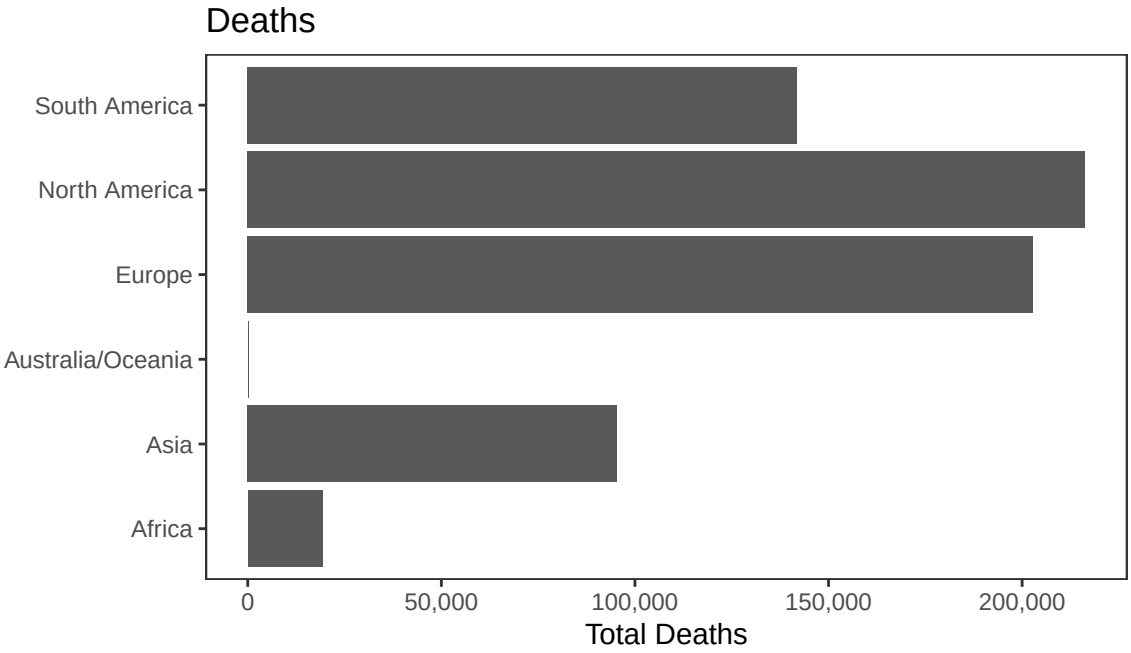
Erik's Covid-19 Chart Pack

Data updated 2020-07-31 18:41:55. 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 17,463,497 confirmed Covid-19 cases and 675,963 deaths worldwide.



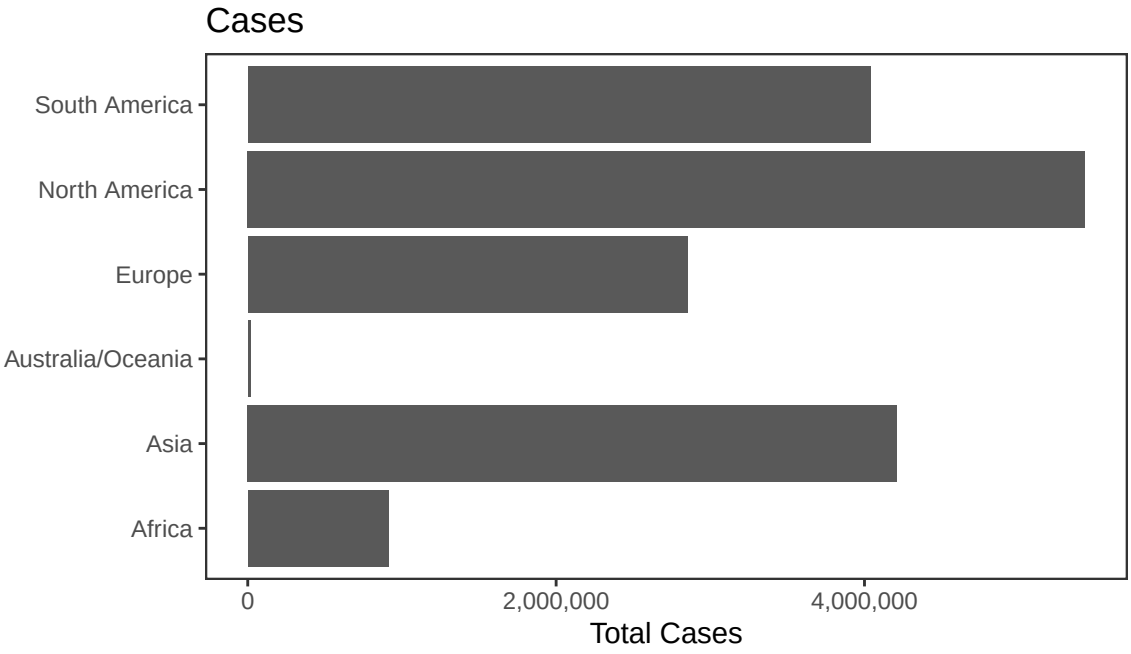
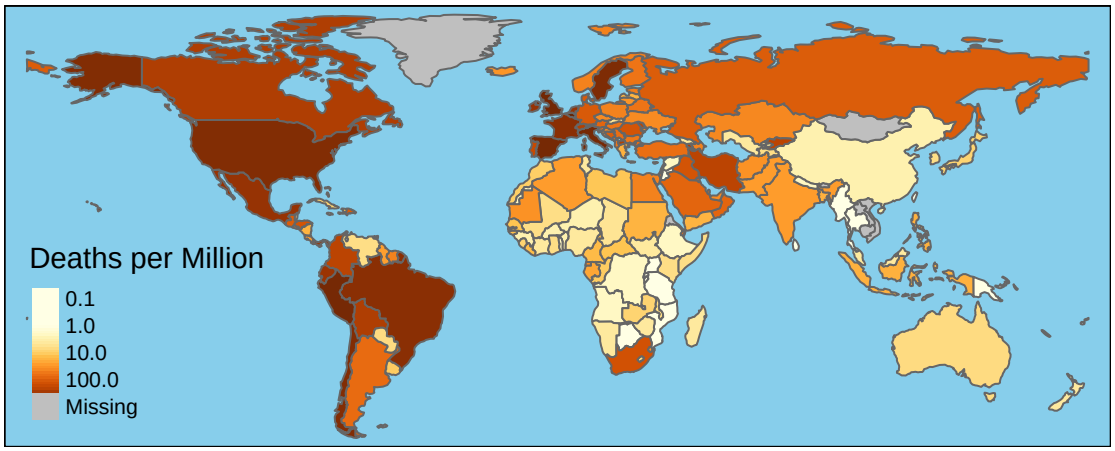
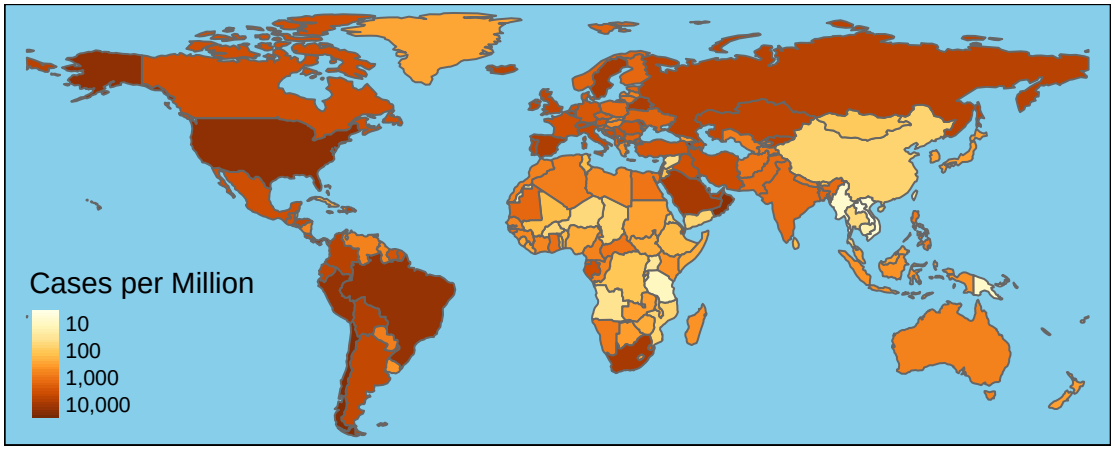
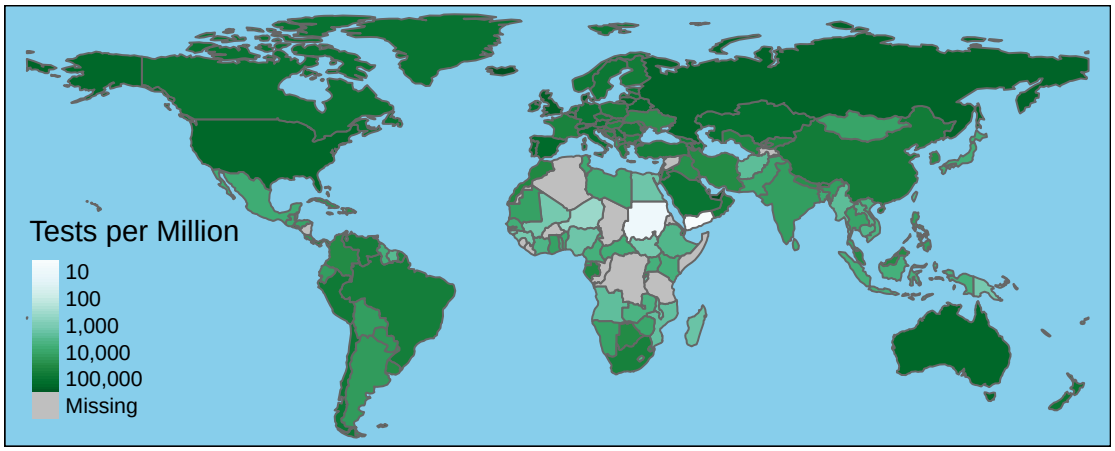


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	4,634,985	155,285	68,569	1,465
Brazil	2,613,789	91,377	58,271	1,189
India	1,639,350	35,786	54,966	783
Russia	834,499	13,802	5,509	129
South Africa	482,169	7,812	11,046	315
Mexico	408,449	45,361	5,752	485
Peru	407,492	19,021	6,809	205
Chile	353,536	9,377	1,961	99
Spain	332,510	28,443	2,789	2
UK	302,301	45,999	846	38
Iran	301,530	16,569	2,621	226
Colombia	286,020	9,810	9,965	356
Pakistan	277,402	5,924	1,114	32
Saudi Arabia	274,219	2,842	1,629	26
Italy	247,158	35,132	382	3
Bangladesh	234,889	3,083	2,695	48
Turkey	229,891	5,674	967	15
Germany	209,653	9,221	842	9
France	186,573	30,254	1,377	16
Argentina	185,373	3,441	6,377	153


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
Missing

National Data

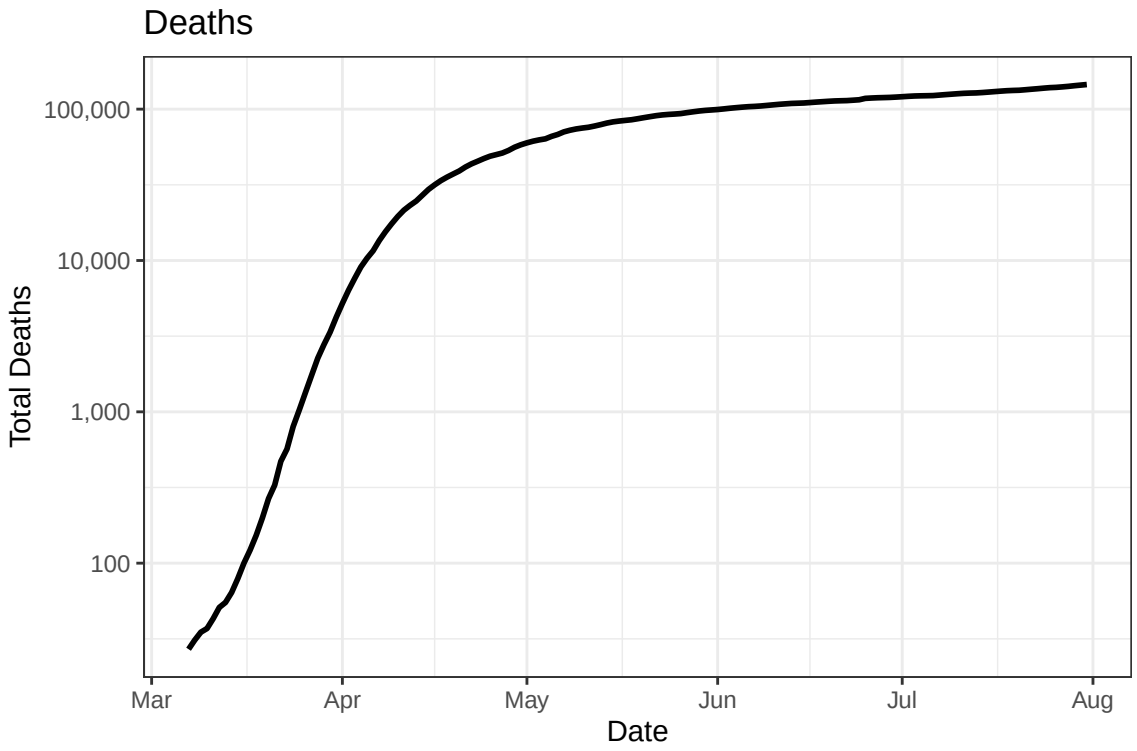
There have been 4,535,607 confirmed Covid-19 cases and 145,447 deaths in the United States.

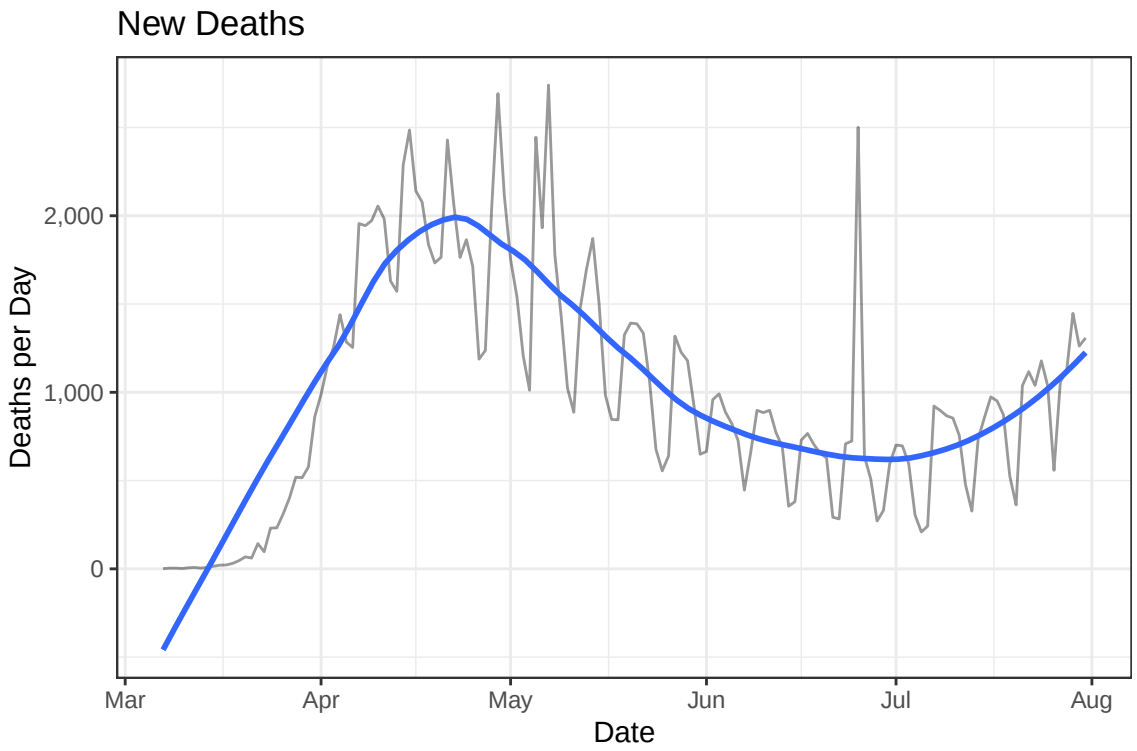
Table 2: U.S. Deaths and Cases over the Last Two Weeks

