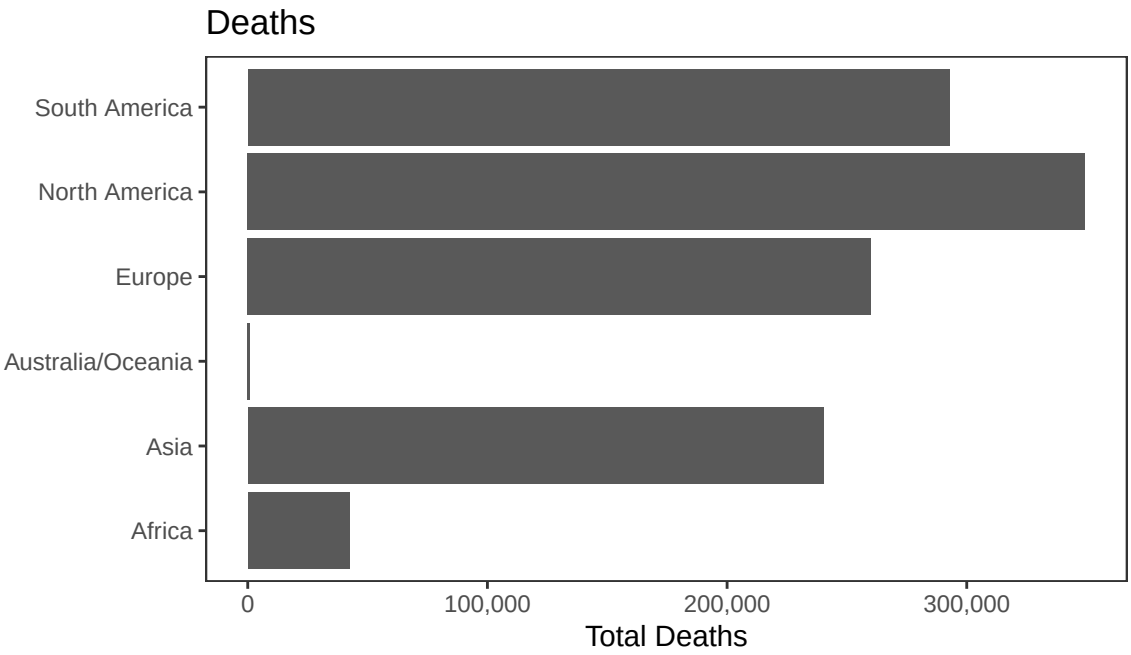
Erik's Covid-19 Chart Pack

Data updated 2020-10-30 09:43:08. 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 45,316,589 confirmed Covid-19 cases and 1,185,733 deaths worldwide.



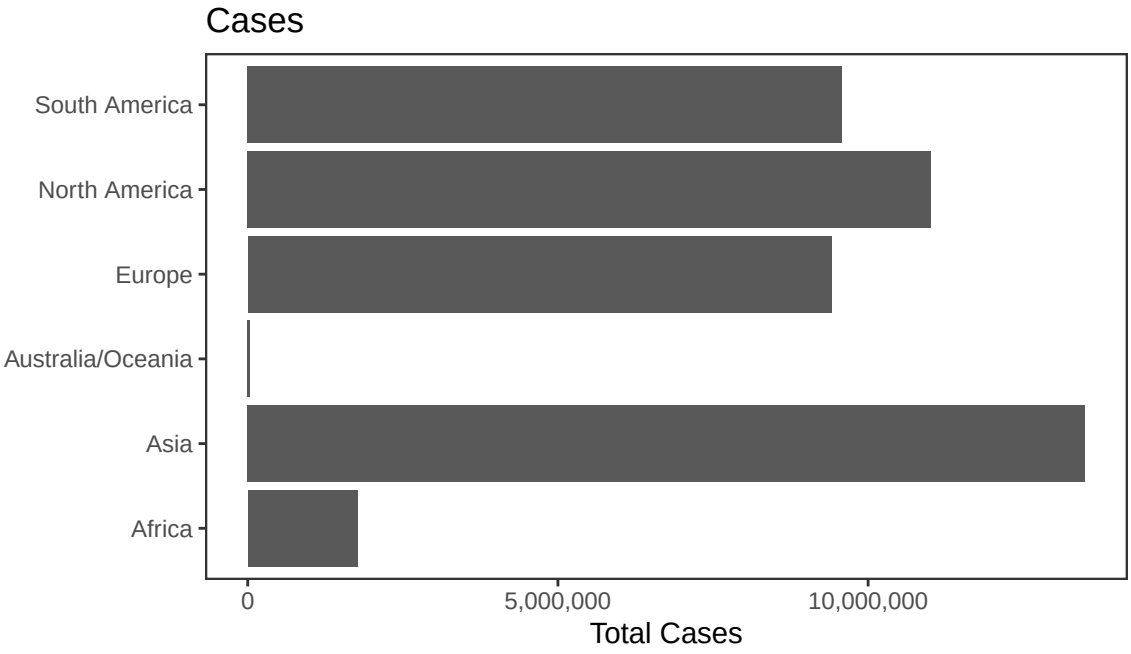
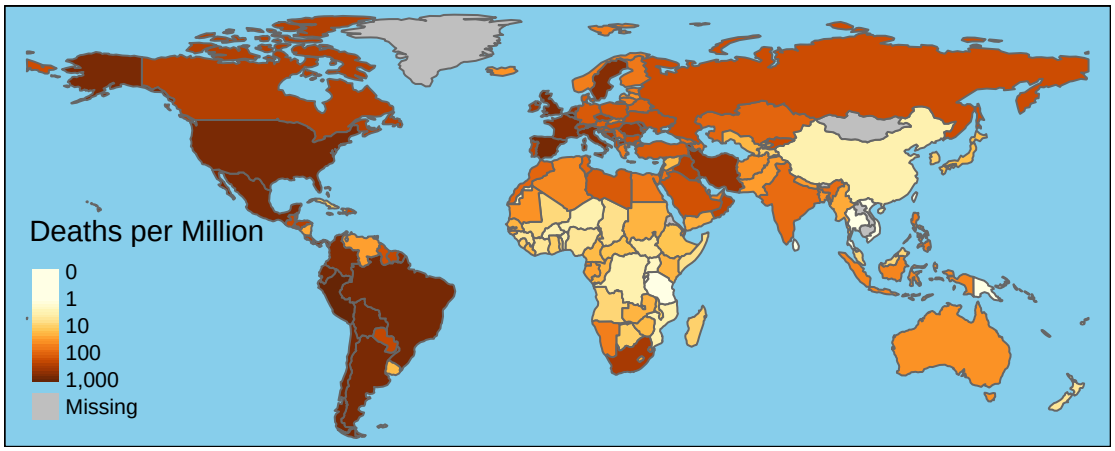
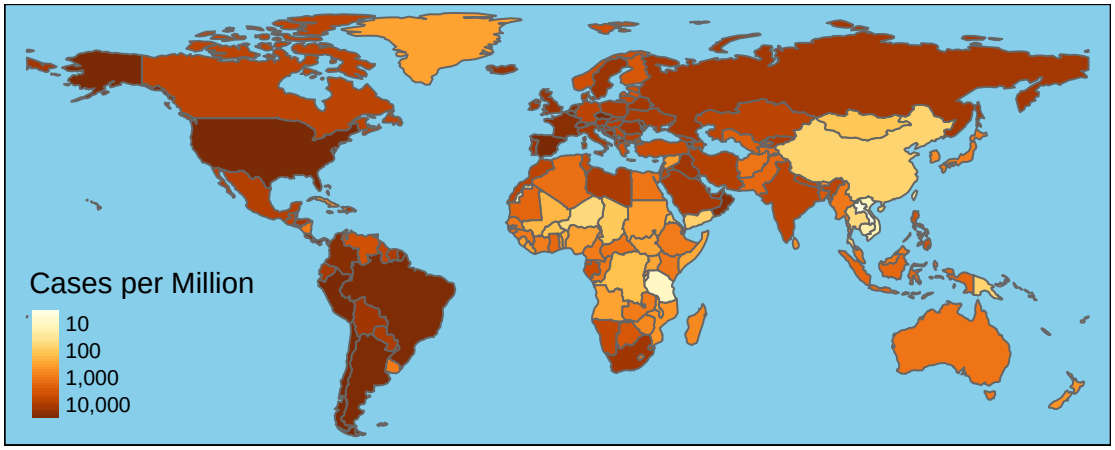
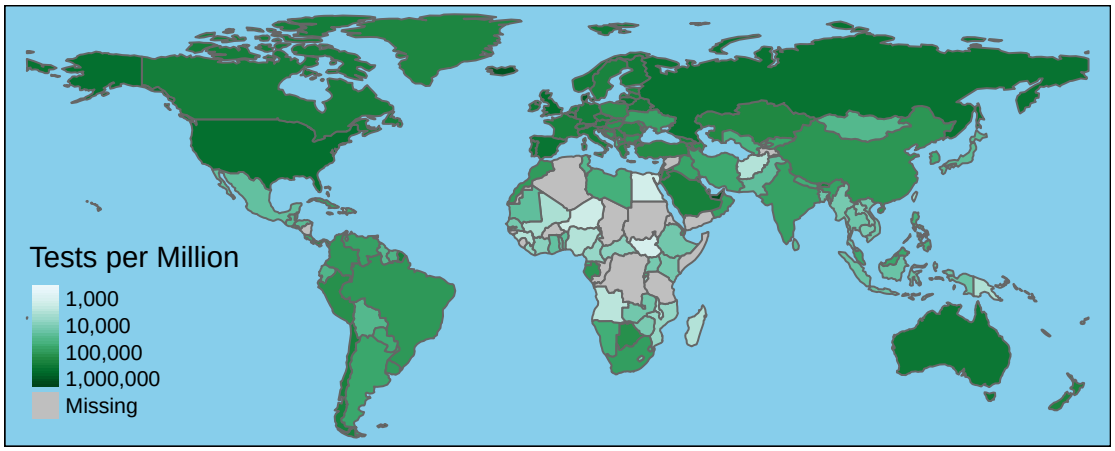


Table 1: Top Countries by Total Cases

Country	Cases	Deaths	New Cases	New Deaths
USA	9,212,767	234,177	91,530	1,047
India	8,088,046	121,131	49,281	568
Brazil	5,496,402	159,033	26,647	565
Russia	1,581,693	27,301	17,717	366
France	1,282,769	36,020	47,637	235
Spain	1,238,922	35,639	23,580	173
Argentina	1,143,800	30,442	13,267	371
Colombia	1,053,122	30,926	11,187	173
UK	965,340	45,955	23,065	280
Mexico	906,863	90,309	5,595	495
Peru	897,594	34,362	2,666	47
South Africa	721,770	19,164	2,056	53
Italy	616,595	38,122	26,831	217
Iran	596,941	34,113	8,293	399
Chile	507,050	14,118	1,520	86
Germany	498,353	10,435	18,732	76
Iraq	467,755	10,815	3,804	45
Bangladesh	404,760	5,886	1,681	25
Indonesia	404,048	13,701	3,565	89
Philippines	376,927	7,147	1,753	33


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

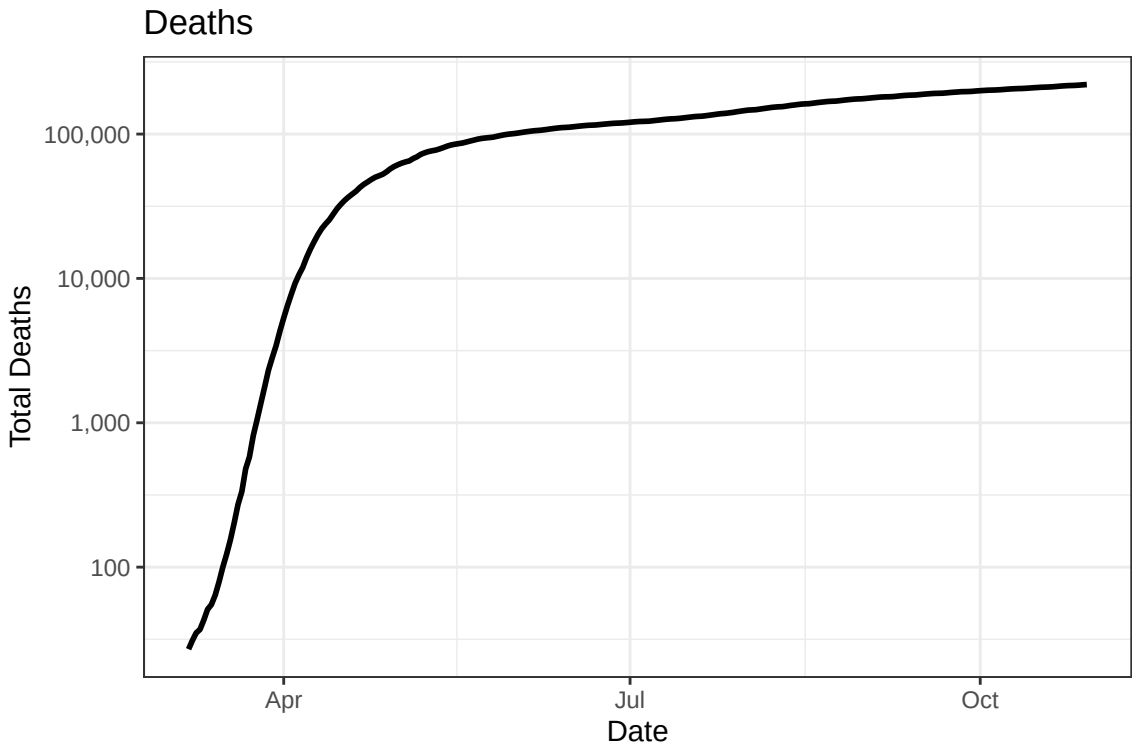
There have been 8,890,551 confirmed Covid-19 cases and 220,423 deaths in the United States.

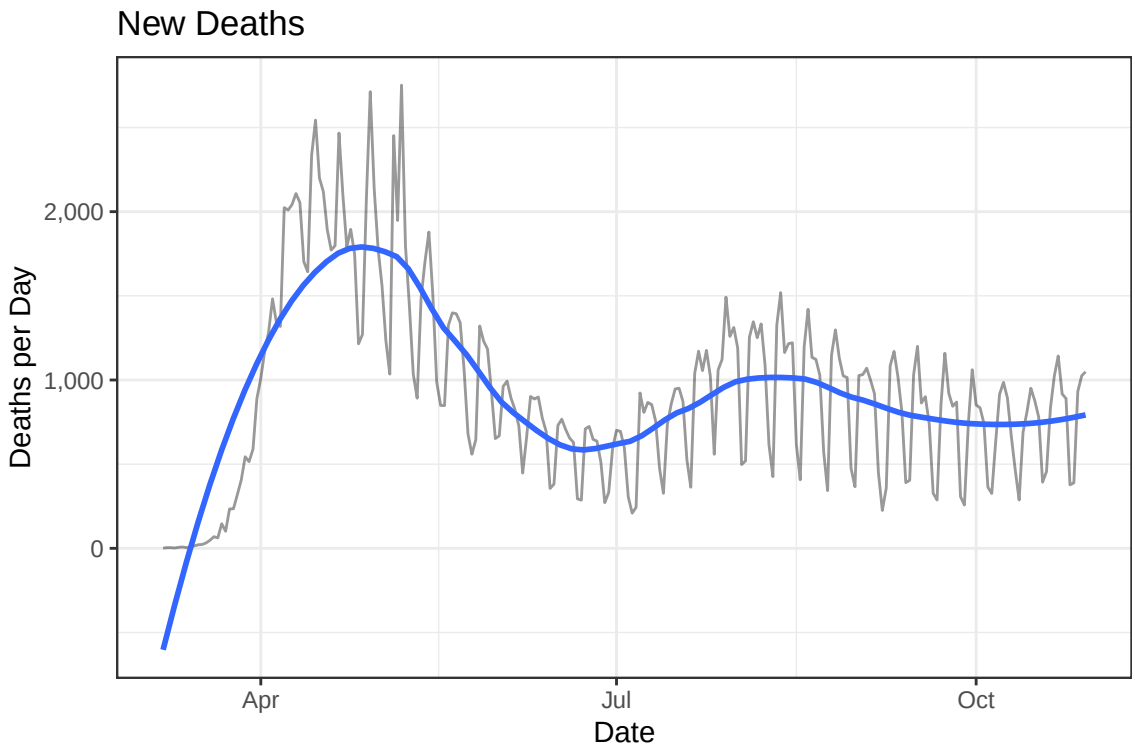
Table 2: U.S. Deaths and Cases over the Last Two Weeks

