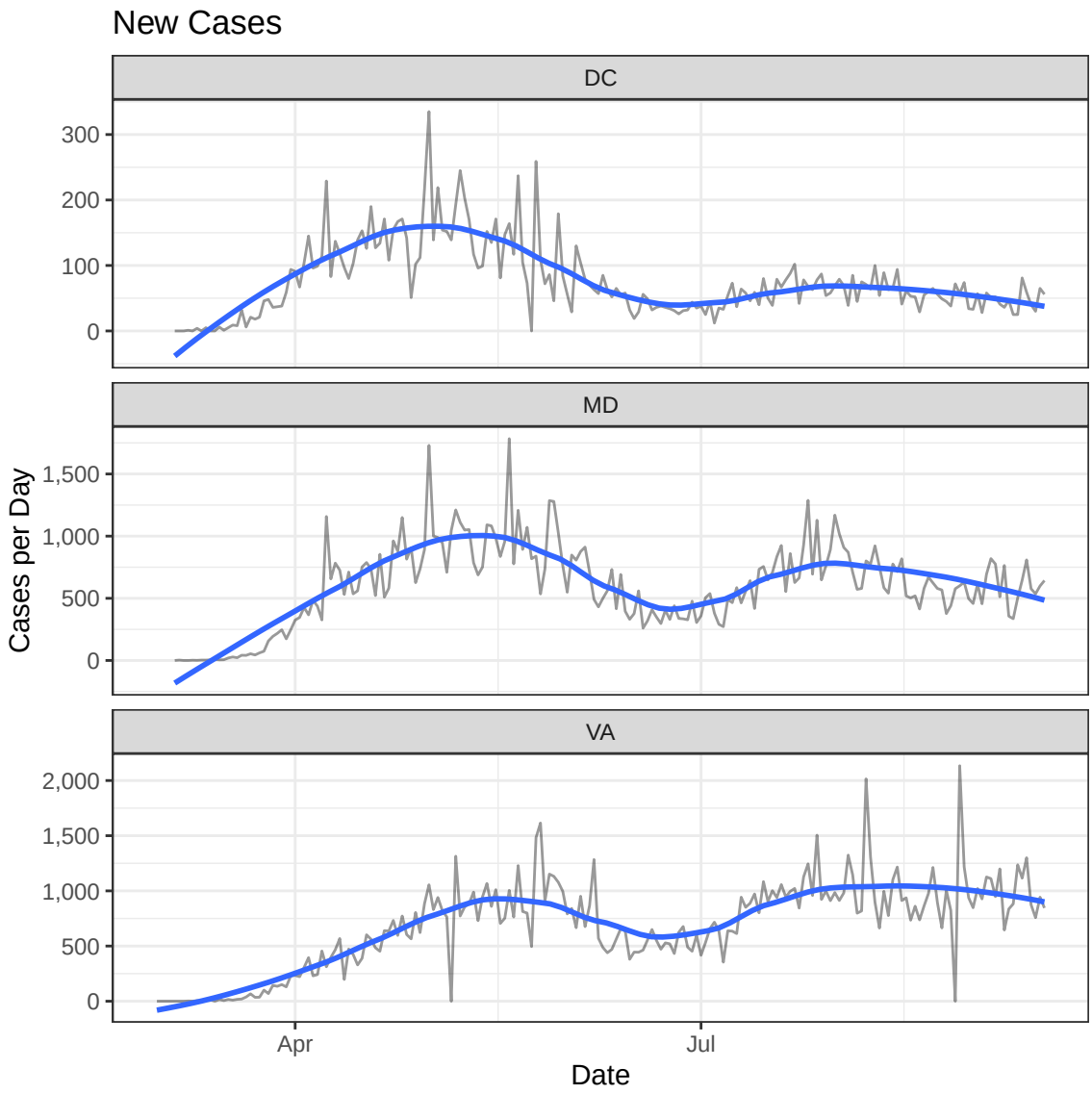

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
100
50
0
7−Day Change
Apr
Jul
Date

