Covid plots for family

April 03, 2020

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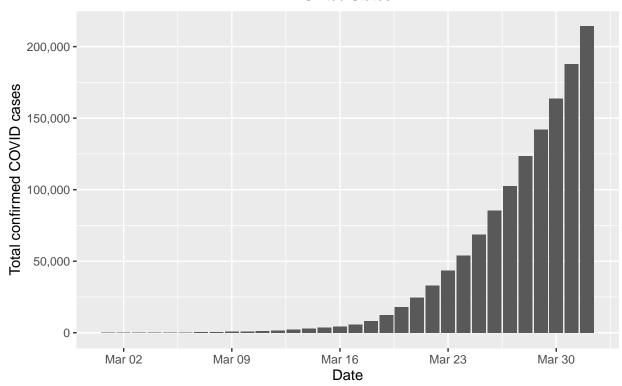
Background

- This document is organized by geography: It starts by showing data for all of the U.S., followed by our respective states, followed by our respective counties.
- Within each geophraphy, we show several plots:
 - Total confirmed cases: This is the cumulative total of cases reported
 - New confirmed cases: This is the number of new cases reported on each respective date
 - Rolling 3-day case growth rate: This is the average daily growth rate in total cases over the previous 3 days. For instance, if it is 100%, then that means total cases are doubling every 3 days. (We don't show this at the county level because the sample size is too small.)
 - Total deaths: This is the cumulative total of deaths reported
 - New deaths: This is the number of new deaths reported on each respective date
 - Rolling 3-day death growth rate: This is the average daily growth rate in total deaths over the previous 3 days. For instance, if it is 100%, then that means total deaths are doubling every 3 days. (We don't show this at the county level because the sample size is too small.)
- Besides this data for each geography, we also show some additional plots at the end:
 - We show tables of both total cases and deaths per million residents for all states, and then we show a graph of trends of these numbers for the top 10 states (only using 10 in the graph so it's not too crowded). Showing the numbers per million helps normalize for the size of the states when looking at totals.
 - We then show these same tables and plots for cases and deaths, but with new cases/deaths per million residents instead of total cases/deaths per million. This section uses a rolling 3-day average of new cases/deaths.
 - Finally, we show the same rolling 3-day average of new cases, but broken out by states that have enacted stay-at-home orders and when the orders were enacted.

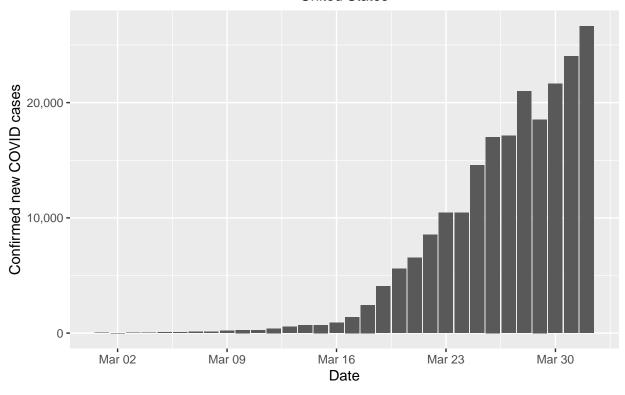
United States

Confirmed cases

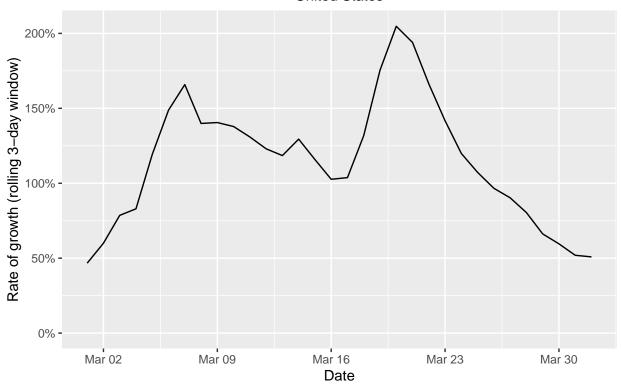
Total confirmed COVID cases United States



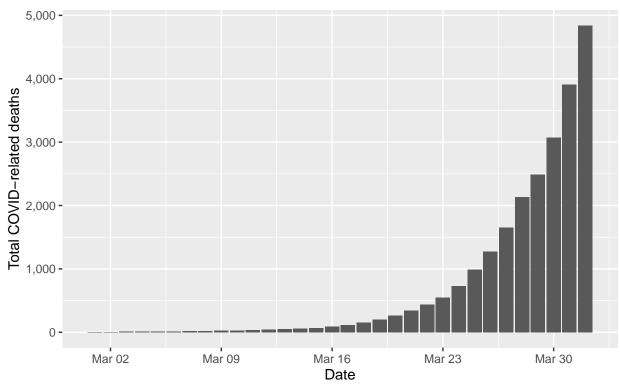
Confirmed new COVID cases by day United States



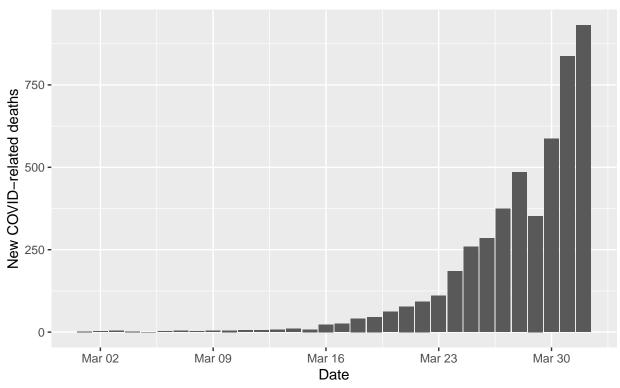
Rolling 3-day rate of growth: Total confirmed COVID cases
United States



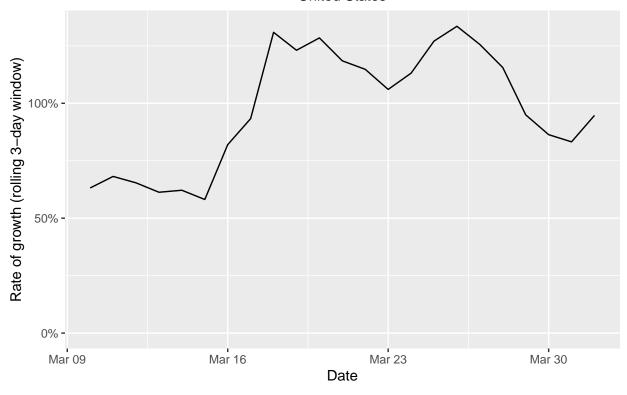
Total COVID-related deaths United States



New COVID-related deaths by day United States



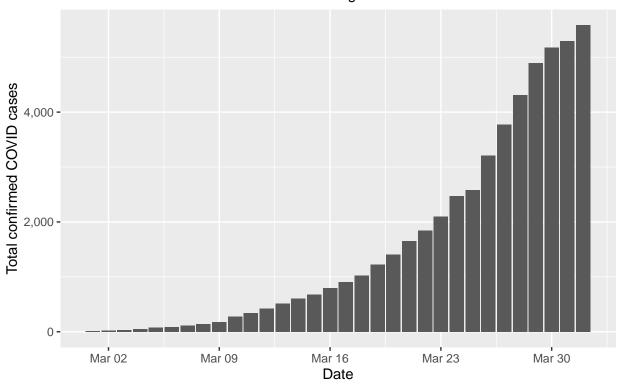
Rolling 3-day rate of growth: Total COVID-related deaths
United States