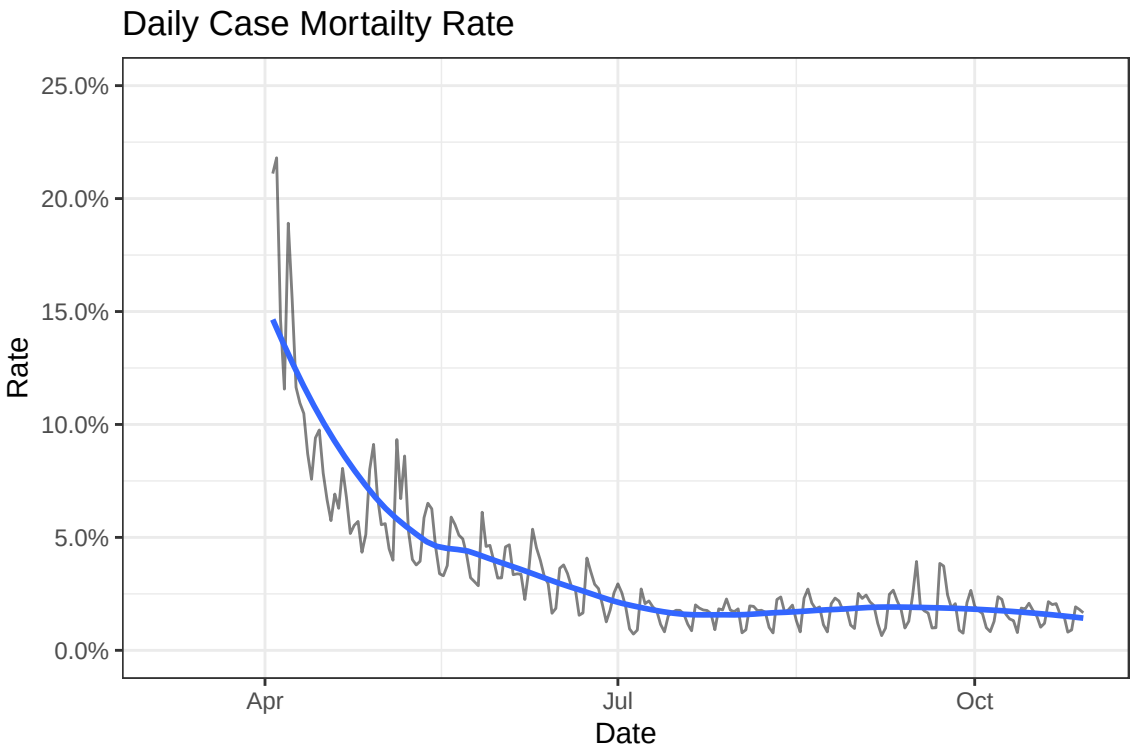
Date	Cases	Deaths	New Cases	New Deaths
2020-10-29	8,890,551	220,423	88,452	1,049
2020-10-28	8,802,099	219,374	78,661	1,025
2020-10-27	8,723,438	218,349	73,096	931
2020-10-26	8,650,342	217,418	62,274	389
2020-10-25	8,588,068	217,029	65,650	377
2020-10-24	8,522,418	216,652	82,925	890
2020-10-23	8,439,493	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
2020-10-17	8,056,170	210,997	57,867	780
2020-10-16	7,998,303	210,217	68,040	877

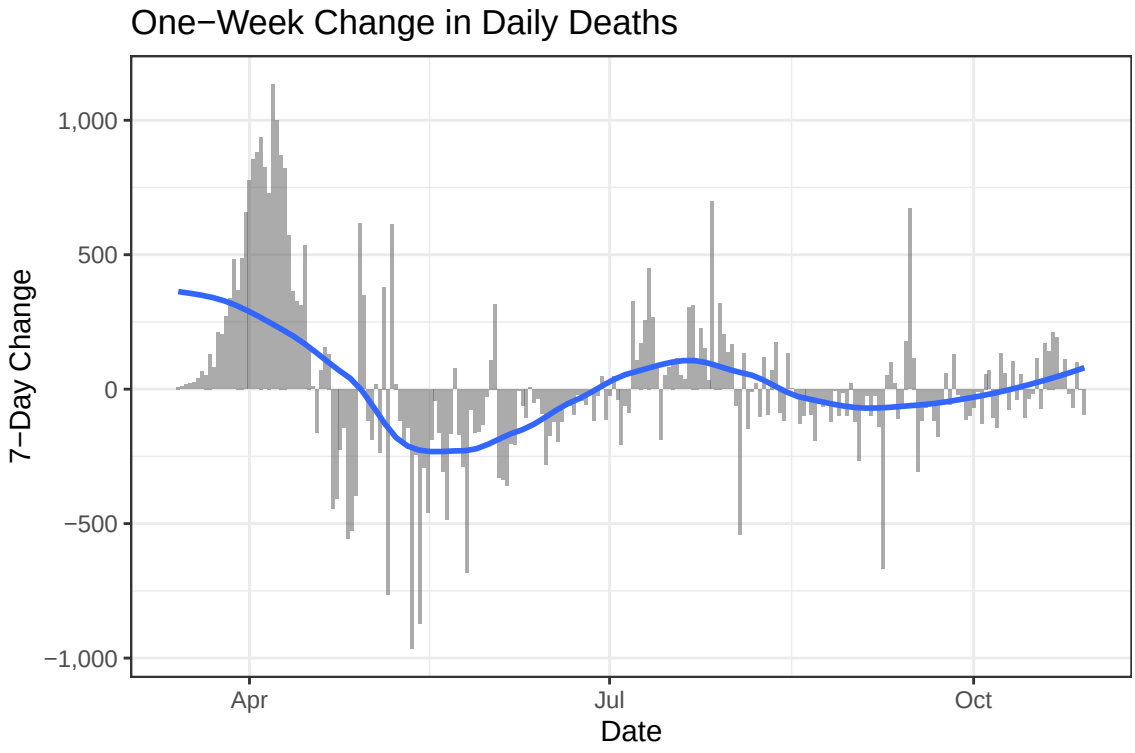
Deaths

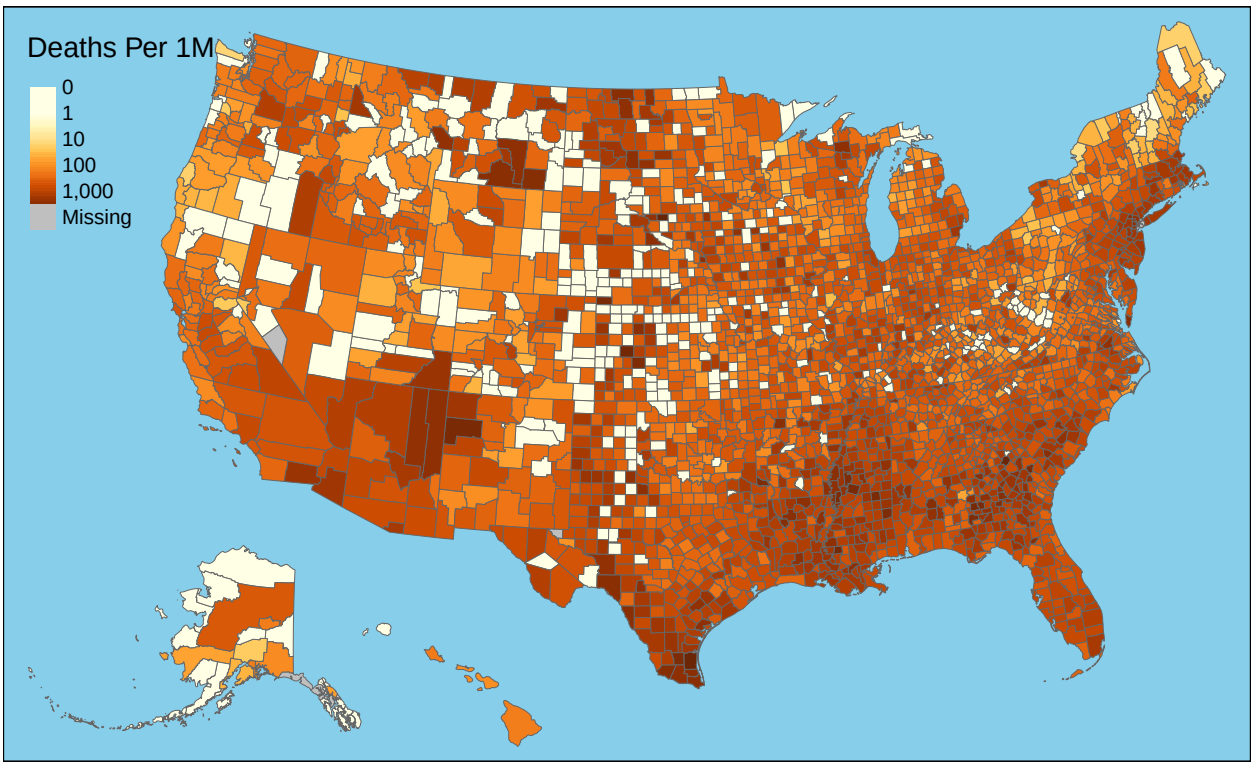
Because the effects of the virus can take several weeks to manifest in patients, deaths are a lagging indicator of contagion, but they may be a more reliable than case counts, which are a function of both the prevalence of the disease and the rate of testing. The case mortality rate is a very crude indicator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





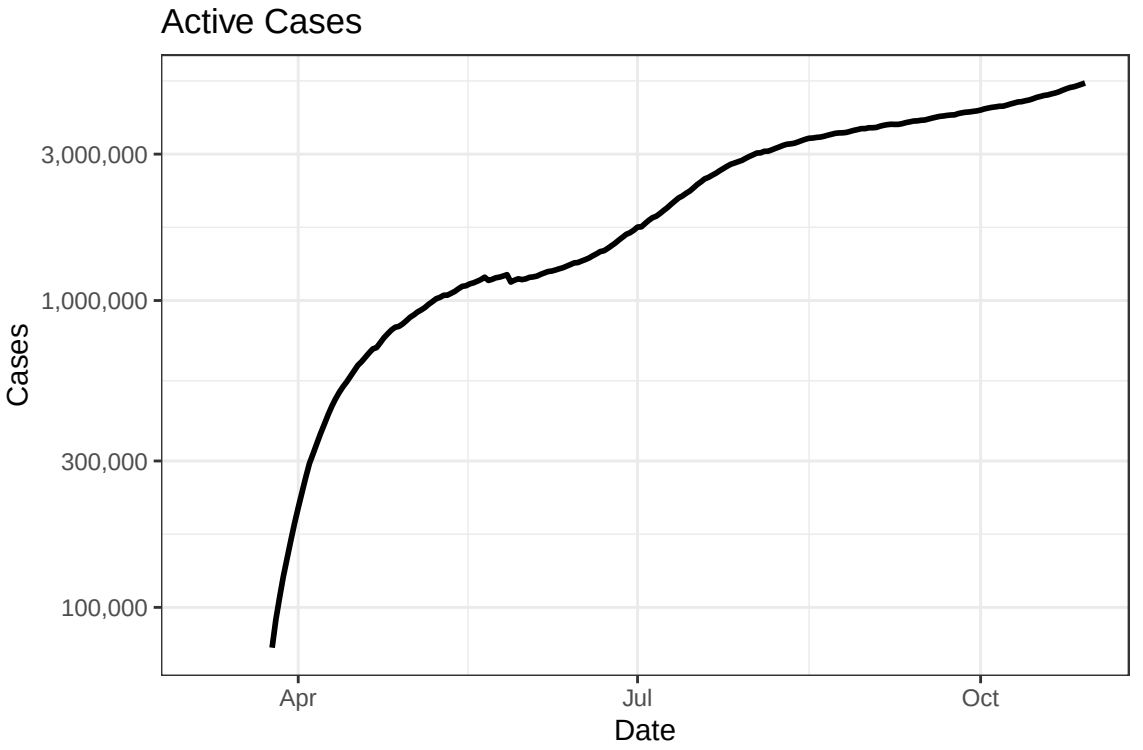

Daily Case Mortailty Rate
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Rate
Apr
Jul
Oct
Date

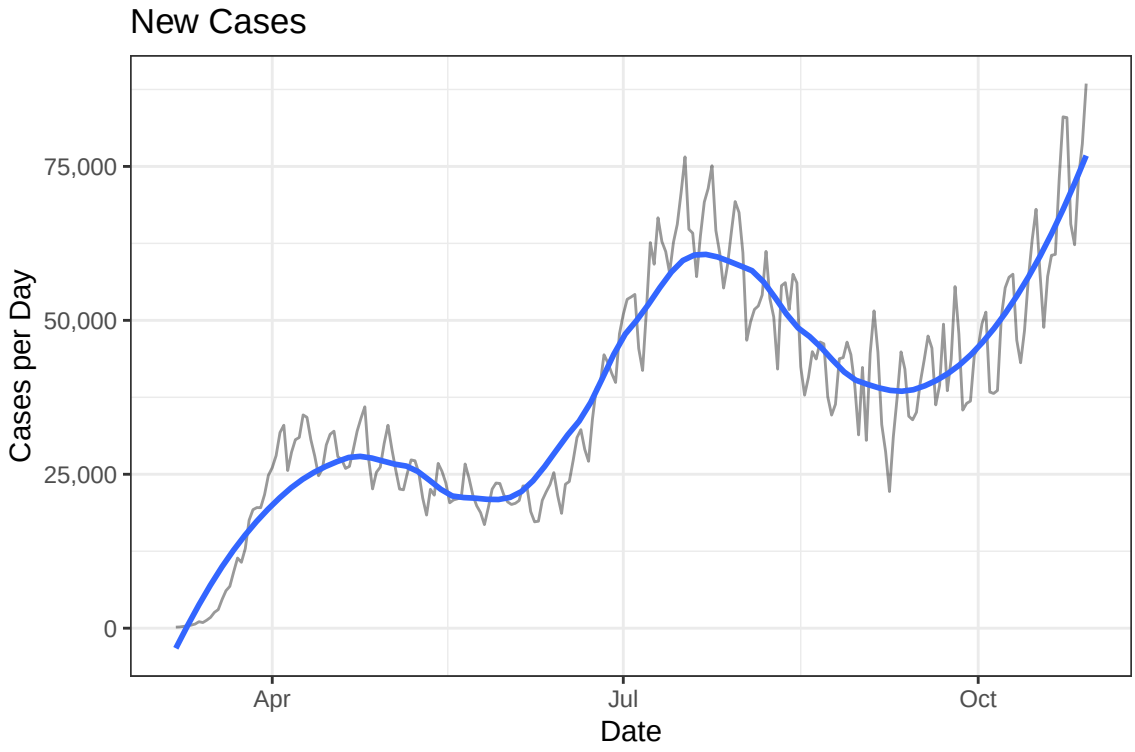

One−Week Change in Daily Deaths
1,000
500
0
−500
−1,000
7−Day Change
Apr
Jul
Oct
Date