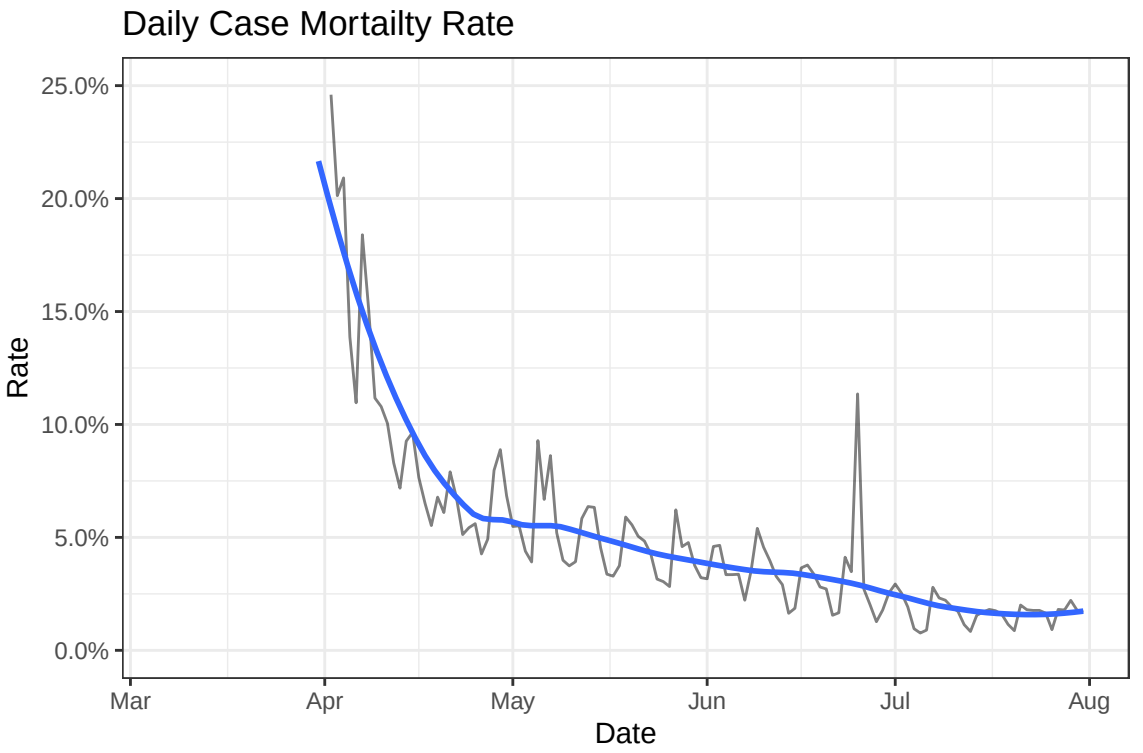
Date	Cases	Deaths	New Cases	New Deaths
2020-07-31	4,535,607	145,447	67,503	1,308
2020-07-30	4,468,104	144,139	69,718	1,262
2020-07-29	4,398,386	142,877	66,969	1,447
2020-07-28	4,331,417	141,430	56,229	1,121
2020-07-27	4,275,188	140,309	55,134	1,059
2020-07-26	4,220,054	139,250	61,713	558
2020-07-25	4,158,341	138,692	65,413	1,037
2020-07-24	4,092,928	137,655	75,193	1,178
2020-07-23	4,017,735	136,477	71,027	1,039
2020-07-22	3,946,708	135,438	69,150	1,117
2020-07-21	3,877,558	134,321	63,642	1,038
2020-07-20	3,813,916	133,283	56,971	362
2020-07-19	3,756,945	132,921	64,884	526
2020-07-18	3,692,061	132,395	65,180	872

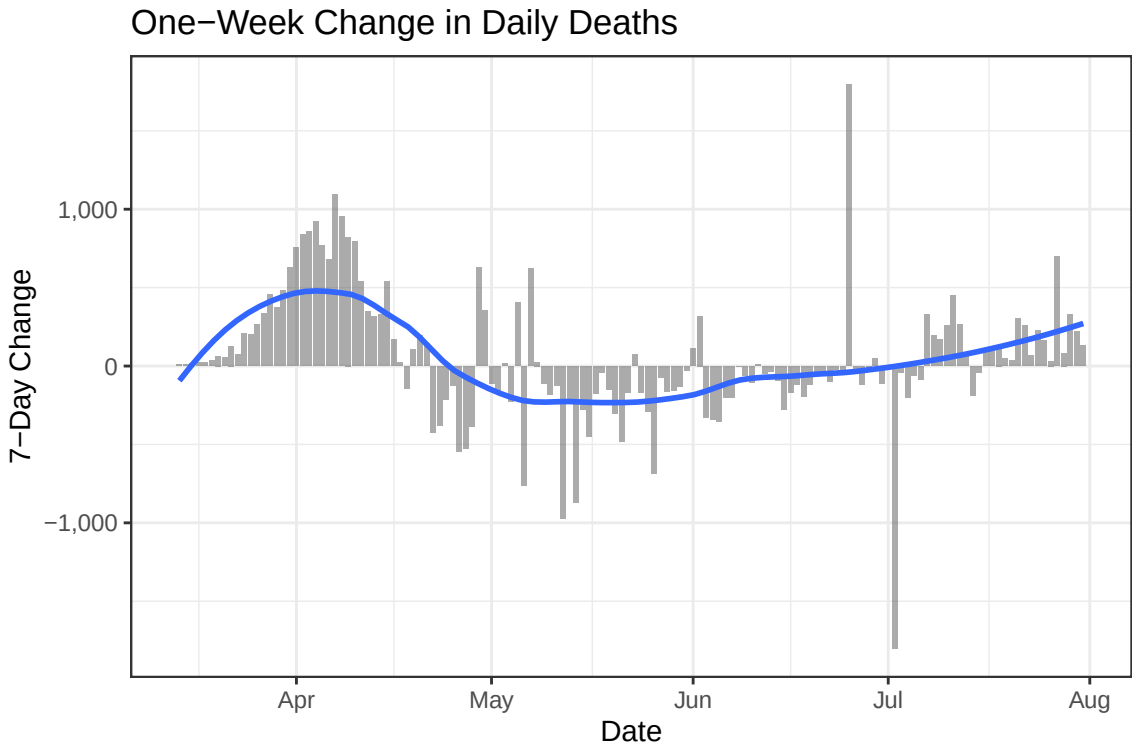
Deaths

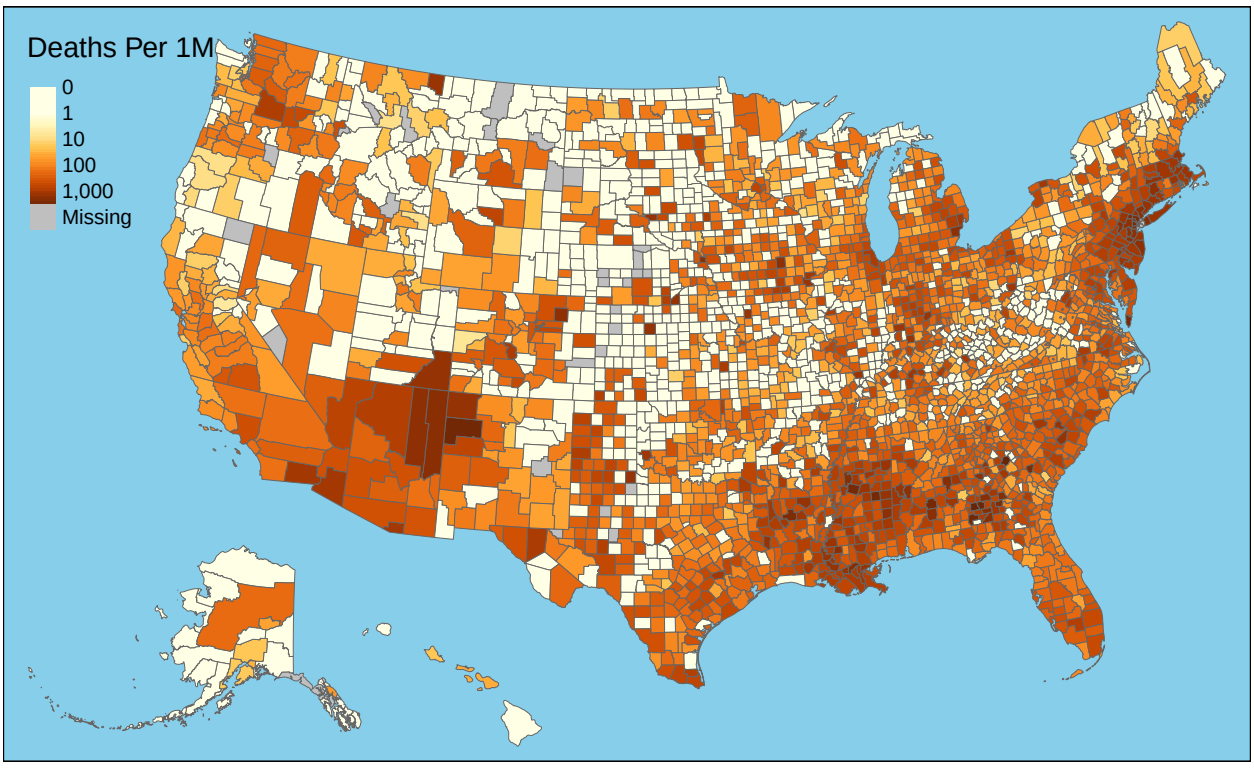
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator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





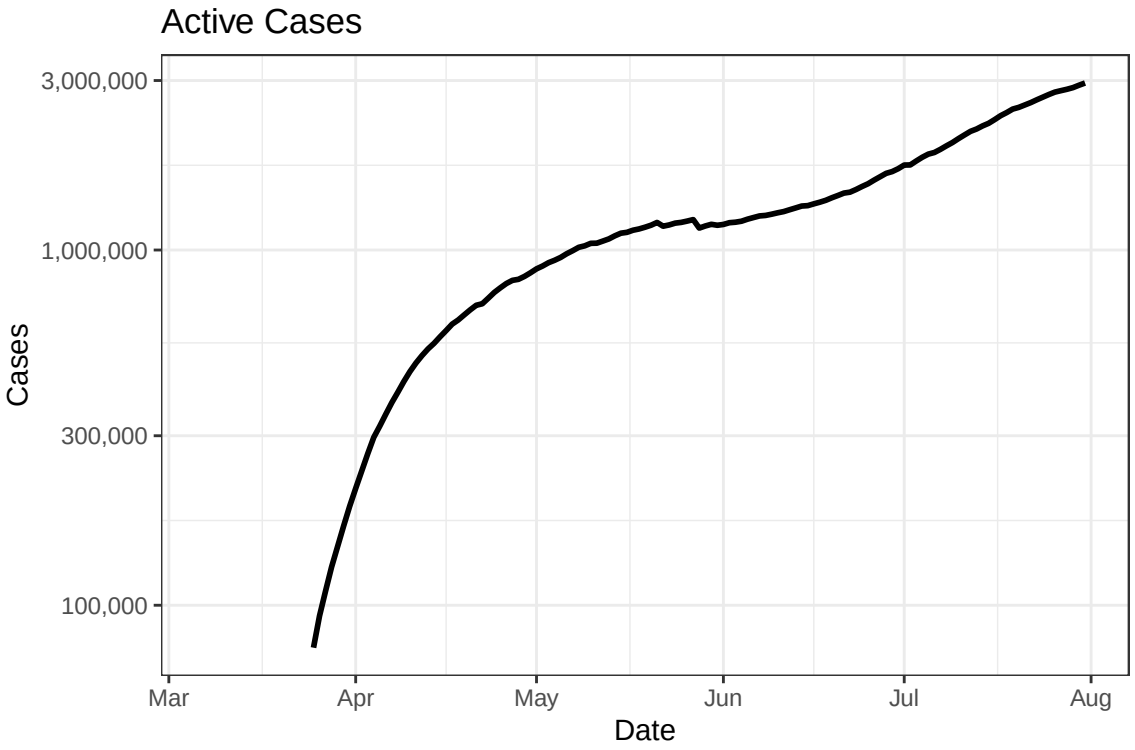

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Mar
Apr
May
Jun
Jul
Aug
Date

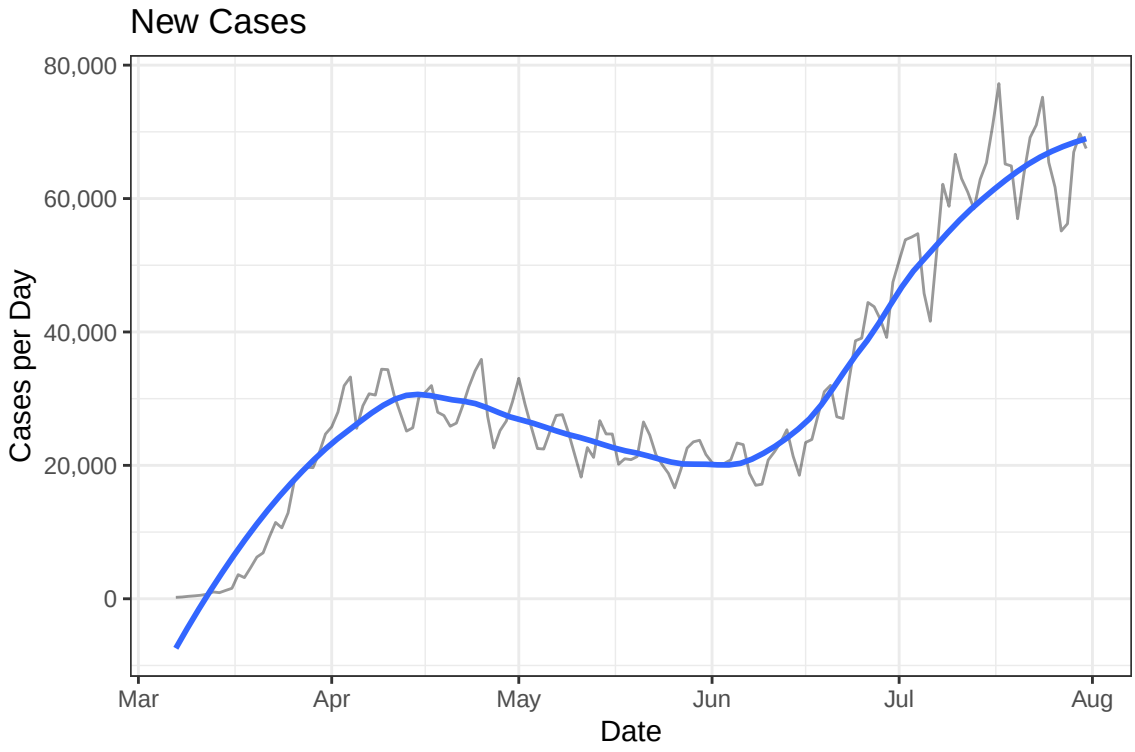

One−Week Change in Daily Deaths
1,000
0
−1,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

