

# COVID-19 Report

Carlos Delgado Salas

**Report Date: March 31 2021**

**You can contact me here!**

## **Datasets**

This document shows visualizations of the rate of infection of COVID 19 in different places. This document was put together on 2021-03-31. The data sources come from github repositories of:

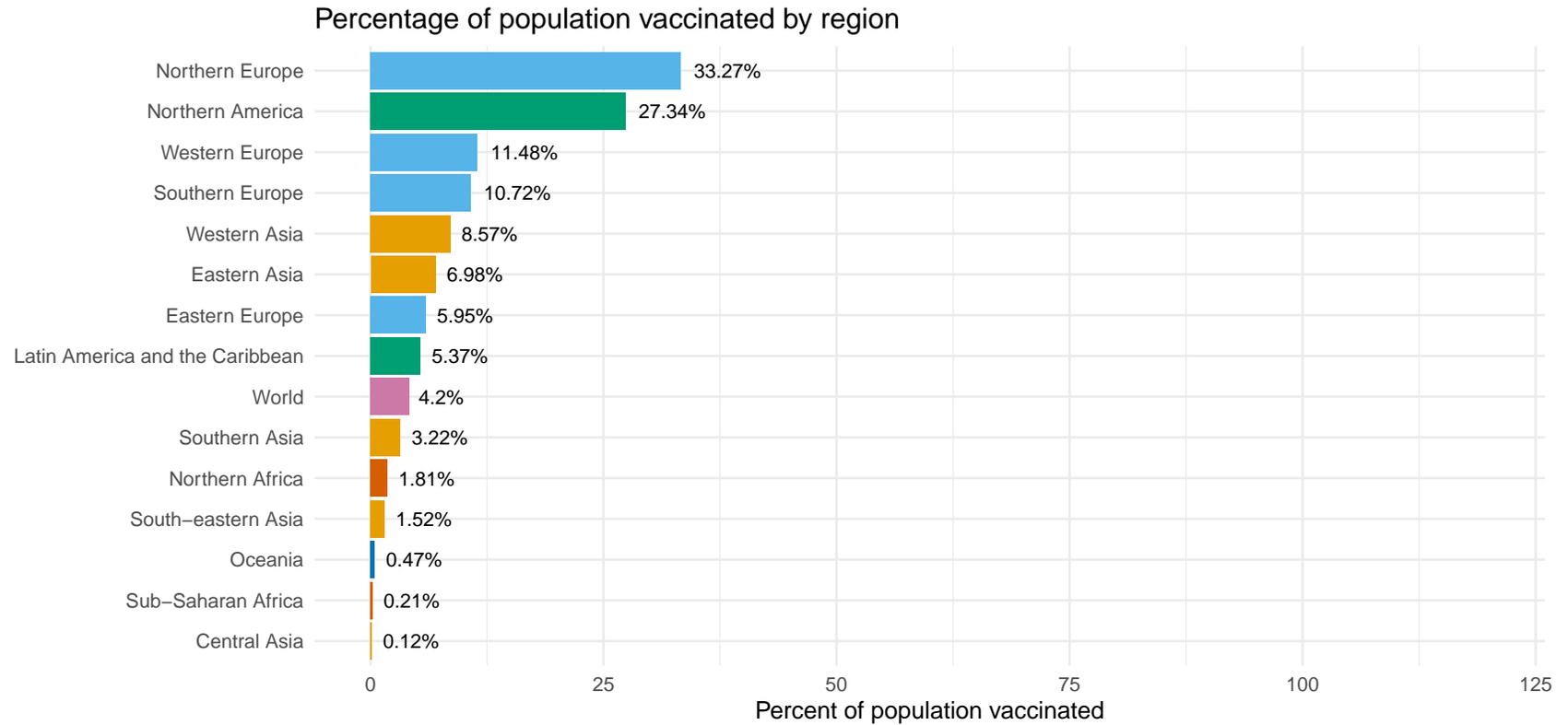
- Johns Hopkins CSSE
- CovidTracking.com by The Atlantic
- New York Times
- Our World in Data

*All graphs have been converted to colorblind friendly palette (thaks for the feedback!)*

# Vaccination

## Percent of the population vaccinated by Regions

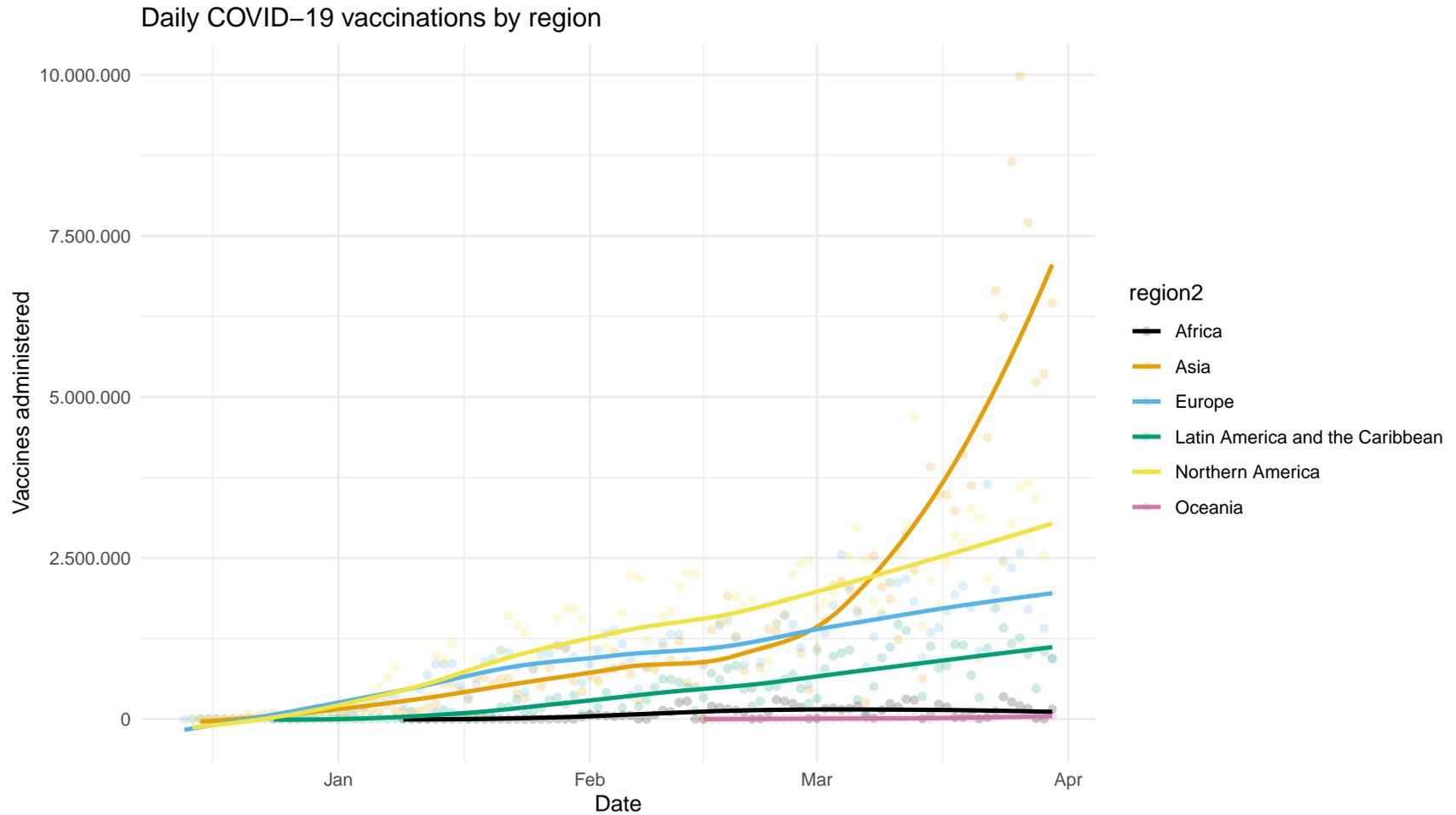
Total COVID-19 vaccines administered in the world by population. Each region has latest available data.