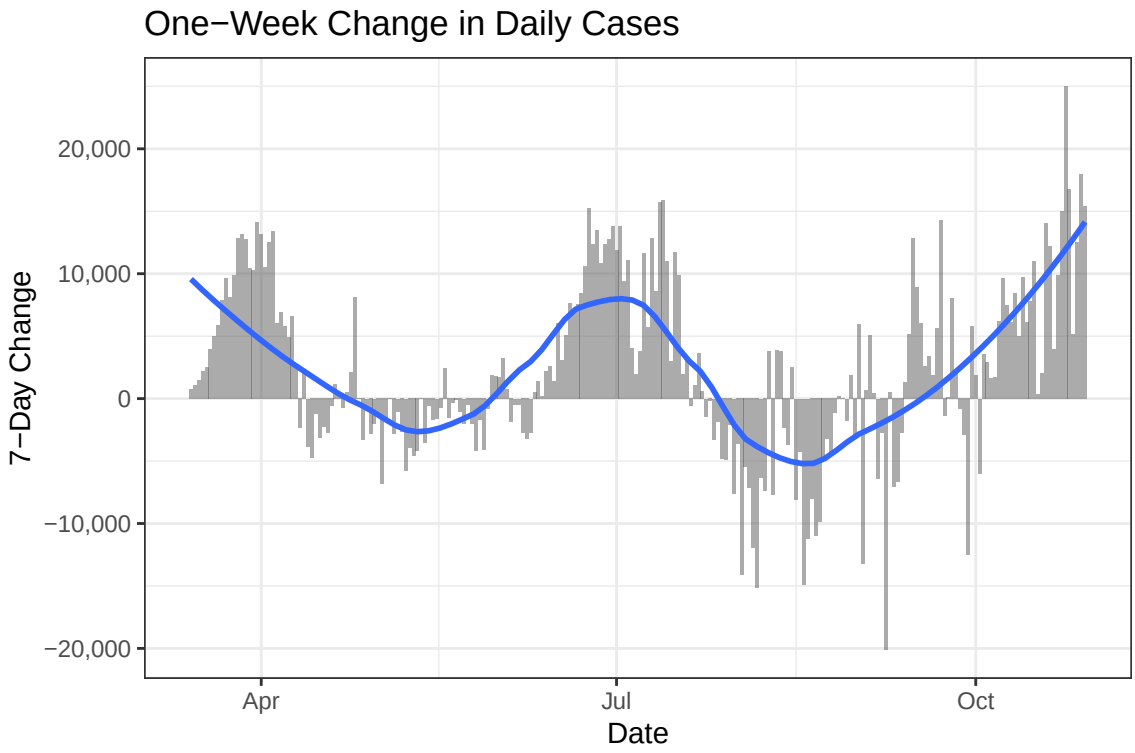

Deaths Per 1M
0
1
10
100
1,000
Missing

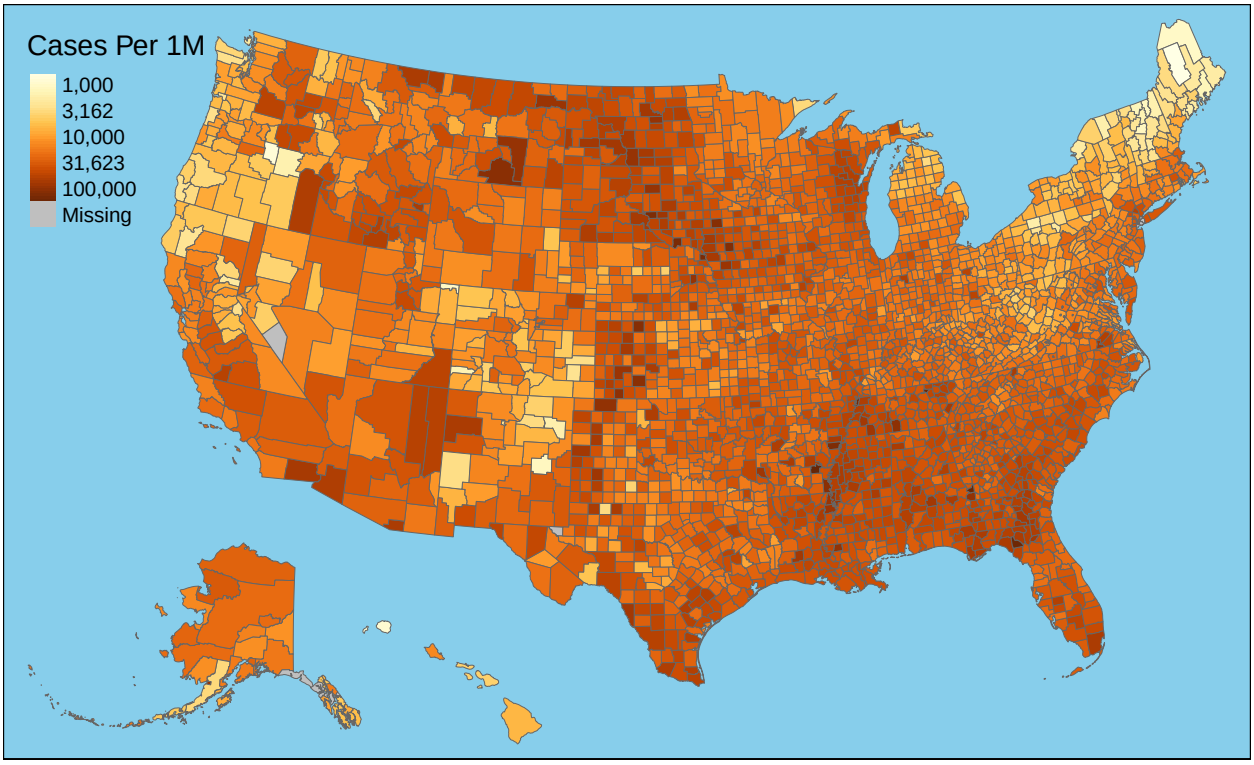
Cases

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



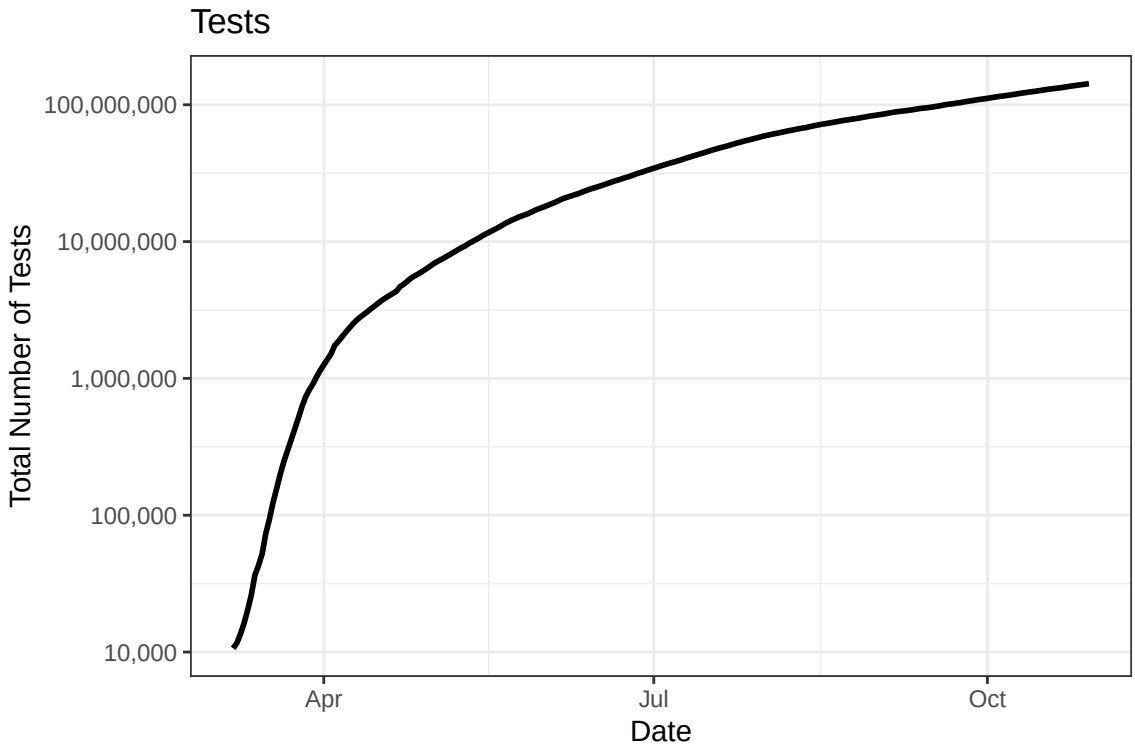


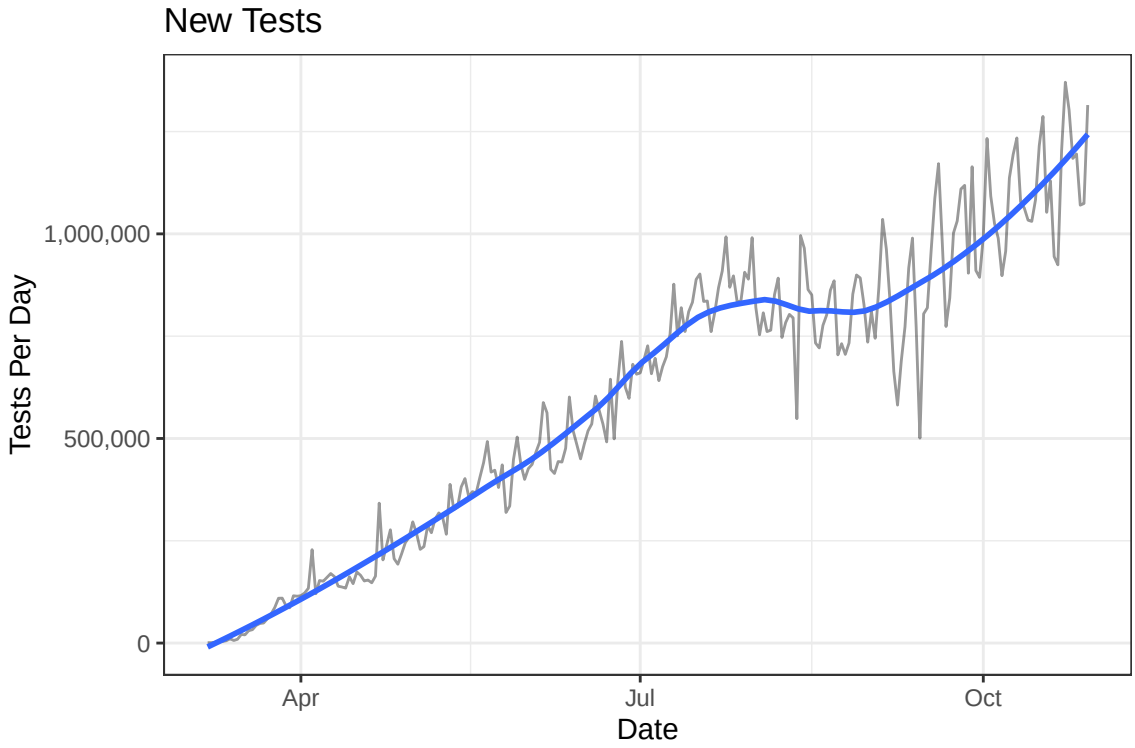

One−Week Change in Daily Cases
20,000
10,000
0
−10,000
−20,000
7−Day Change
Apr
Jul
Oct
Date

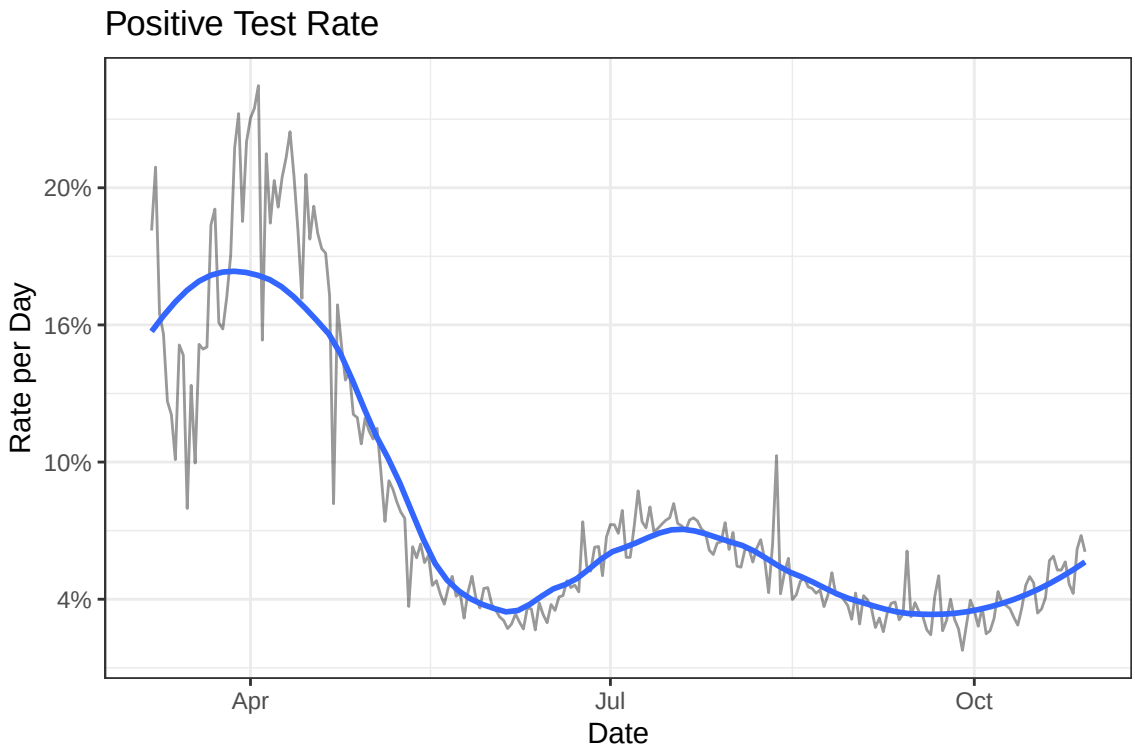

Cases Per 1M
1,000
3,162
10,000
31,623
100,000
Missing

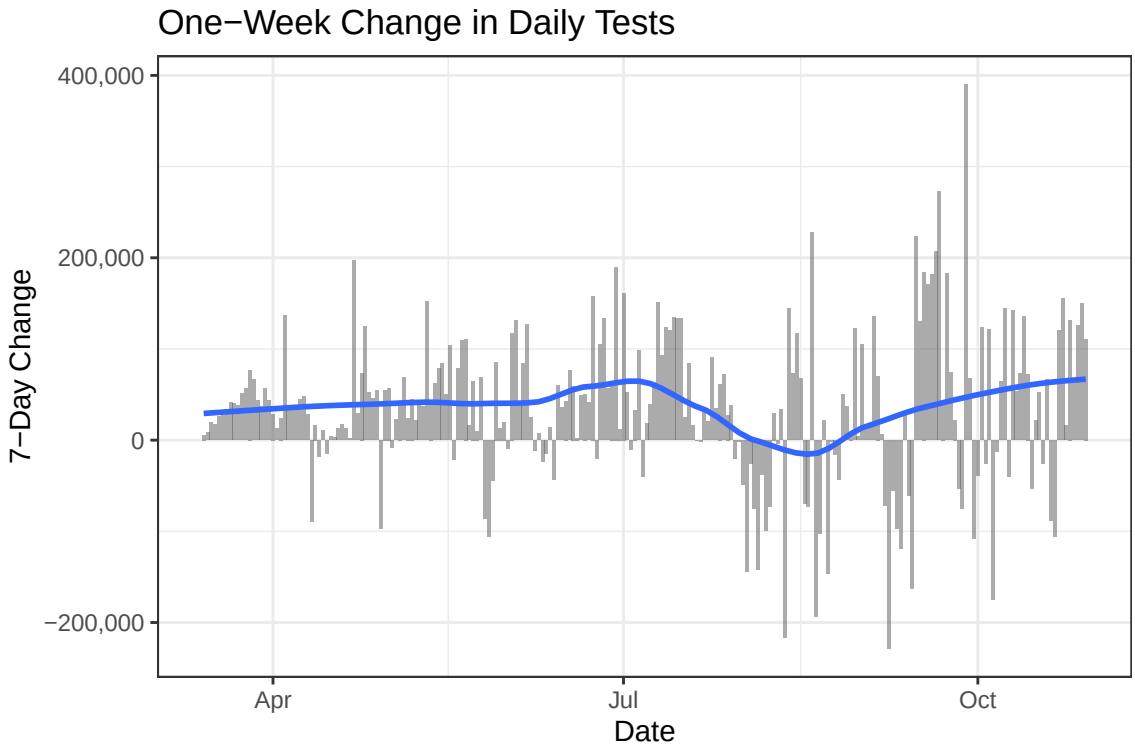
Testing

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.