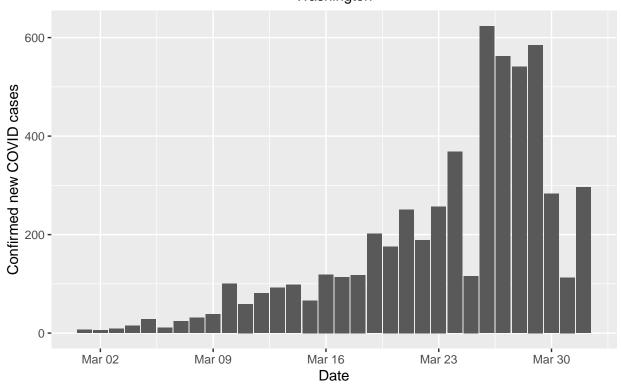
Washington

Confirmed cases

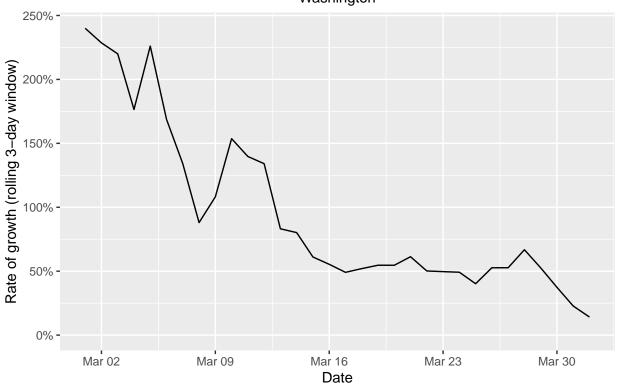
Total confirmed COVID cases Washington



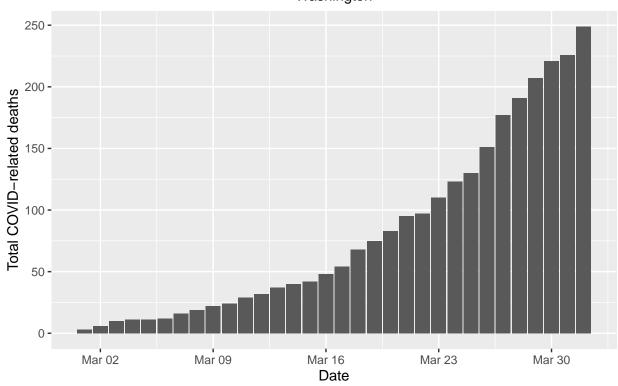
Confirmed new COVID cases by day Washington



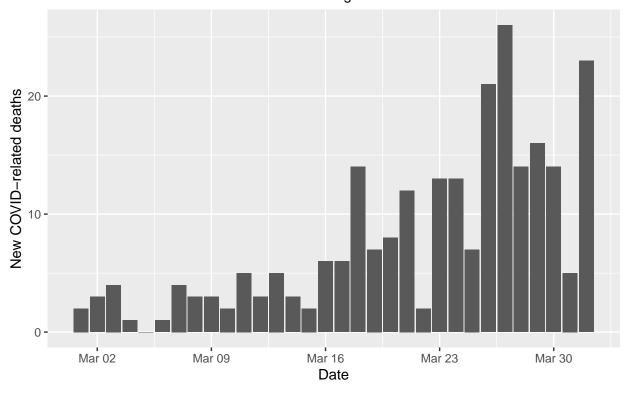
Rolling 3-day rate of growth: Total confirmed COVID cases Washington



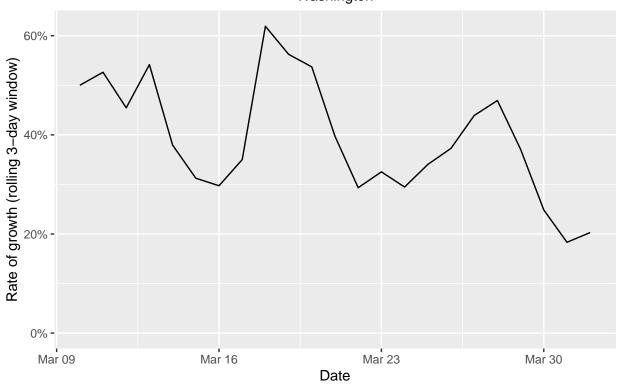
Total COVID-related deaths Washington



New COVID-related deaths by day Washington



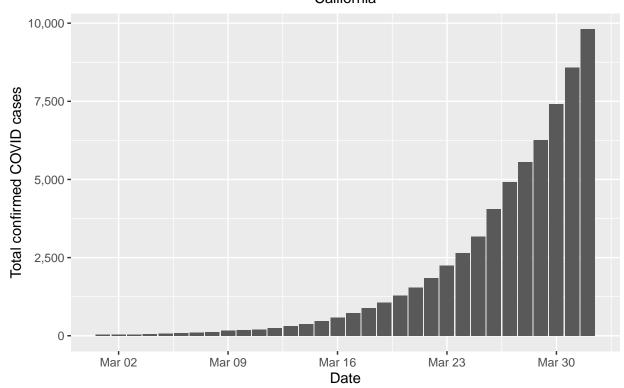
Rolling 3-day rate of growth: Total COVID-related deaths
Washington



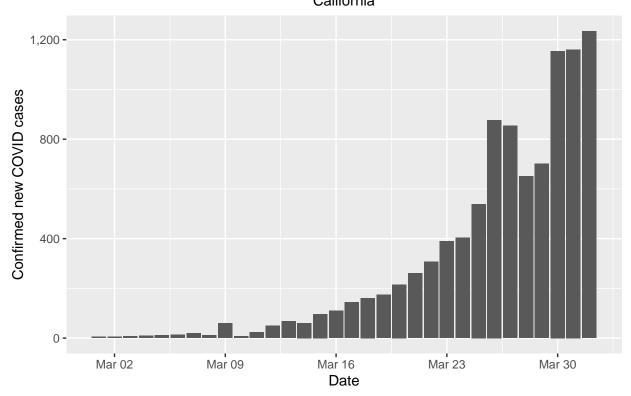
California

Confirmed cases

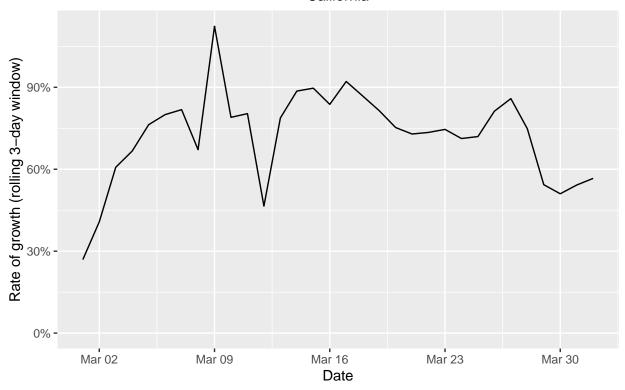
Total confirmed COVID cases California



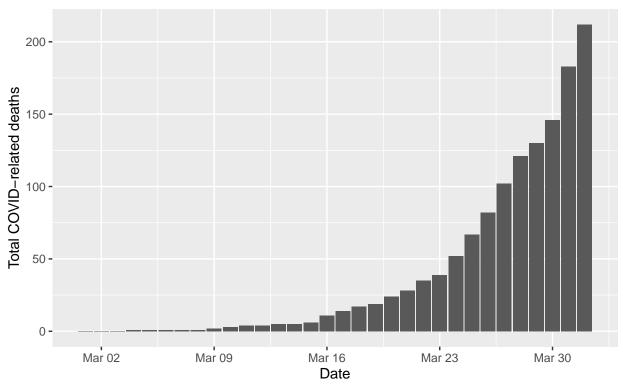
Confirmed new COVID cases by day California