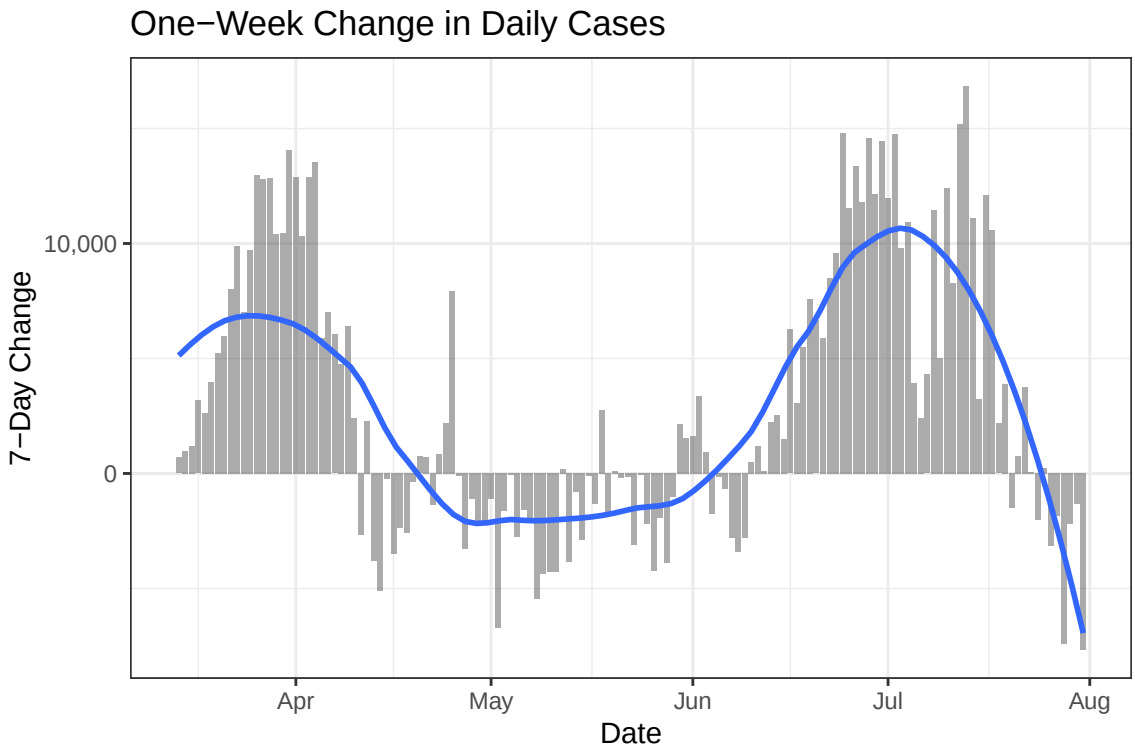

Deaths Per 1M
0
1
10
100
1,000
Missing

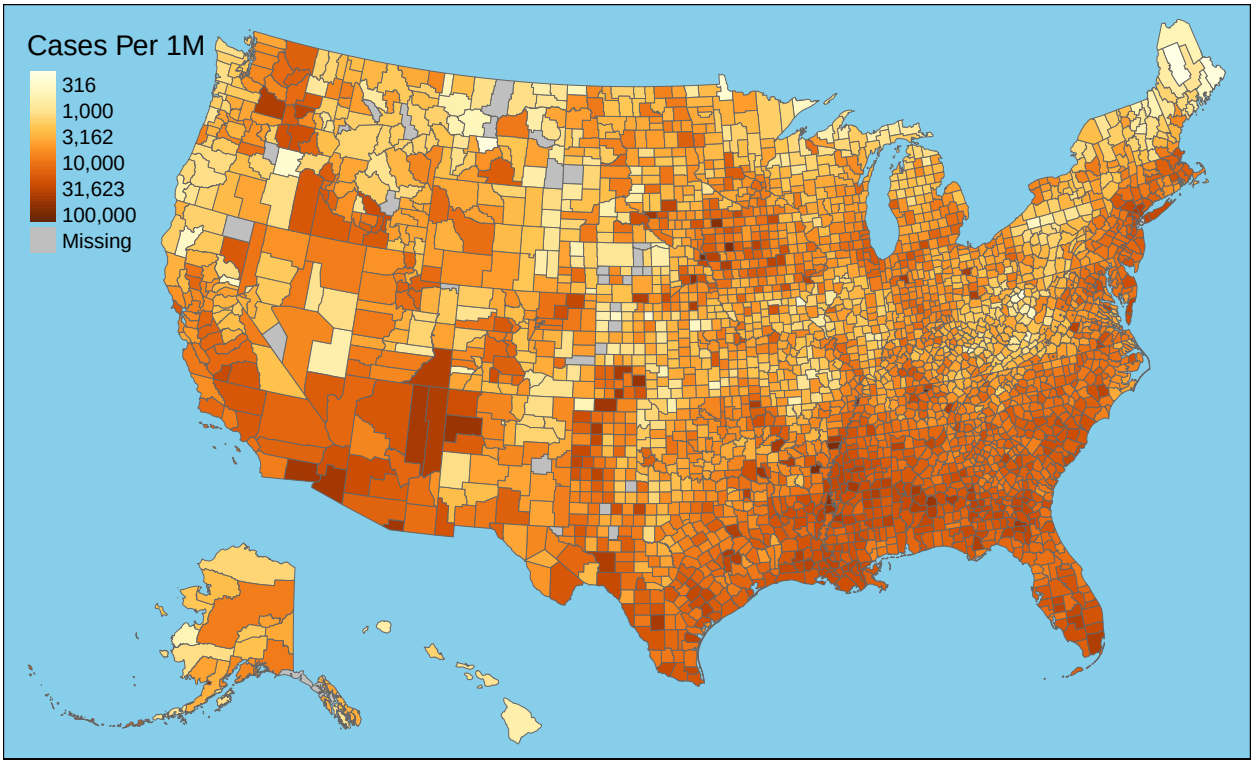
Cases

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



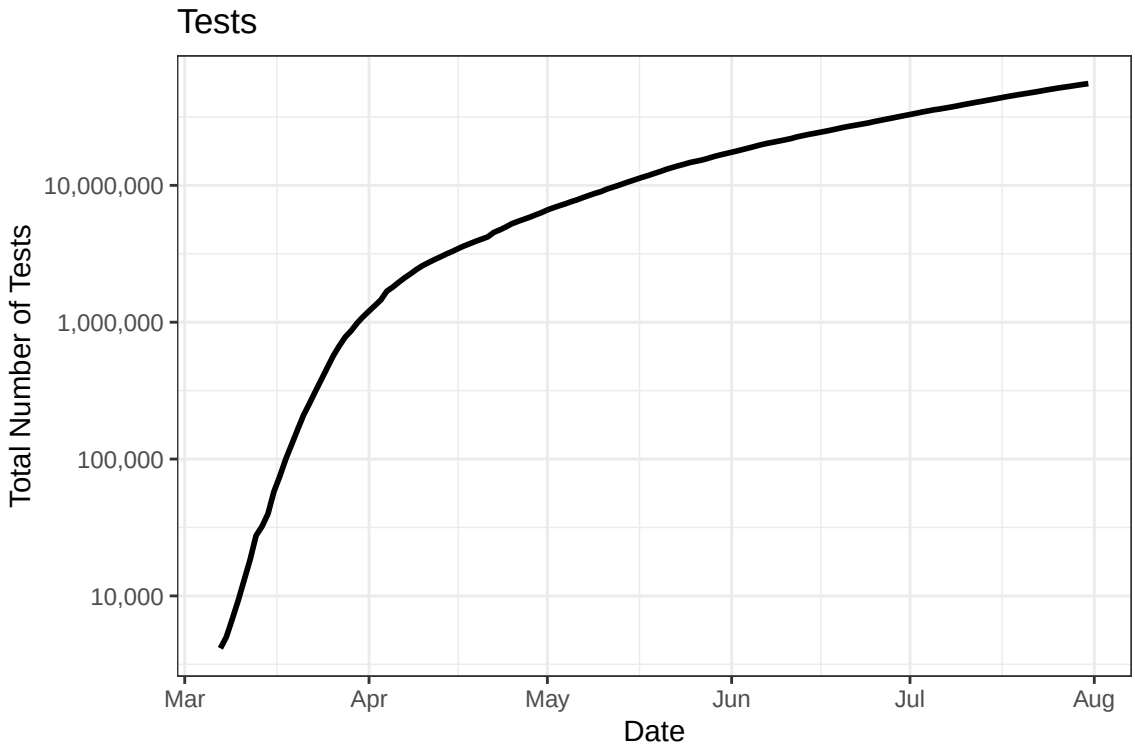


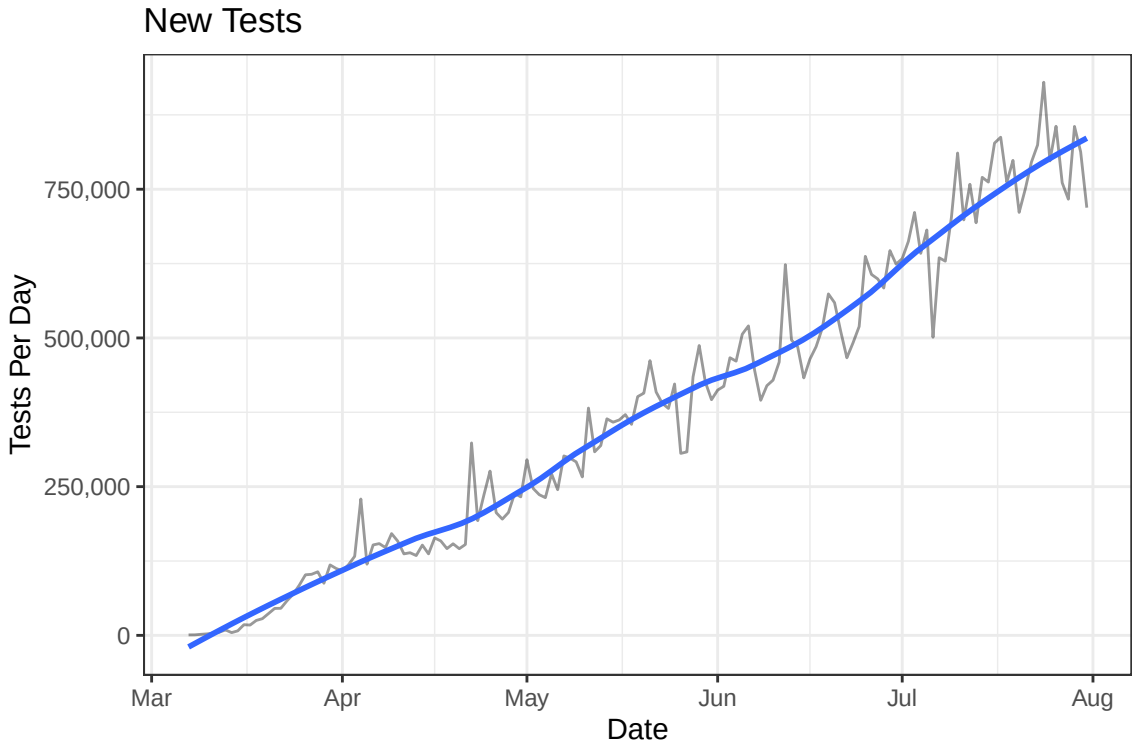

One−Week Change in Daily Cases
7−Day Change
10,000
0
Apr
May
Jun
Jul
Aug
Date

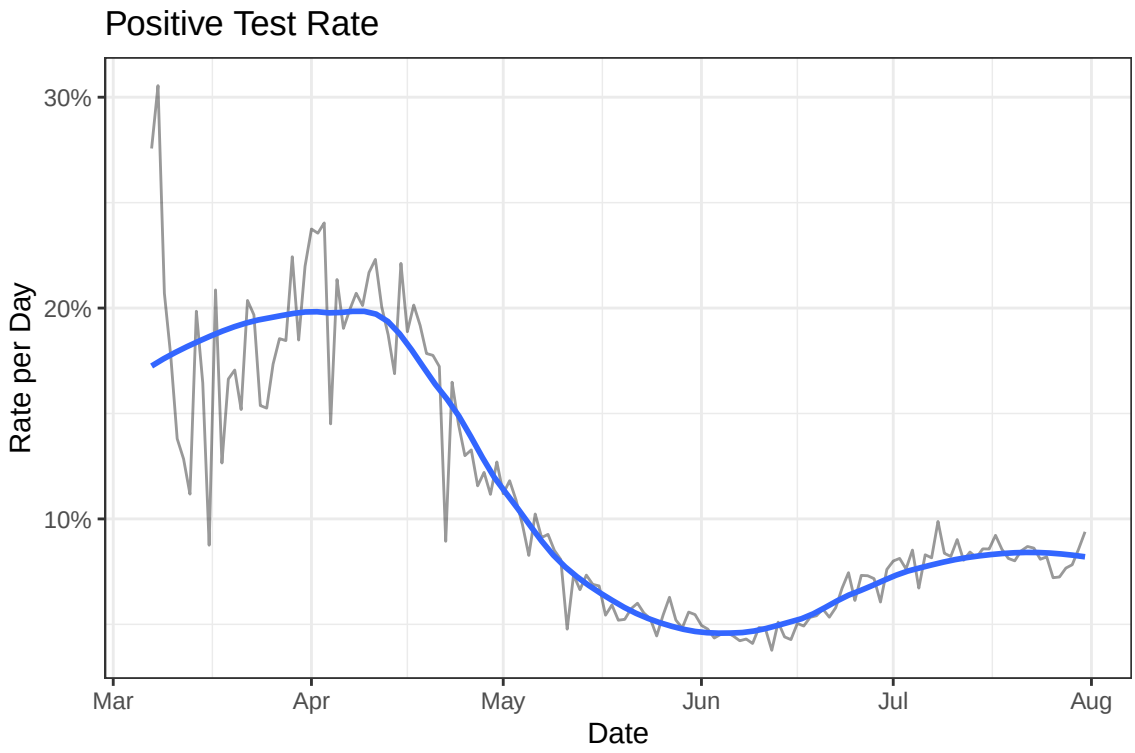

Cases Per 1M
316
1,000
3,162
10,000
31,623
100,000
Missing

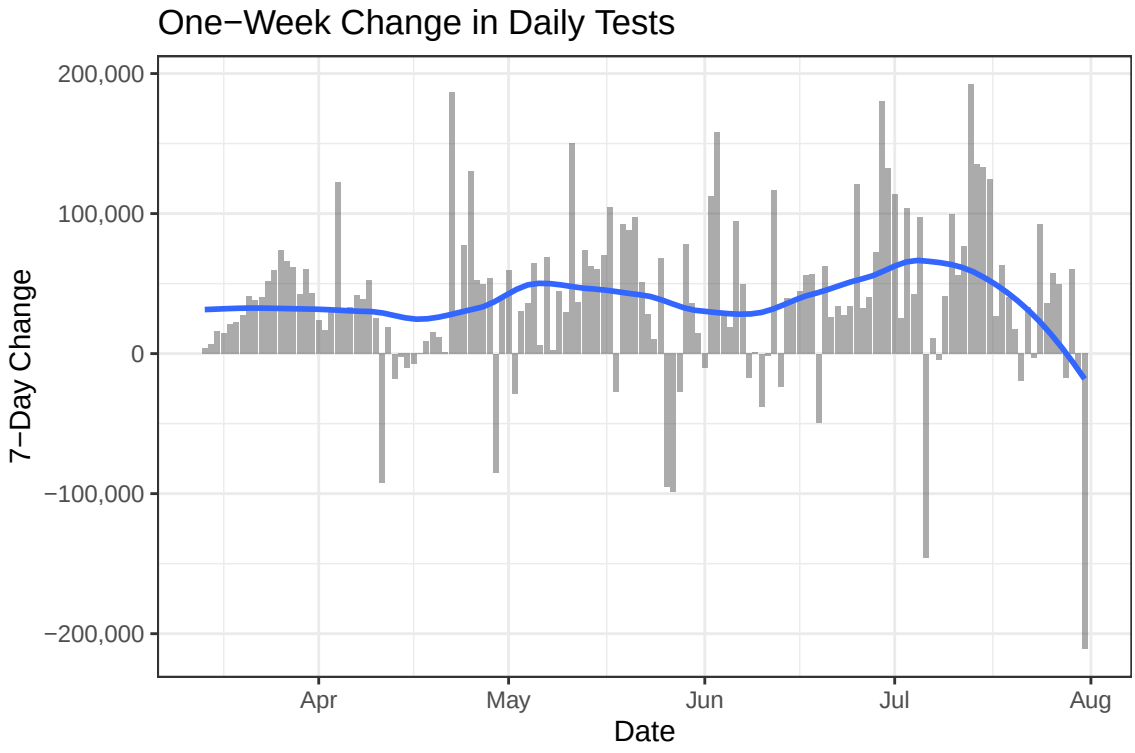
Testing

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.





