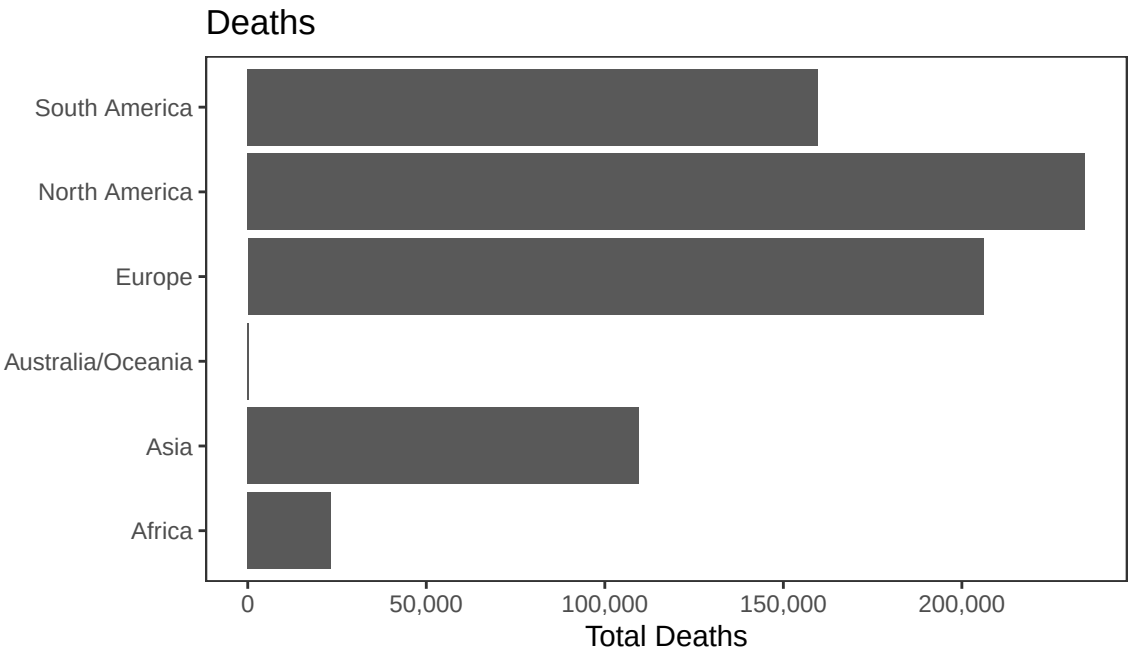
Erik's Covid-19 Chart Pack

Data updated 2020-08-10 19:18:54. 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 20,029,033 confirmed Covid-19 cases and 733,558 deaths worldwide.



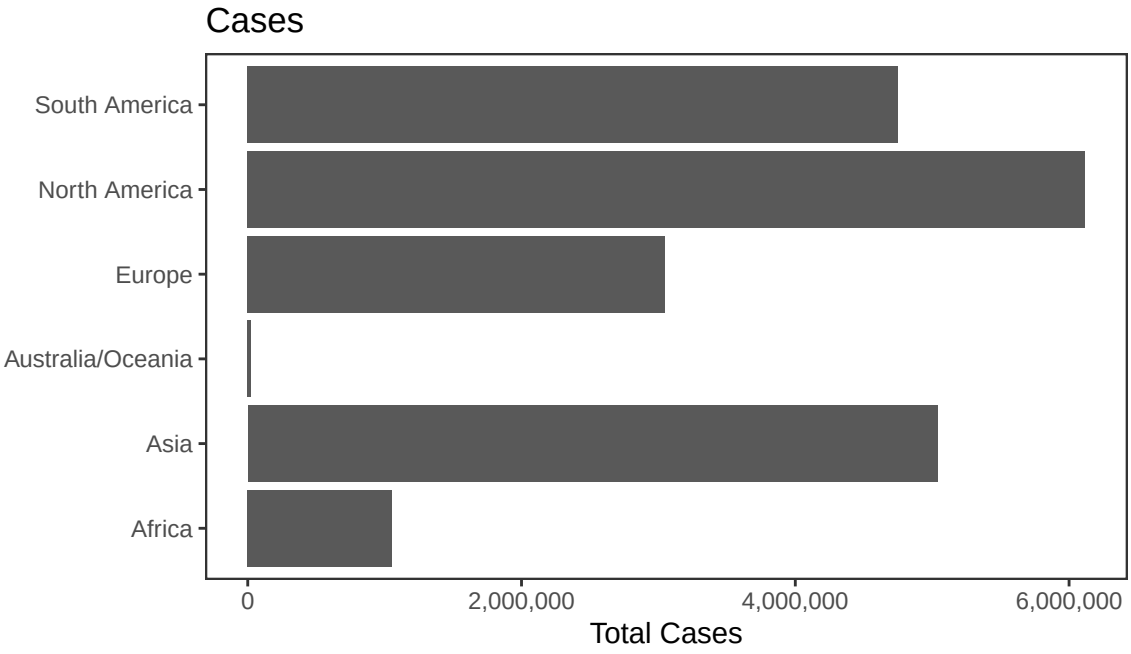
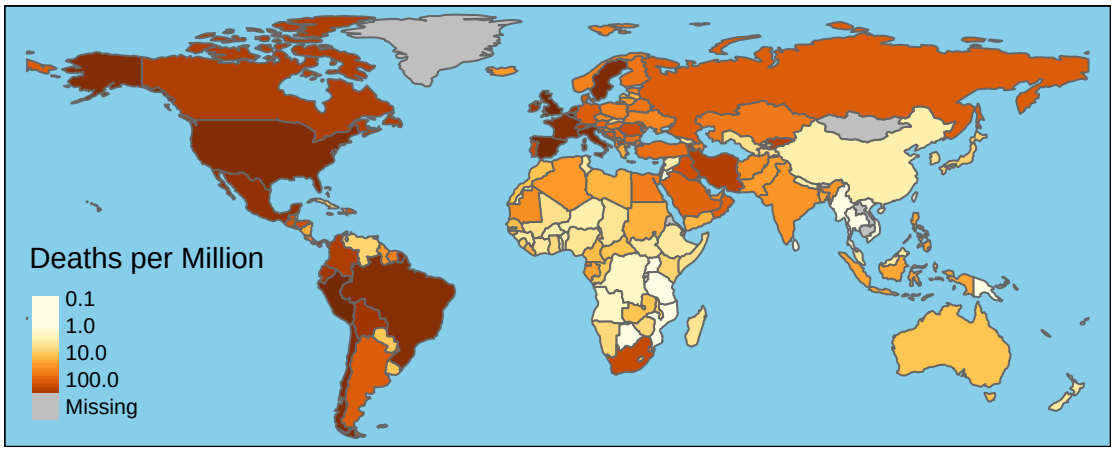
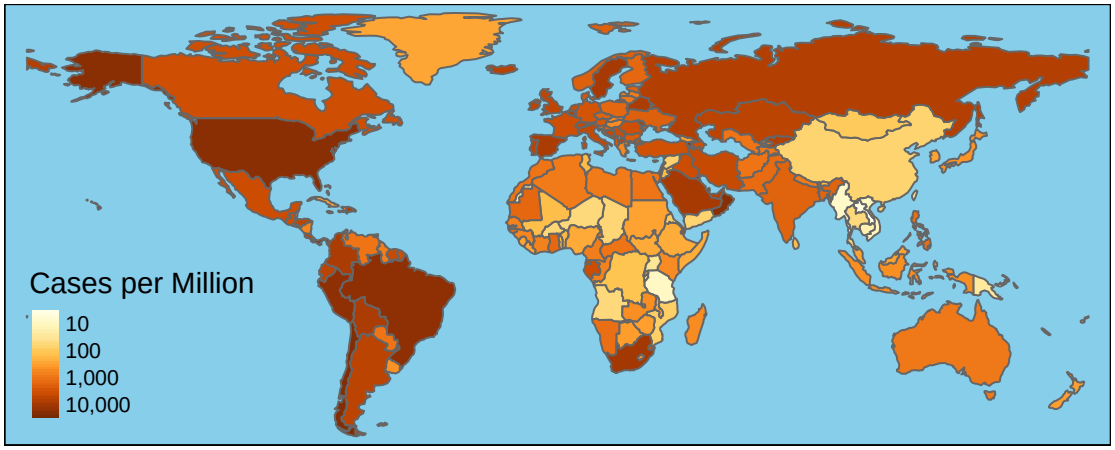
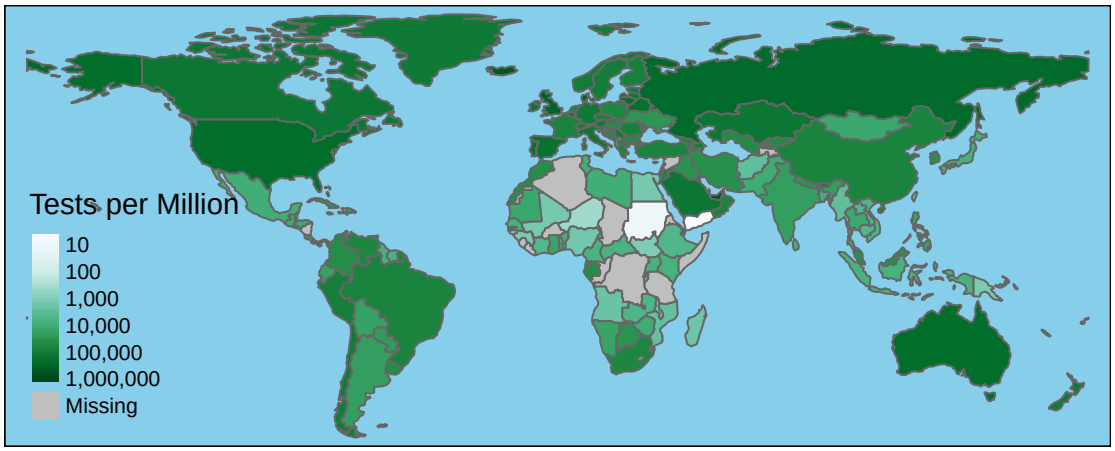


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	5,201,646	165,623	47,979	534
Brazil	3,035,582	101,136	22,213	593
India	2,214,137	44,466	62,117	1,013
Russia	887,536	14,931	5,189	77
South Africa	559,859	10,408	6,671	198
Peru	478,024	21,072	7,012	228
Mexico	475,902	52,006	6,495	695
Colombia	387,481	12,842	10,611	302
Chile	373,056	10,077	2,033	66
Spain	367,187	28,503	2,873	0
Iran	326,712	18,427	2,020	163
UK	310,825	46,505	1,062	8
Saudi Arabia	288,690	3,167	1,428	37
Pakistan	284,121	6,082	634	14
Bangladesh	257,600	3,399	2,487	34
Italy	250,566	35,205	463	2
Argentina	246,499	4,606	4,688	83
Turkey	240,804	5,844	1,182	15
Germany	217,281	9,260	385	0
France	201,990	30,326	2,034	1


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

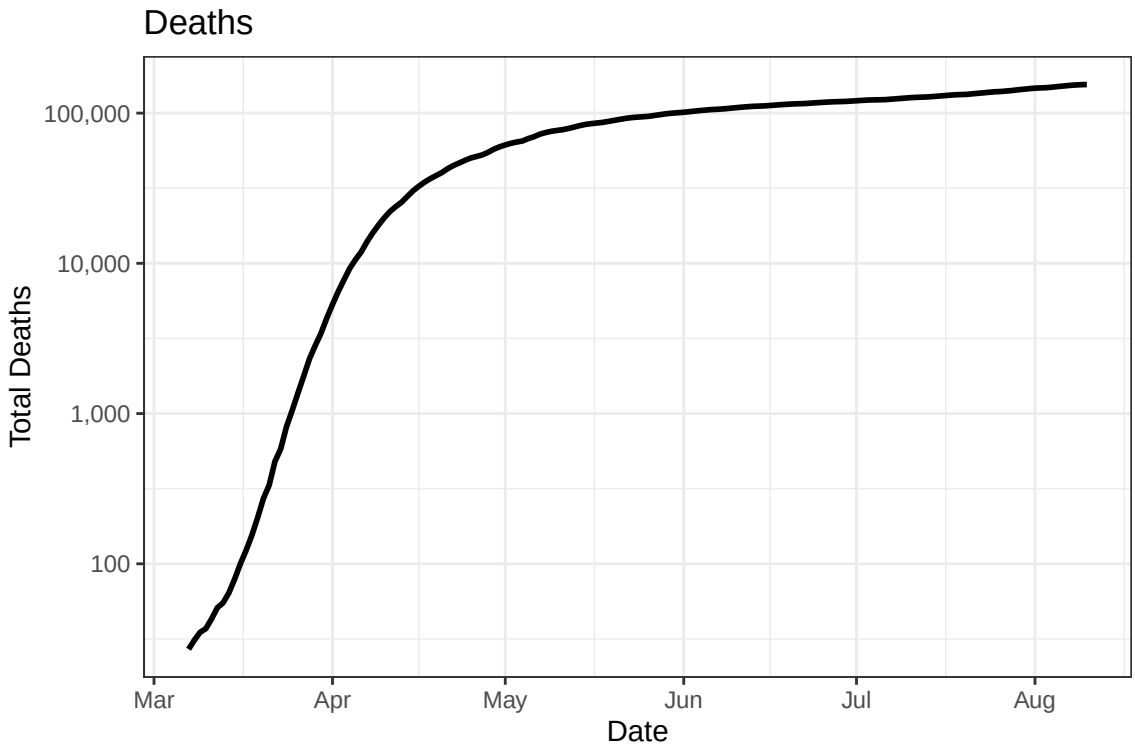
There have been 5,060,880 confirmed Covid-19 cases and 154,947 deaths in the United States.

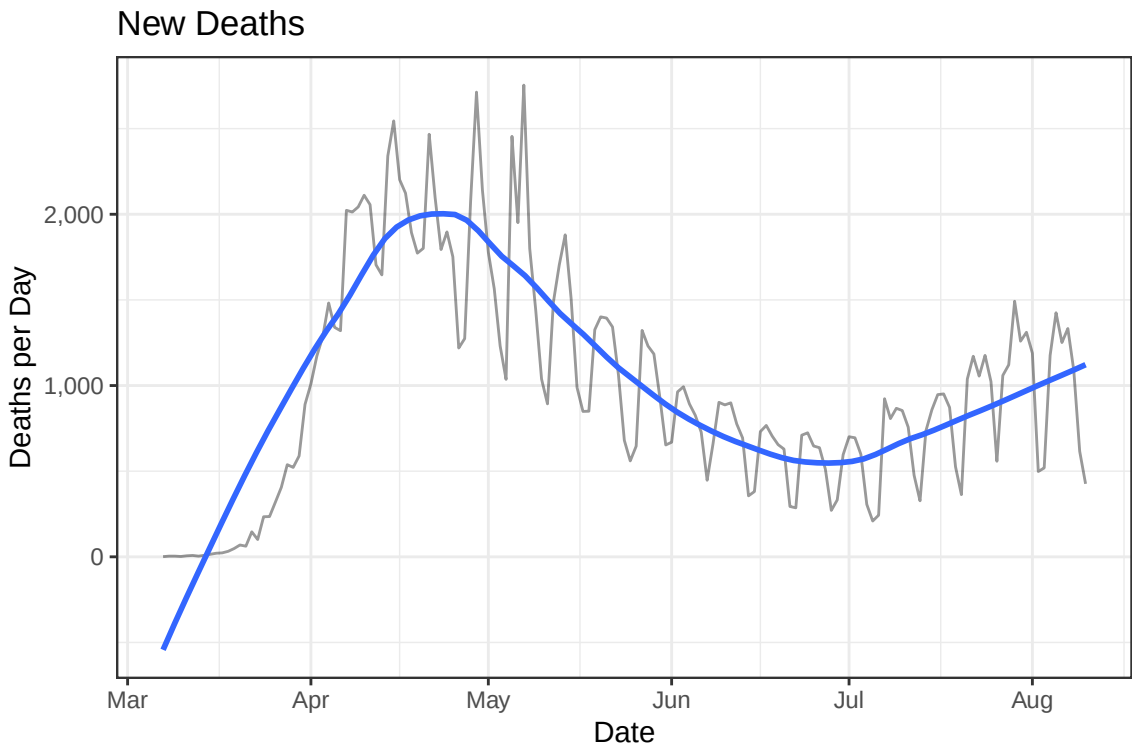
Table 2: U.S. Deaths and Cases over the Last Two Weeks