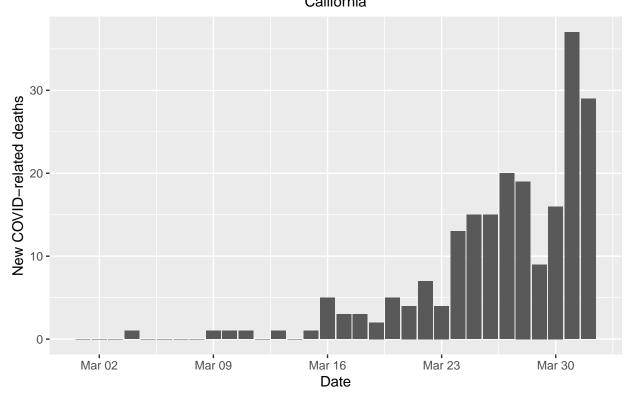
Rolling 3-day rate of growth: Total confirmed COVID cases
California



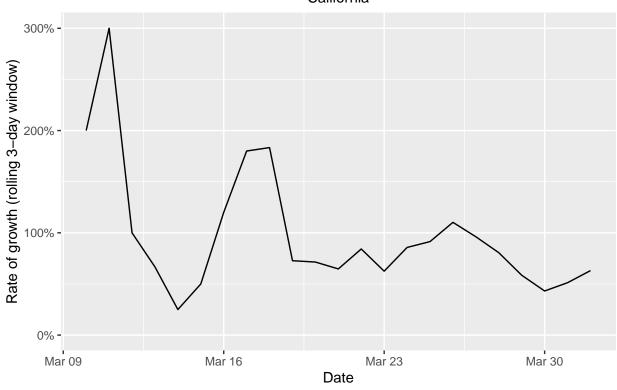
Total COVID-related deaths California



New COVID-related deaths by day California



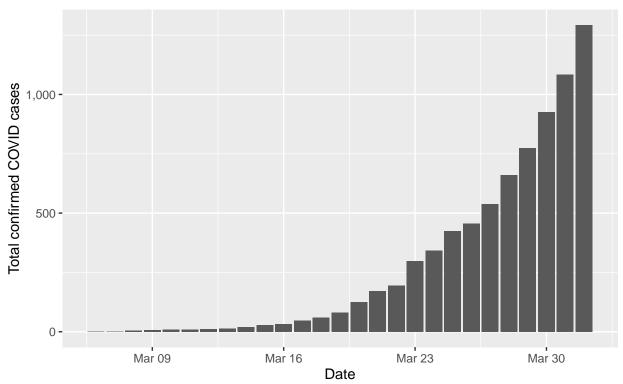
Rolling 3-day rate of growth: Total COVID-related deaths
California



South Carolina

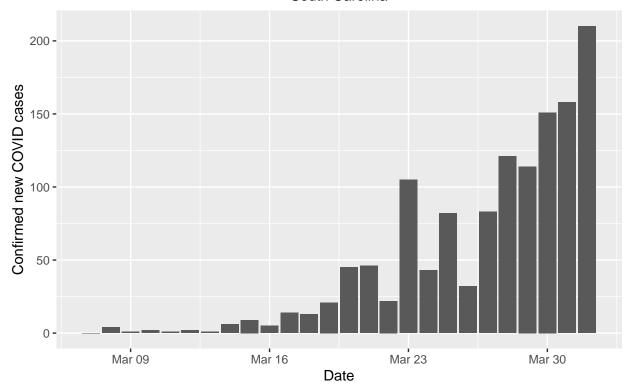
Confirmed cases

Total confirmed COVID cases South Carolina



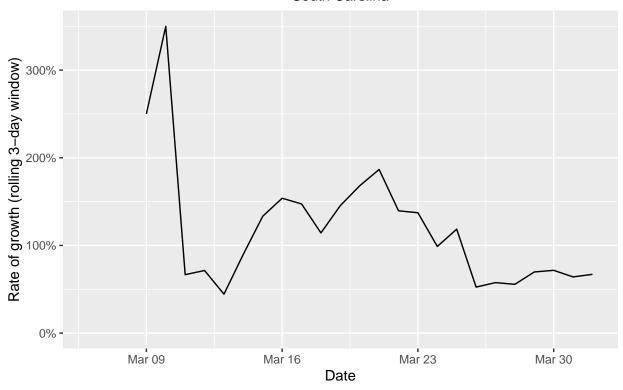
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Confirmed new COVID cases by day South Carolina

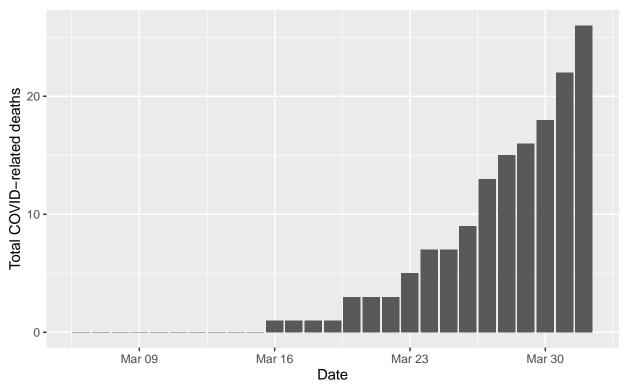


Warning: Removed 3 row(s) containing missing values (geom_path).