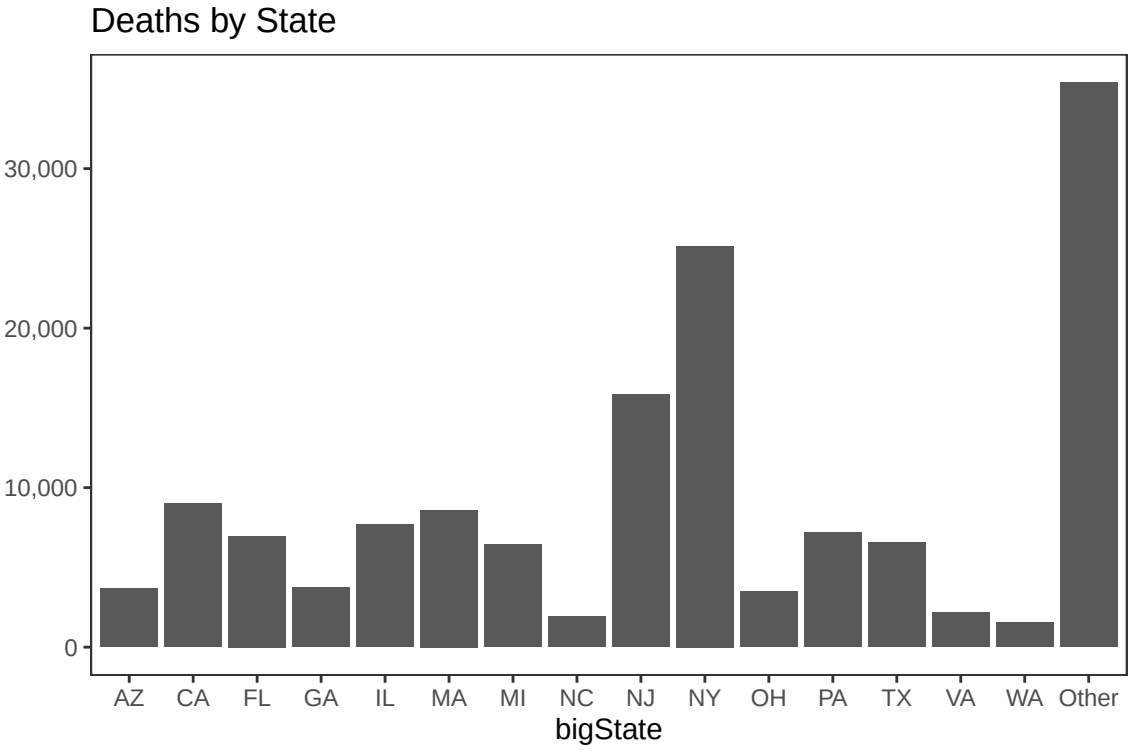

Positive Test Rate
30%
20%
10%
Rate per Day
Mar
Apr
May
Jun
Jul
Aug
Date

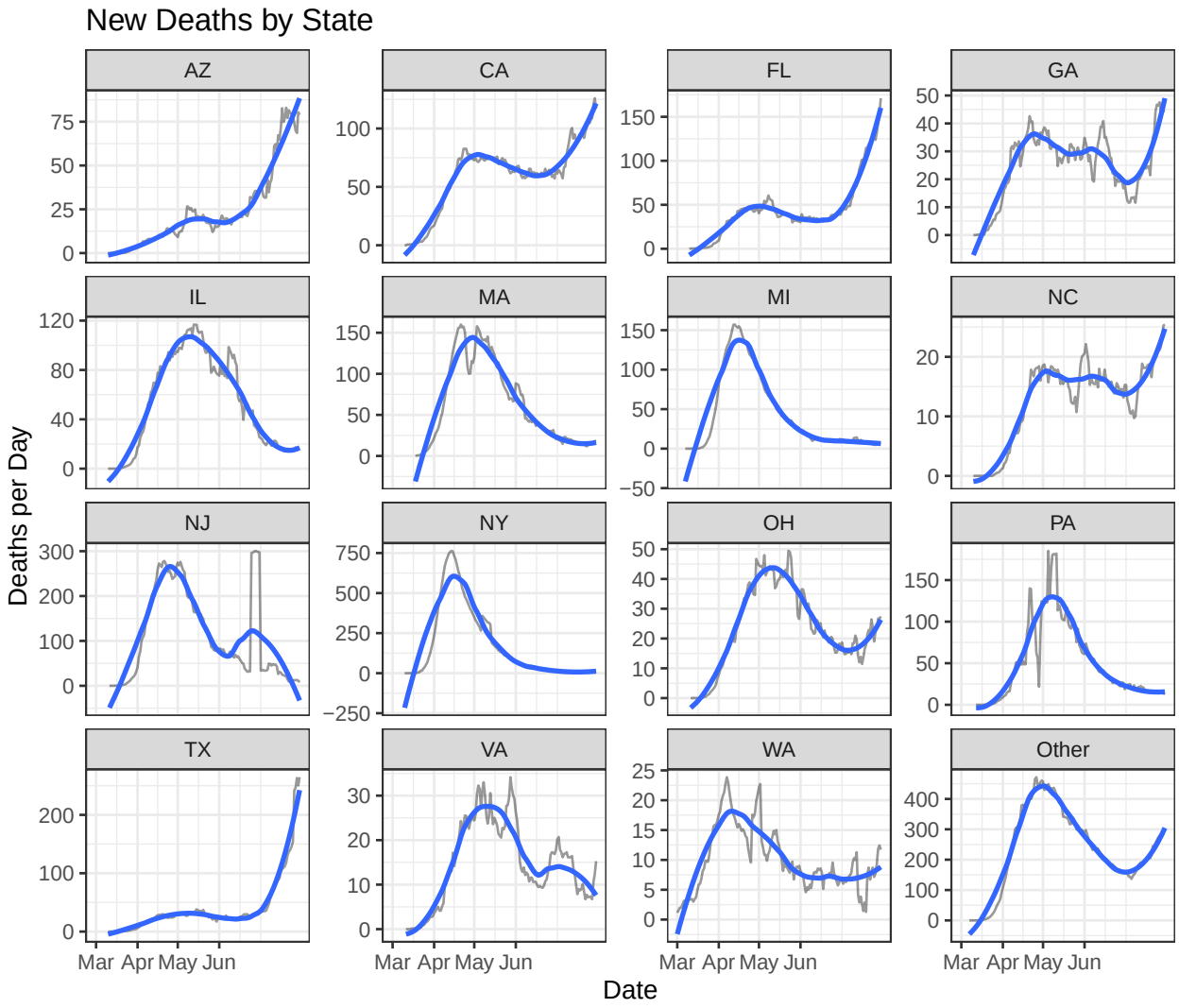

One−Week Change in Daily Tests
200,000
100,000
0
−100,000
−200,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

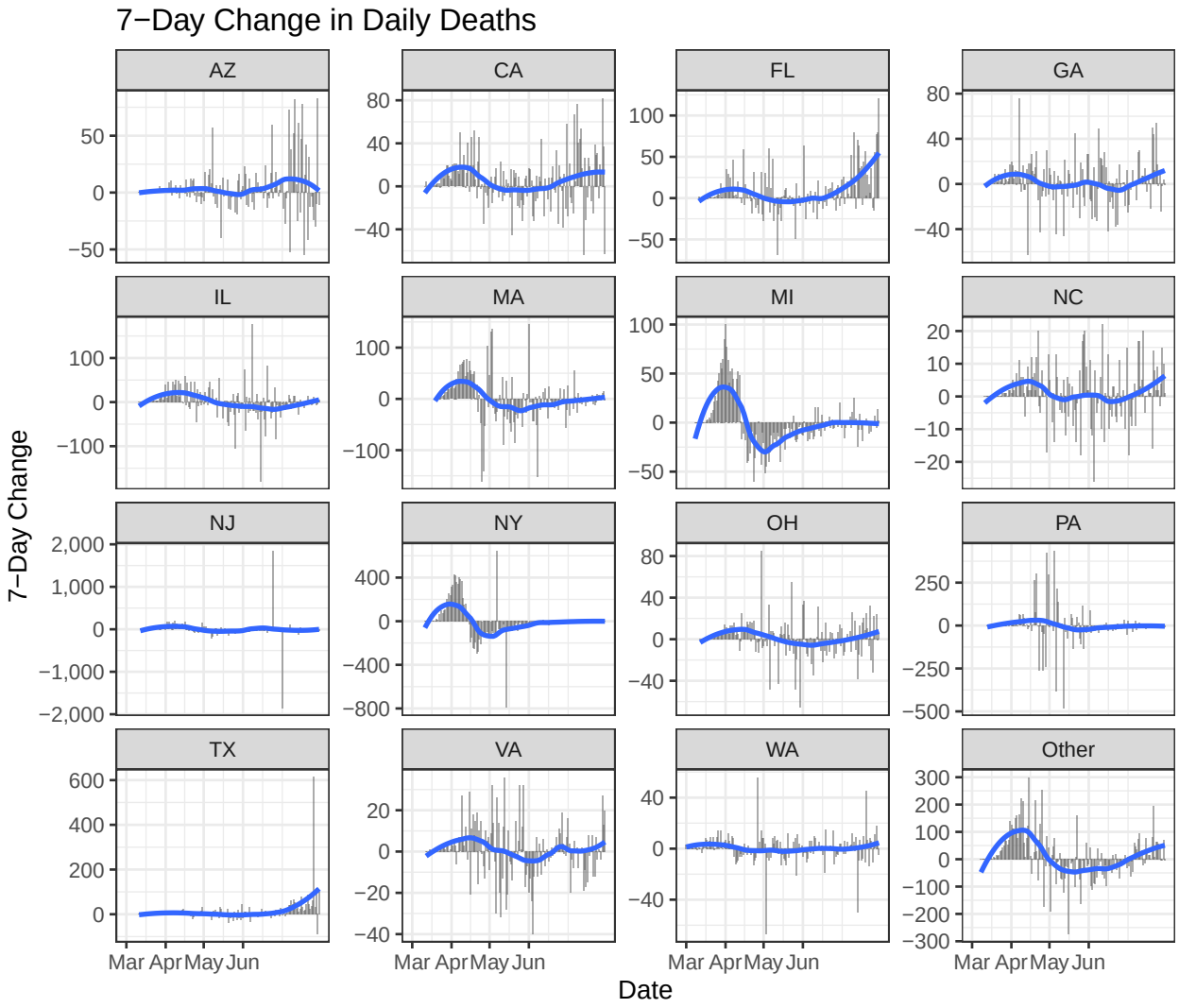
State Data

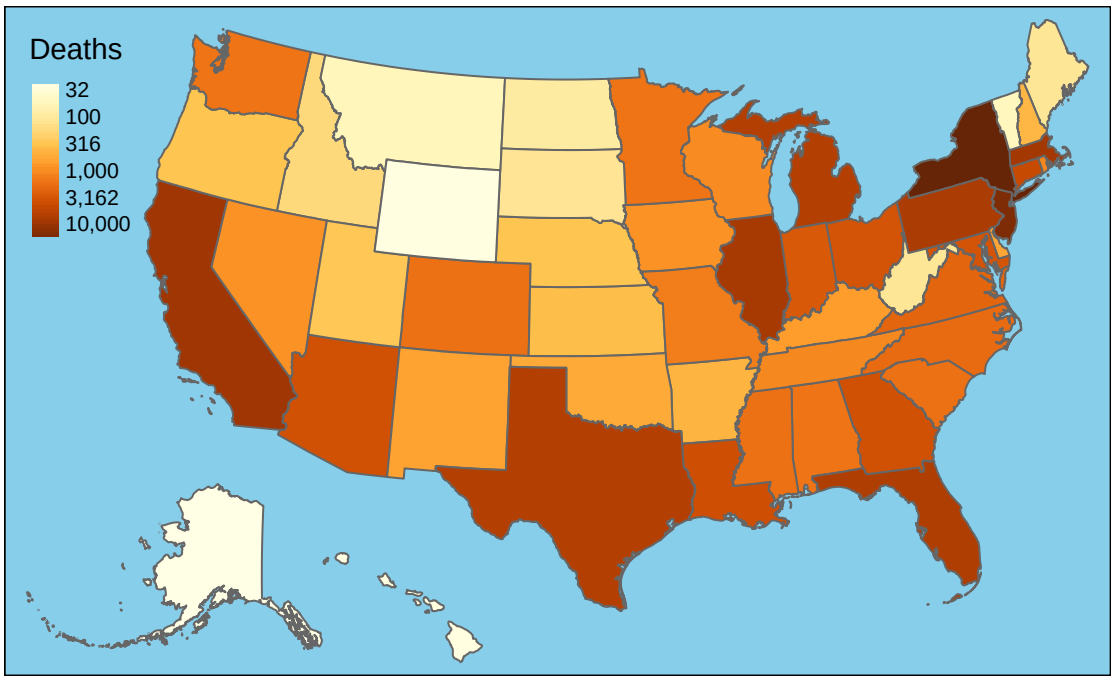
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