Source: Our World in Data  
Author: Carlos Delgado Salas

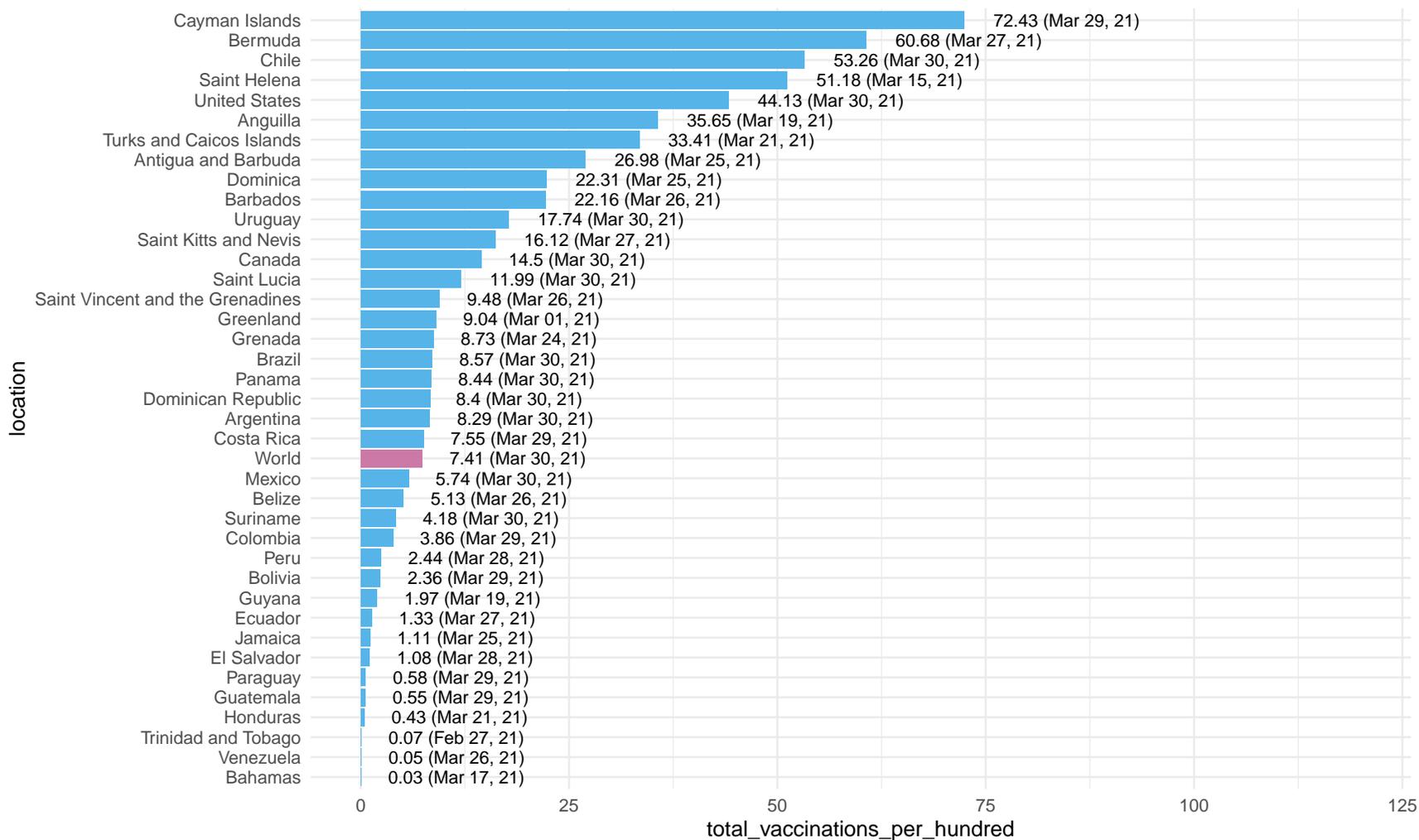
## Daily vaccination by Regions

Total COVID-19 vaccines administered daily in the world by region. A loess model is fitted to get the average vaccination by region.