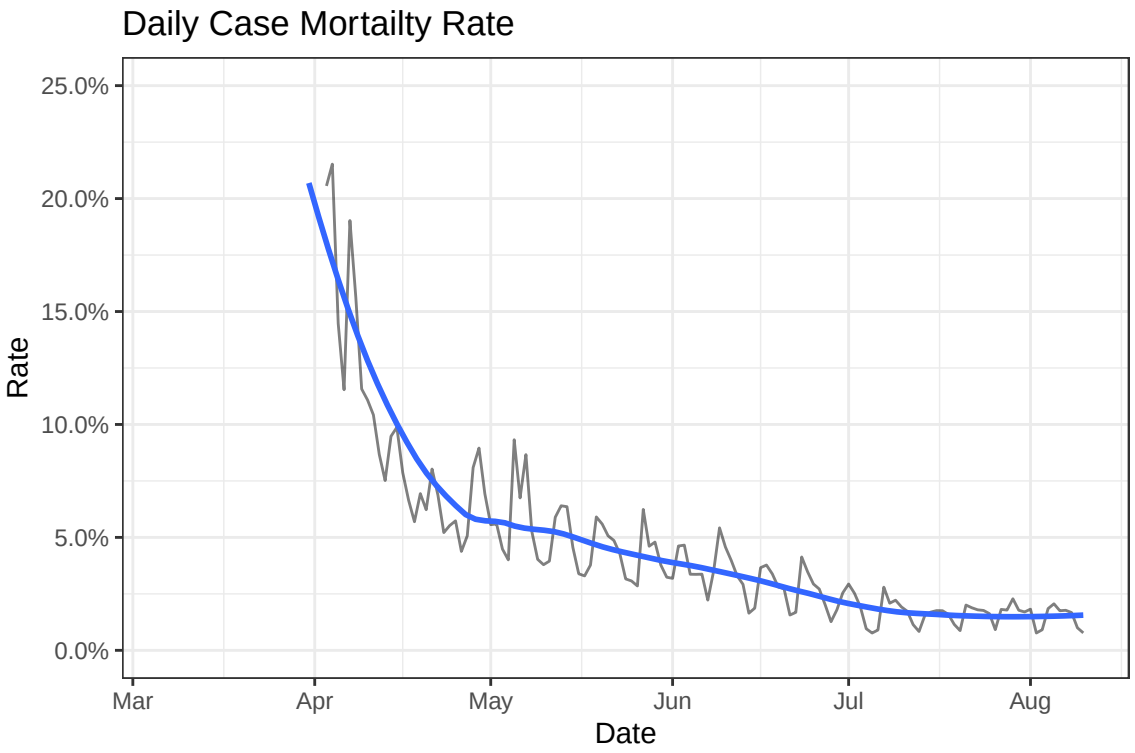
Date	Cases	Deaths	New Cases	New Deaths
2020-08-10	5,060,880	154,947	41,807	426
2020-08-09	5,019,073	154,521	51,319	616
2020-08-08	4,967,754	153,905	54,091	1,089
2020-08-07	4,913,663	152,816	61,520	1,333
2020-08-06	4,852,143	151,483	54,184	1,251
2020-08-05	4,797,959	150,232	52,265	1,425
2020-08-04	4,745,694	148,807	51,568	1,176
2020-08-03	4,694,126	147,631	49,561	519
2020-08-02	4,644,565	147,112	48,266	498
2020-08-01	4,596,299	146,614	60,692	1,189
2020-07-31	4,535,607	145,425	67,755	1,311
2020-07-30	4,467,852	144,114	69,466	1,259
2020-07-29	4,398,386	142,855	66,969	1,492
2020-07-28	4,331,417	141,363	56,229	1,121

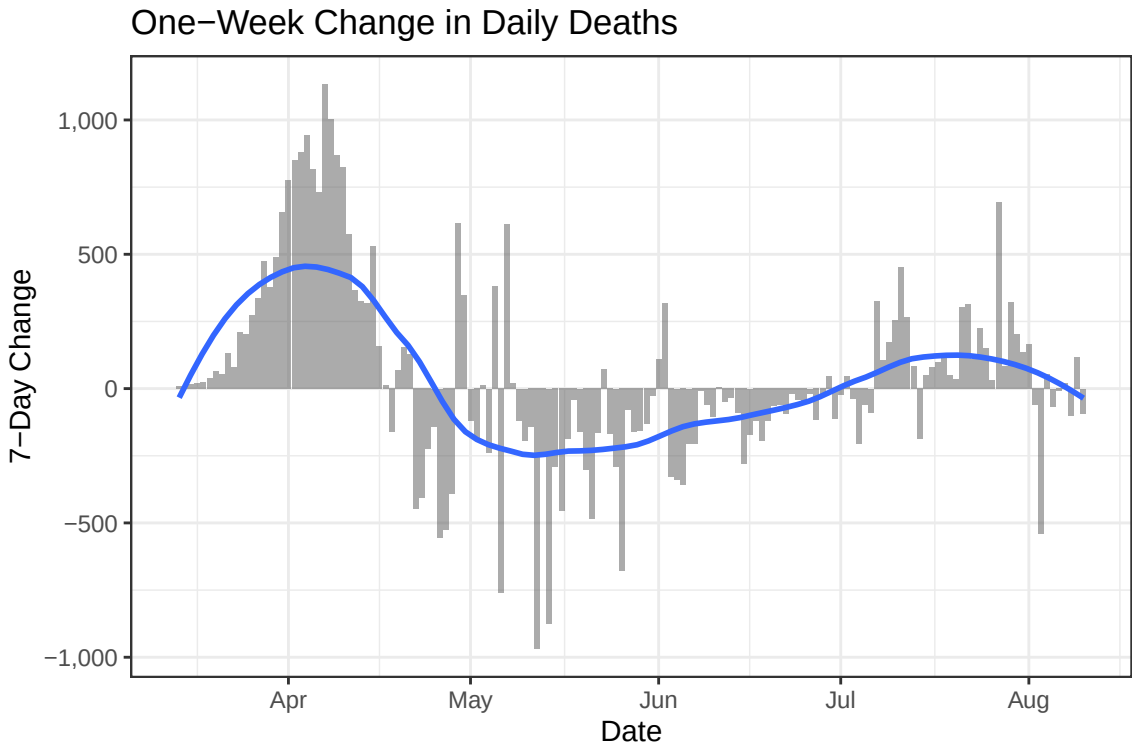
Deaths

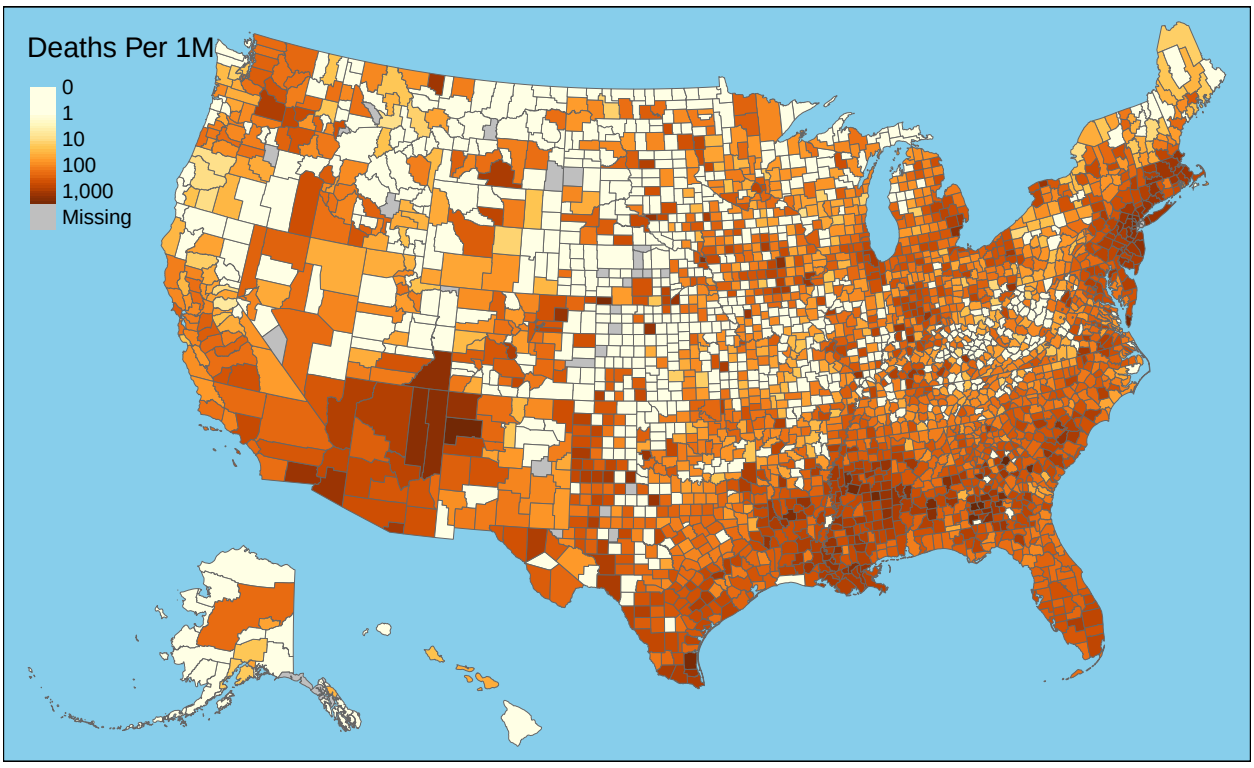
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator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





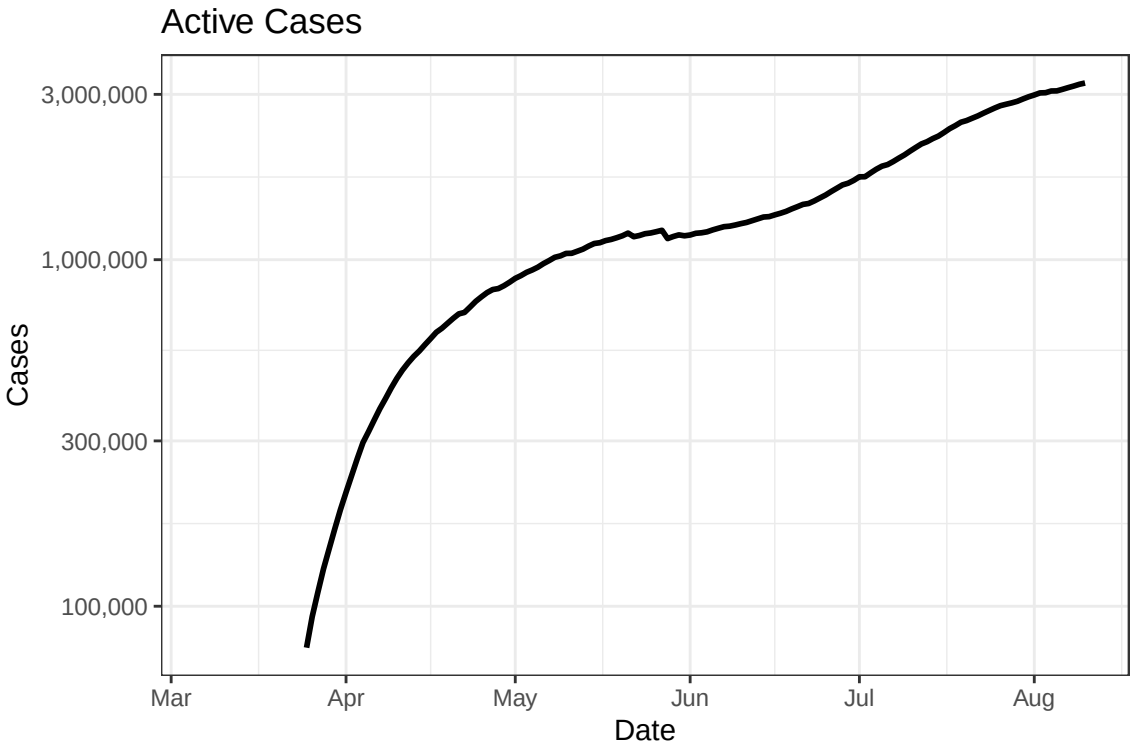

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Mar
Apr
May
Jun
Jul
Aug
Date

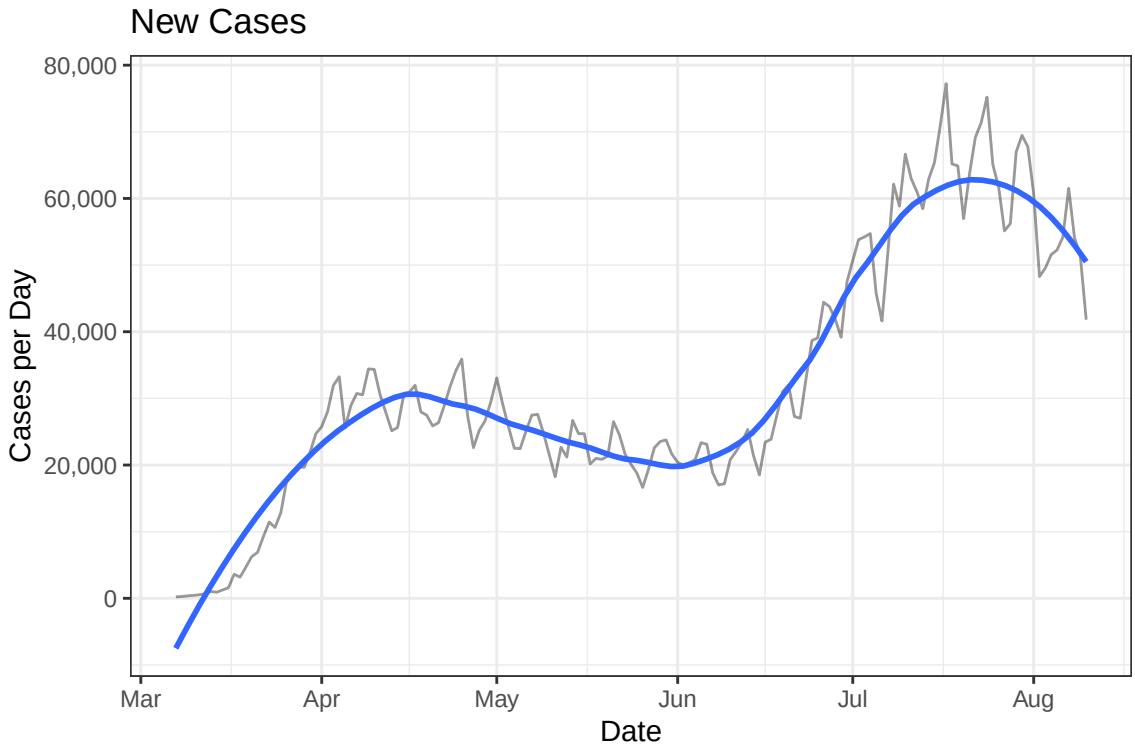

One−Week Change in Daily Deaths
1,000
500
0
−500
−1,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

