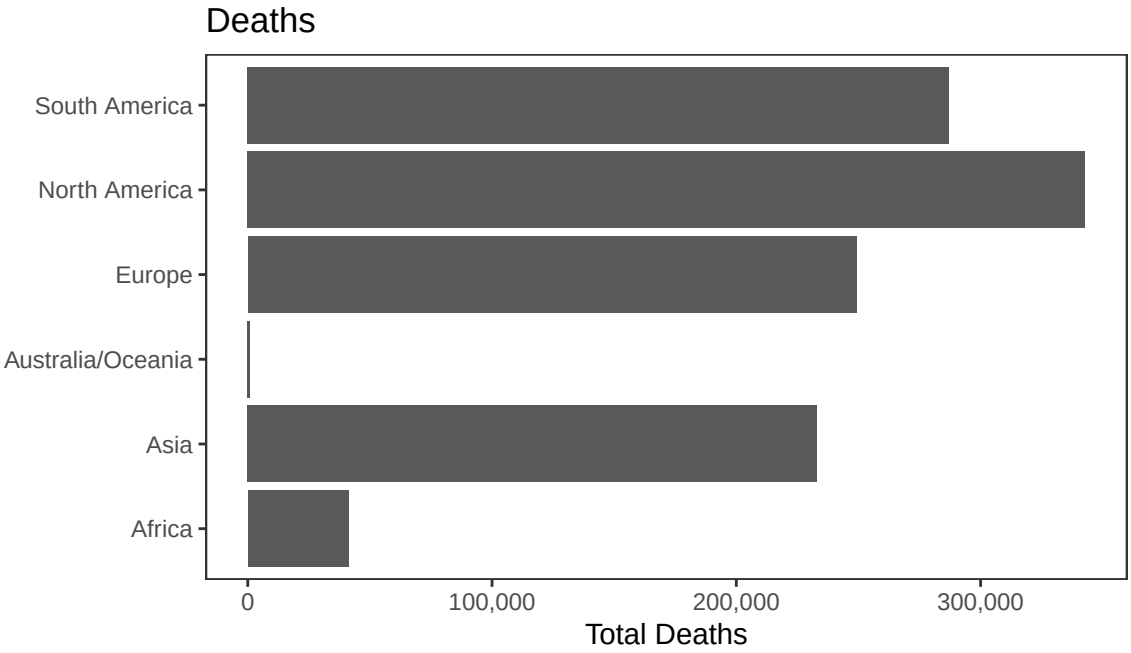
Erik's Covid-19 Chart Pack

Data updated 2020-10-25 20:21:38. 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 42,918,598 confirmed Covid-19 cases and 1,154,312 deaths worldwide.



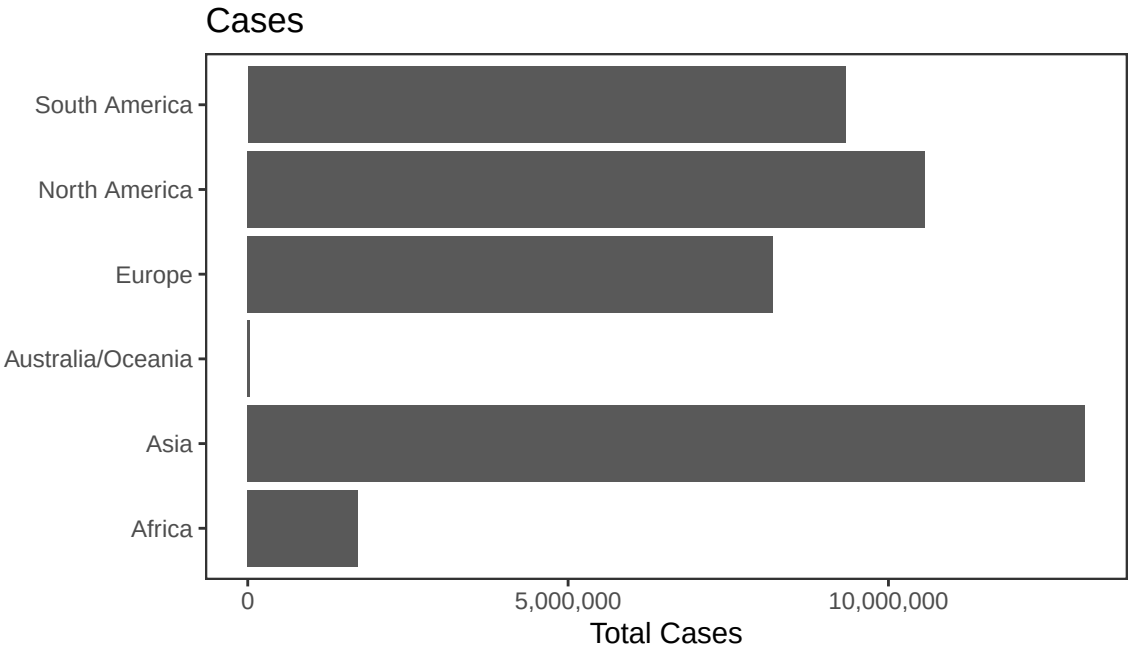
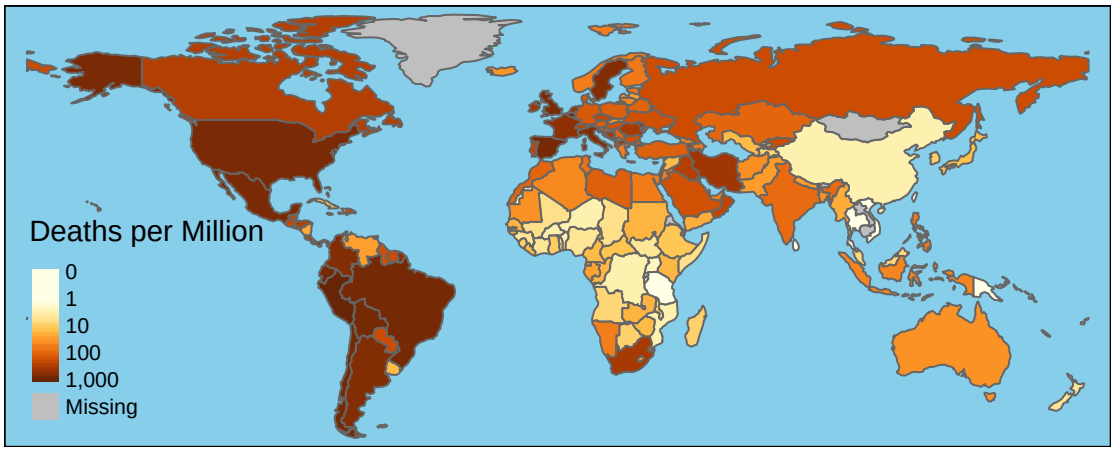
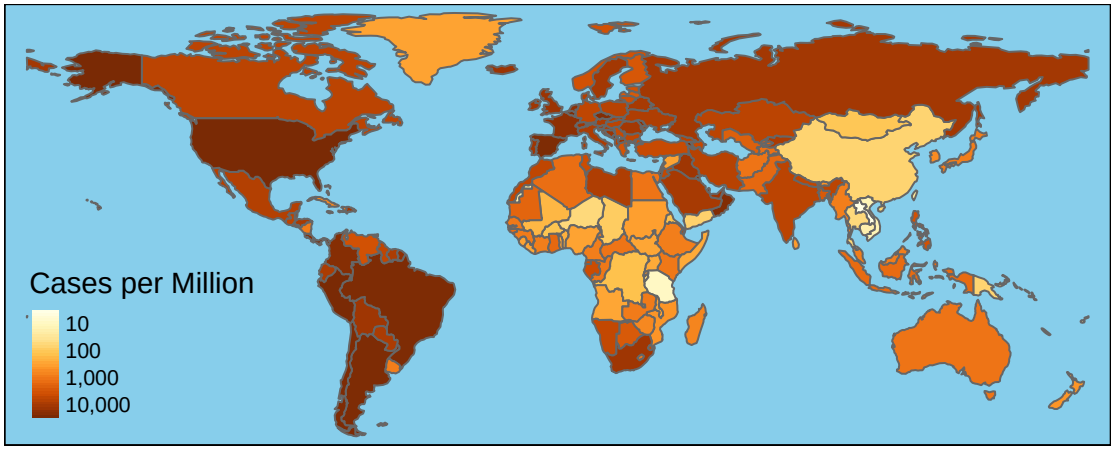
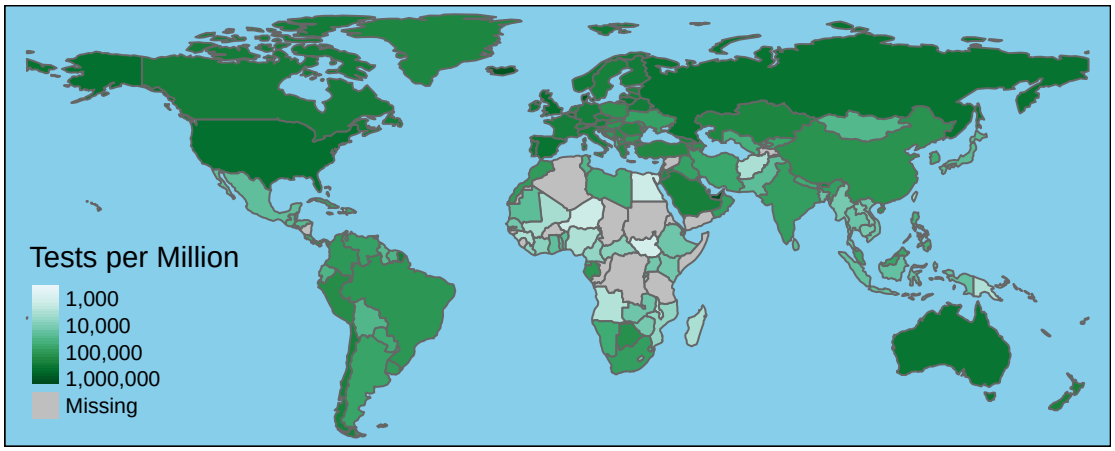


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	8,828,290	230,068	79,453	784
India	7,863,892	118,567	50,224	575
Brazil	5,381,224	156,926	25,574	398
Russia	1,497,167	25,821	16,521	296
Spain	1,110,372	34,752	0	0
France	1,086,497	34,645	45,422	137
Argentina	1,081,336	28,613	11,968	275
Colombia	1,007,711	30,000	8,769	198
Peru	886,214	34,095	3,098	62
Mexico	880,775	88,312	6,604	418
UK	854,010	44,745	23,012	174
South Africa	714,246	18,944	1,834	53
Iran	562,705	32,320	5,814	335
Italy	504,509	37,210	19,644	151
Chile	500,523	13,892	1,612	48
Iraq	449,153	10,568	3,204	55
Germany	427,808	10,111	10,458	21
Bangladesh	397,507	5,780	1,094	19
Indonesia	385,980	13,205	4,070	128
Philippines	367,805	6,934	2,043	19


Deaths per Million
0
1
10
100
1,000
Missing


Cases per Million
10
100
1,000
10,000


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

National Data

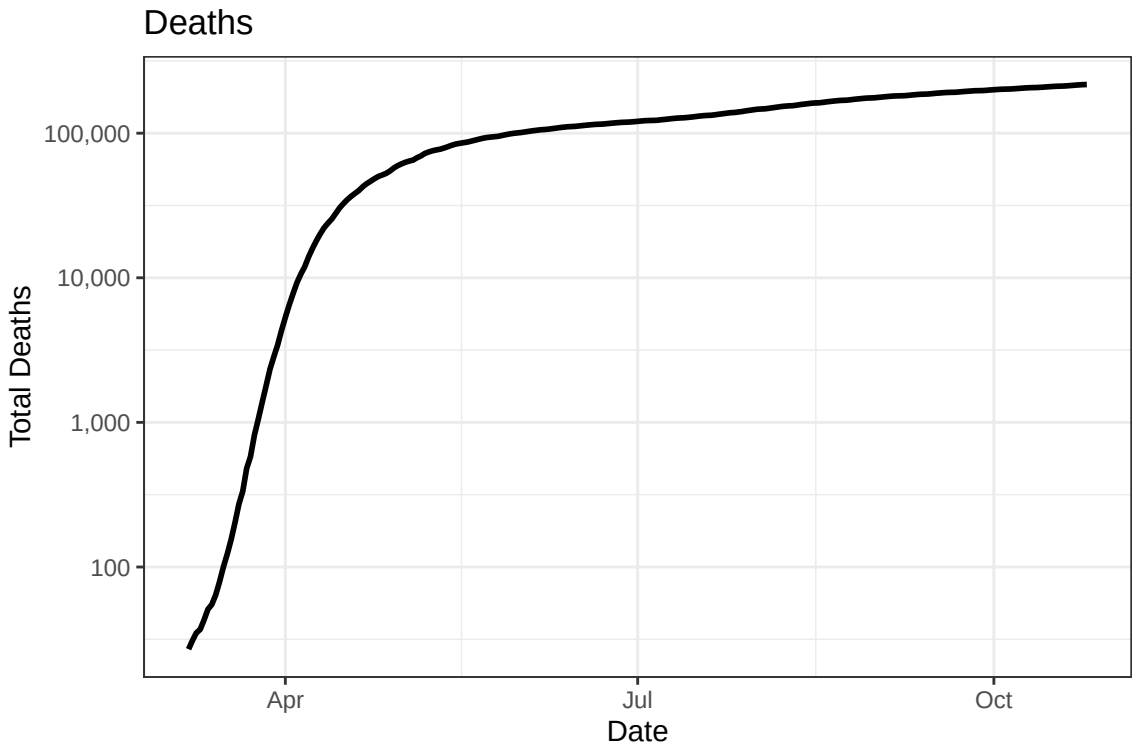
There have been 8,597,312 confirmed Covid-19 cases and 217,023 deaths in the United States.

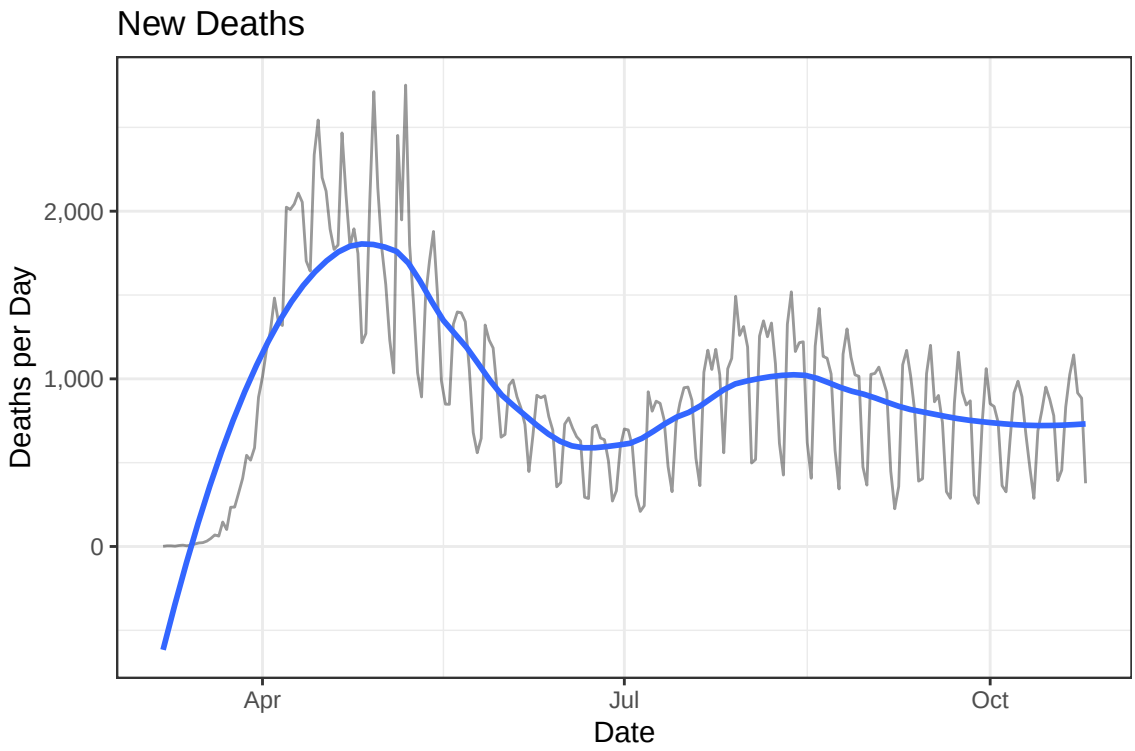
Table 2: U.S. Deaths and Cases over the Last Two Weeks