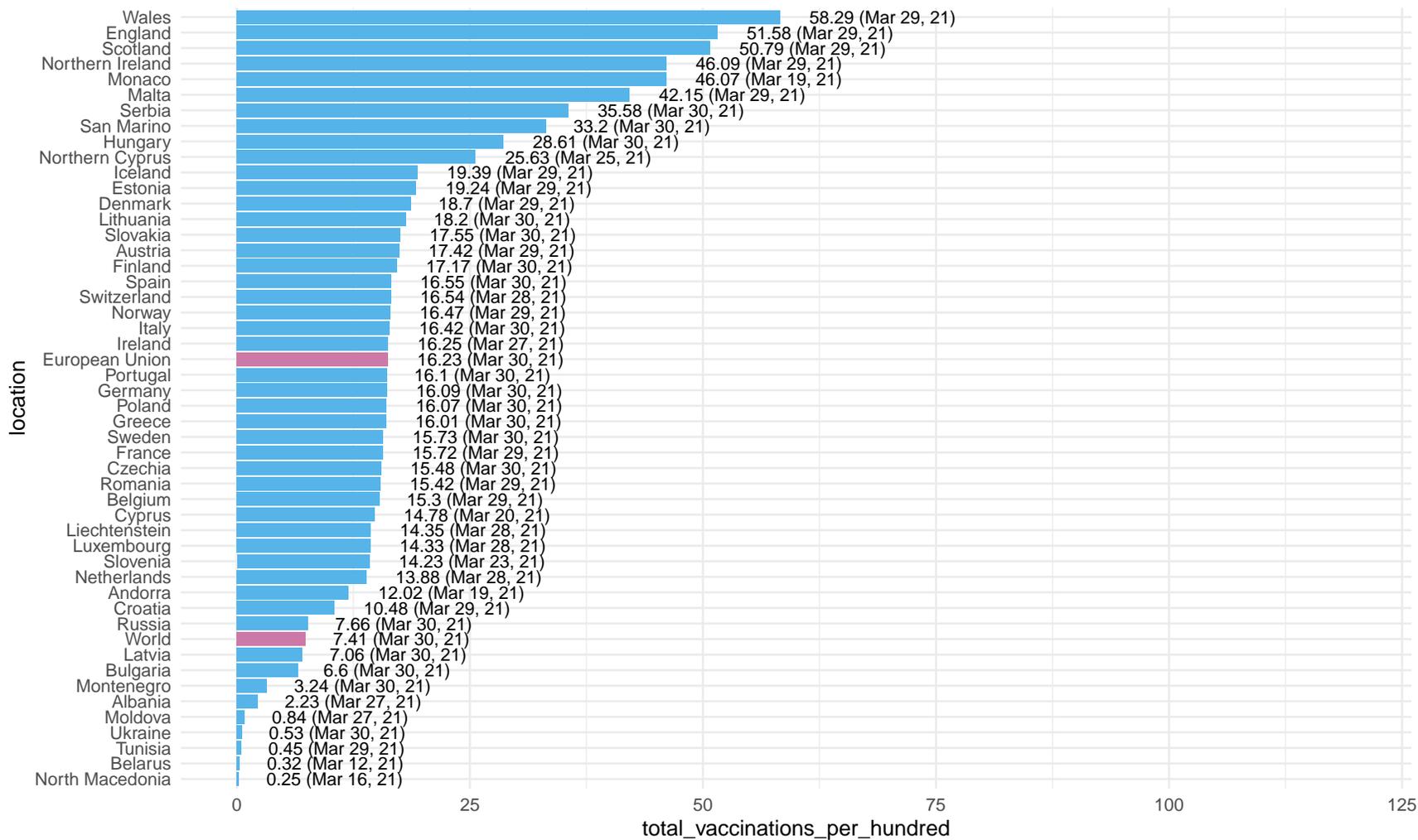


Source: Our World in Data  
Author: Carlos Delgado Salas

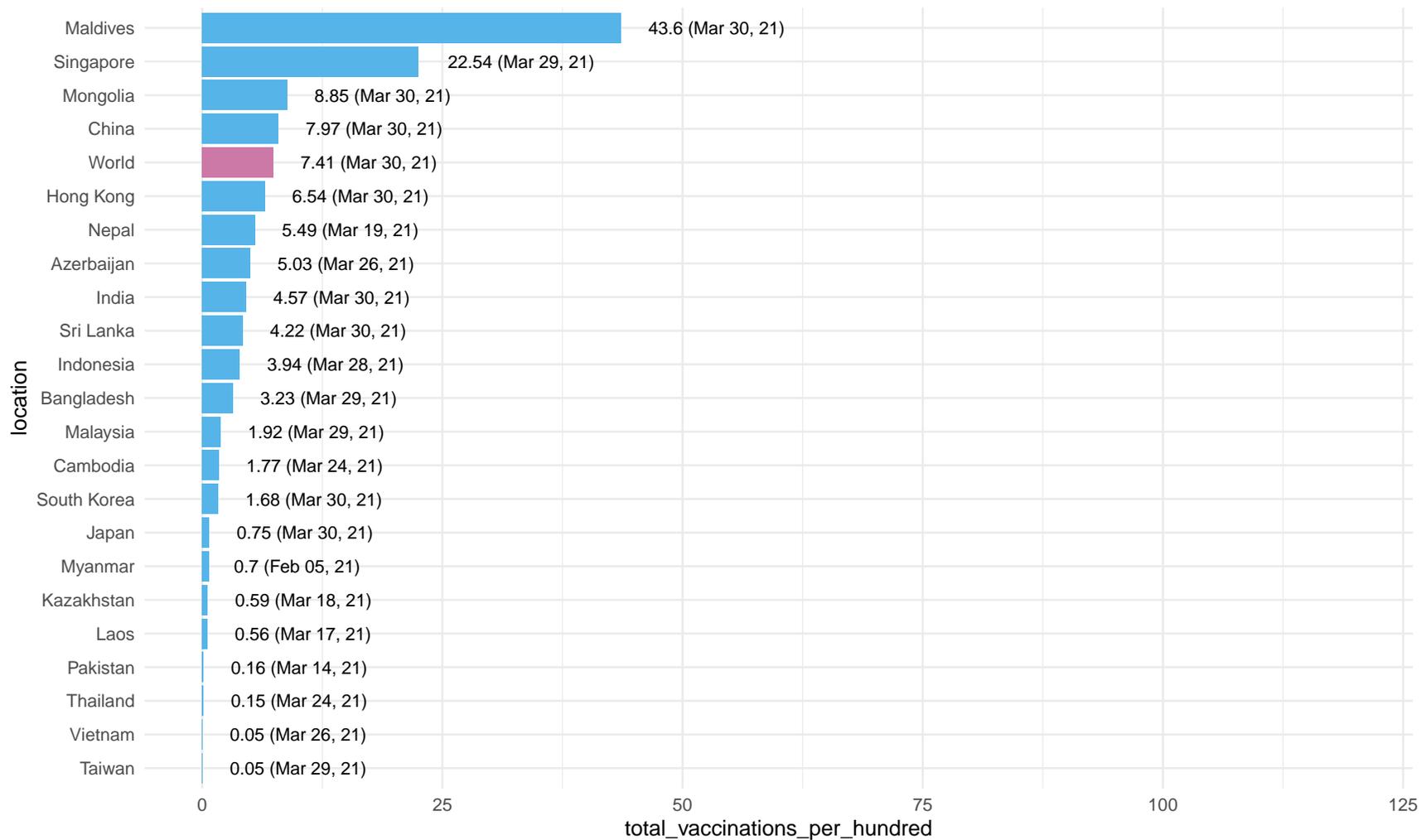
Total COVID-19 vaccines administered in the world by country in North America, Latin America and Caribbean. Each country has latest available data.



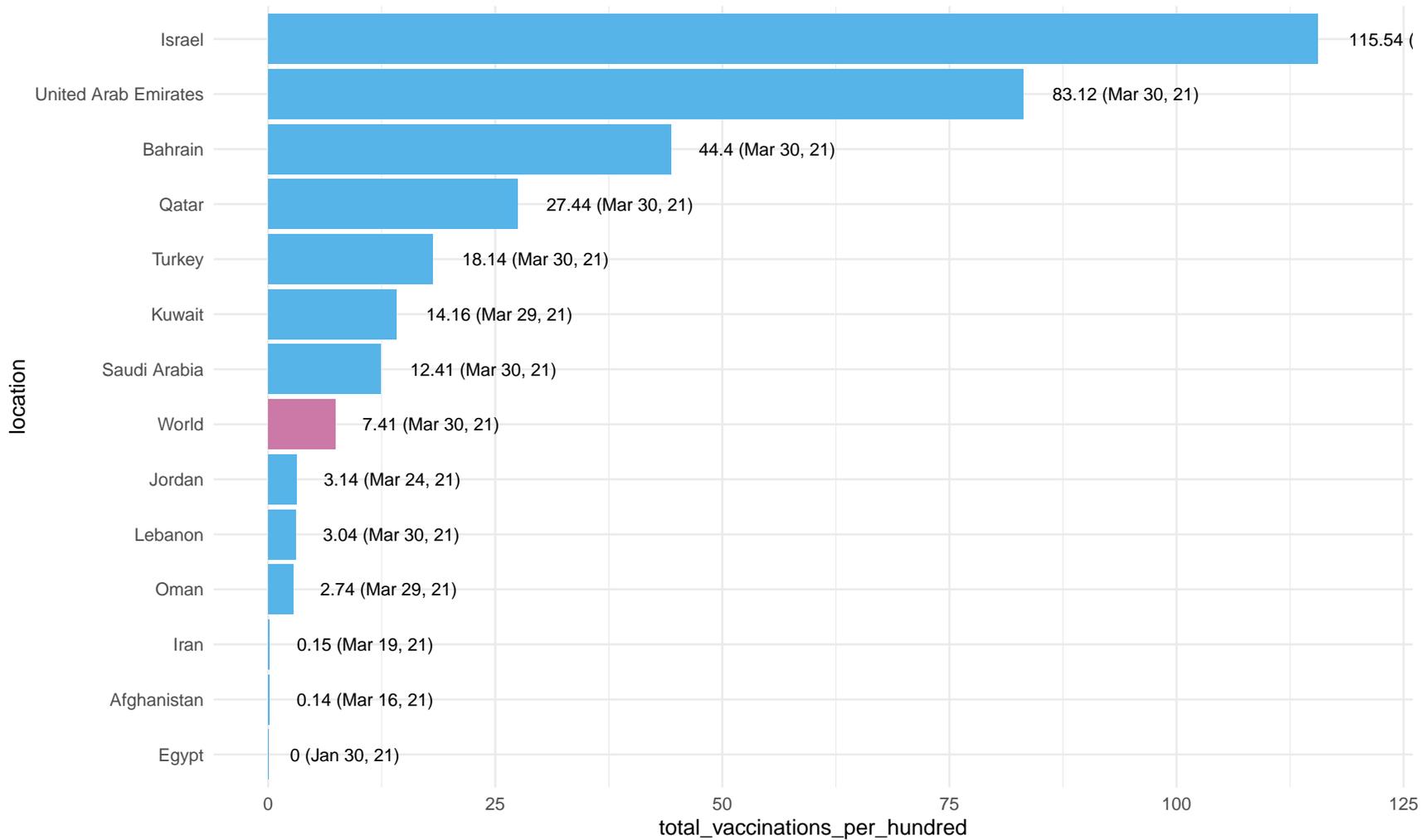
Total COVID-19 vaccines administered in the world by country in Europe. Each country has latest available data.



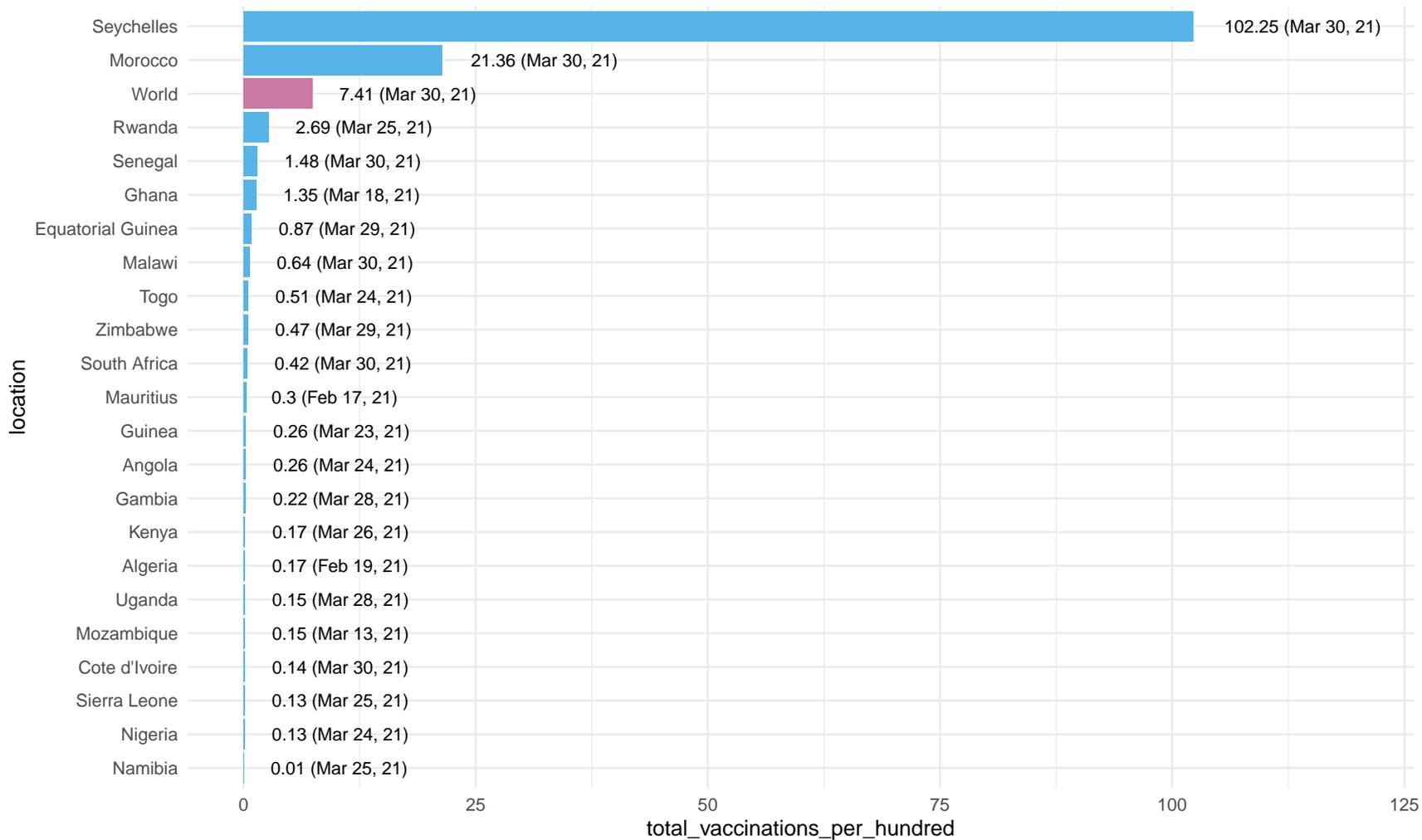
Total COVID-19 vaccines administered in the world by country in Asia. Each country has latest available data.