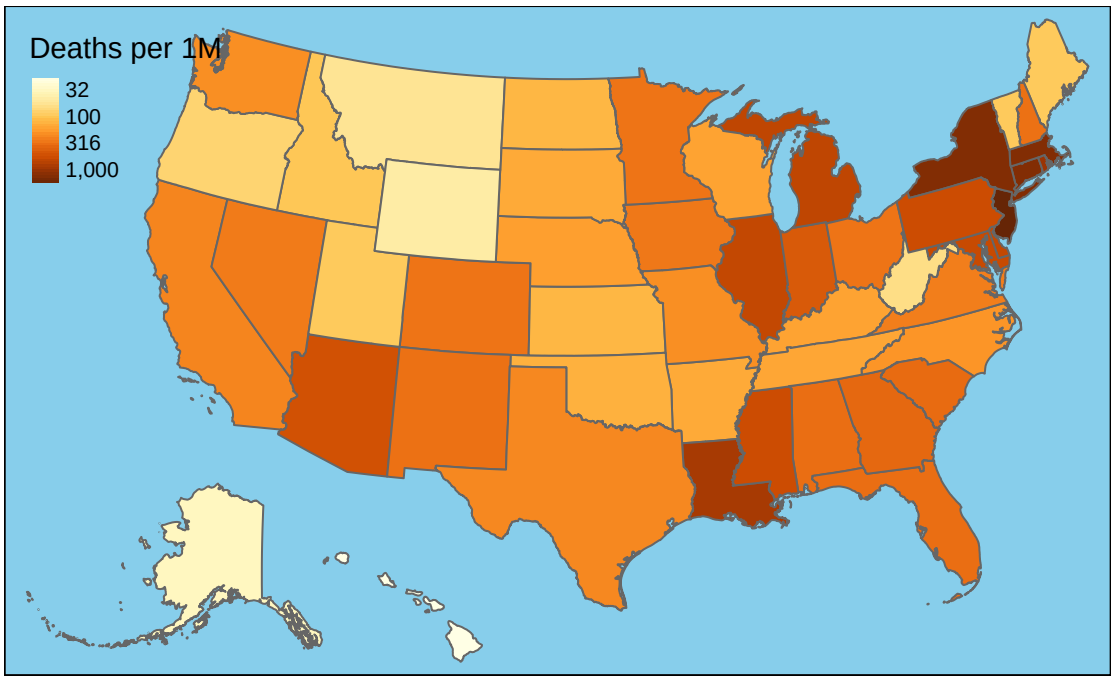
Deaths



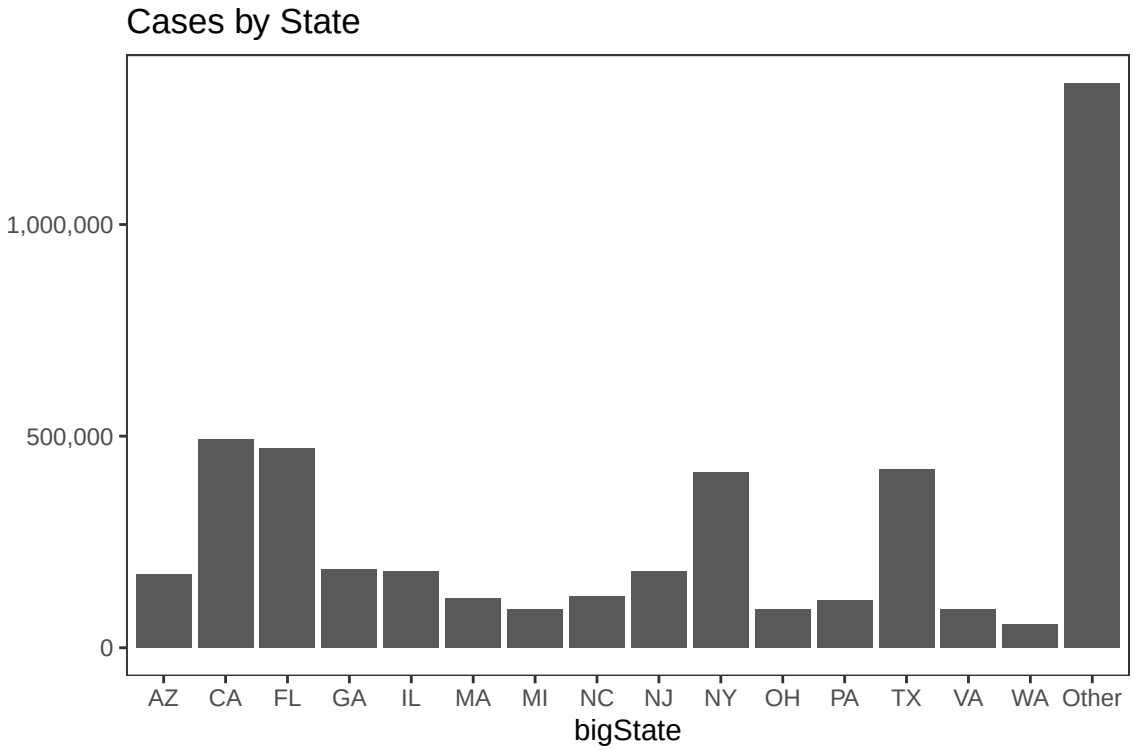

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Mar Apr May Jun
Date

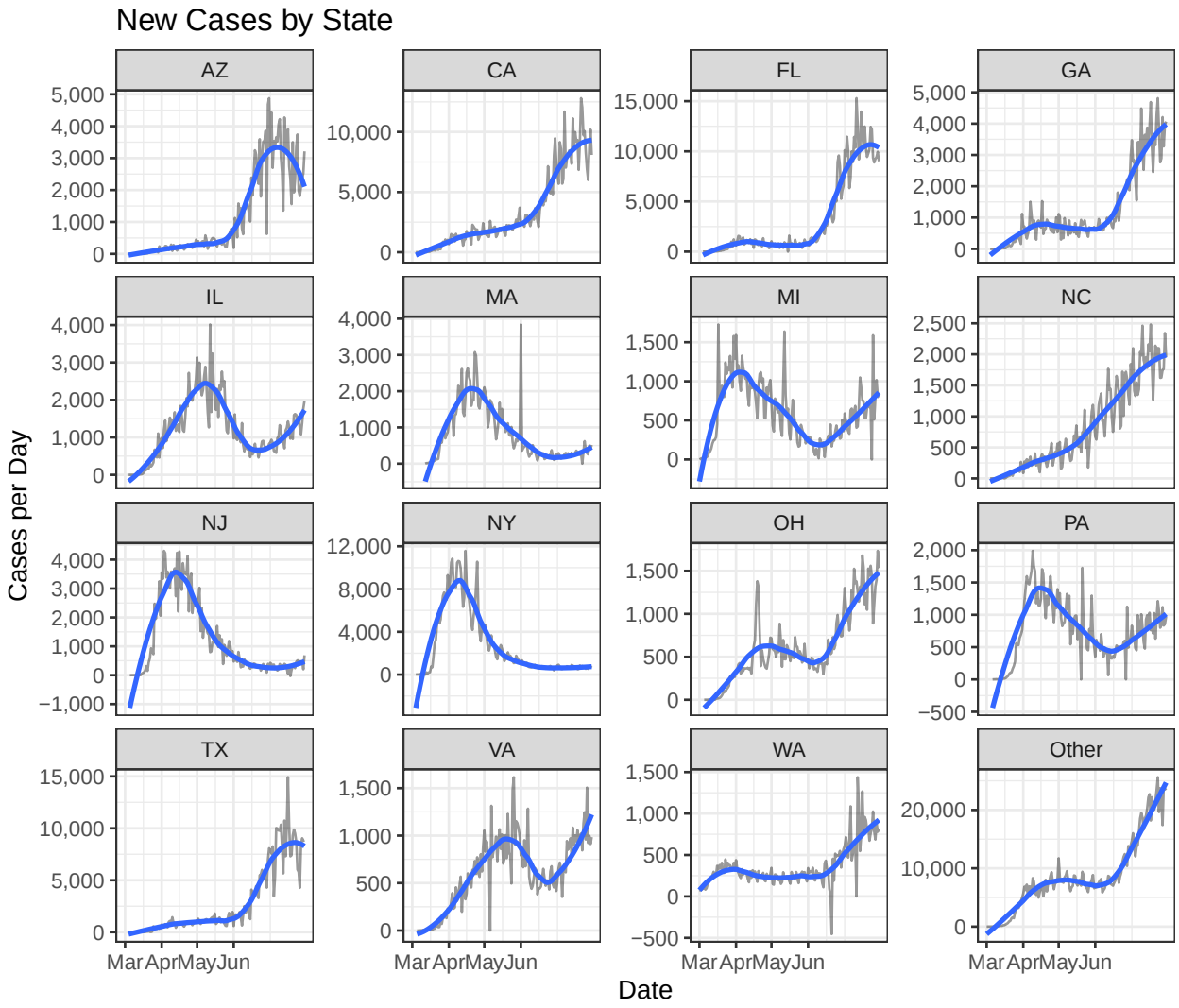

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Mar Apr May Jun
Date

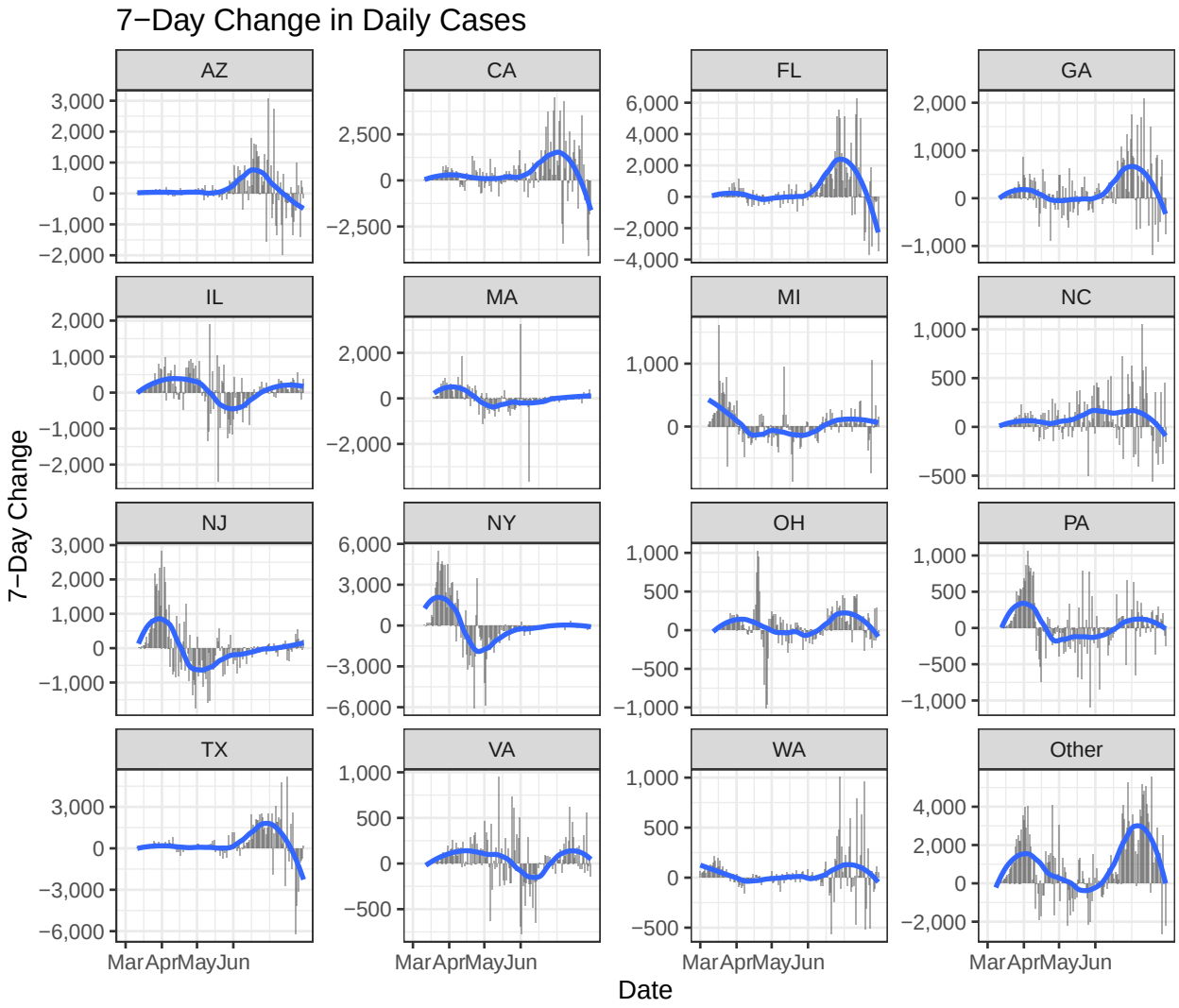

Deaths
32
100
316
1,000
3,162
10,000

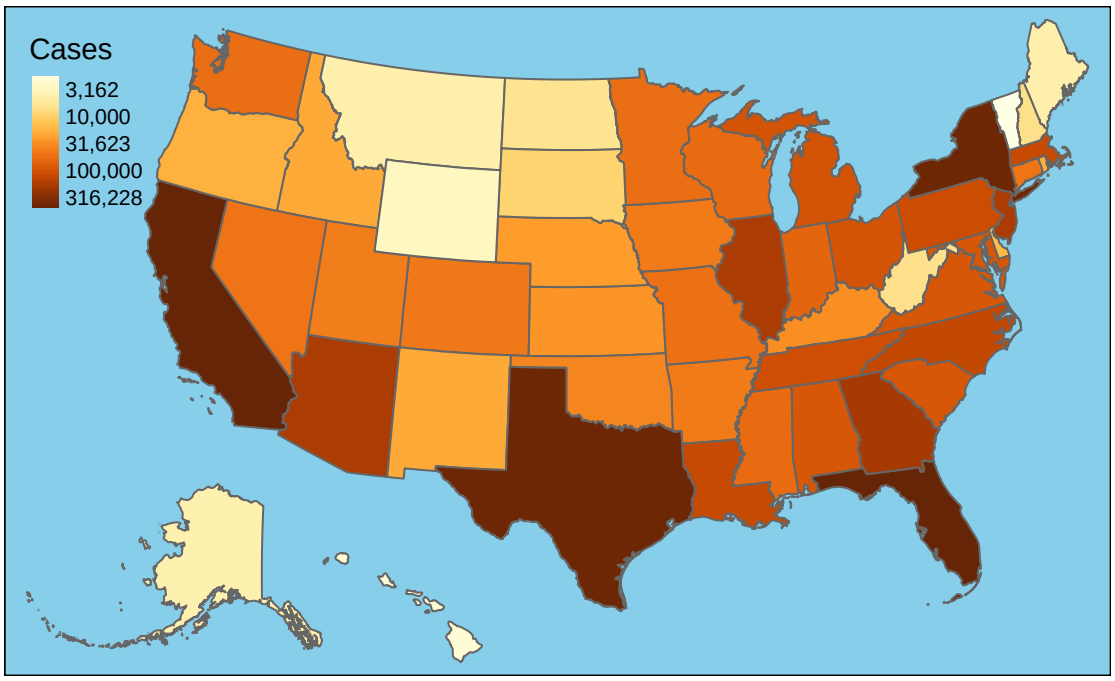

Deaths per 1M
32
100
316
1,000

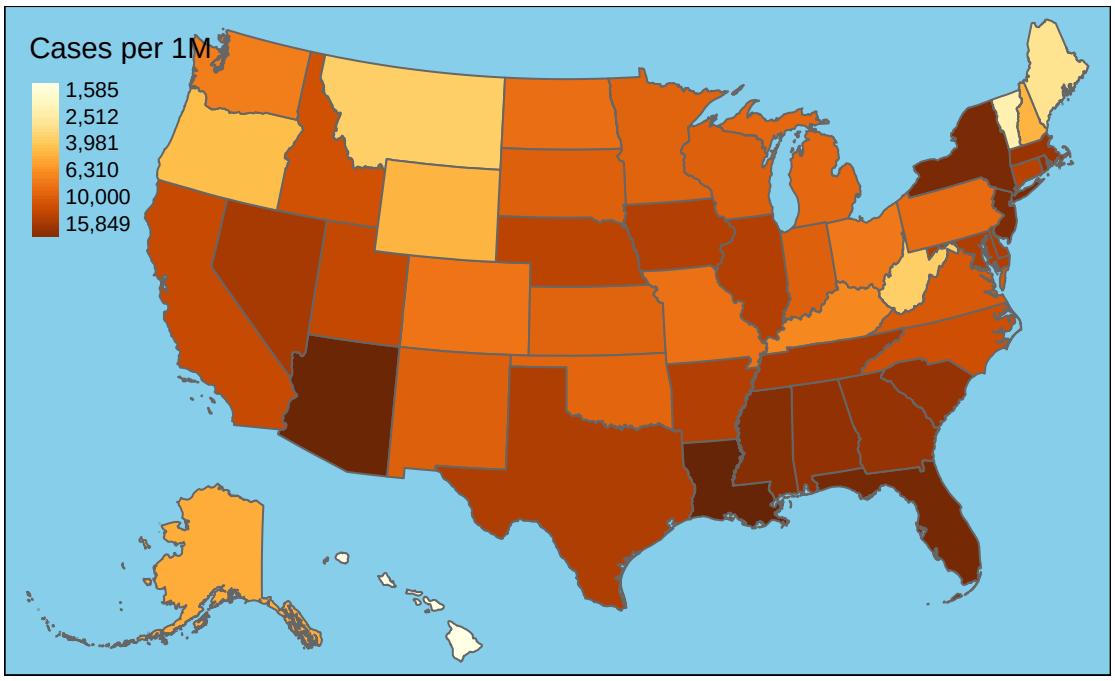
Cases


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

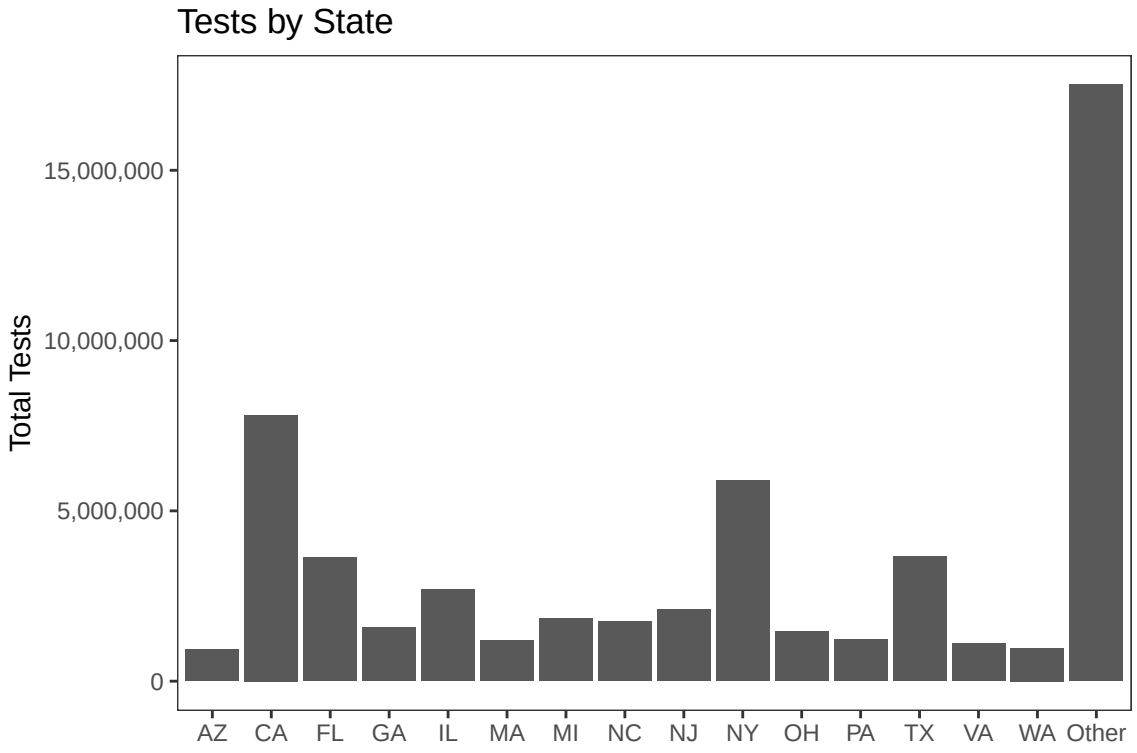

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Date
Mar
Apr
May
Jun

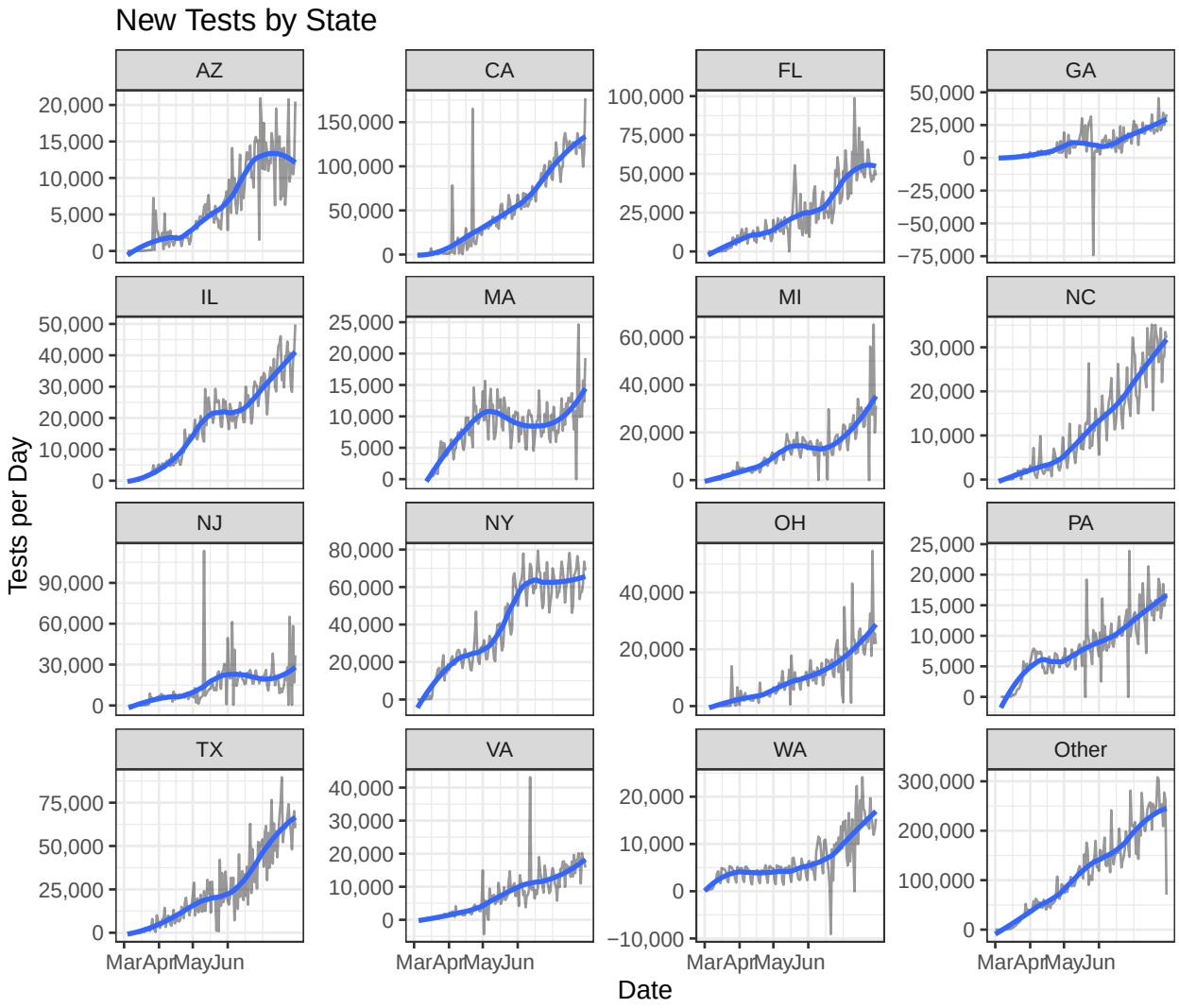