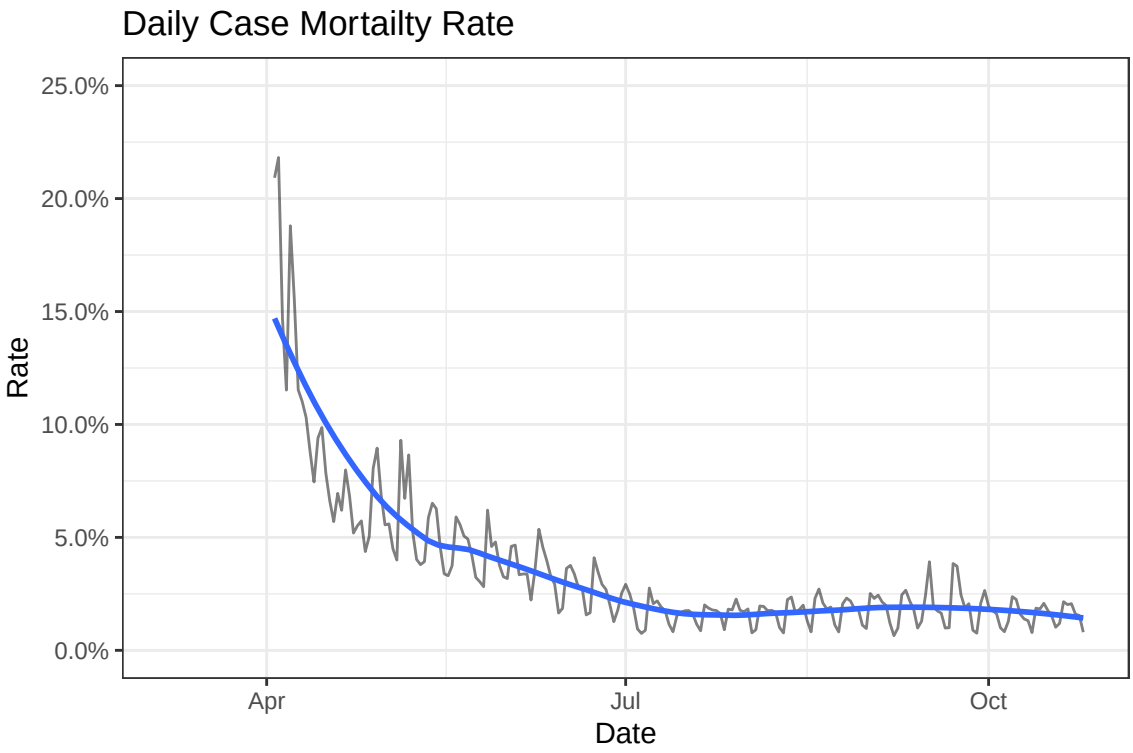
Date	Cases	Deaths	New Cases	New Deaths
2020-10-25	8,597,312	217,023	65,413	377
2020-10-24	8,531,899	216,646	82,668	885
2020-10-23	8,449,231	215,761	83,010	916
2020-10-22	8,366,221	214,845	75,248	1,143
2020-10-21	8,290,973	213,702	58,606	1,024
2020-10-20	8,232,367	212,678	60,664	832
2020-10-19	8,171,703	211,846	57,148	456
2020-10-18	8,114,555	211,390	48,922	393
2020-10-17	8,065,633	210,997	57,943	780
2020-10-16	8,007,690	210,217	68,124	877
2020-10-15	7,939,566	209,340	63,172	951
2020-10-14	7,876,394	208,389	56,797	811
2020-10-13	7,819,597	207,578	48,387	690
2020-10-12	7,771,210	206,888	43,124	287

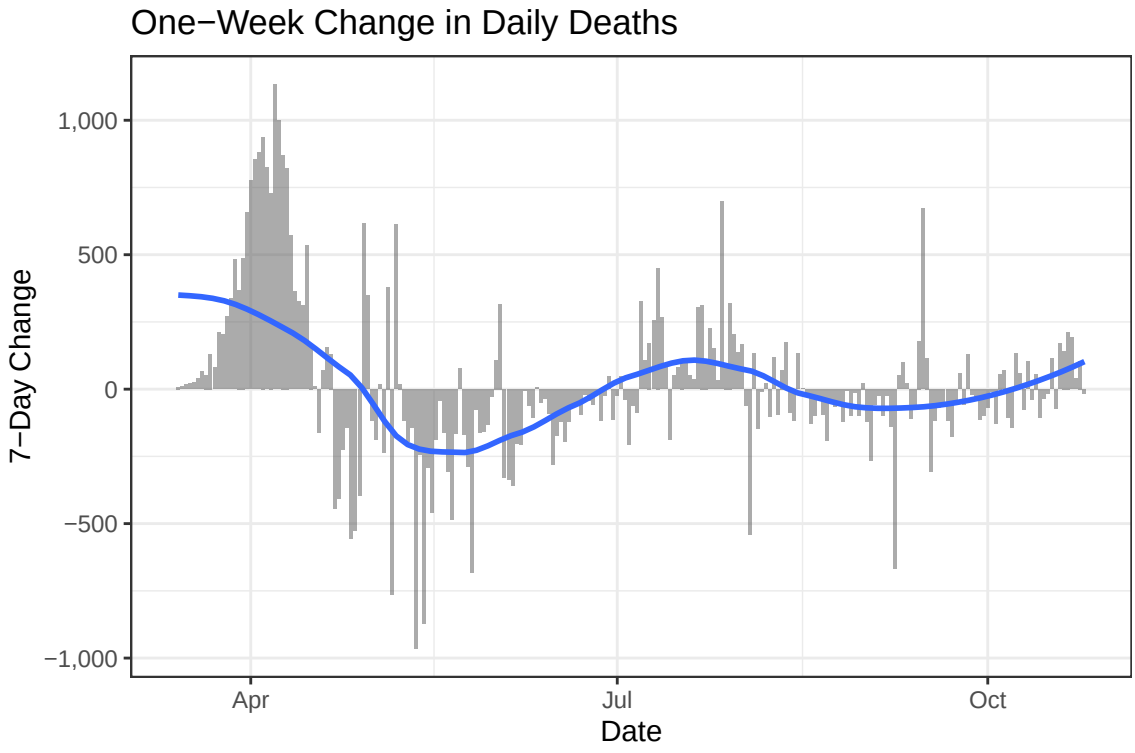
Deaths

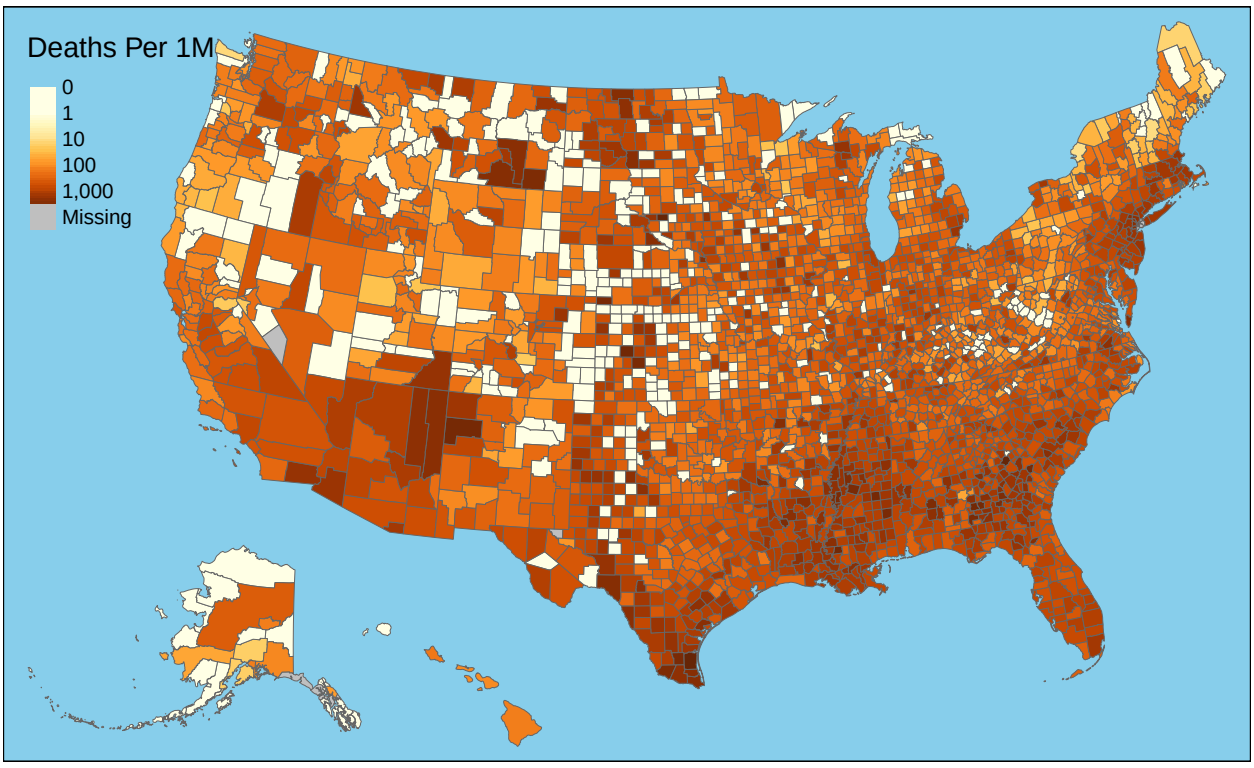
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator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





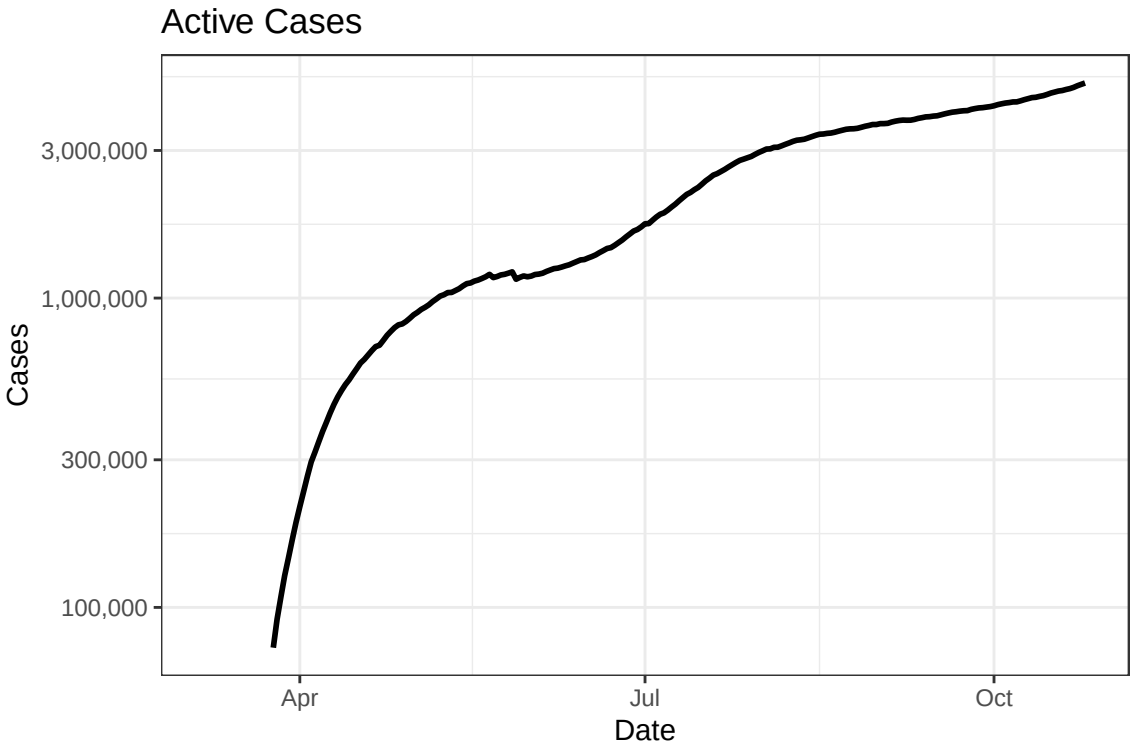

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Apr
Jul
Oct
Date

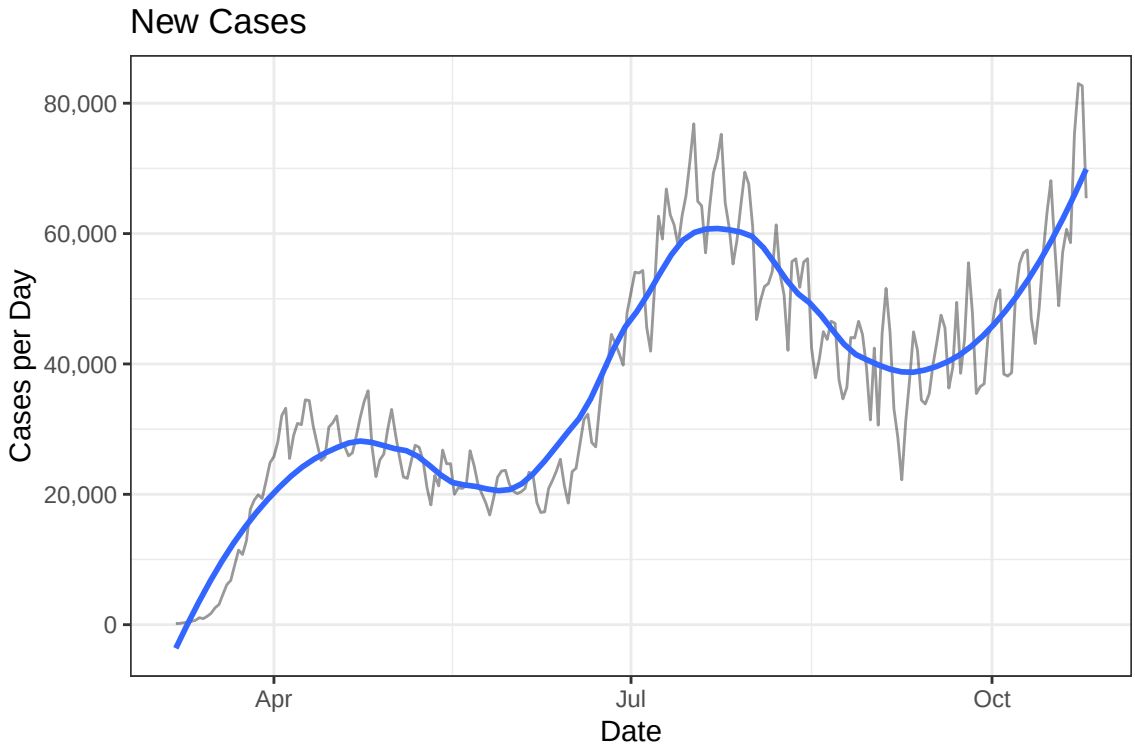

One−Week Change in Daily Deaths
1,000
500
0
−500
−1,000
7−Day Change
Apr
Jul
Oct
Date