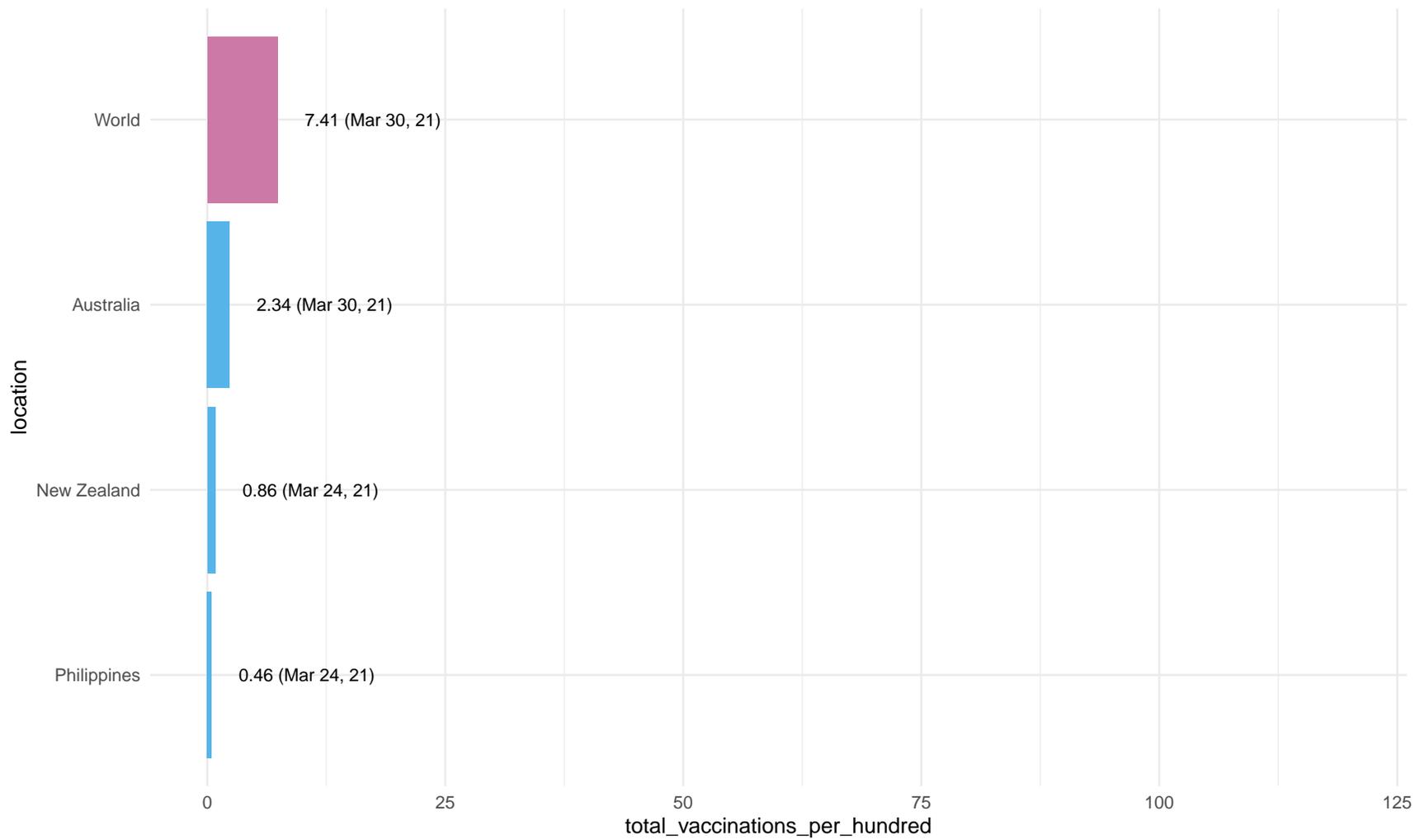
Total COVID-19 vaccines administered in the world by country in Middle East. Each country has latest available data.



Total COVID-19 vaccines administered in the world by country in Africa. Each country has latest available data.

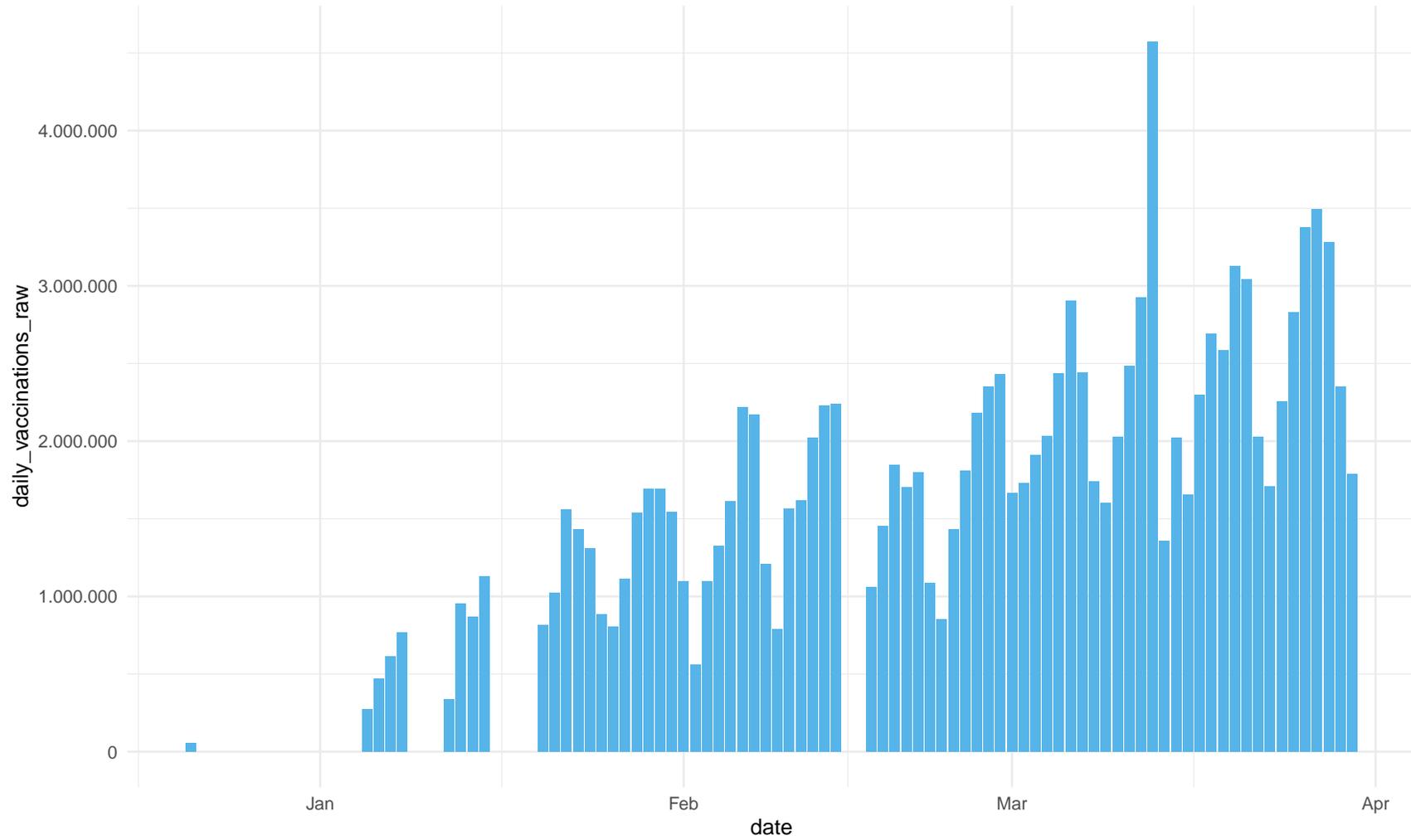


Total COVID-19 vaccines administered in the world by country in Oceania. Each country has latest available data.



