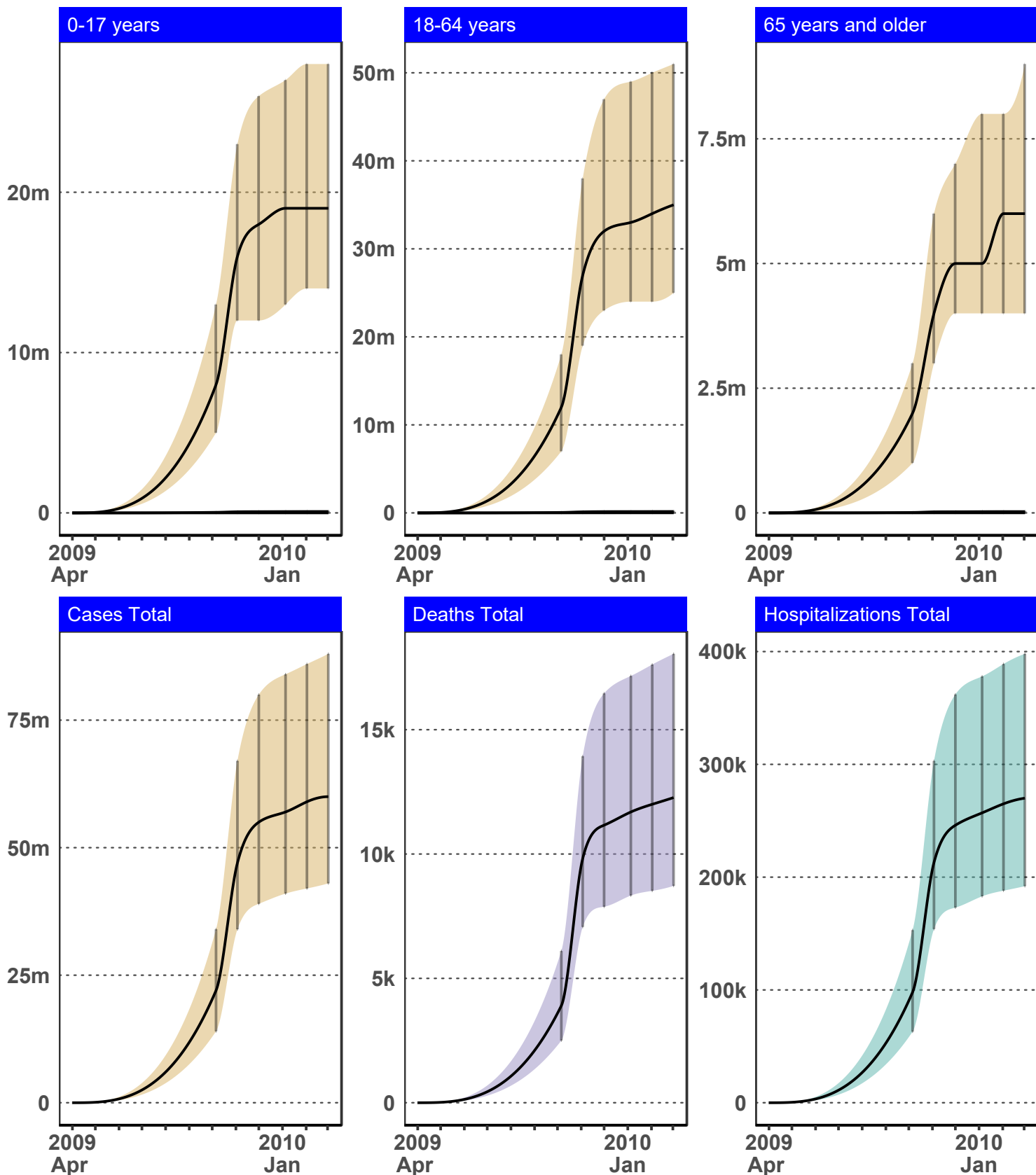# 2009 H1N1 (swine flu pandemic) cases, deaths, and hospitalizations

Interpolated counts from counts from Oct 2009 to March 2010
 The CDC provided middle, low and high, estimate counts for the categories below for each month from Oct 2009 to March 2010.
 Estimates starting from April 2009 (the beginning of the H1N1 pandemic) are not given, these were interpolated using spline estimation.
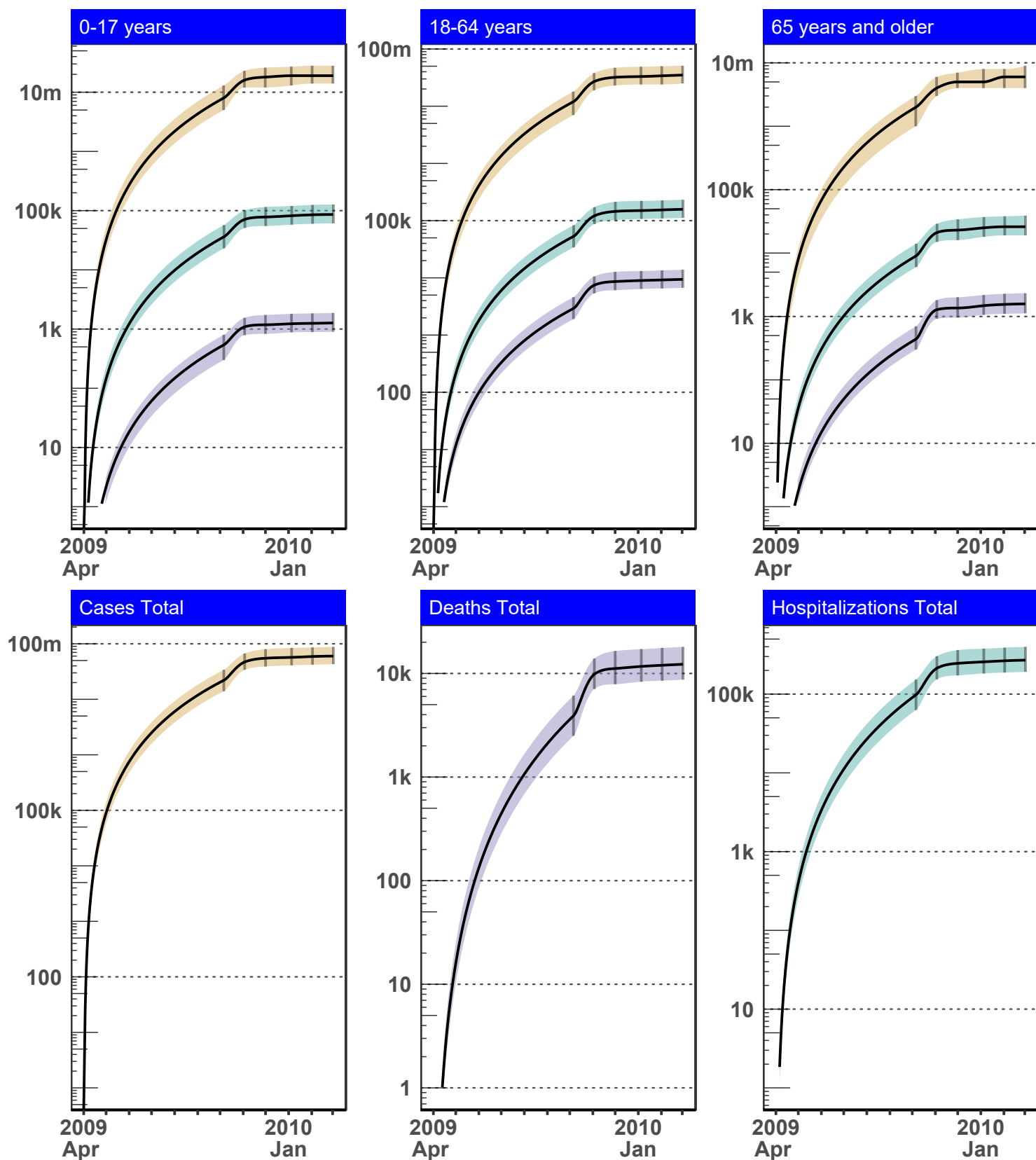
Type ▊ Cases ▊ Deaths ▊ Hospitalizations