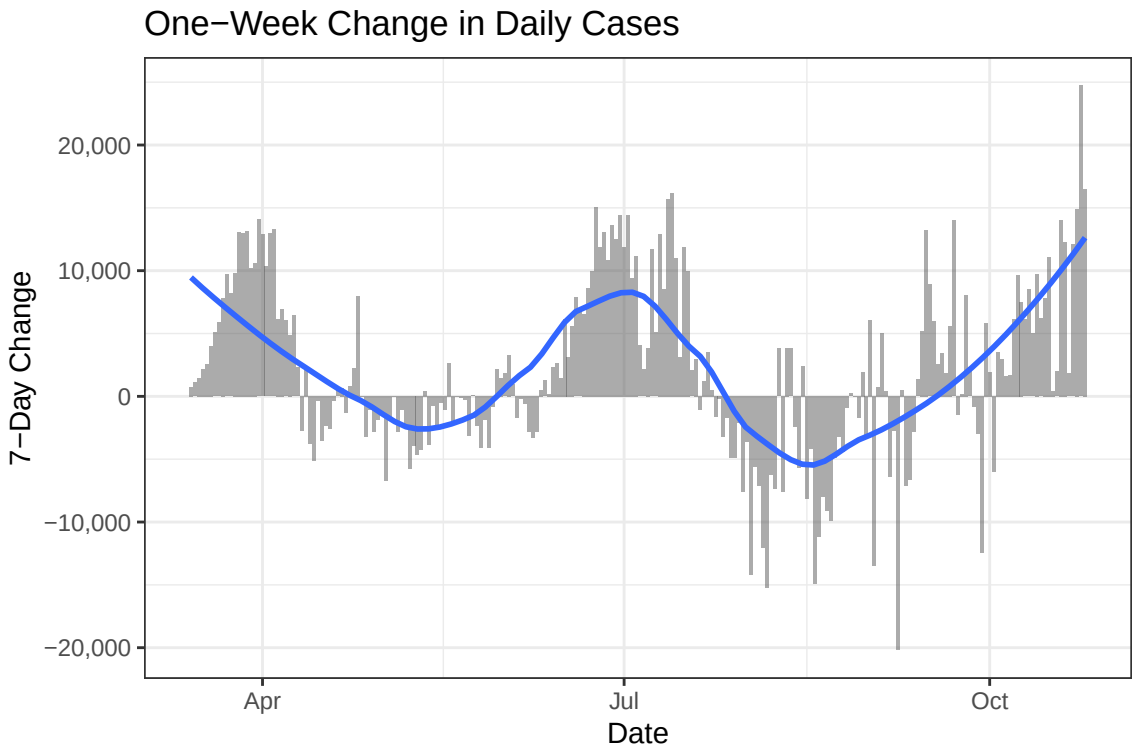

Deaths Per 1M
0
1
10
100
1,000
Missing

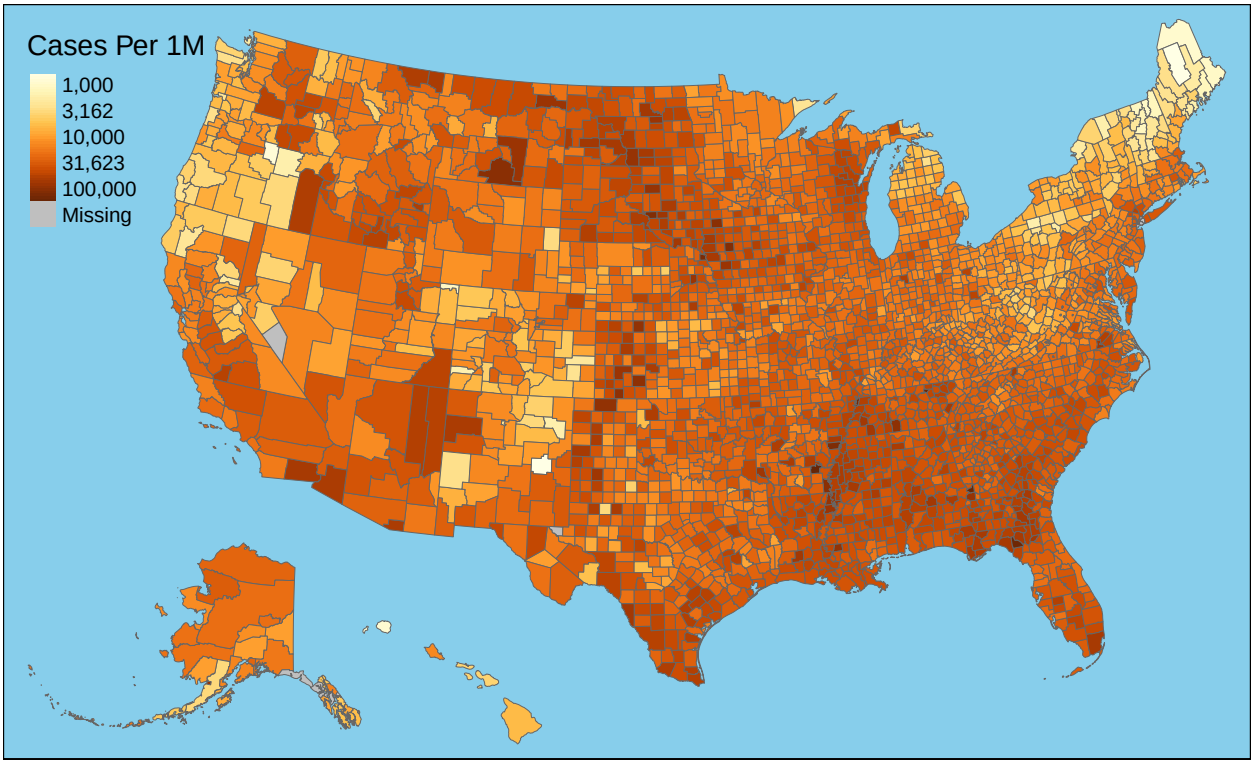
Cases

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



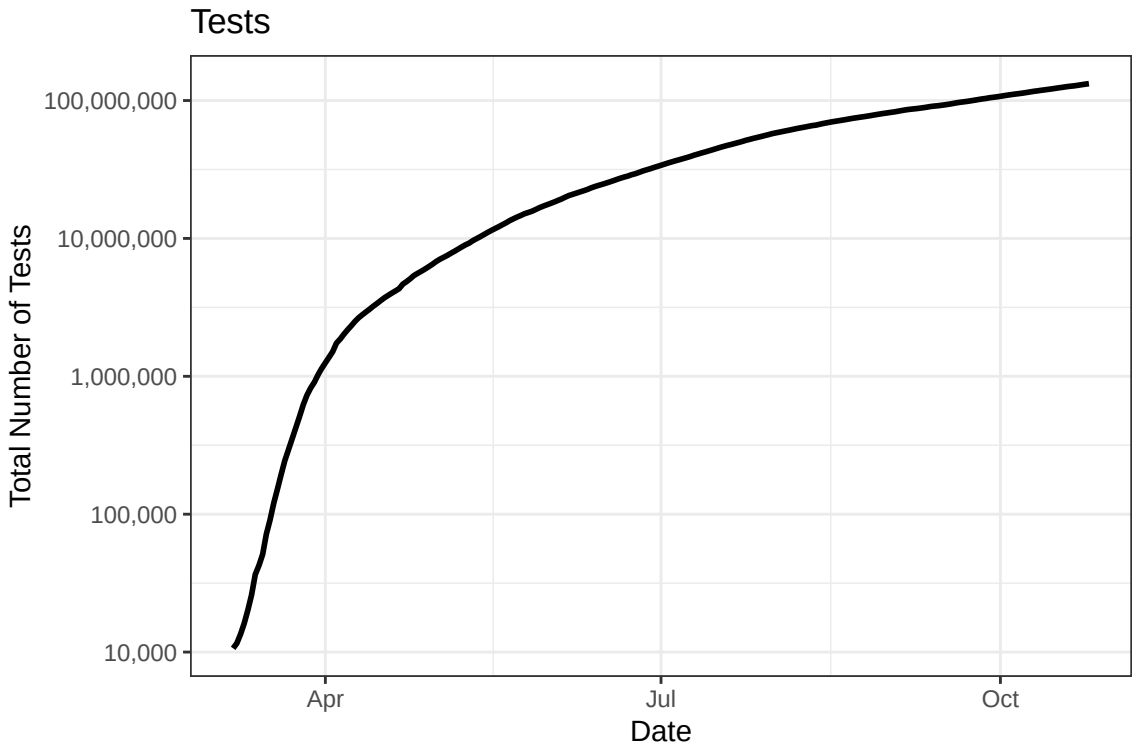


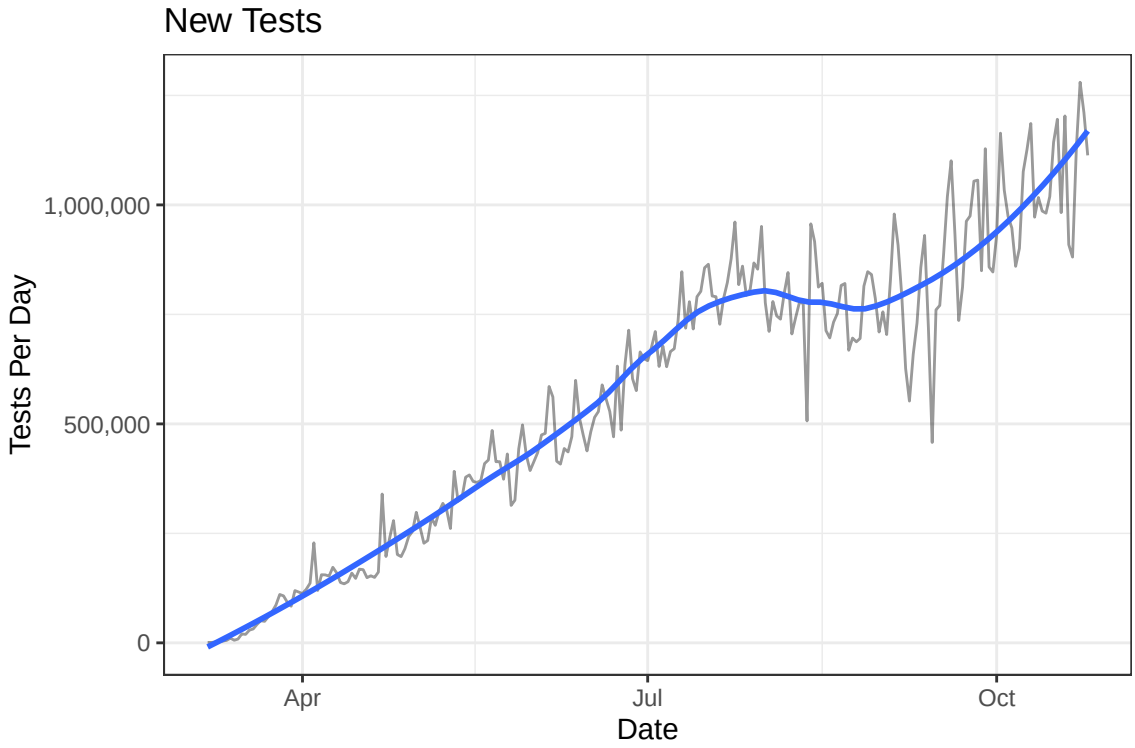

One−Week Change in Daily Cases
20,000
10,000
0
−10,000
−20,000
7−Day Change
Apr
Jul
Oct
Date

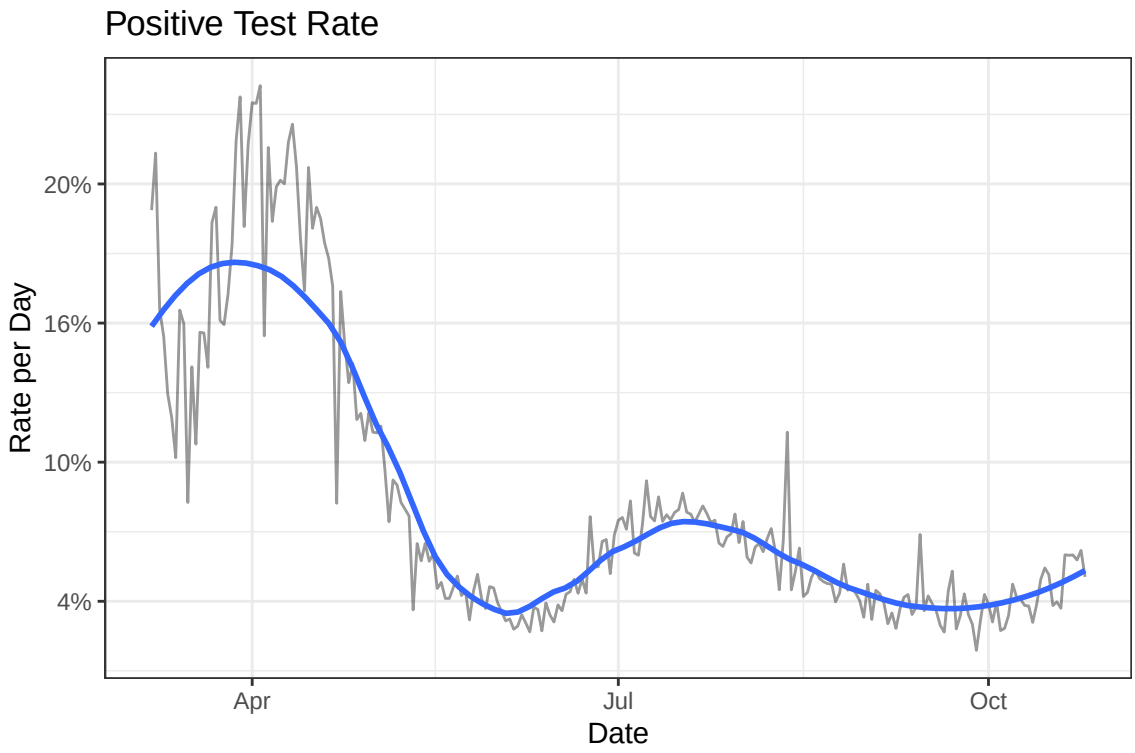

Cases Per 1M
1,000
3,162
10,000
31,623
100,000
Missing

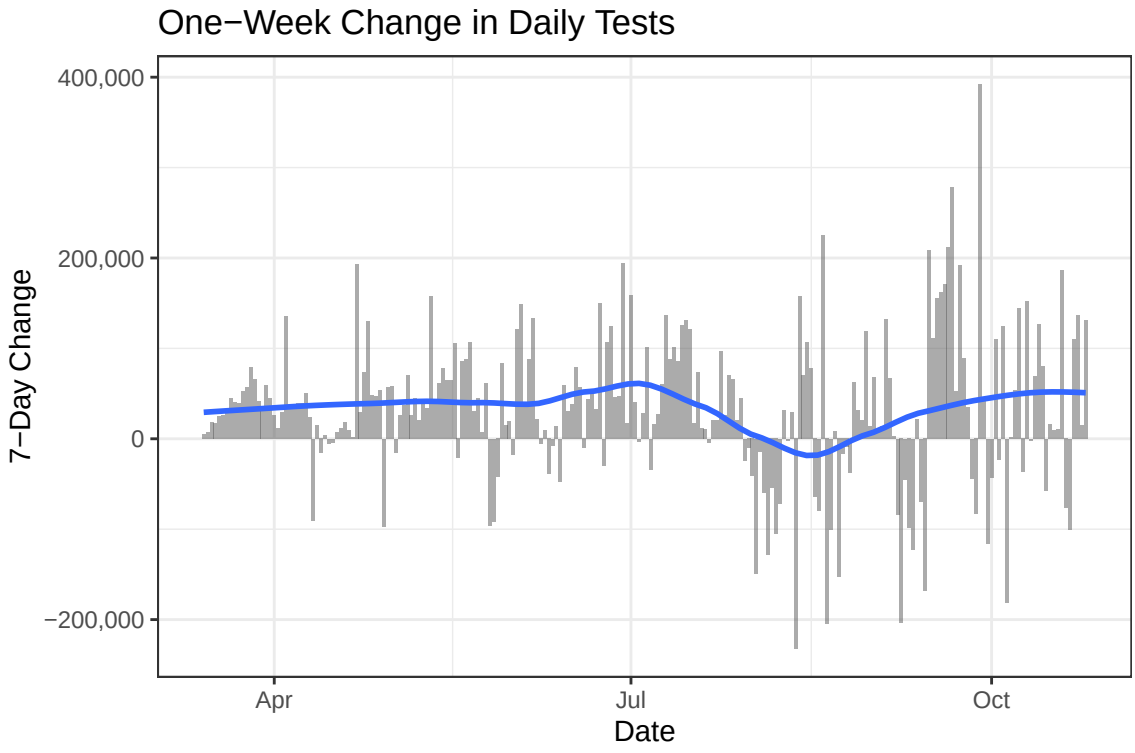
Testing

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.