Rolling 3-day rate of growth: Total confirmed COVID cases
South Carolina

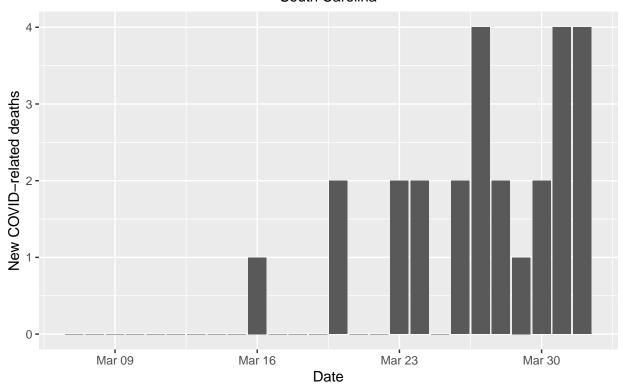


Total COVID-related deaths South Carolina



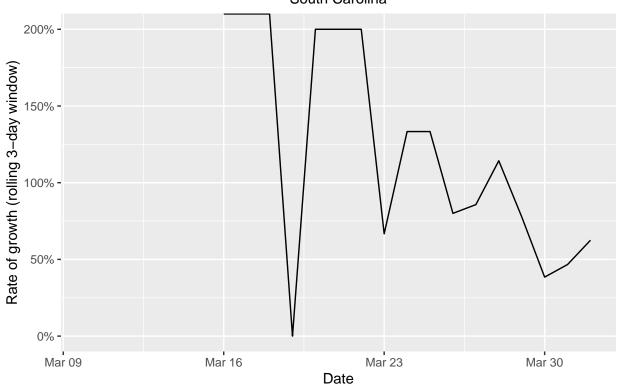
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New COVID-related deaths by day South Carolina



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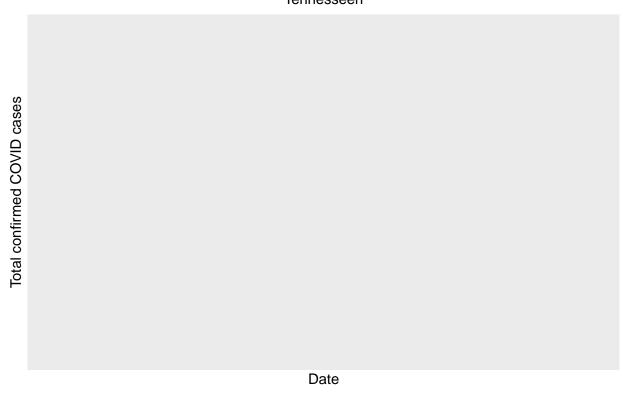
Rolling 3-day rate of growth: Total COVID-related deaths
South Carolina



Tennessee

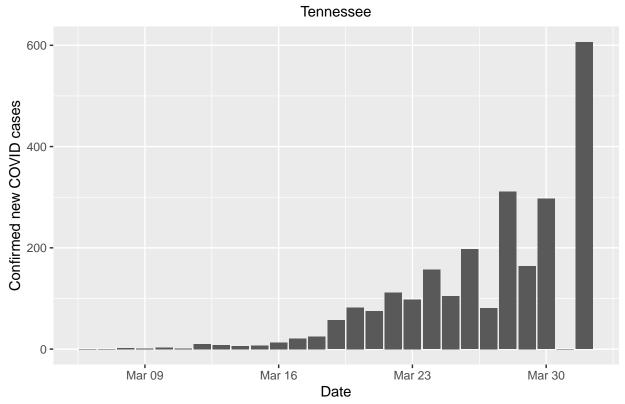
Confirmed cases

Total confirmed COVID cases Tennesseen



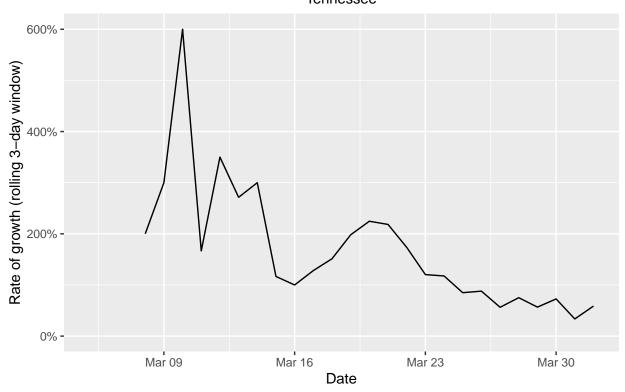
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Confirmed new COVID cases by day

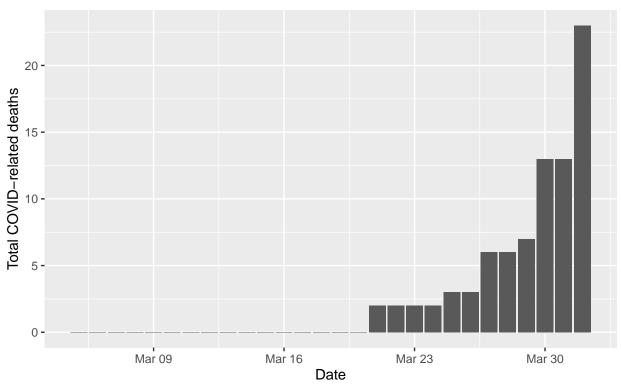


Warning: Removed 3 row(s) containing missing values (geom_path).

Rolling 3-day rate of growth: Total confirmed COVID cases
Tennessee

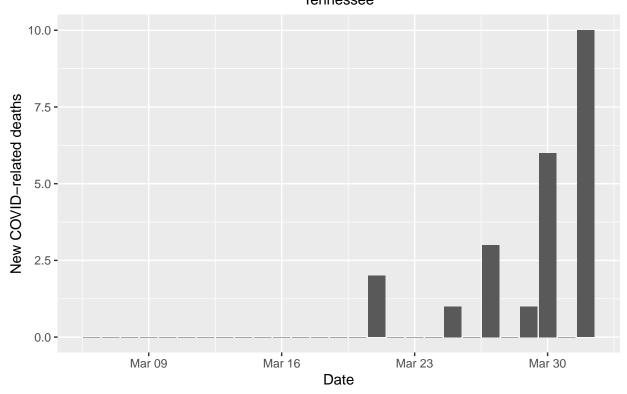


Total COVID-related deaths Tennessee



Warning: Removed 1 rows containing missing values (position_stack).

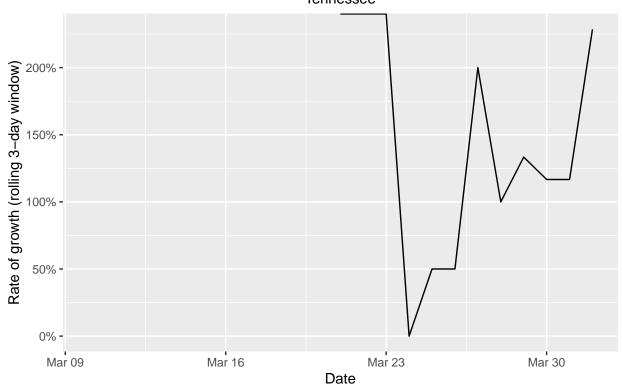
New COVID-related deaths by day Tennessee



Warning: Removed 11 row(s) containing missing values (geom_path).