2009 H1N1 (swine flu pandemic) cases, deaths, and hospitalizations

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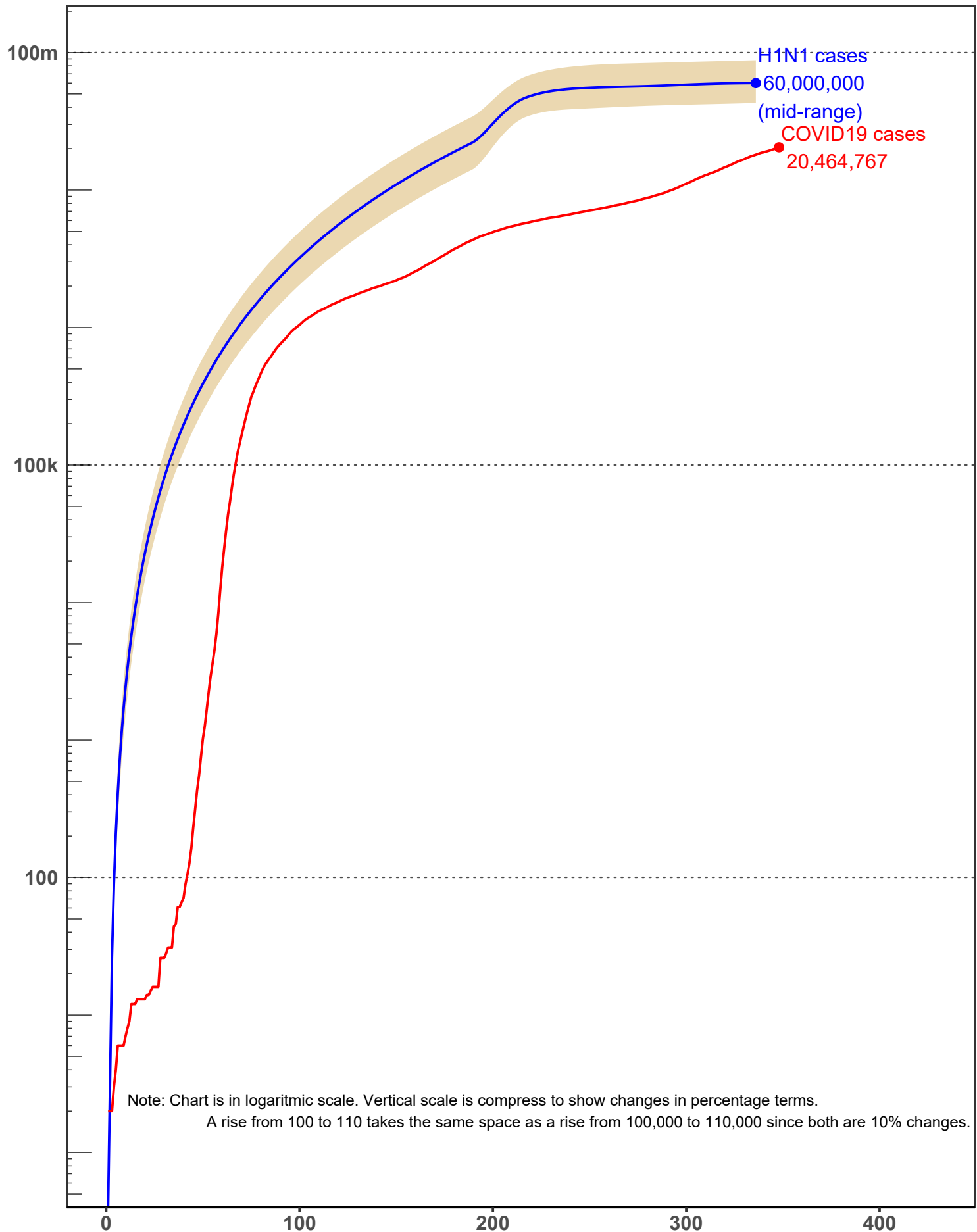

Type   Cases   Deaths   Hospitalizations

2009 H1N1 cumulative cases by day vs Covid-19

348 days after the first case

H1N1 cases
60,000,000
(mid-range)

COVID19 cases
20,464,767

100m

100k

100
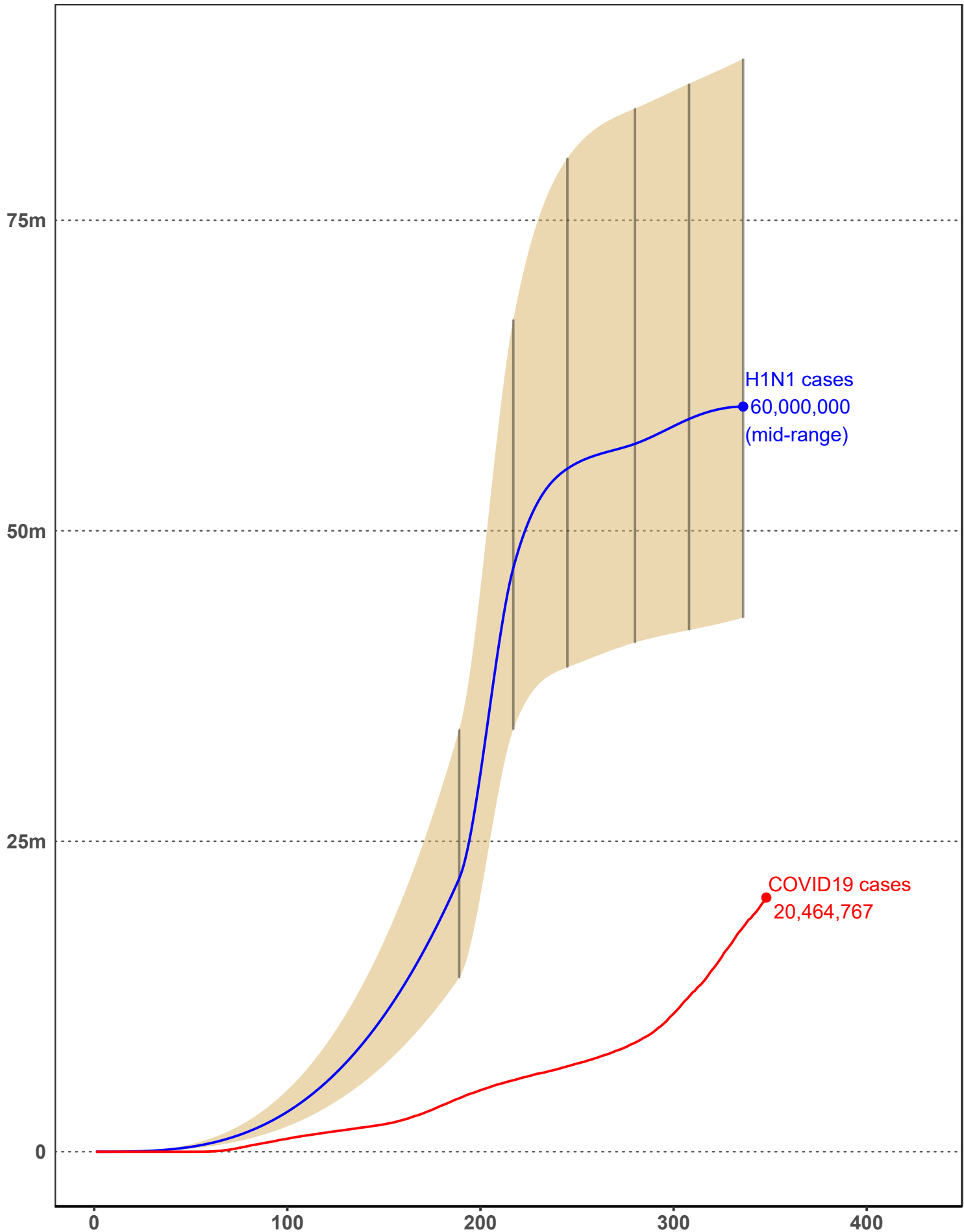
Note: Chart is in logaritmic scale. Vertical scale is compress to show changes in percentage terms.
A rise from 100 to 110 takes the same space as a rise from 100,000 to 110,000 since both are 10% changes.