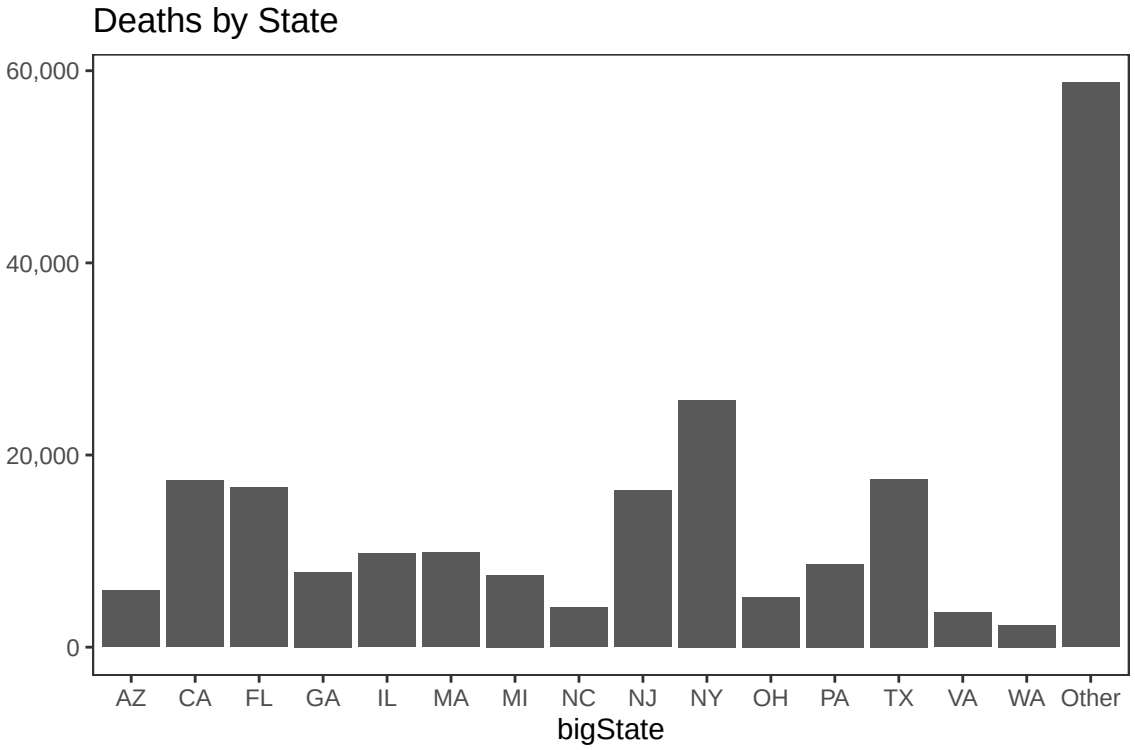

Positive Test Rate
20%
16%
10%
4%
Rate per Day
Apr
Jul
Oct
Date

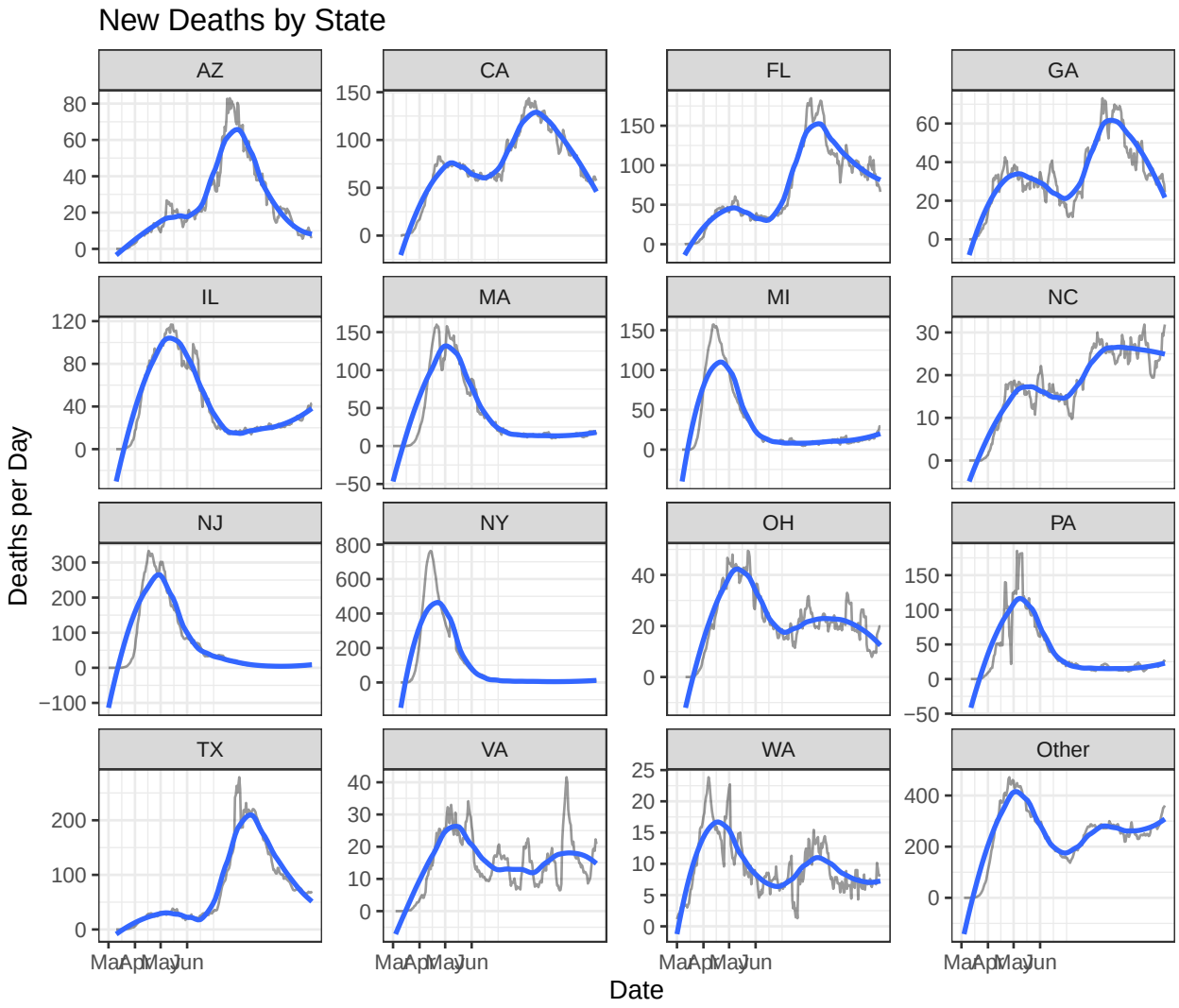

One−Week Change in Daily Tests
400,000
200,000
0
−200,000
7−Day Change
Apr
Jul
Oct
Date

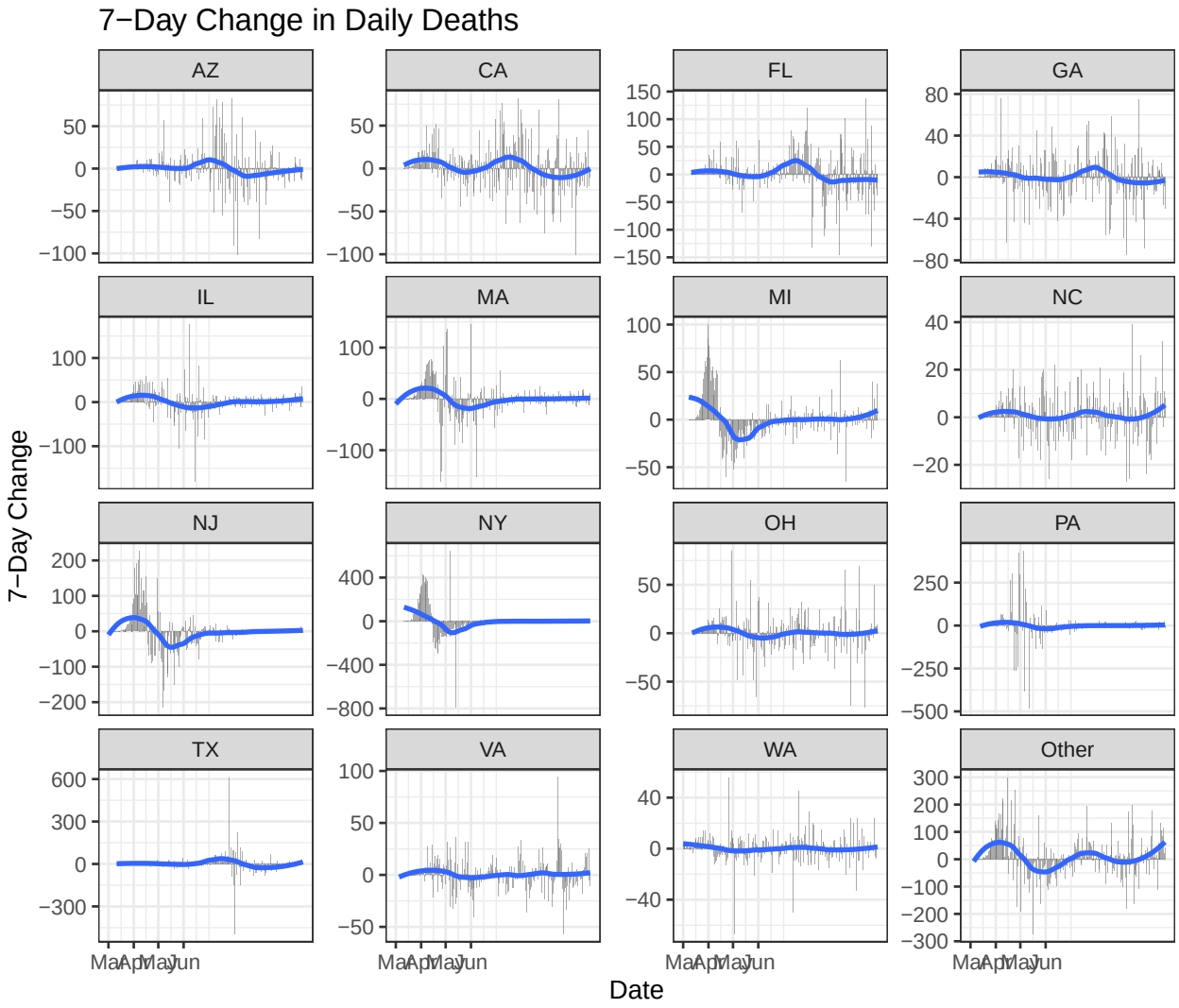
State Data

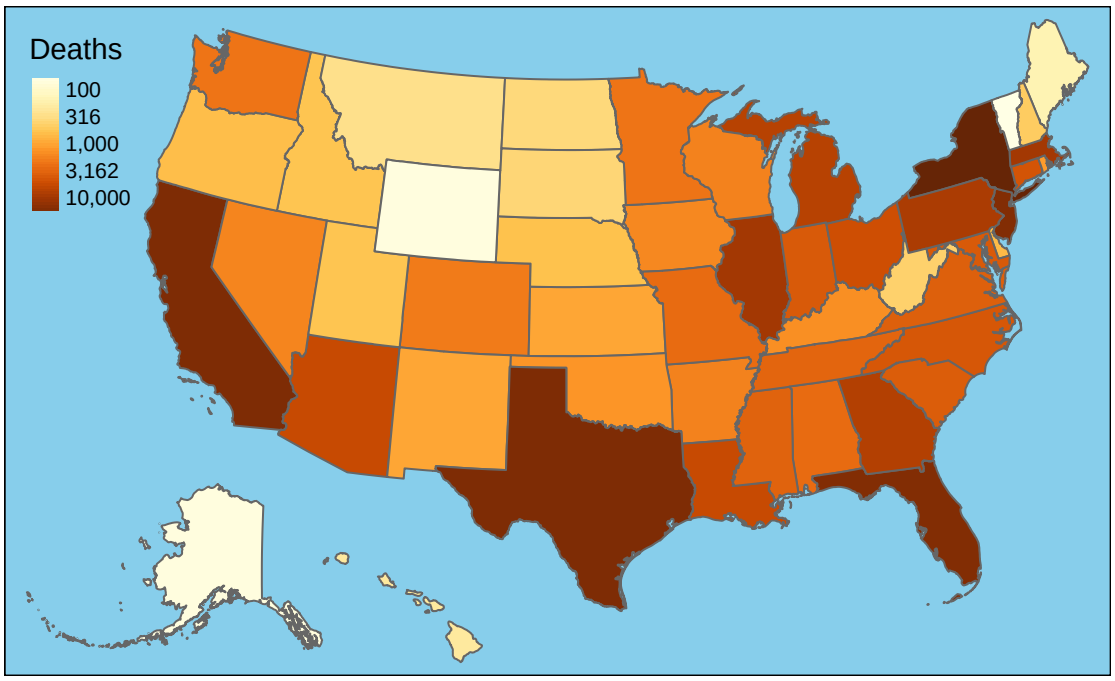
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