## Vaccination evolution in the US

Total COVID-19 vaccines administered in the United States by date.



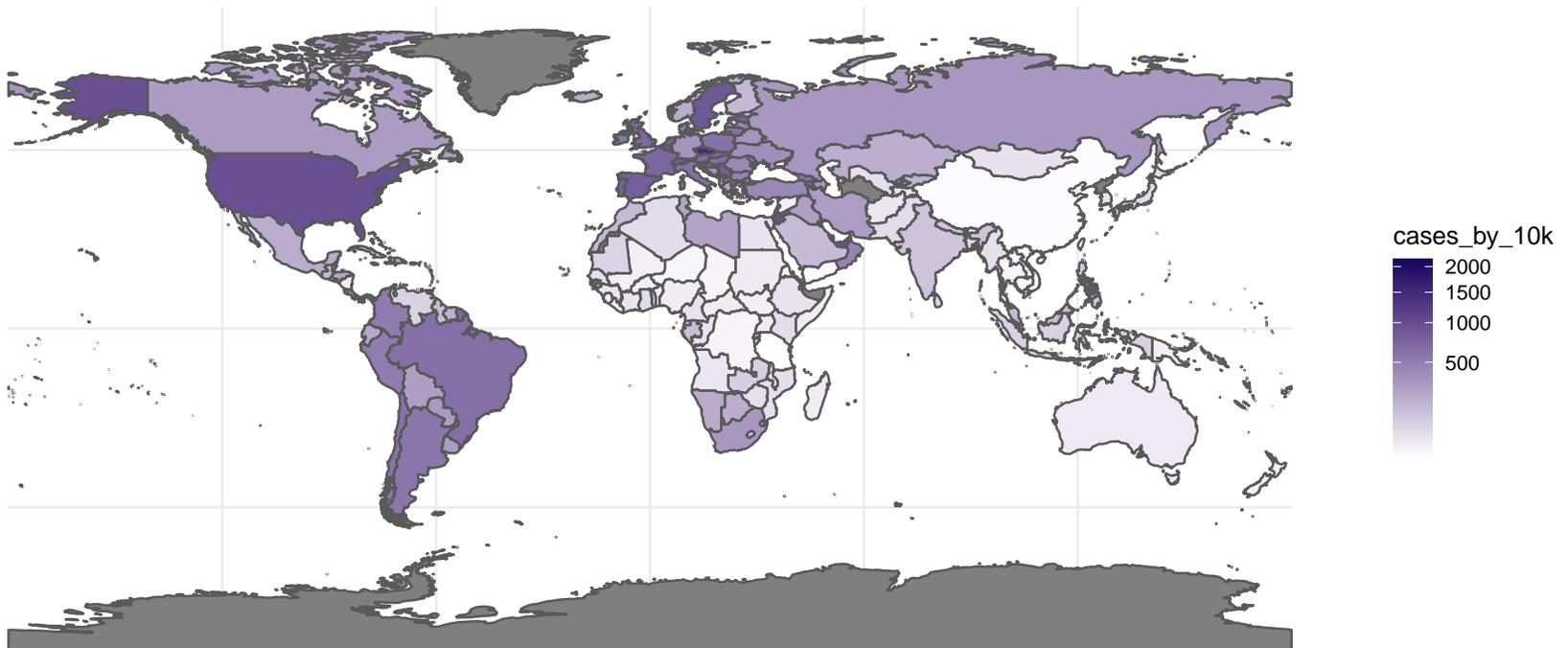
## Plots for world

### World

#### Total COVID-19 Cases by 10,000 people as of 2021-03-30

Total cases of infection of COVID-19 in the world.

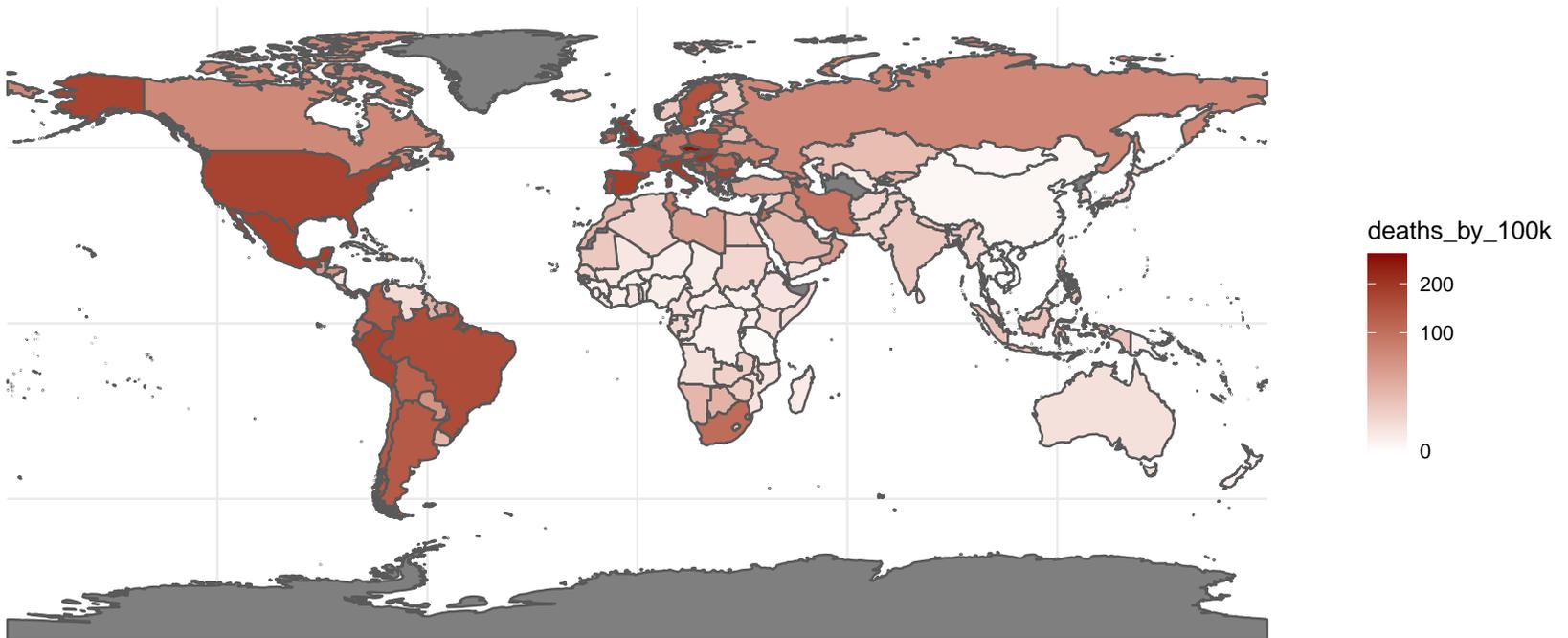
(The map has a square root transformation to make more contrast between countries refer to legend to match number)



### Total COVID-19 Deaths by 100,000 people as of 2021-03-30

Total deaths due to infection of COVID-19 in the world.