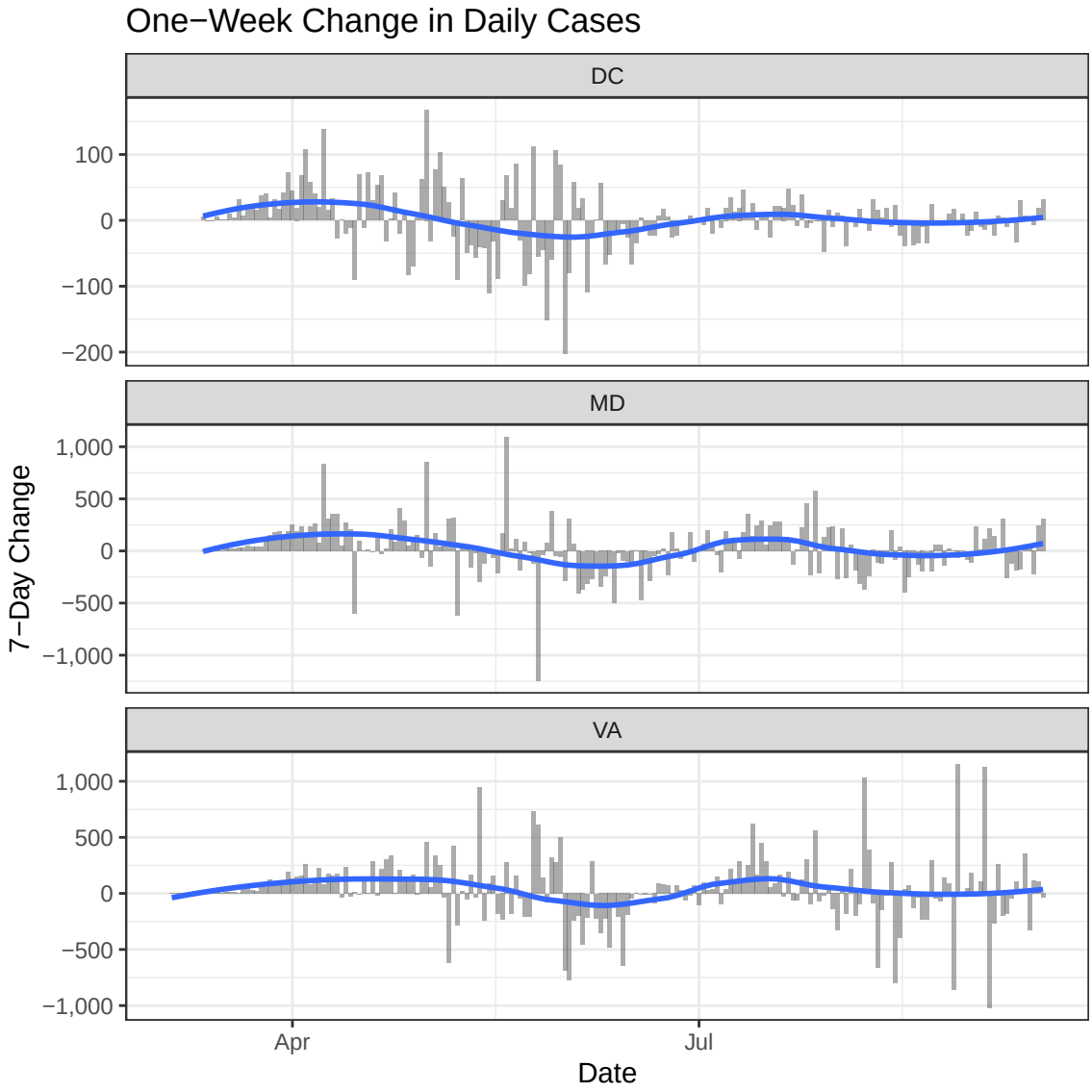

Deaths per 1M
0
1
10
100
1,000

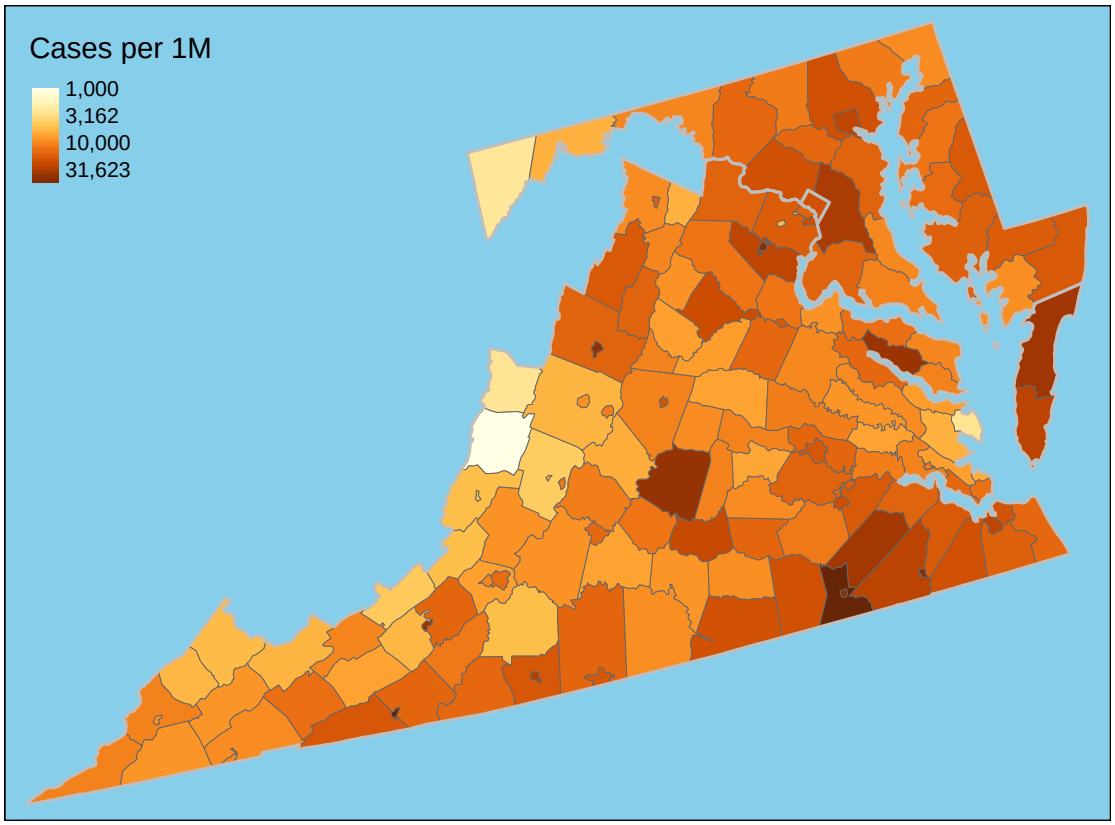