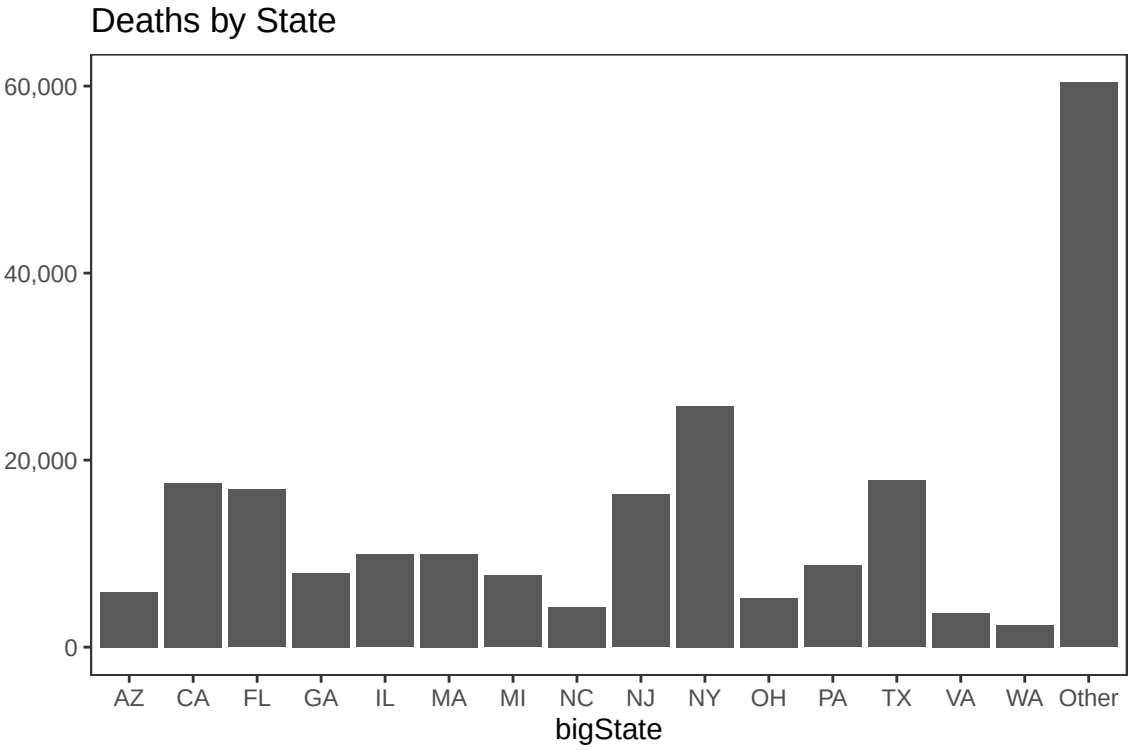

Positive Test Rate
20%
16%
10%
4%
Rate per Day
Apr
Jul
Oct
Date

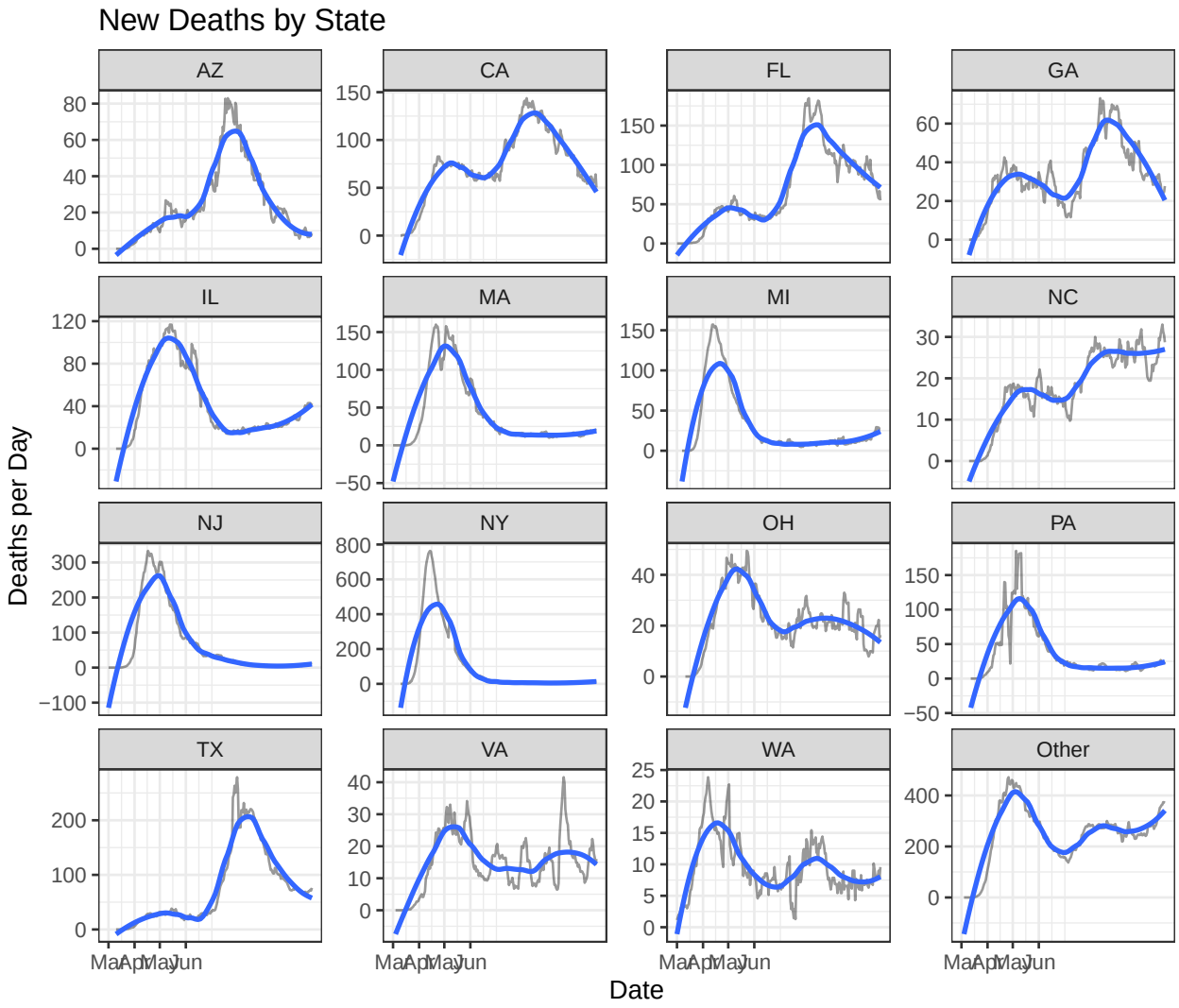

One−Week Change in Daily Tests
400,000
200,000
0
−200,000
7−Day Change
Apr
Jul
Oct
Date

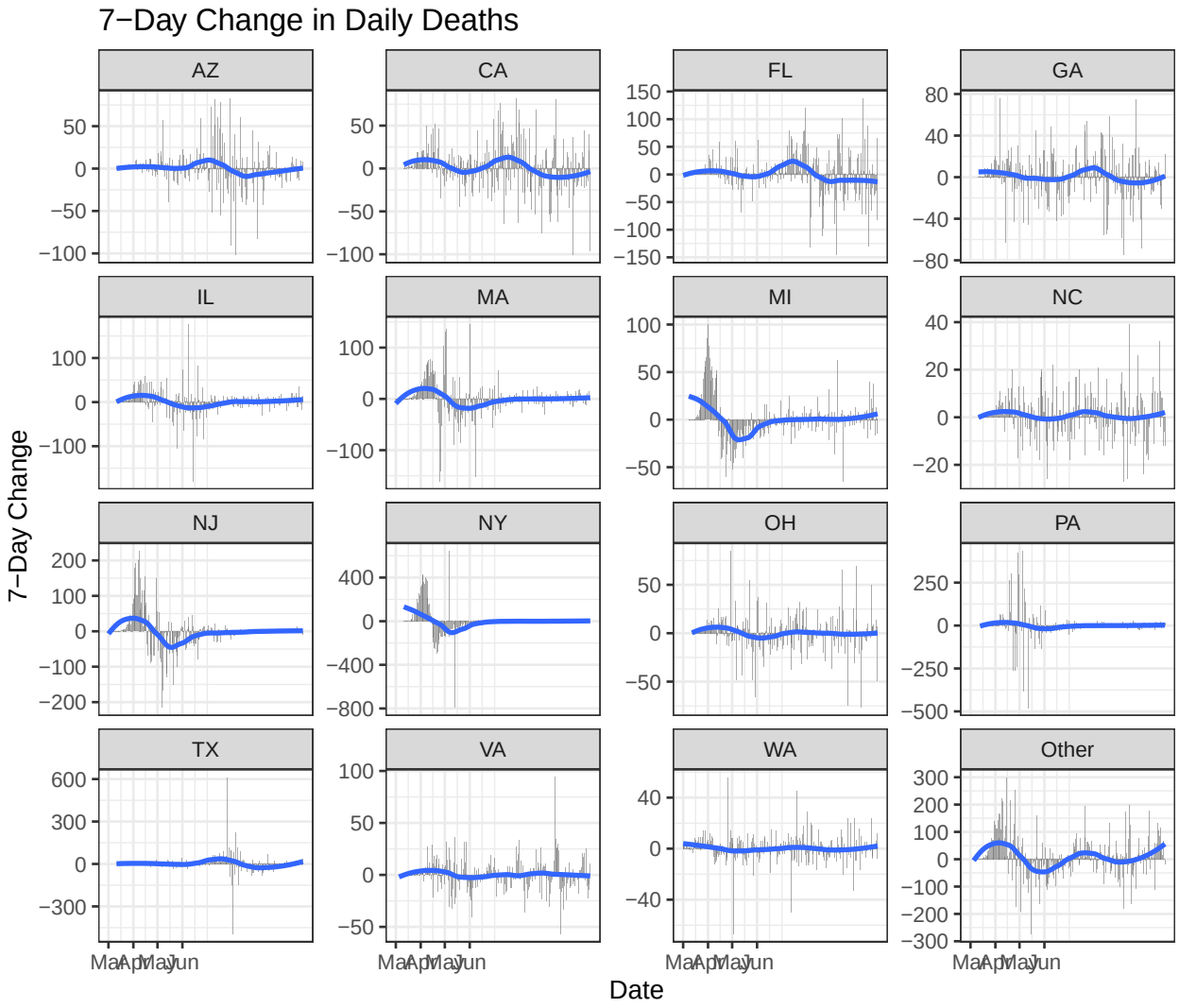
State Data

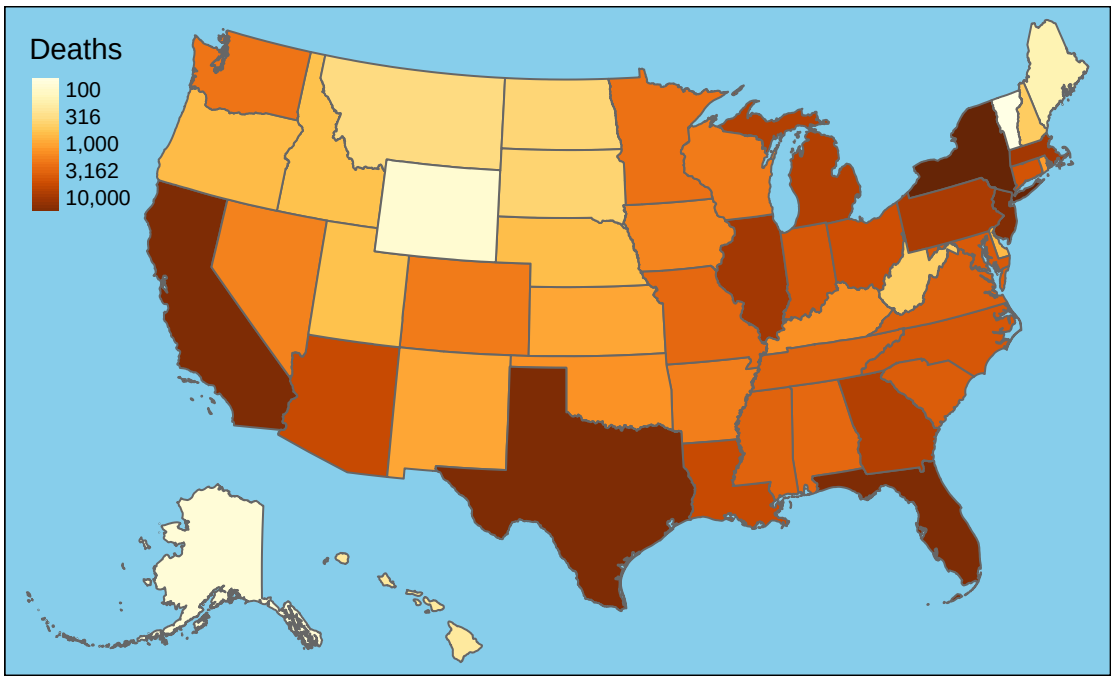
This section summarizes state-level data. Most data are reported for the largest 15 states by population, which account for NaN percent of the total U.S. population.

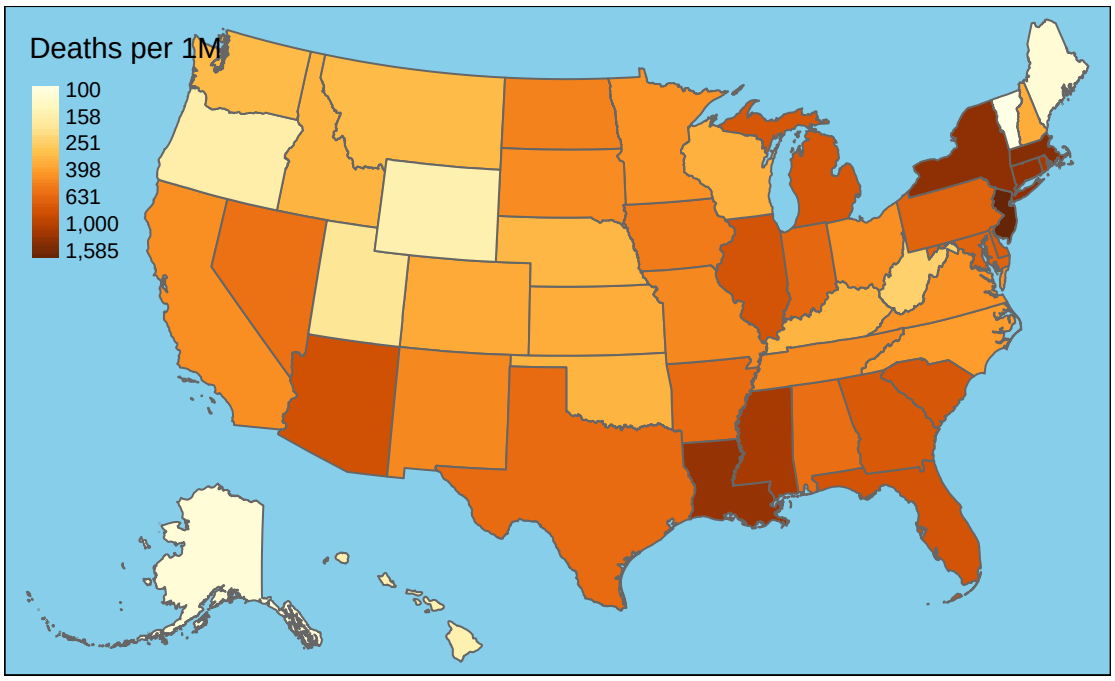
Deaths



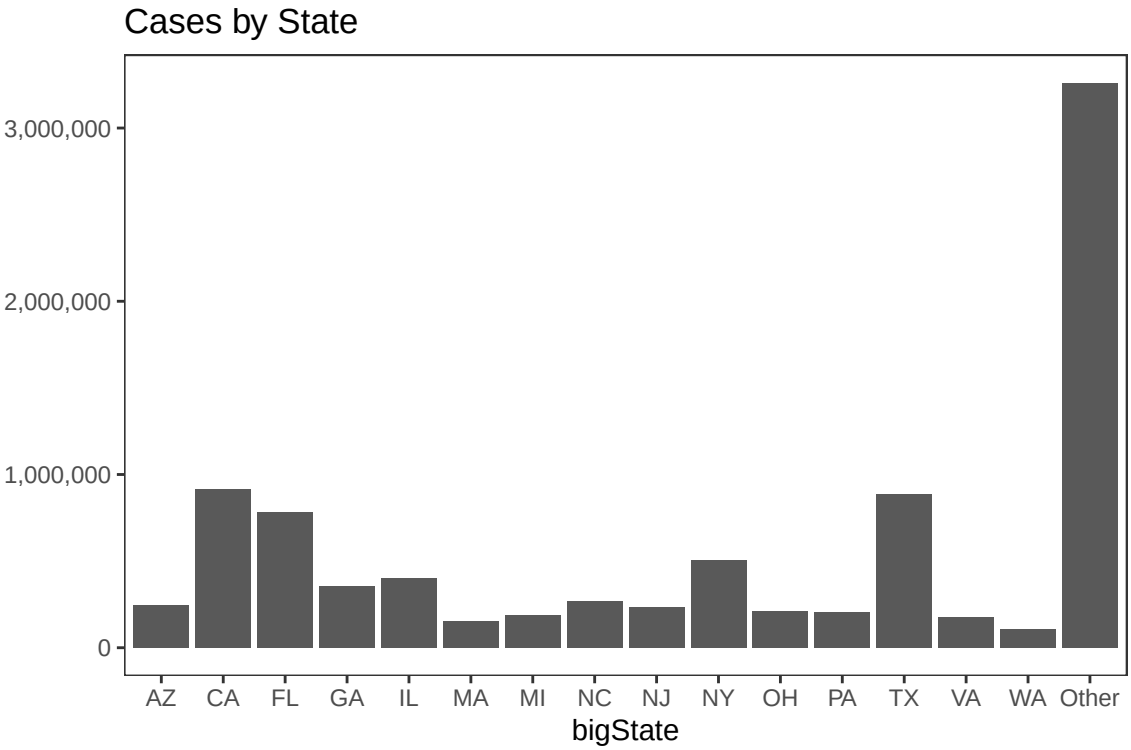

New Deaths by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Deaths per Day
Date
Mar
Apr
May
Jun

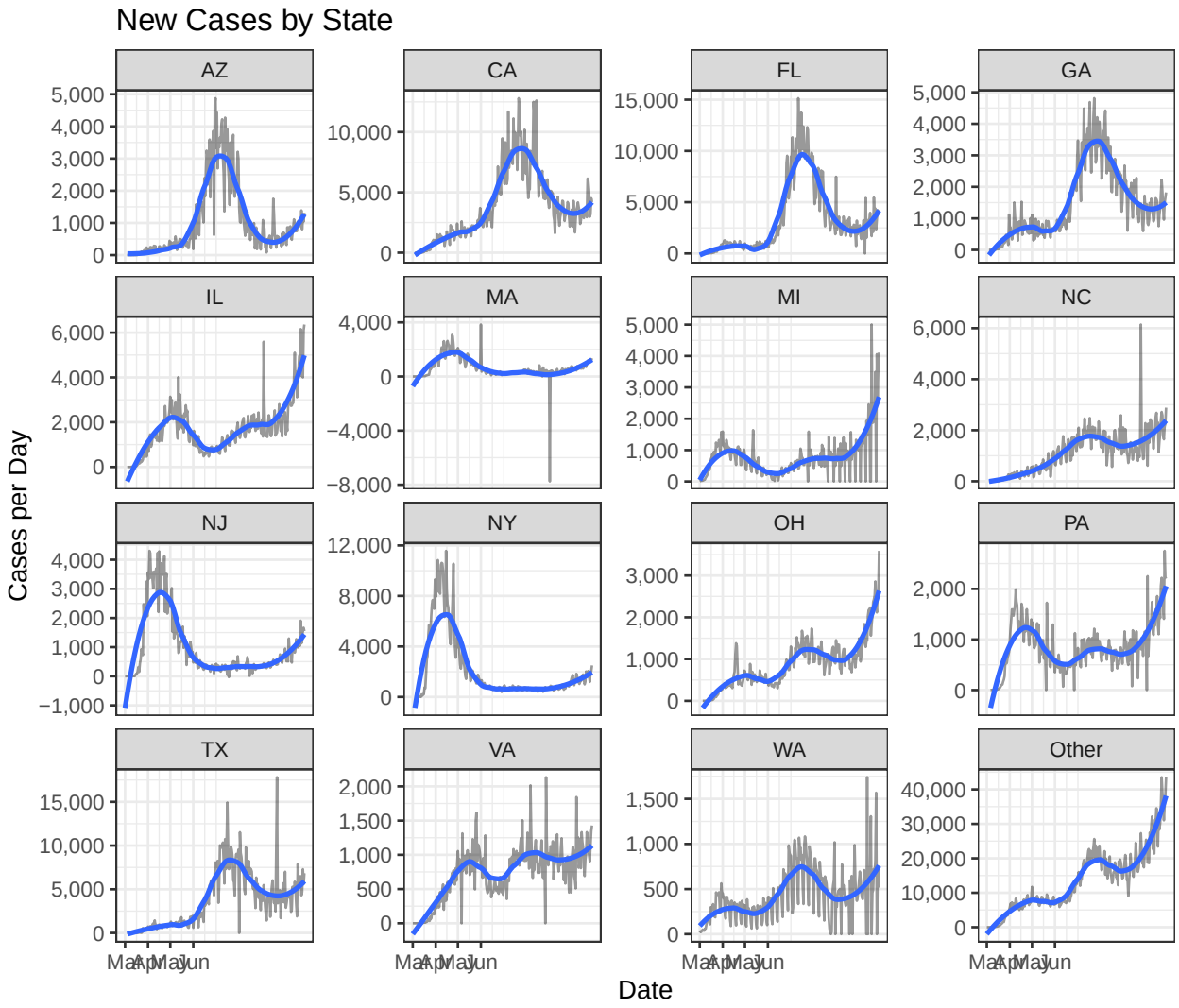

7−Day Change in Daily Deaths
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