(The map has a square root transformation to make more contrast between countries refer to legend to match number)



## Plots for regions

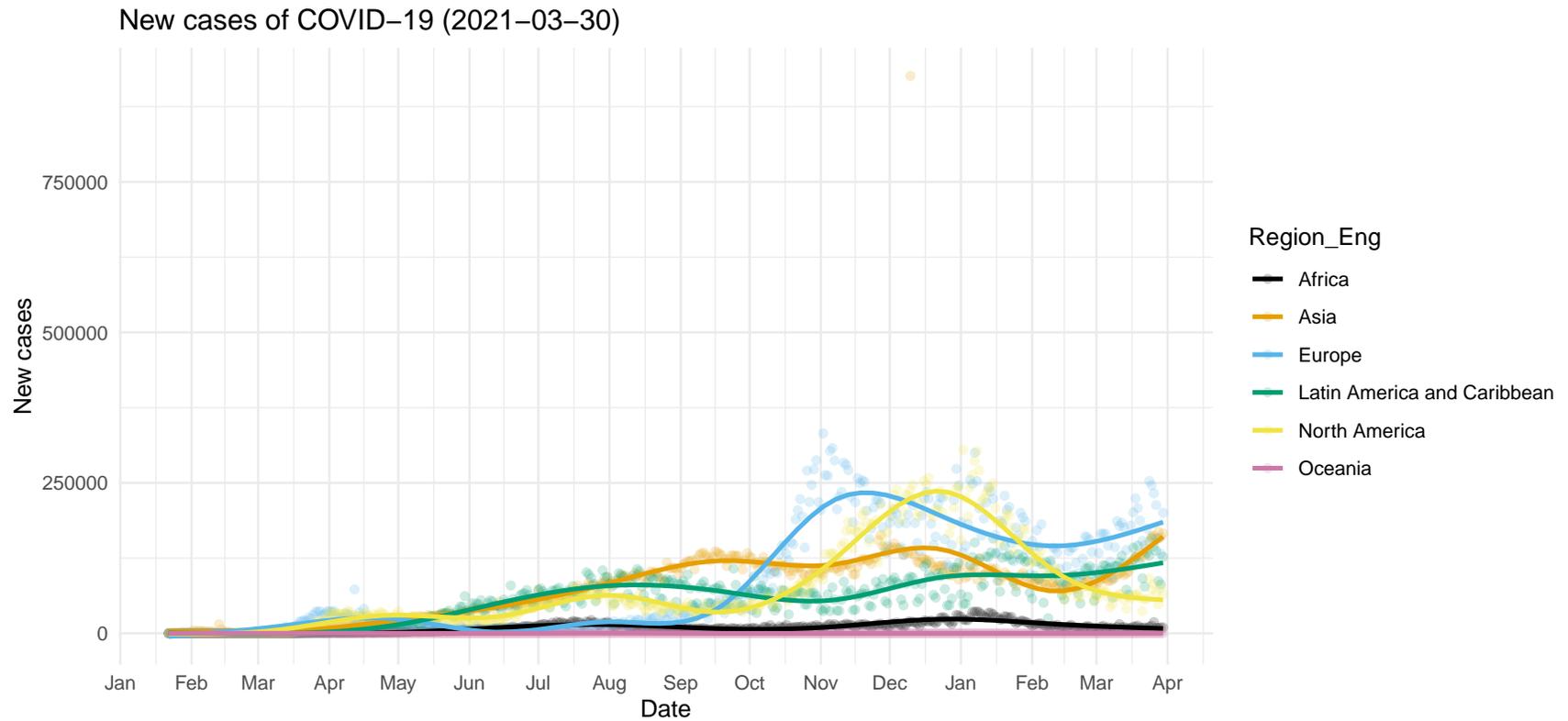
### Regions

#### Cases and Deaths by Region

Total Cases, Deaths and Mortality Rate by region.

Region_Eng	Total Cases	Total Deaths	Mortality Rate
Africa	4205028	112575	2.68
Asia	32078076	513088	1.60
Europe	36004933	828177	2.30
Latin America and Caribbean	24691266	778191	3.15
North America	31373814	573907	1.83
Oceania	37637	995	2.64

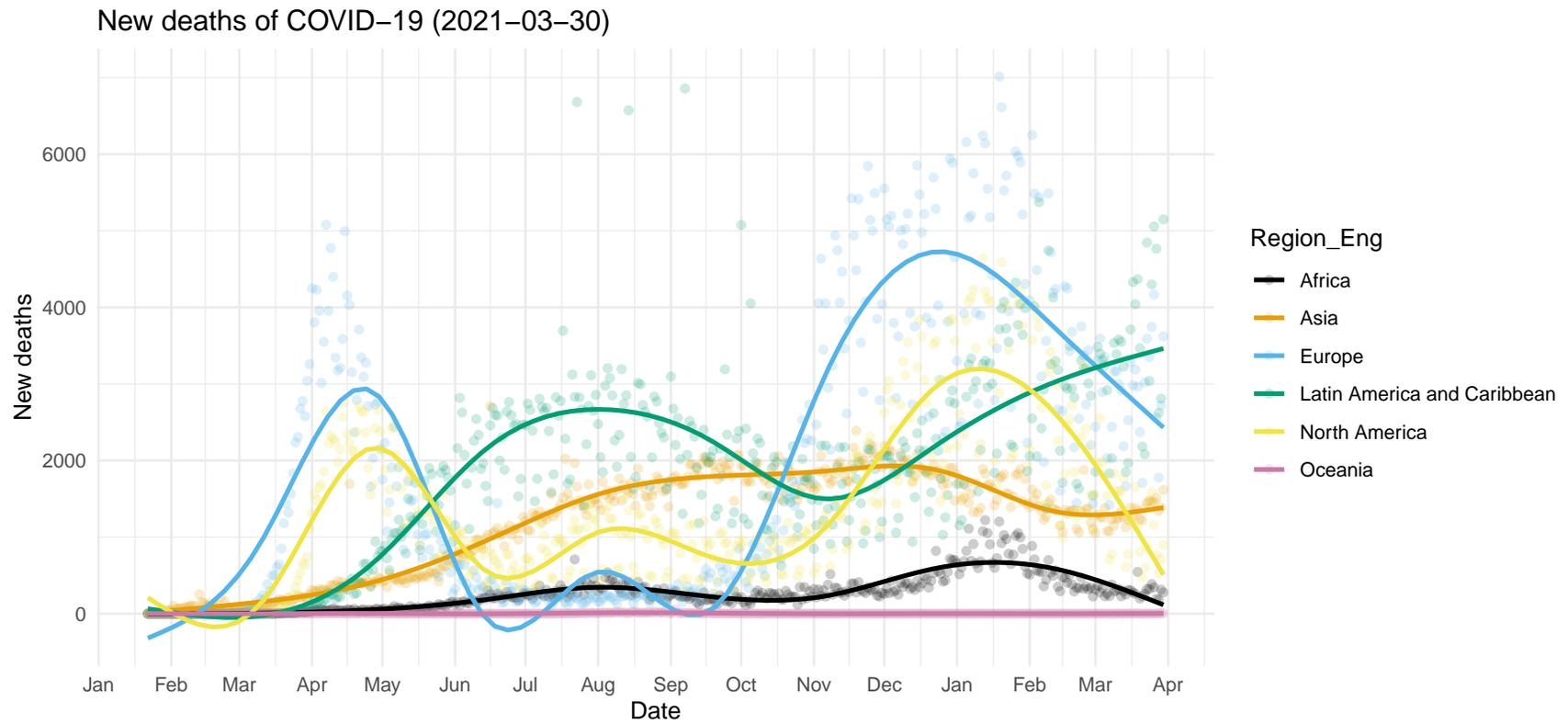
(The amount of new cases per day are shown in points (transparency added) and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Author: Carlos Delgado Salas

New deaths due to COVID-19 in world regions.