Rolling 3-day rate of growth: Total COVID-related deaths

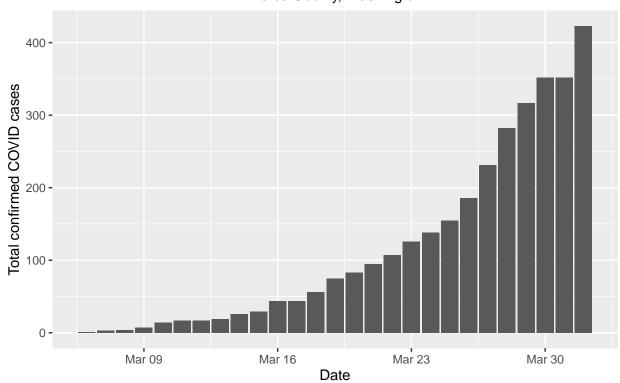
Tennessee



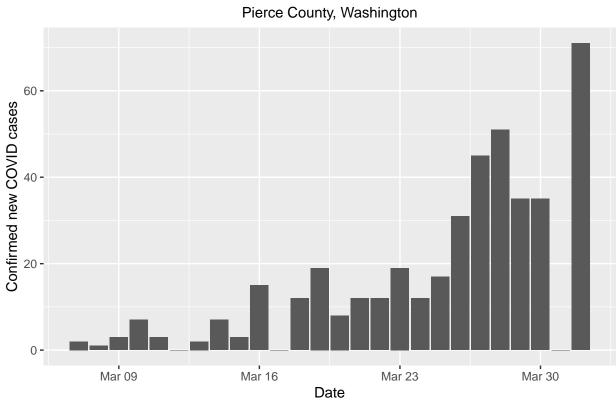
Pierce County, Washington

Confirmed cases

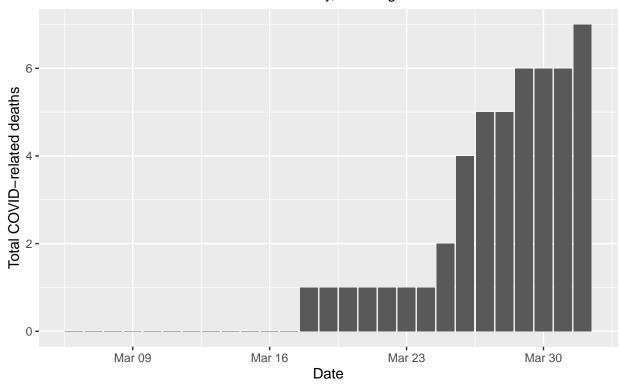
Total confirmed COVID cases Pierce County, Washington



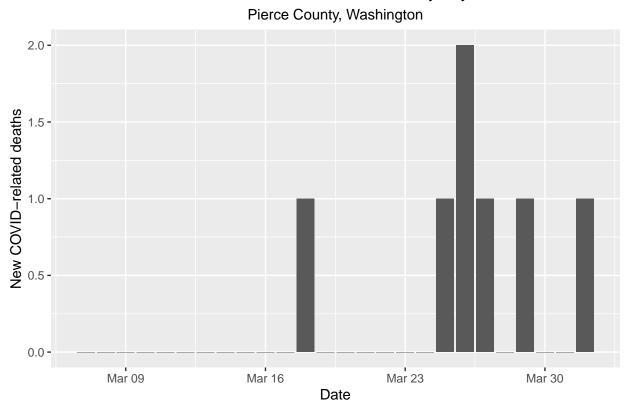
Confirmed new COVID cases by day



Total COVID-related deaths Pierce County, Washington



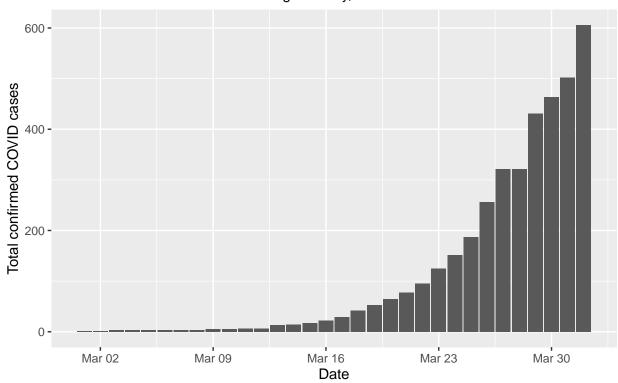
New COVID-related deaths by day



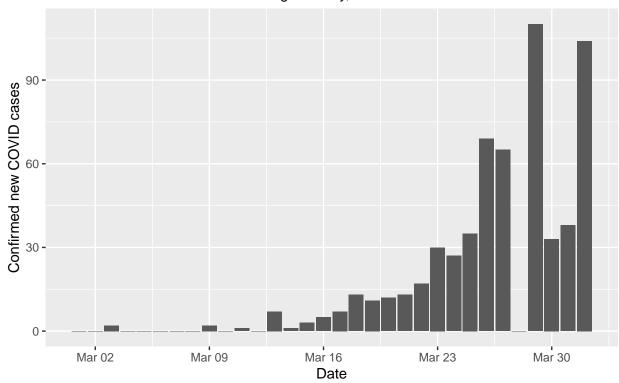
Orange County, California

Confirmed cases

Total confirmed COVID cases Orange County, California

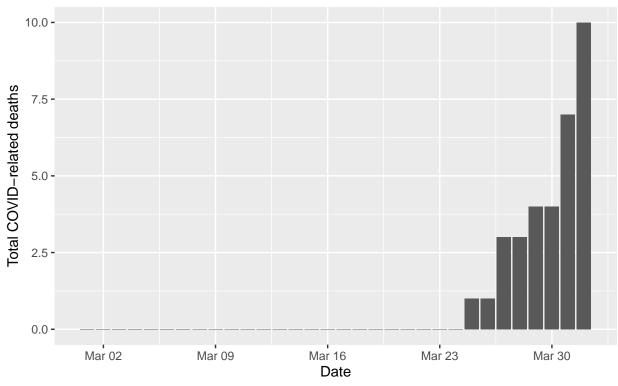


Confirmed new COVID cases by day Orange County, California

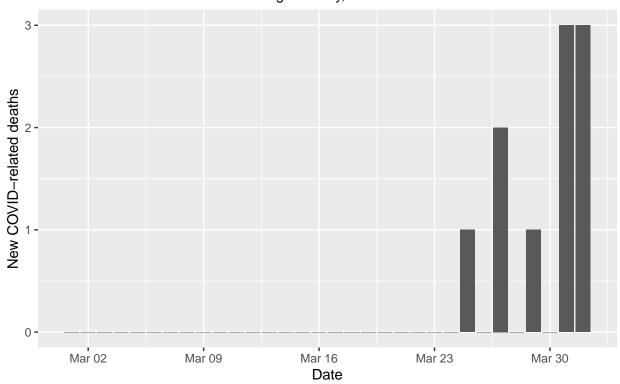


Deaths

Total COVID-related deaths Orange County, California



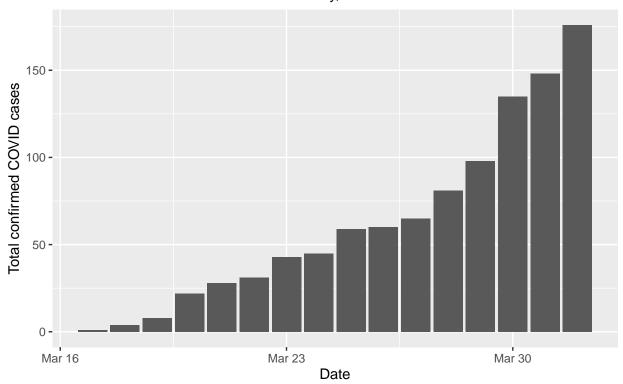
New COVID-related deaths by day Orange County, California