0   100   200   300   400

Note: y-axis is in log scale
Sources: The New York Times, https://github.com/nytimes/covid-19-data accessed 2021-01-03 (Covid19);
https://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm (H1N1)
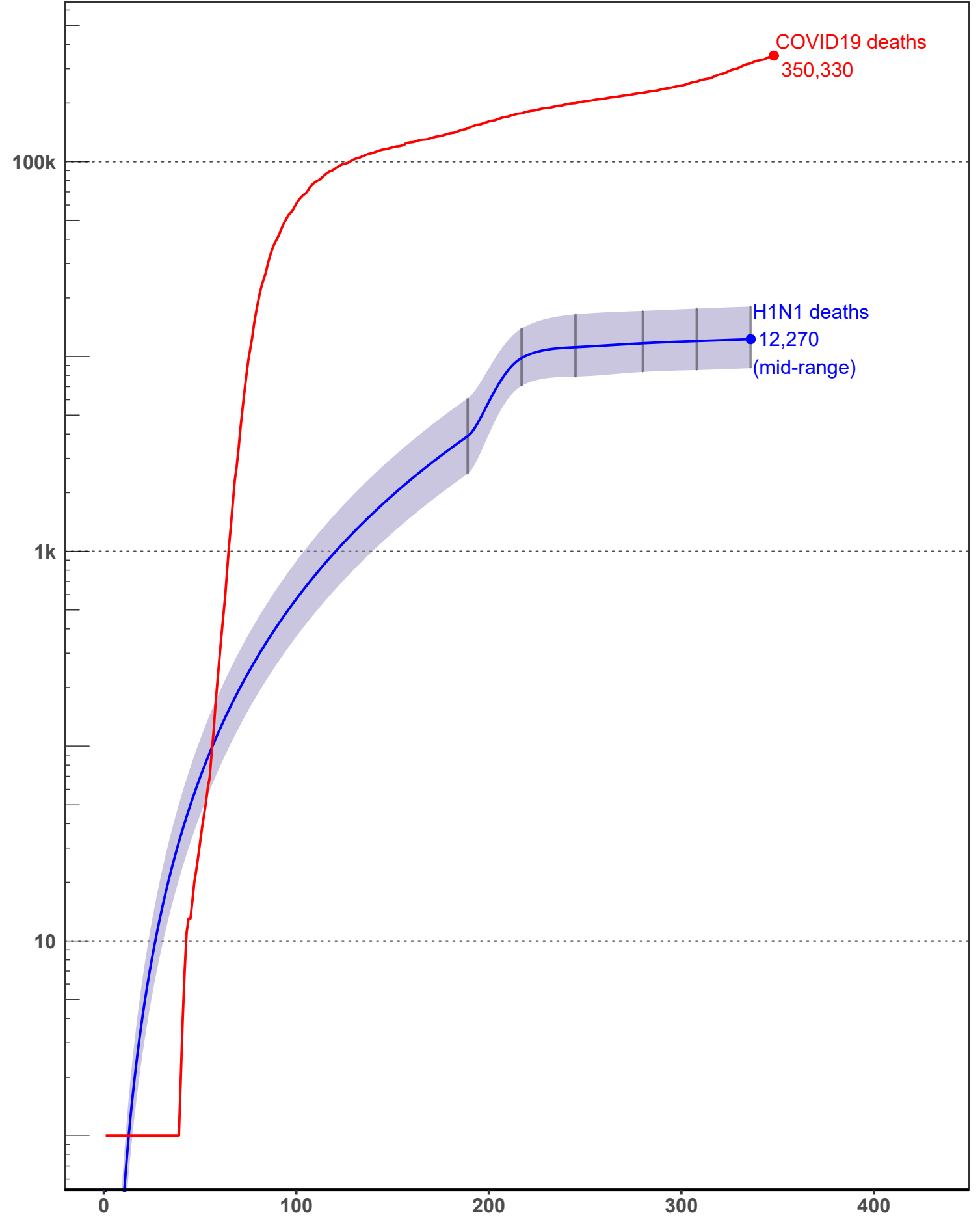
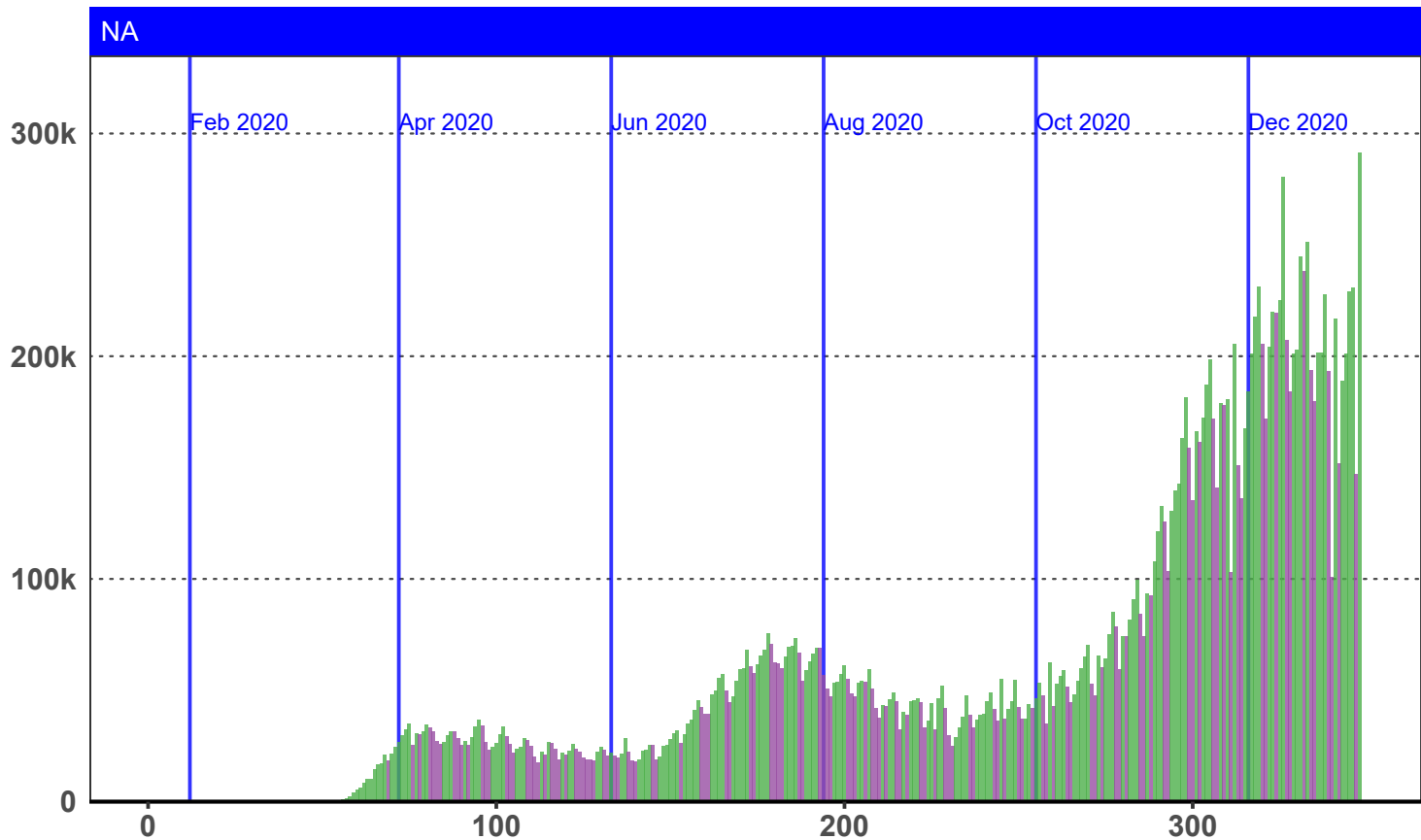# 2009 H1N1 cumulative cases by day vs Covid-19
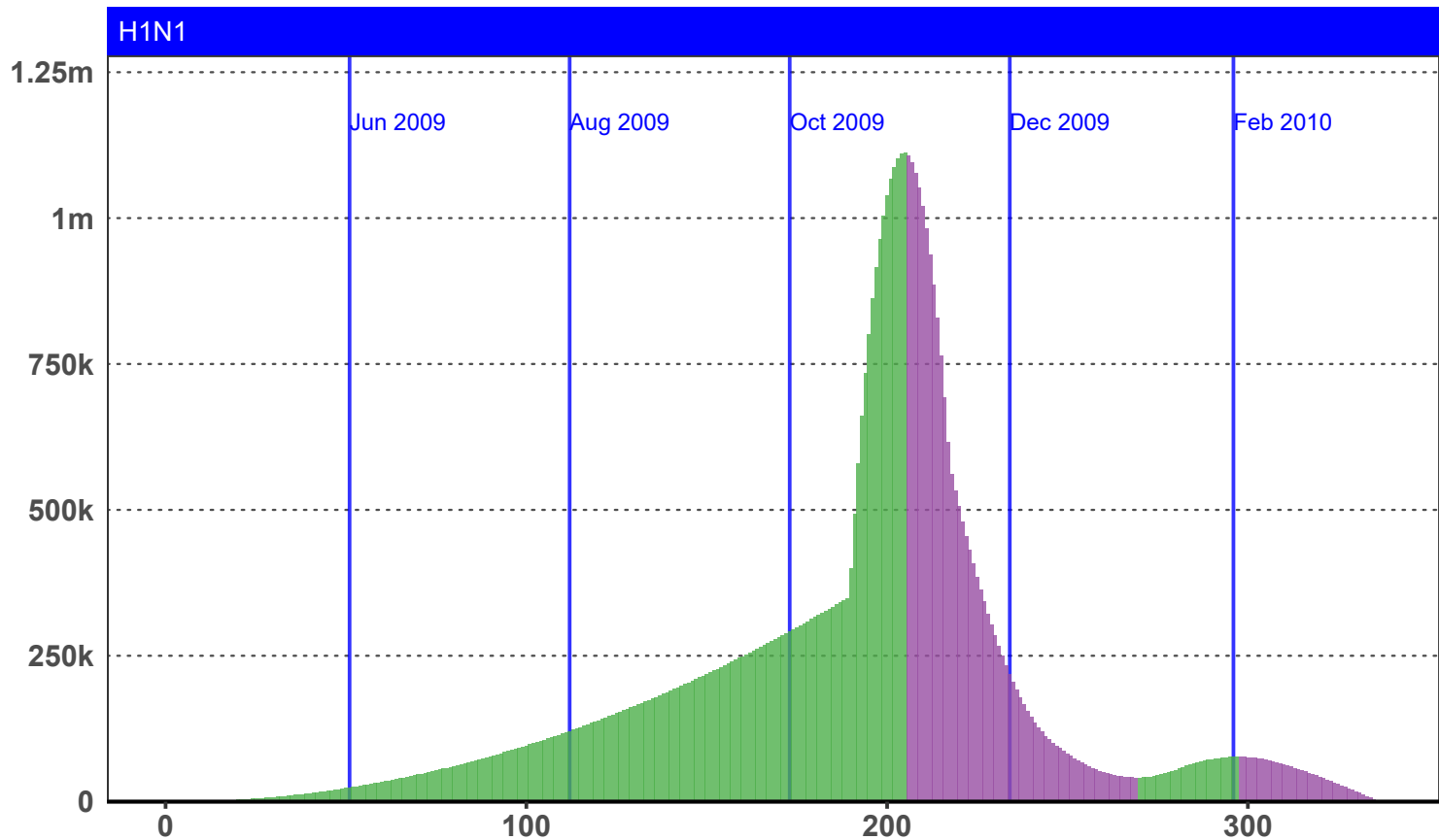
348 days after the first case