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

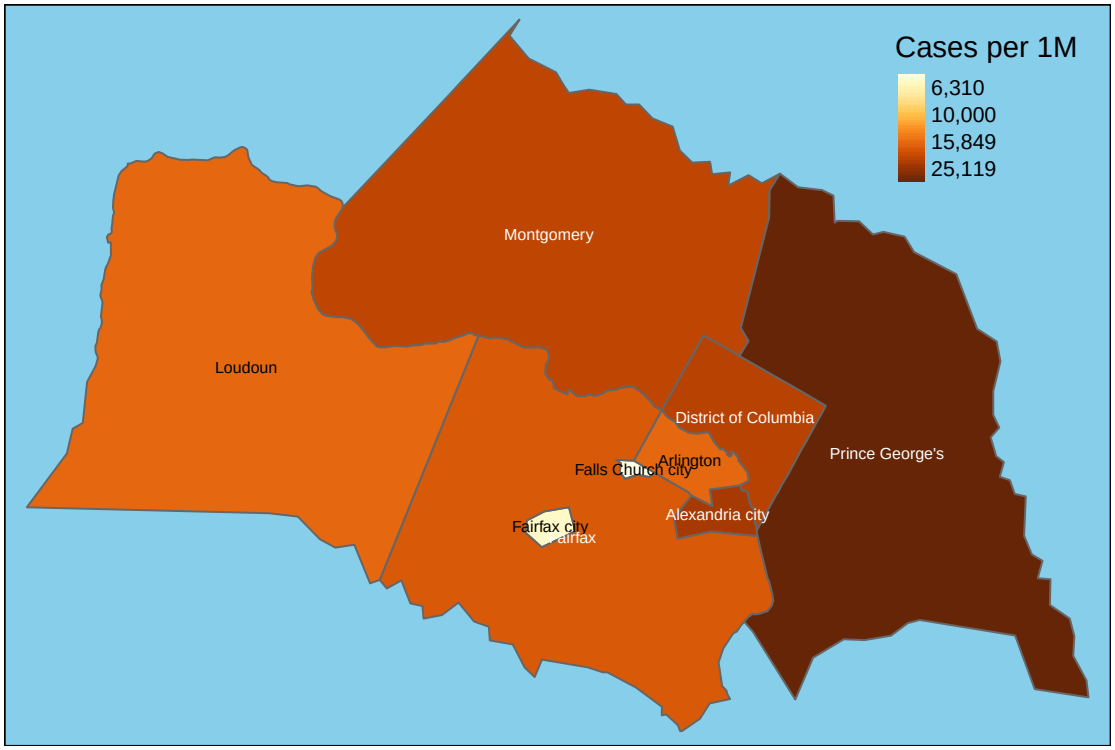
Cases



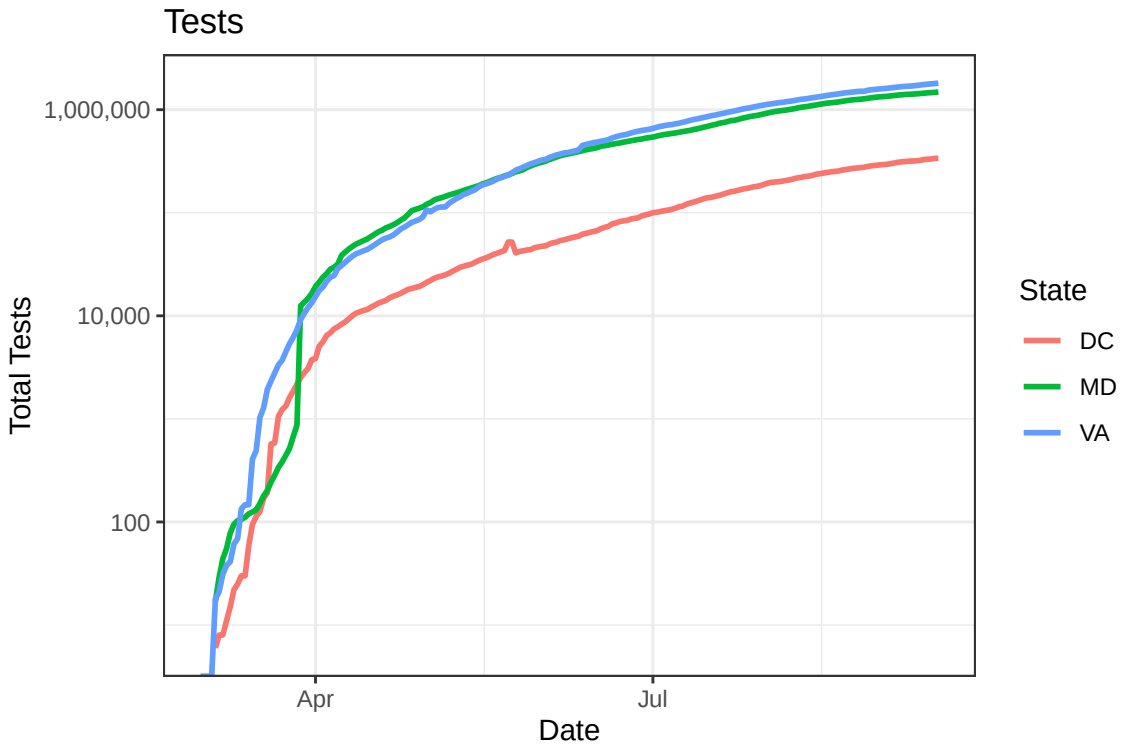

New Cases
DC
MD
VA
Cases per Day
300
200
100
0
1,500
1,000
500
0
2,000
1,500
1,000
500
0
Apr
Jul
Date

