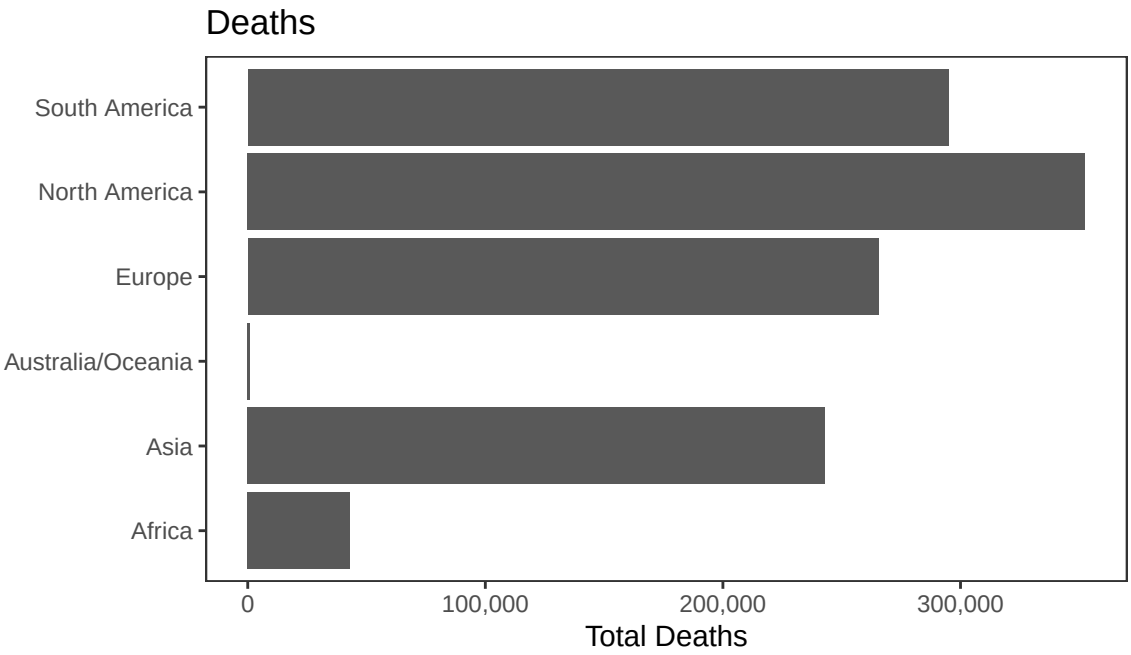
Erik's Covid-19 Chart Pack

Data updated 2020-11-01 13:19:42. 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 46,367,840 confirmed Covid-19 cases and 1,199,743 deaths worldwide.



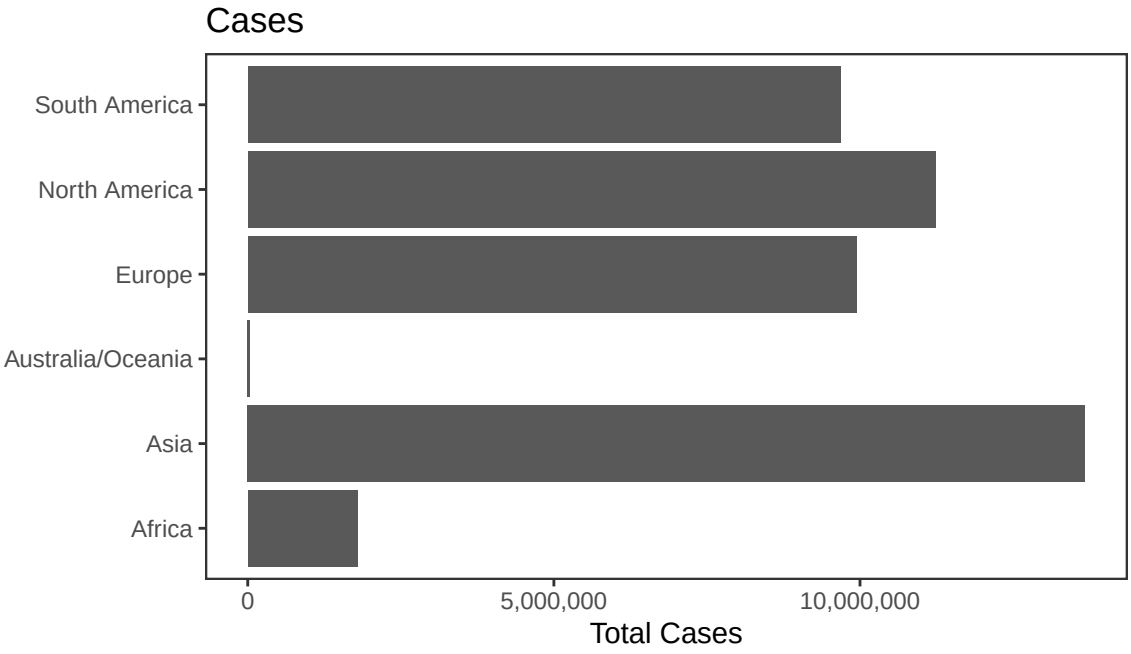
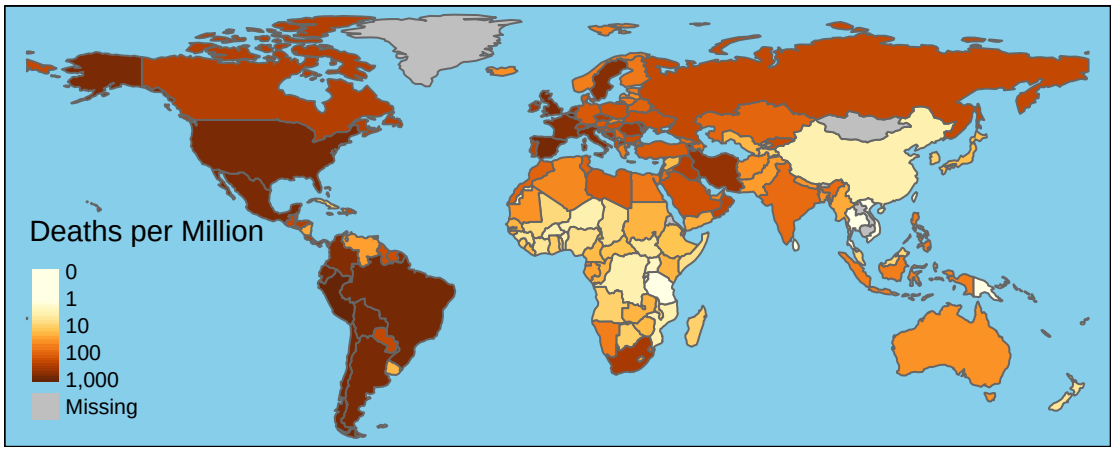
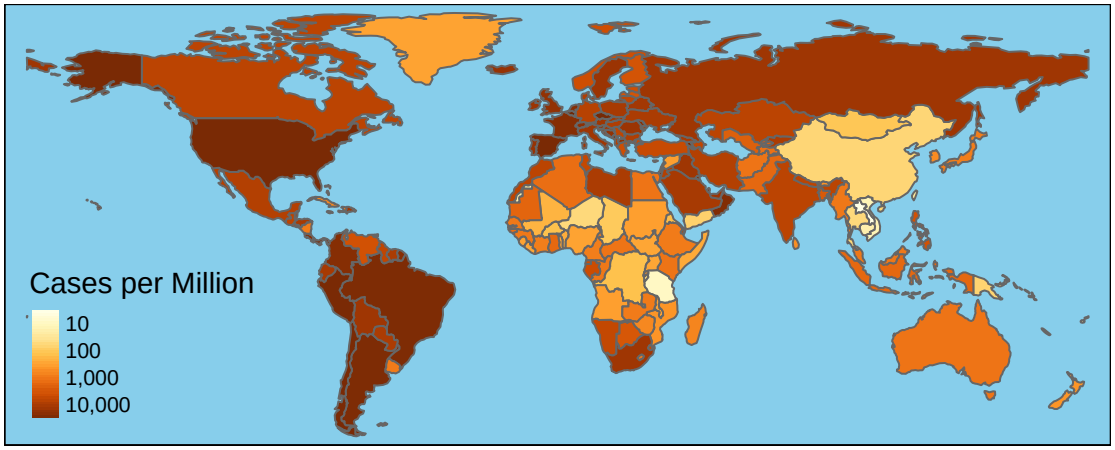
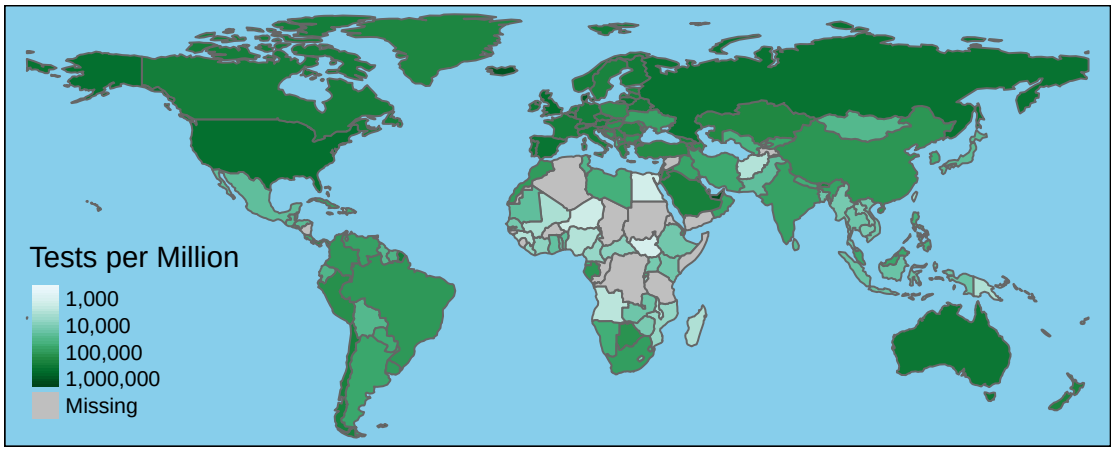


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	9,402,590	236,072	86,293	914
India	8,182,881	122,149	46,715	468
Brazil	5,535,605	159,902	16,077	340
Russia	1,618,116	27,990	18,140	334
France	1,367,625	36,788	35,641	223
Spain	1,264,517	35,878	0	0
Argentina	1,166,924	31,002	9,745	210
Colombia	1,074,184	31,314	11,033	179
UK	1,011,660	46,555	21,915	326
Mexico	918,811	91,289	6,000	516
Peru	902,503	34,476	2,323	65
South Africa	725,452	19,276	1,770	46
Italy	679,428	38,618	31,756	297
Iran	612,772	34,864	7,820	386
Germany	531,790	10,583	14,070	60
Chile	510,256	14,207	1,685	49
Iraq	472,630	10,910	1,997	48
Belgium	412,314	11,452	20,056	144
Indonesia	410,088	13,869	3,143	87
Bangladesh	407,684	5,923	1,320	18


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

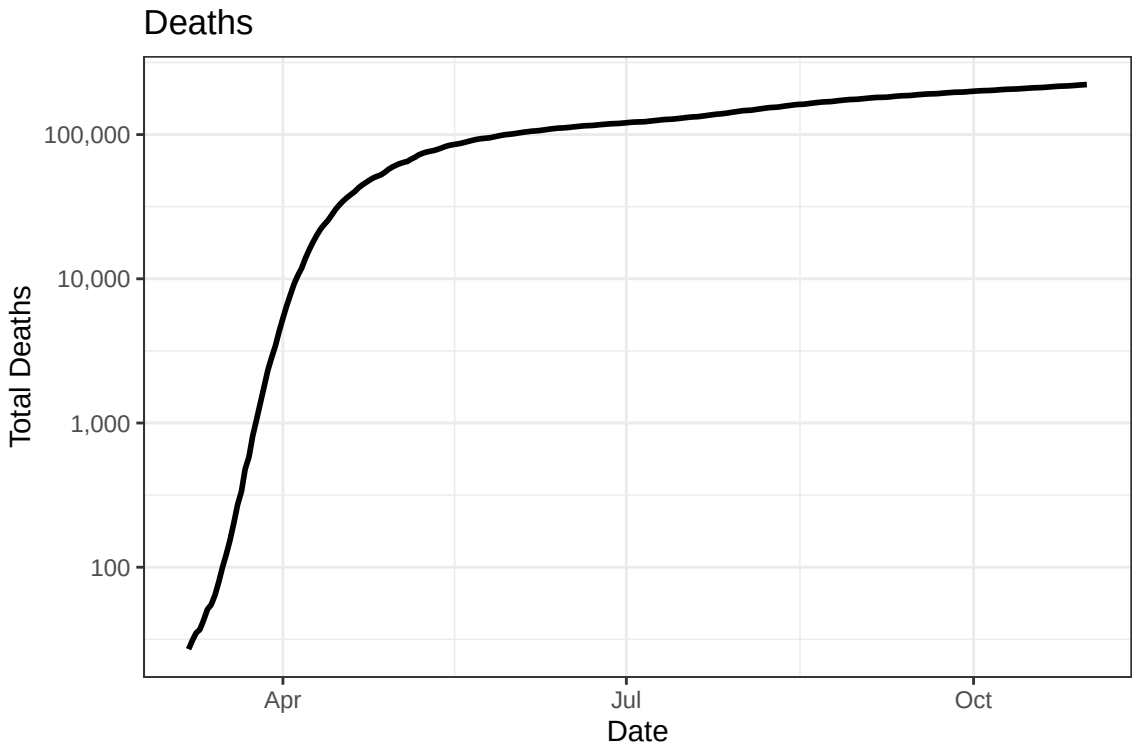
There have been 9,077,689 confirmed Covid-19 cases and 222,316 deaths in the United States.

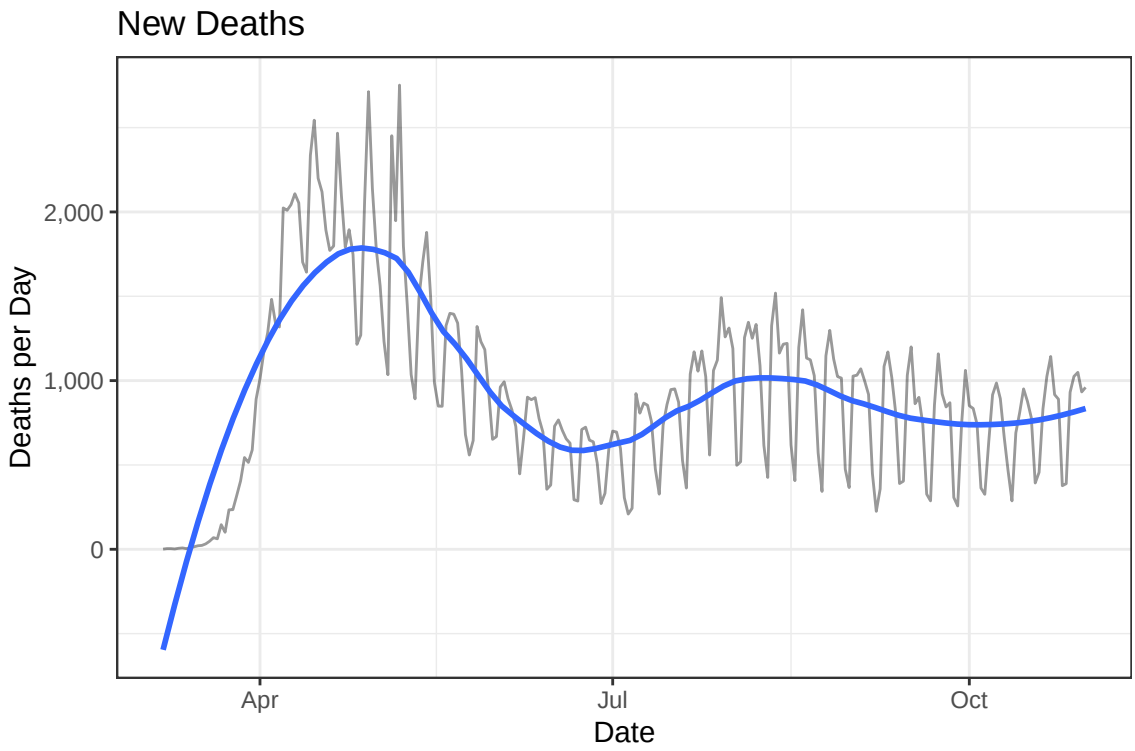
Table 2: U.S. Deaths and Cases over the Last Two Weeks