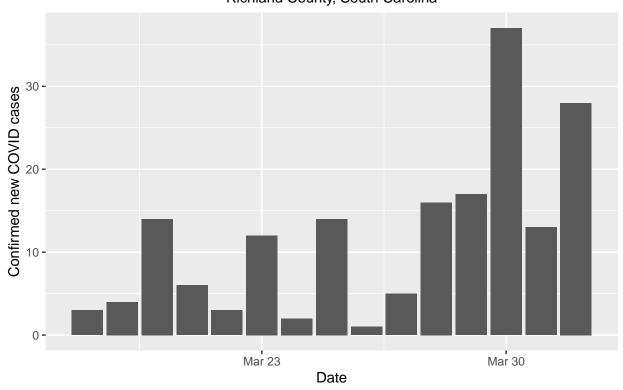
Richland County, South Carolina

Confirmed cases

Total confirmed COVID cases Richland County, South Carolina

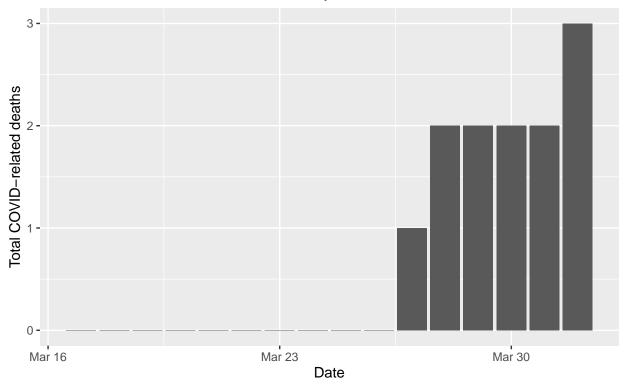


Confirmed new COVID cases by day Richland County, South Carolina

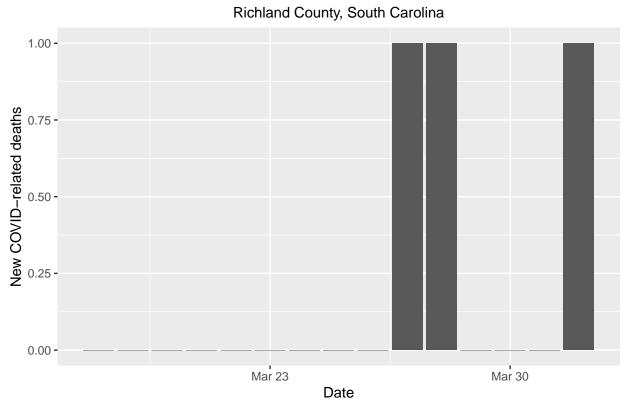


Deaths

Total COVID-related deaths Richland County, South Carolina



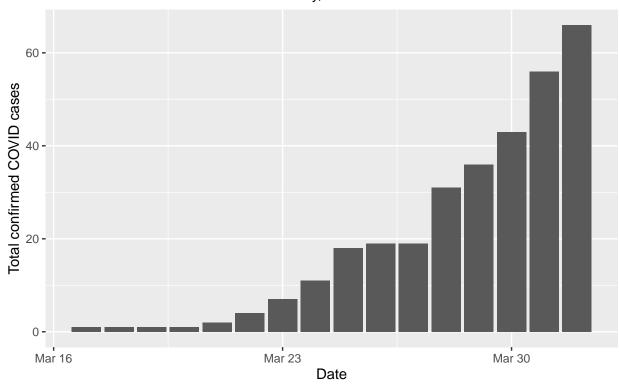
New COVID-related deaths by day



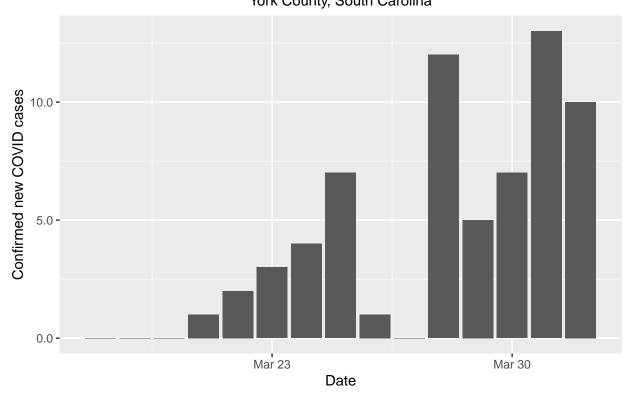
York County, South Carolina

Confirmed cases

Total confirmed COVID cases York County, South Carolina

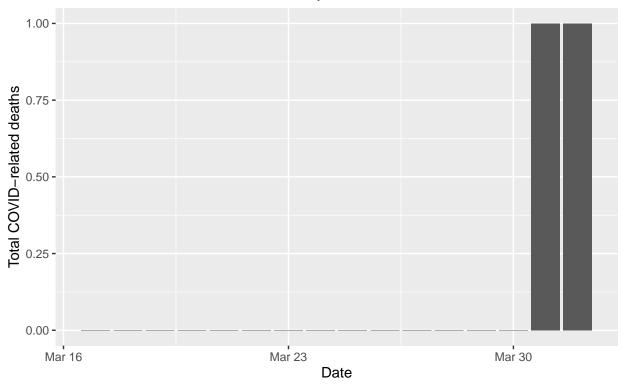


Confirmed new COVID cases by day York County, South Carolina

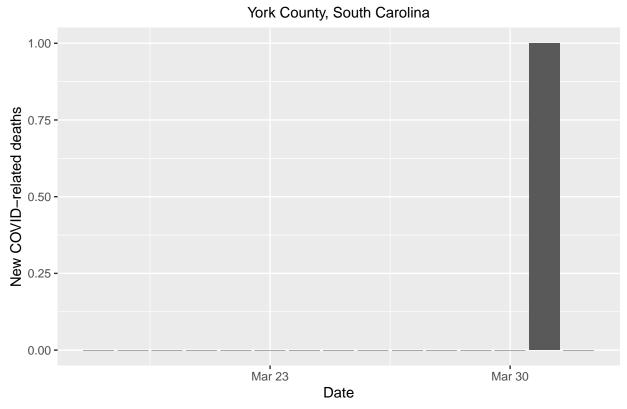


Deaths

Total COVID-related deaths York County, South Carolina



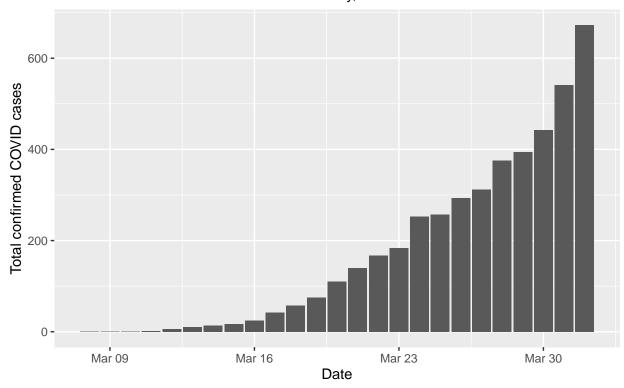
New COVID-related deaths by day



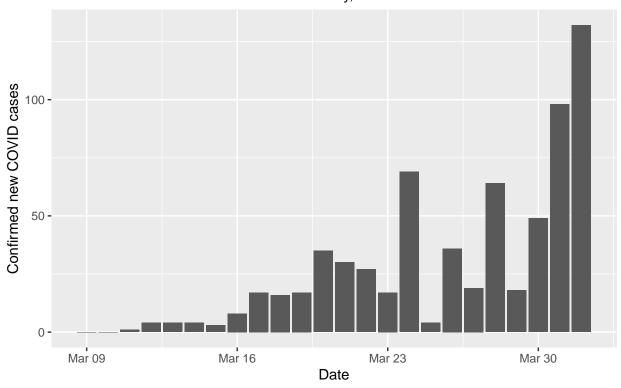
Davidson County, Tennessee

Confirmed cases

Total confirmed COVID cases Davidson County, Tennessee

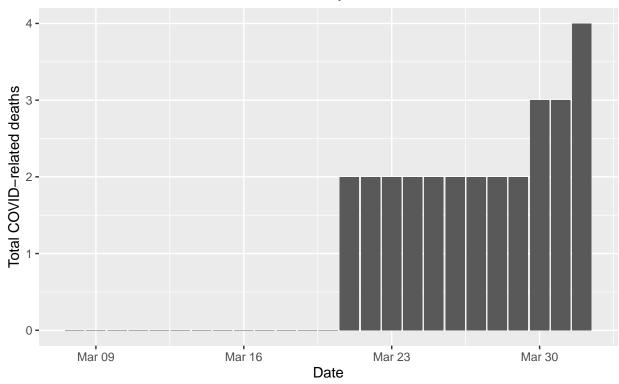


Confirmed new COVID cases by day Davidson County, Tennessee

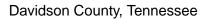


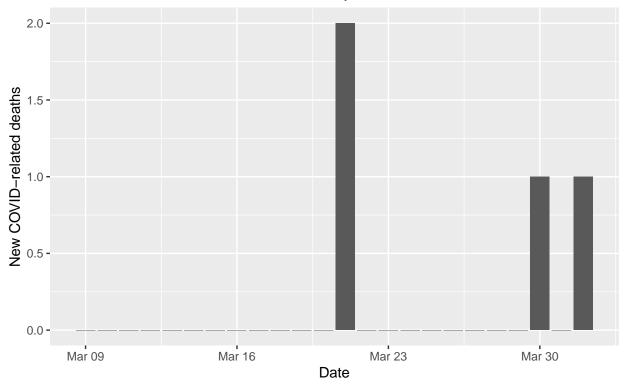
Deaths

Total COVID-related deaths Davidson County, Tennessee



New COVID-related deaths by day





Compare state data based on population

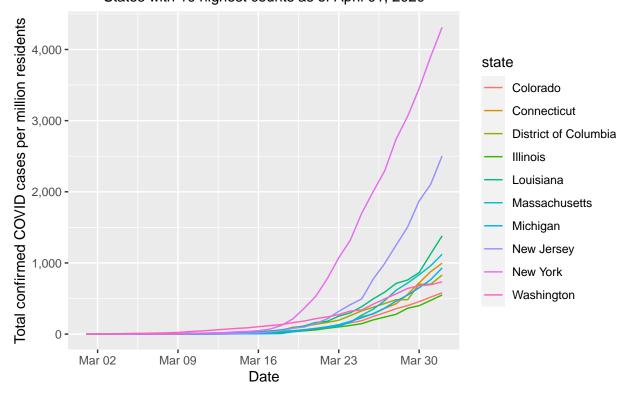
Total confirmed cases

Table of total confirmed cases by population (all 50 states)