H1N1 cases
60,000,000
(mid-range)

COVID19 cases
20,464,767

2009 H1N1 estimated deaths by day vs Covid-19 deaths

348 days after the first case

COVID19 deaths
350,330

H1N1 deaths
12,270
(mid-range)

2009 H1N1 estimated deaths by day vs Covid-19 deaths

348 days after the first case

2009 H1N1 new cases by day vs Covid-19 cases

336 days after the first case
Vertical blue lines are for reference and placed every two months
after the frst case for each pandemic

Change Type ■ Decreased ■ Increased ■ Unchanged ■ Other

2009 H1N1 new deaths by day vs Covid-19 deaths

Vertical blue lines are for reference and placed every two months
  after the frst case for each pandemic

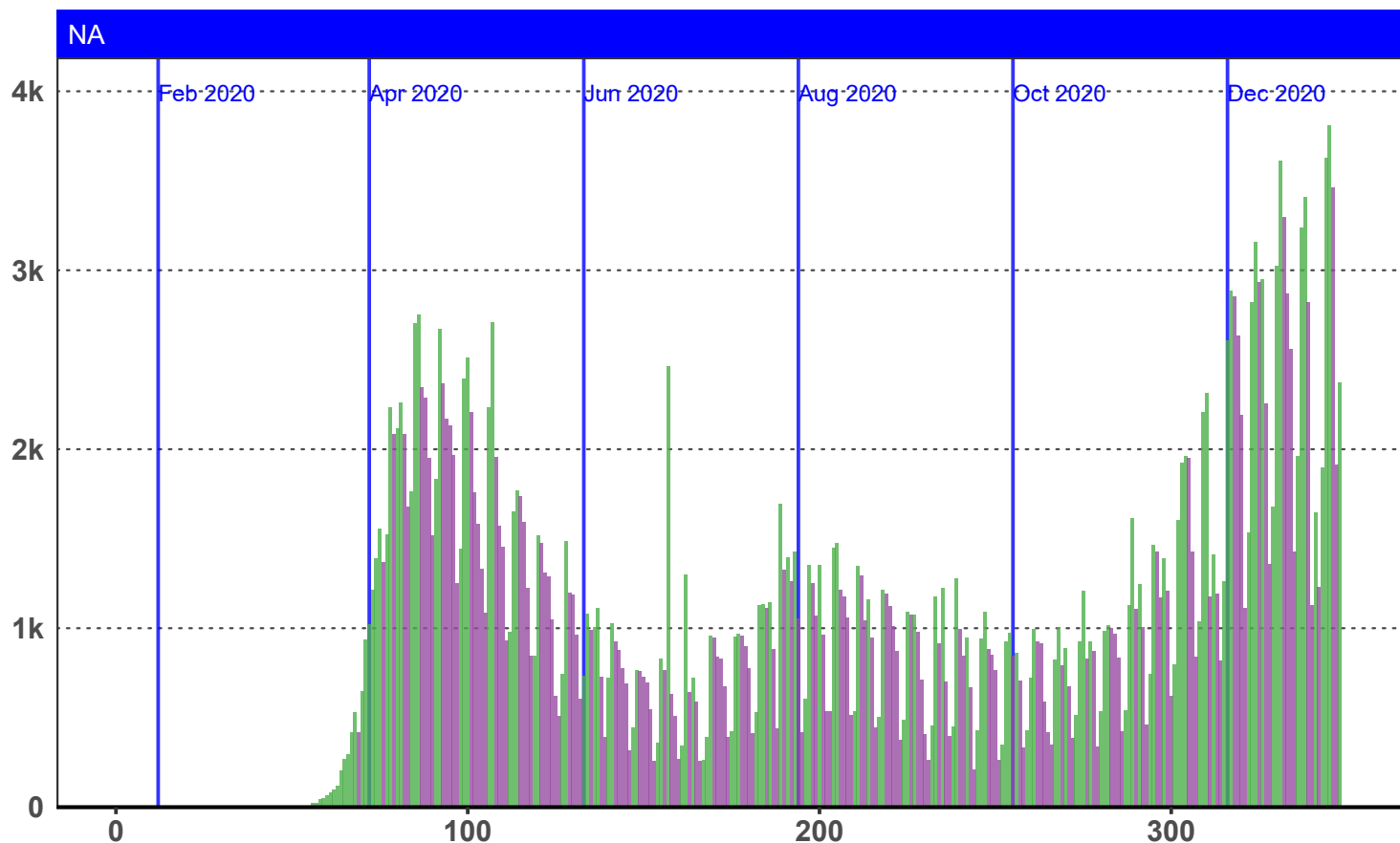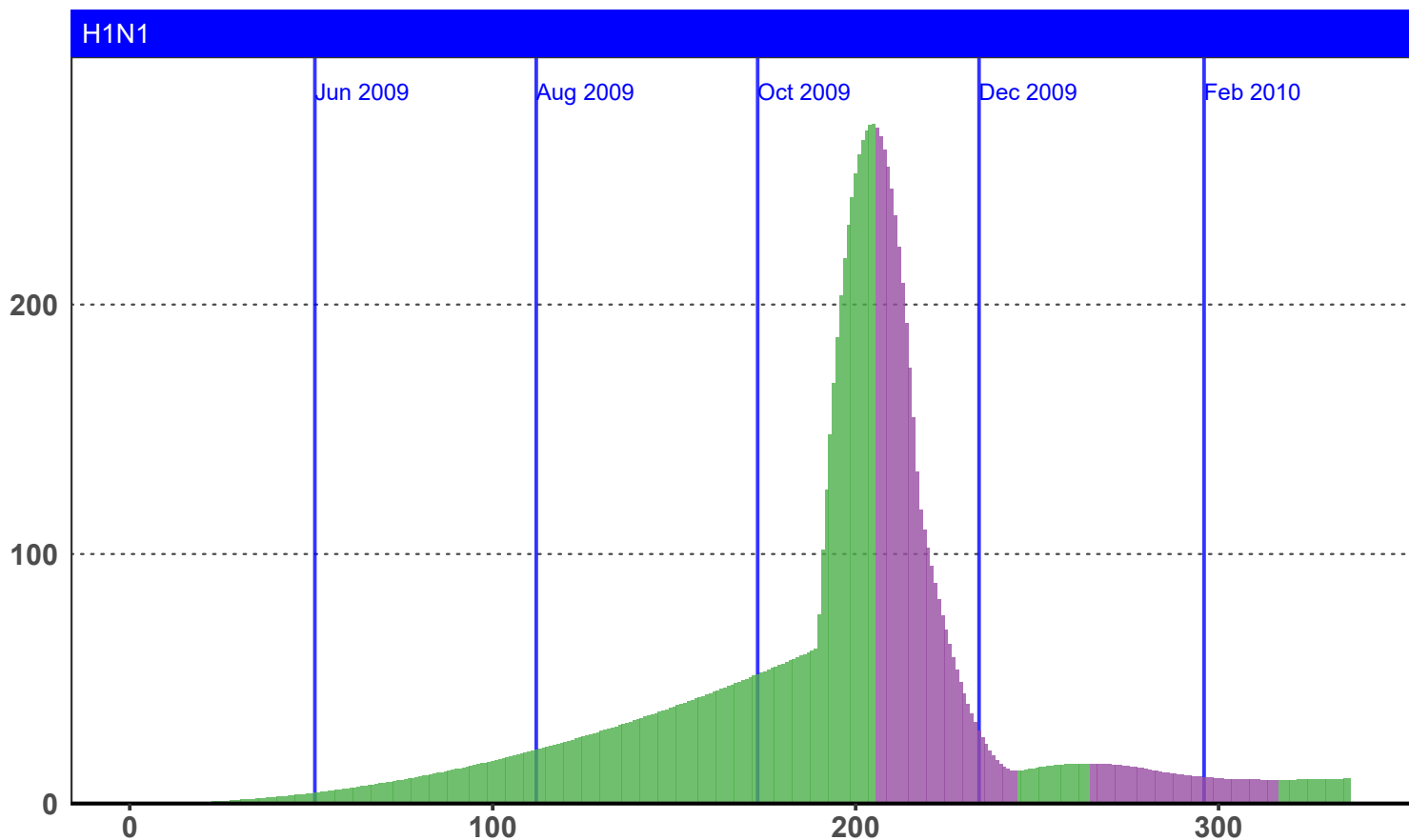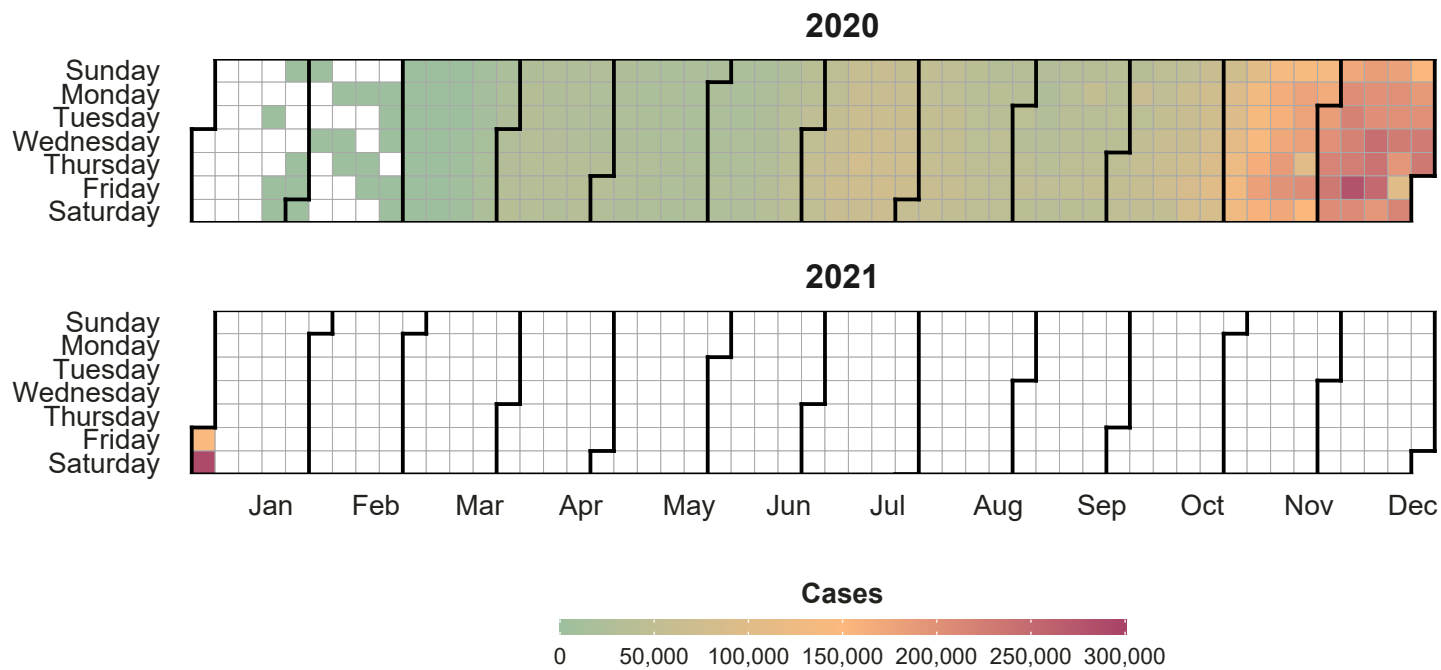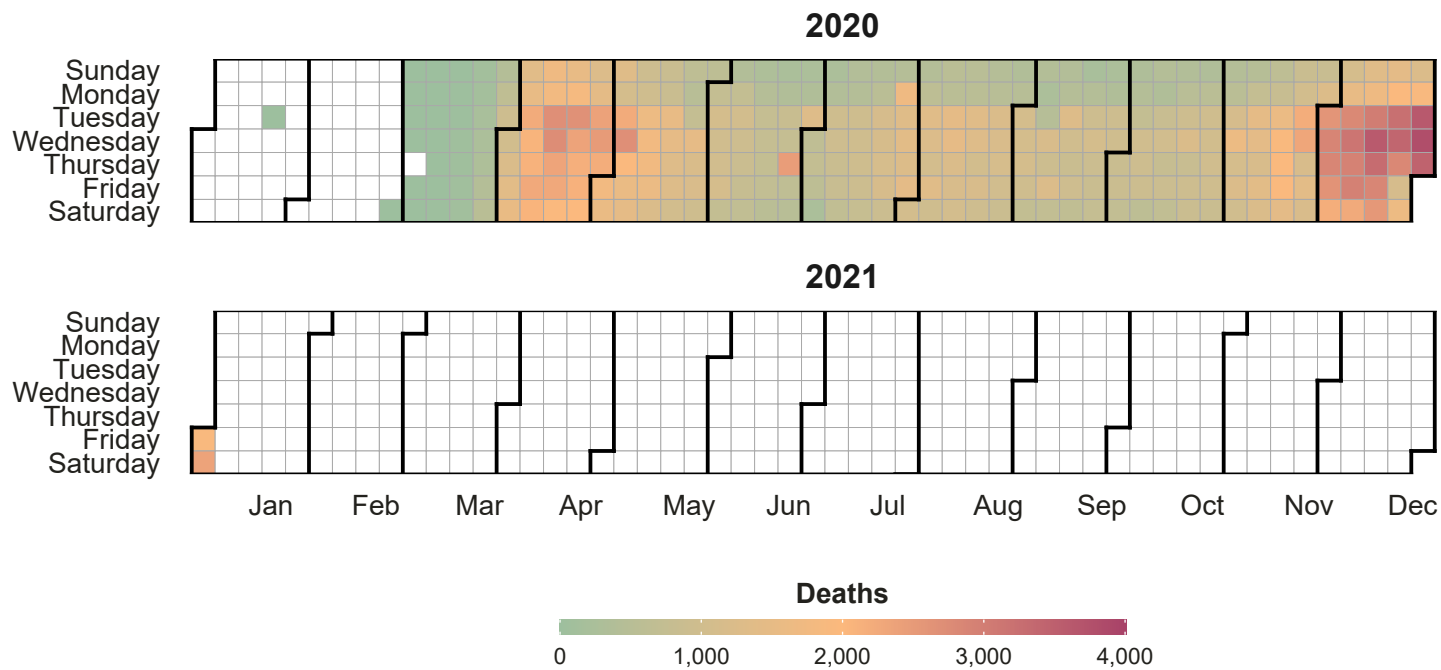Change Type ■ Decreased ■ Increased ■ Unchanged ■ Other