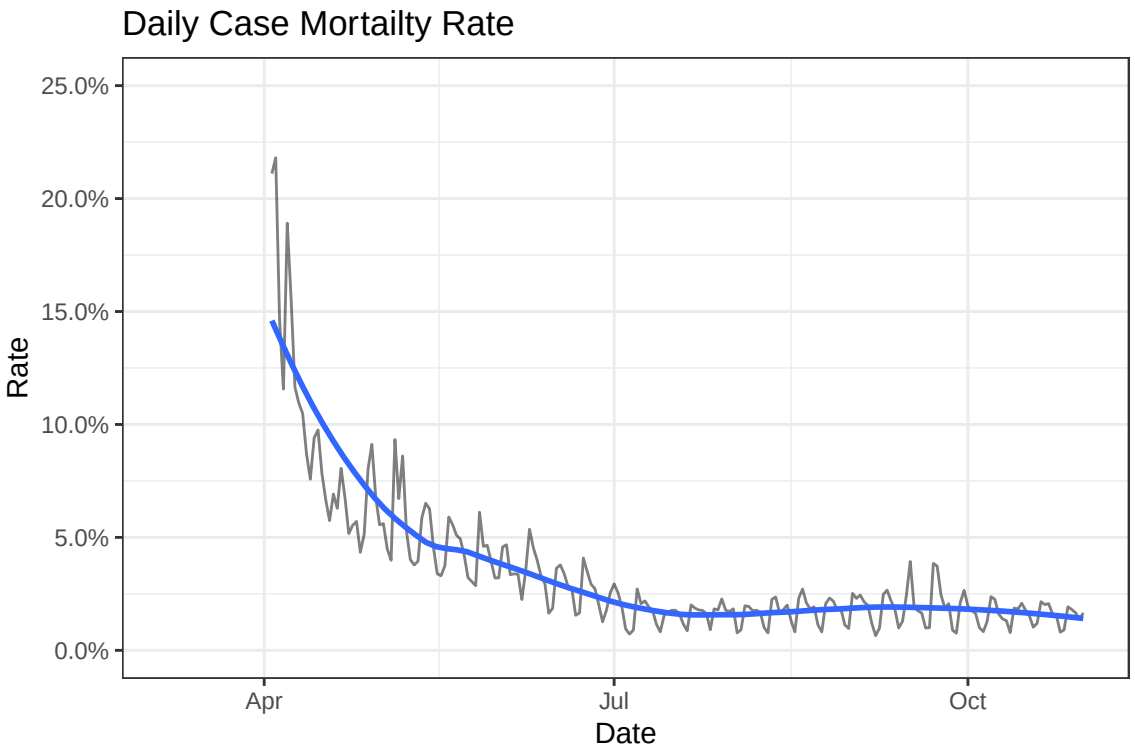
Date	Cases	Deaths	New Cases	New Deaths
2020-10-31	9,077,689	222,316	90,058	960
2020-10-30	8,987,631	221,356	97,080	933
2020-10-29	8,890,551	220,423	88,452	1,049
2020-10-28	8,802,099	219,374	78,661	1,025
2020-10-27	8,723,438	218,349	73,096	931
2020-10-26	8,650,342	217,418	62,274	389
2020-10-25	8,588,068	217,029	65,650	377
2020-10-24	8,522,418	216,652	82,925	890
2020-10-23	8,439,493	215,762	83,057	917
2020-10-22	8,356,436	214,845	73,007	1,143
2020-10-21	8,283,429	213,702	60,712	1,024
2020-10-20	8,222,717	212,678	60,558	832
2020-10-19	8,162,159	211,846	57,132	456
2020-10-18	8,105,027	211,390	48,857	393

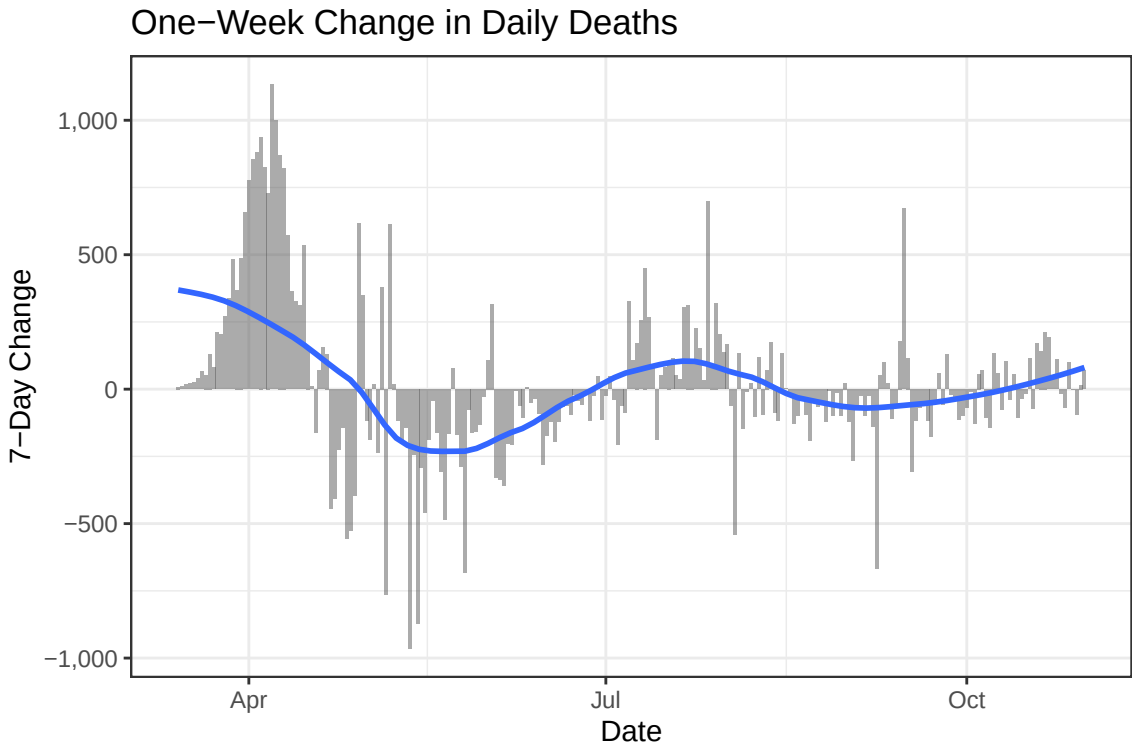
Deaths

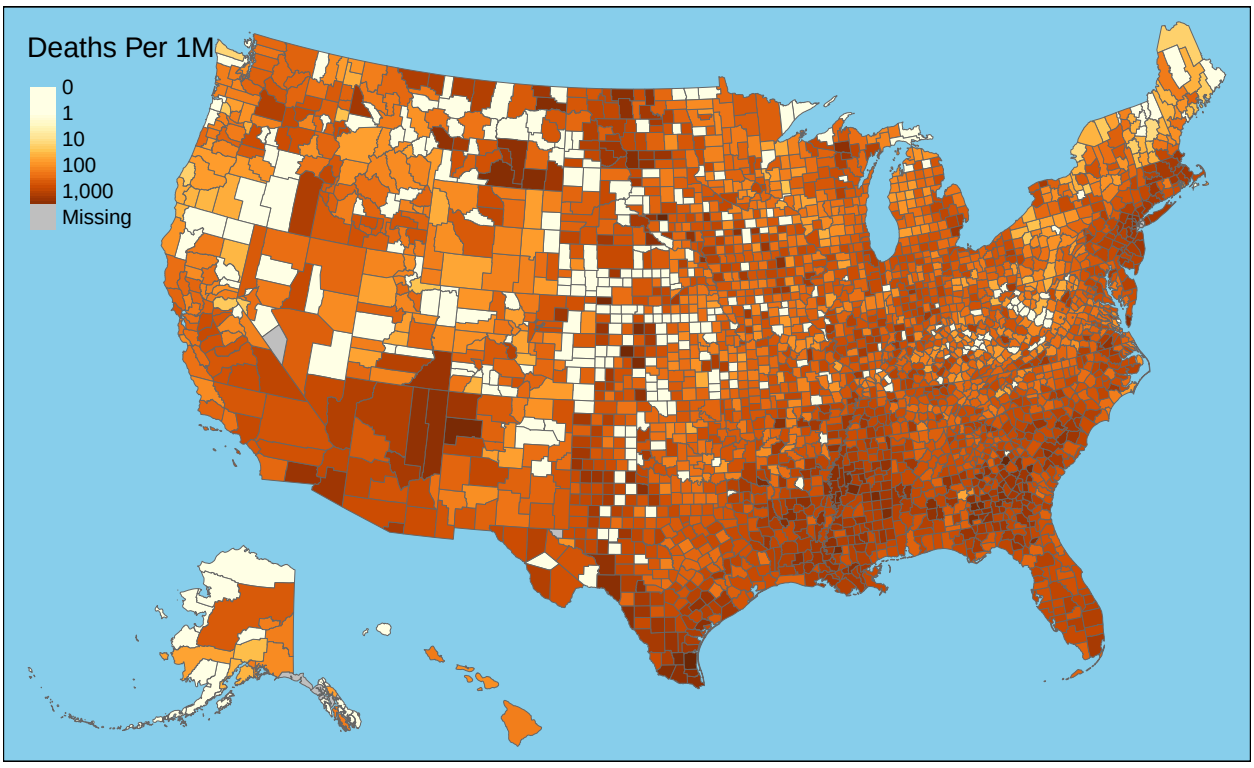
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator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





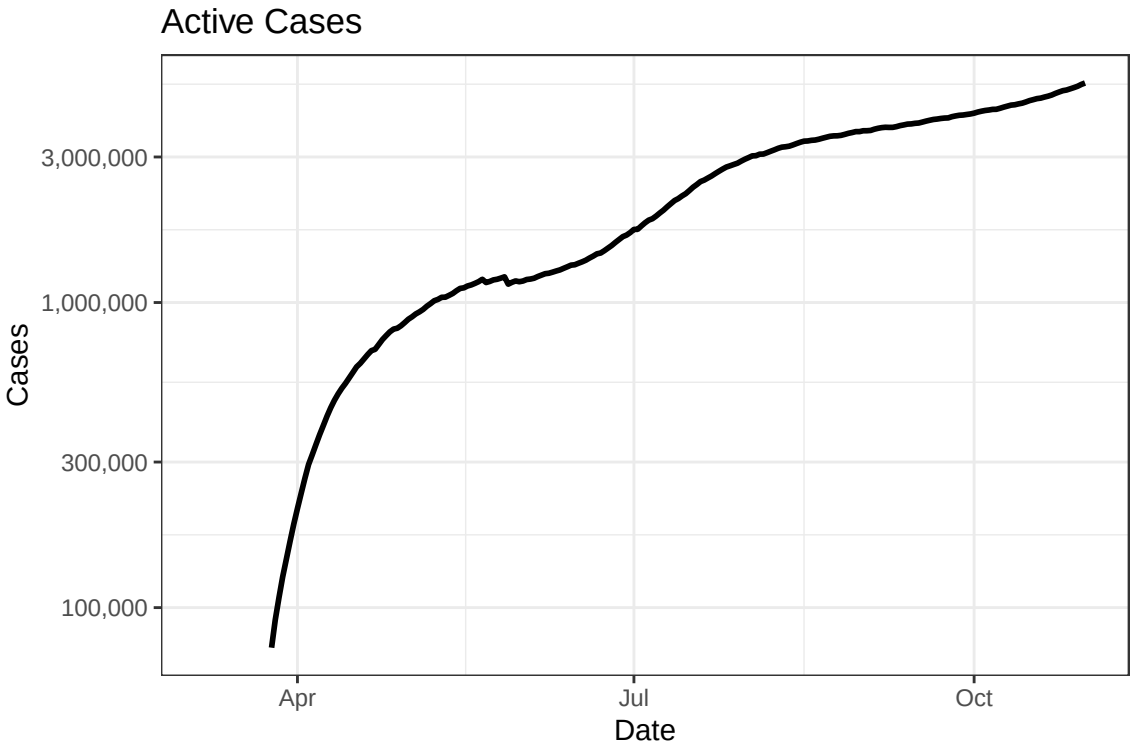

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Apr
Jul
Oct
Date

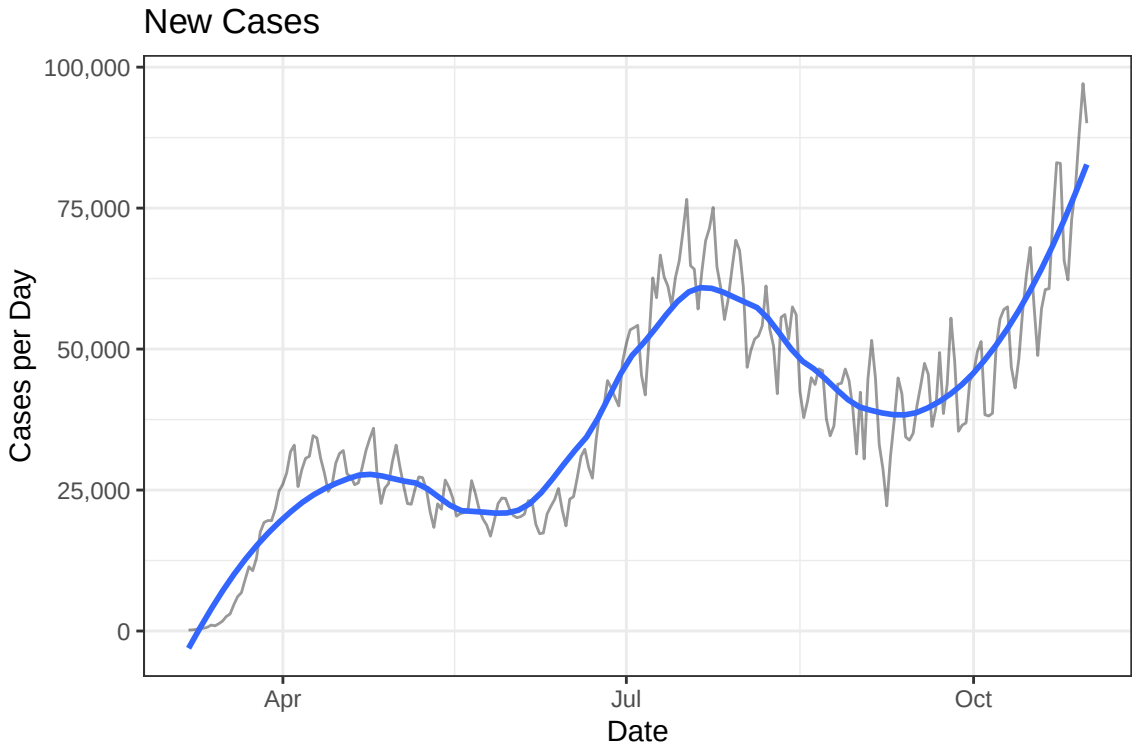

One−Week Change in Daily Deaths
1,000
500
0
−500
−1,000
7−Day Change
Apr
Jul
Oct
Date