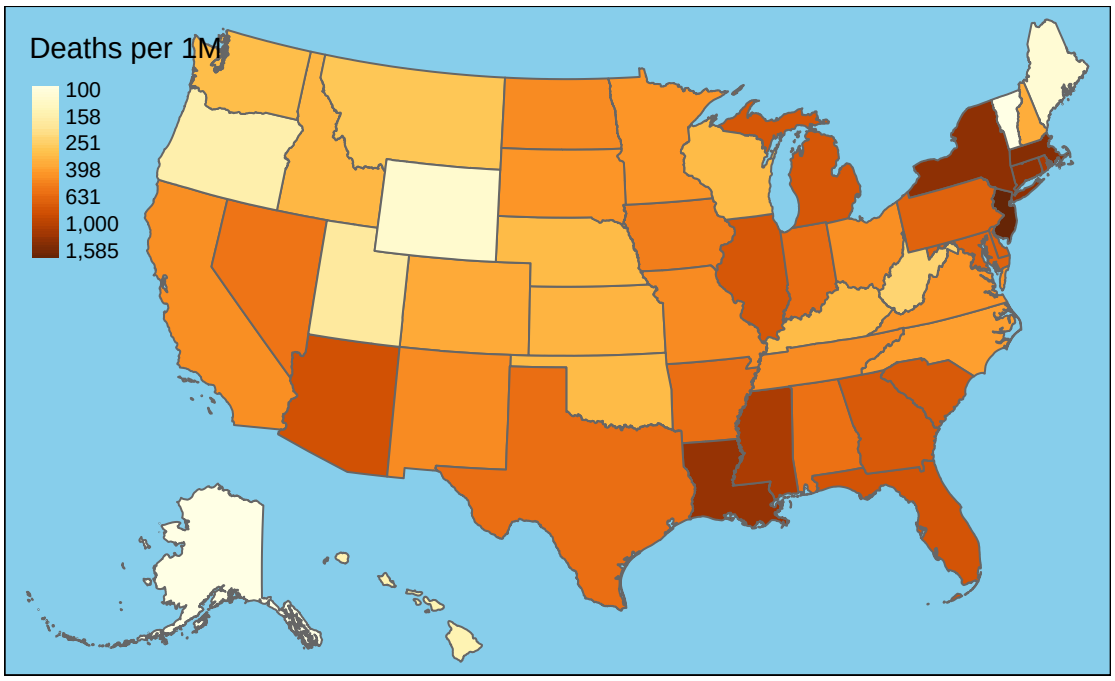
Deaths



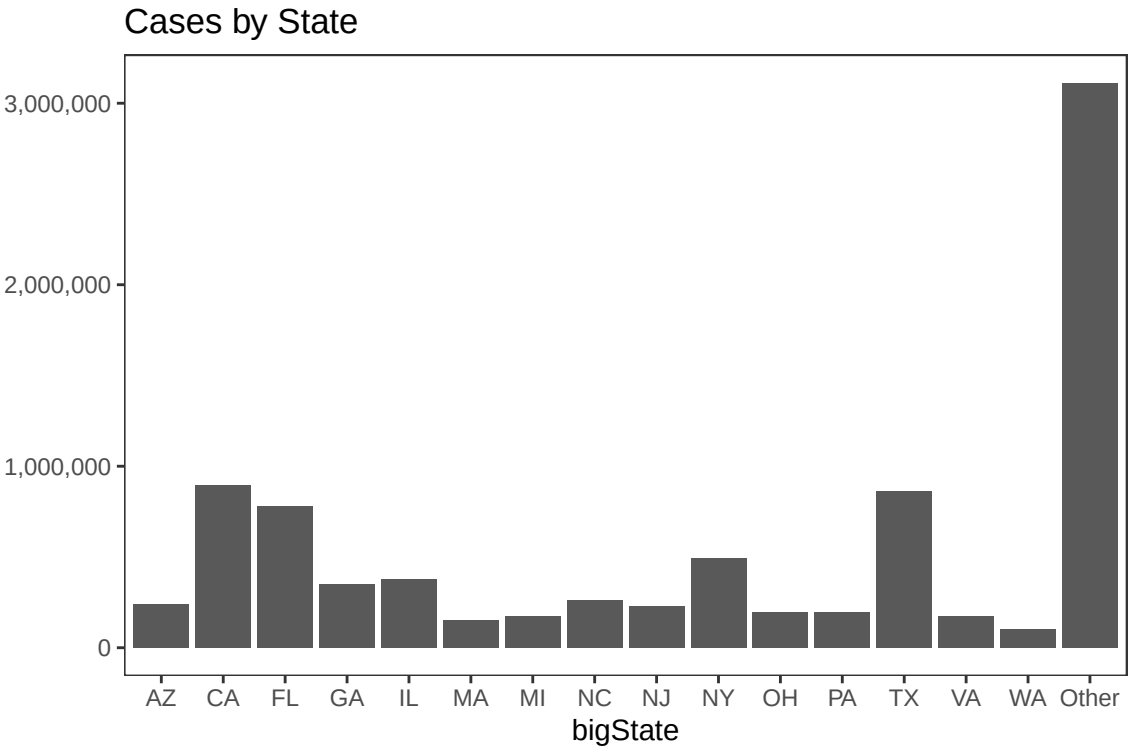

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Date
Mar
Apr
May
Jun

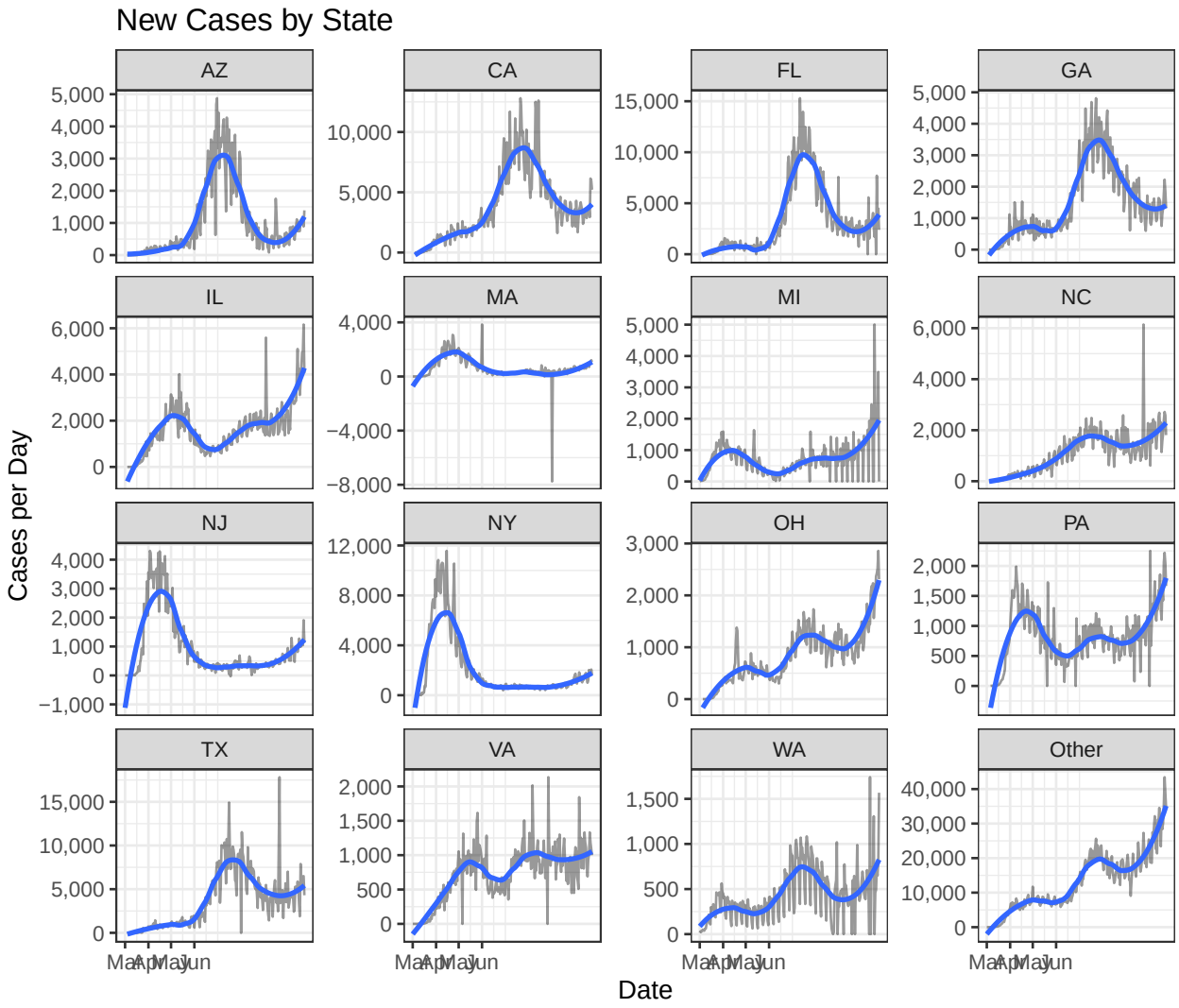

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

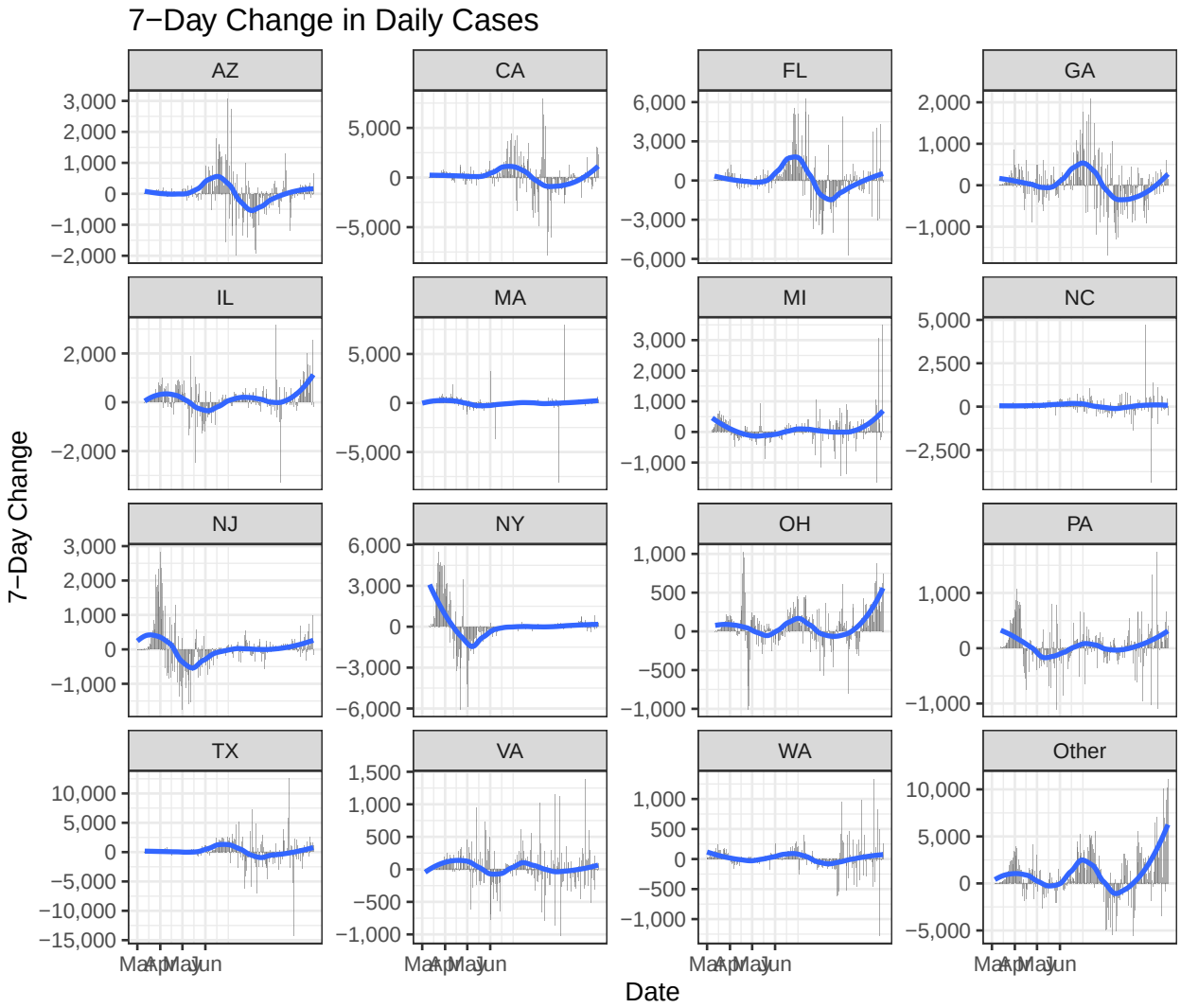

Deaths
100
316
1,000
3,162
10,000

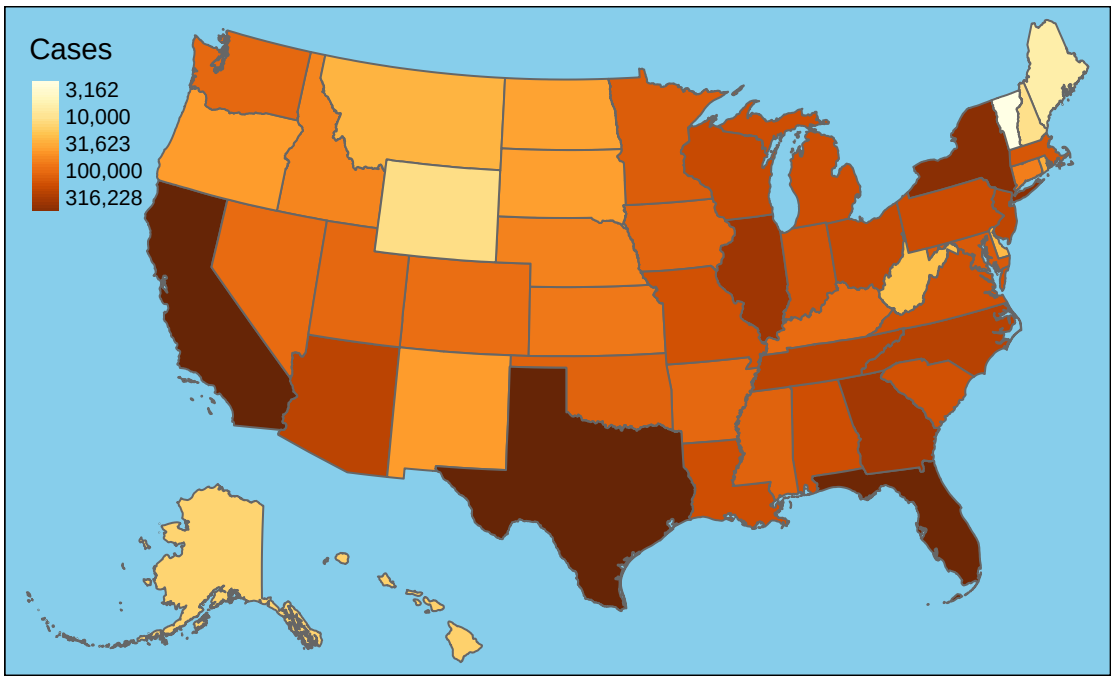

Deaths per 1M
100
158
251
398
631
1,000
1,585

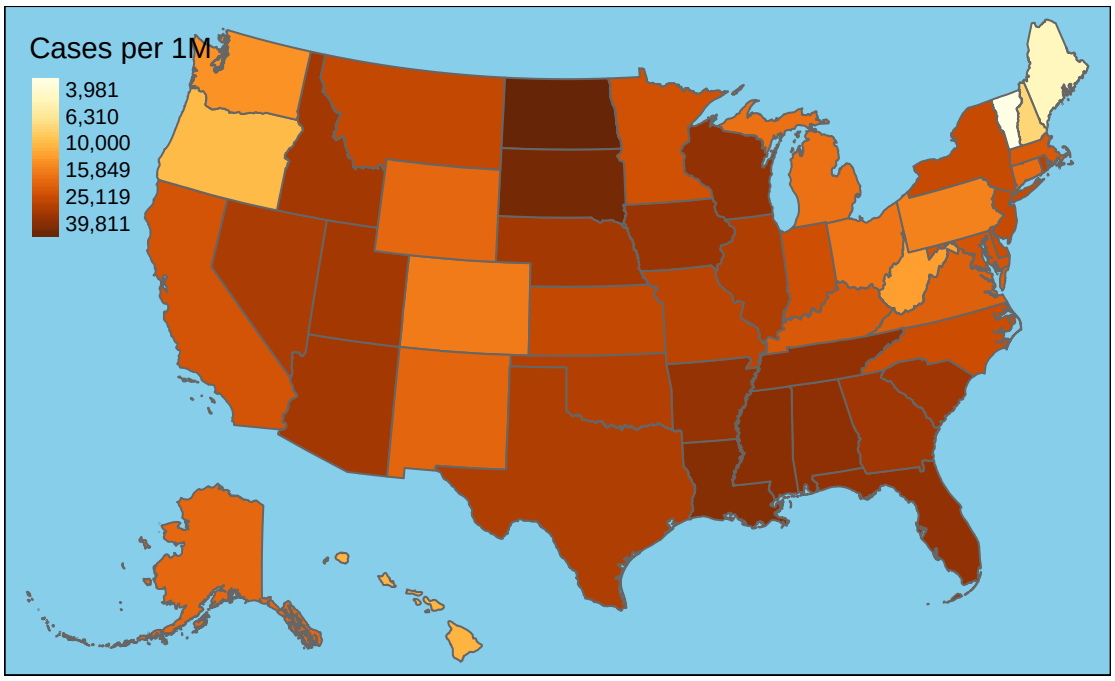
Cases


Cases by State
3,000,000
2,000,000
1,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
bigState