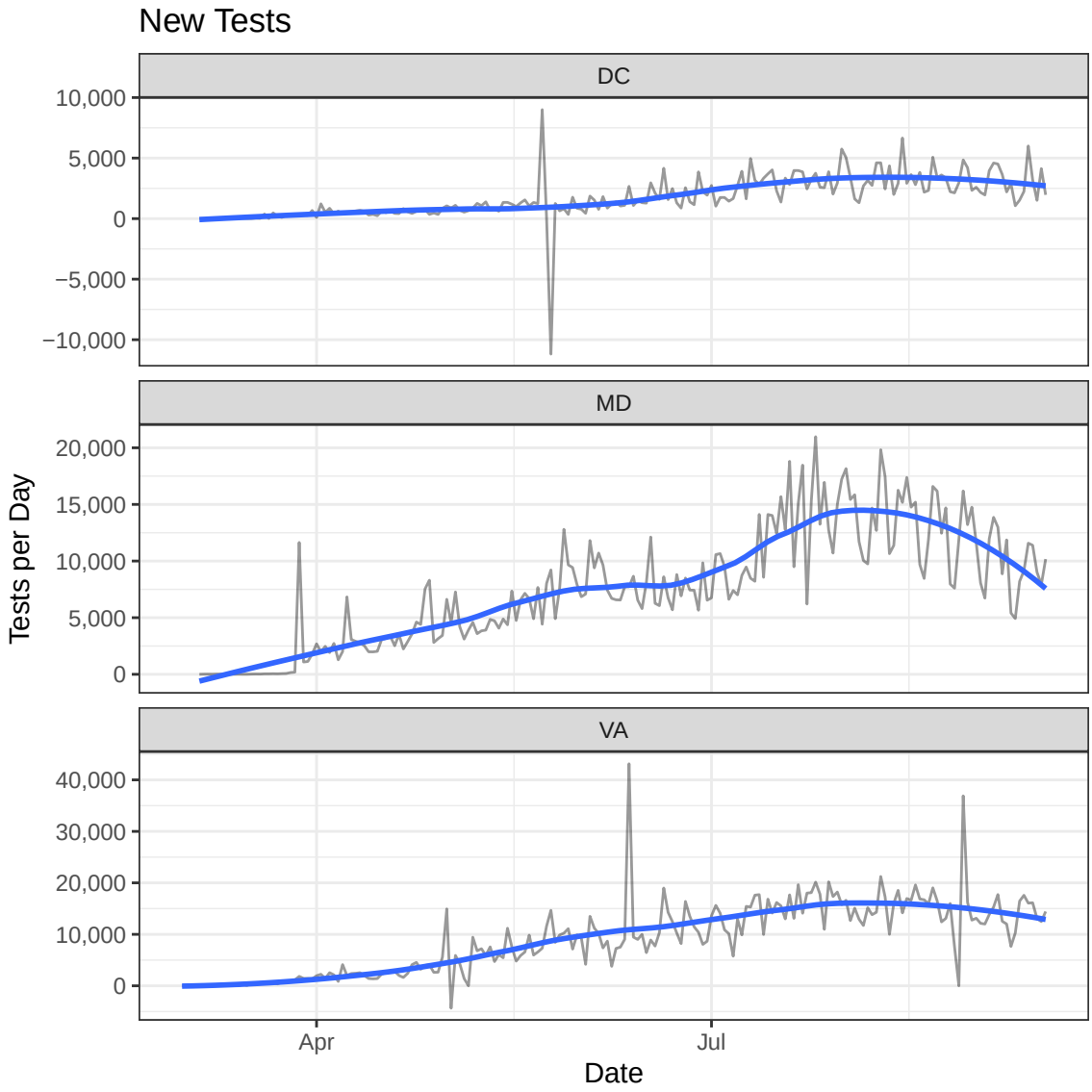

One−Week Change in Daily Cases
DC
MD
VA
100
0
−100
−200
1,000
500
0
−500
−1,000
7−Day Change
Apr
Jul
Date