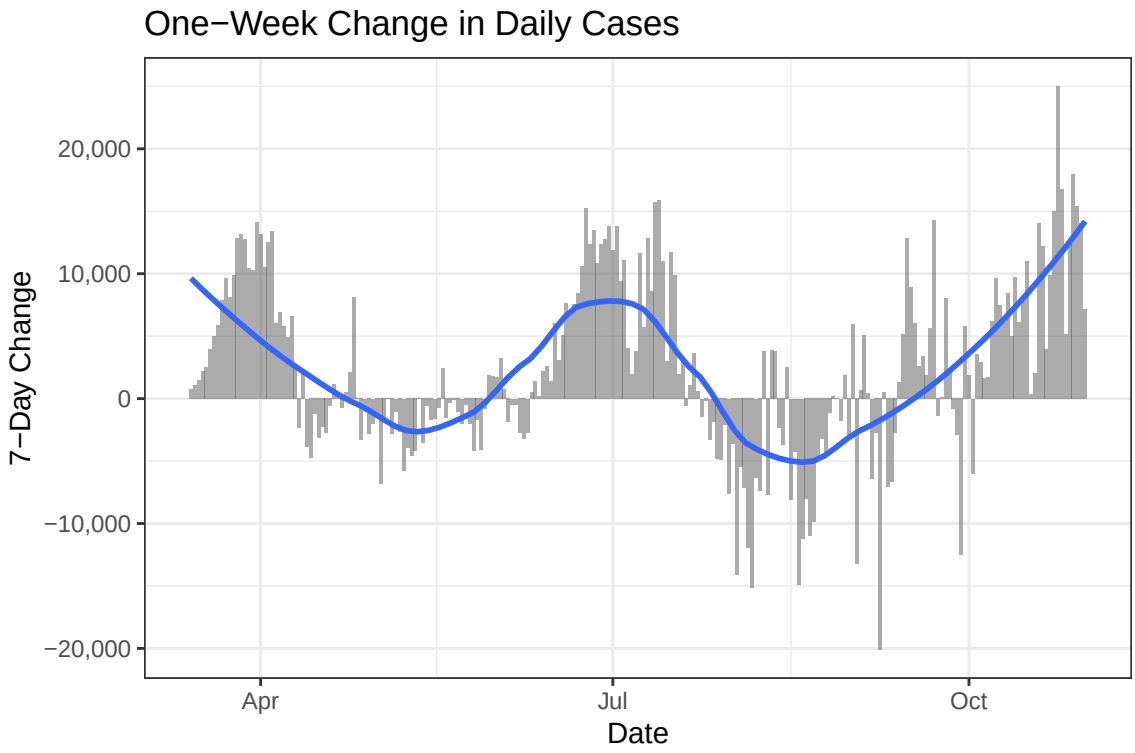

Deaths Per 1M
0
1
10
100
1,000
Missing

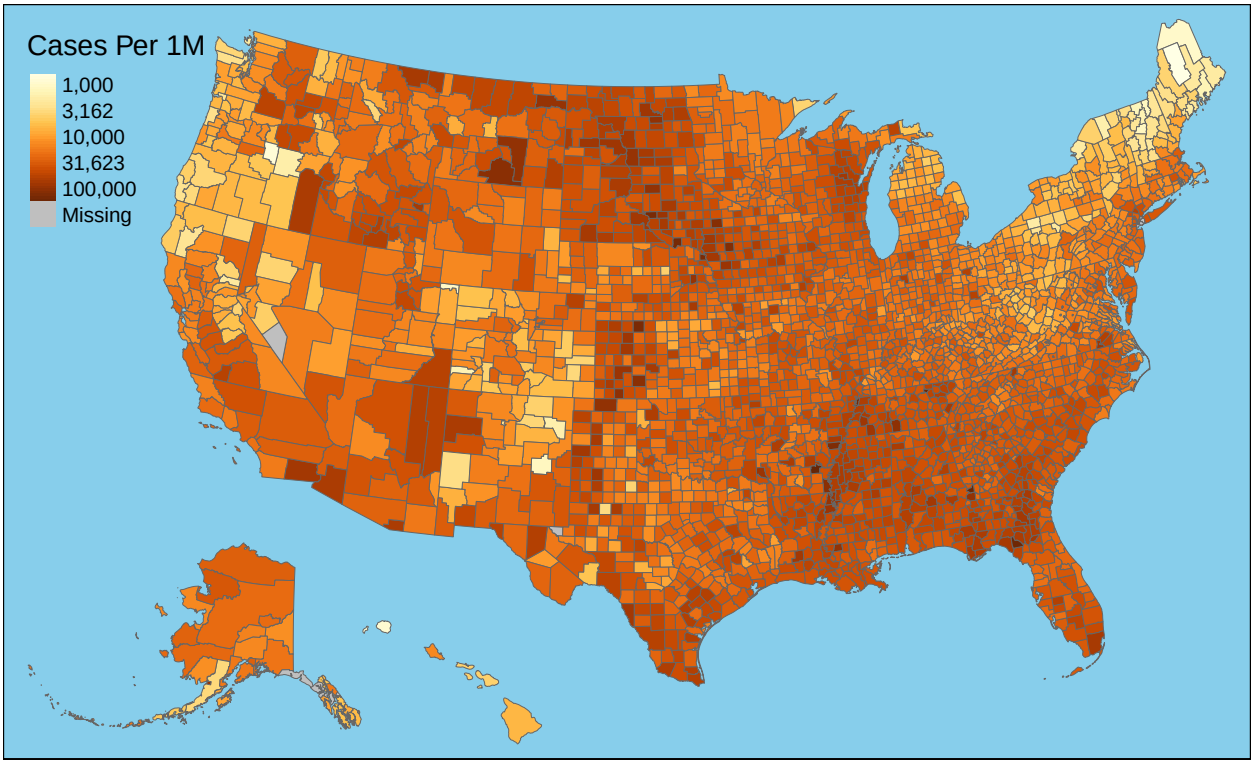
Cases

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



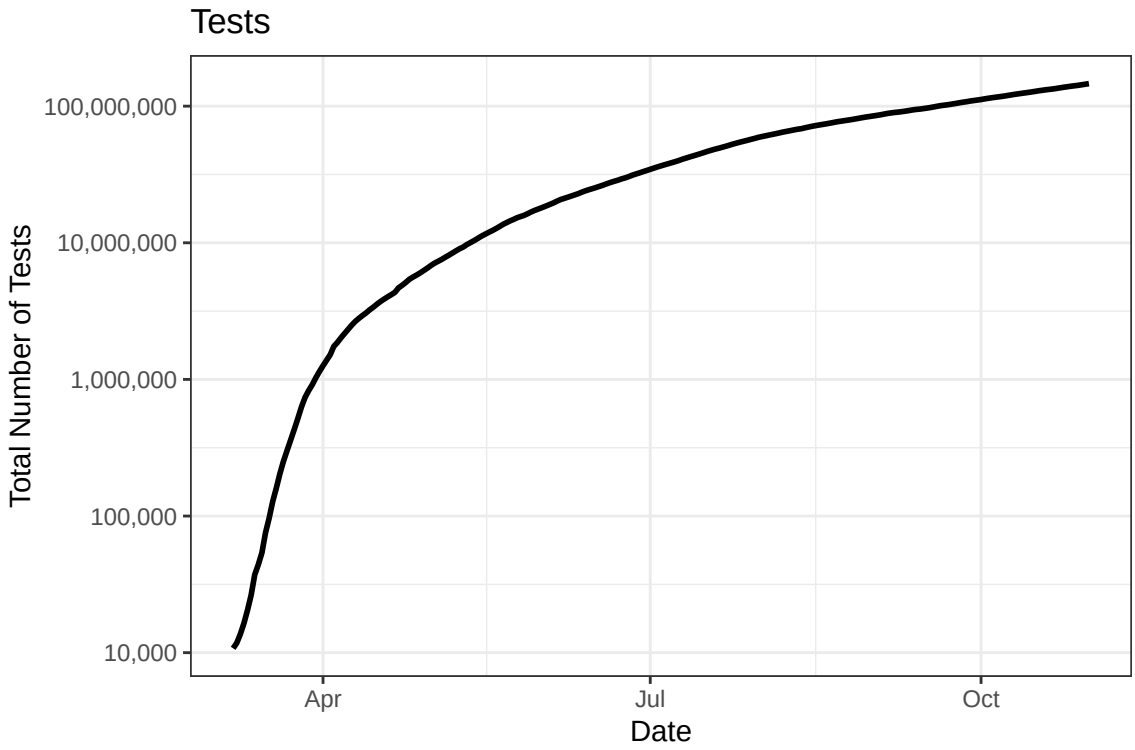


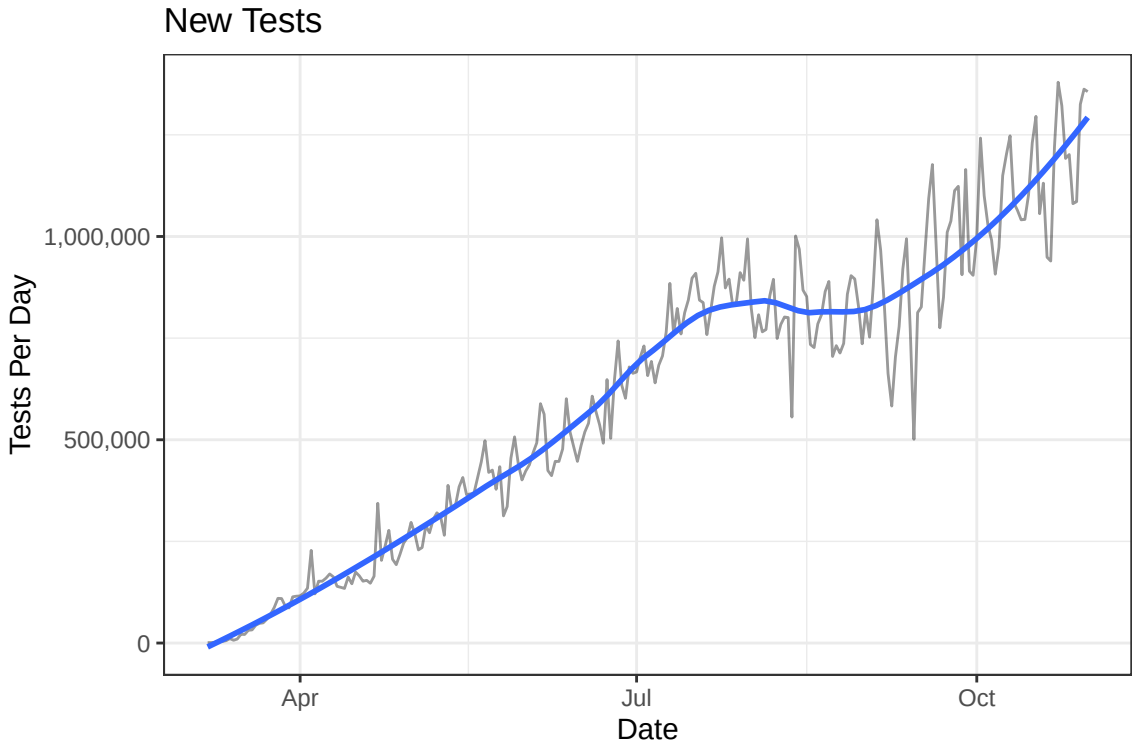

One−Week Change in Daily Cases
20,000
10,000
0
−10,000
−20,000
7−Day Change
Apr
Jul
Oct
Date

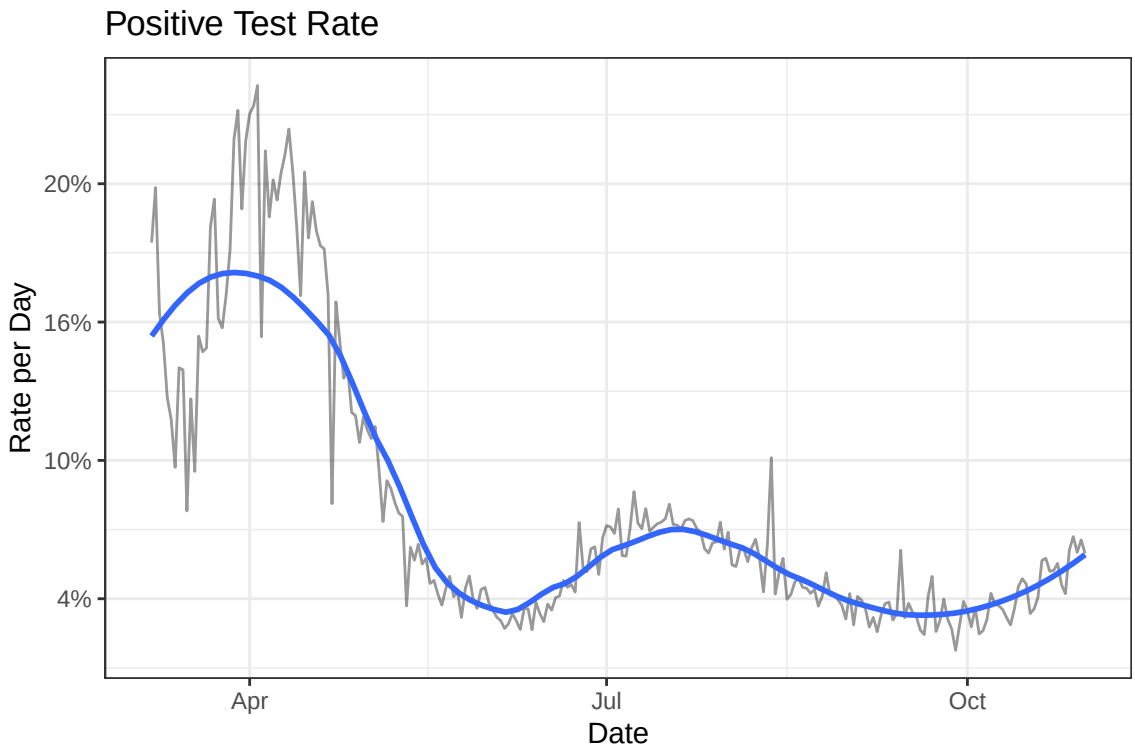

Cases Per 1M
1,000
3,162
10,000
31,623
100,000
Missing

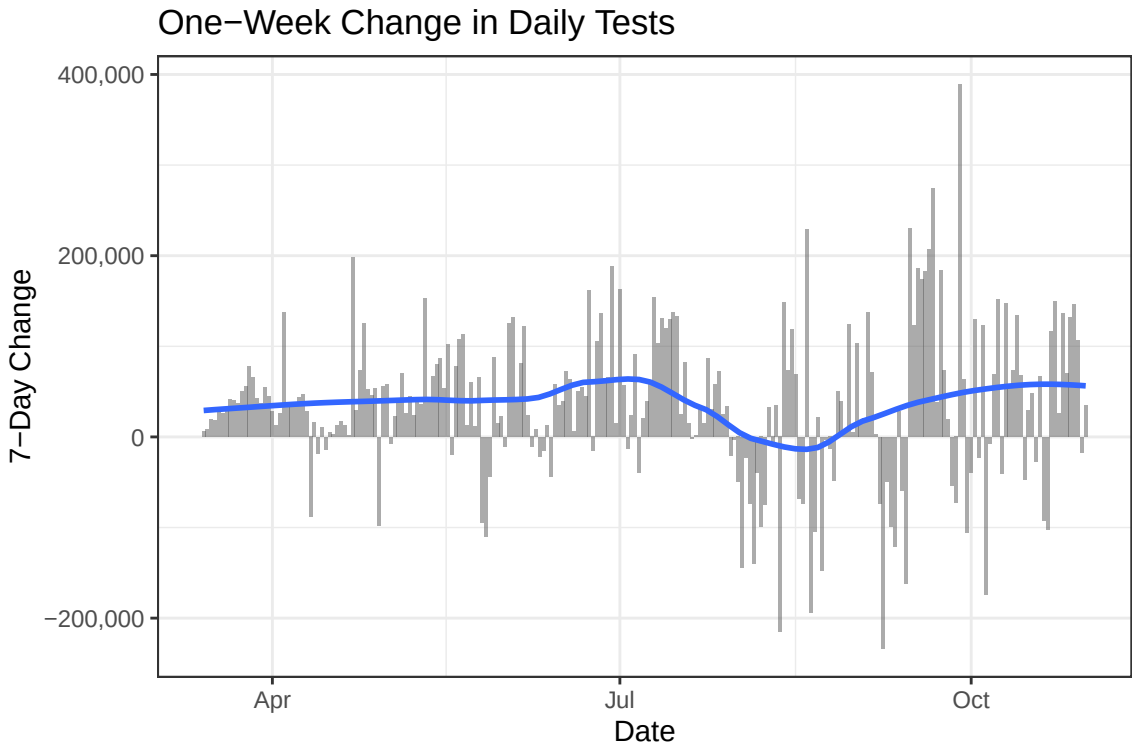
Testing

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.