Sources: The New York Times, https://github.com/nytimes/covid-19-data accessed 2021-01-03 (Covid19);
https://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm (H1N1)

COVID-19 Cases in the US

2020

2021

Cases

0   50,000   100,000   150,000   200,000   250,000   300,000

COVID-19 Deaths in the US

2020

2021

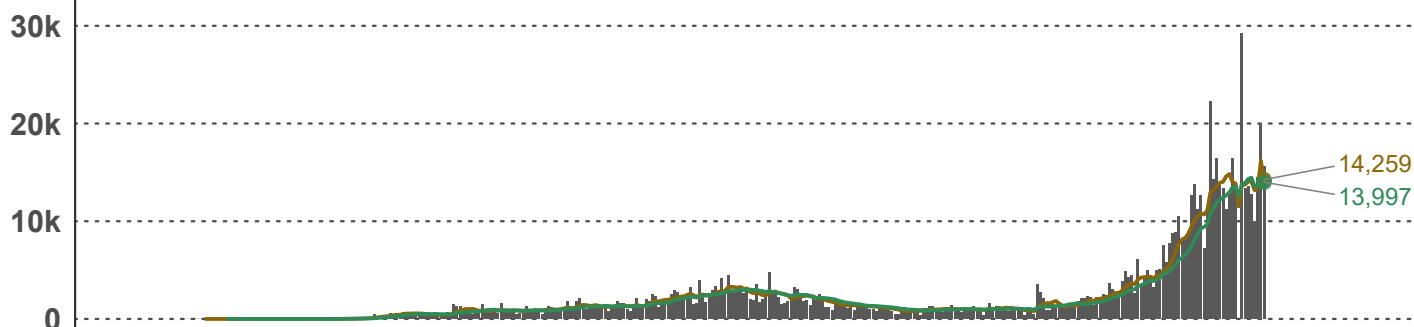
Deaths

0   1,000   2,000   3,000   4,000

Rates by Counties

New cases, 7 and 14 days rolling average

variable   ●— rollingMean07Day   ●— rollingMean14Day

Sources: The New York Times, https://github.com/nytimes/covid-19-data accessed 2021-01-03 (Covid19)
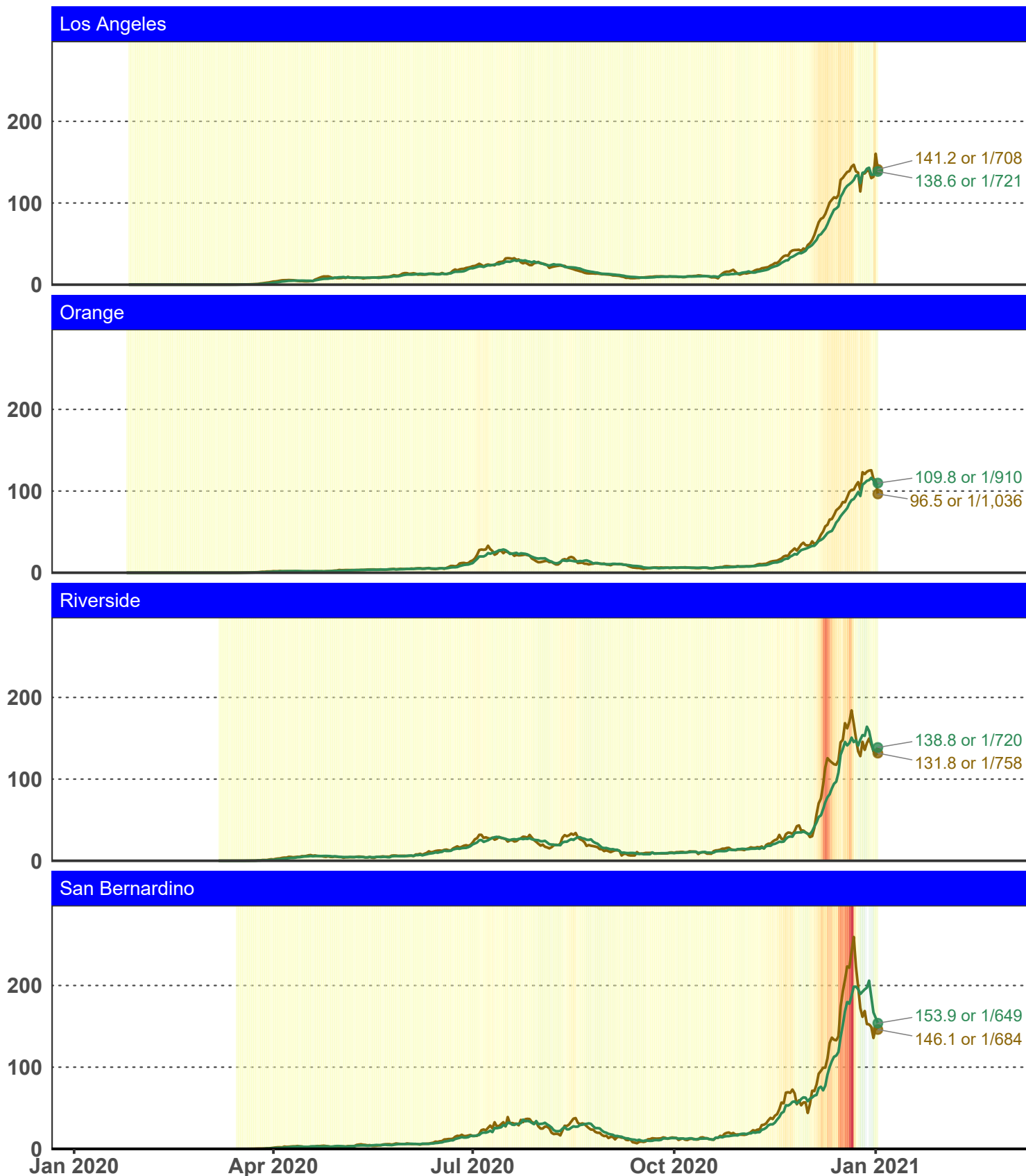
Rates by Counties by 100K population

New cases, 7 and 14 days rolling average

Difference between
7 and 14 days rolling average

-30 0 30 60

Rolling Average ● 7-day ● 14-day

Los Angeles

200

100

0

141.2 or 1/708
138.6 or 1/721

Orange

200

100

0

109.8 or 1/910
96.5 or 1/1,036

Riverside

200

100

0

138.8 or 1/720
131.8 or 1/758

San Bernardino

200

100

0

153.9 or 1/649
146.1 or 1/684
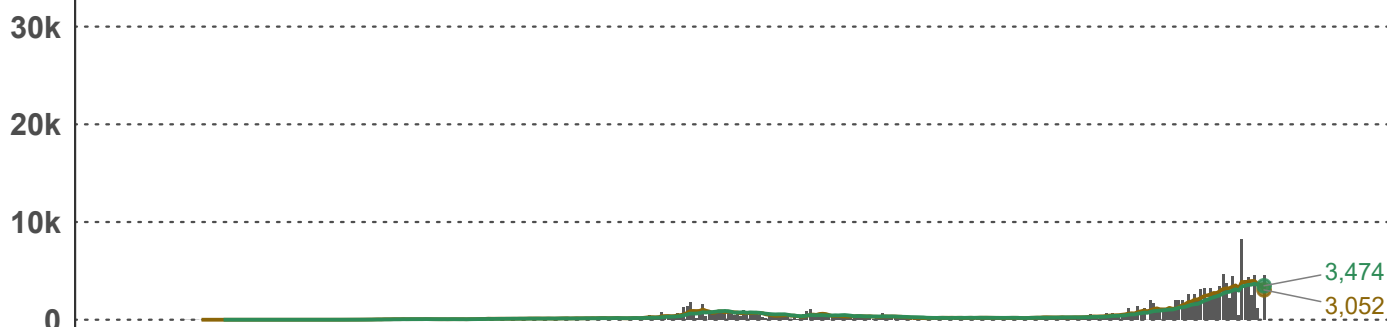
Jan 2020   Apr 2020   Jul 2020   Oct 2020   Jan 2021

Sources: The New York Times, https://github.com/nytimes/covid-19-data accessed 2021-01-03 (Covid19)
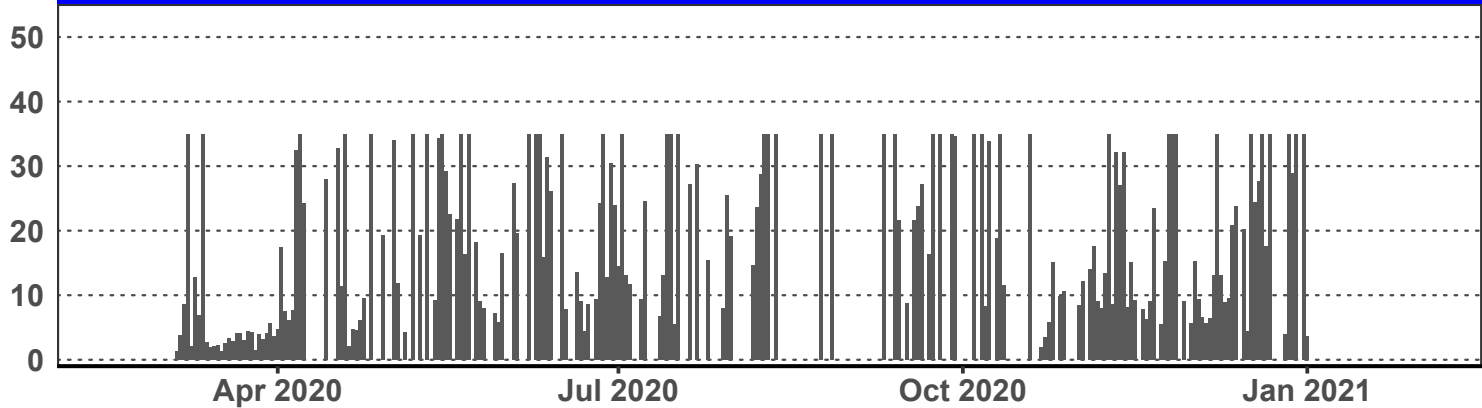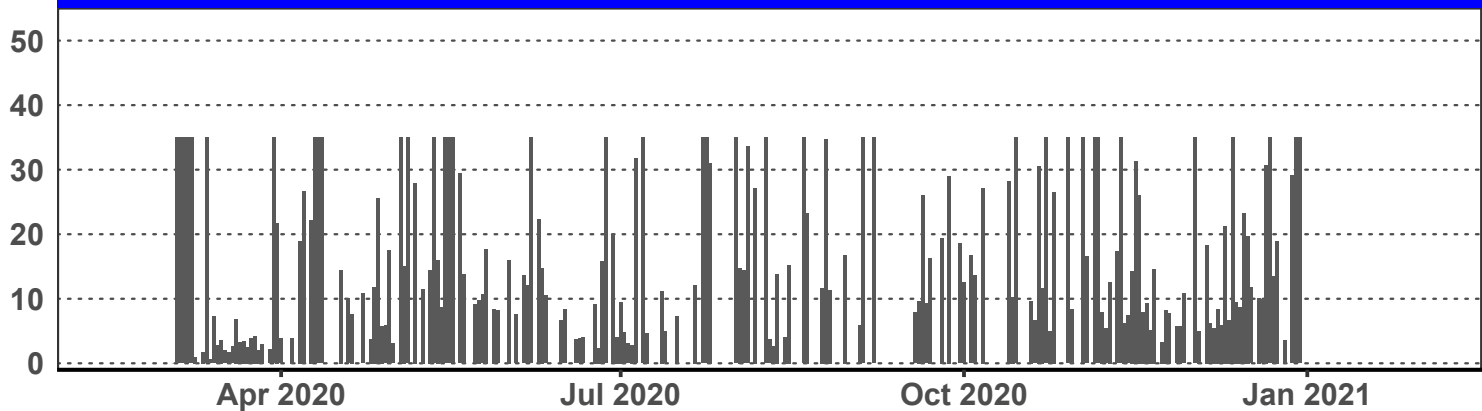
Days to double the number of cases