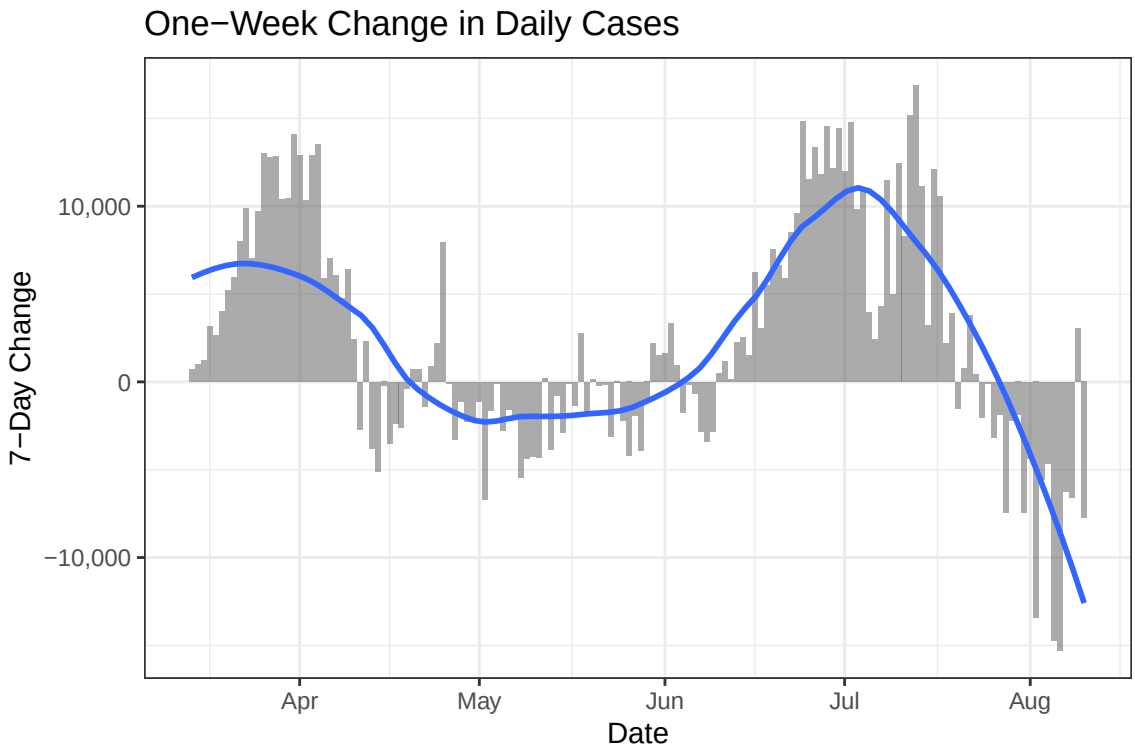

Deaths Per 1M
0
1
10
100
1,000
Missing

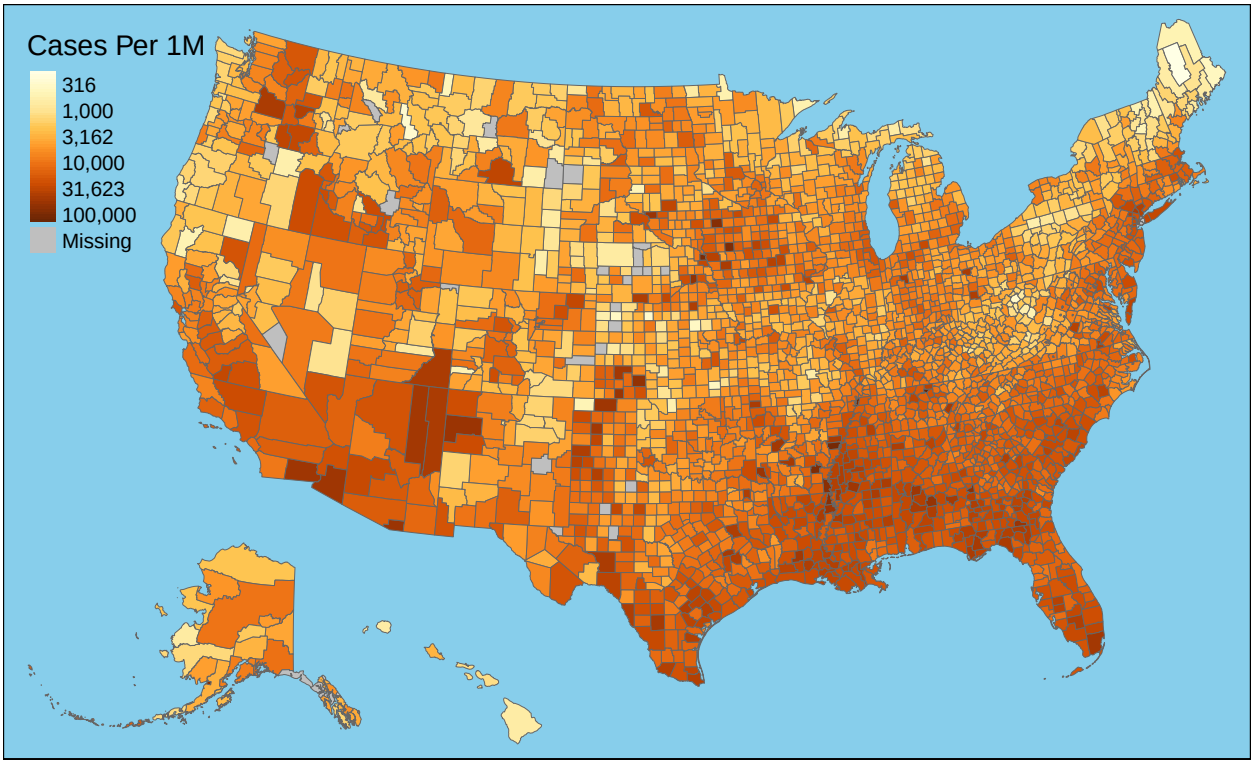
Cases

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



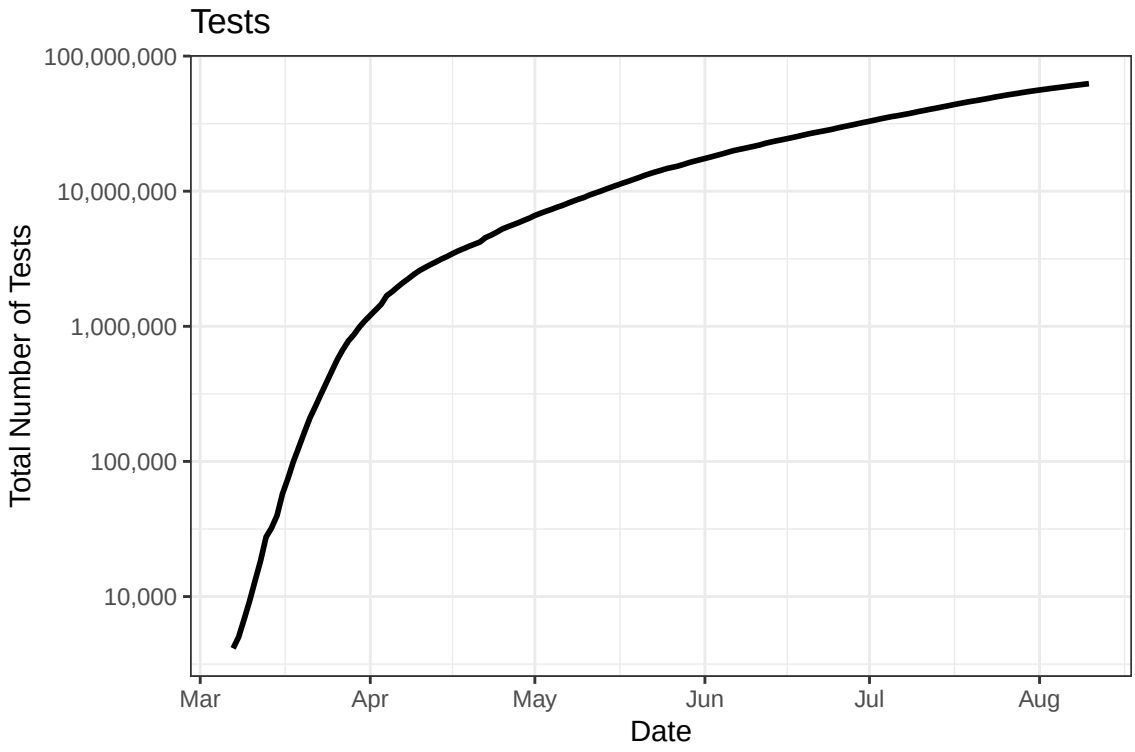


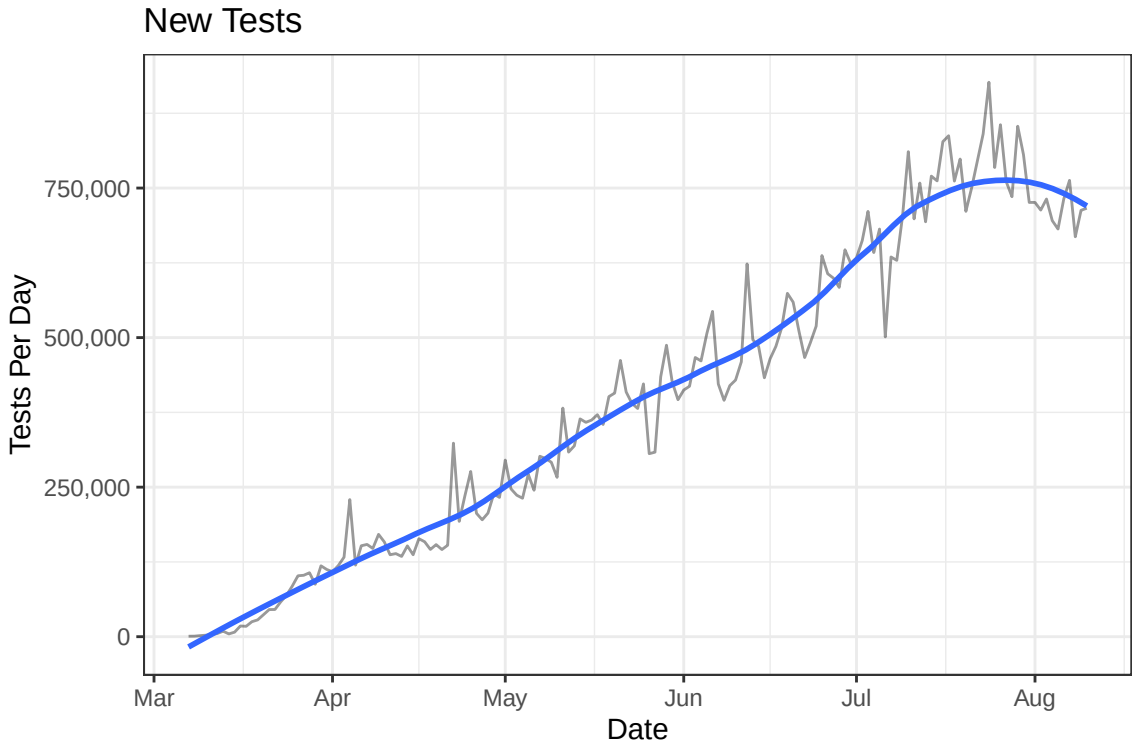

One−Week Change in Daily Cases
10,000
0
−10,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

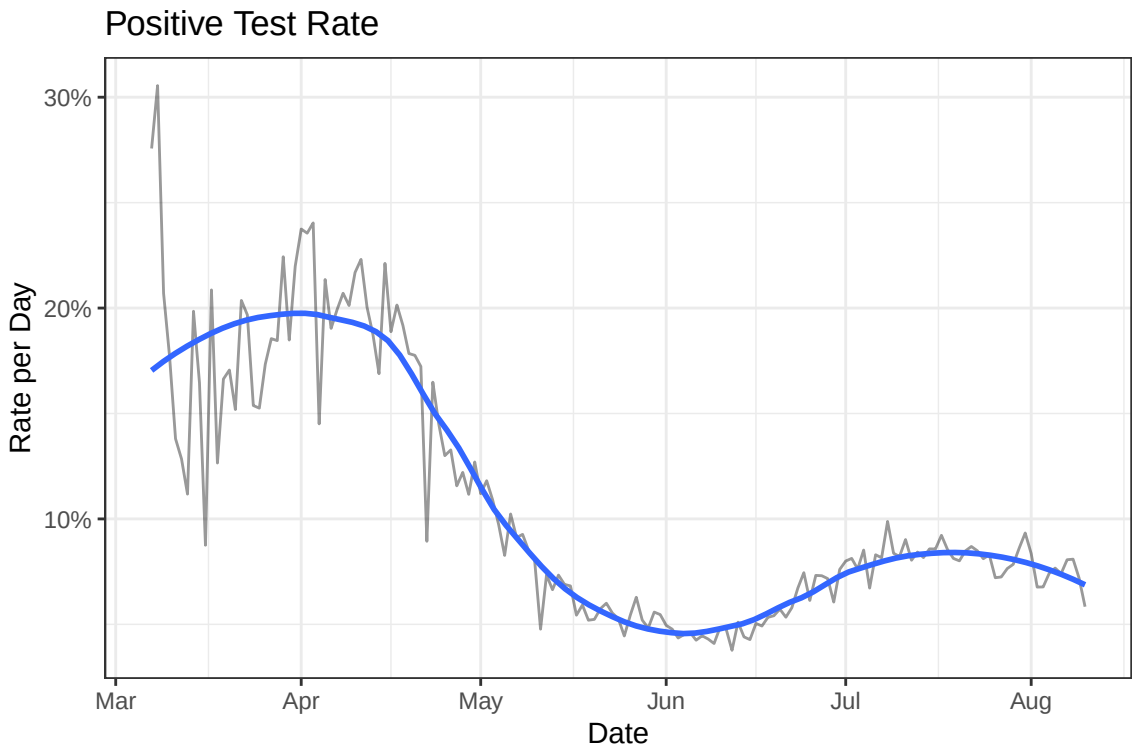

Cases Per 1M
316
1,000
3,162
10,000
31,623
100,000
Missing

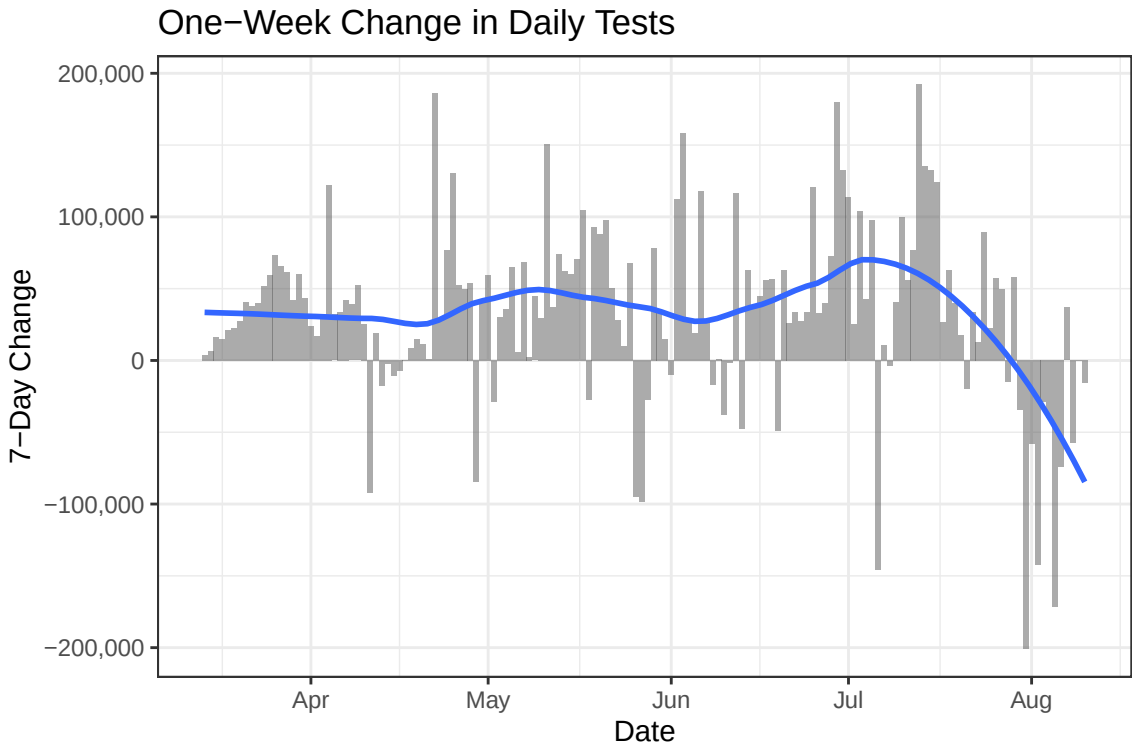
Testing

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.