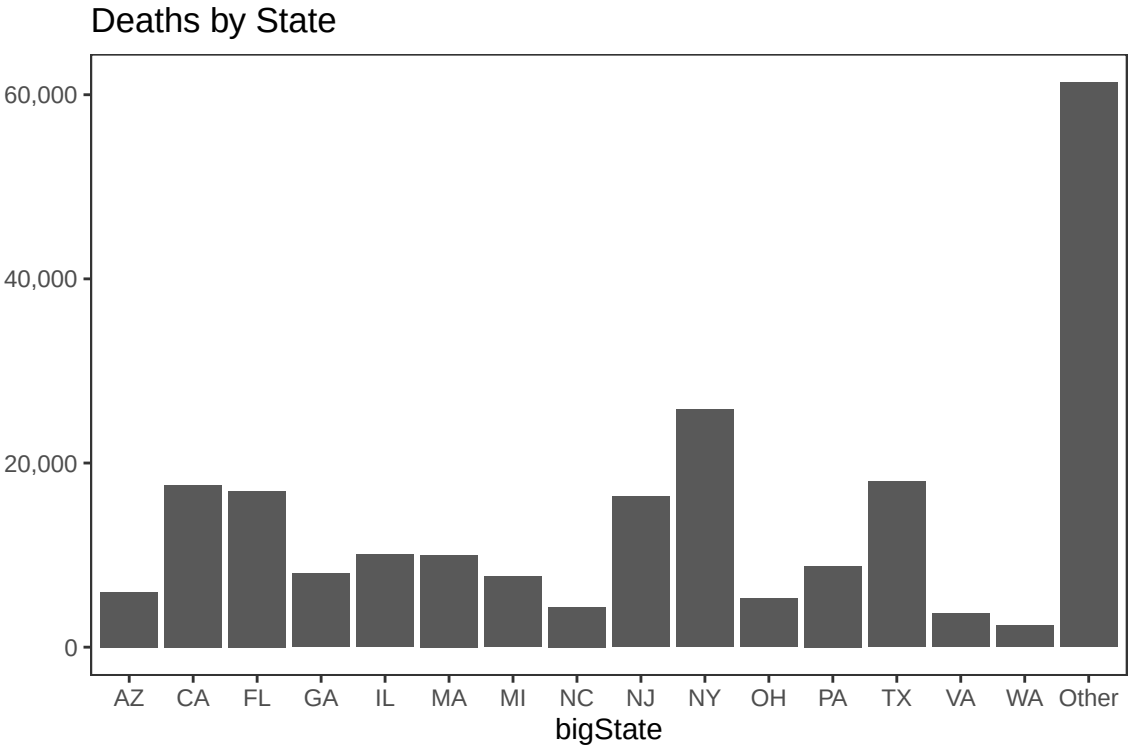

Positive Test Rate
Rate per Day
20%
16%
10%
4%
Apr
Jul
Oct
Date

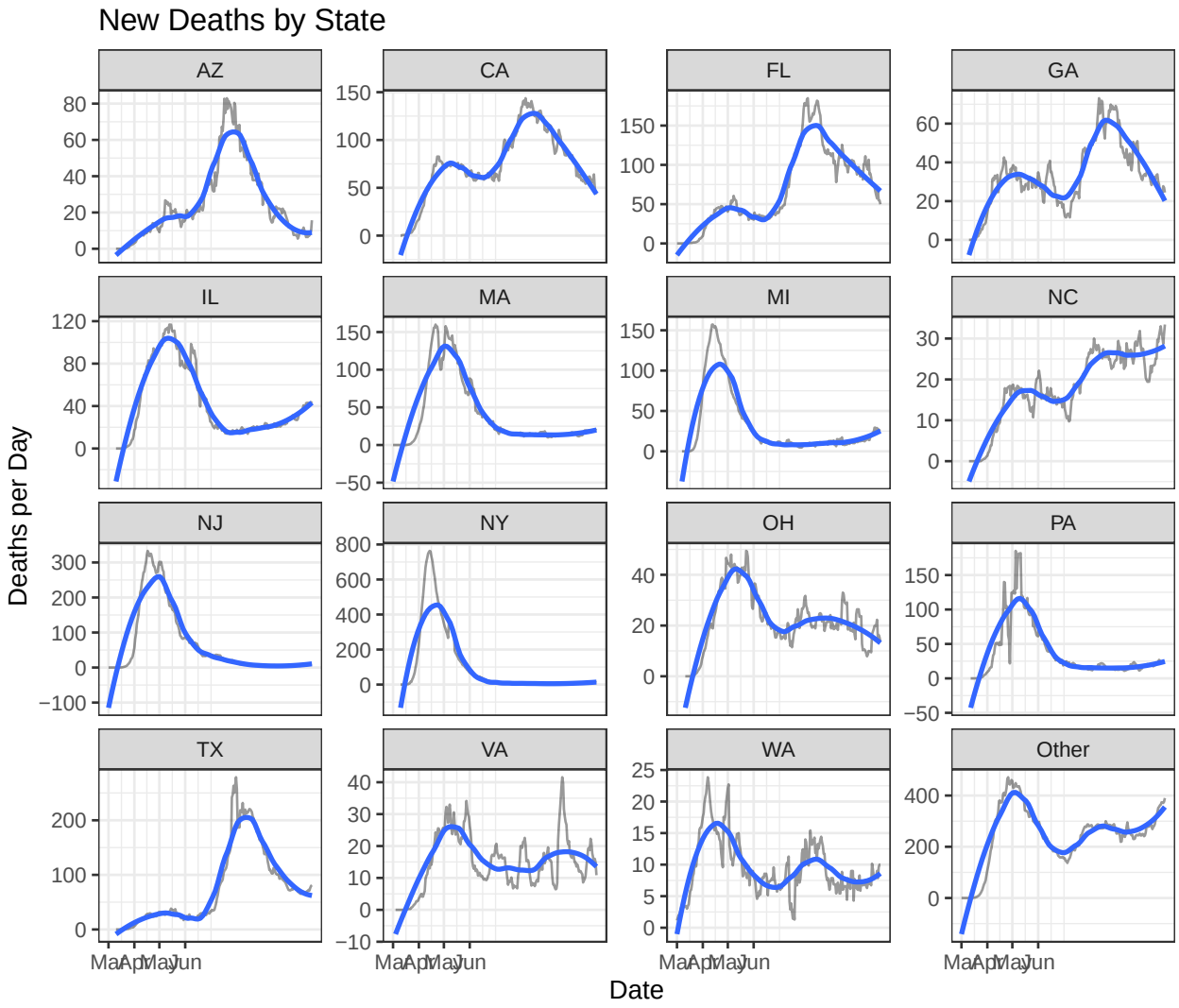

One−Week Change in Daily Tests
7−Day Change
400,000
200,000
0
−200,000
Apr
Jul
Oct
Date

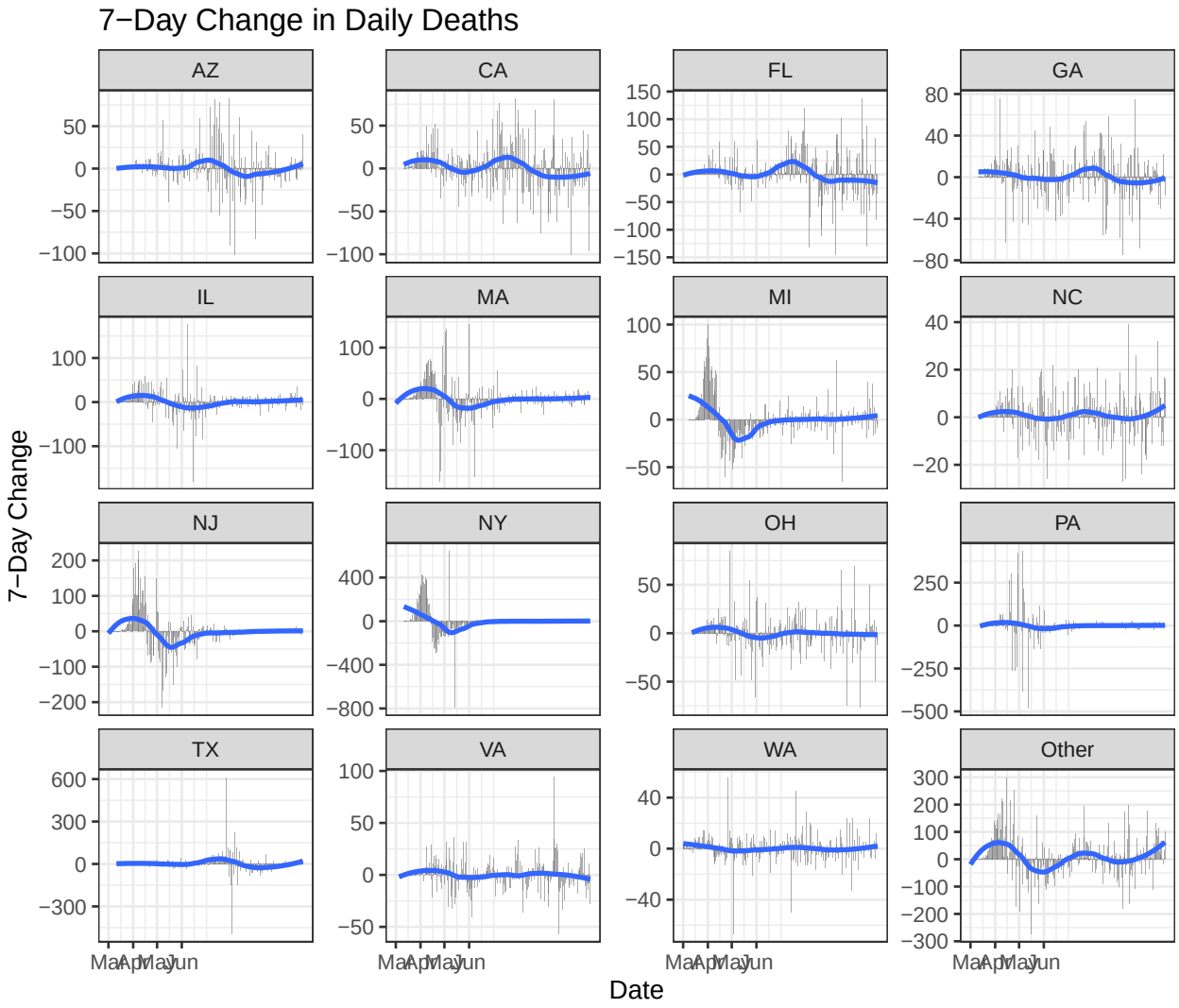
State Data

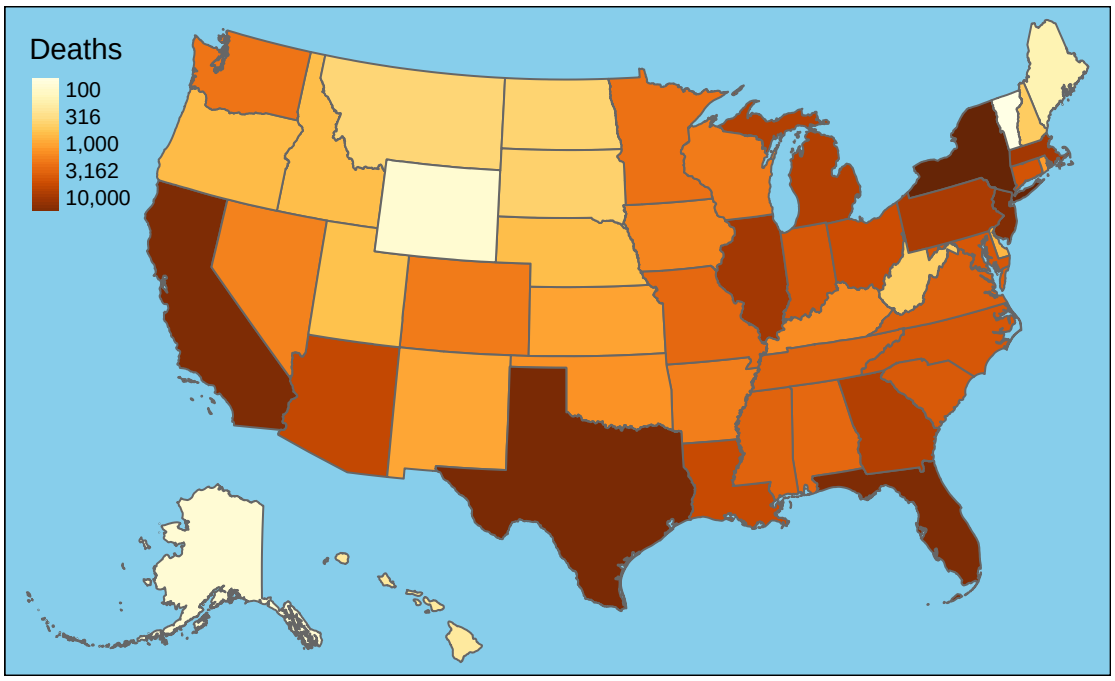
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