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Mar
Apr
May
Jun
Date

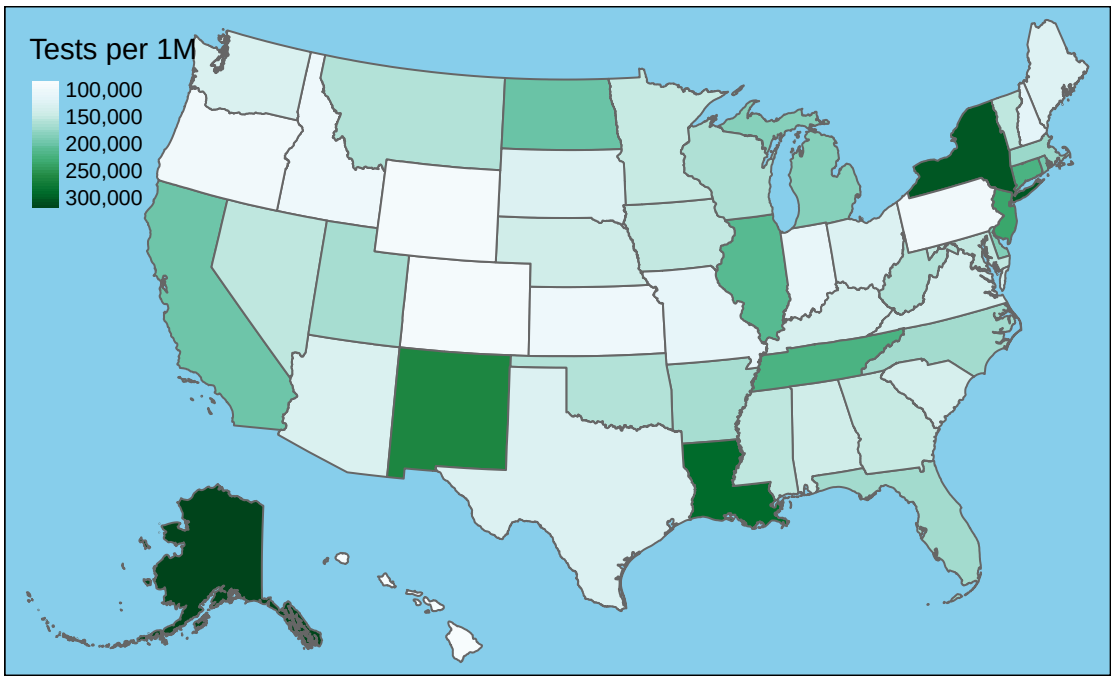

Cases
3,162
10,000
31,623
100,000
316,228

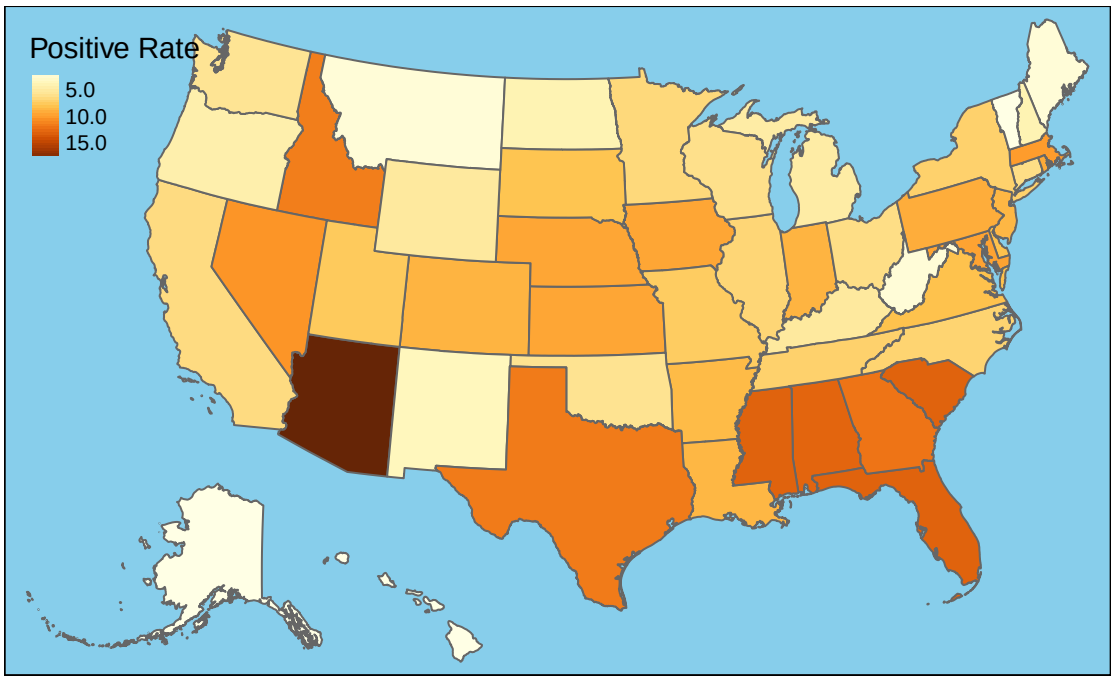

Cases per 1M
1,585
2,512
3,981
6,310
10,000
15,849

Testing

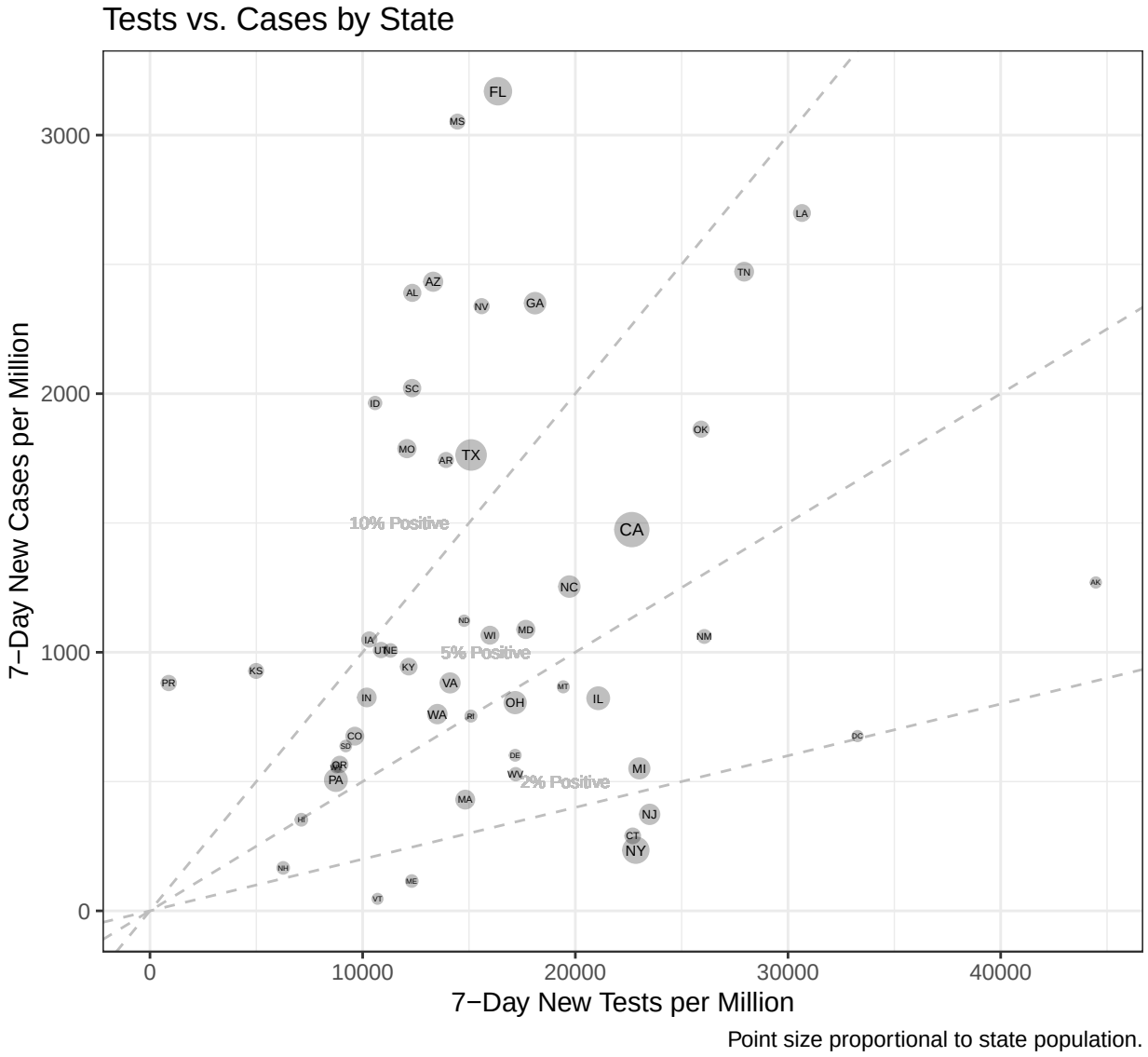

Tests by State
Total Tests
15,000,000
10,000,000
5,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


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
100,000
150,000
200,000
250,000
300,000


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.



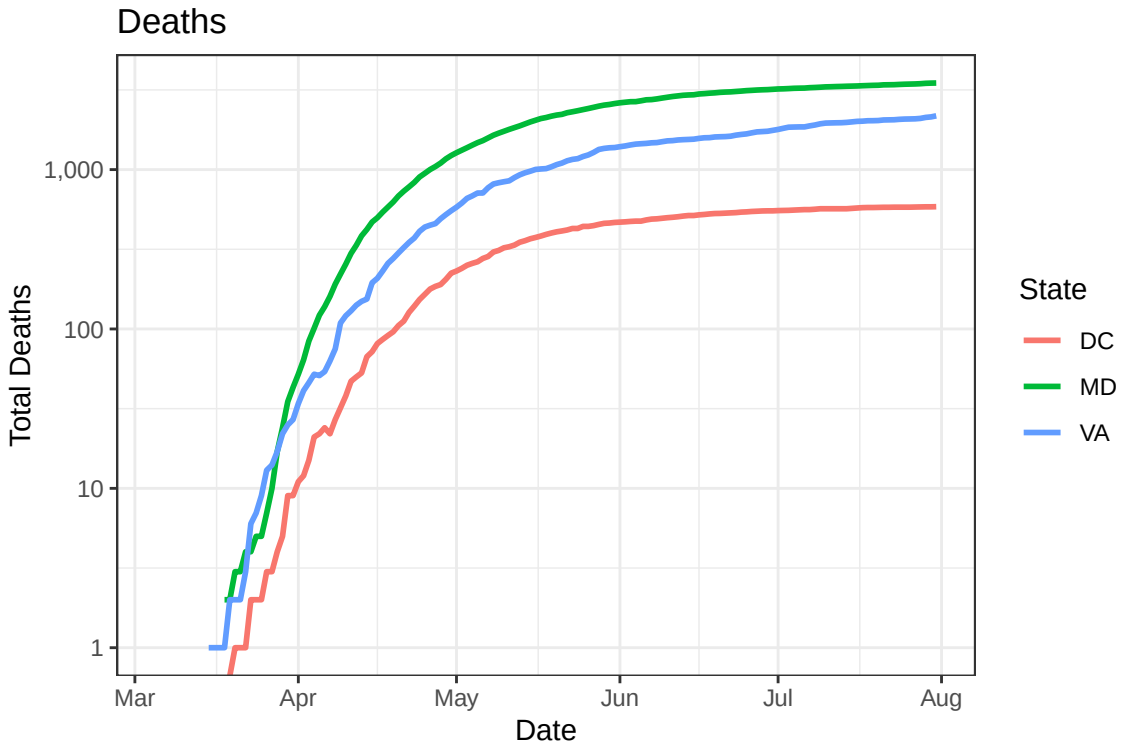
Local Data

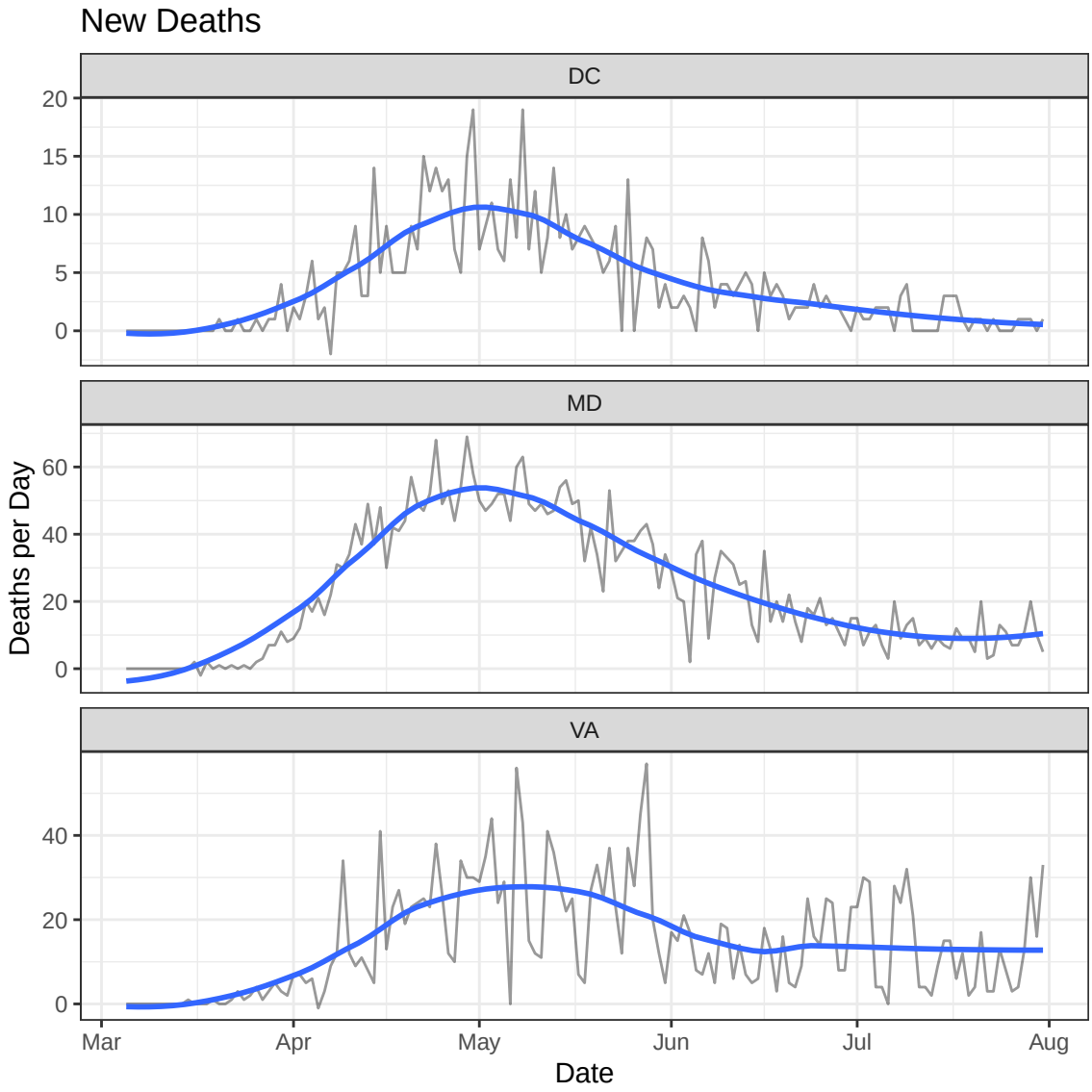
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