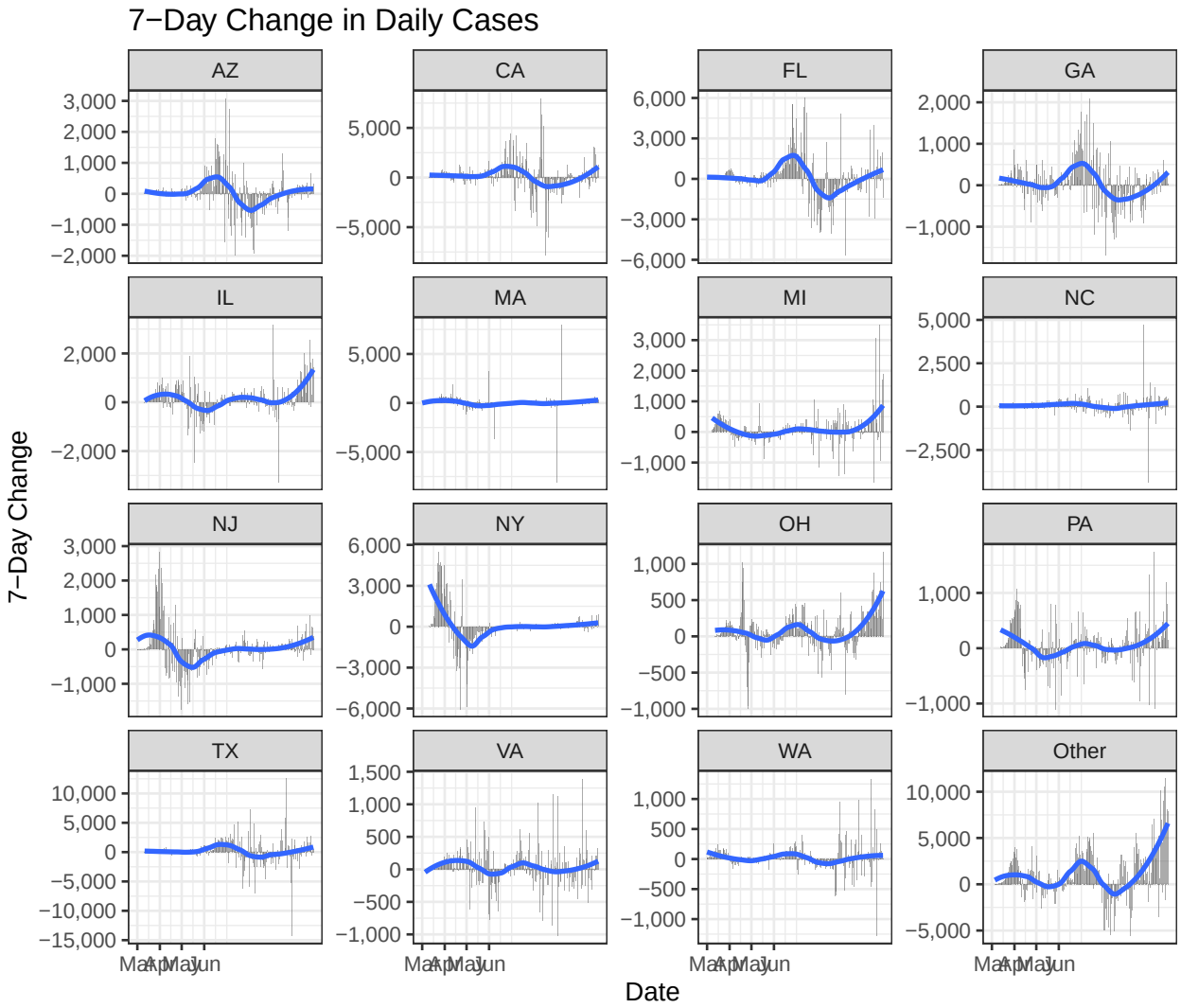

Deaths
100
316
1,000
3,162
10,000

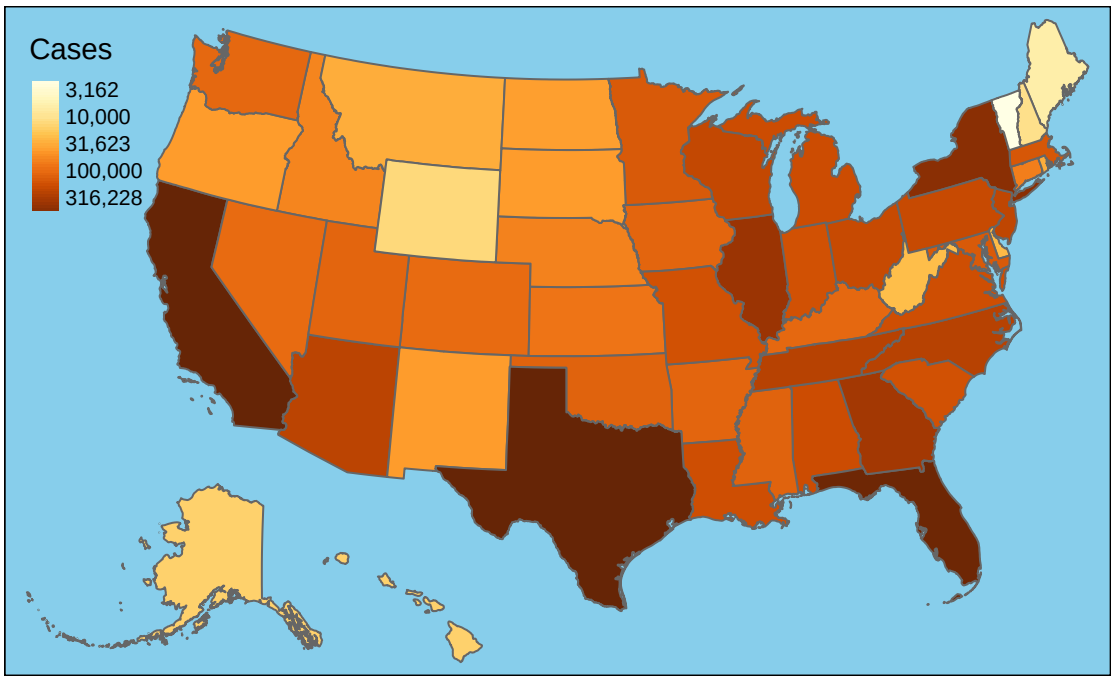

Deaths per 1M
100
158
251
398
631
1,000
1,585

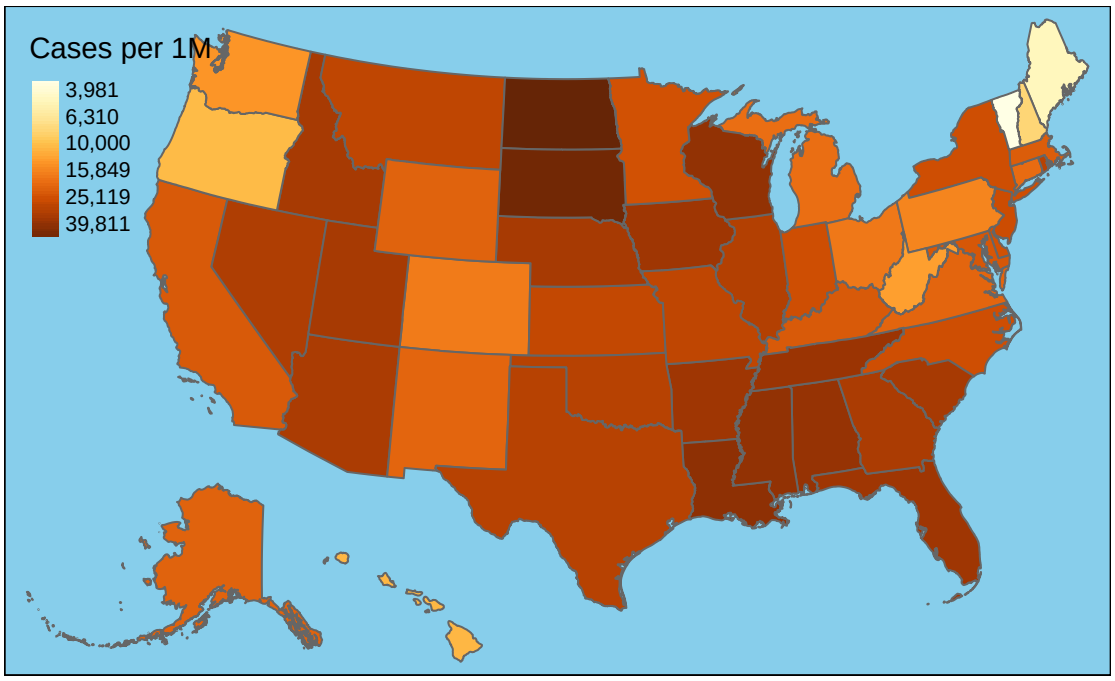
Cases


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

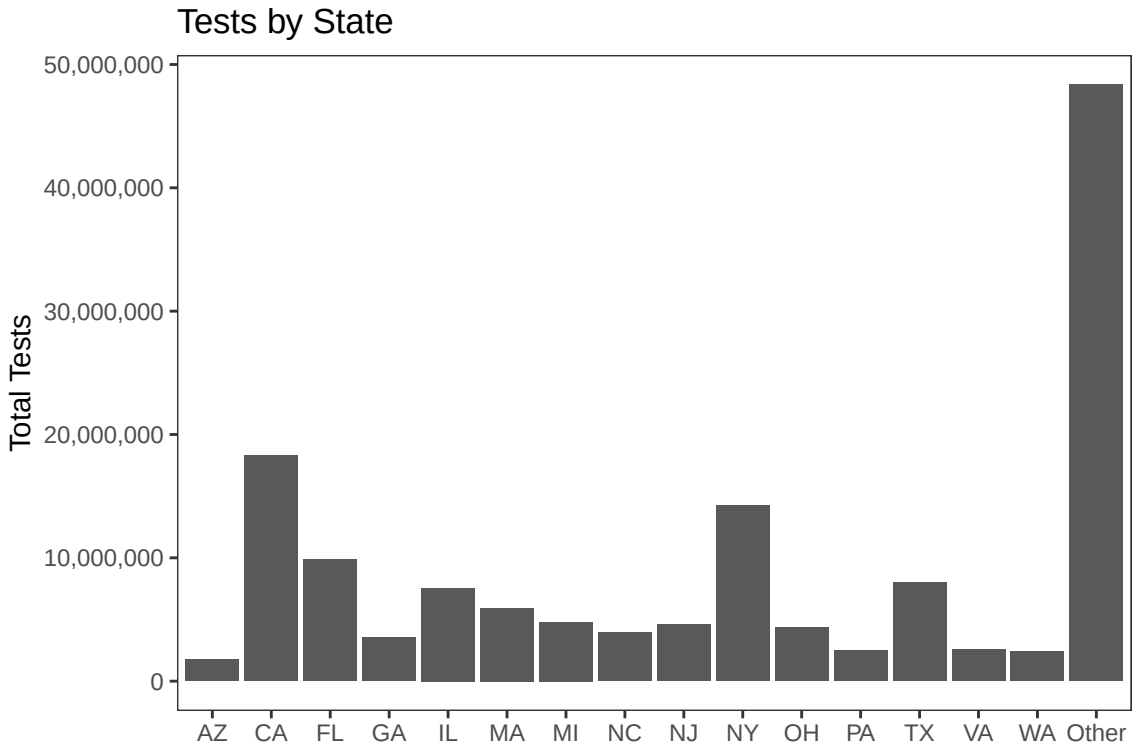

New Cases by State
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
Cases per Day
Date
Mar
Apr
May
Jun

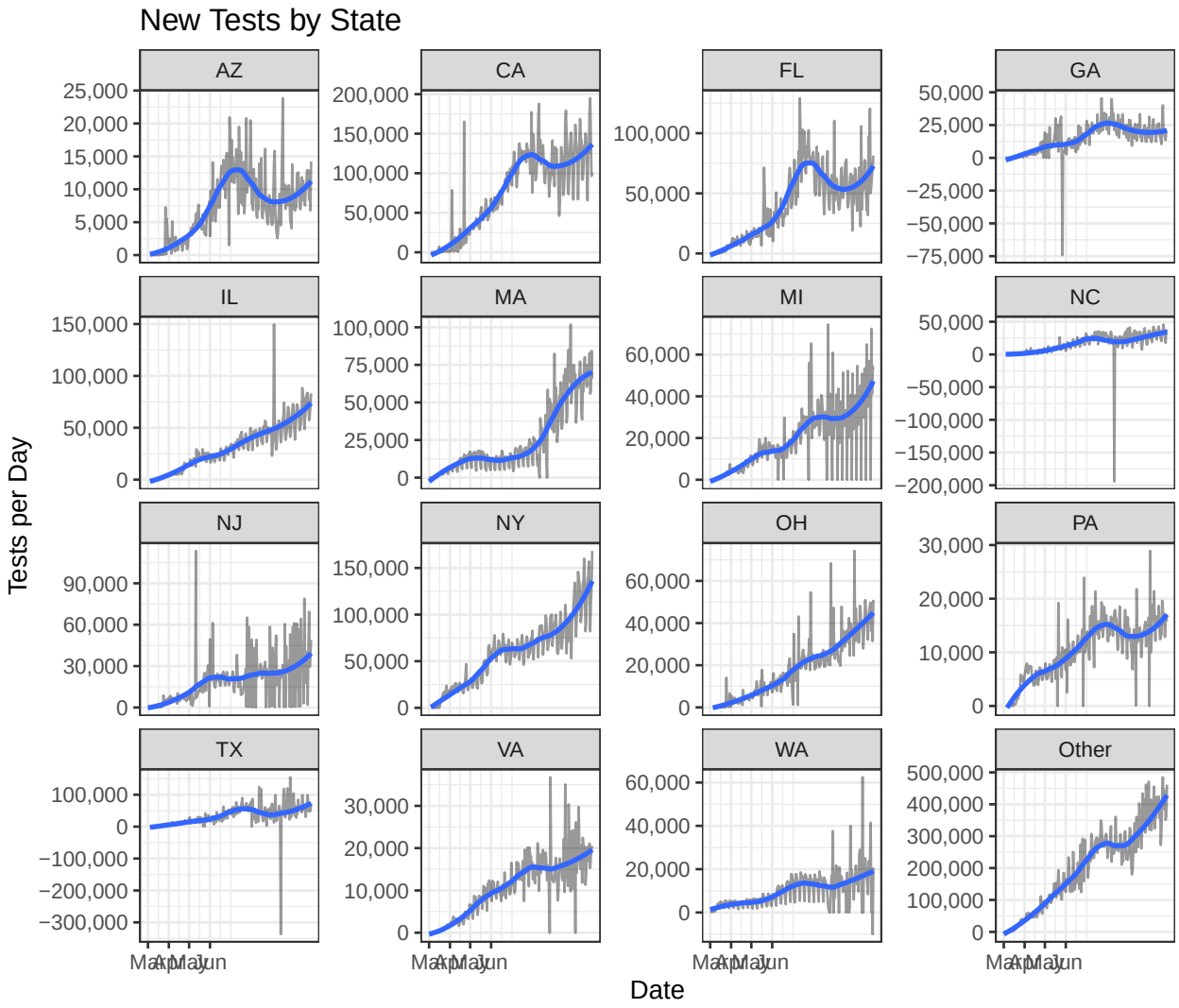

7−Day Change in Daily Cases
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other
7−Day Change
Date
Mar
Apr
May
Jun