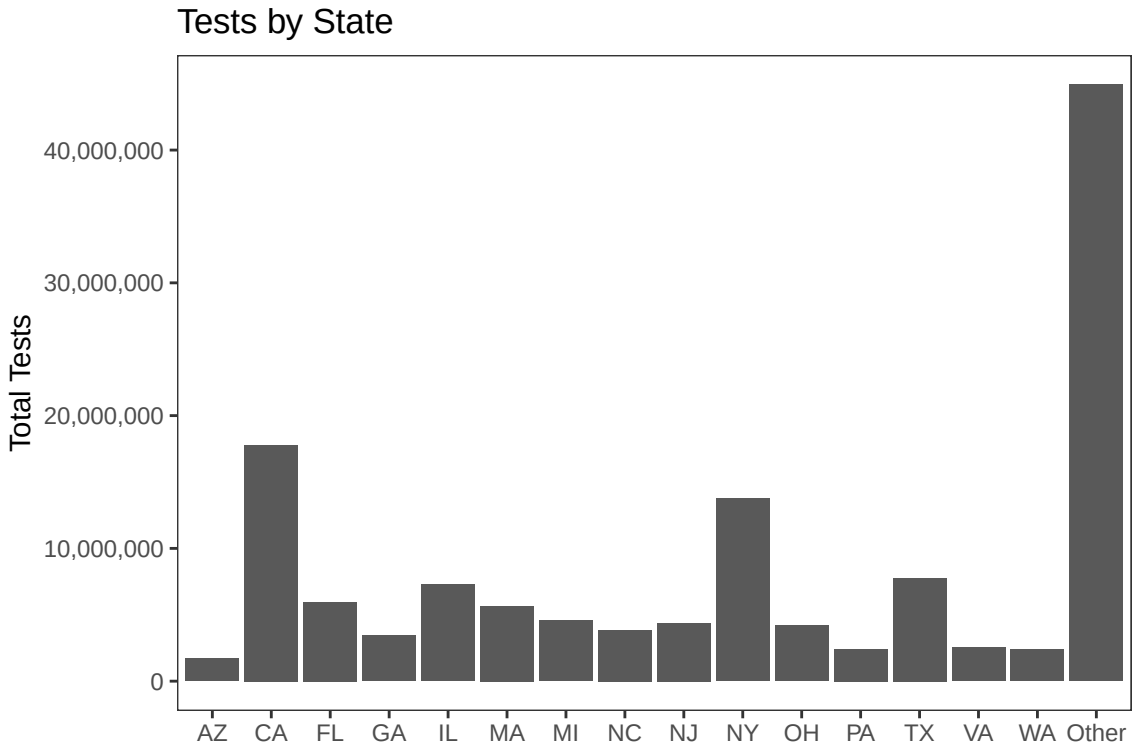

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Date
Mar
Apr
May
Jun

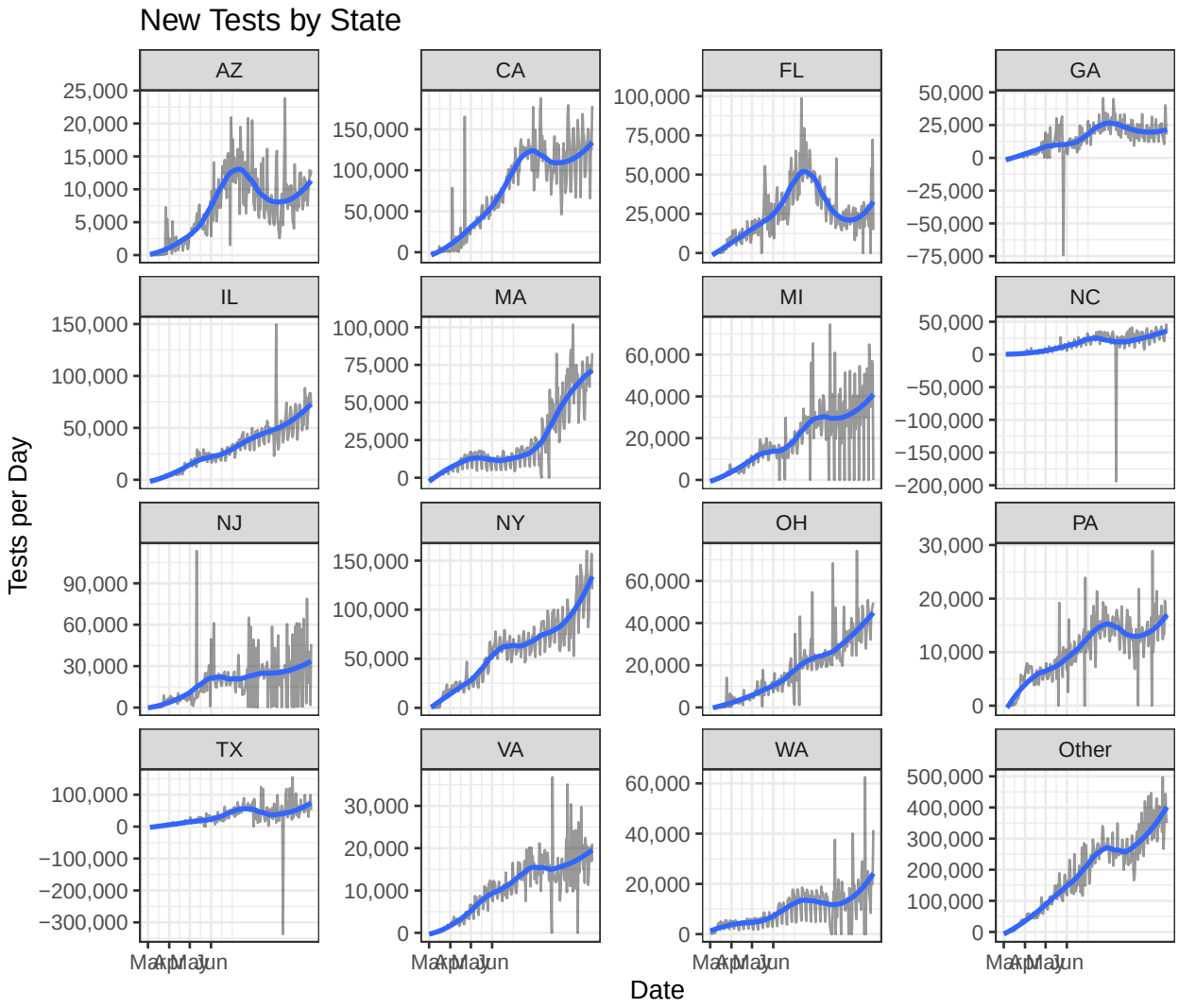

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

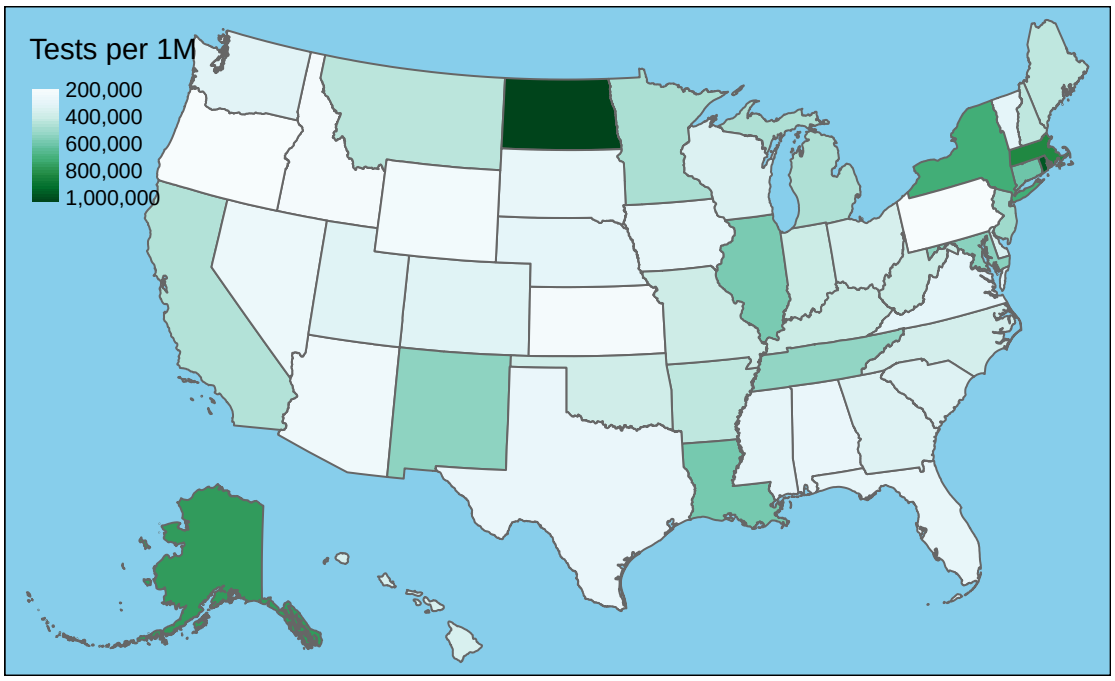

Cases
3,162
10,000
31,623
100,000
316,228

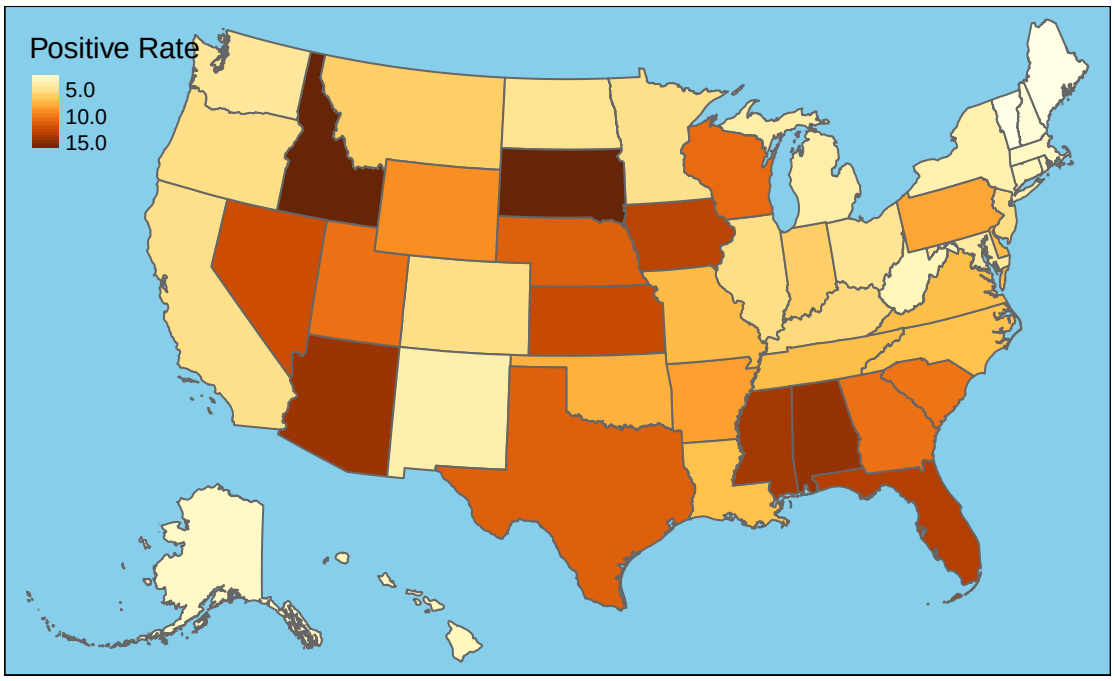

Cases per 1M
3,981
6,310
10,000
15,849
25,119
39,811

Testing

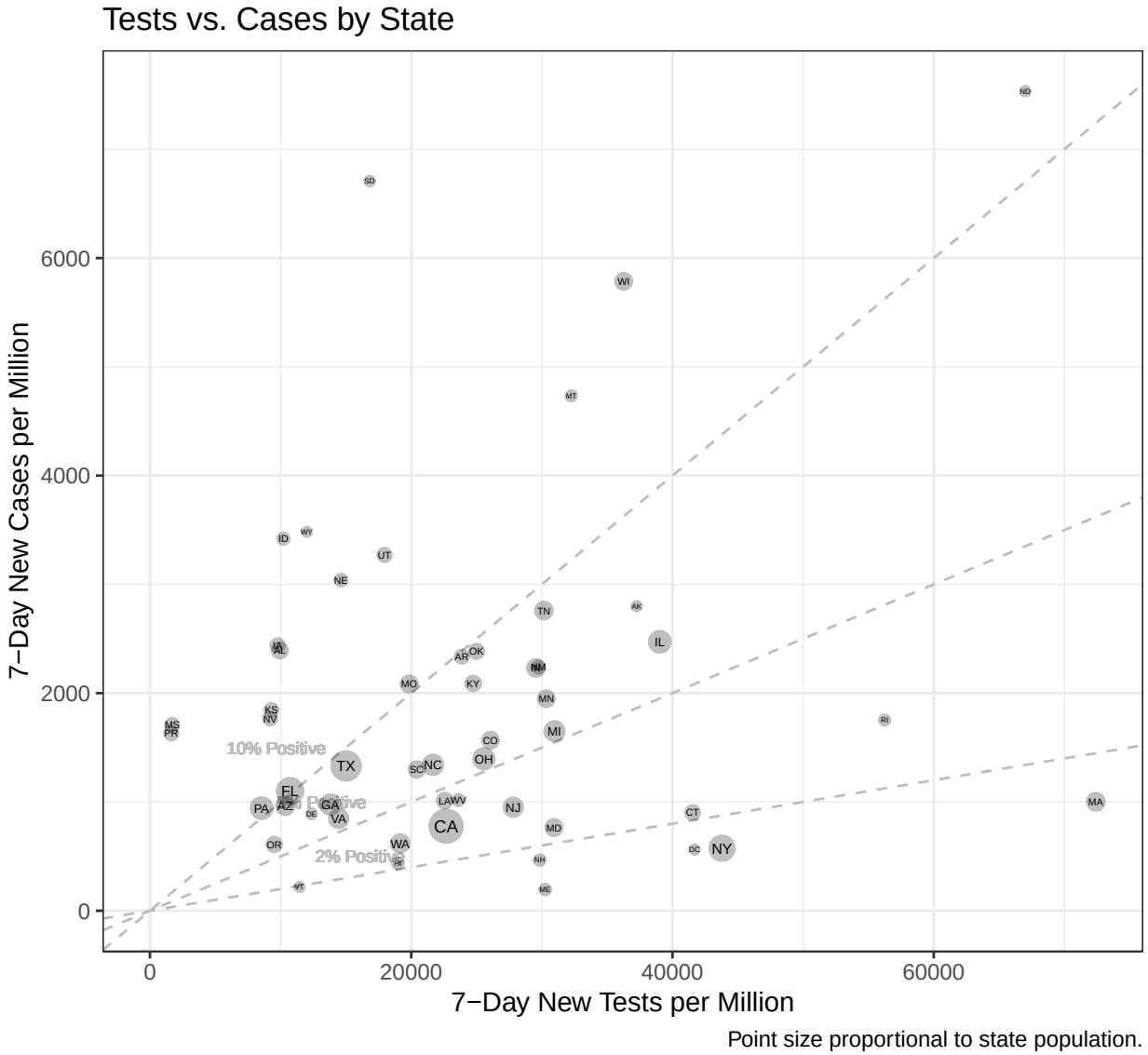

Tests by State
Total Tests
40,000,000
30,000,000
20,000,000
10,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


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
400,000
600,000
800,000
1,000,000


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.

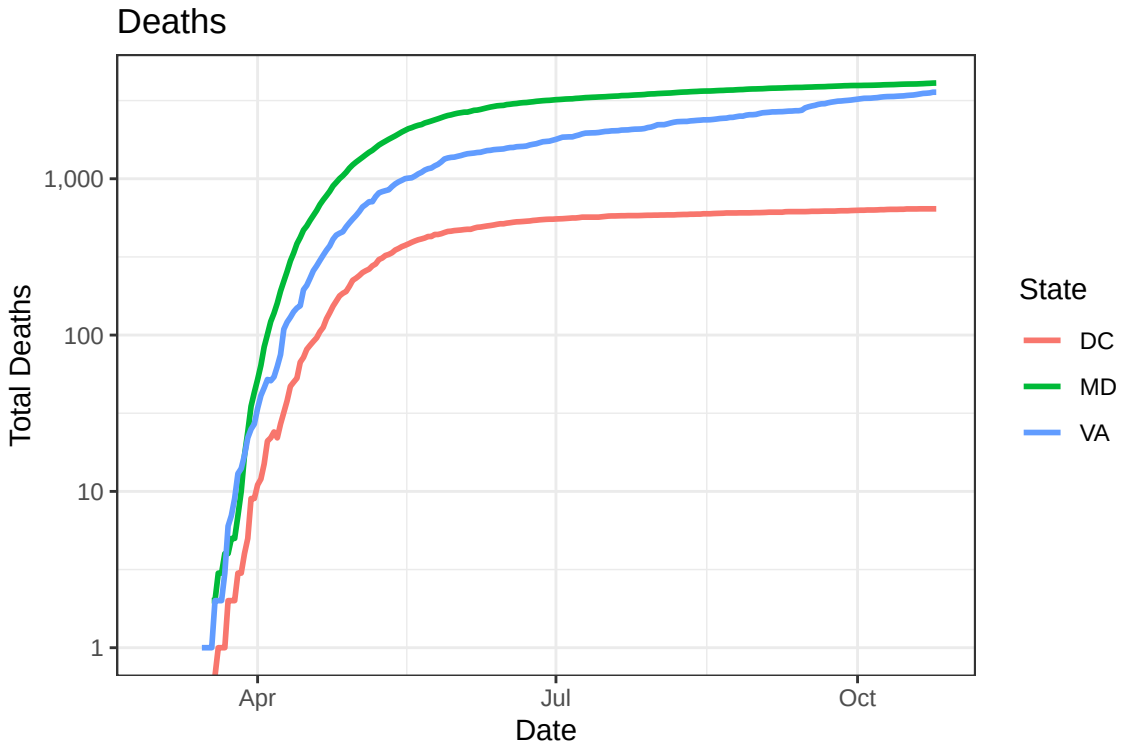
Local Data

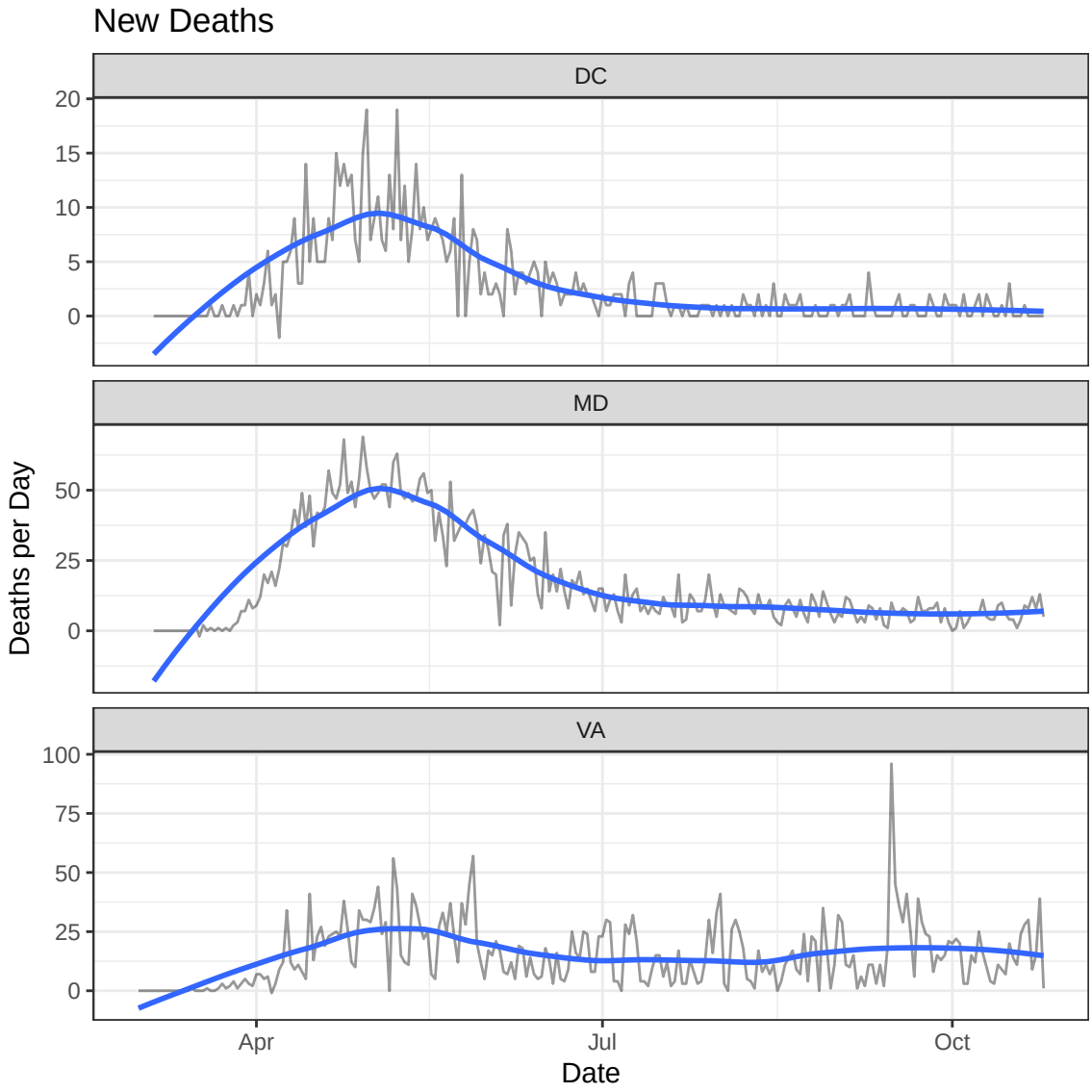
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