based on seven day rolling average of new cases,
for counts increase only, if the counts double in more
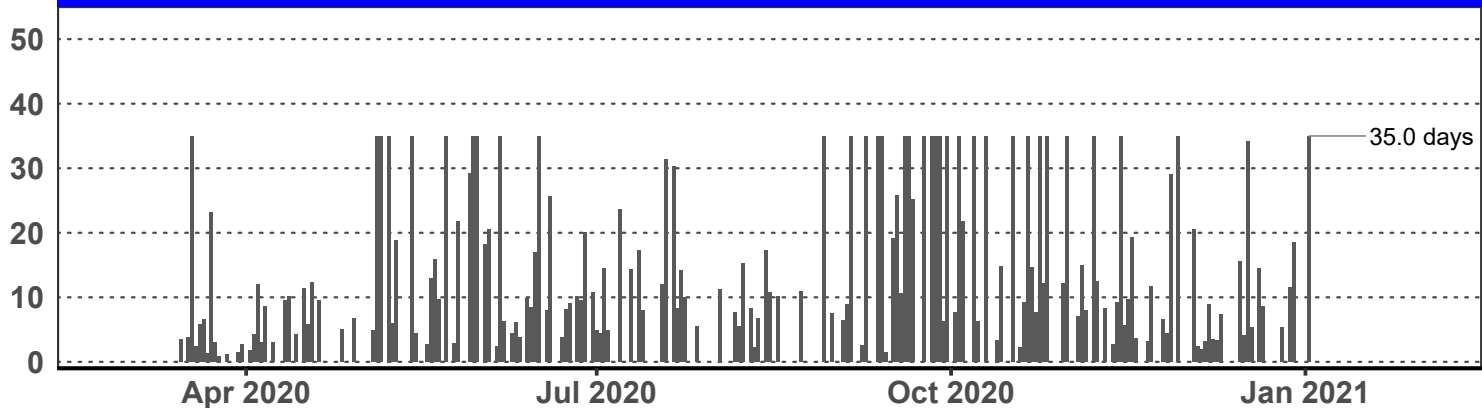than 35 days they show as 35 days.

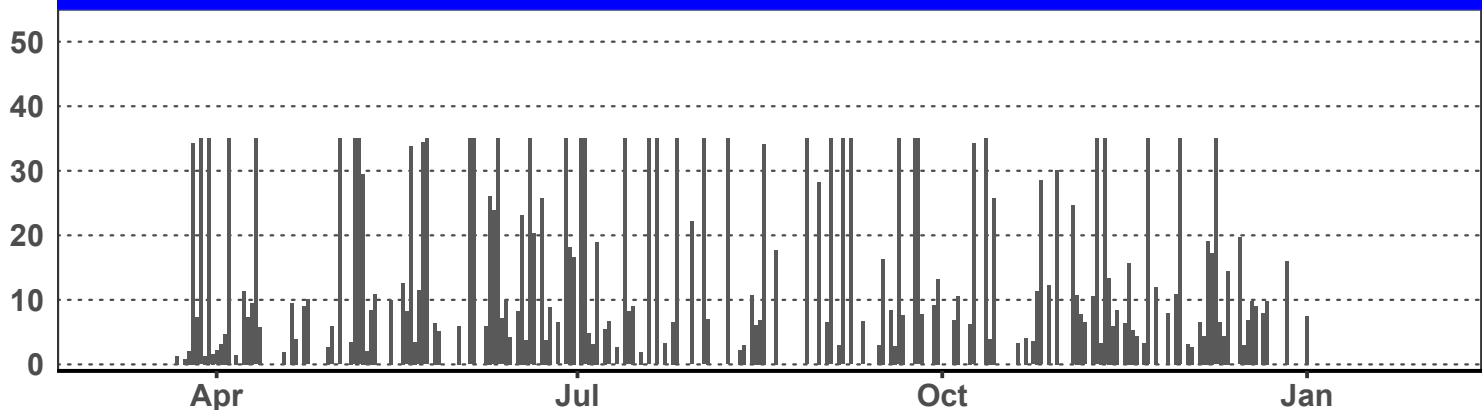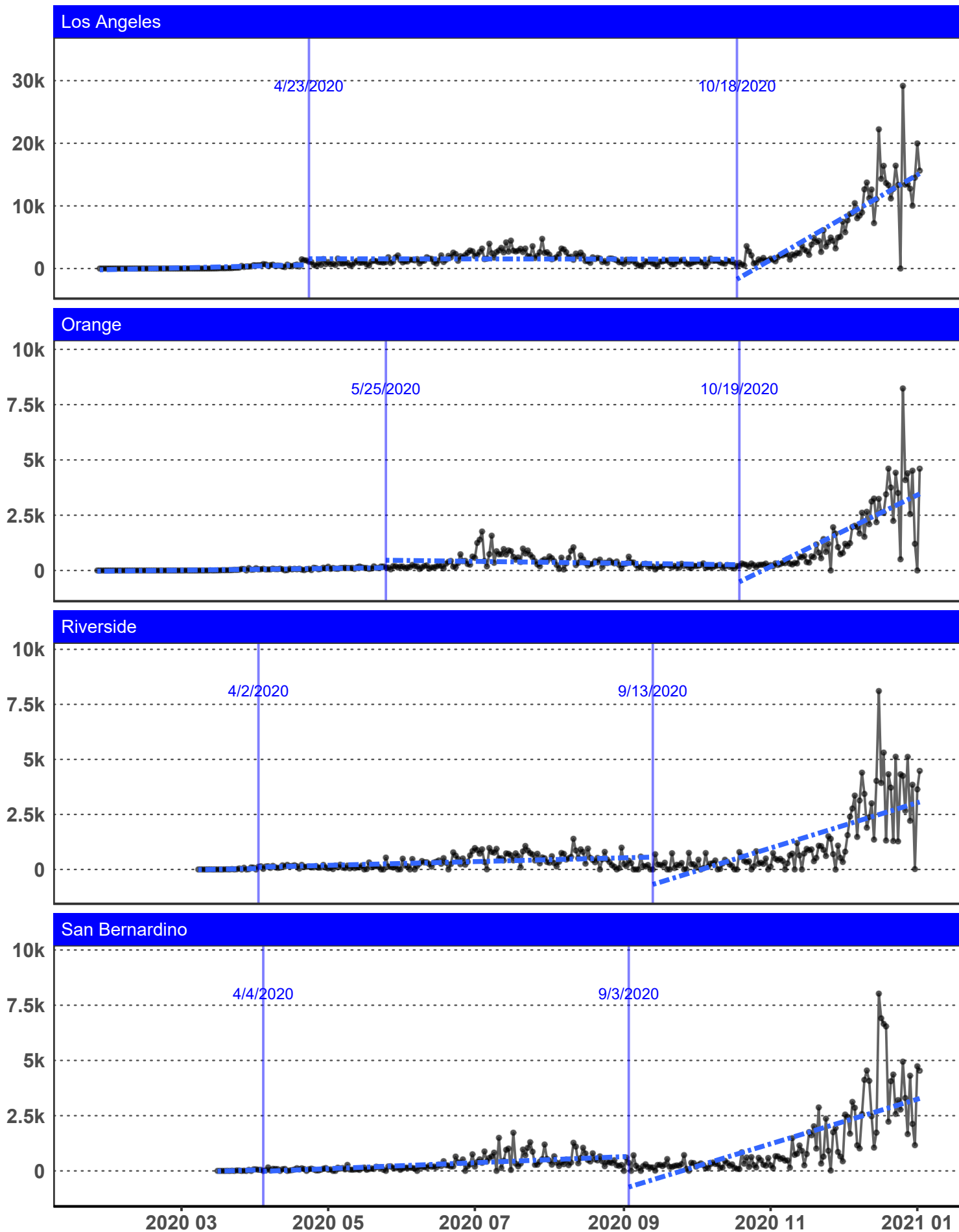Sources: The New York Times, https://github.com/nytimes/covid-19-data accessed 2021-01-03 (Covid19)

Structural change analysis of daily cases
blue lines with dates reflect when there was a break in the trend for each county