##		state	casesPerMillion
##	1:	New York	4,312
##	2:	New Jersey	2,505
##	3:	Louisiana	1,381
##	4:	Massachusetts	1,122
##	5:	Connecticut	997
##	6:	Michigan	930
##	7:	District of Columbia	830
##	8:	Washington	733
##	9:	Colorado	581
##	10:	Illinois	550
##	11:	Rhode Island	534
##	12:	Vermont	514
##	13:	Pennsylvania	453
##	14:	Georgia	447
##	15:	Nevada	415
##	16:	Indiana	381
##	17:	Delaware	377
##	18:	Idaho	374

## 1	19:	Florida	361
## 2	20:	Mississippi	360
## 2	21:	Tennessee	357
## 2	22:	Maryland	328
## 2	23:	Utah	315
## 2	24:	New Hampshire	305
## 2	25:	Wisconsin	266
## 2	26:	Missouri	257
## 2	27:	Maine	255
## 2	28:	South Carolina	251
## 2	29:	California	248
## 3	30:	Wyoming	236
## 3	31:	Alabama	225
## 3	32:	Ohio	217
## 3	33:	Arkansas	206
## 3	34:	Montana	203
## 3	35:	Alaska	195
## 3	36:	Arizona	194
## 3	37:	North Dakota	192
## 3	38:	Hawaii	182
## 3	39:	Oklahoma	181
## 4	10:	Virginia	177
## 4	11:	Iowa	174
## 4	12:	Oregon	174
## 4	13:	New Mexico	173
## 4	14:	Kansas	167
## 4	15:	Kentucky	152
## 4	16:	North Carolina	150
## 4	17:	Texas	146
## 4	18:	South Dakota	145
## 4	19:	Nebraska	128
## 5	50:	Minnesota	122
## 5	51:	West Virginia	106
## 5	52:	Puerto Rico	89
## 5	53:	Guam	<na></na>
## 5	54:	${\tt Northern\ Mariana\ Islands}$	<na></na>
## 5	55:	Virgin Islands	<na></na>
##		state	casesPerMillion

Total confirmed COVID cases per million residents States with 10 highest counts as of April 01, 2020



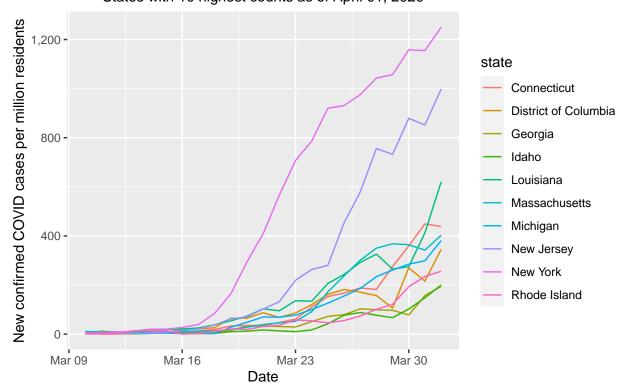
New confirmed cases

Table of new cases by population: rolling 3-day average (all 50 states)

##		state	casesNewPerMillion
##	1:	New York	1,250
##	2:	New Jersey	998
##	3:	Louisiana	620
##	4:	Connecticut	438
##	5:	Massachusetts	403
##	6:	Michigan	381
##	7:	District of Columbia	345
##	8:	Rhode Island	256
##	9:	Idaho	200
##	10:	Georgia	194
##	11:	Illinois	186
##	12:	Pennsylvania	184
##	13:	Colorado	179
##	14:	Indiana	156
##	15:	Delaware	139
##	16:	Vermont	137
##	17:	Tennessee	132
##	18:	Florida	131
##	19:	Maryland	122
##	20:	Nevada	116