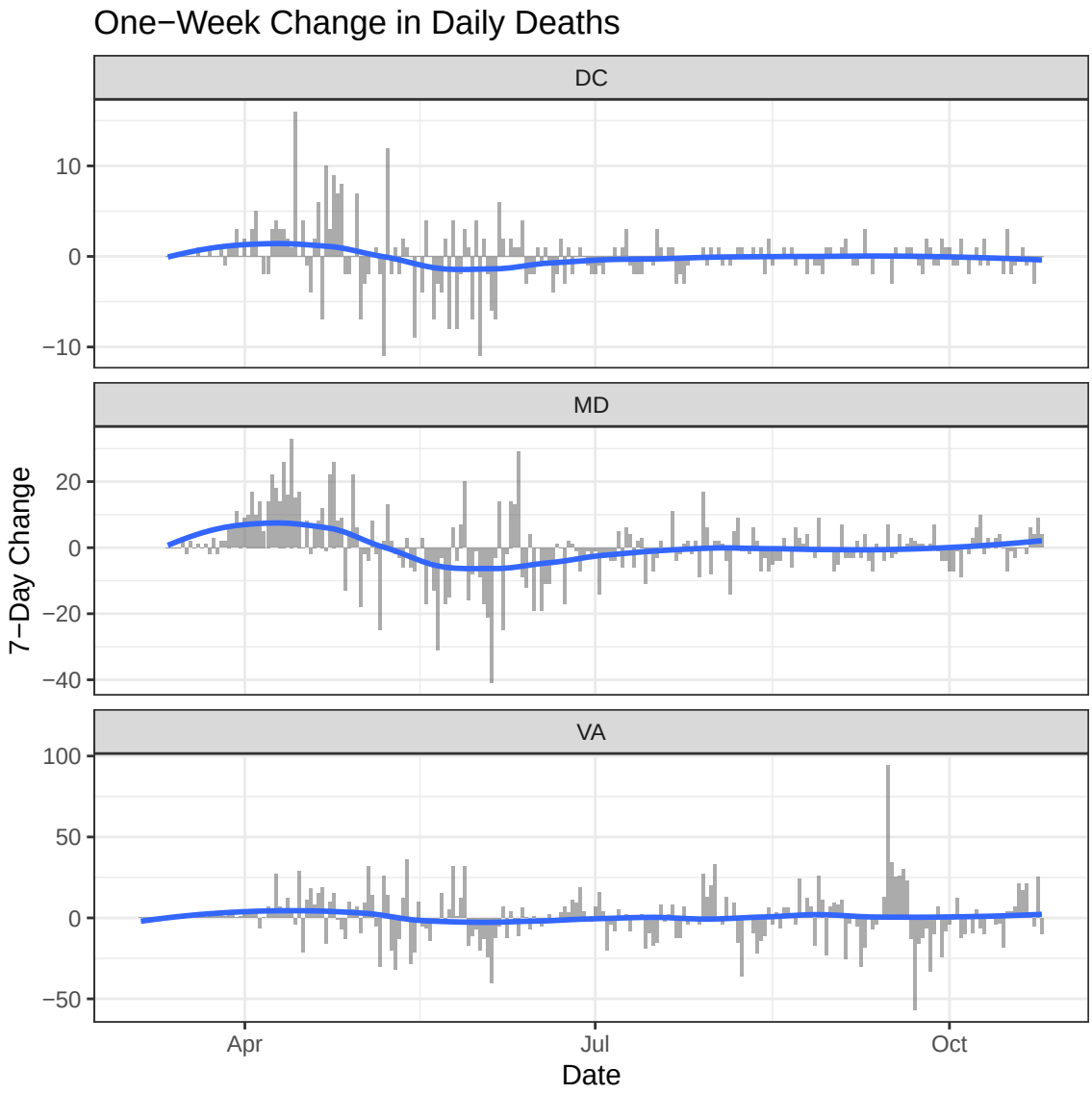
Table 3: Latest Local Data

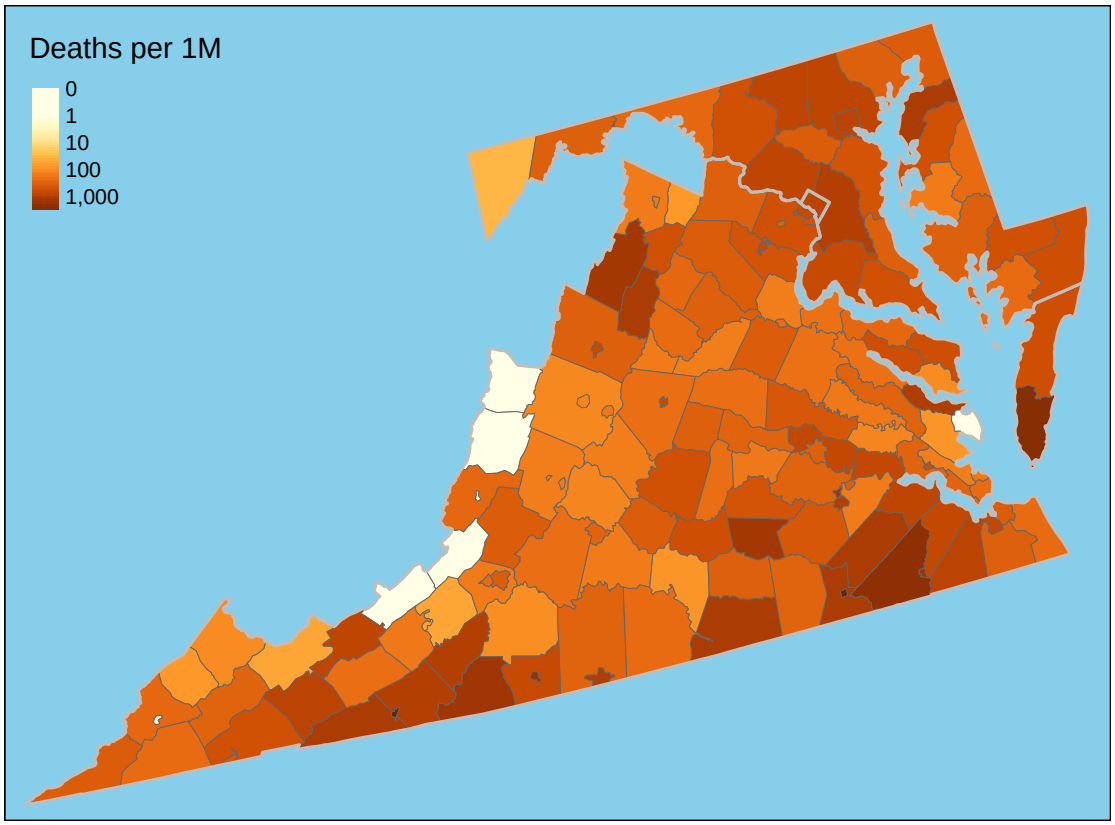
State	Cases	Deaths	New Cases	New Deaths
DC	16,767	642	61	0
MD	140,279	4,096	792	5
VA	173,371	3,579	999	1

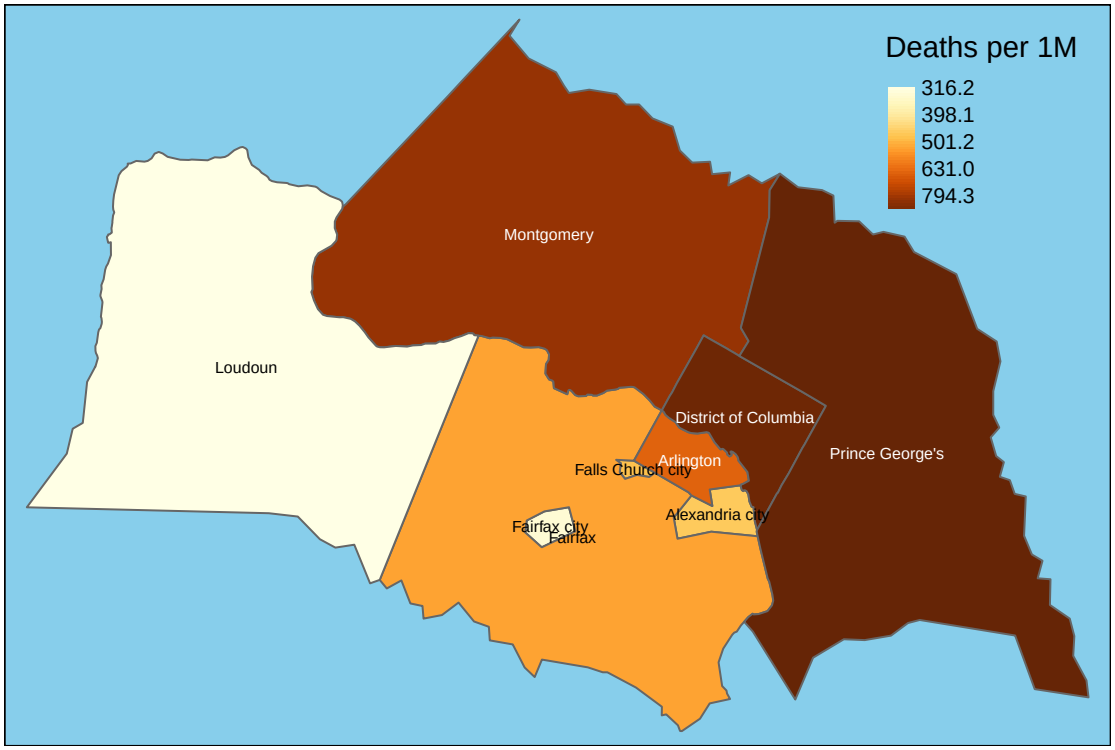
Deaths


Deaths
Total Deaths
1,000
100
10
1
Apr
Jul
Oct
Date
State
DC
MD
VA

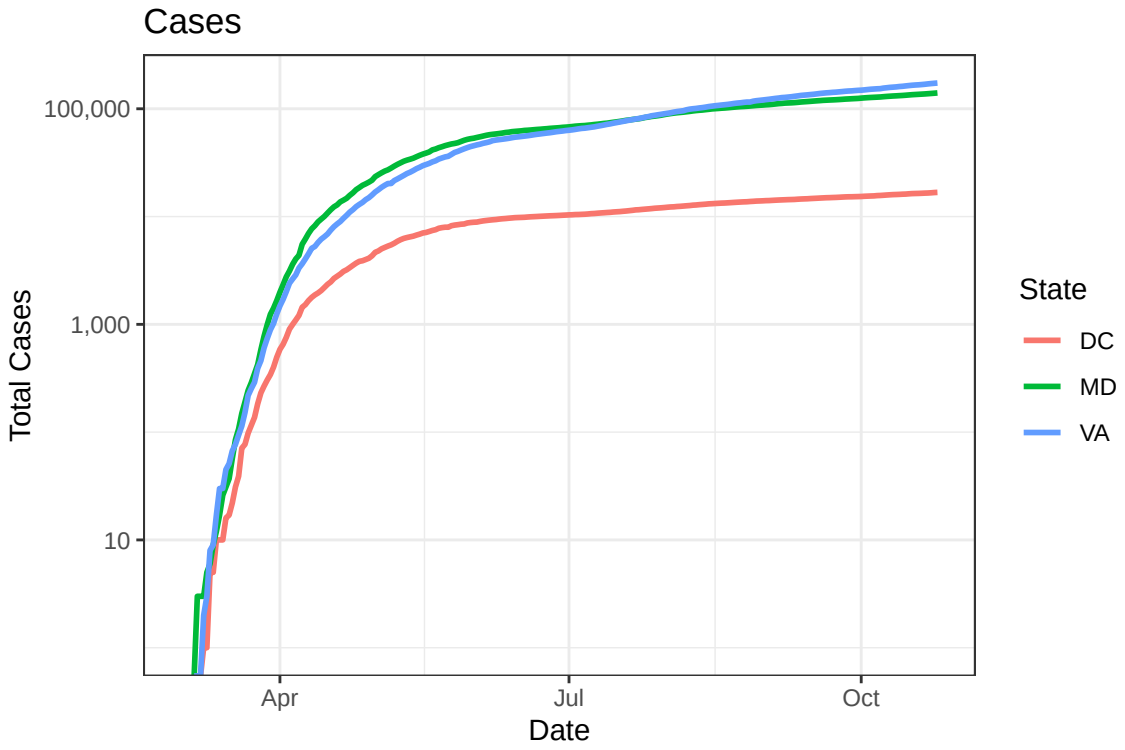

New Deaths
DC
MD
VA
Deaths per Day
20
15
10
5
0
50
25
0
100
75
50
25
0
Apr
Jul
Oct
Date

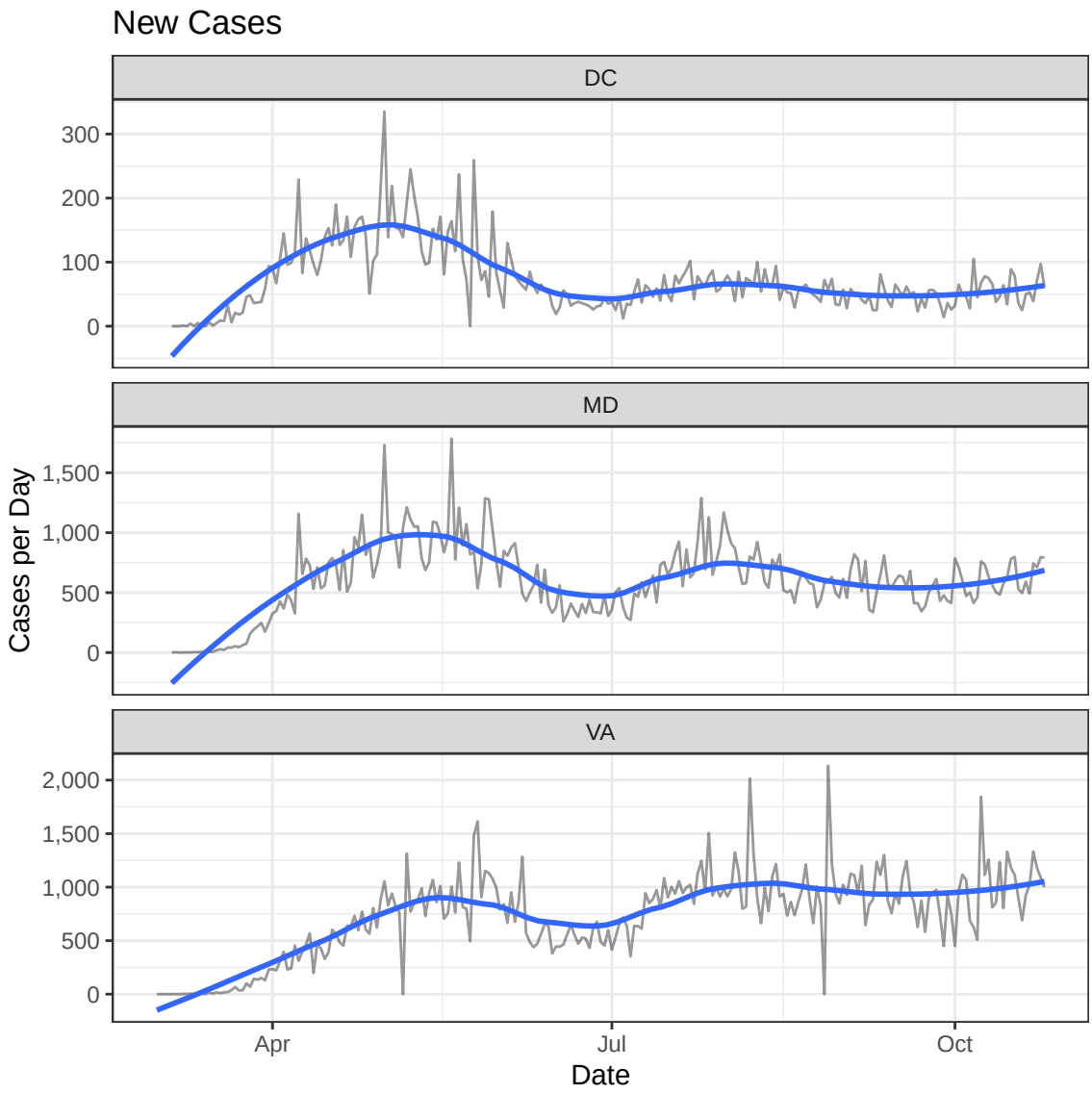

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
100
50
0
−50
7−Day Change
Apr
Jul
Oct
Date