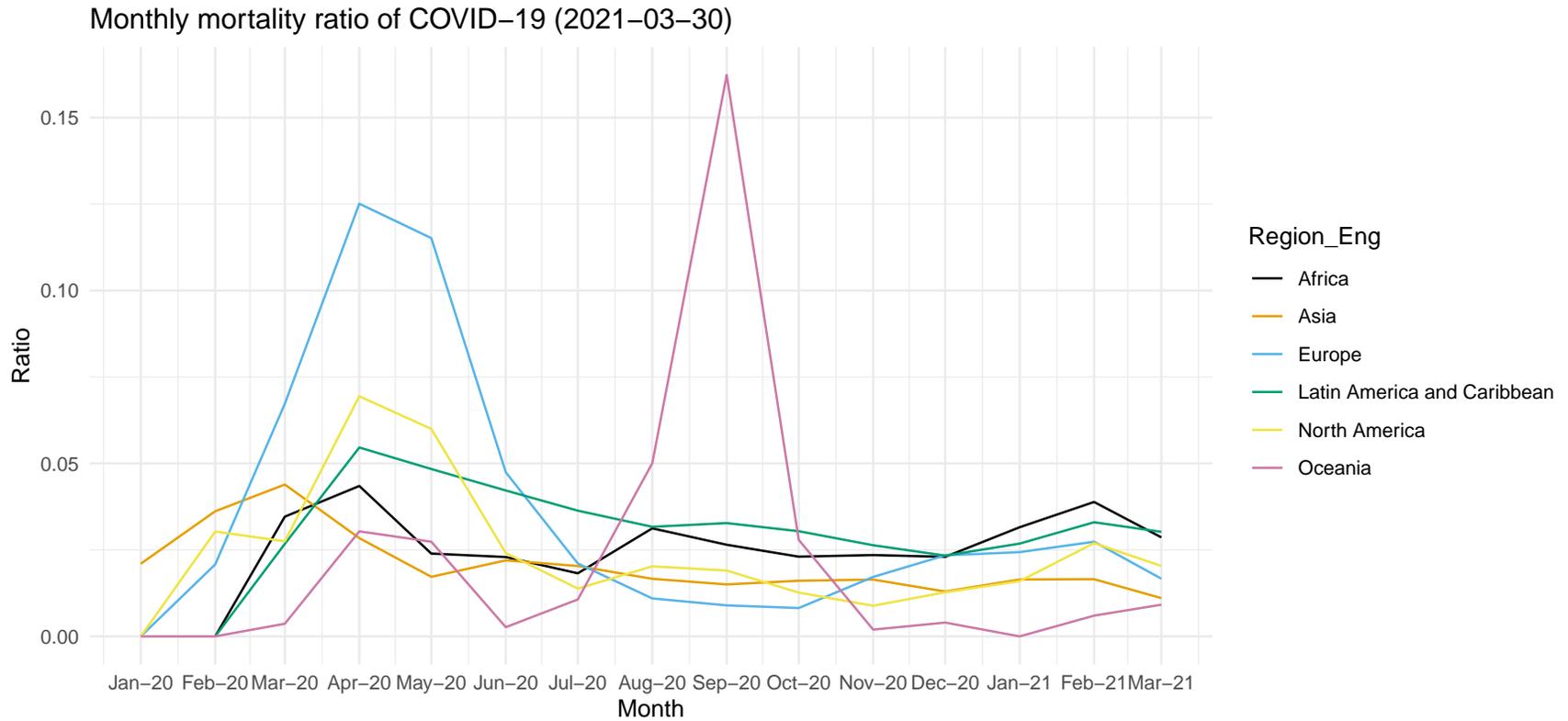
(The amount of new deaths per day are shown in points (transparency added) and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Author: Carlos Delgado Salas

## Mortality rate by Region

The Monthly COVID-19 mortality ratio is calculated as the sum of deaths in a single month, divided by the sum of positive cases in the same month.



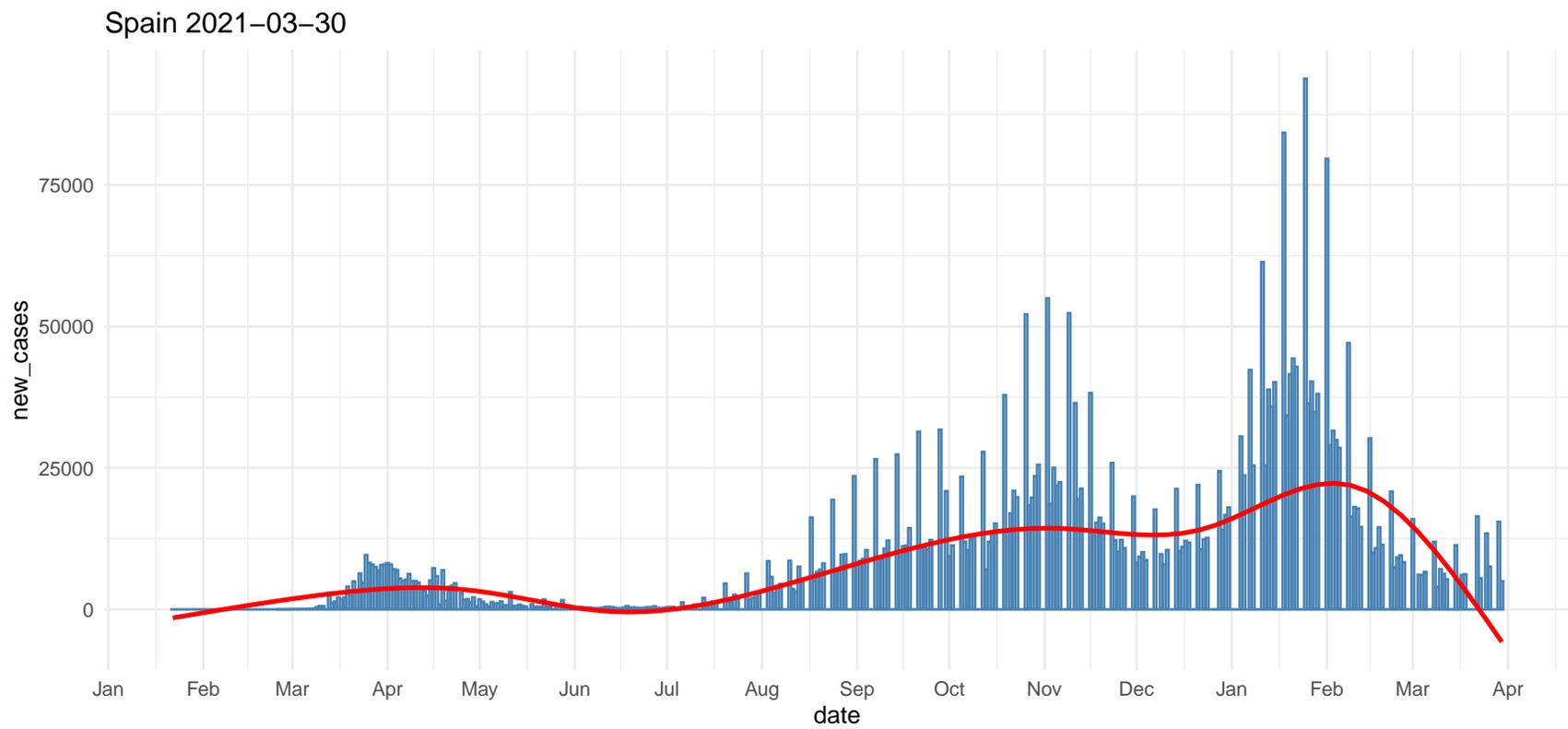
Source: Johns Hopkins University  
Author: Carlos Delgado Salas

## Plots for countries of interest

### Europe

#### Spain

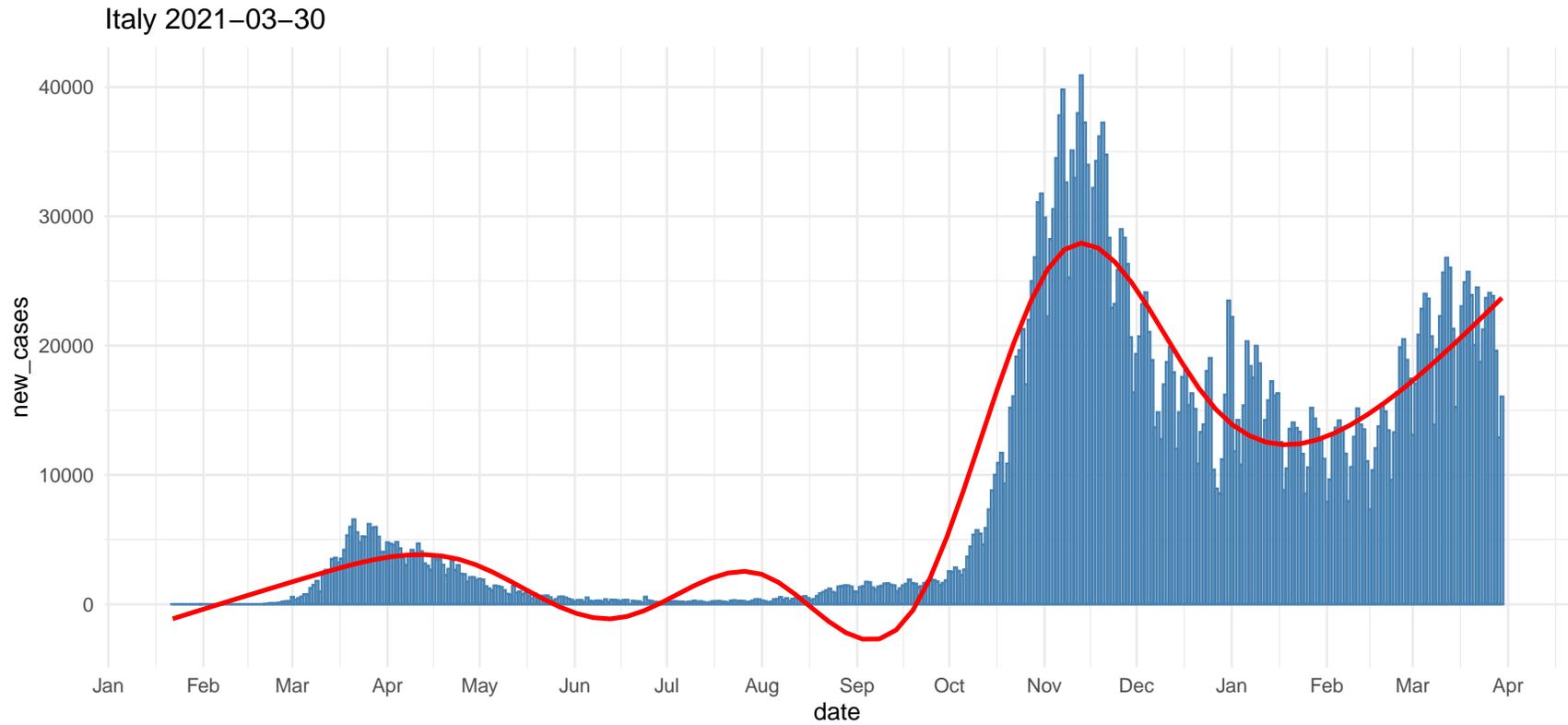
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Italy