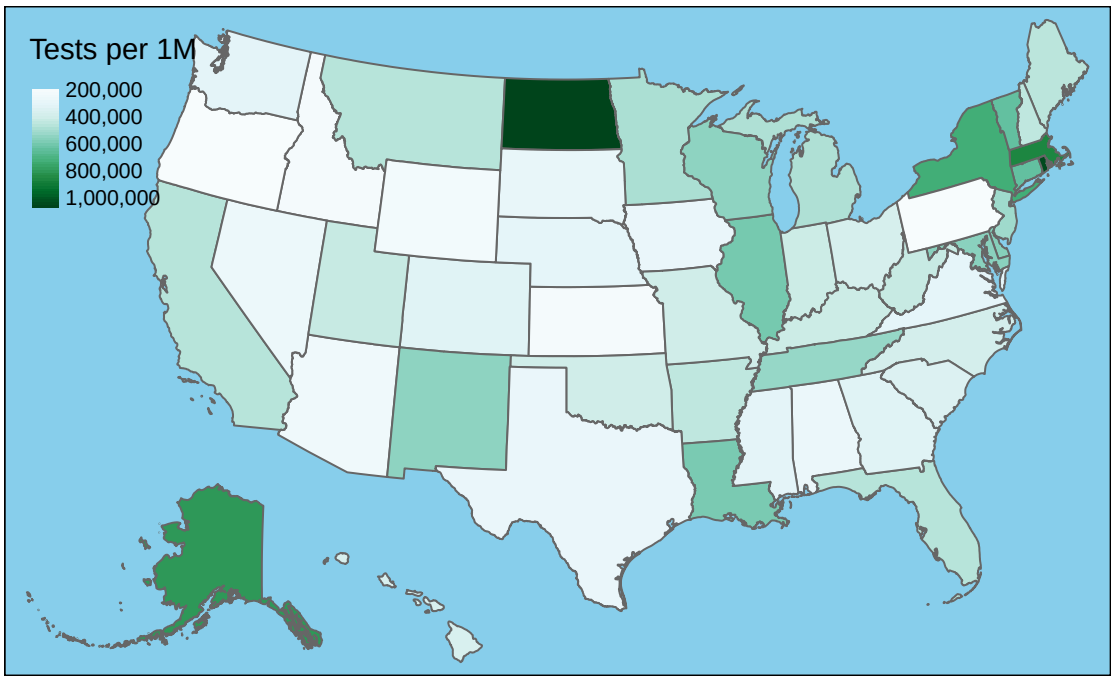

Cases
3,162
10,000
31,623
100,000
316,228

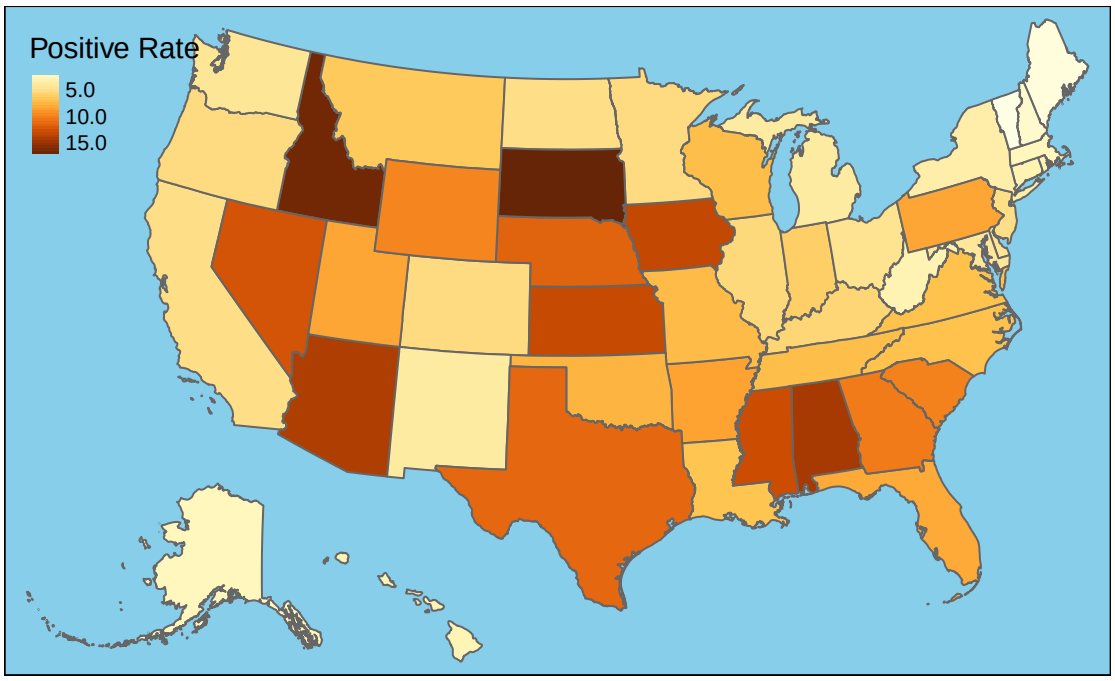

Cases per 1M
3,981
6,310
10,000
15,849
25,119
39,811

Testing

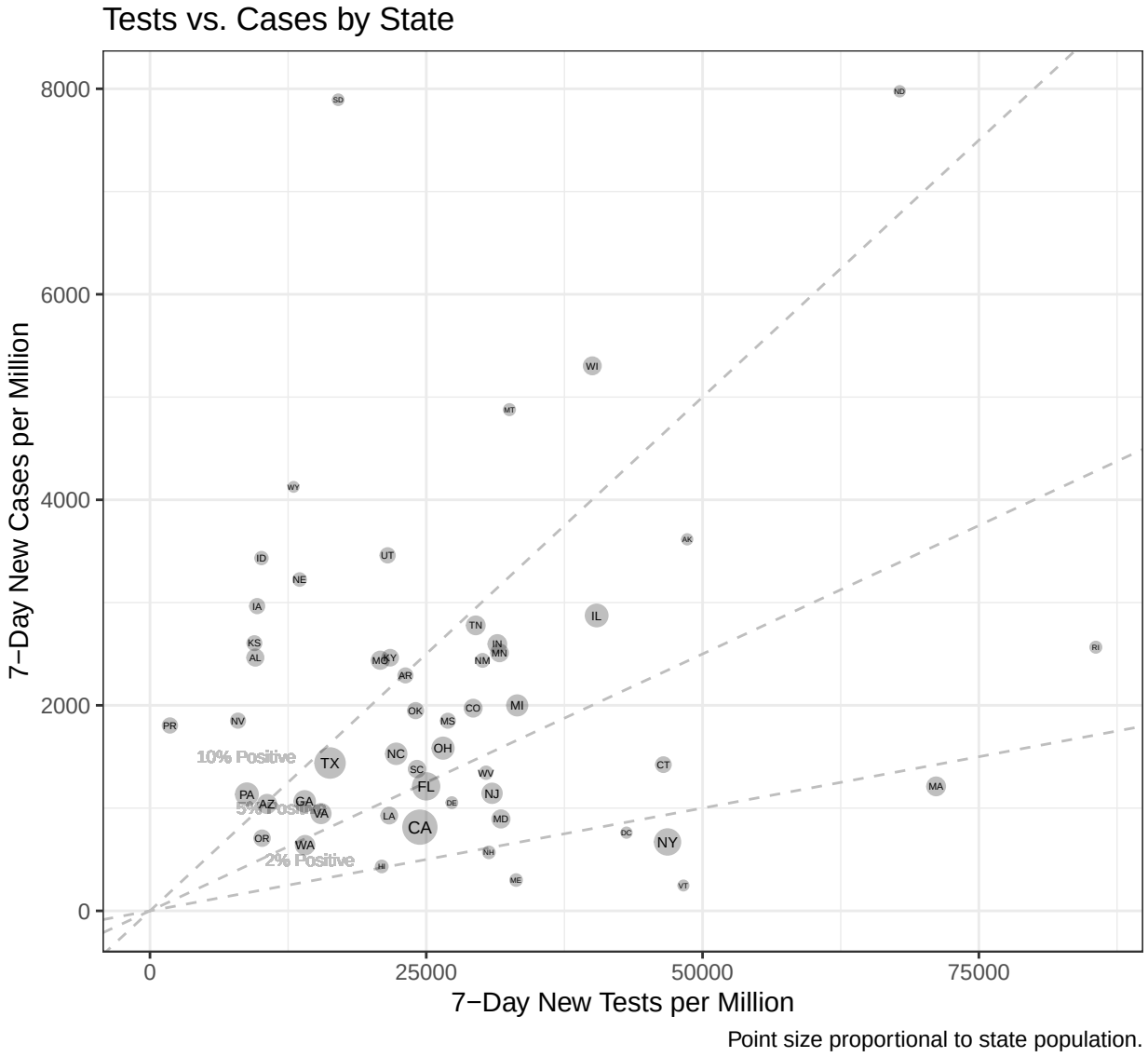

Tests by State
Total Tests
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
AZ
CA
FL
GA
IL
MA
MI
NC
NJ
NY
OH
PA
TX
VA
WA
Other


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.



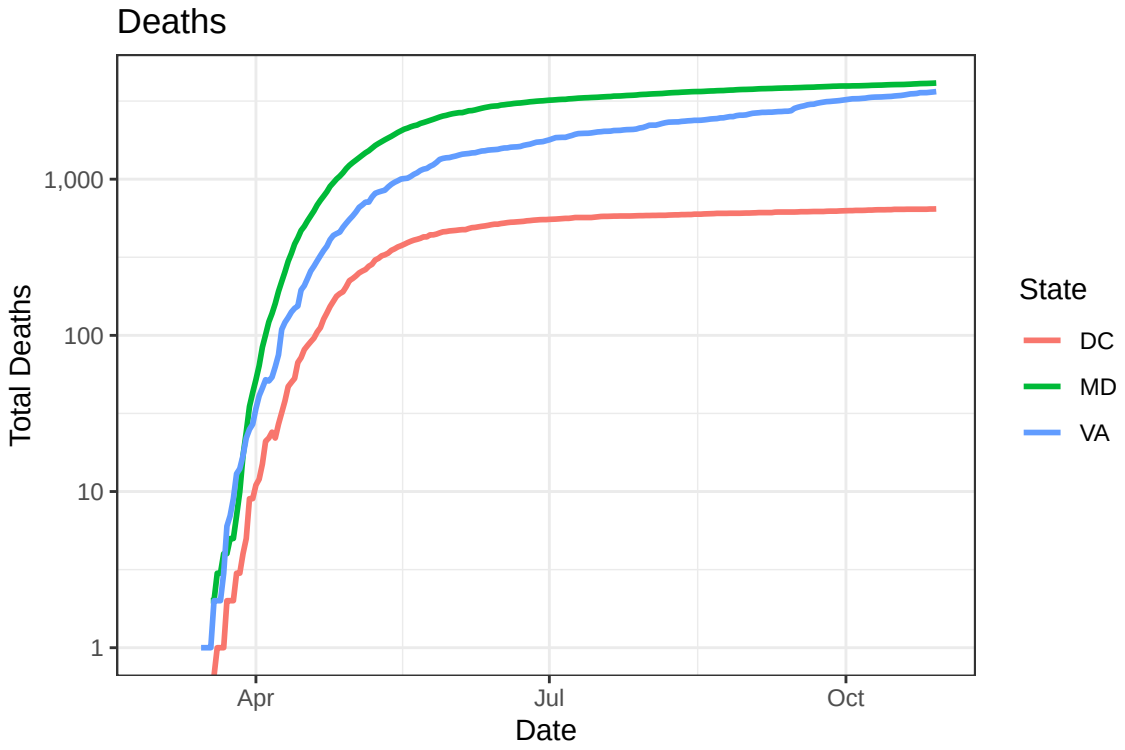
Local Data

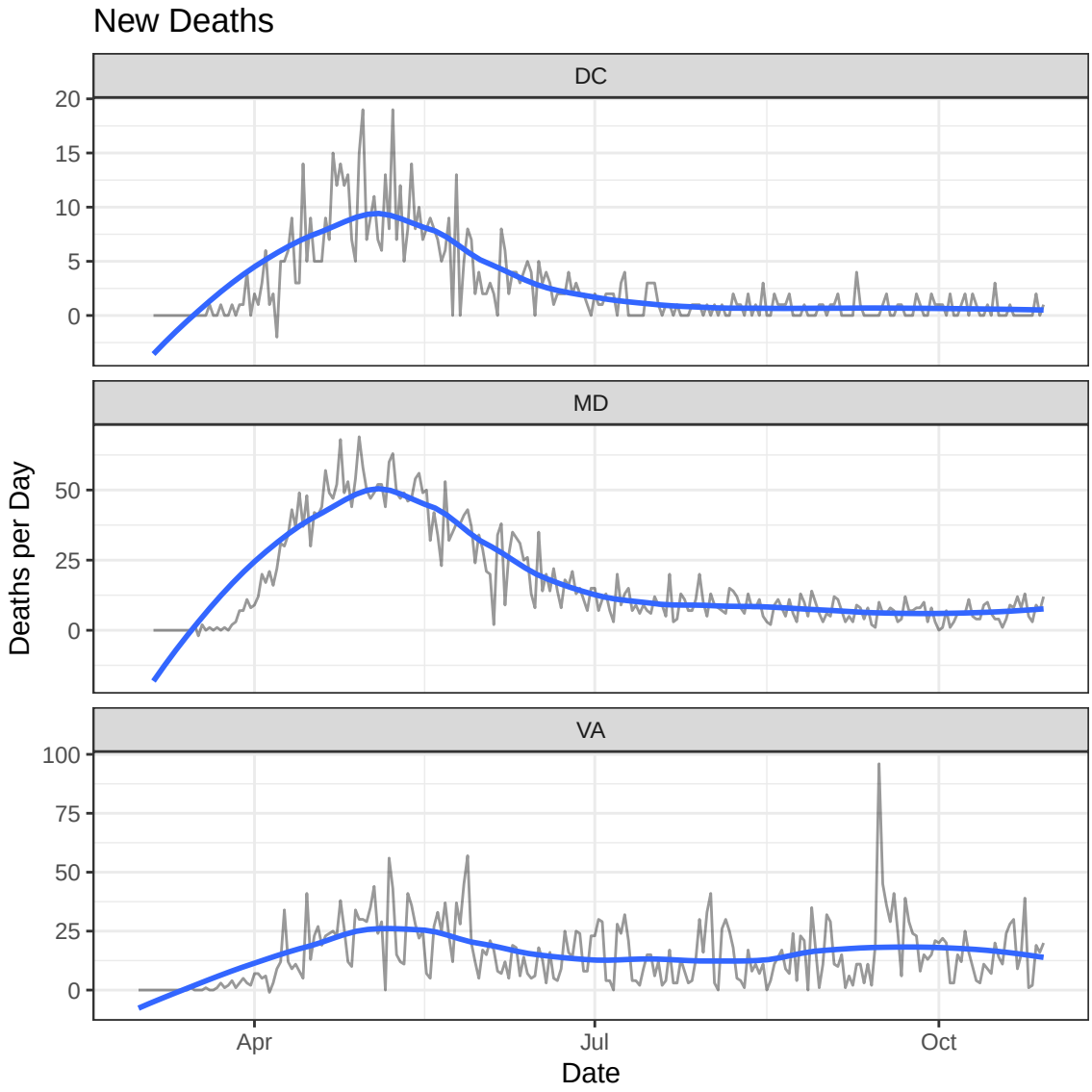
The following charts and tables present mortality, case, and testing data for the Washington DC metropolitan area and adjacent states.