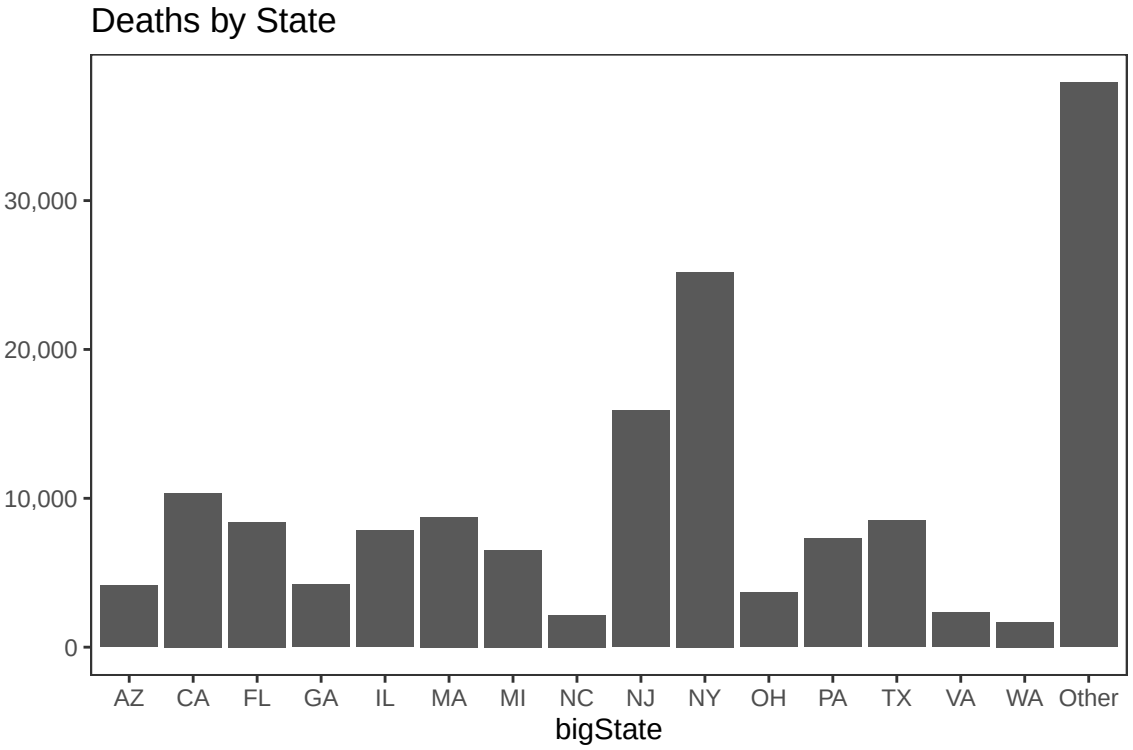

Positive Test Rate
30%
20%
10%
Rate per Day
Mar
Apr
May
Jun
Jul
Aug
Date

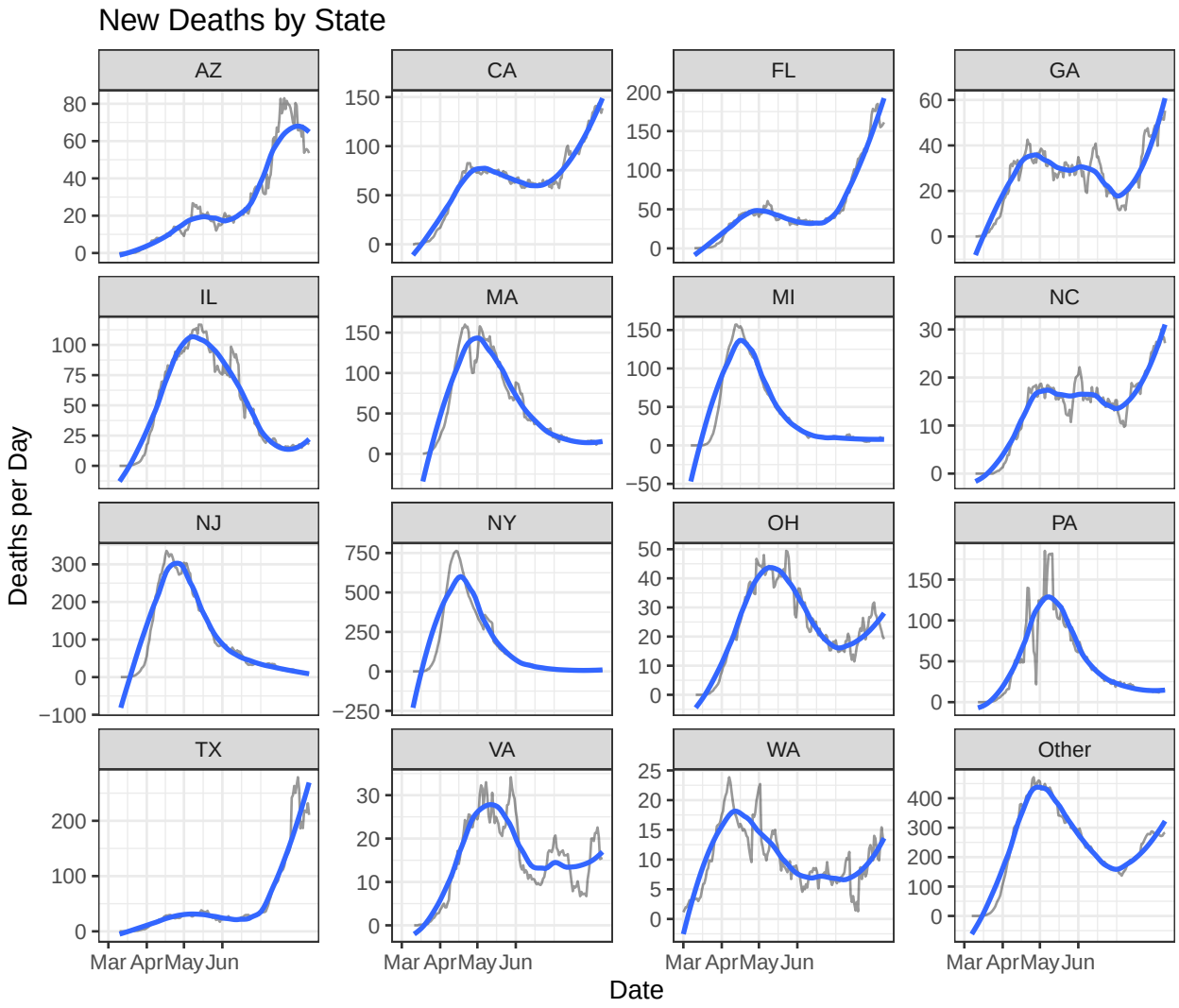

One−Week Change in Daily Tests
200,000
100,000
0
−100,000
−200,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

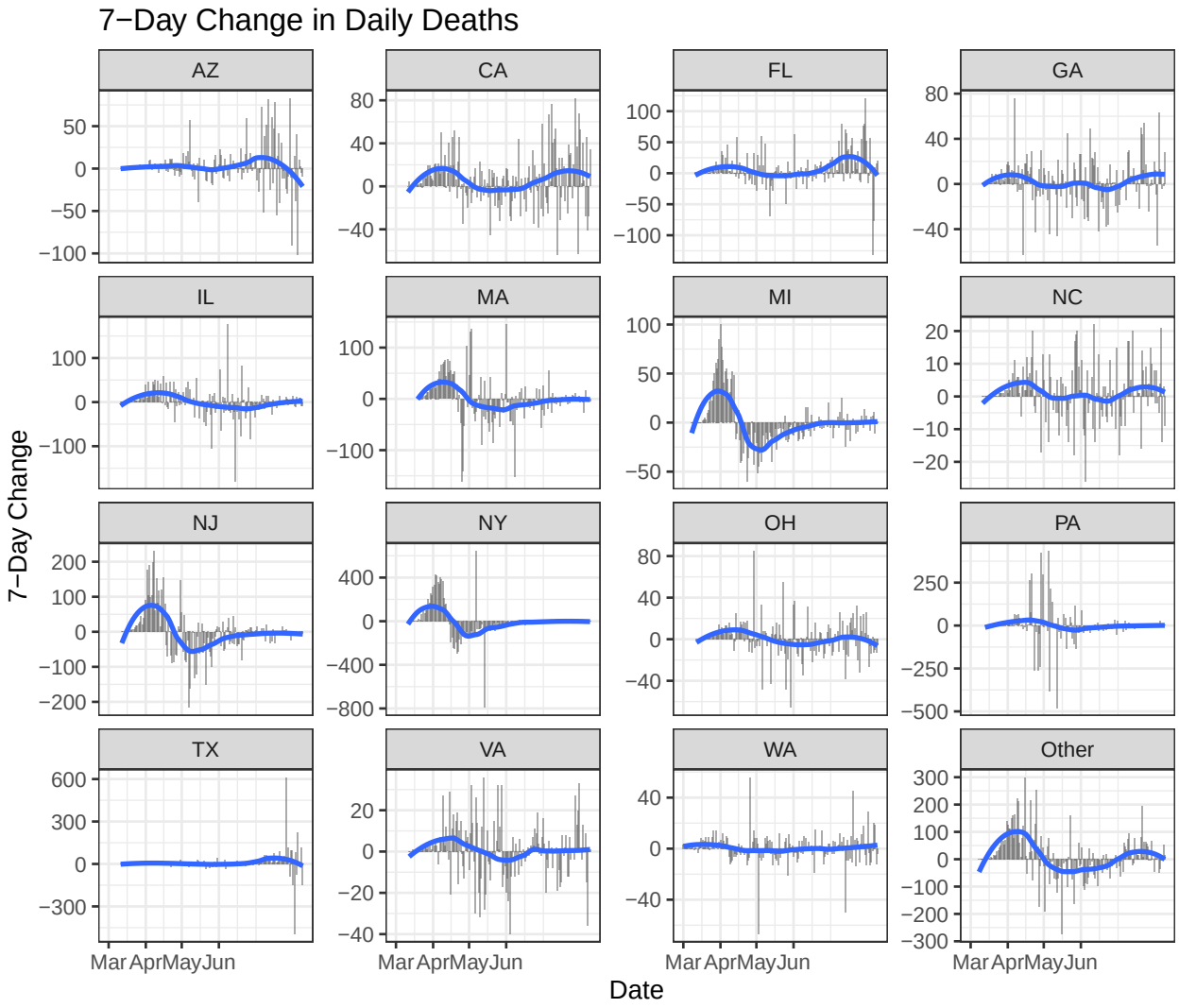
State Data

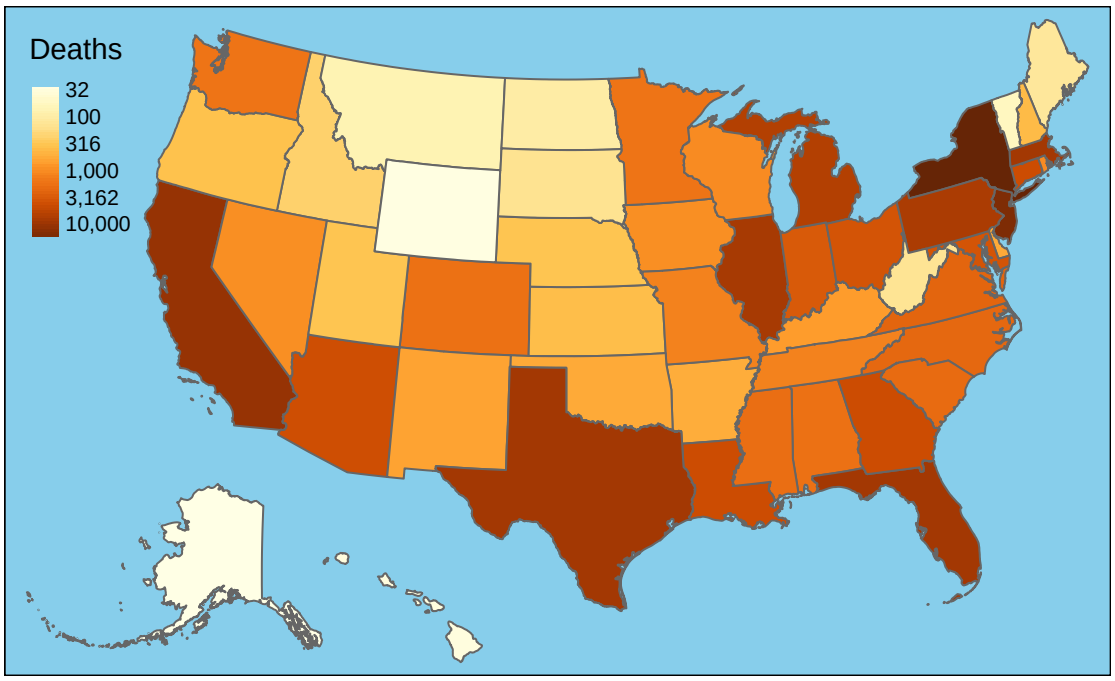
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