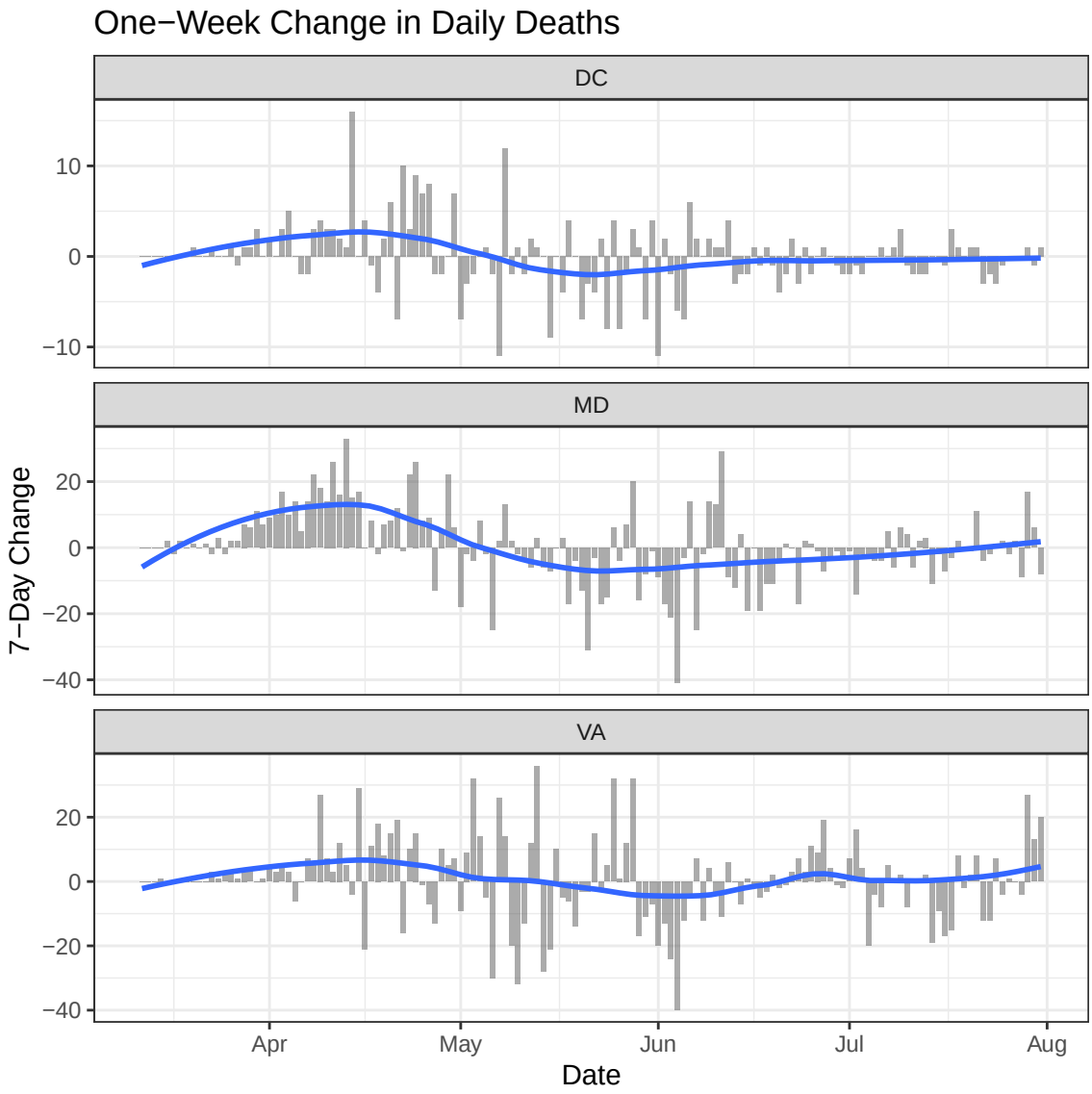
Table 3: Latest Local Data

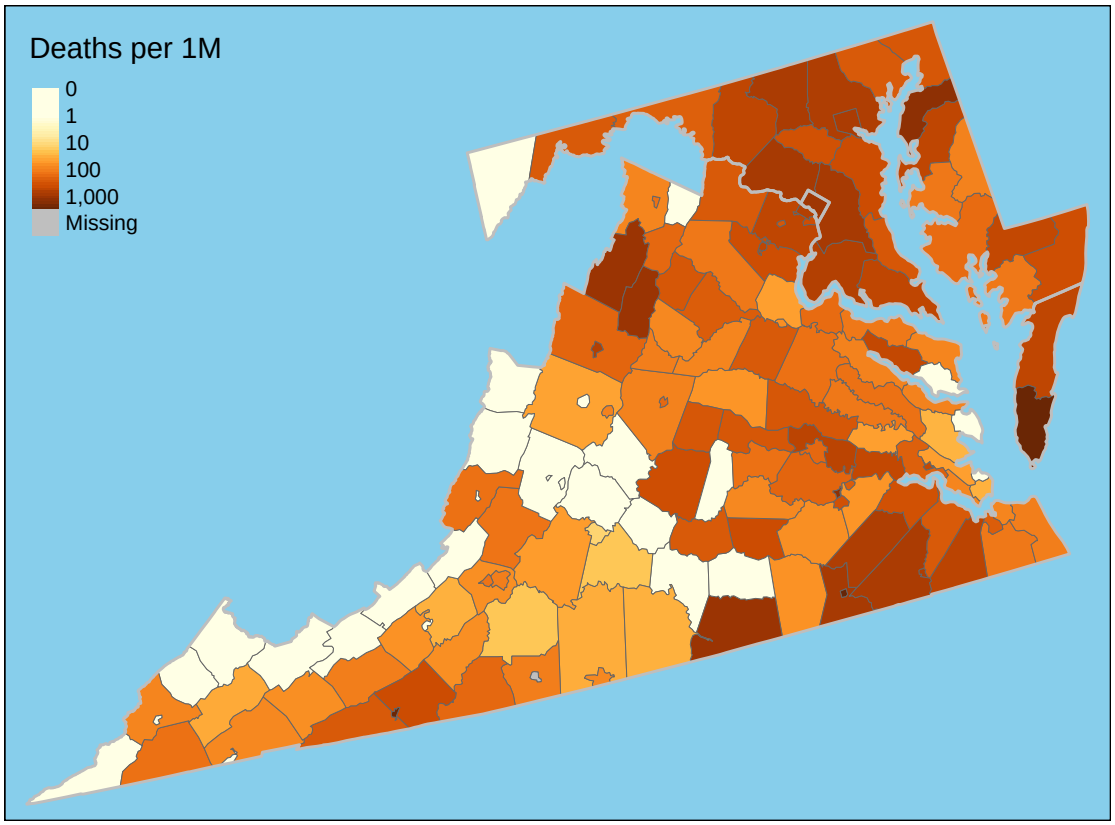
State	Cases	Deaths	New Cases	New Deaths
DC	12,126	585	69	1
MD	88,346	3,493	1,169	5
VA	89,888	2,174	984	33

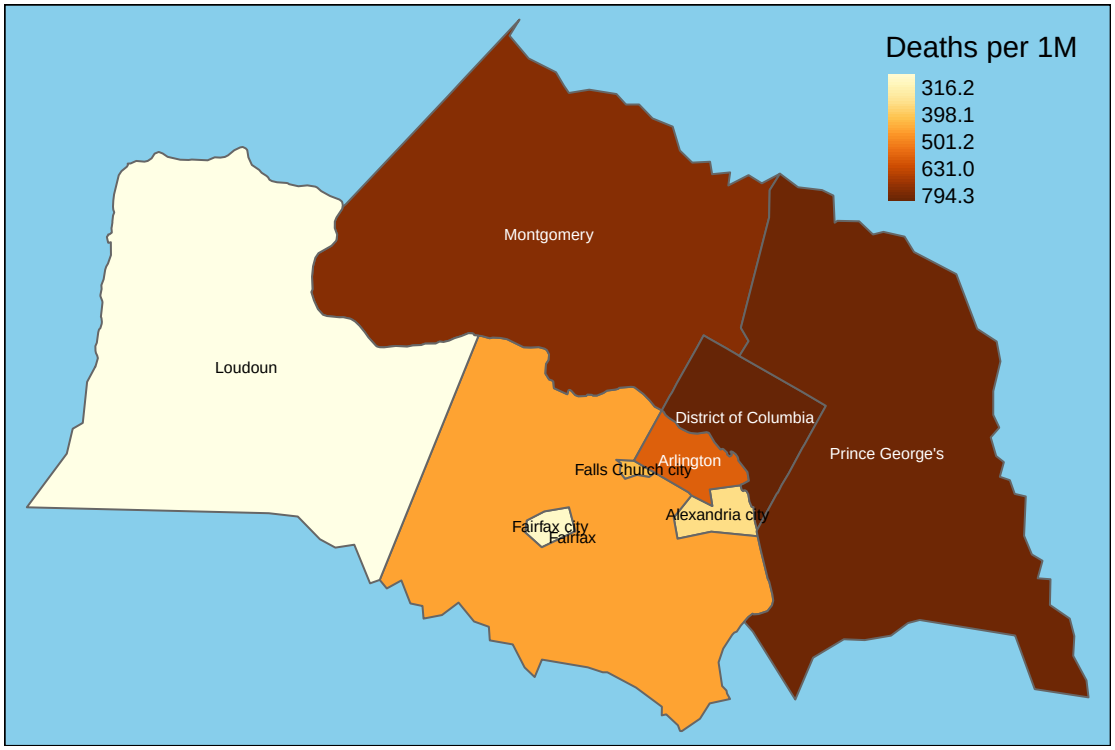
Deaths


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

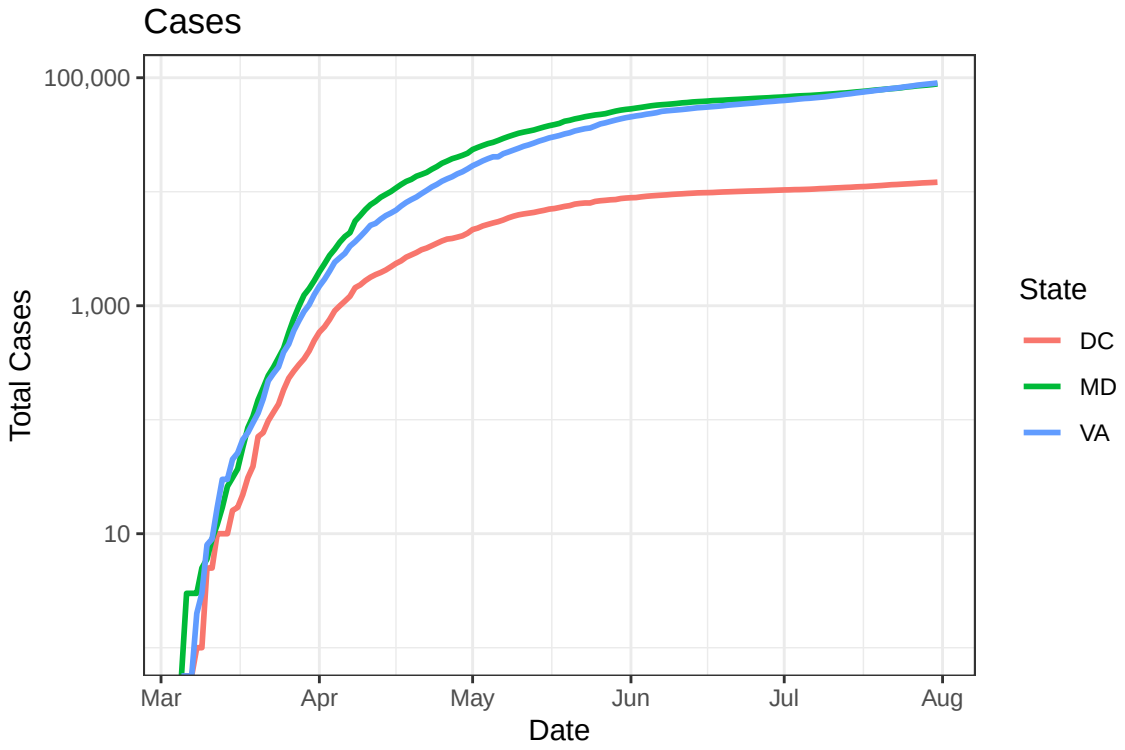

New Deaths
DC
MD
VA
Deaths per Day
Date
Mar
Apr
May
Jun
Jul
Aug

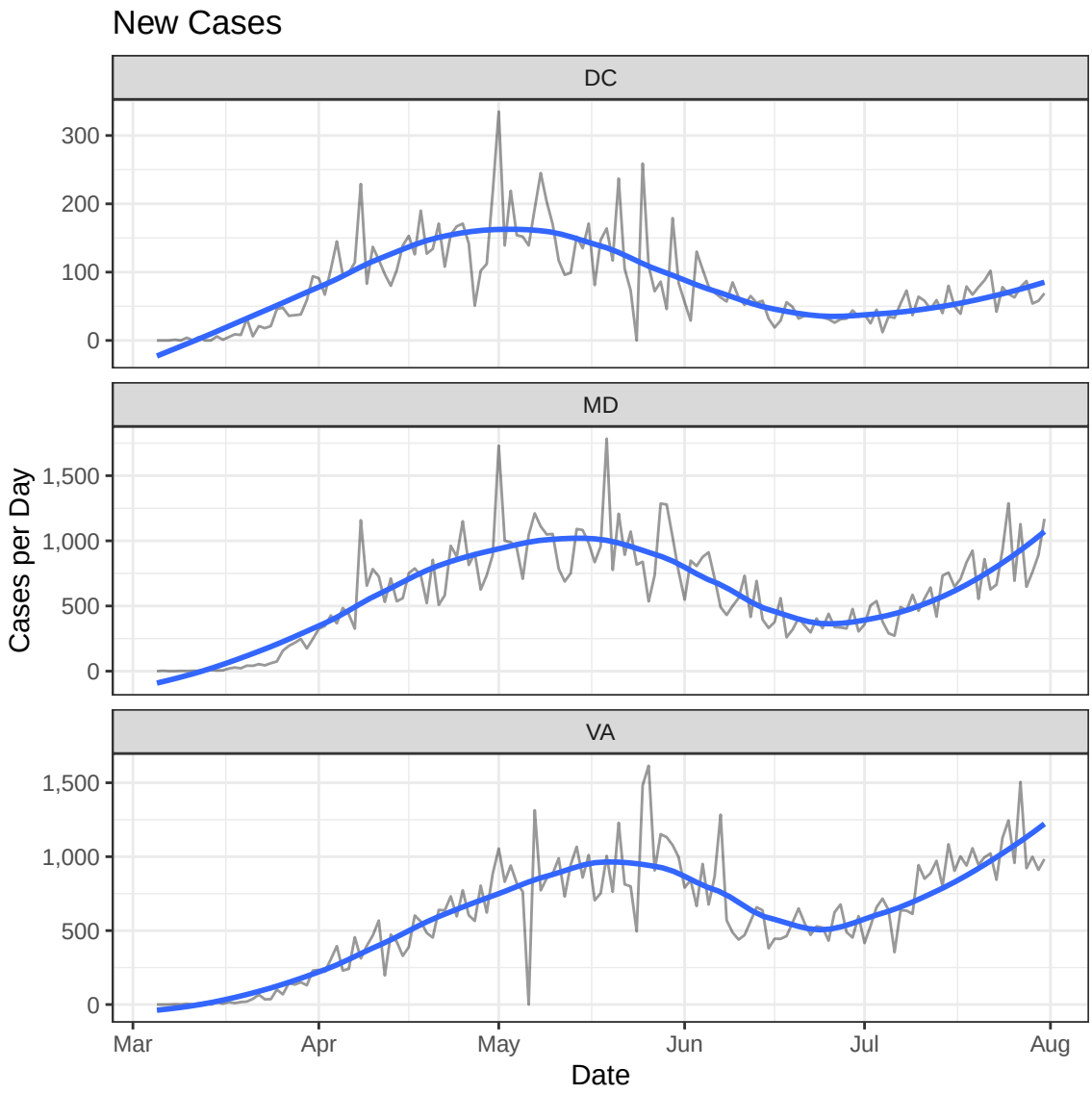

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
7−Day Change
Apr
May
Jun
Jul
Aug
Date