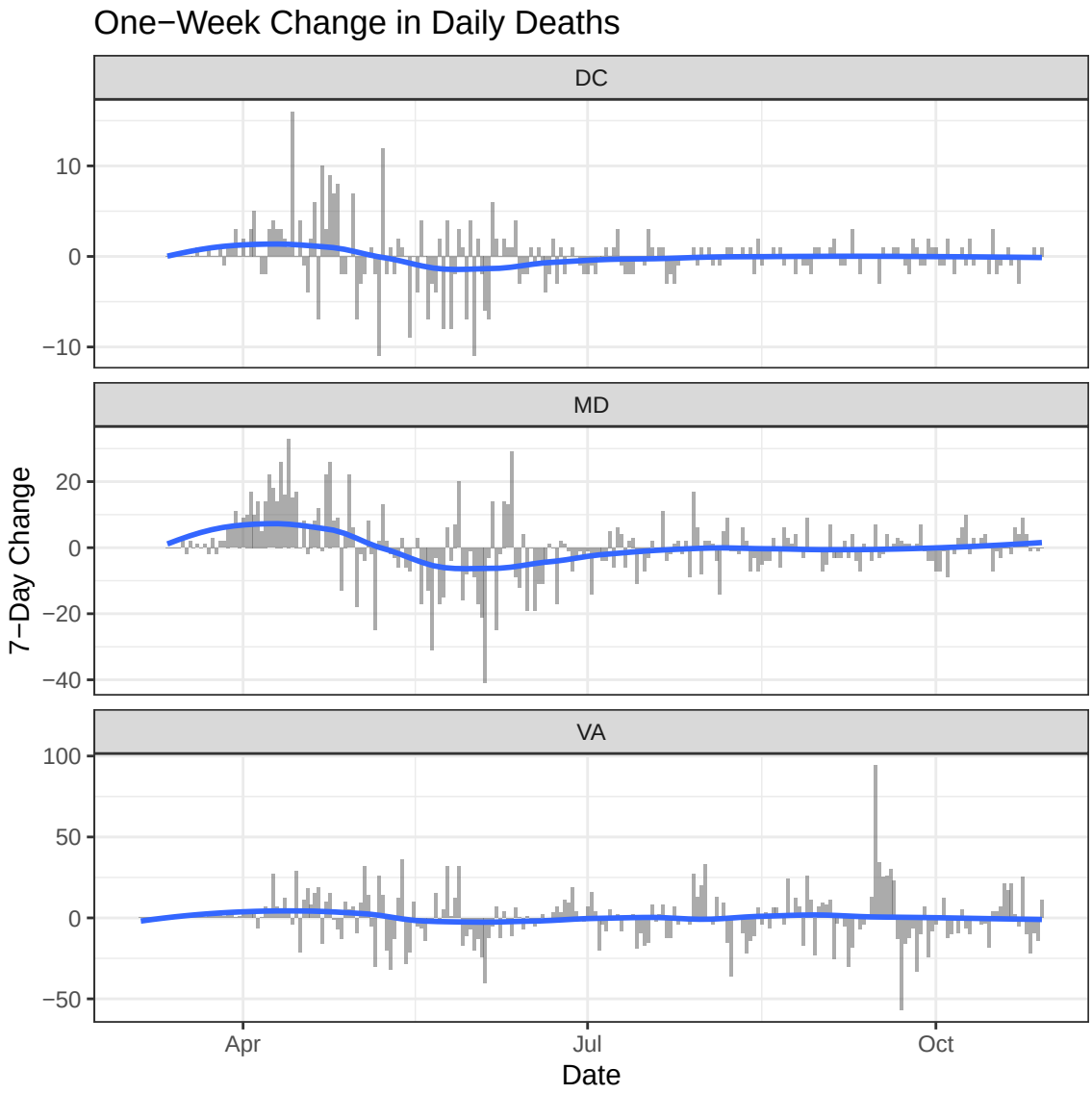
Table 3: Latest Local Data

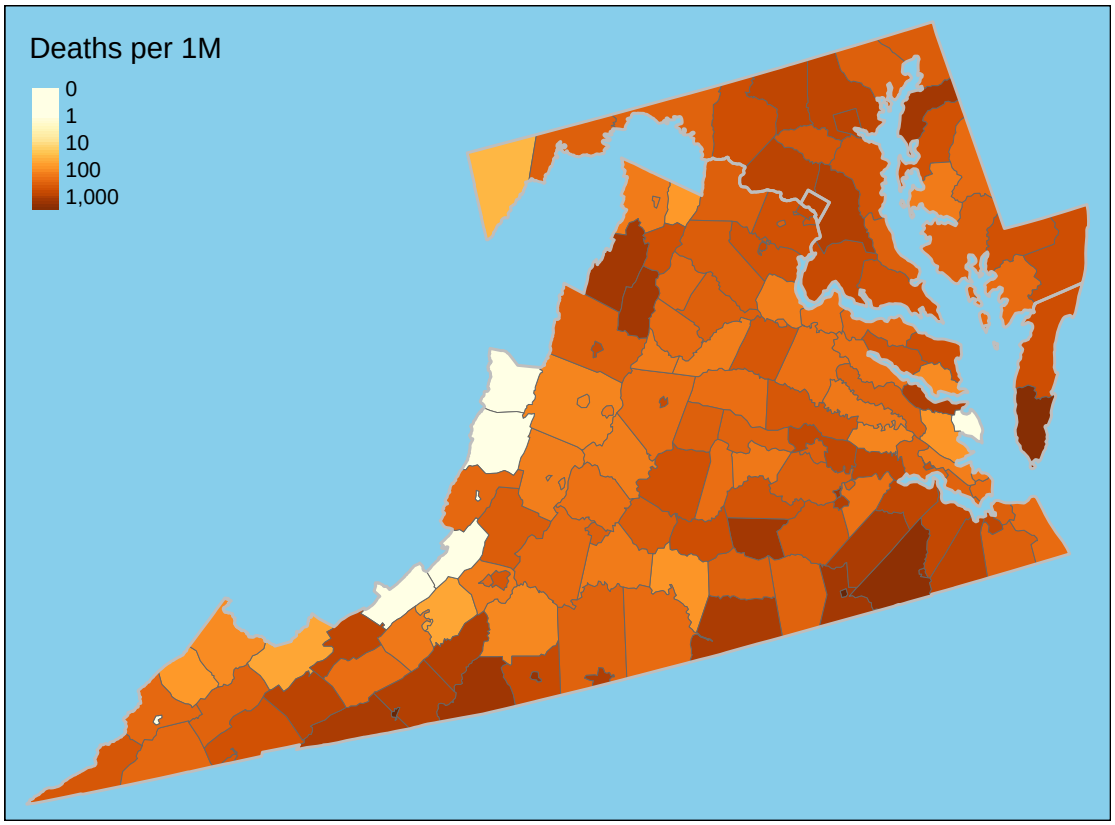
State	Cases	Deaths	New Cases	New Deaths
DC	17,074	645	101	1
MD	143,387	4,127	962	12
VA	178,183	3,636	1,429	20

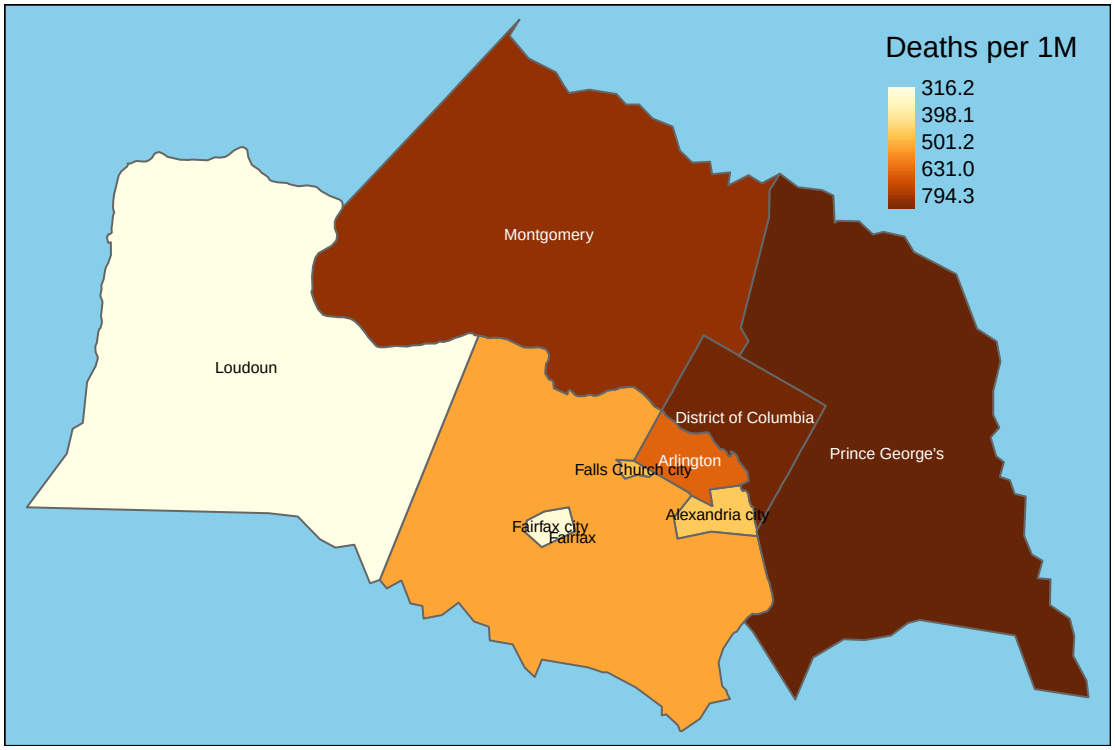
Deaths


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

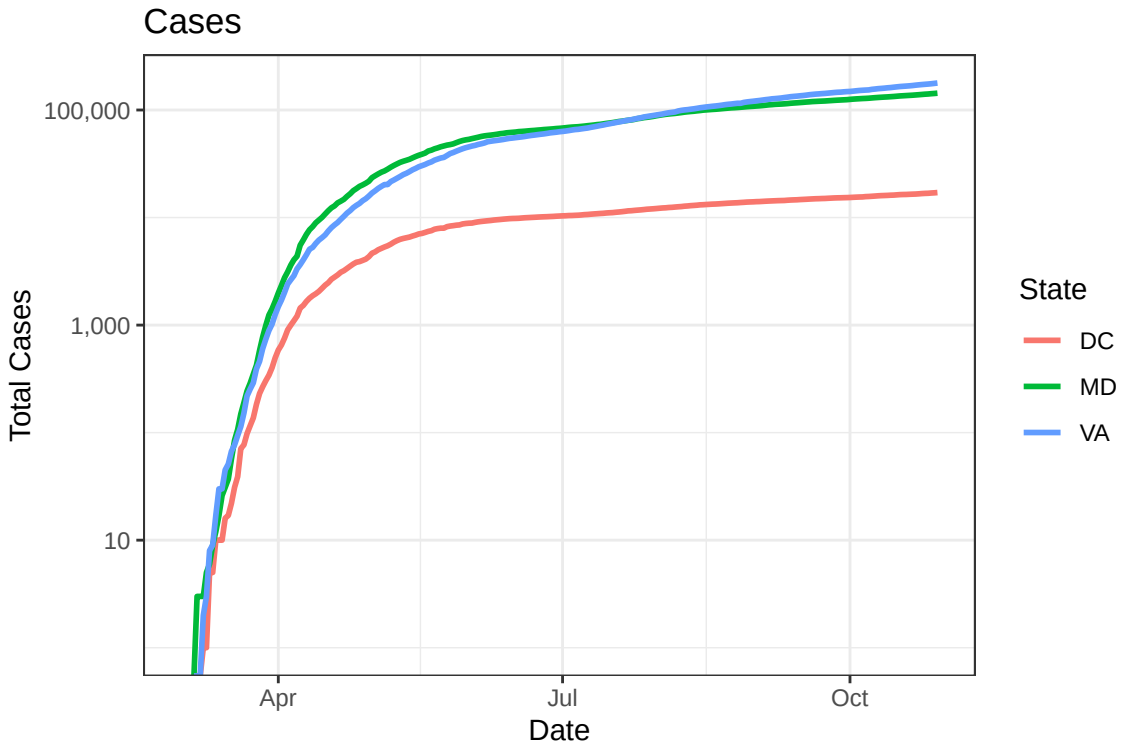

New Deaths
DC
MD
VA
Deaths per Day
20
15
10
5
0
50
25
0
100
75
50
25
0
Apr
Jul
Oct
Date

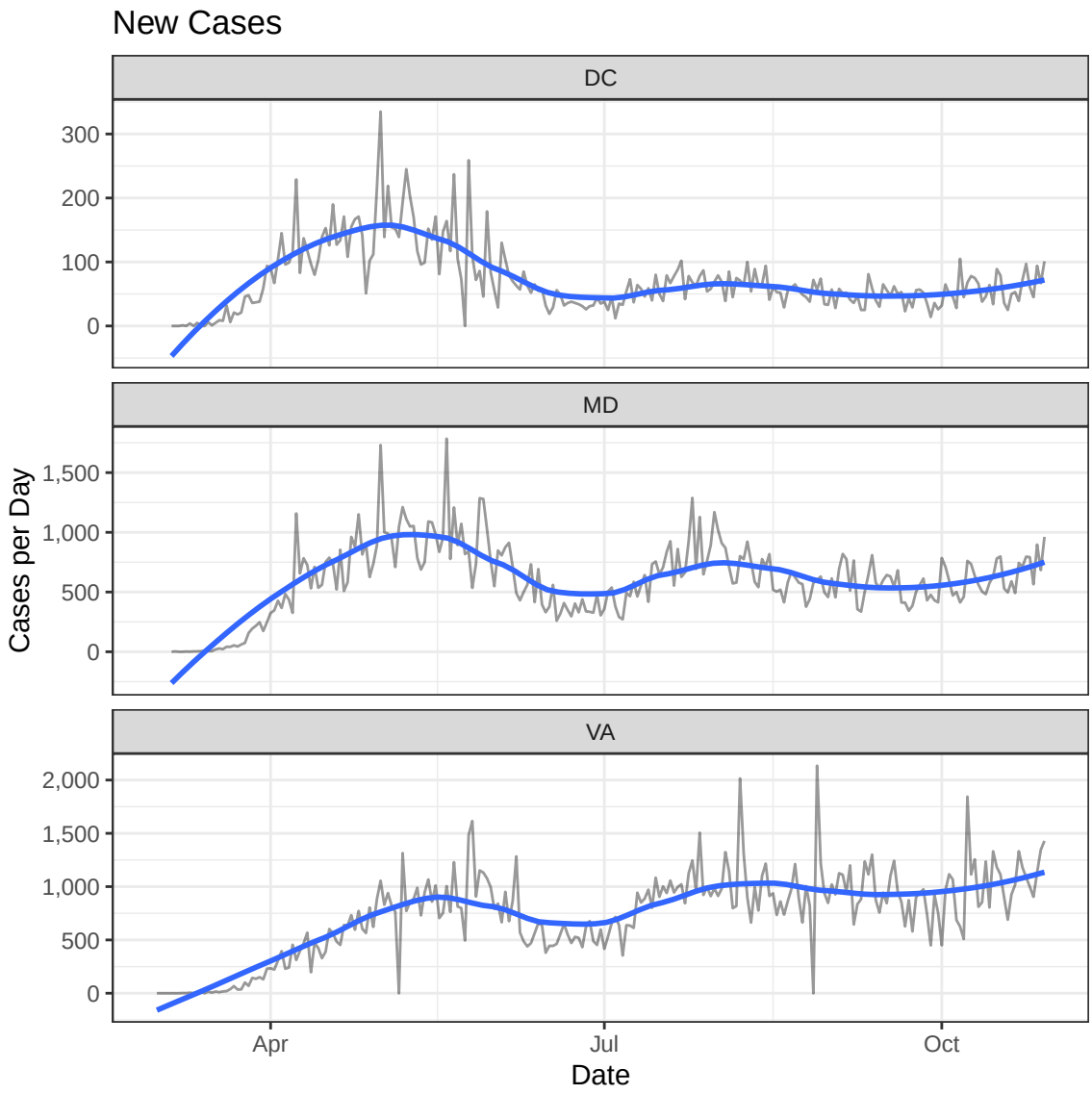

One−Week Change in Daily Deaths
DC
MD
VA
10
0
−10
20
0
−20
−40
100
50
0
−50
7−Day Change
Apr
Jul
Oct
Date