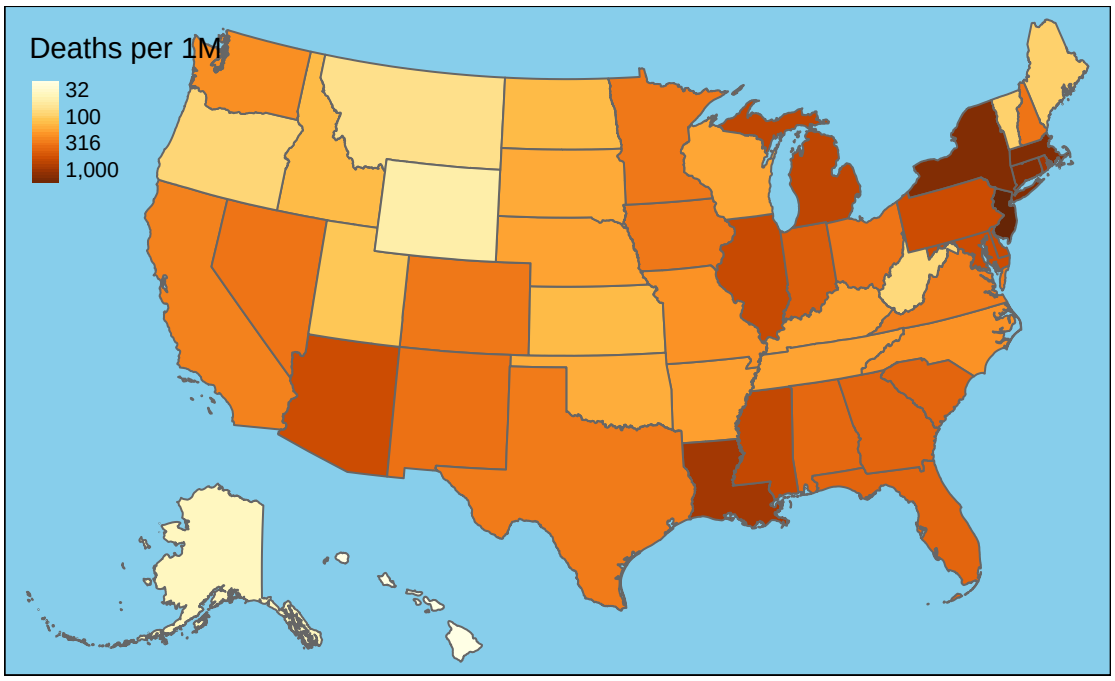
Deaths



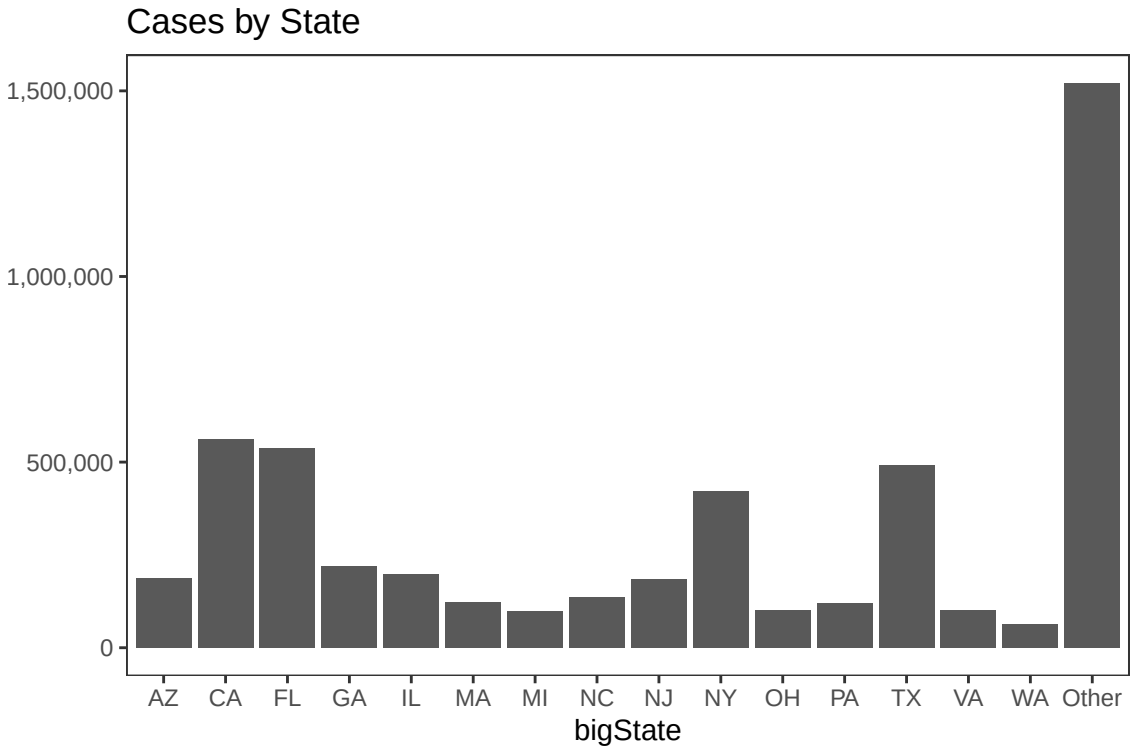

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Mar
Apr
May
Jun
Date

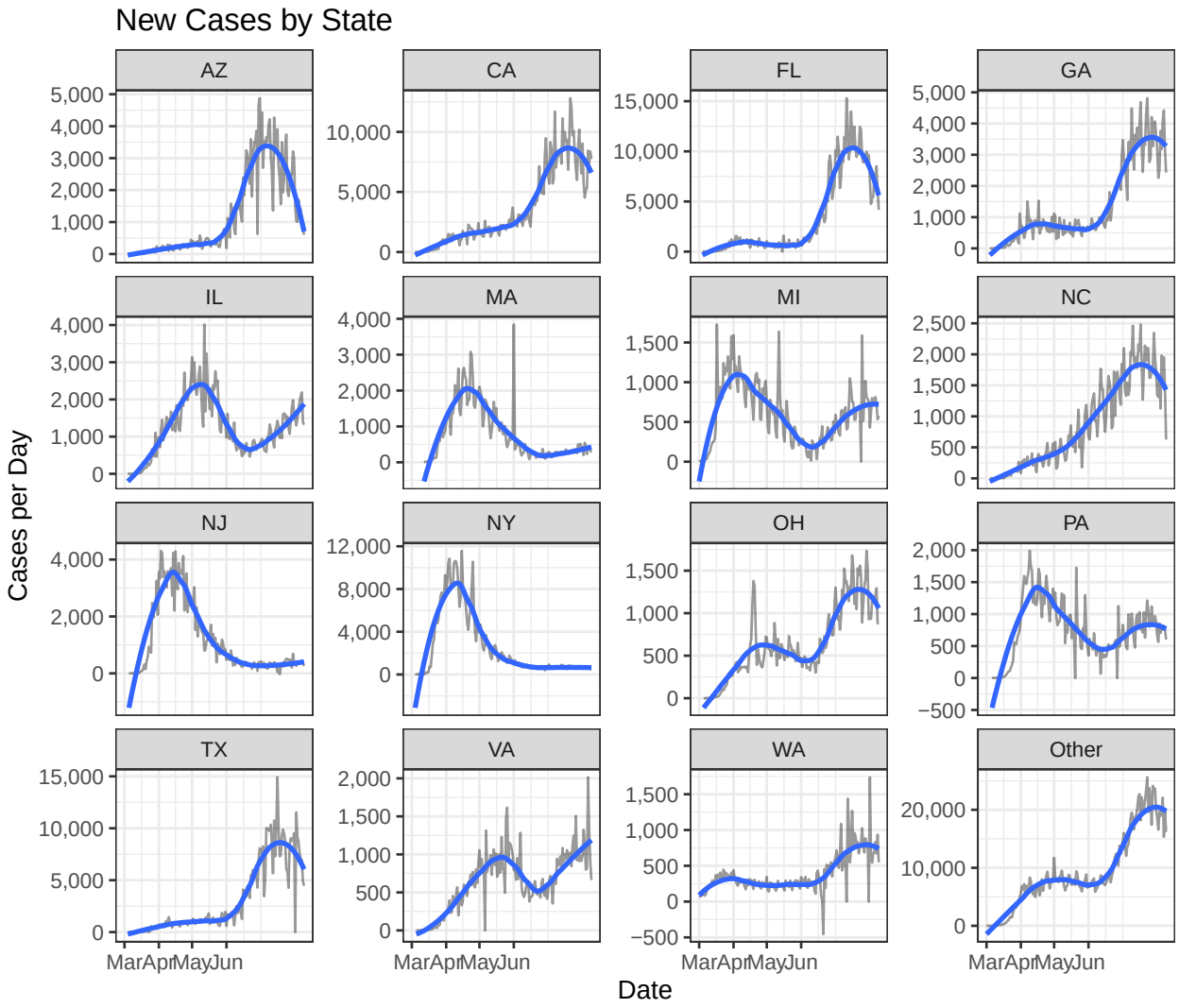

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Mar
Apr
May
Jun
Date

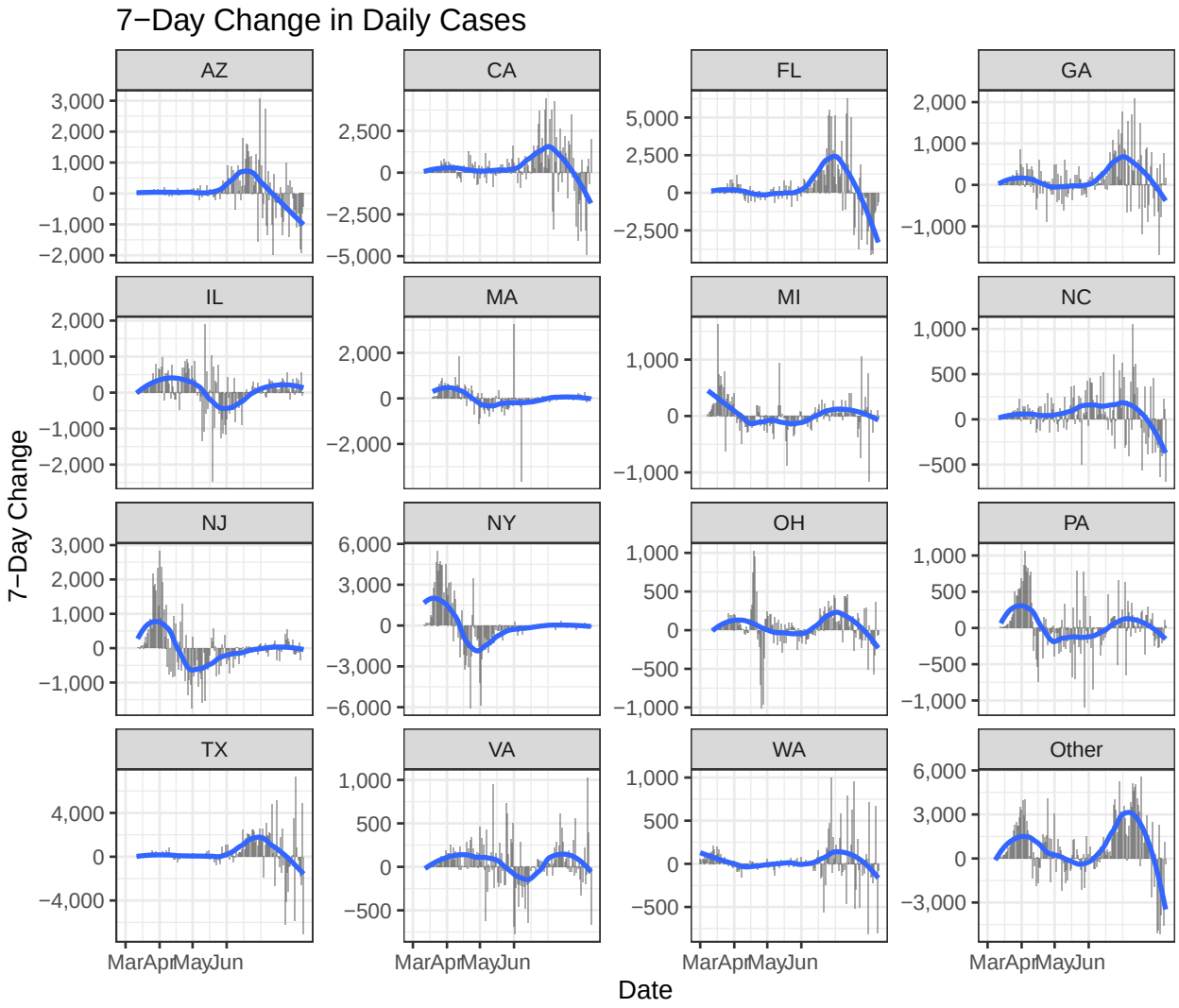

Deaths
32
100
316
1,000
3,162
10,000

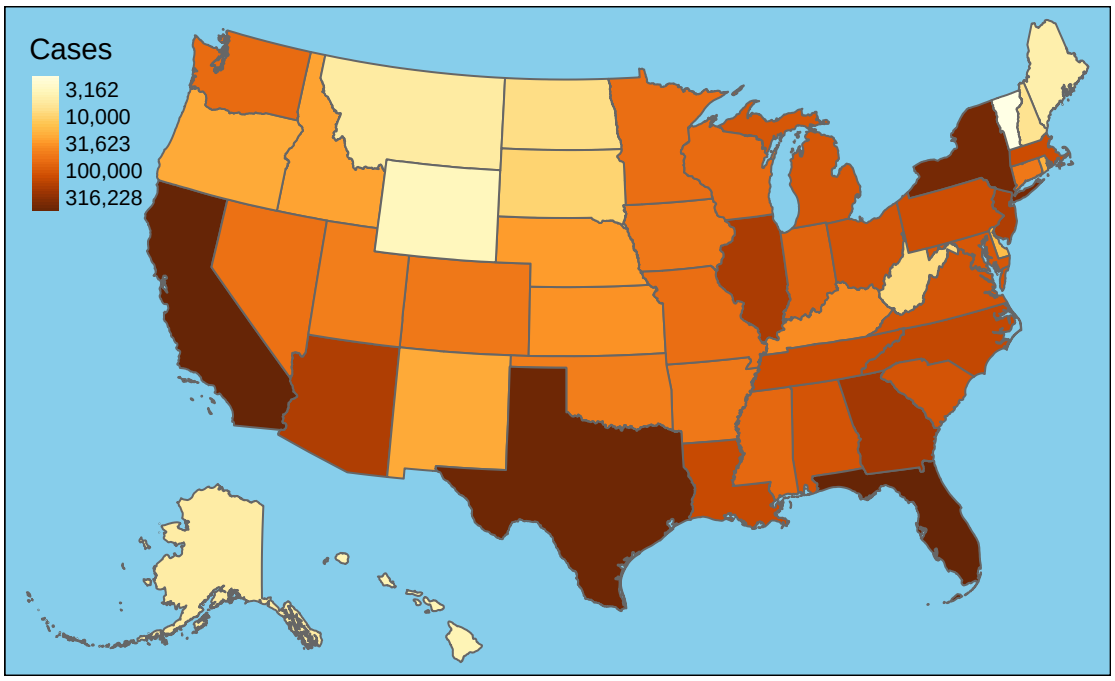

Deaths per 1M
32
100
316
1,000

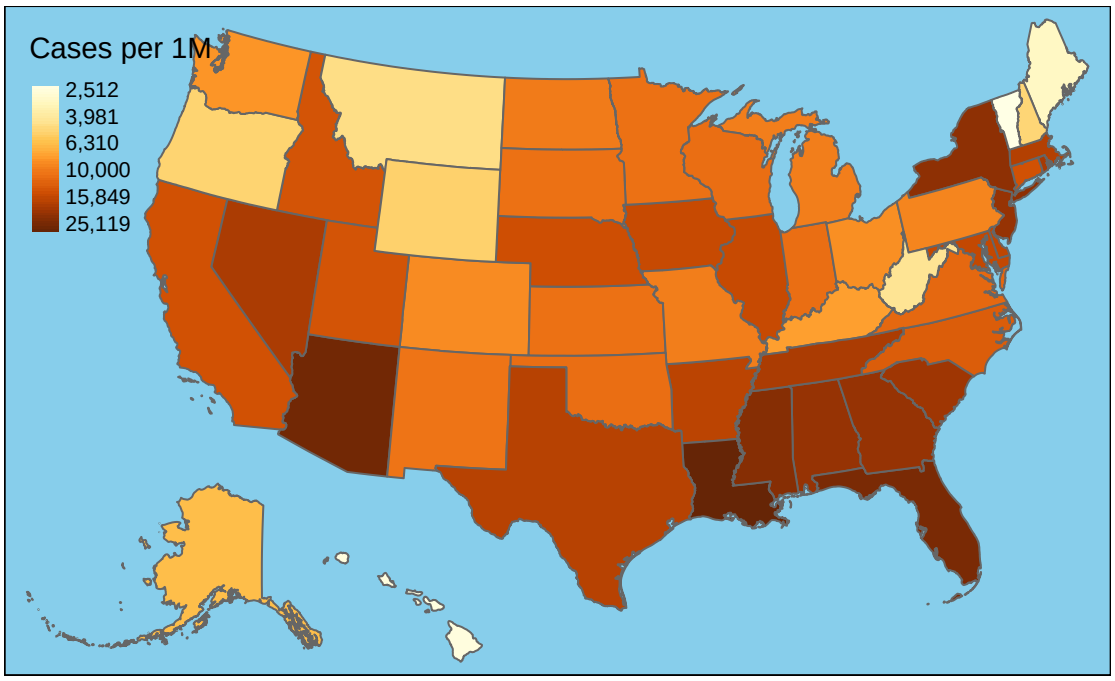
Cases


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

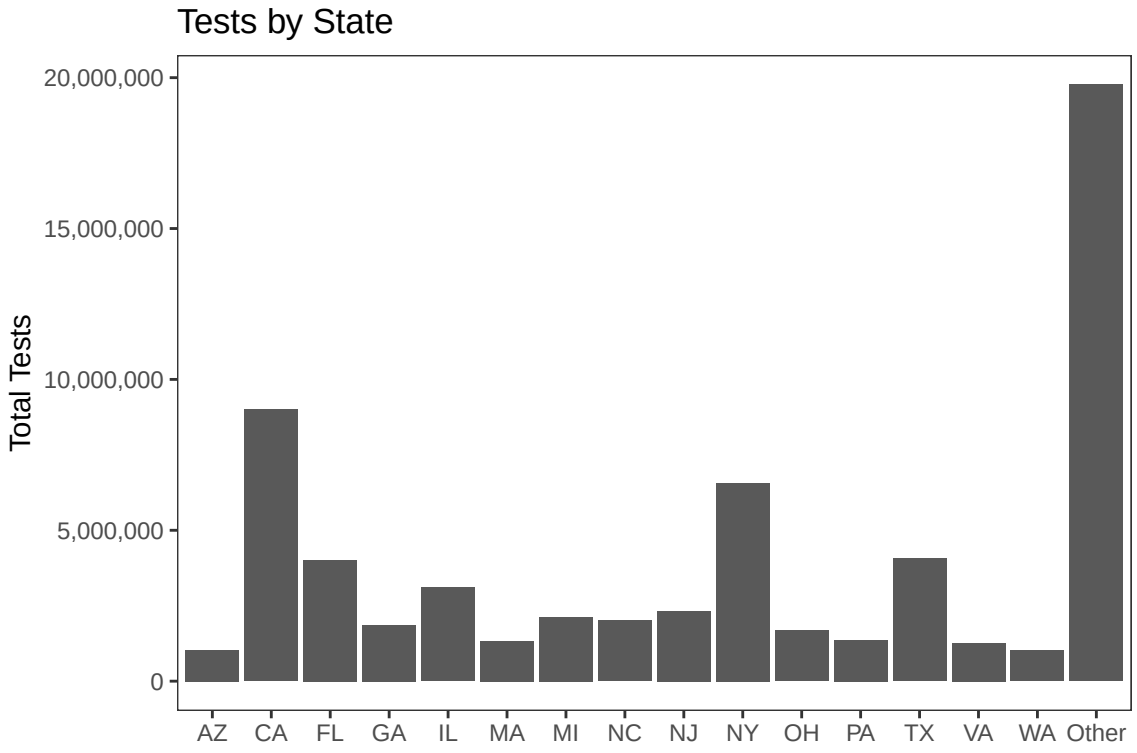

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Mar
Apr
May
Jun
Date

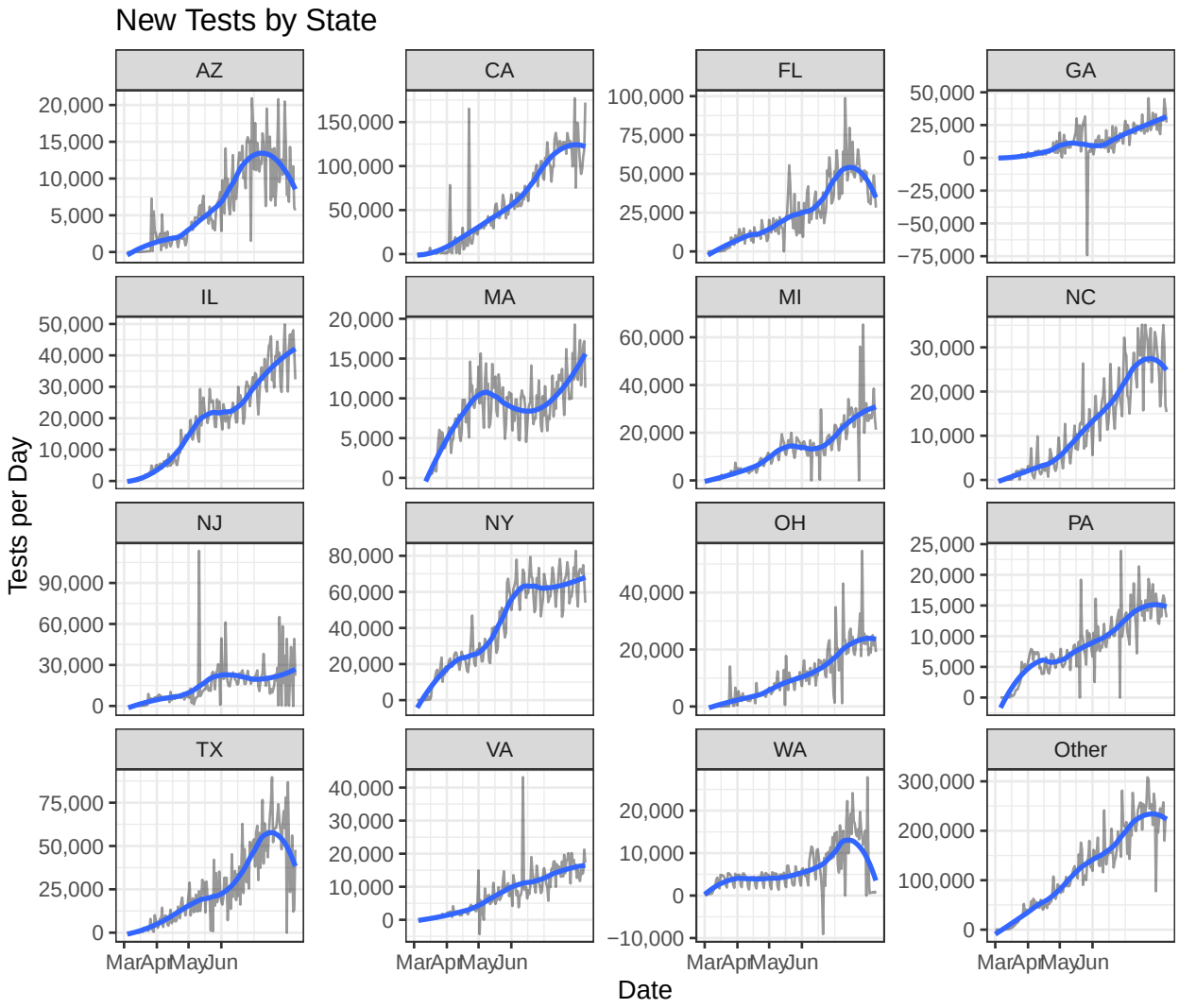