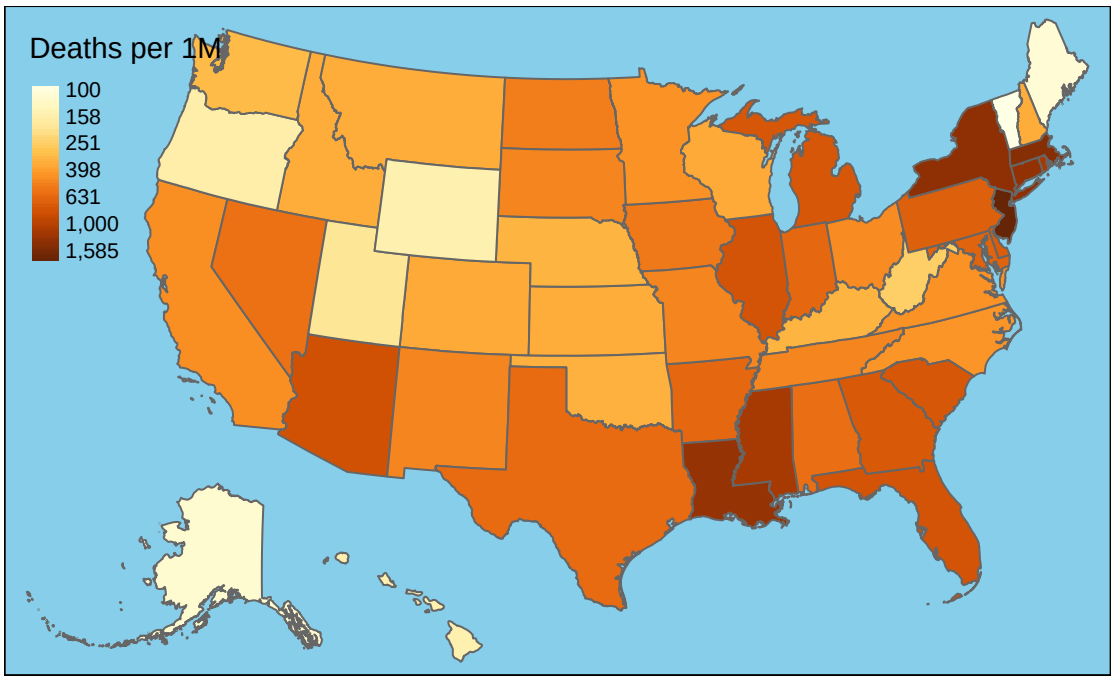
Deaths



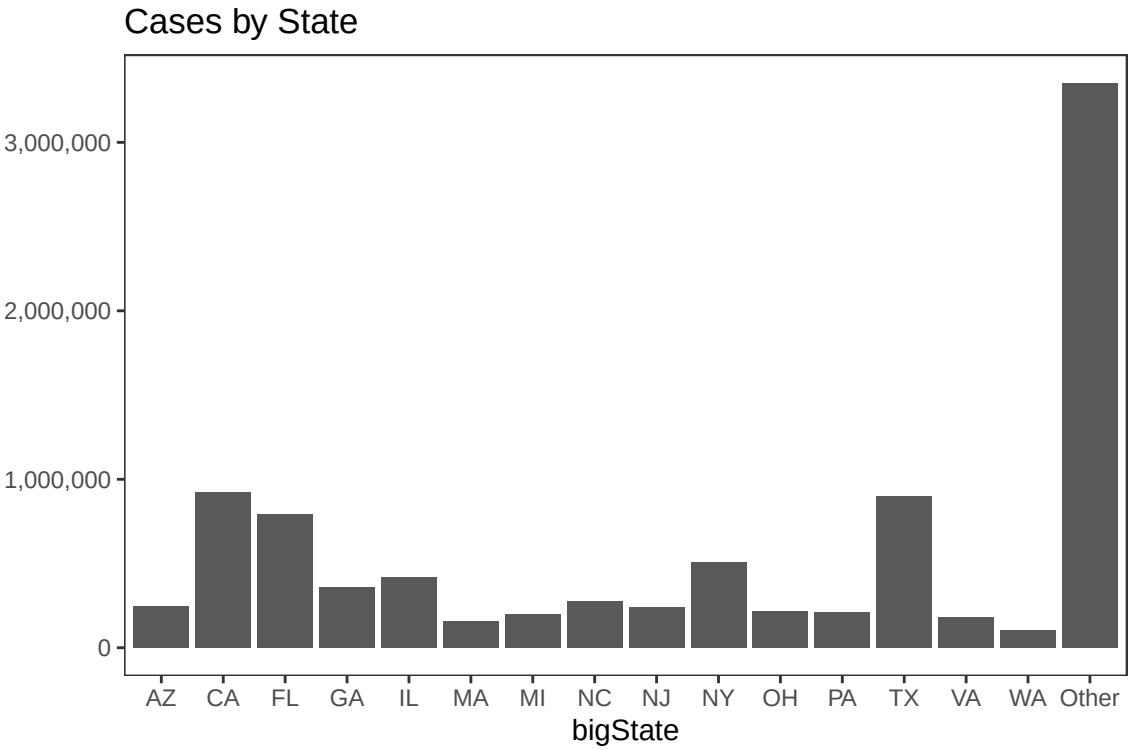

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Date
Mar
Apr
May
Jun

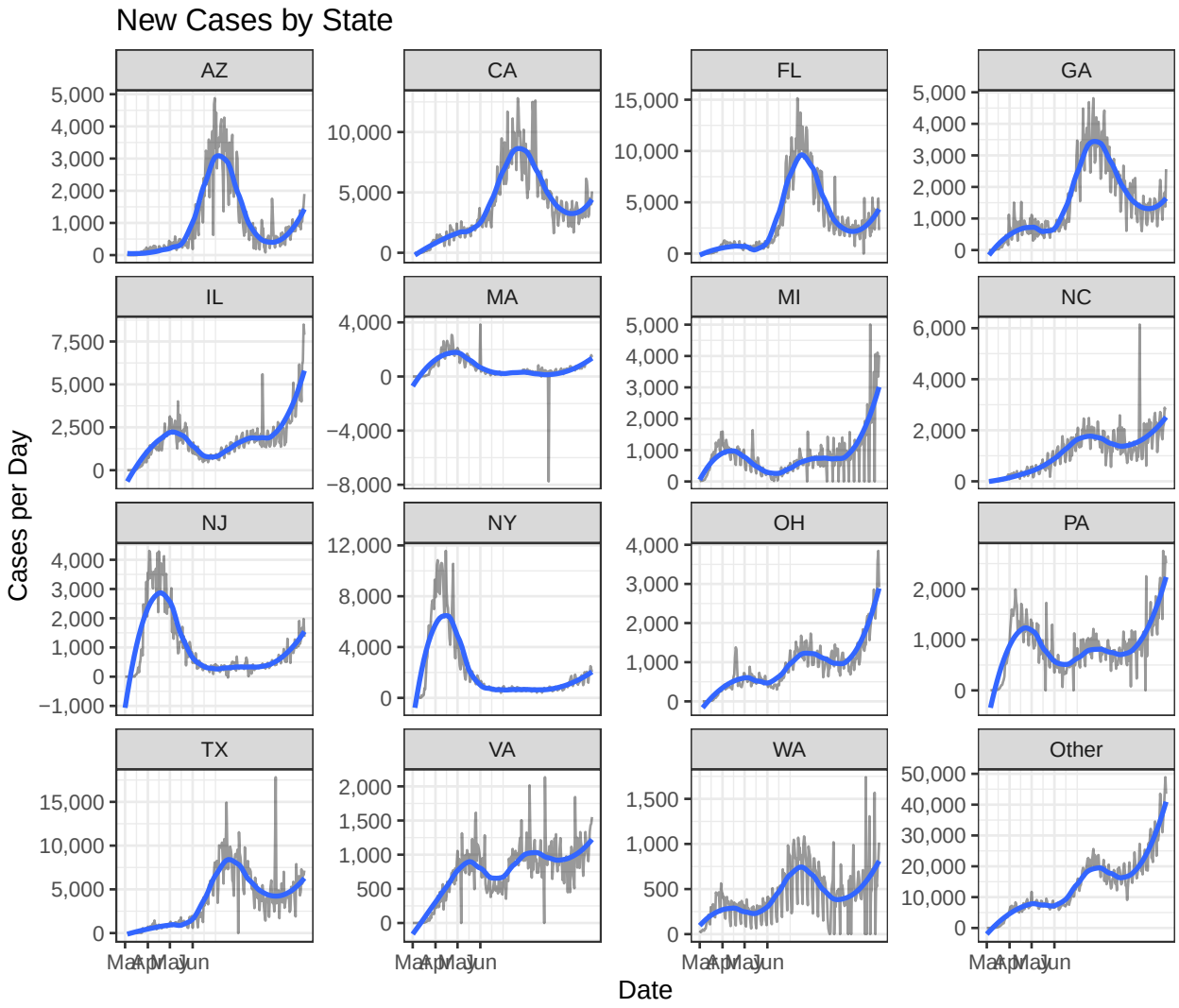

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

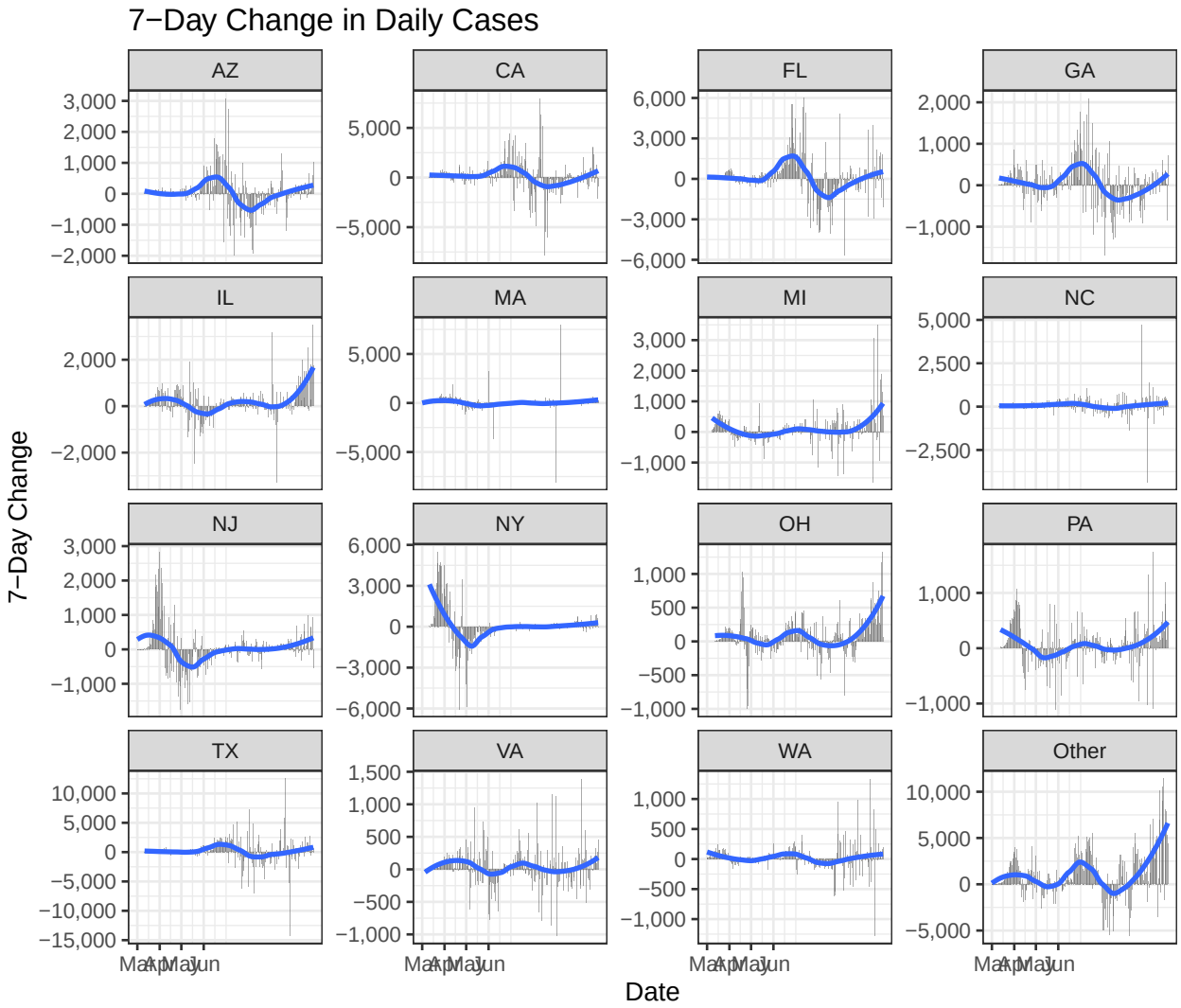

Deaths
100
316
1,000
3,162
10,000

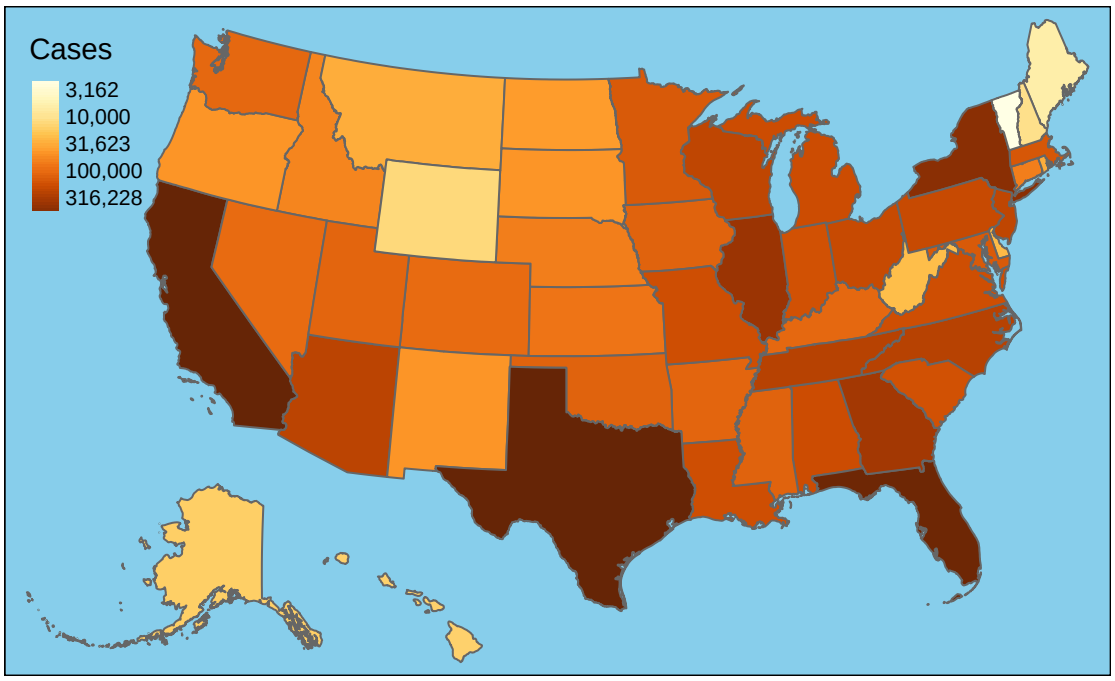

Deaths per 1M
100
158
251
398
631
1,000
1,585

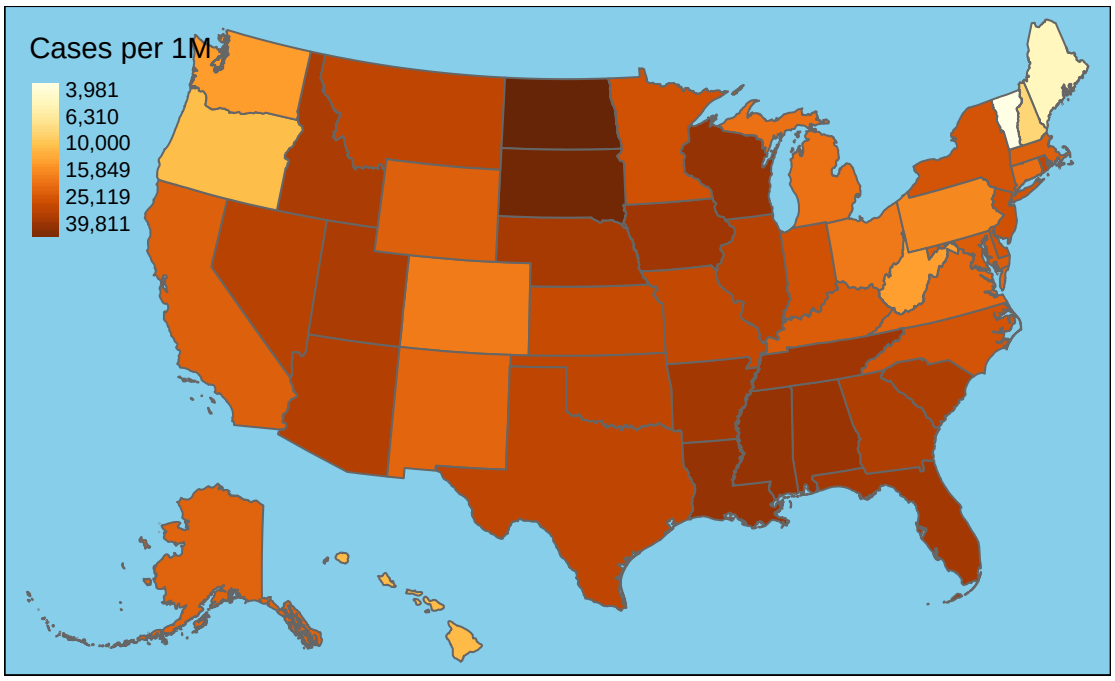
Cases


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

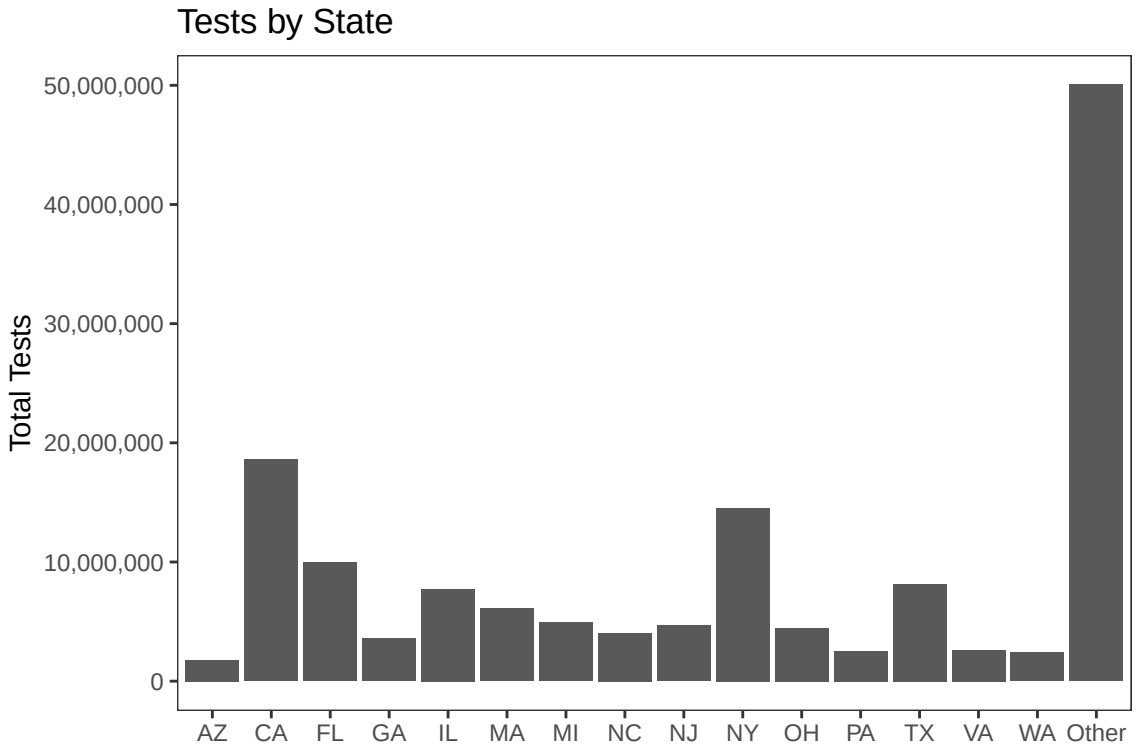

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Date