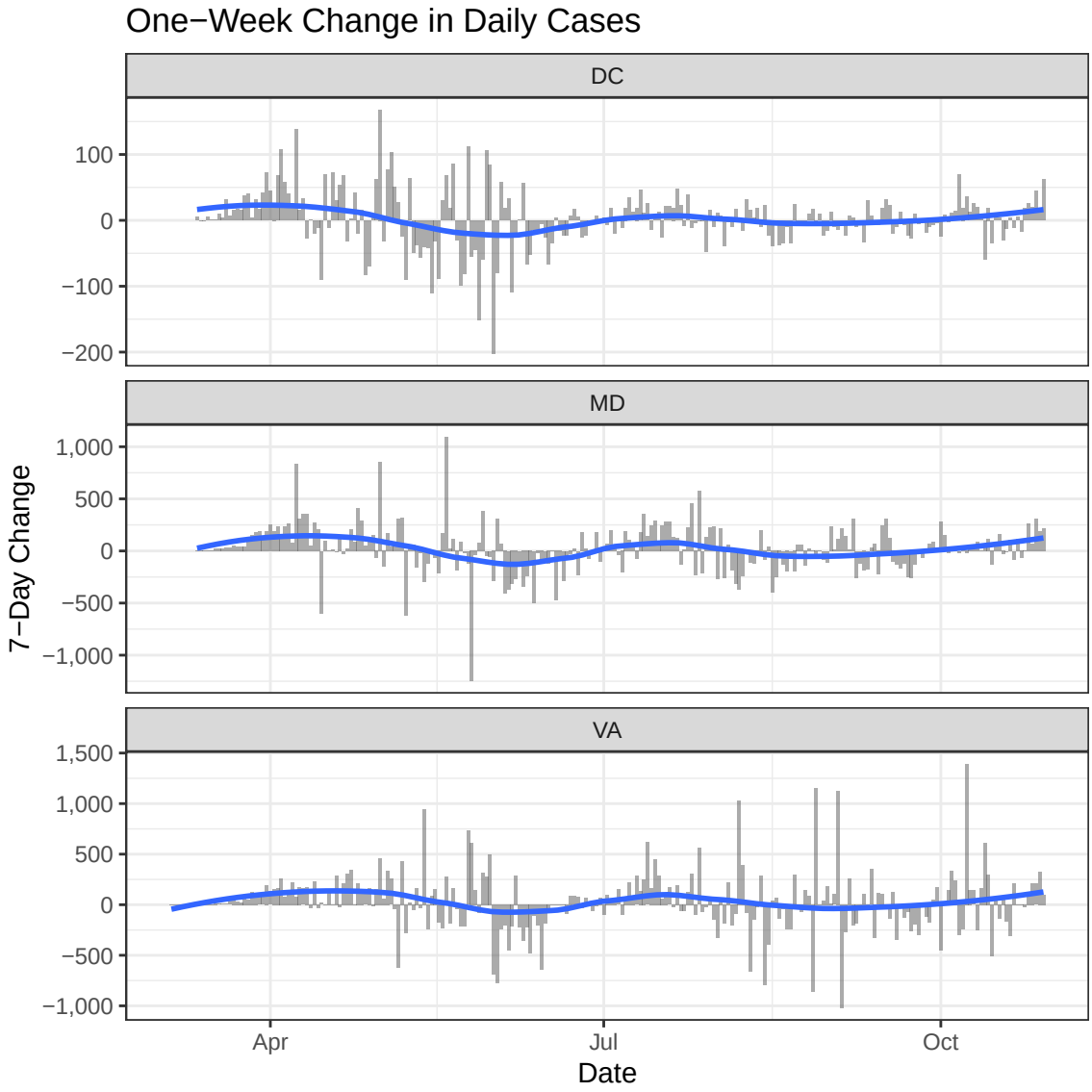

Deaths per 1M
0
1
10
100
1,000

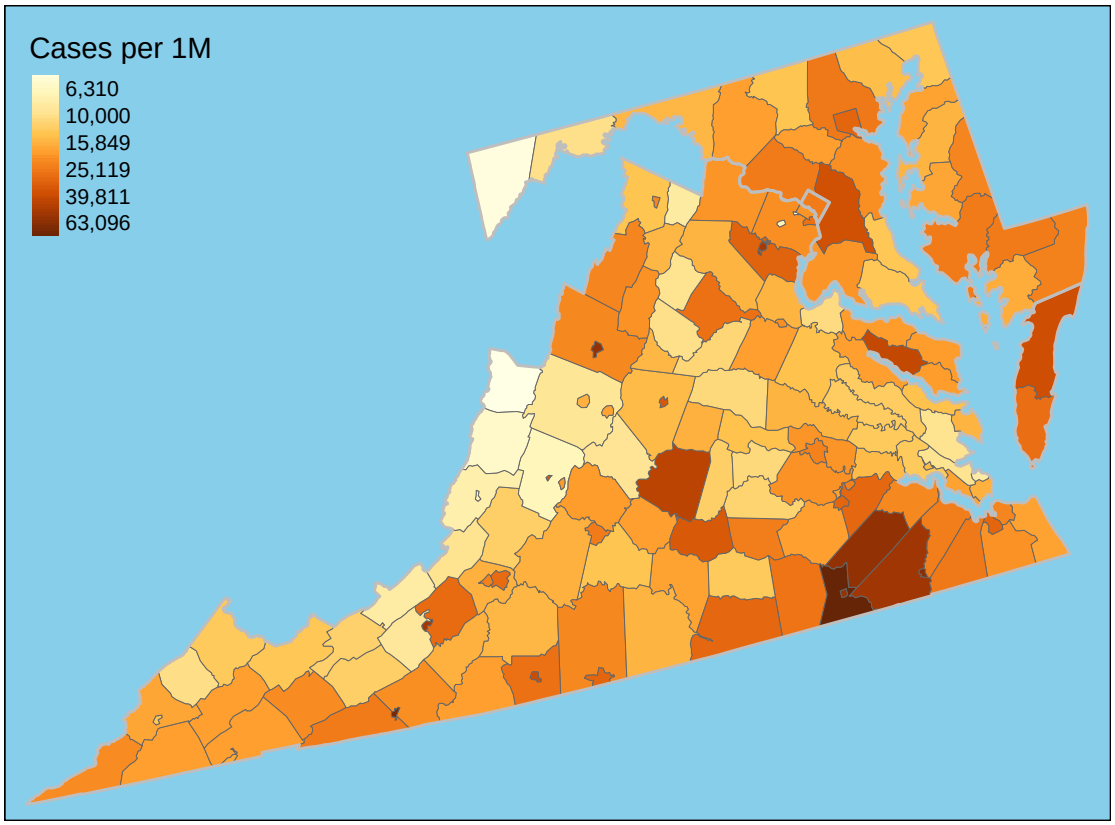

Deaths per 1M
316.2
398.1
501.2
631.0
794.3
Montgomery
Loudoun
District of Columbia
Prince George's
Arlington
Falls Church city
Alexandria city
Fairfax city
Fairfax

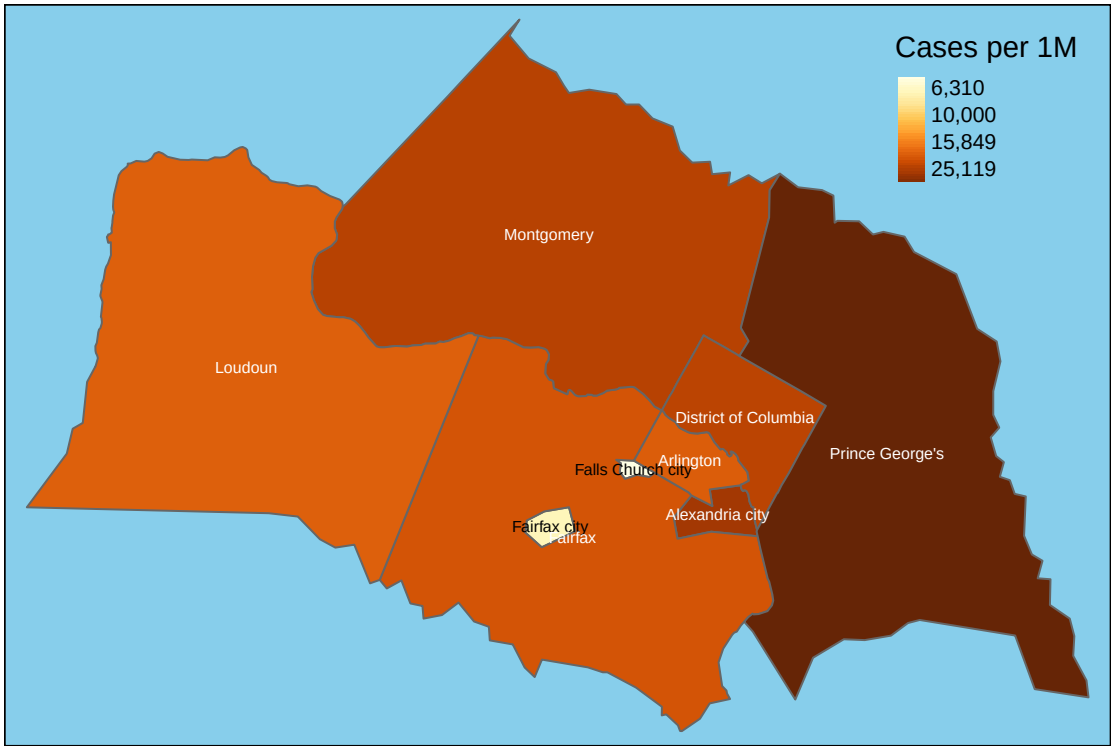
Cases


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

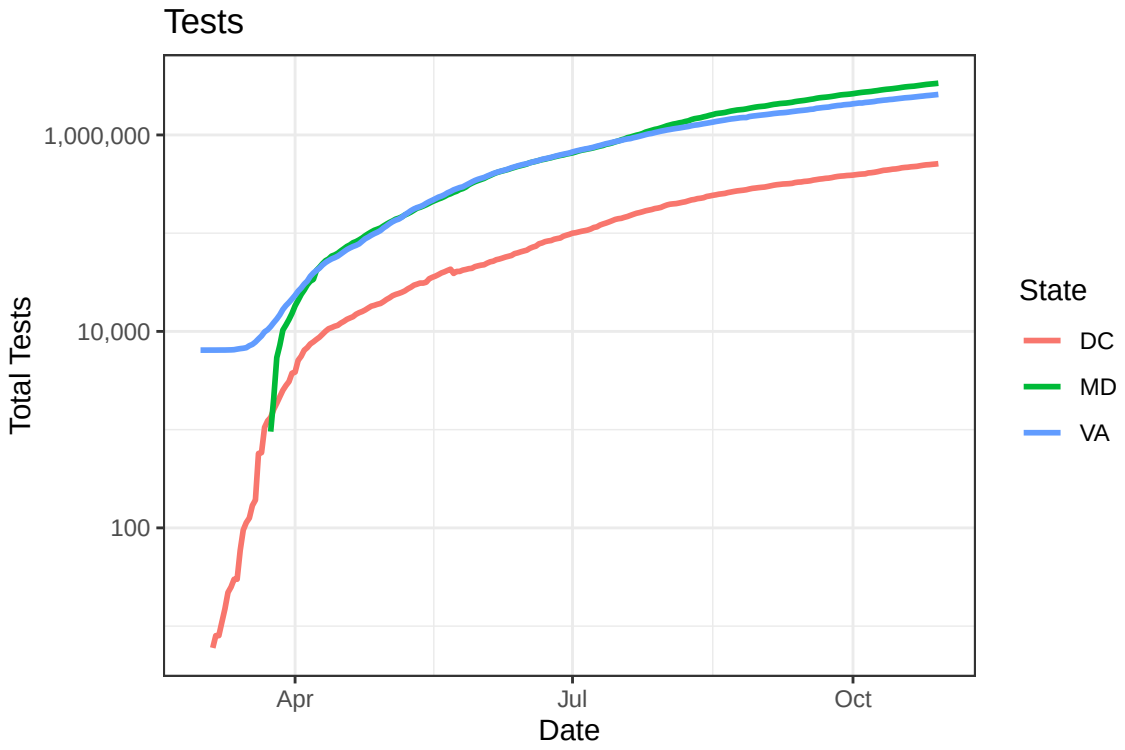

New Cases
DC
MD
VA
Cases per Day
300
200
100
0
1,500
1,000
500
0
2,000
1,500
1,000
500
0
Apr
Jul
Oct
Date

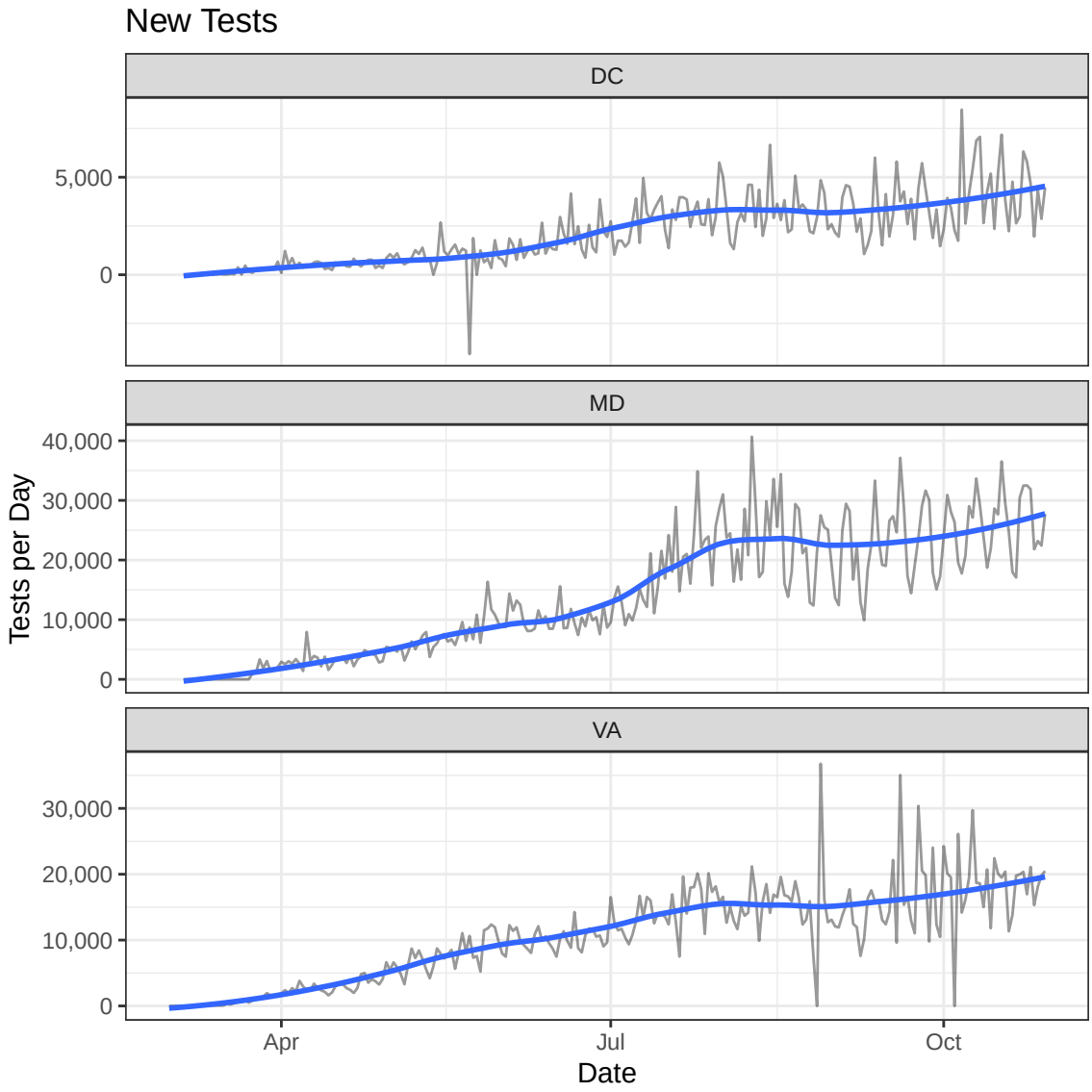

One−Week Change in Daily Cases
DC
MD
VA
7−Day Change
100
0
−100
−200
1,000
500
0
−500
−1,000
1,500
1,000
500
0
−500
−1,000
Apr
Jul
Oct
Date

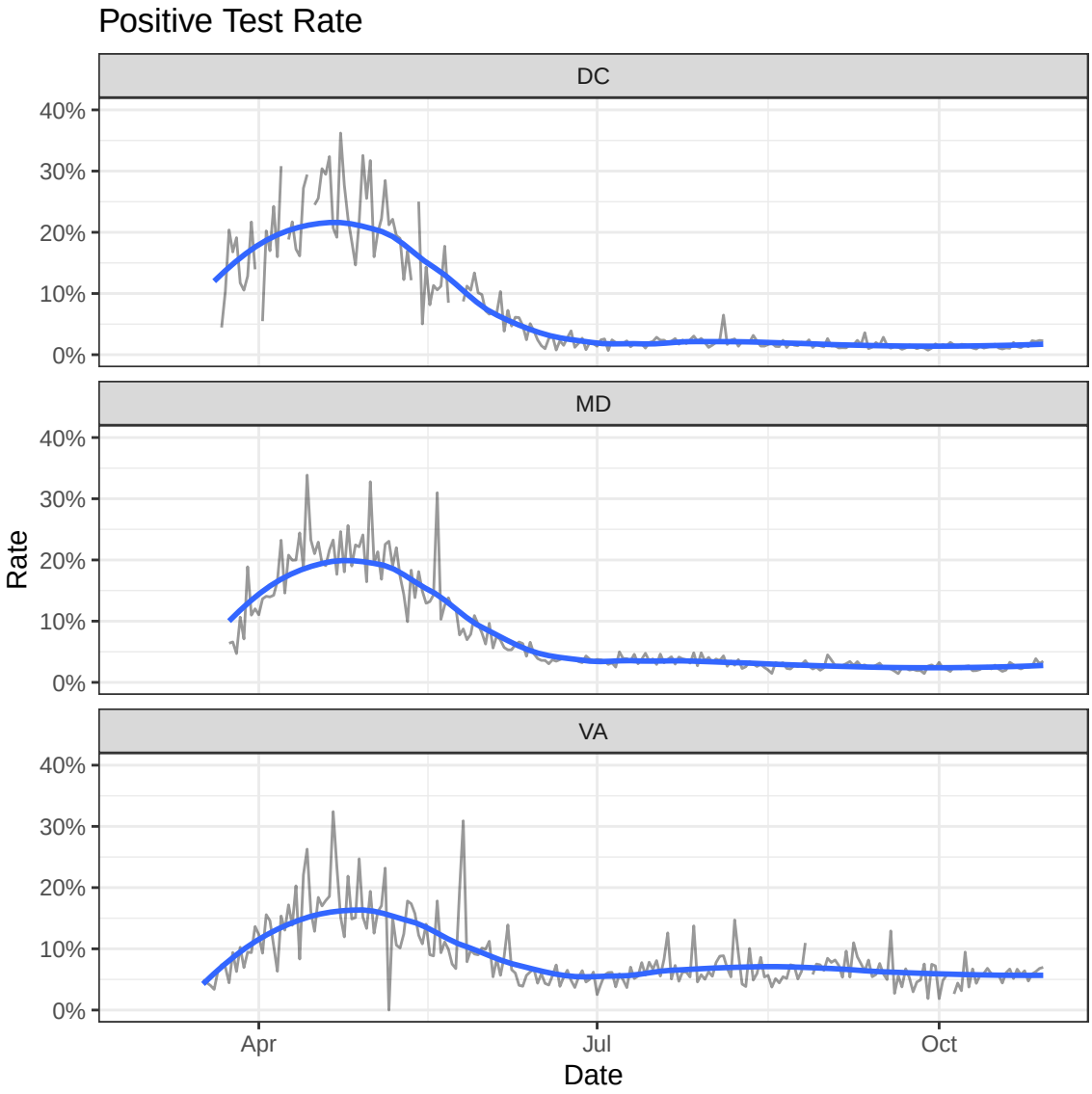

Cases per 1M
6,310
10,000
15,849
25,119
39,811
63,096


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