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

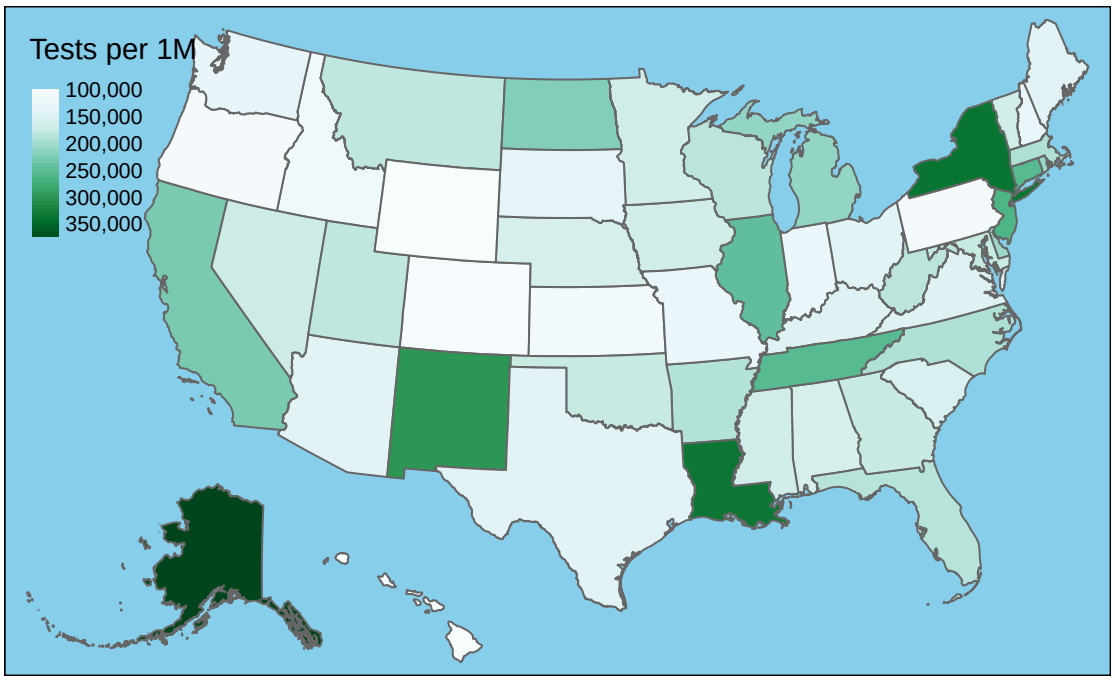

Cases
3,162
10,000
31,623
100,000
316,228

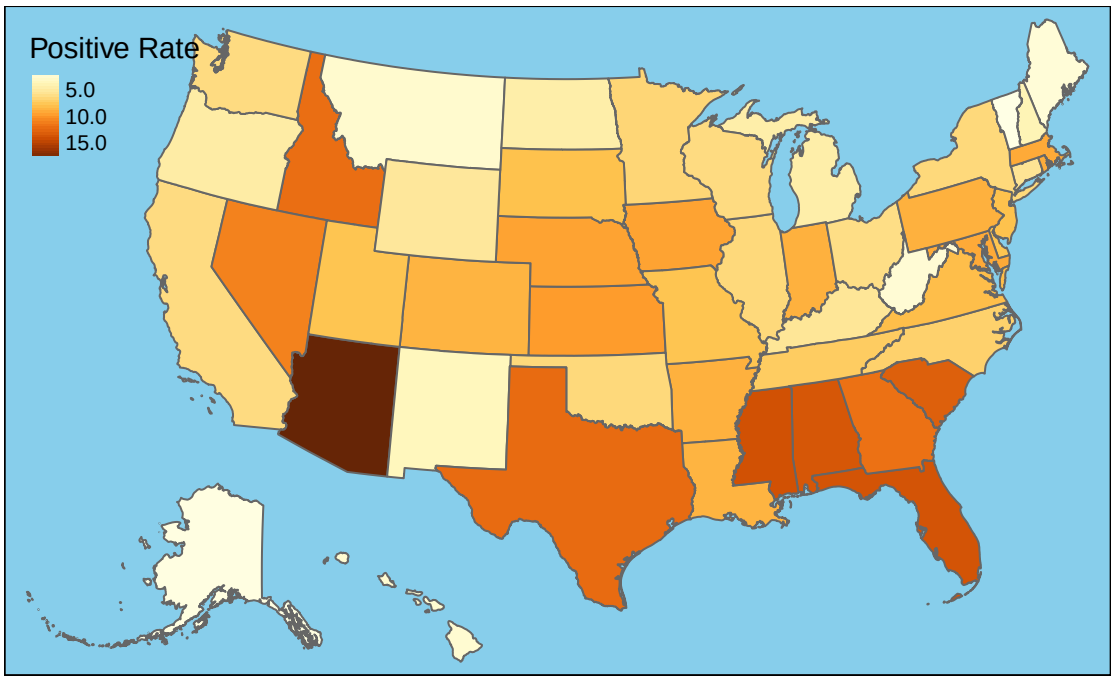

Cases per 1M
2,512
3,981
6,310
10,000
15,849
25,119

Testing

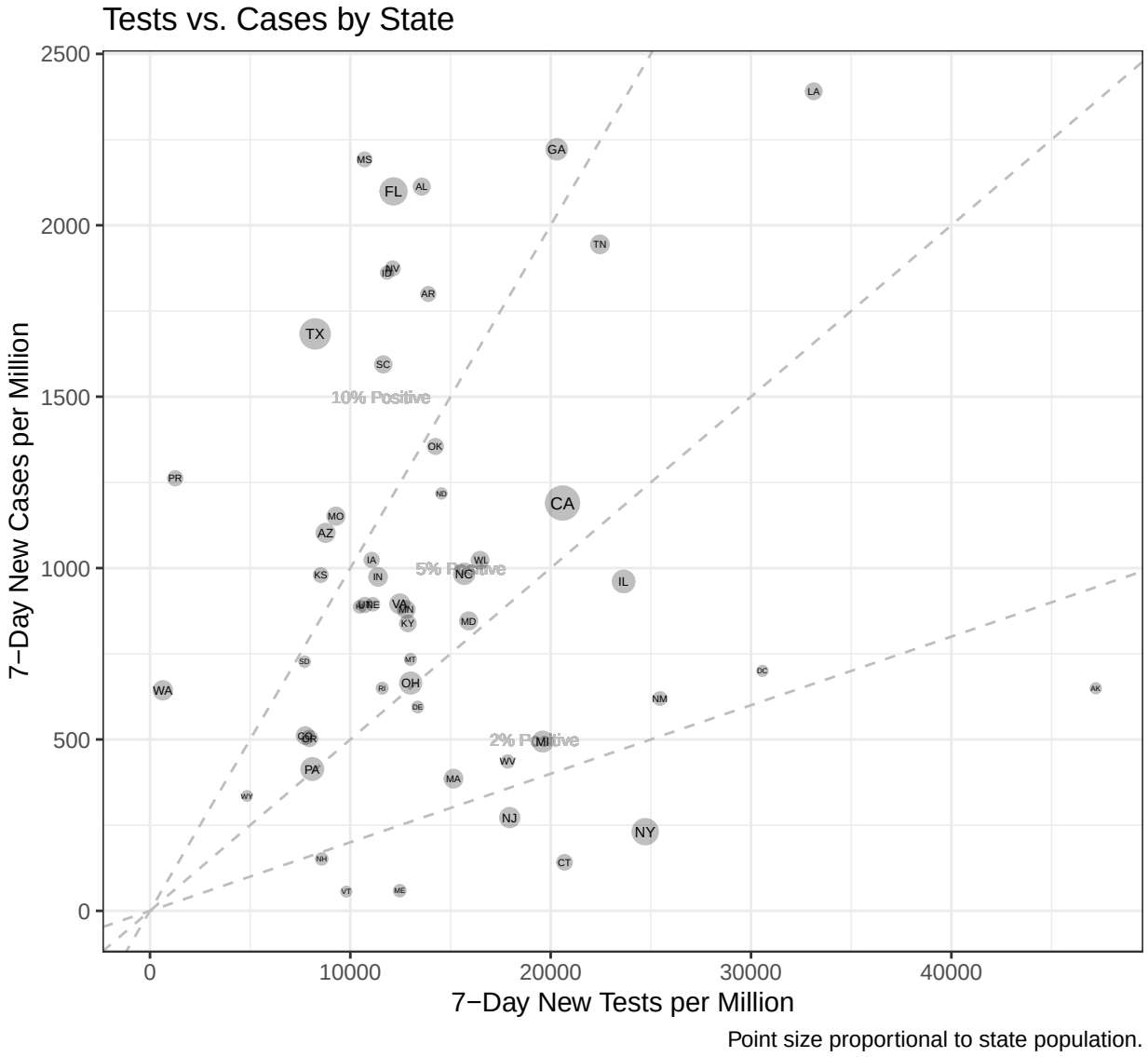

Tests by State
Total Tests
20,000,000
15,000,000
10,000,000
5,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


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
100,000
150,000
200,000
250,000
300,000
350,000


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.

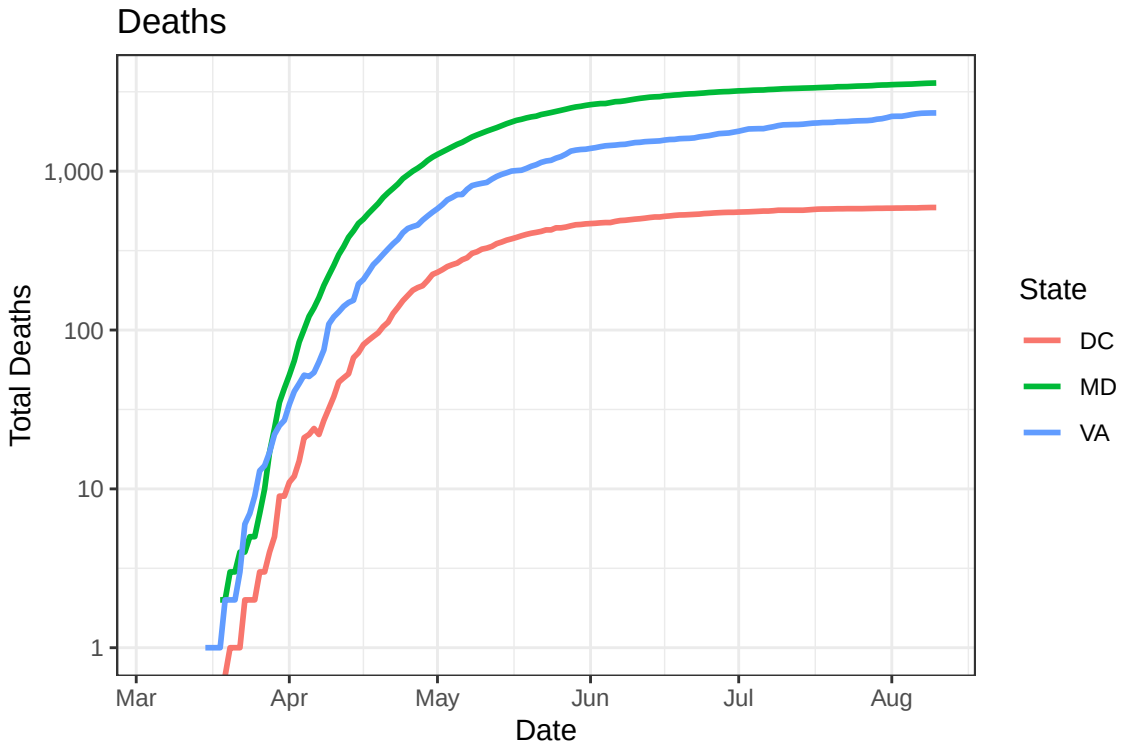
Local Data

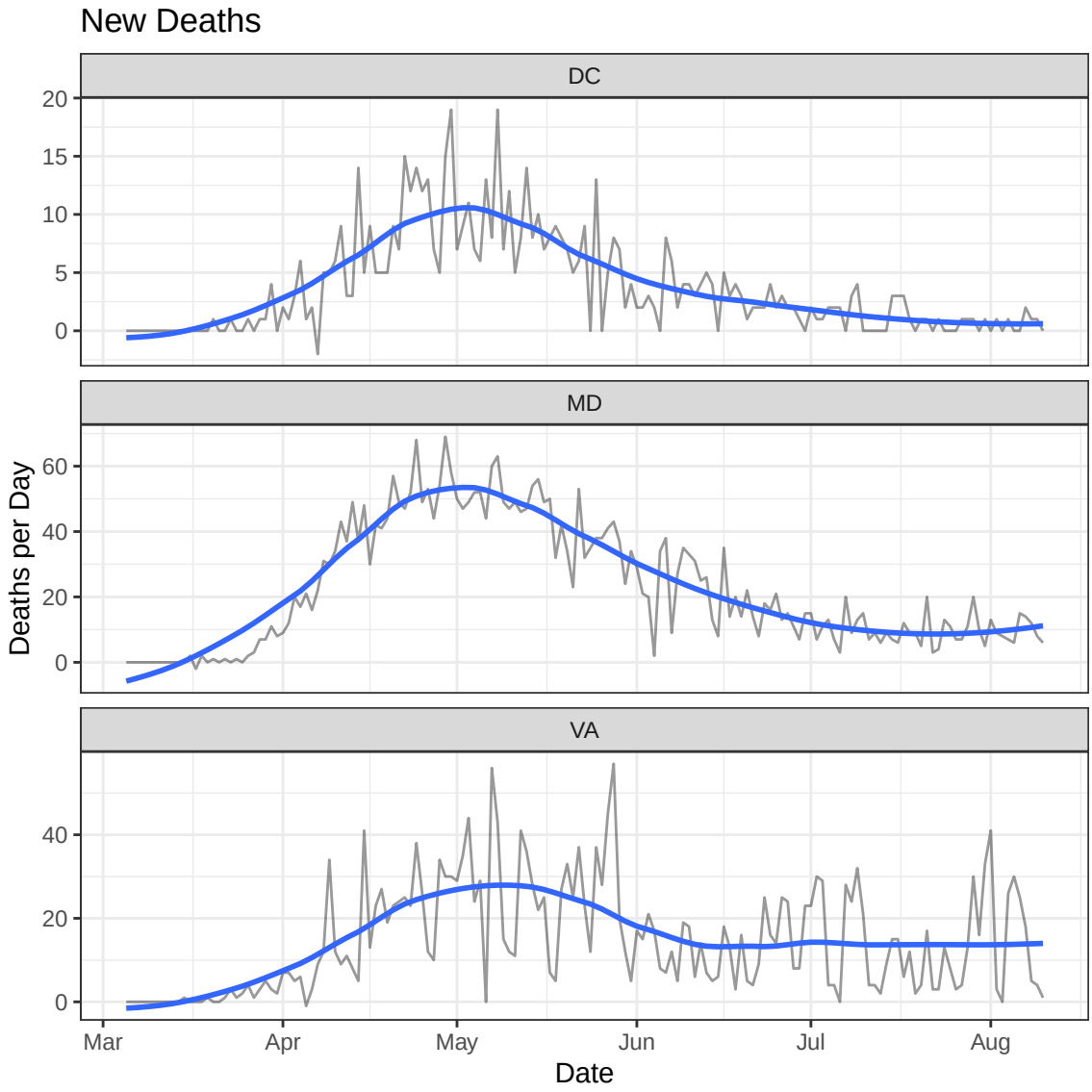
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