##	21:	New Hampshire	115
##	22:	Missouri	110
##	23:	Mississippi	105
##	24:	South Carolina	100
##	25:	Utah	91
##	26:	Washington	90
##	27:	California	89
##	28:	Wyoming	86
##	29:	Ohio	75
##	30:	Oklahoma	73
##	31:	Wisconsin	73
##	32:	Virginia	72
##	33:	Iowa	67
##	34:	Maine	67
##	35:	Arizona	66
##	36:	North Dakota	64
##	37:	New Mexico	60
##	38:	Hawaii	58
##	39:	Arkansas	57
##	40:	Nebraska	57
	41:	Alabama	56
	42:	Kentucky	54
	43:	Kansas	53
	44:	Texas	53
	45:	Montana	52
	46:	Puerto Rico	49
	47:	Oregon	44
	48:	South Dakota	44
	49:	Alaska	39
##	50:	North Carolina	39
##	51:	West Virginia	37
##	52:	Minnesota	32
##	53:	Guam	<na></na>
##	54:	Northern Mariana Islands	<na></na>
##	55:	Virgin Islands	<na></na>
##		state	casesNewPerMillion

w confirmed COVID cases per million resident (3-day rolling average) States with 10 highest counts as of April 01, 2020



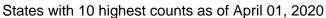
Total deaths

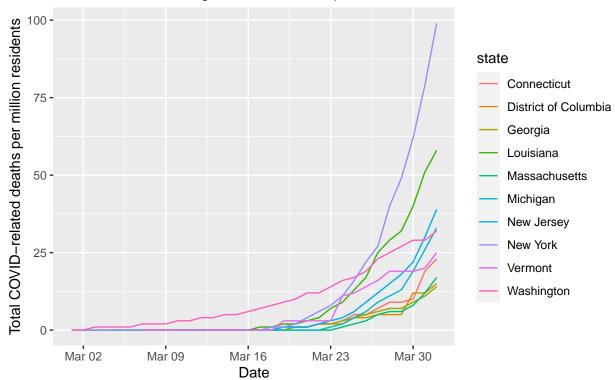
Table of total deaths by population (all 50 states)

##		state	deathsPerMillion
##	1:	New York	99
##	2:	Louisiana	58
##	3:	New Jersey	39
##	4:	Michigan	33
##	5:	Washington	32
##	6:	Vermont	25
##	7:	Connecticut	23
##	8:	Massachusetts	17
##	9:	District of Columbia	15
##	10:	Georgia	14
##	11:	Colorado	13
##	12:	Delaware	11
##	13:	Illinois	11
##	14:	Nevada	10
##	15:	Indiana	9
##	16:	Rhode Island	9
##	17:	Mississippi	7
##	18:	Oklahoma	7
##	19:	Alabama	5
##	20:	California	5

##	21:			Idaho	5
##	22:			Maine	5
##	23:			Maryland	5
##	24:			Ohio	5
##	25:		Penn	sylvania	5
##	26:		South	Carolina	5
##	27:		W	isconsin	5
##	28:			Florida	4
##	29:			Kentucky	4
##	30:			Montana	4
##	31:			Oregon	4
##	32:			Arizona	3
##	33:			Arkansas	3
##	34:			Kansas	3
##	35:		M	innesota	3
##	36:		Nort	h Dakota	3
##	37:		Pue	rto Rico	3
##	38:		T	ennessee	3
##	39:			Virginia	3
##	40:			Alaska	2
##	41:			Iowa	2
##	42:			Missouri	2
##	43:			Nebraska	2
##	44:		New H	ampshire	2
##	45:		Ne	w Mexico	2
##	46:		Sout	h Dakota	2
##	47:			Texas	2
##	48:			Utah	2
##	49:		North	Carolina	1
##	50:		West	Virginia	1
##	51:			Hawaii	0
##	52:			Wyoming	0
##	53:			Guam	<na></na>
##	54:	Northern	Mariana	Islands	<na></na>
##	55:		Virgin	Islands	<na></na>
##				state	${\tt deathsPerMillion}$

Total COVID-related deaths per million residents





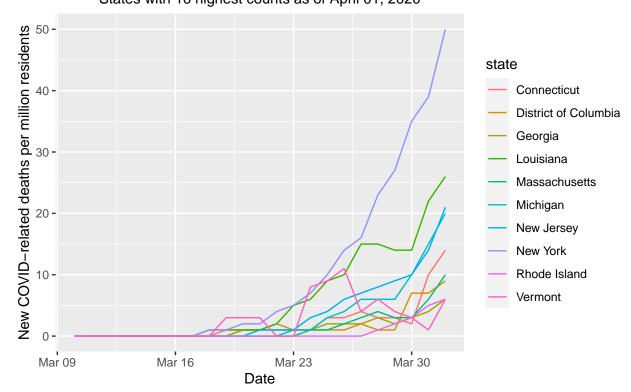
New deaths

Table of new deaths by population: rolling 3-day average (all 50 states)

##		state	deathsNewPerMillion
##	1:	New York	50
##	2:	Louisiana	26
##	3:	New Jersey	21
##	4:	Michigan	20
##	5:	Connecticut	14
##	6:	Massachusetts	10
##	7:	District of Columbia	9
##	8:	Georgia	6
##	9:	Rhode Island	6
##	10:	Vermont	6
##	11:	Colorado	5
##	12:	Delaware	5
##	13:	Illinois	5
##	14:	Nevada	5
##	15:	Washington	5
##	16:	Alabama	4
##	17:	Indiana	4
##	18:	Maryland	3
##	19:	Montana	3
##	20:	Oklahoma	3

##	21:	California	2
##	22:	Kentucky	2
##	23:	Maine	2
##	24:	Mississippi	2
##	25:	North Dakota	2
##	26:	Ohio	2
##	27:	Pennsylvania	2
##	28:	Tennessee	2
##	29:	Wisconsin	2
##	30:	Alaska	1
##	31:	Arizona	1
##	32:	Arkansas	1
##	33:	Florida	1
##	34:	Idaho	1
##	35:	Iowa	1
##	36:	Kansas	1
##	37:	Minnesota	1
##	38:	Nebraska	1
##	39:	New Mexico	1
##	40:	Oregon	1
##	41:	Puerto Rico	1
##	42:	South Carolina	1
##	43:	South Dakota	1
##	44:	Utah	1
##	45:	Virginia	1
##	46:	Hawaii	0
##	47:	Missouri	0
##	48:	New Hampshire	0
##	49:	North Carolina	0
##	50:	Texas	0
##	51:	West Virginia	0
##	52:	Wyoming	0
##	53:	Guam	<na></na>
##	54:	Northern Mariana Islands	<na></na>
##	55:	Virgin Islands	<na></na>
##		state	${\tt deathsNewPerMillion}$

w COVID-related deaths per million resident (3-day rolling average) States with 10 highest counts as of April 01, 2020



Compare new cases based on stay-at-home orders