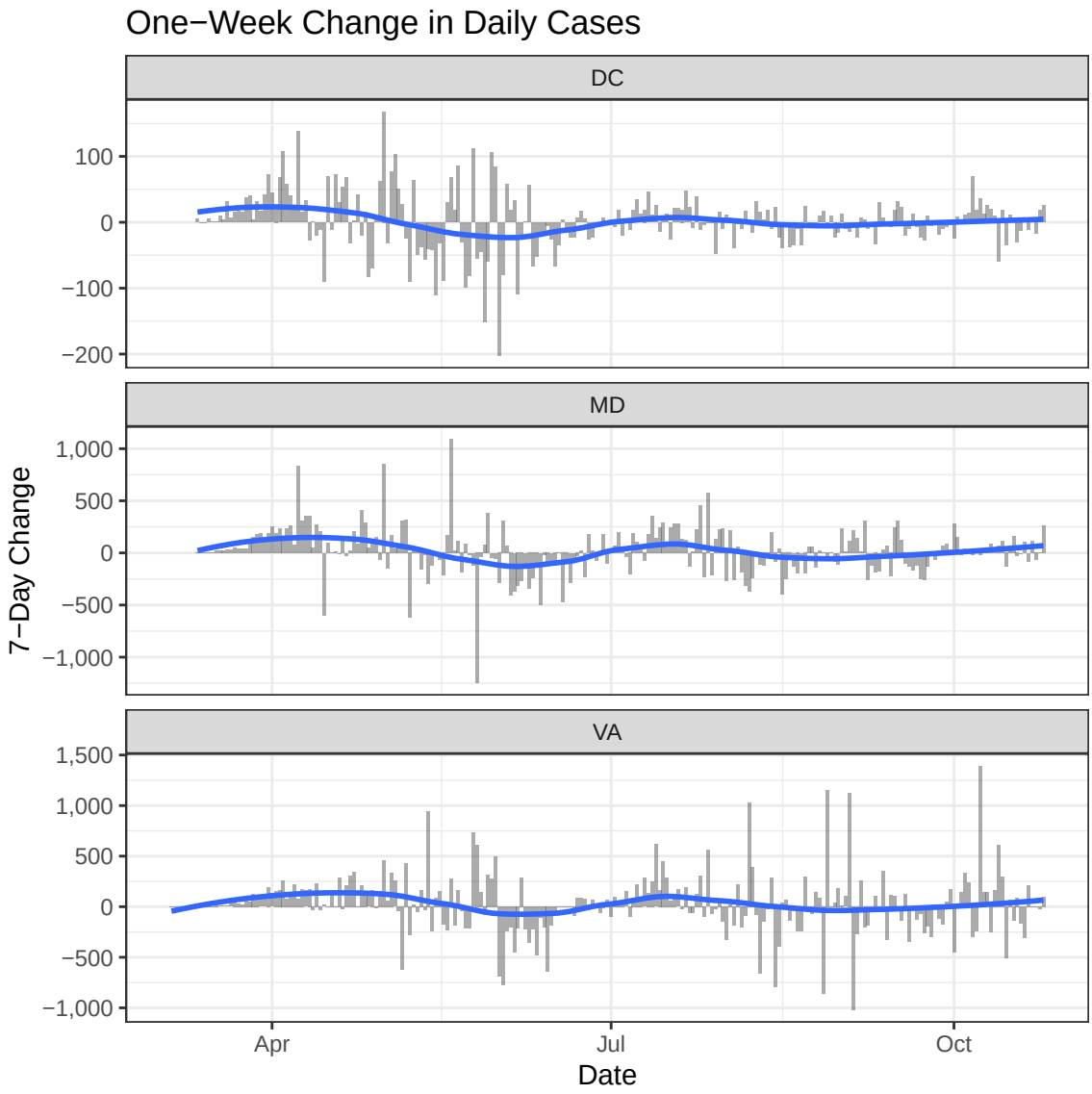

Deaths per 1M
0
1
10
100
1,000

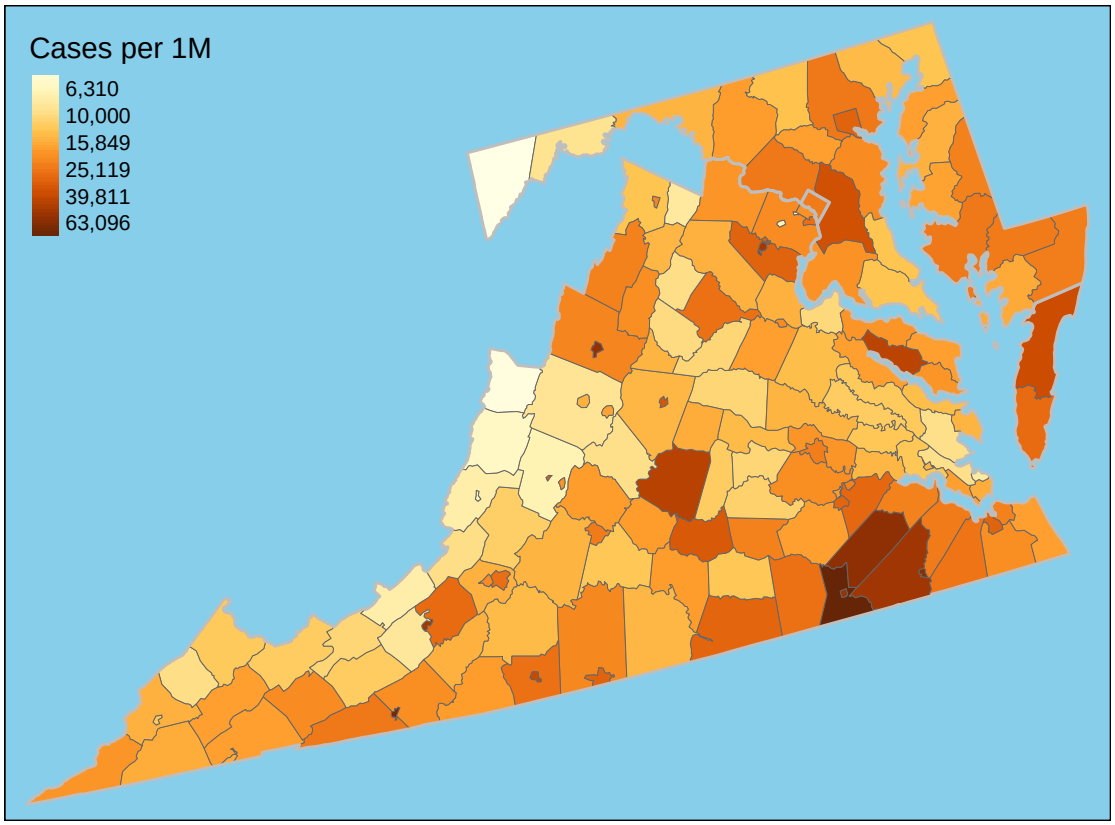

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

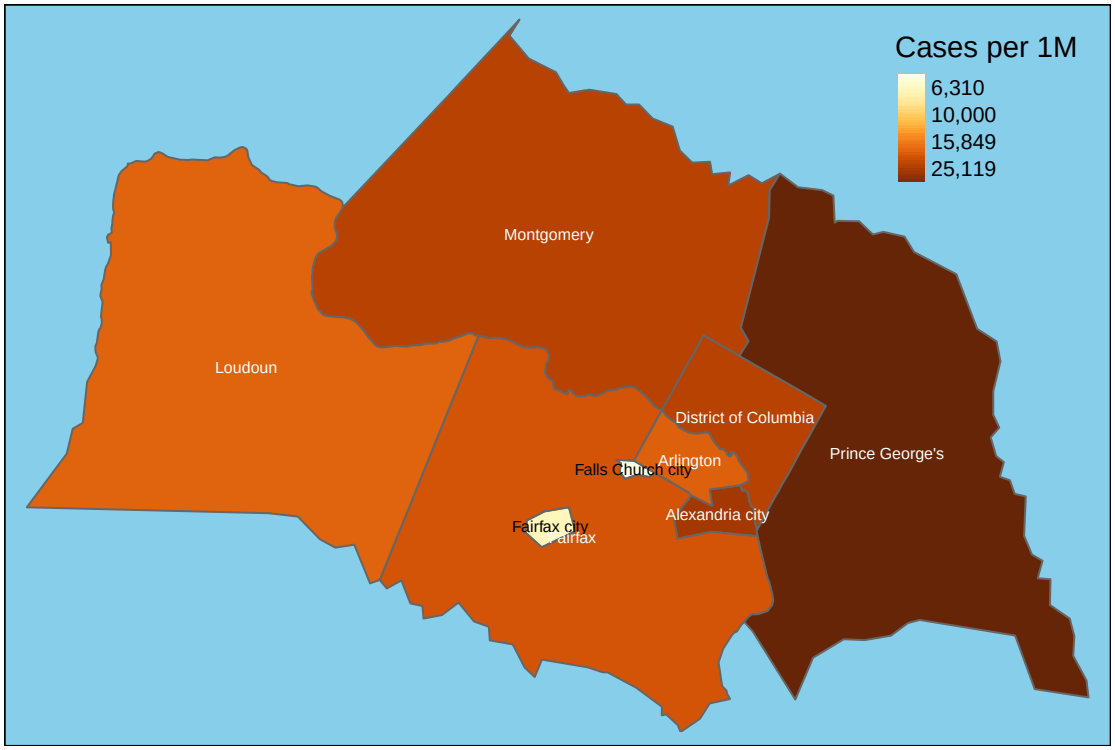
Cases


Cases
100,000
1,000
10
Total Cases
Apr
Jul
Oct
Date
State
DC
MD
VA

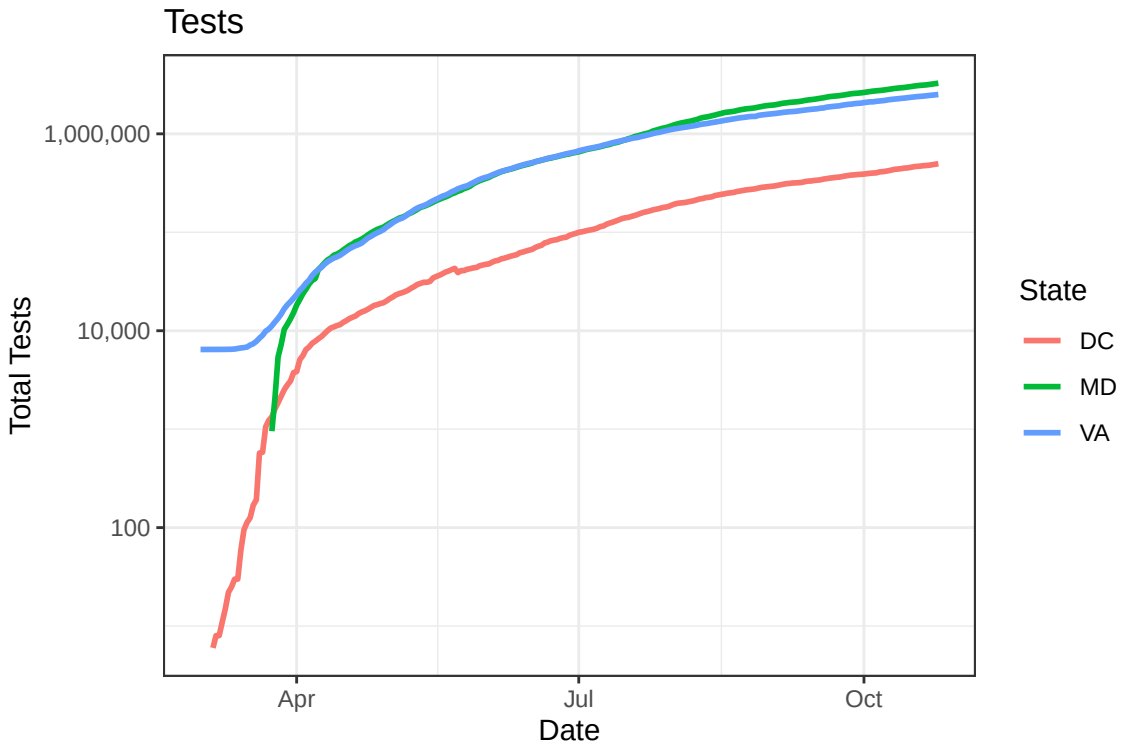

New Cases
DC
MD
VA
Cases per Day
300
200
100
0
1,500
1,000
500
0
2,000
1,500
1,000
500
0
Apr
Jul
Oct
Date

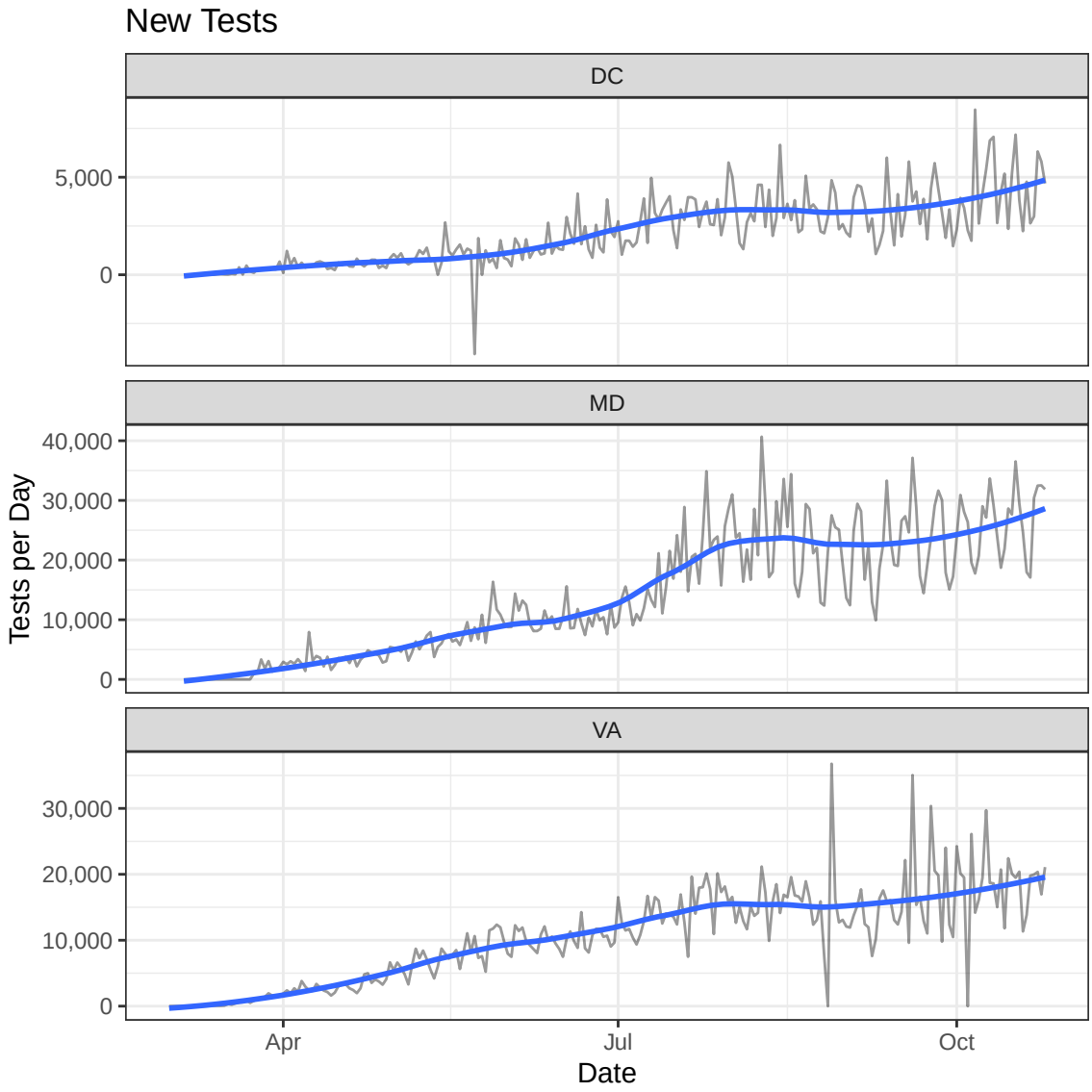

One−Week Change in Daily Cases
DC
MD
VA
100
0
−100
−200
1,000
500
0
−500
−1,000
1,500
1,000
500
0
−500
−1,000
7−Day Change
Apr
Jul
Oct
Date

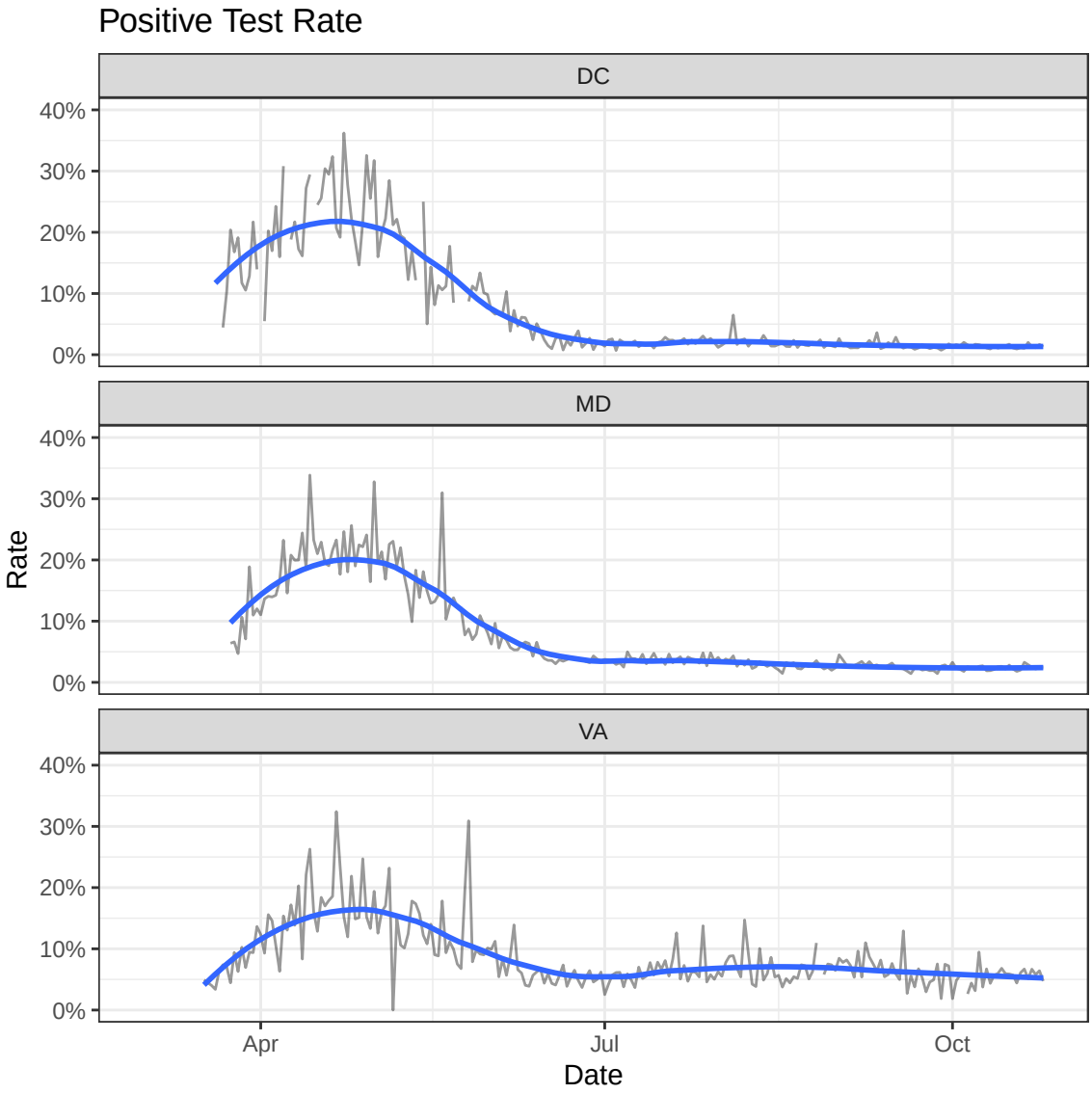

Cases per 1M
6,310
10,000
15,849
25,119
39,811
63,096


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
Oct
Date
State
DC
MD
VA


New Tests
DC
5,000
0
MD
40,000
30,000
20,000
10,000
0
VA
30,000
20,000
10,000
0
Tests per Day
Apr
Jul
Oct
Date


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