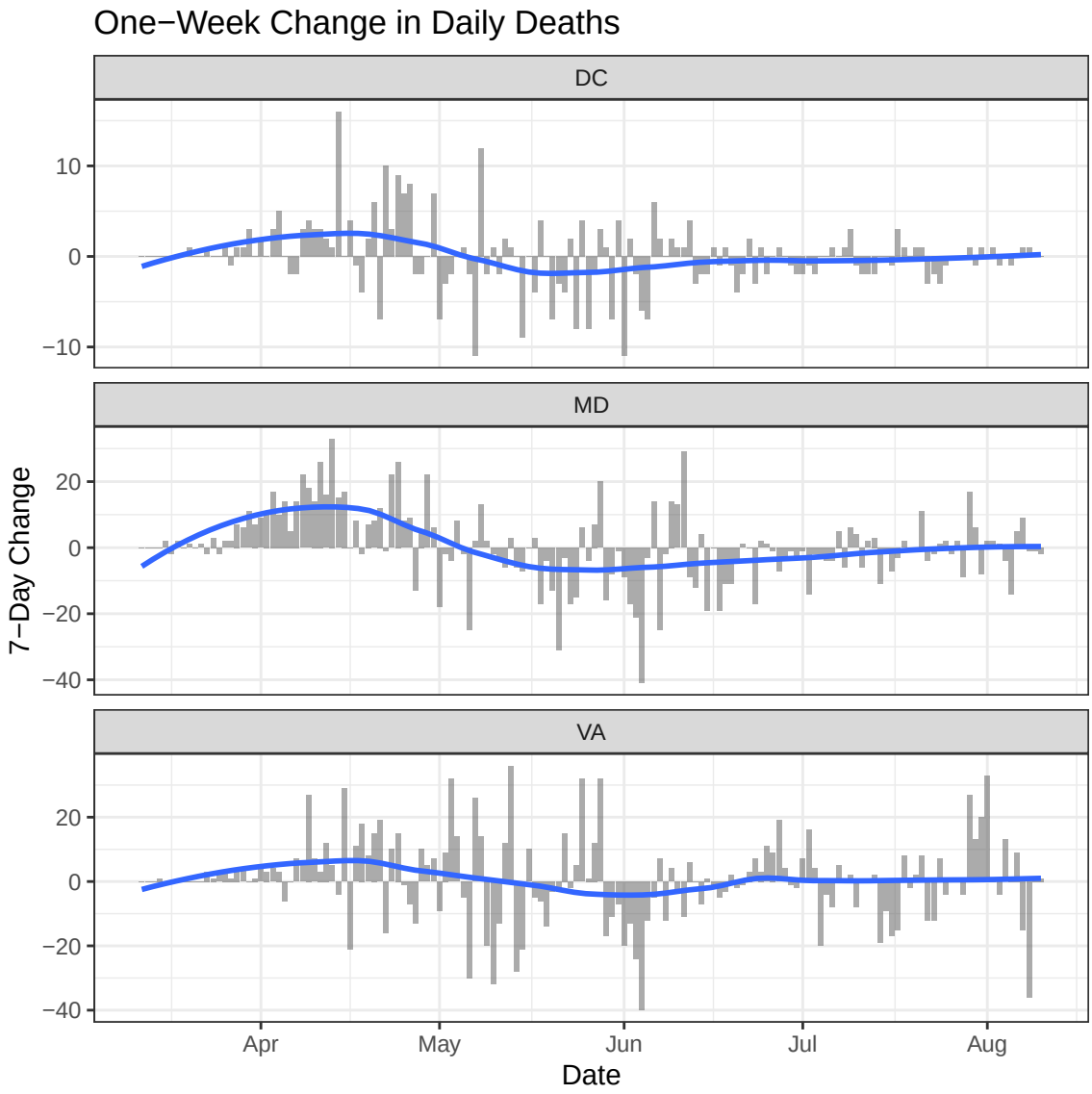
Table 3: Latest Local Data

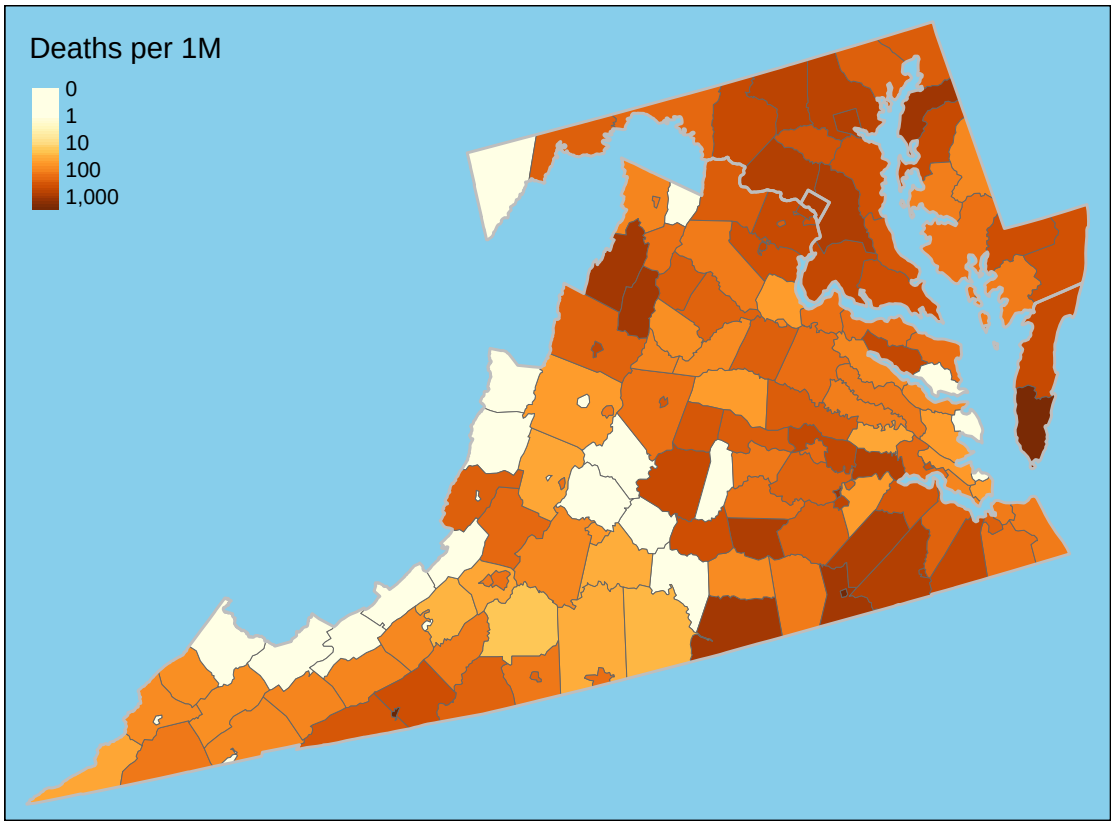
State	Cases	Deaths	New Cases	New Deaths
DC	12,807	591	54	0
MD	96,258	3,591	755	6
VA	100,749	2,327	663	1

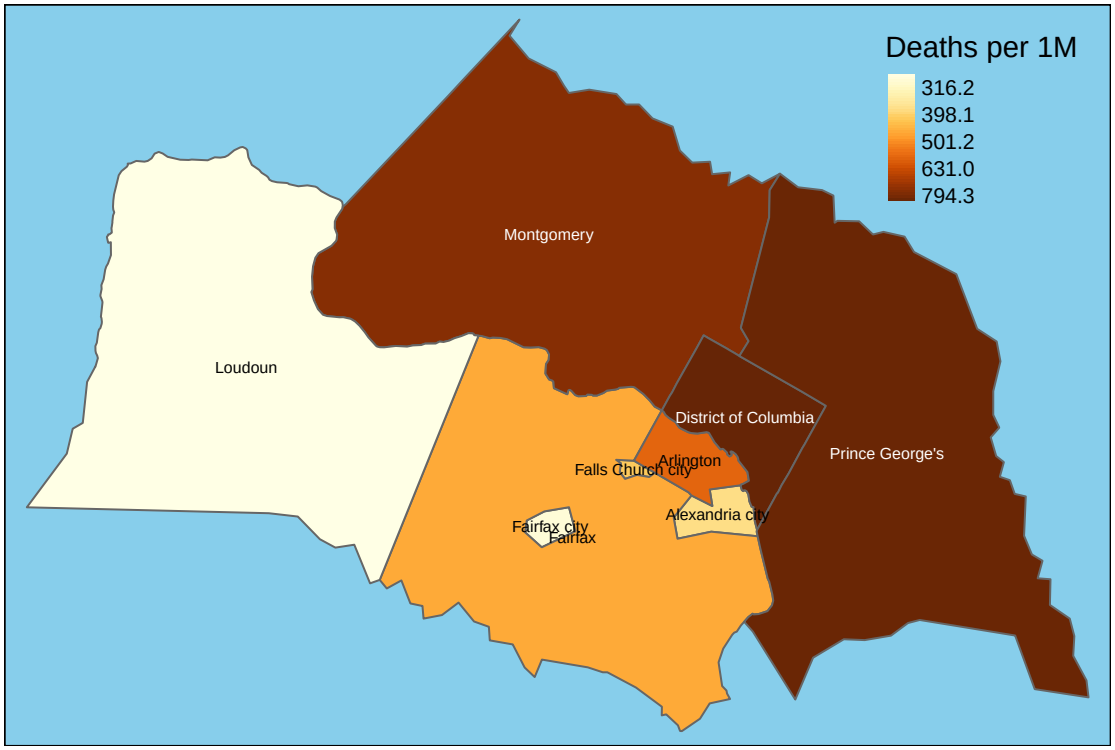
Deaths


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

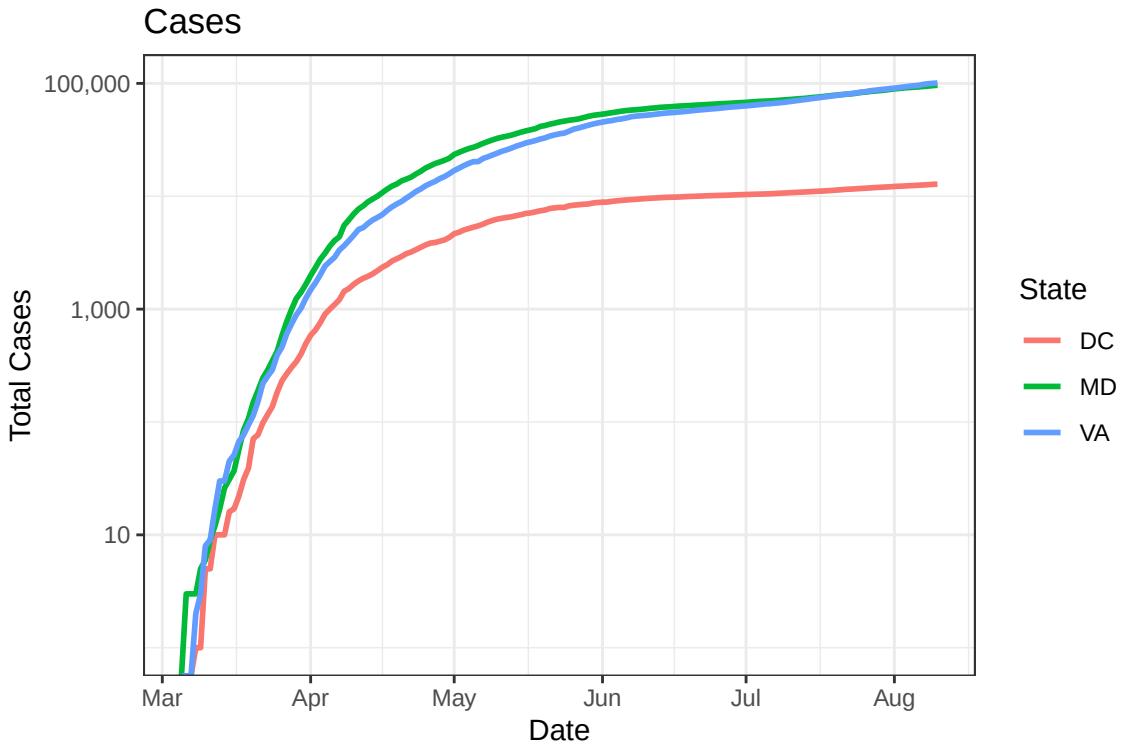

New Deaths
DC
MD
VA
Deaths per Day
Date
Mar
Apr
May
Jun
Jul
Aug

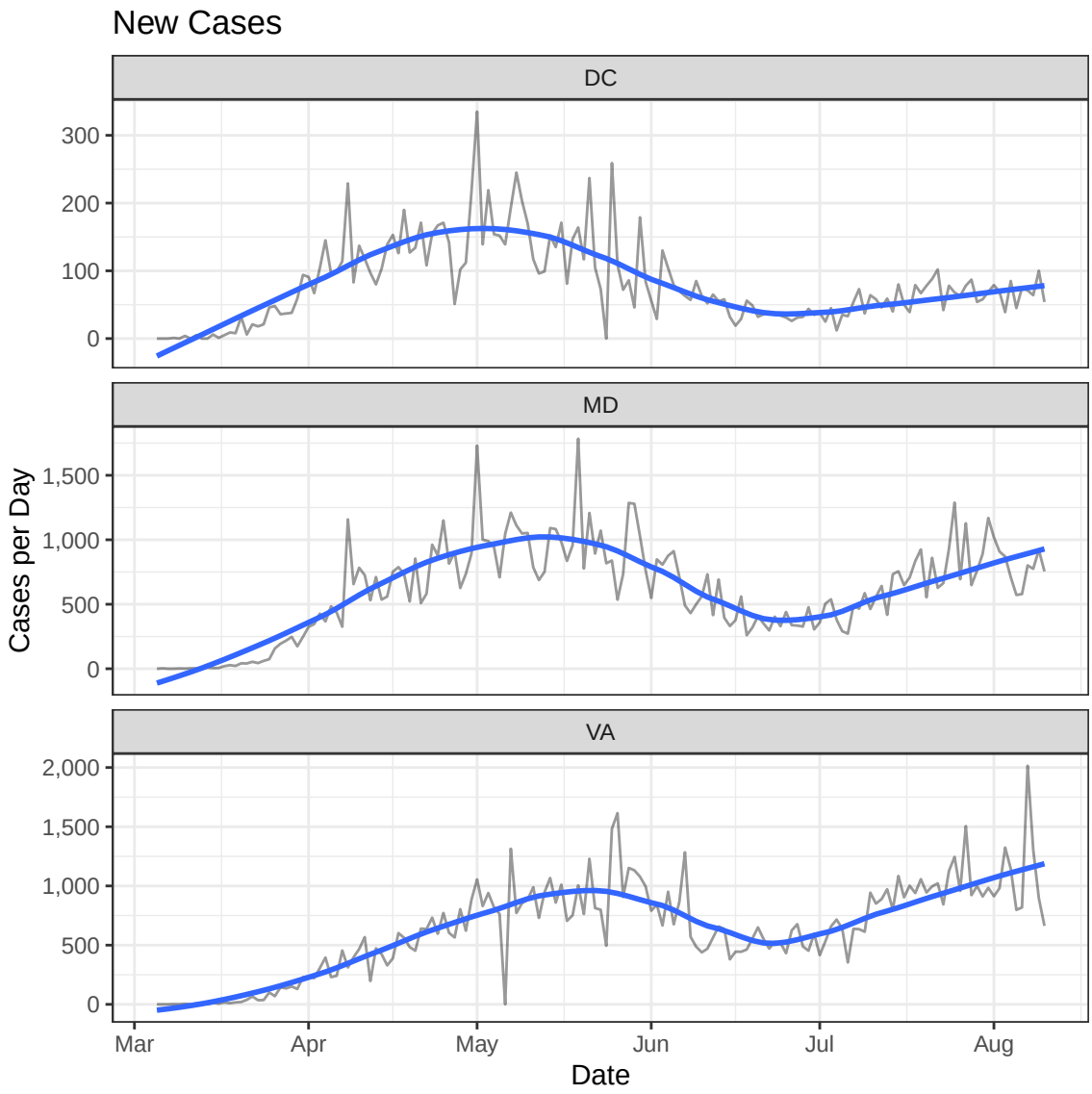

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
7−Day Change
Apr
May
Jun
Jul
Aug
Date