COVID-19 Reported Patient Impact and Hospital Capacity by Facility

For Los Angeles, Orange, Riverside and San Bernardino Counties
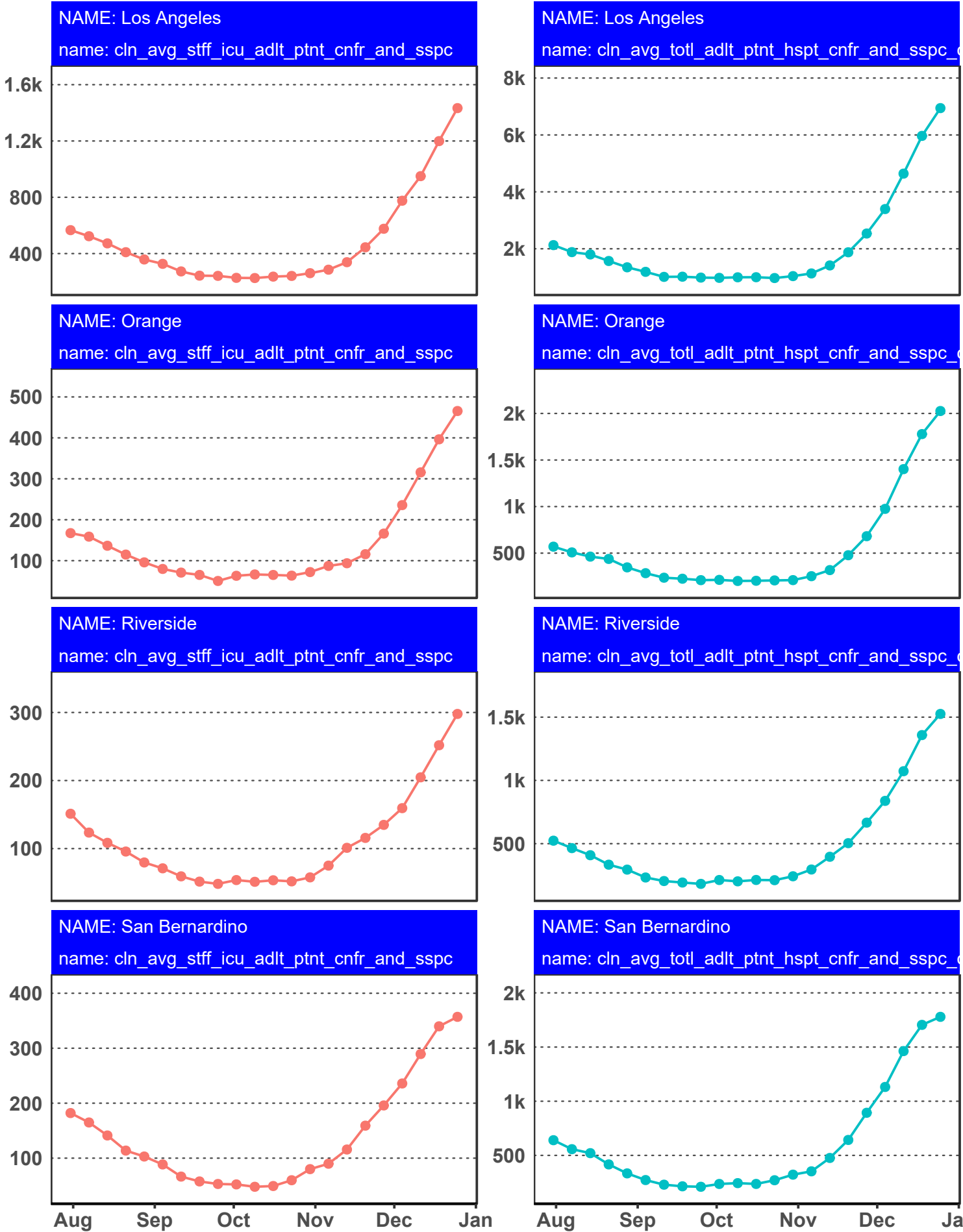
Cummulative cases per 1k persons by state region

the four highest states by region are highlighted

Northeast

RI 83.2 or 1/12

MA 56.2 or 1/18
NJ 55.2 or 1/18
CT 53.1 or 1/19

South

TN 88.6 or 3/34
AR 77.4 or 1/13
AL 75.9 or 1/13
OK 75.6 or 4/53

North Central

ND 123.5 or 1/8
SD 115.5 or 1/8

IA 90.6 or 1/11
WI 90.6 or 1/11

West

UT 92.5 or 5/54
ID 84.3 or 1/12
MT 78.7 or 3/38
NV 78.6 or 3/38

7-day rolling average of daily cases per 100k persons by state region

the four highest states by region are highlighted

Northeast

RI 79.5 or 1/1,257
MA 72.3 or 1/1,382
CT 69.3 or 1/1,442
NY 66.8 or 1/1,496

South

TN 92.7 or 1/1,078
AR 83.5 or 1/1,198
AL 76.4 or 1/1,309
GA 76.2 or 1/1,311

North Central

KS 84.8 or 1/1,179
IN 66.9 or 1/1,494
OH 61.4 or 1/1,629
NE 52.4 or 1/1,908

West

CA 97.9 or 1/1,021
AZ 94.4 or 1/1,059
UT 82.9 or 1/1,206
NV 64.9 or 1/1,541

Sources: The New York Times, https://github.com/nytimes/covid-19-data accessed 2021-01-03 (Covid19)
U.S. Census Bureau; American Community Survey, 2014-2018 5-year Estimates,
Table B01003_001 TOTAL POPULATION; generated with tidycensus R package.

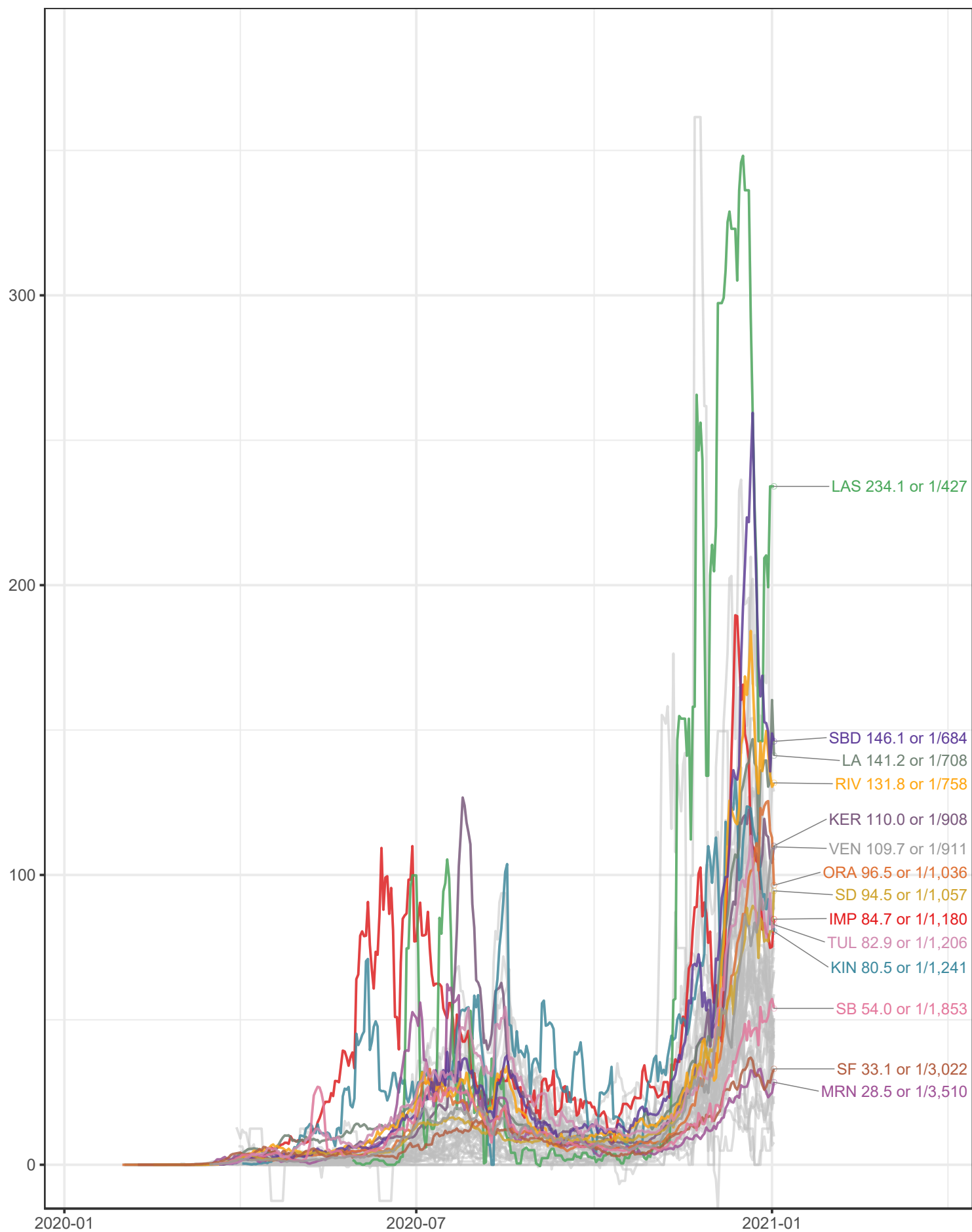# Cummulative cases per 1k persons for California counties
selected counties highlighted

LAS 150.4 or 1/7
IMP 126.0 or 1/8
KIN 109.2 or 1/9
SBD 95.4 or 2/21
LA 79.9 or 2/25
KER 79.7 or 2/25
RIV 79.2 or 2/25
TUL 73.8 or 2/27
ORA 54.0 or 2/37
SD 49.8 or 1/20
VEN 49.6 or 1/20
SB 40.0 or 1/25
MRN 38.5 or 1/26
SF 27.8 or 1/36

7-day rolling average of daily cases per 100k persons by California counties
selected counties highlighted

LAS 234.1 or 1/427

SBD 146.1 or 1/684
LA 141.2 or 1/708
RIV 131.8 or 1/758
KER 110.0 or 1/908
VEN 109.7 or 1/911
ORA 96.5 or 1/1,036
SD 94.5 or 1/1,057
IMP 84.7 or 1/1,180
TUL 82.9 or 1/1,206
KIN 80.5 or 1/1,241
SB 54.0 or 1/1,853
SF 33.1 or 1/3,022
MRN 28.5 or 1/3,510