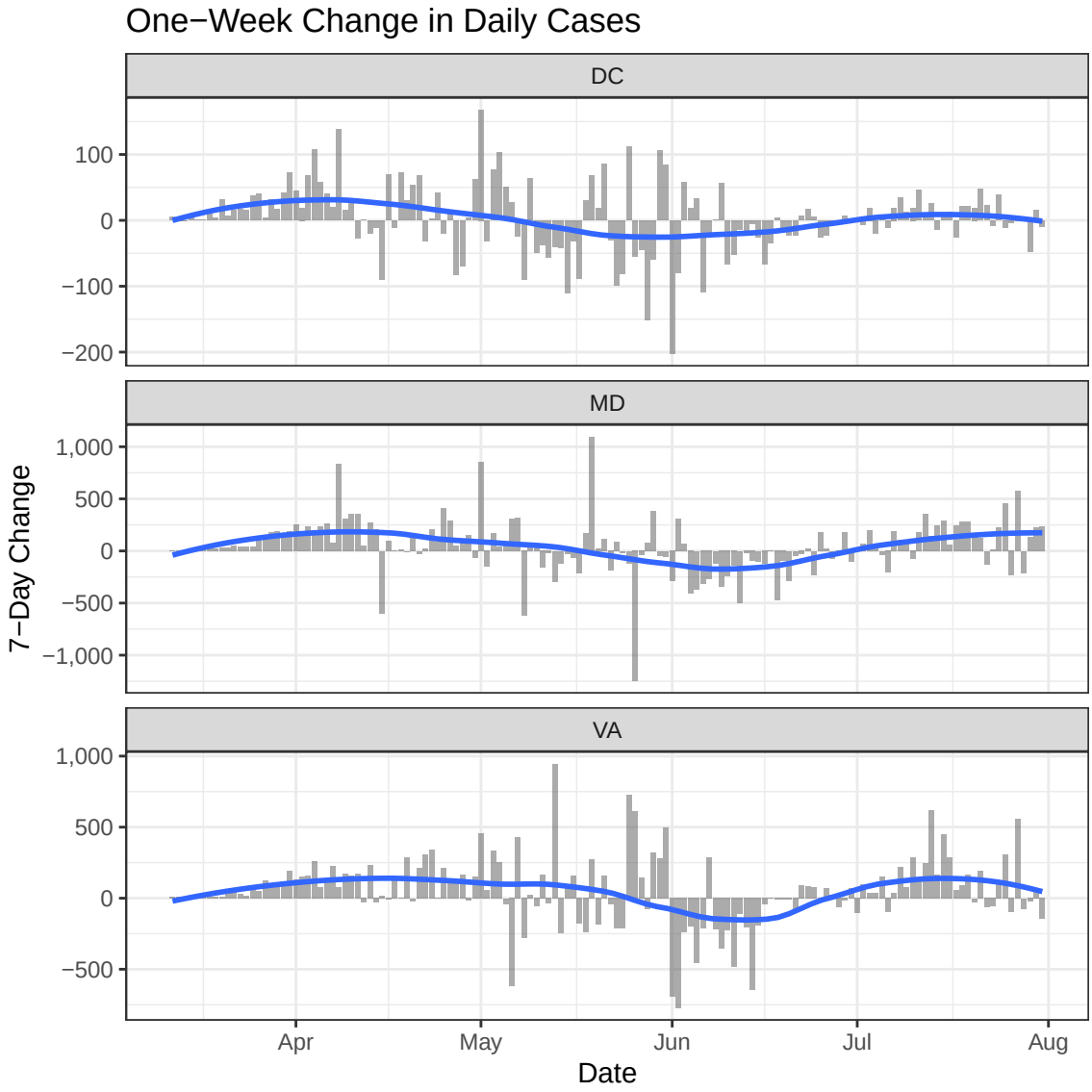

Deaths per 1M
0
1
10
100
1,000
Missing

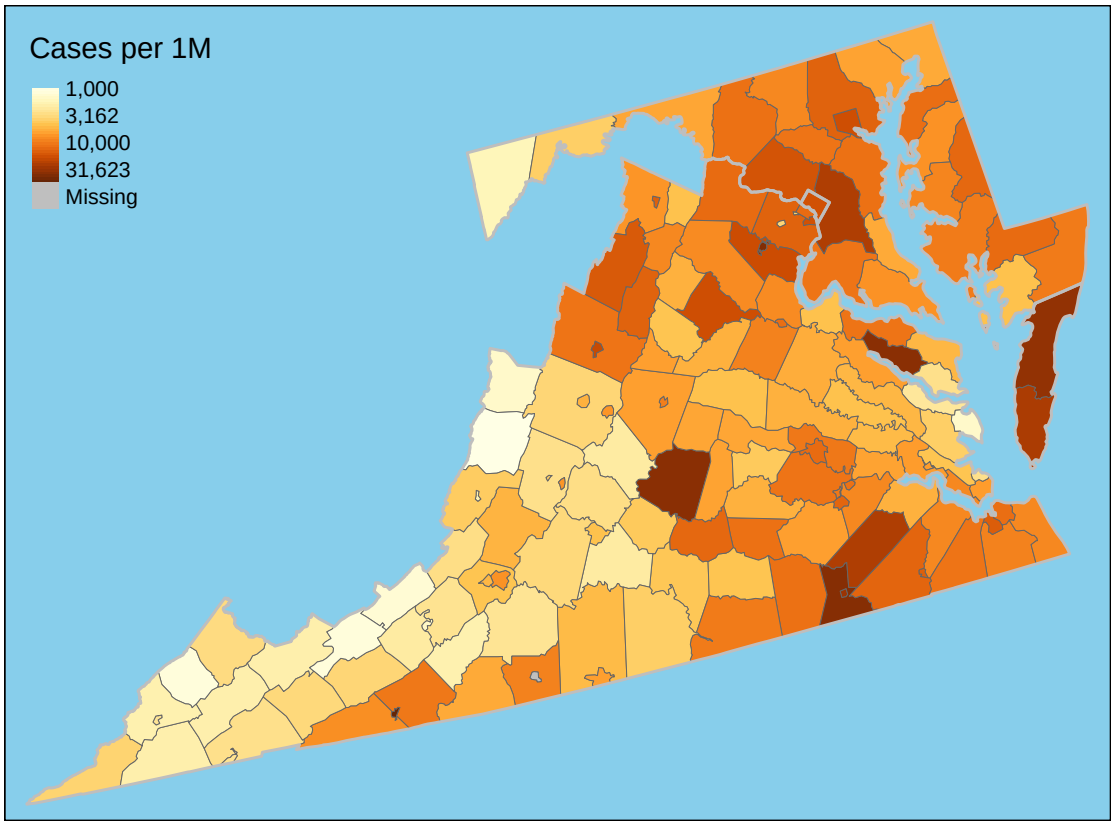

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

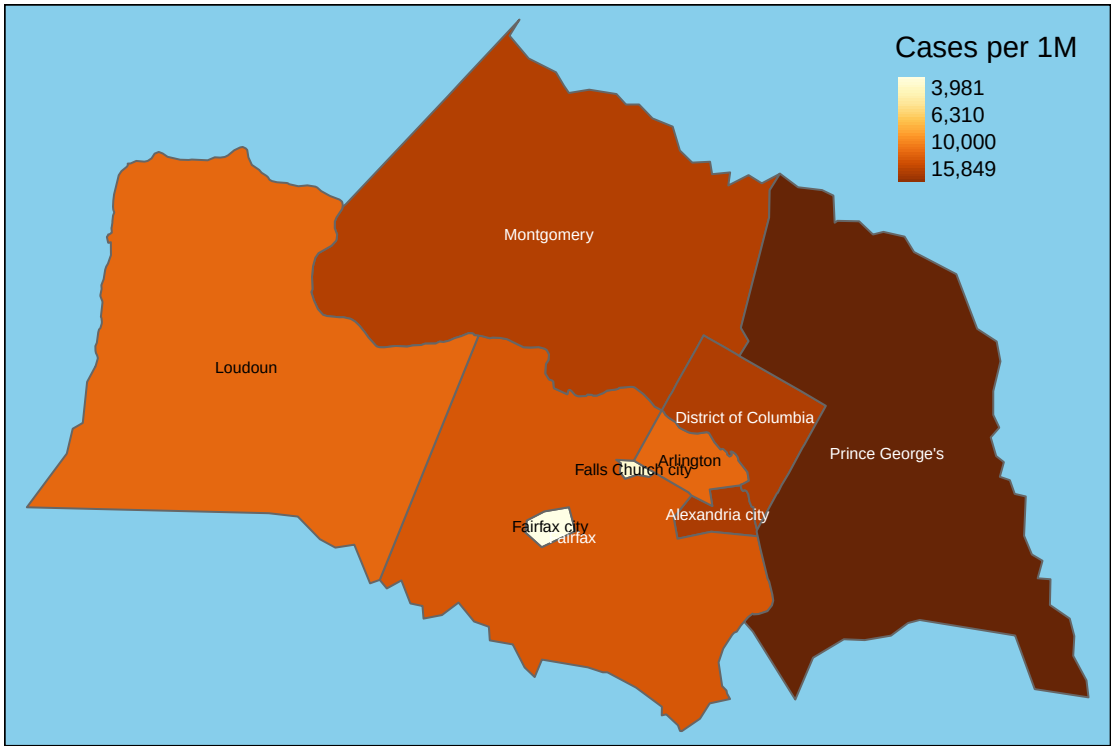
Cases


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

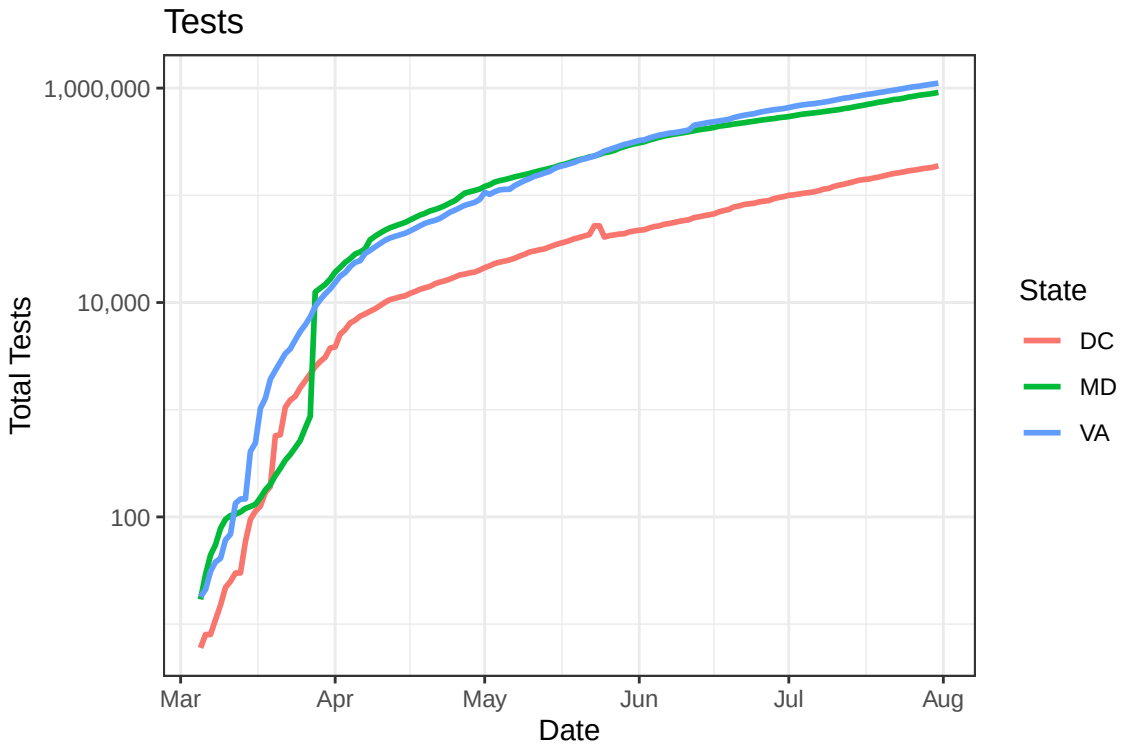

New Cases
DC
MD
VA
300
200
100
0
1,500
1,000
500
0
Cases per Day
Mar
Apr
May
Jun
Jul
Aug
Date

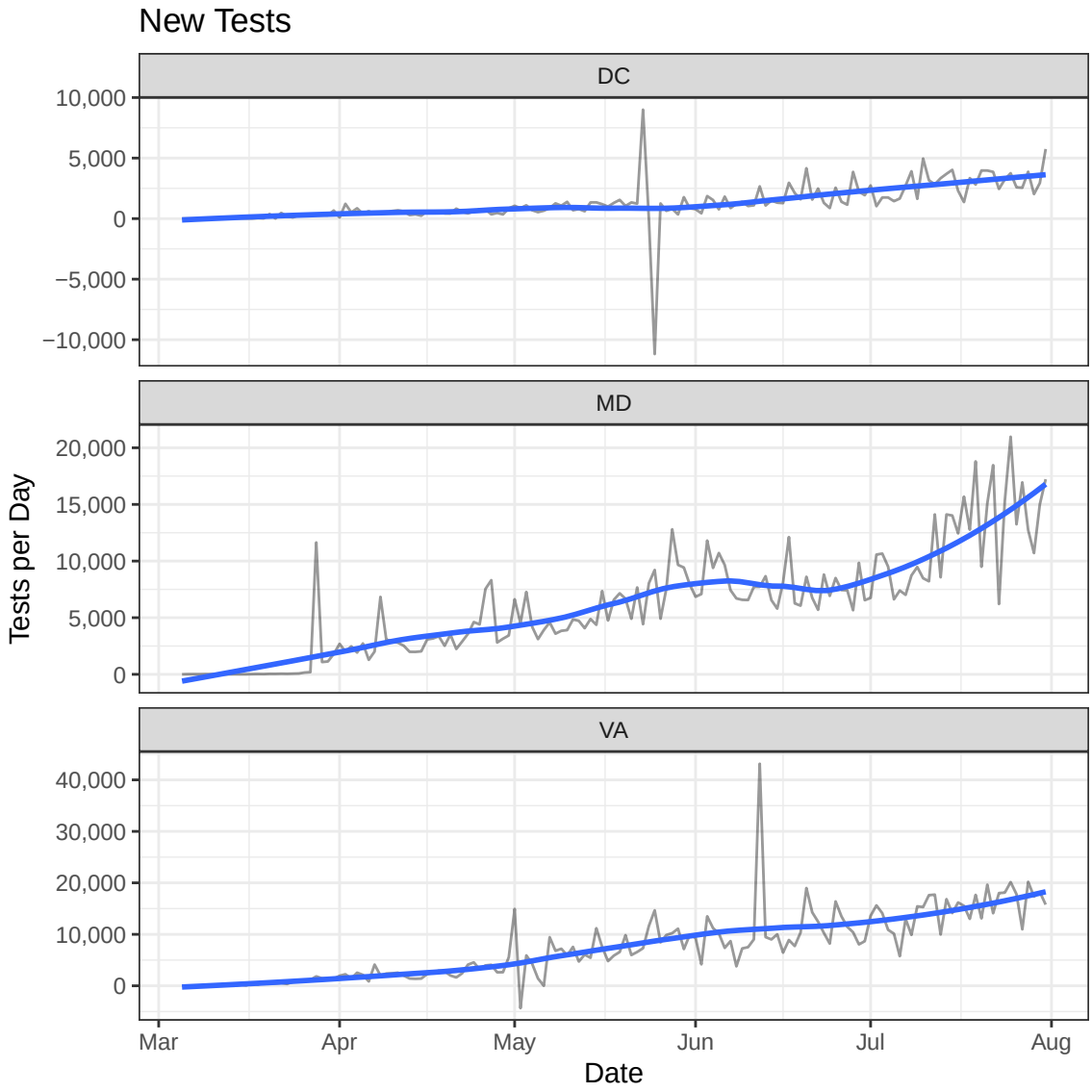

One−Week Change in Daily Cases
DC
MD
VA
7−Day Change
100
0
−100
−200
1,000
500
0
−500
−1,000
Apr
May
Jun
Jul
Aug
Date

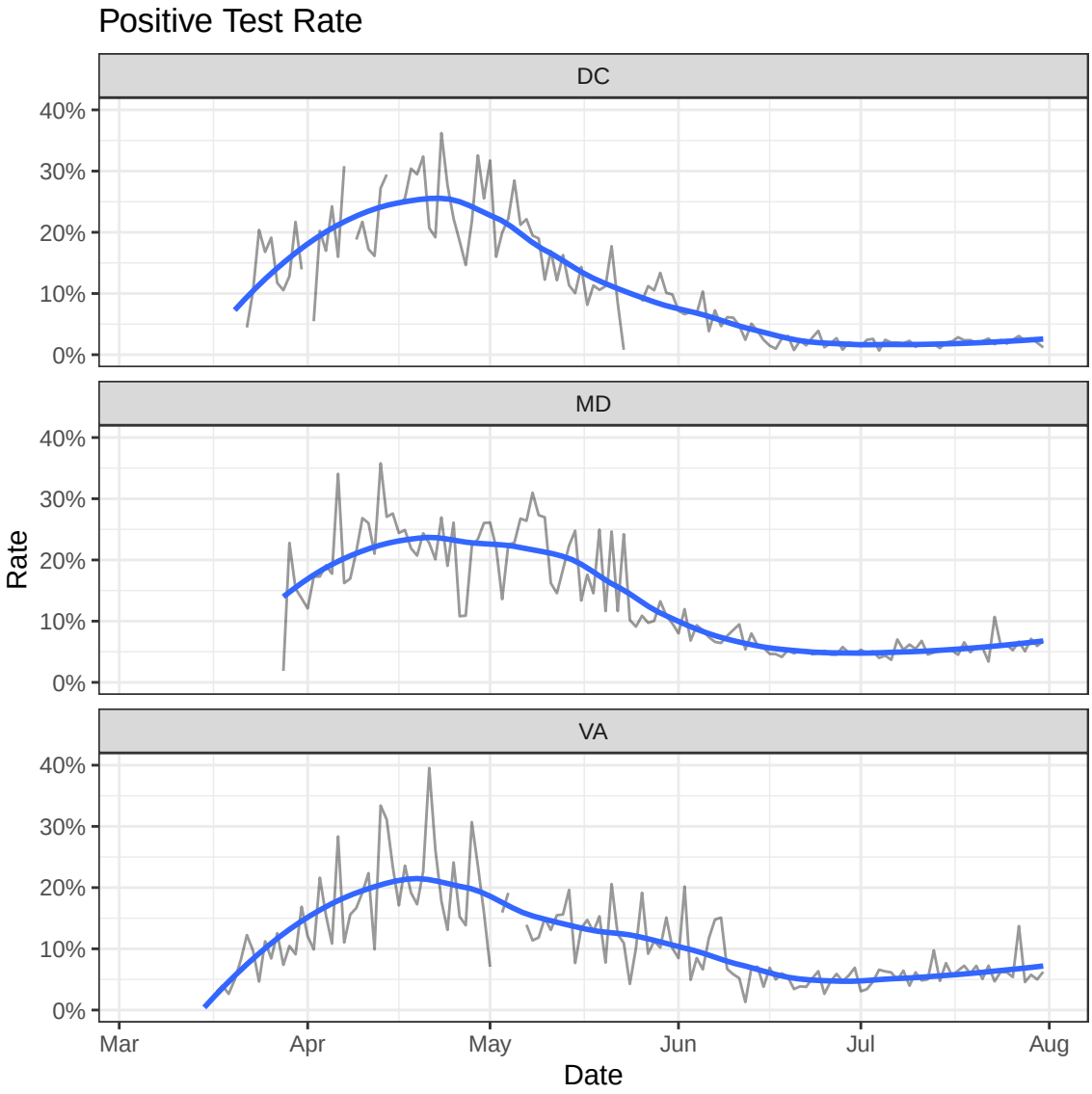

Cases per 1M
1,000
3,162
10,000
31,623
Missing


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