Mar
Apr
May
Jun

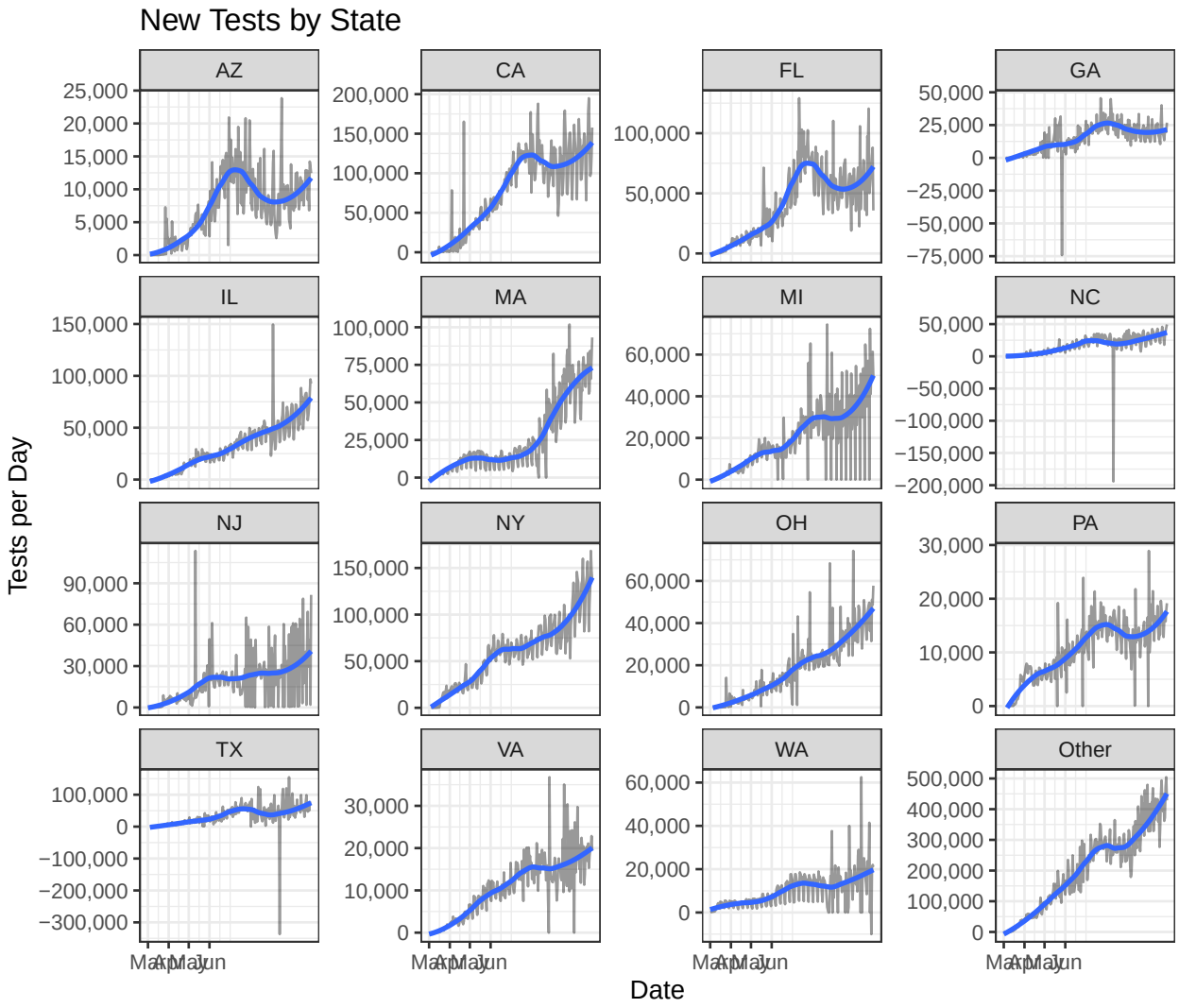

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

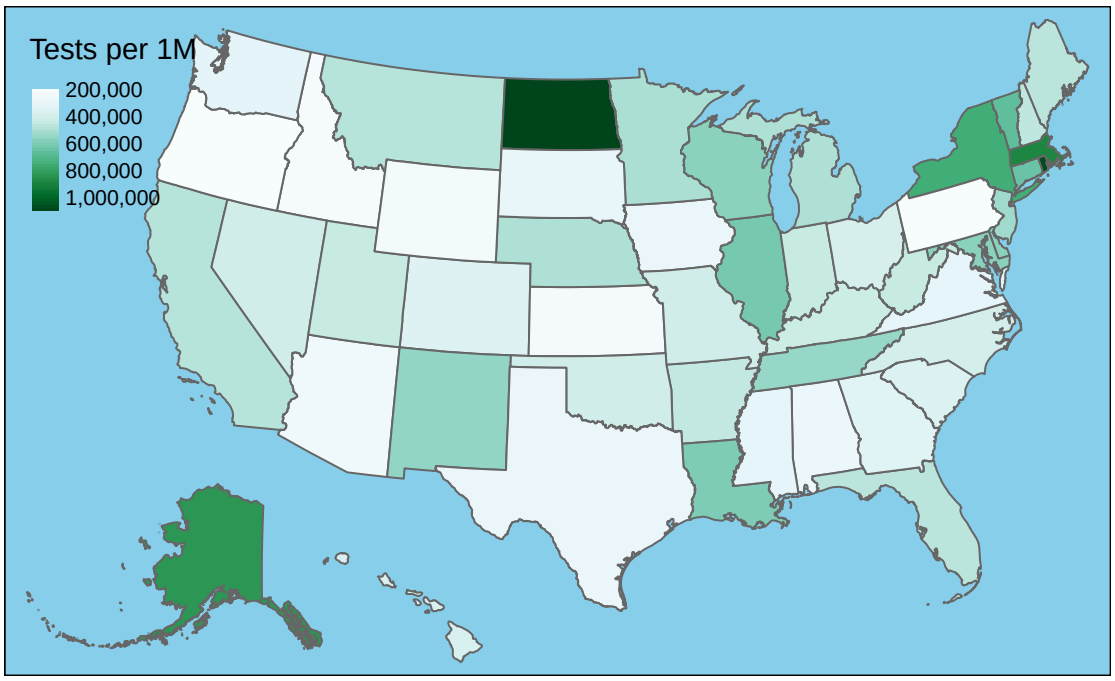

Cases
3,162
10,000
31,623
100,000
316,228

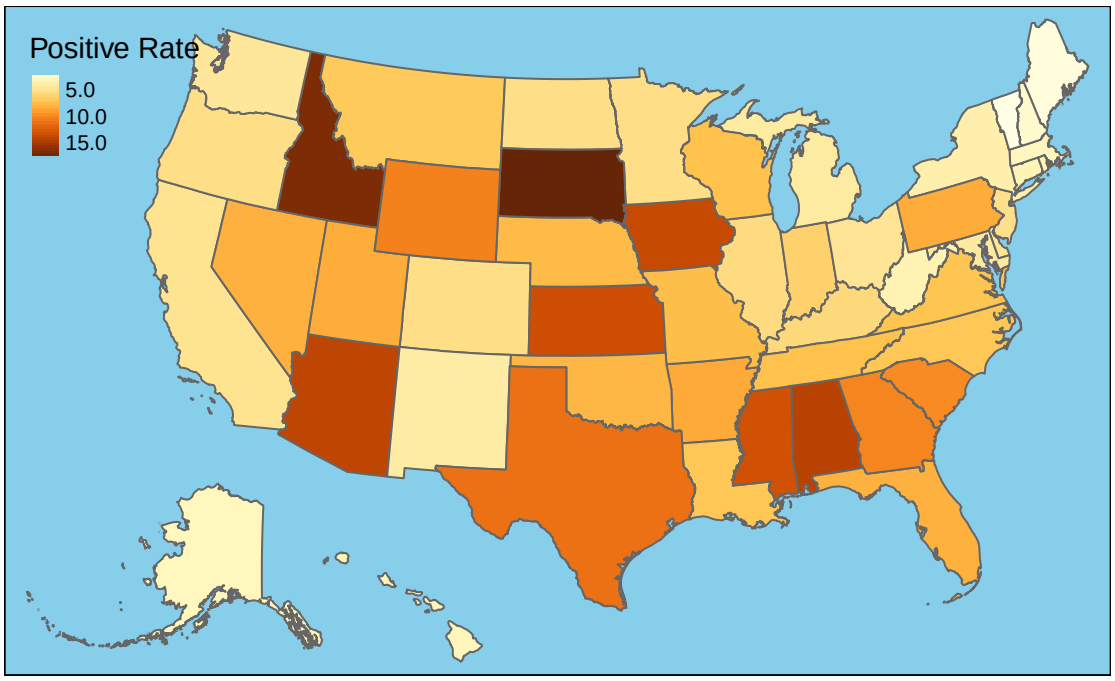

Cases per 1M
3,981
6,310
10,000
15,849
25,119
39,811

Testing

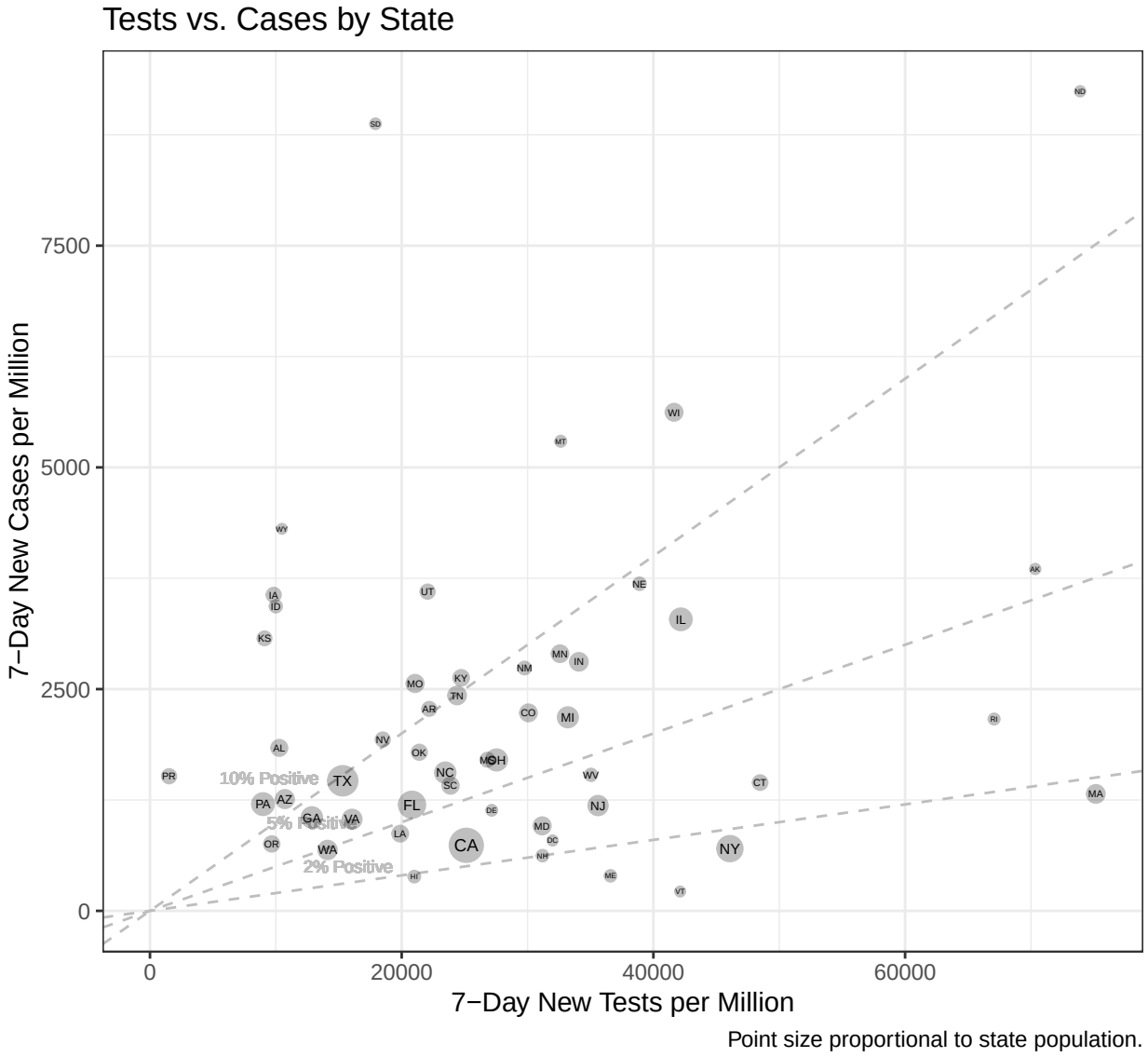

Tests by State
Total Tests
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


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.



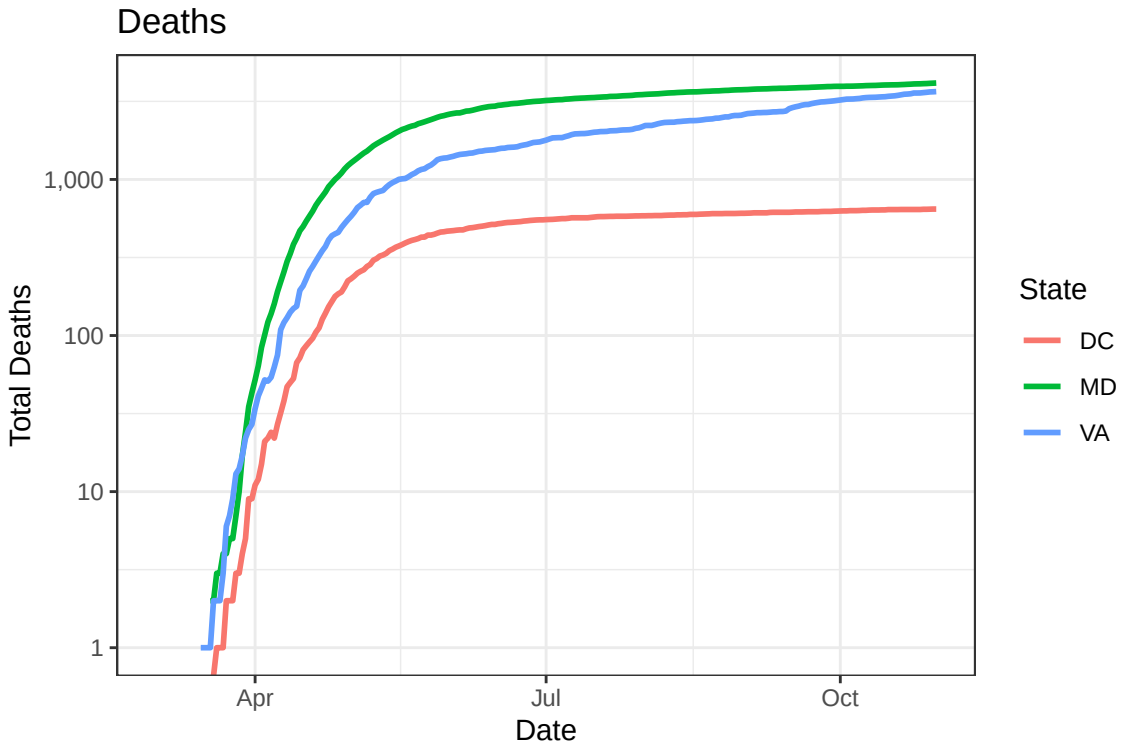
Local Data

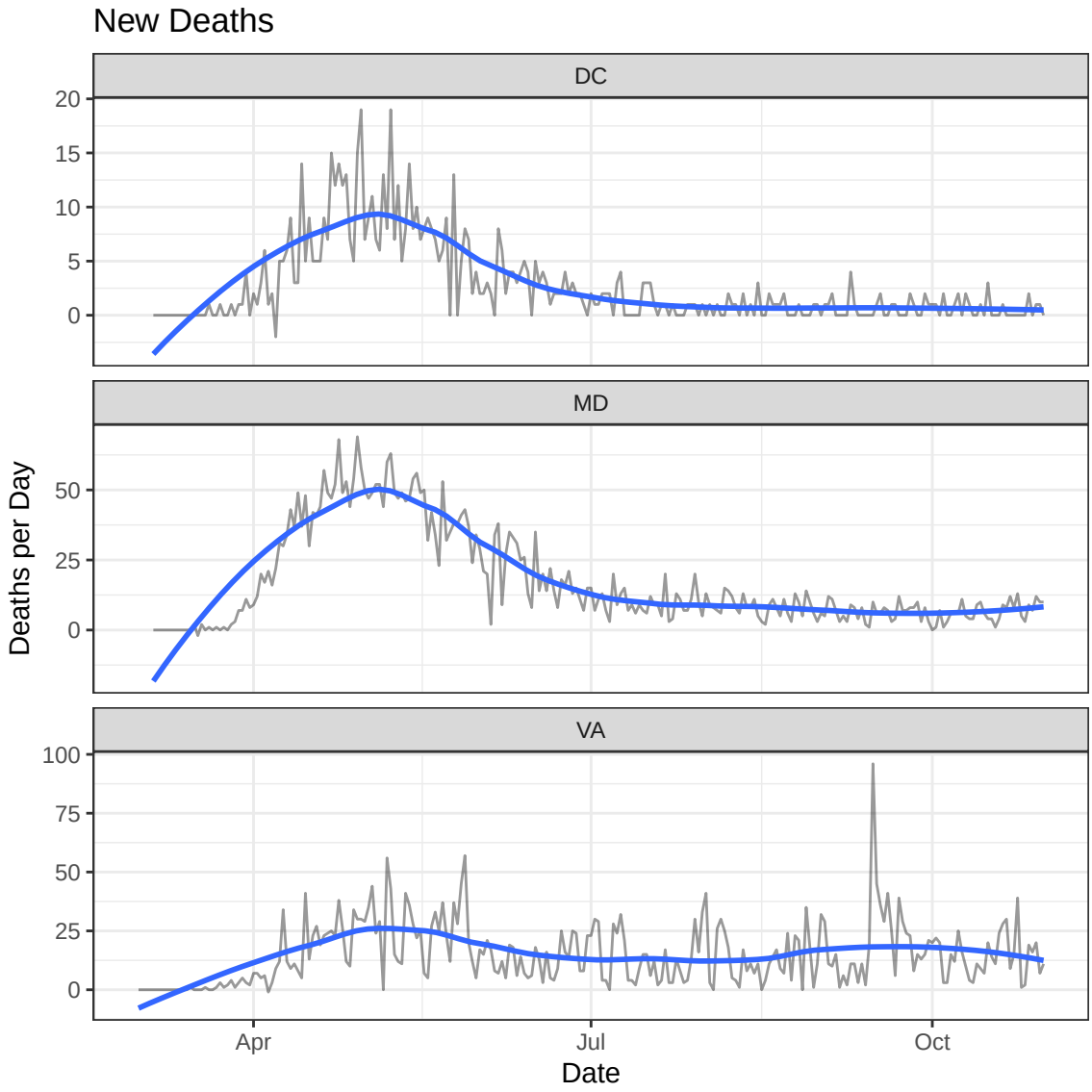
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