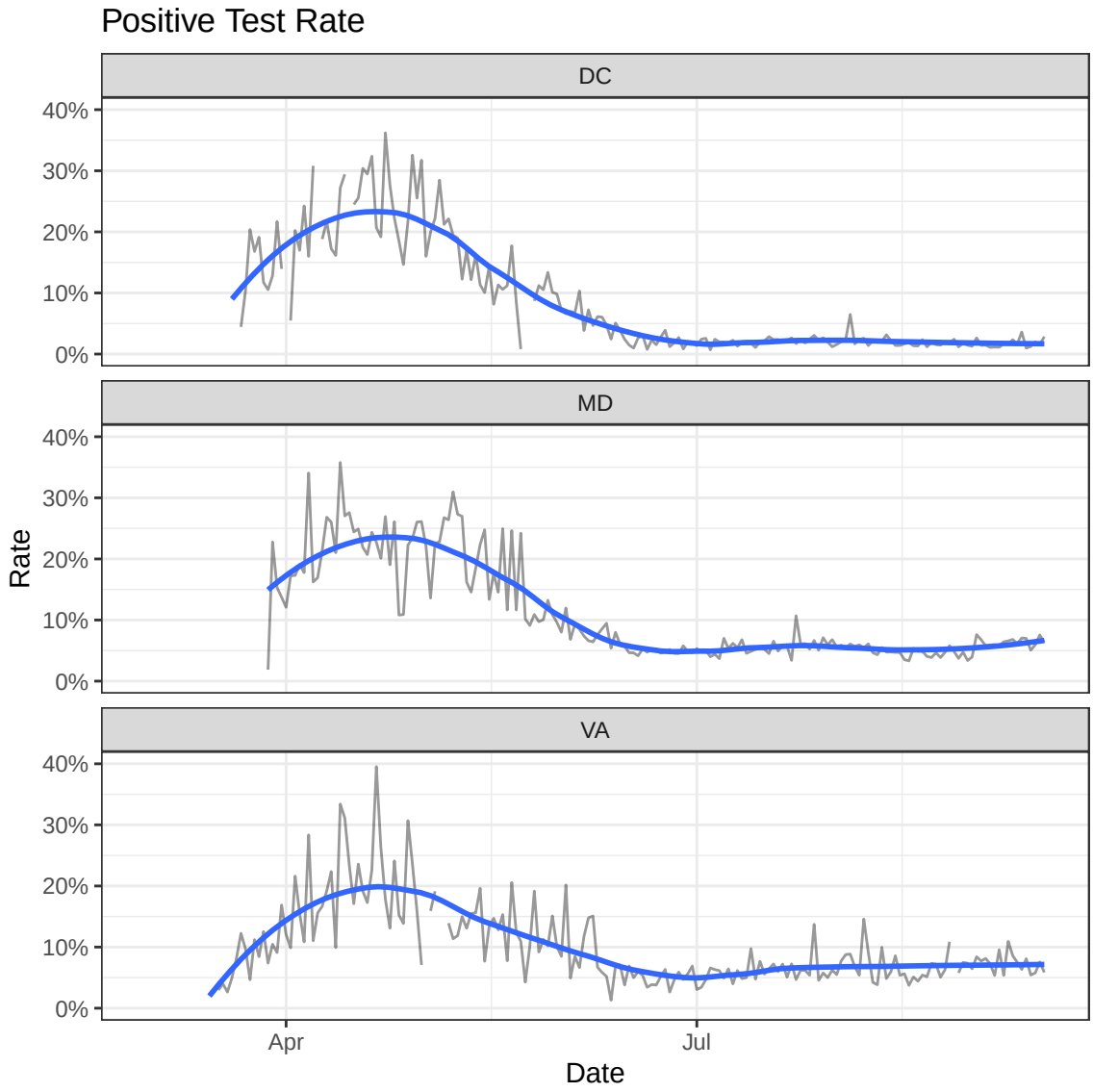

Cases per 1M
1,000
3,162
10,000
31,623


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
Apr
Jul
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
Apr
Jul
Date


Positive Test Rate
DC
MD
VA
40%
30%
20%
10%
0%
Rate
Apr
Jul
Date