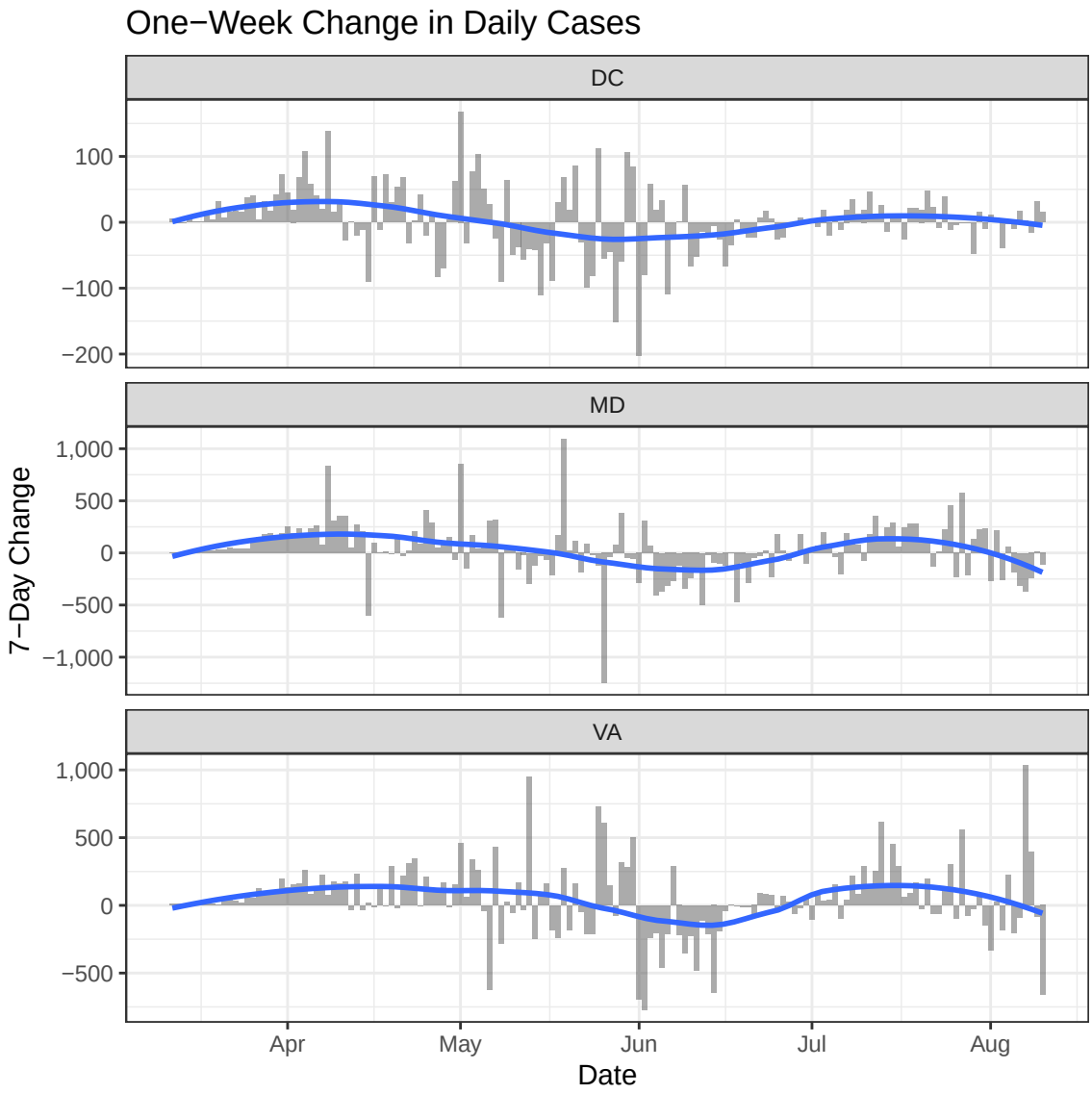

Deaths per 1M
0
1
10
100
1,000

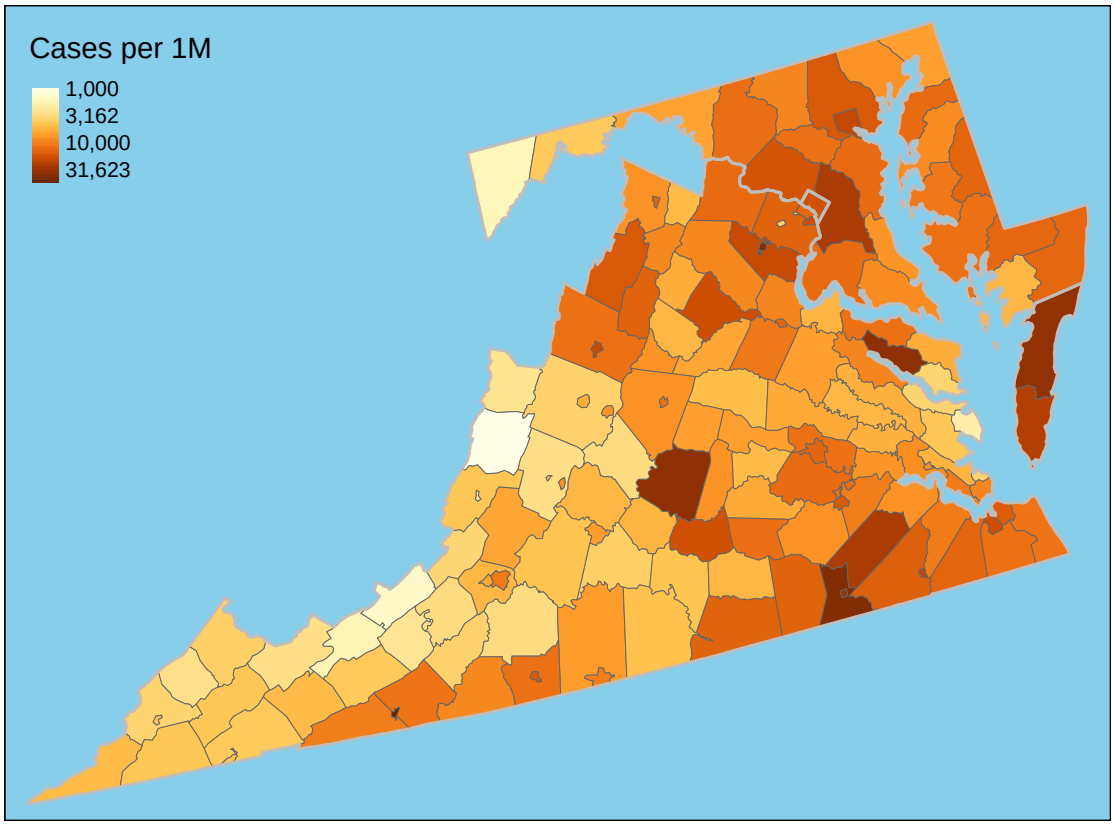

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

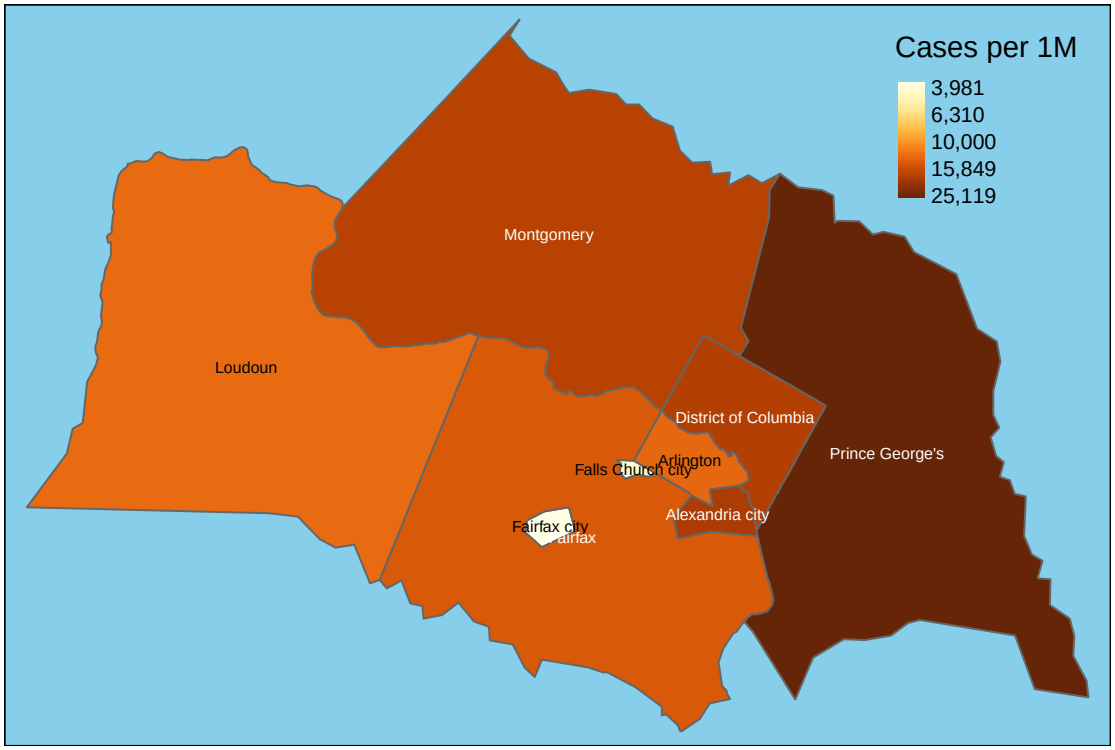
Cases


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

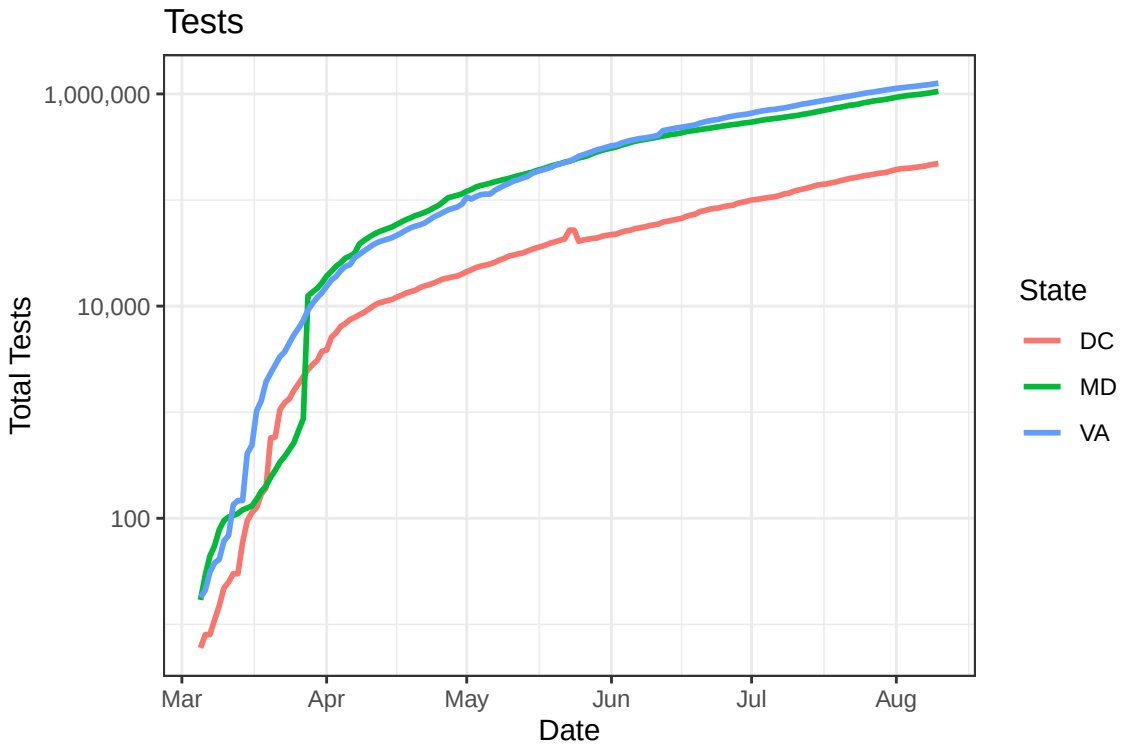

New Cases
DC
MD
VA
Cases per Day
0
100
200
300
500
1,000
1,500
2,000
Mar
Apr
May
Jun
Jul
Aug
Date

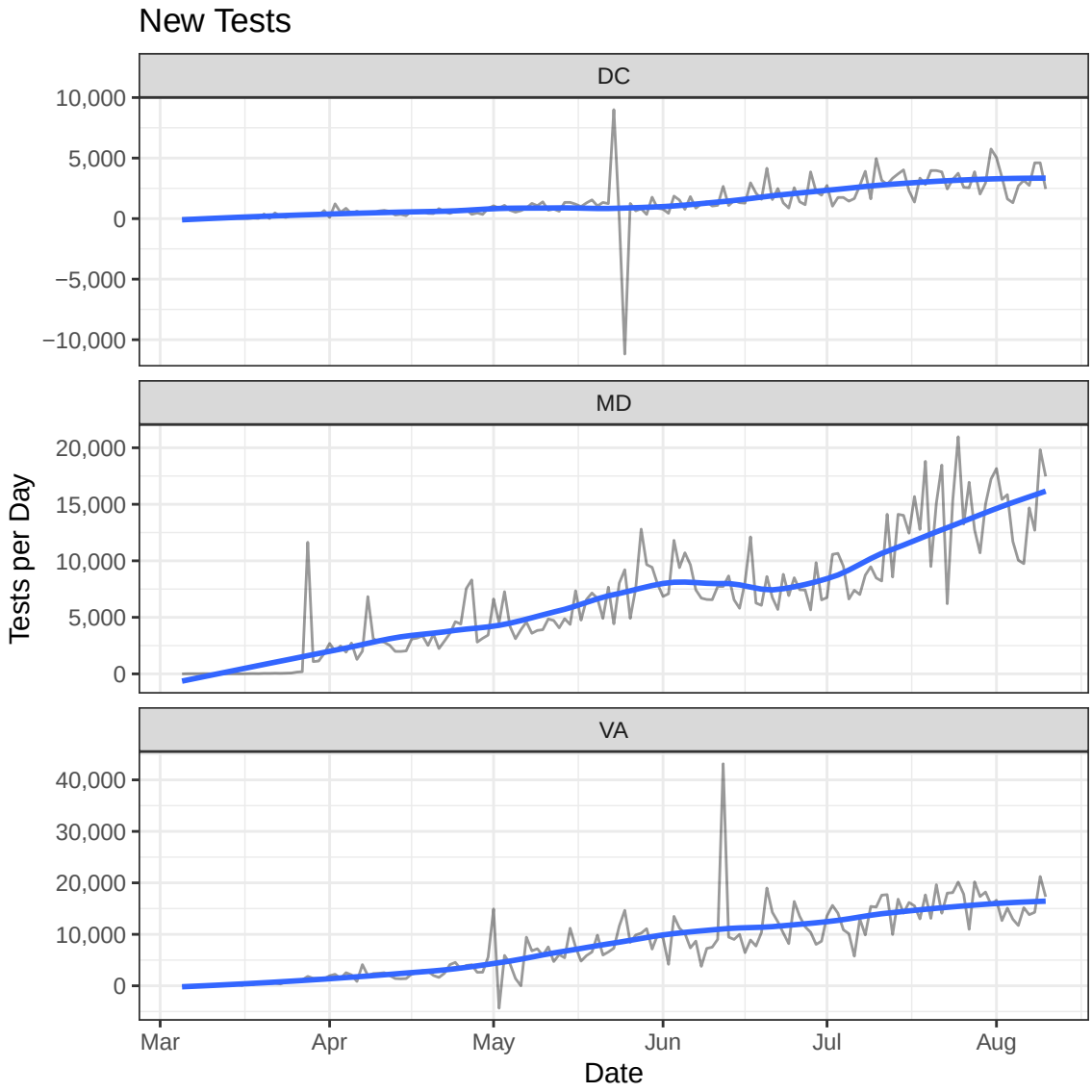

One−Week Change in Daily Cases
DC
MD
VA
100
0
−100
−200
1,000
500
0
−500
−1,000
7−Day Change
Apr
May
Jun
Jul
Aug
Date

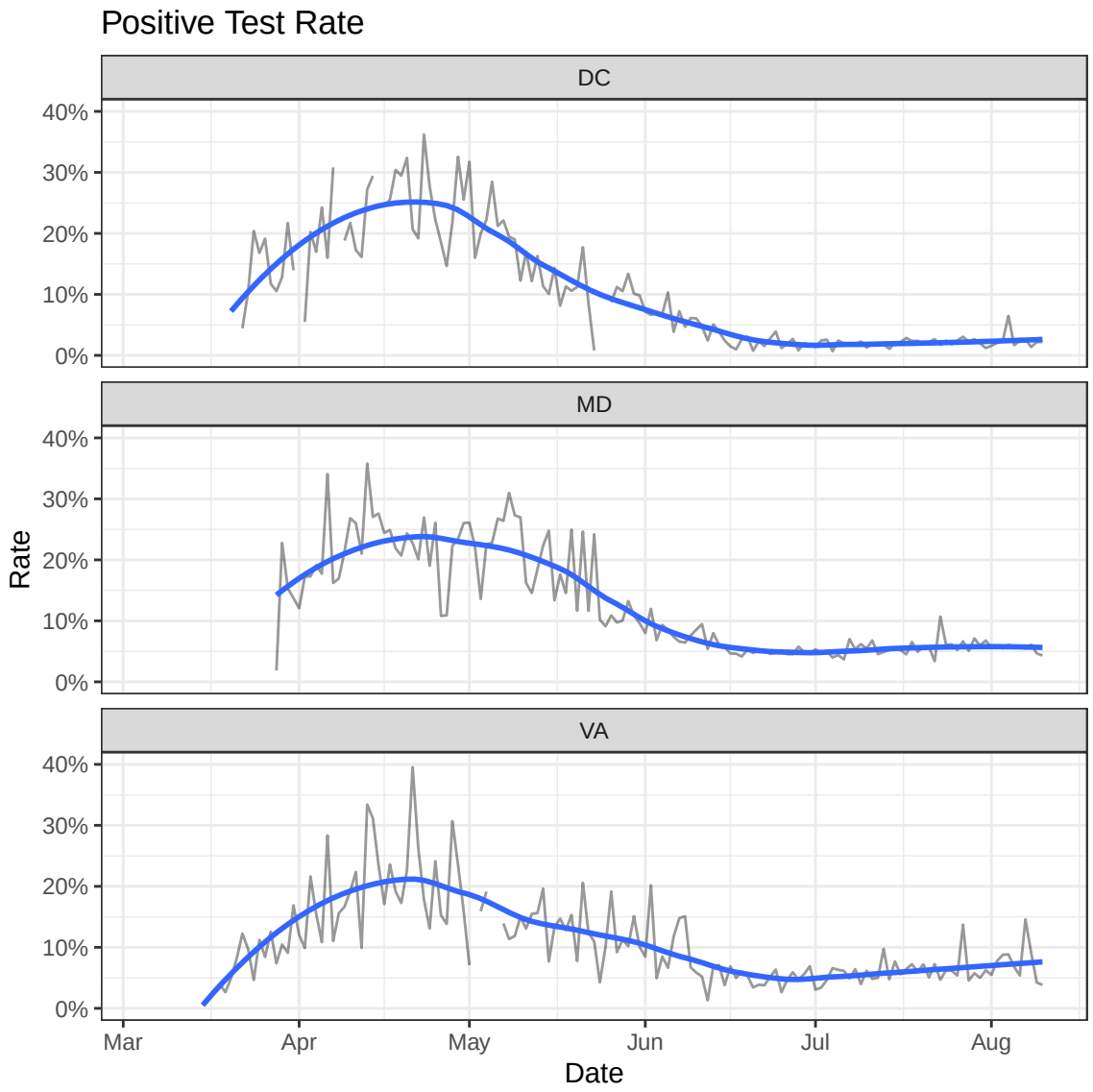

Cases per 1M
1,000
3,162
10,000
31,623


Cases per 1M
3,981
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