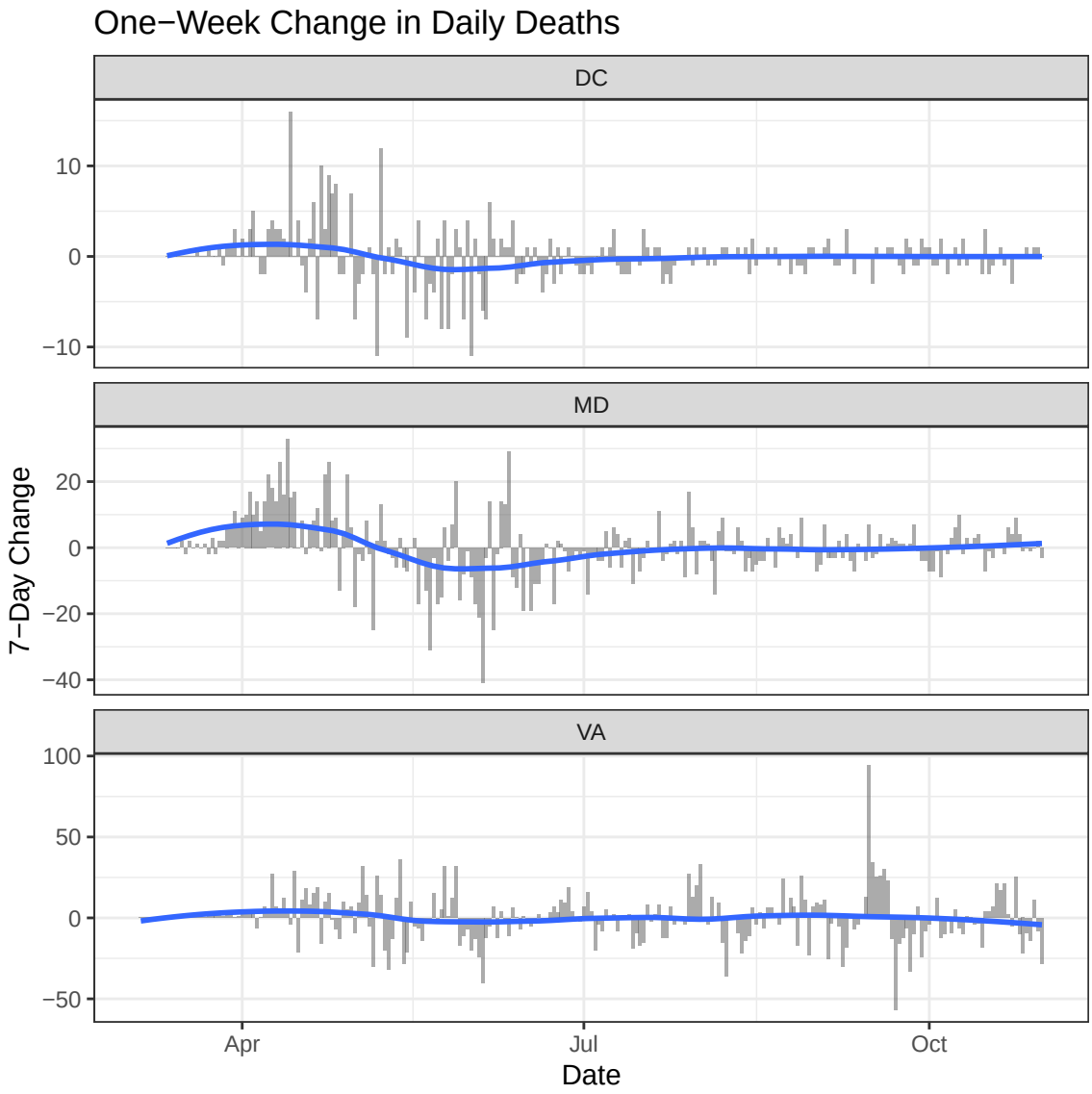
Table 3: Latest Local Data

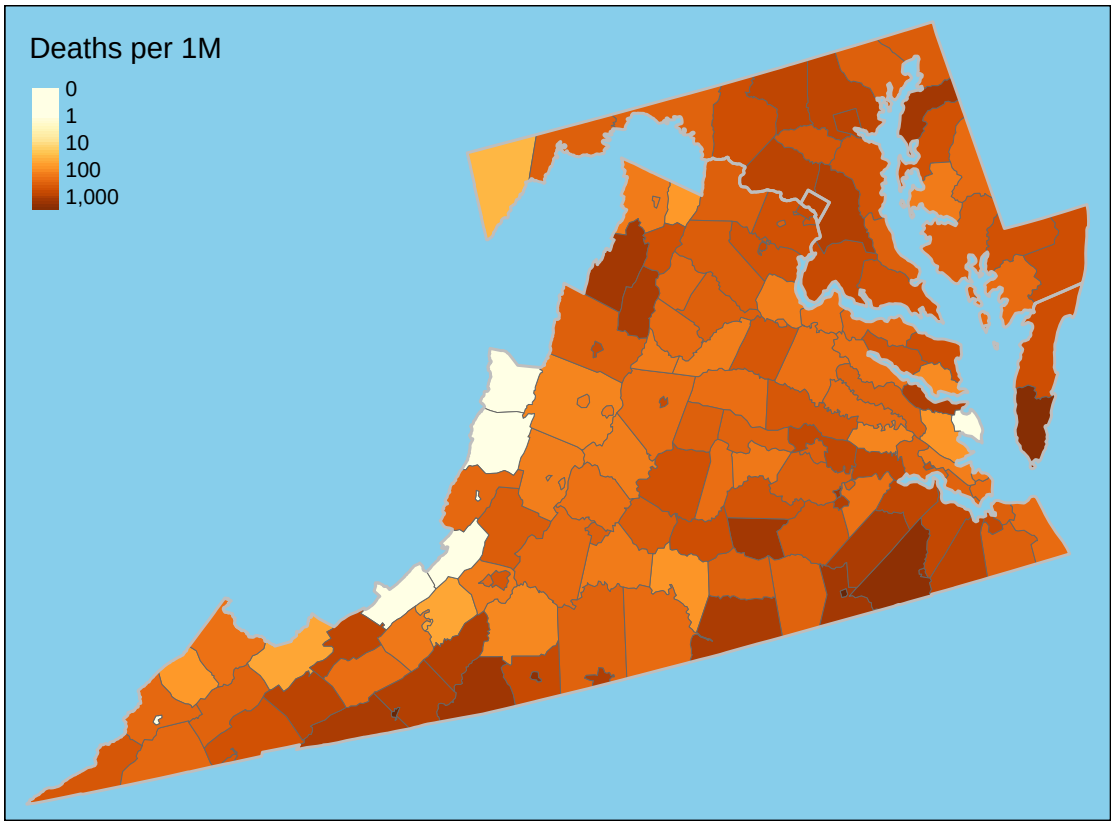
State	Cases	Deaths	New Cases	New Deaths
DC	17,266	646	122	0
MD	145,281	4,147	967	10
VA	181,190	3,654	1,551	11

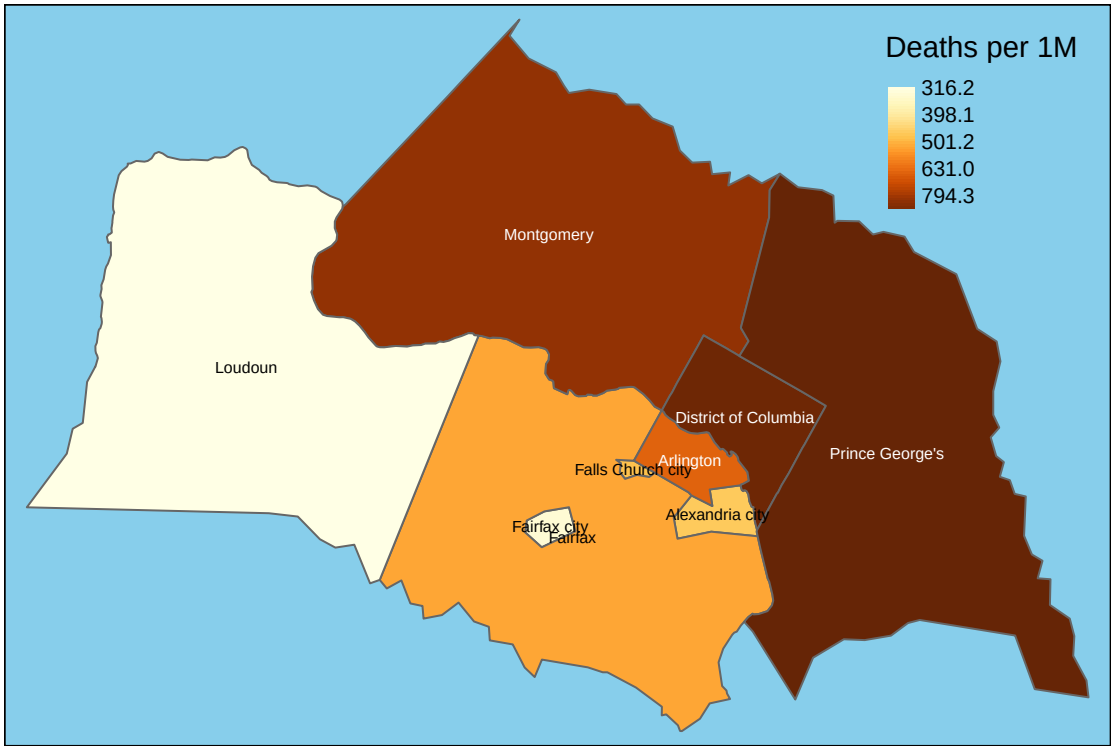
Deaths


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

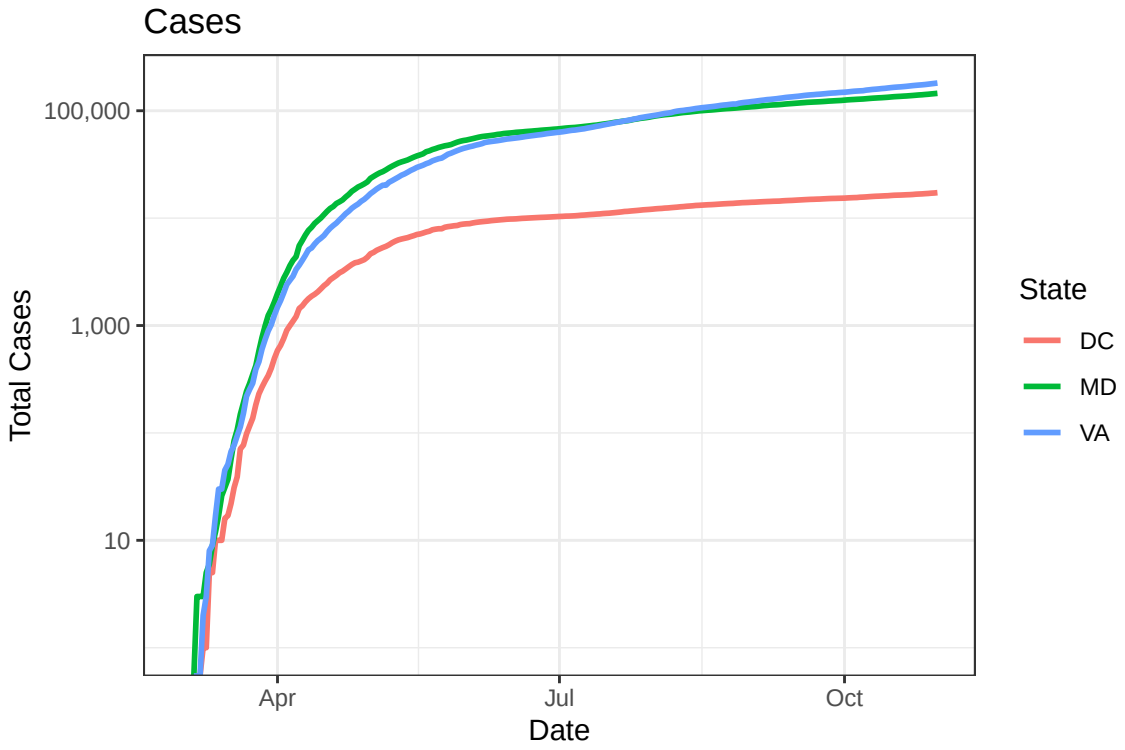

New Deaths
DC
MD
VA
Deaths per Day
20
15
10
5
0
50
25
0
100
75
50
25
0
Apr
Jul
Oct
Date

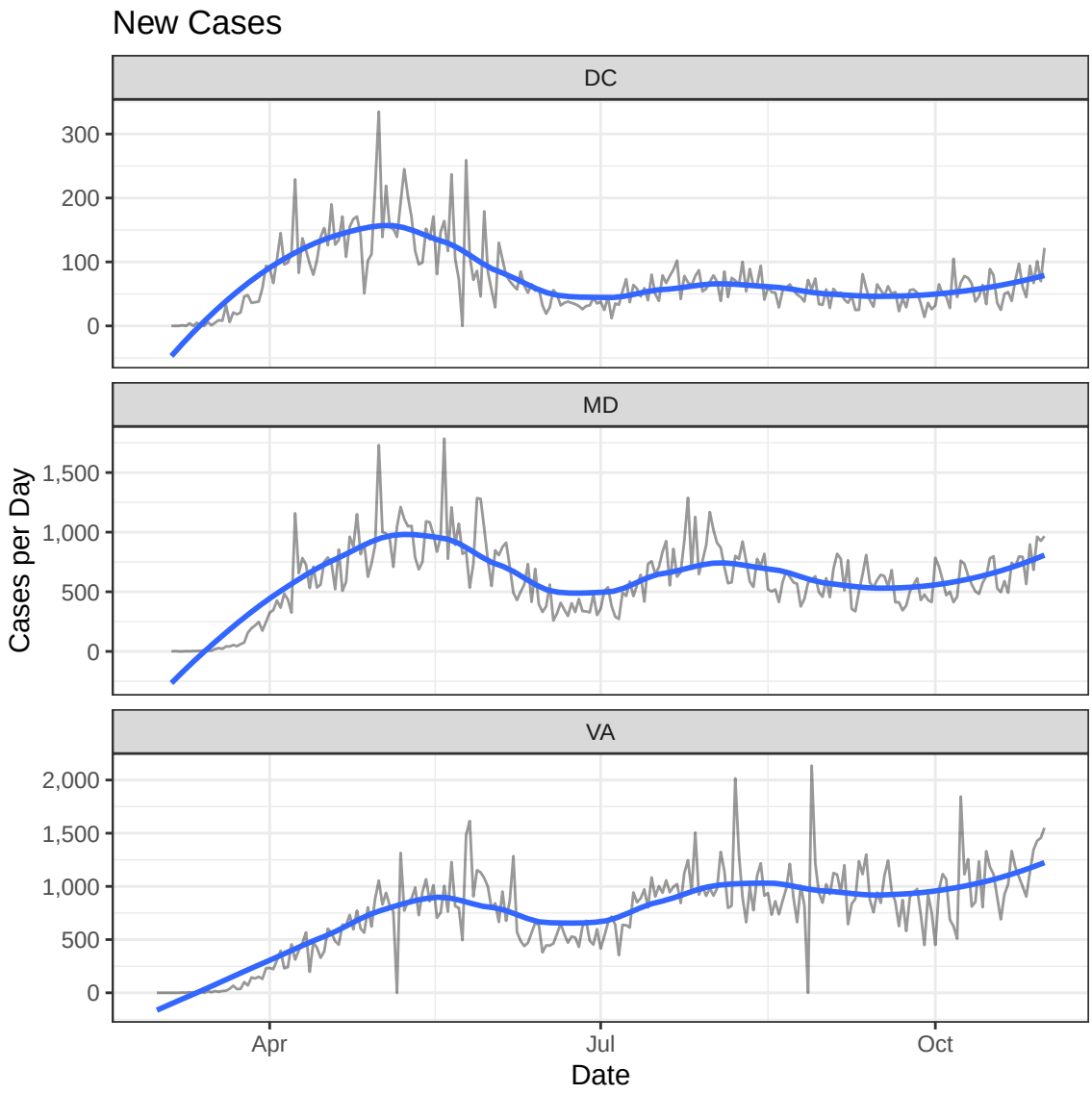

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
100
50
0
−50
7−Day Change
Apr
Jul
Oct
Date

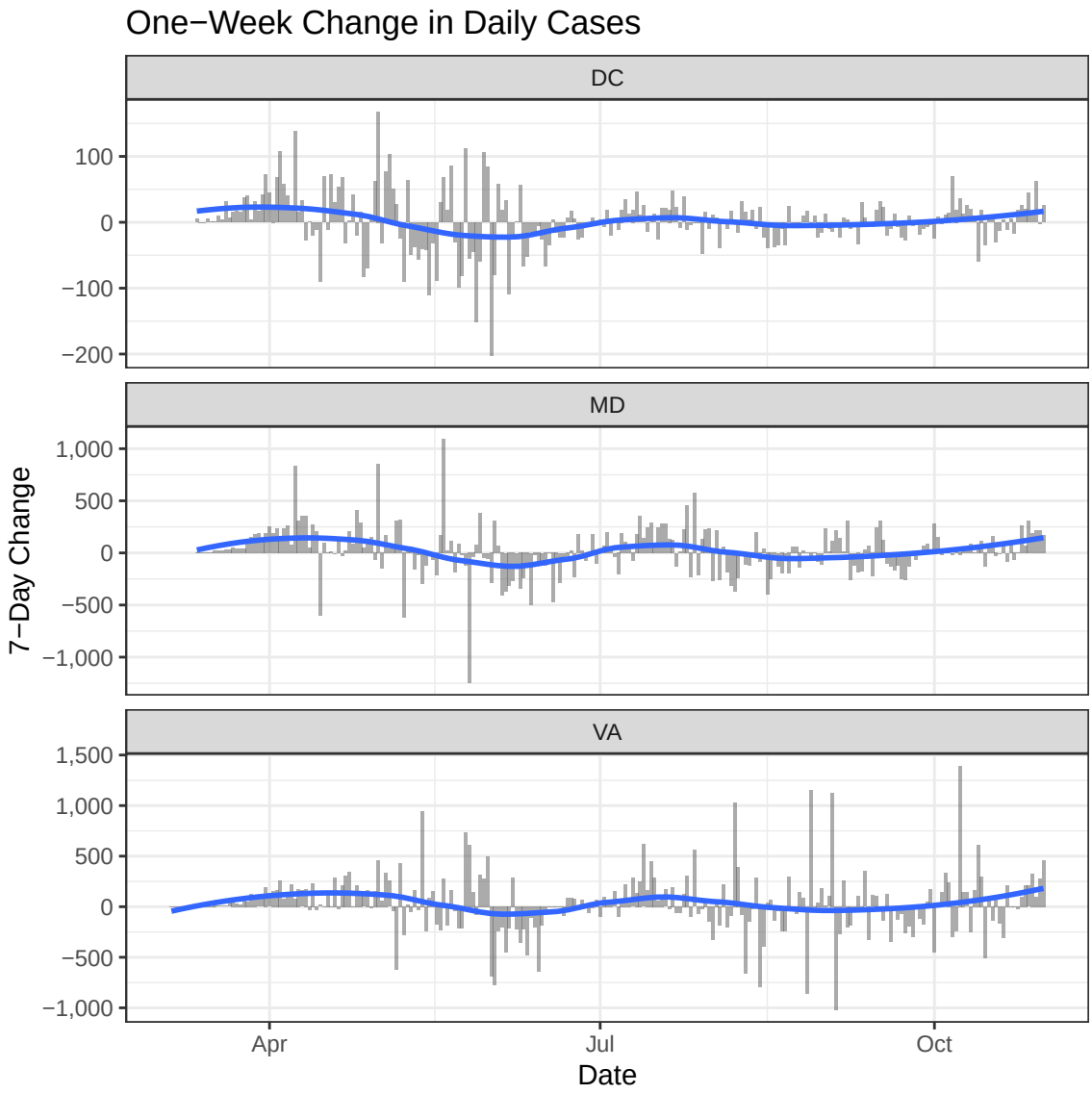

Deaths per 1M
0
1
10
100
1,000

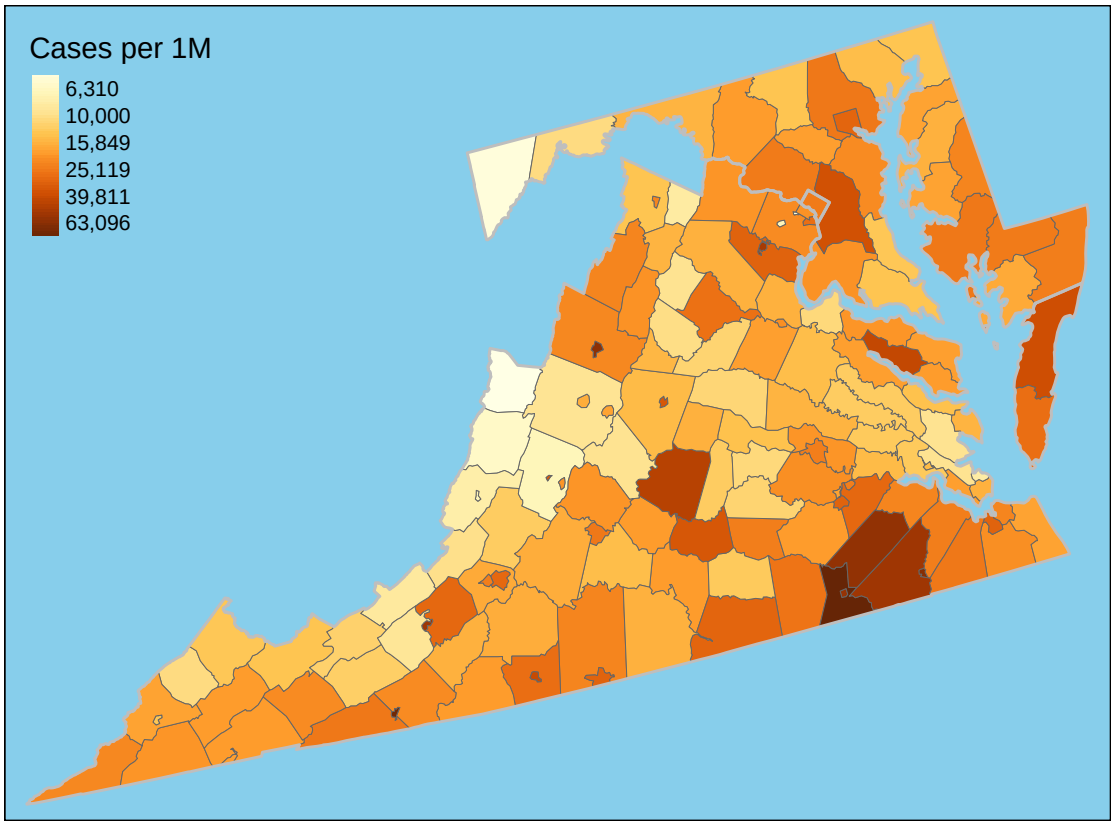

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

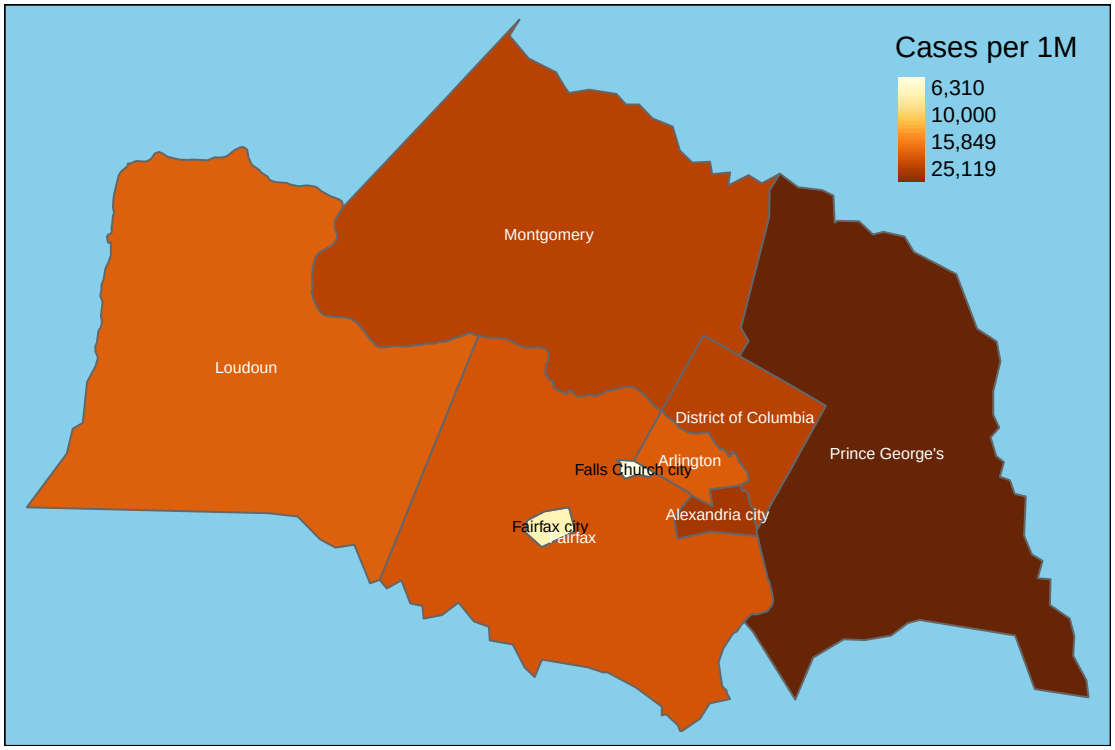
Cases


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

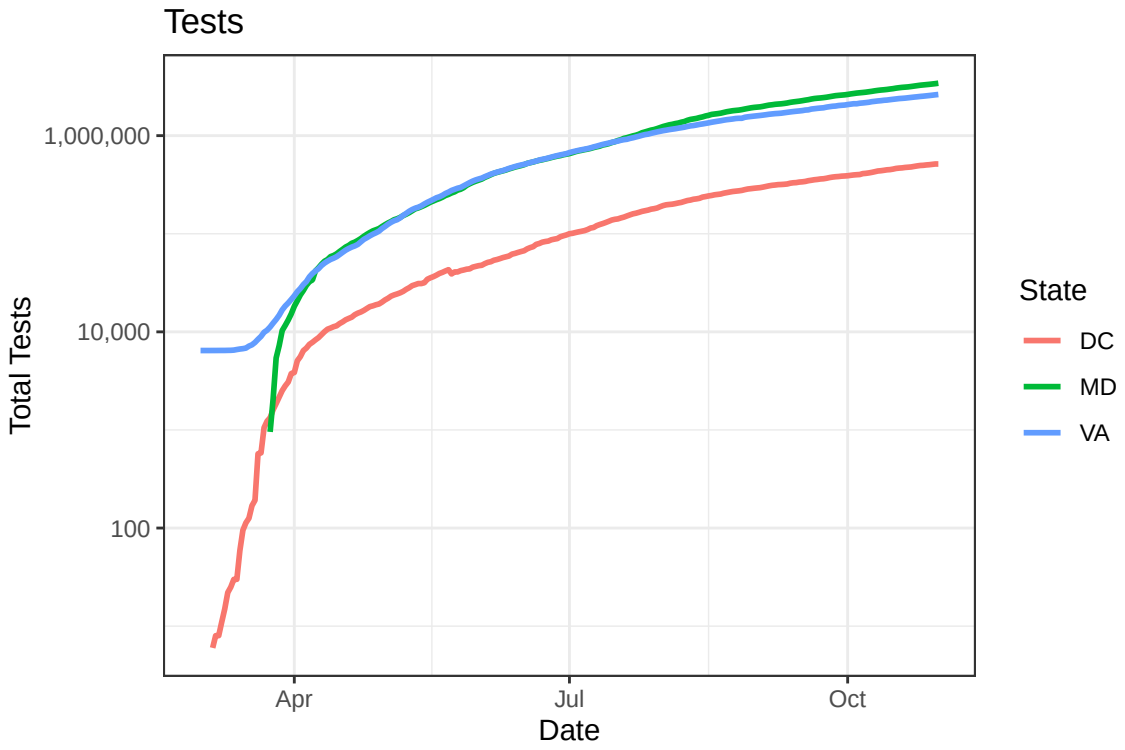

New Cases
DC
MD
VA
Cases per Day
300
200
100
0
1,500
1,000
500
0
2,000
1,500
1,000
500
0
Apr
Jul
Oct
Date

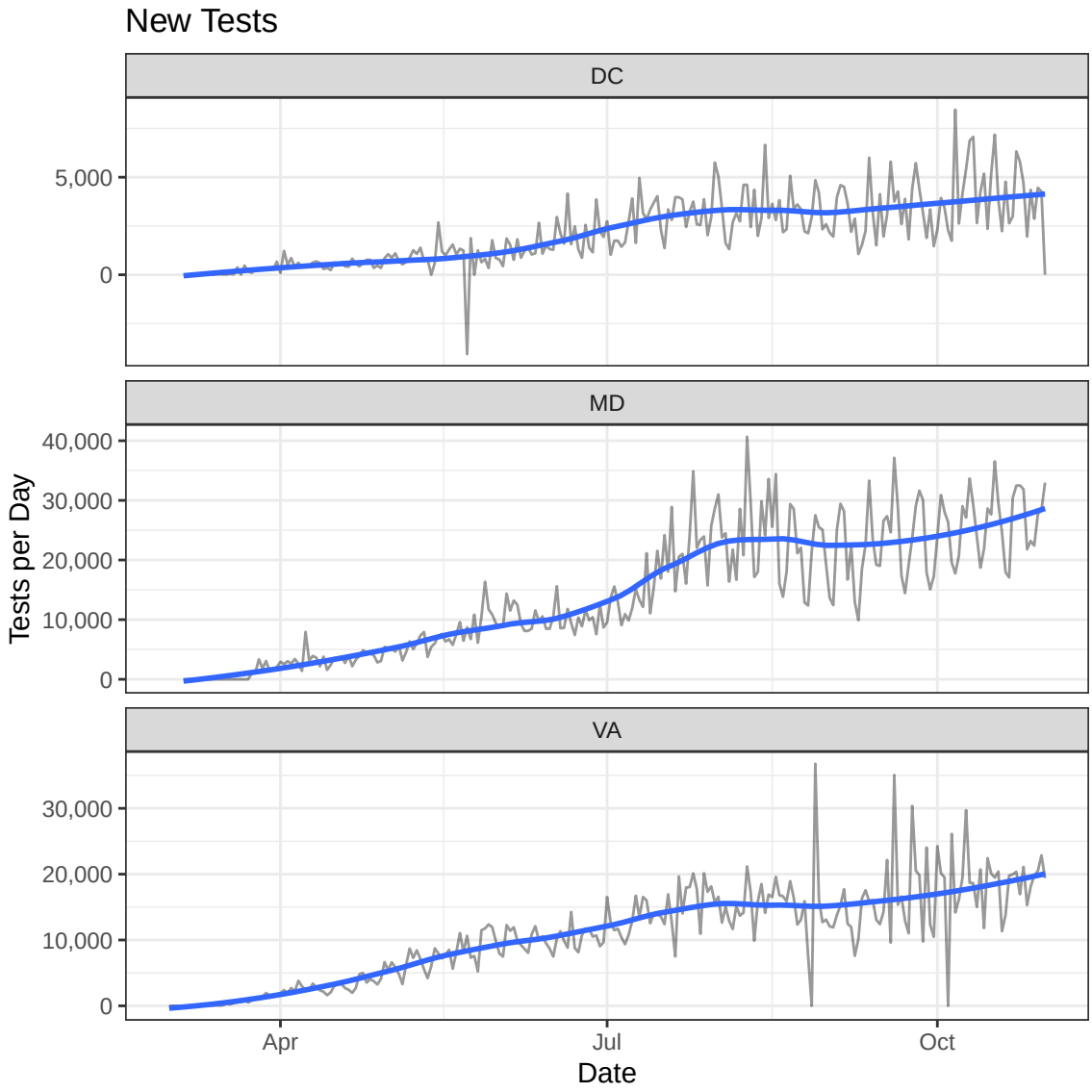

One−Week Change in Daily Cases
DC
MD
VA
7−Day Change
100
0
−100
−200
1,000
500
0
−500
−1,000
1,500
1,000
500
0
−500
−1,000
Apr
Jul
Oct
Date

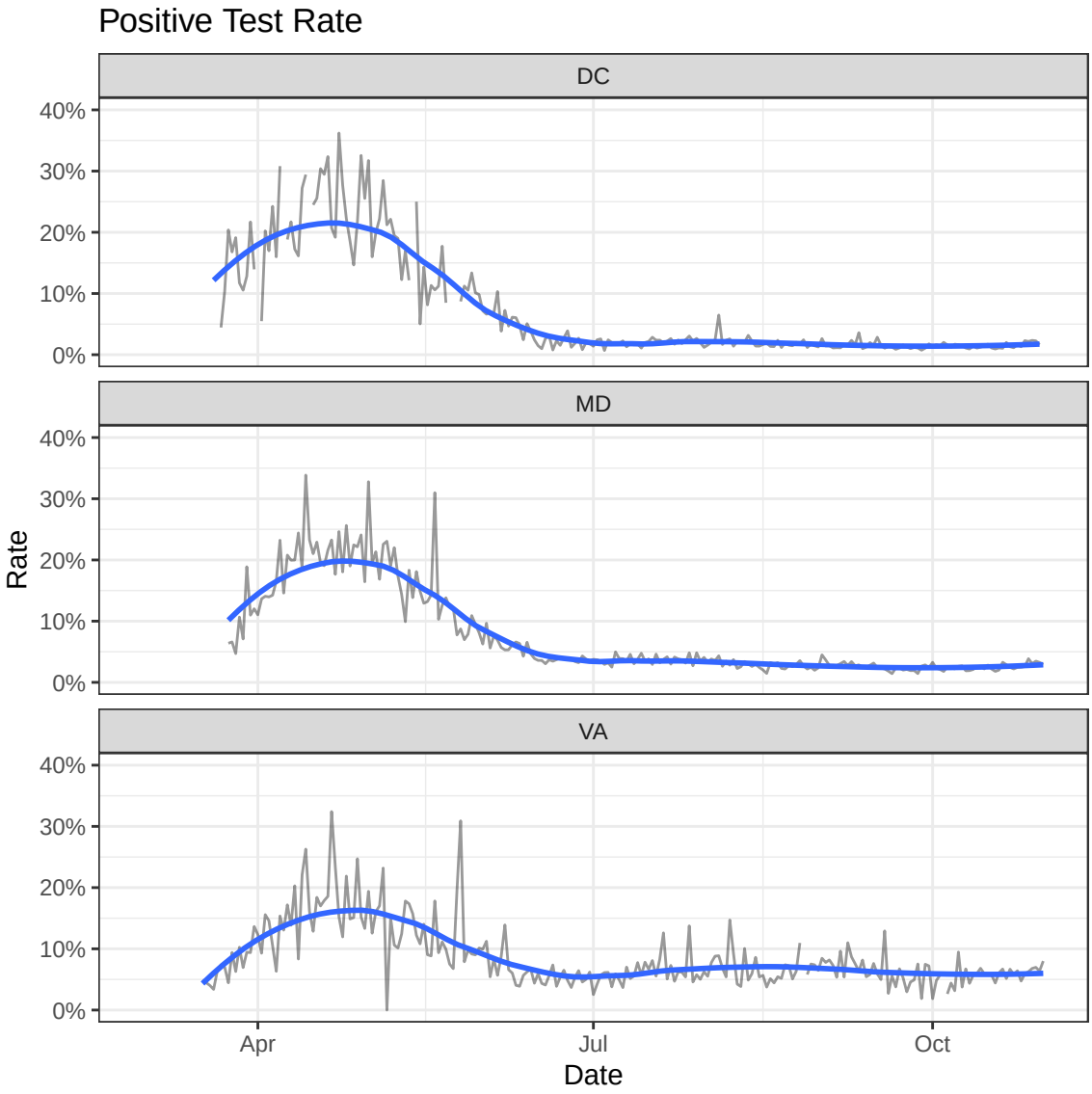

Cases per 1M
6,310
10,000
15,849
25,119
39,811
63,096


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
MD
VA
5,000
0
40,000
30,000
20,000
10,000
0
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