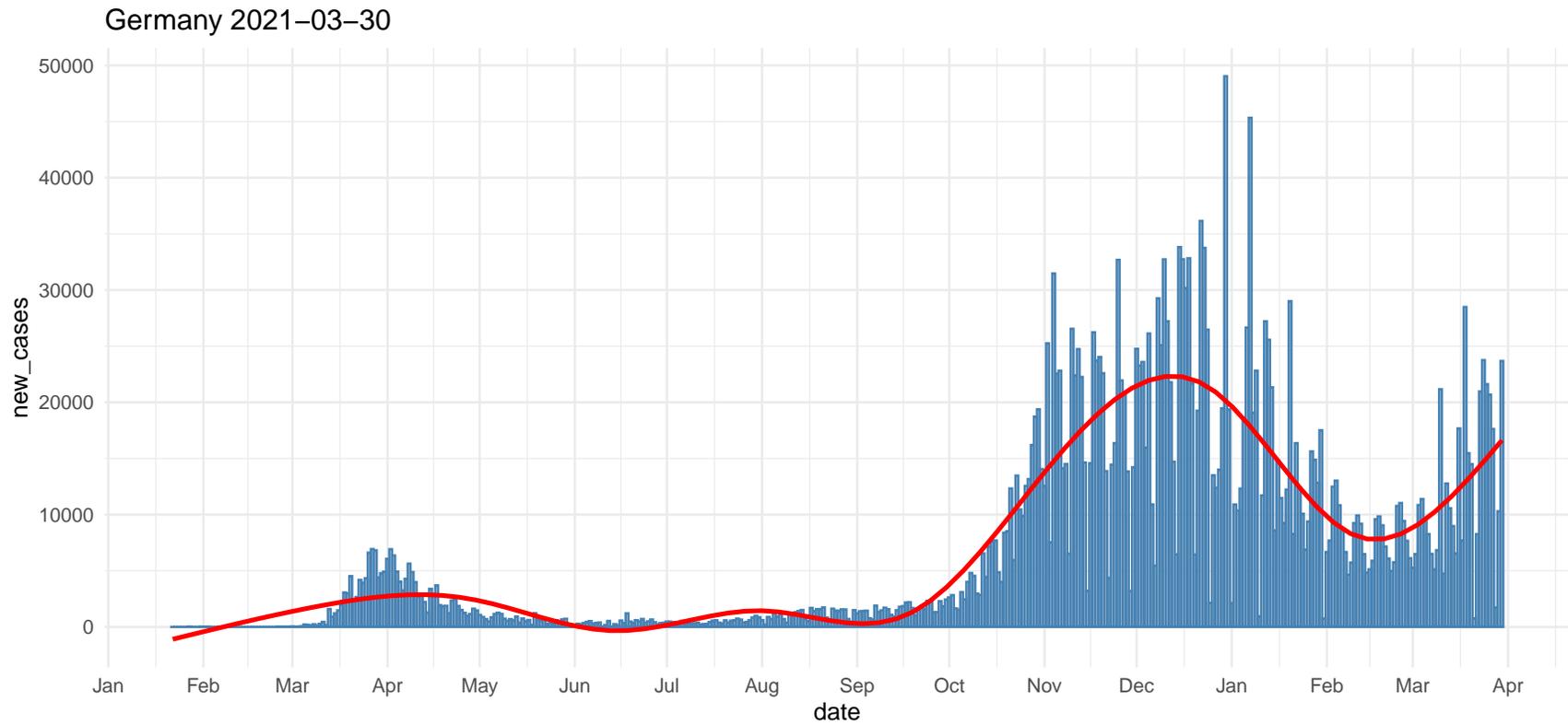
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Germany

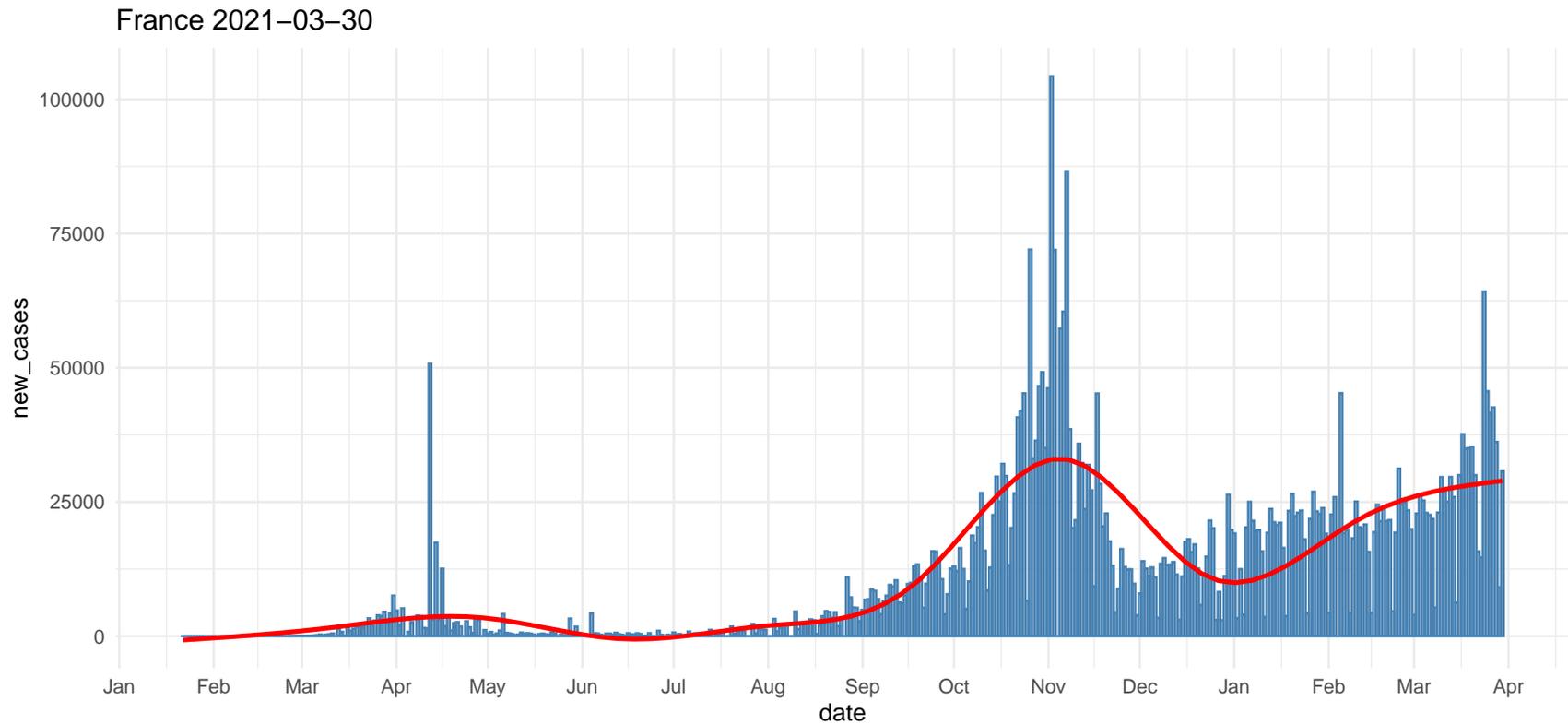
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## France

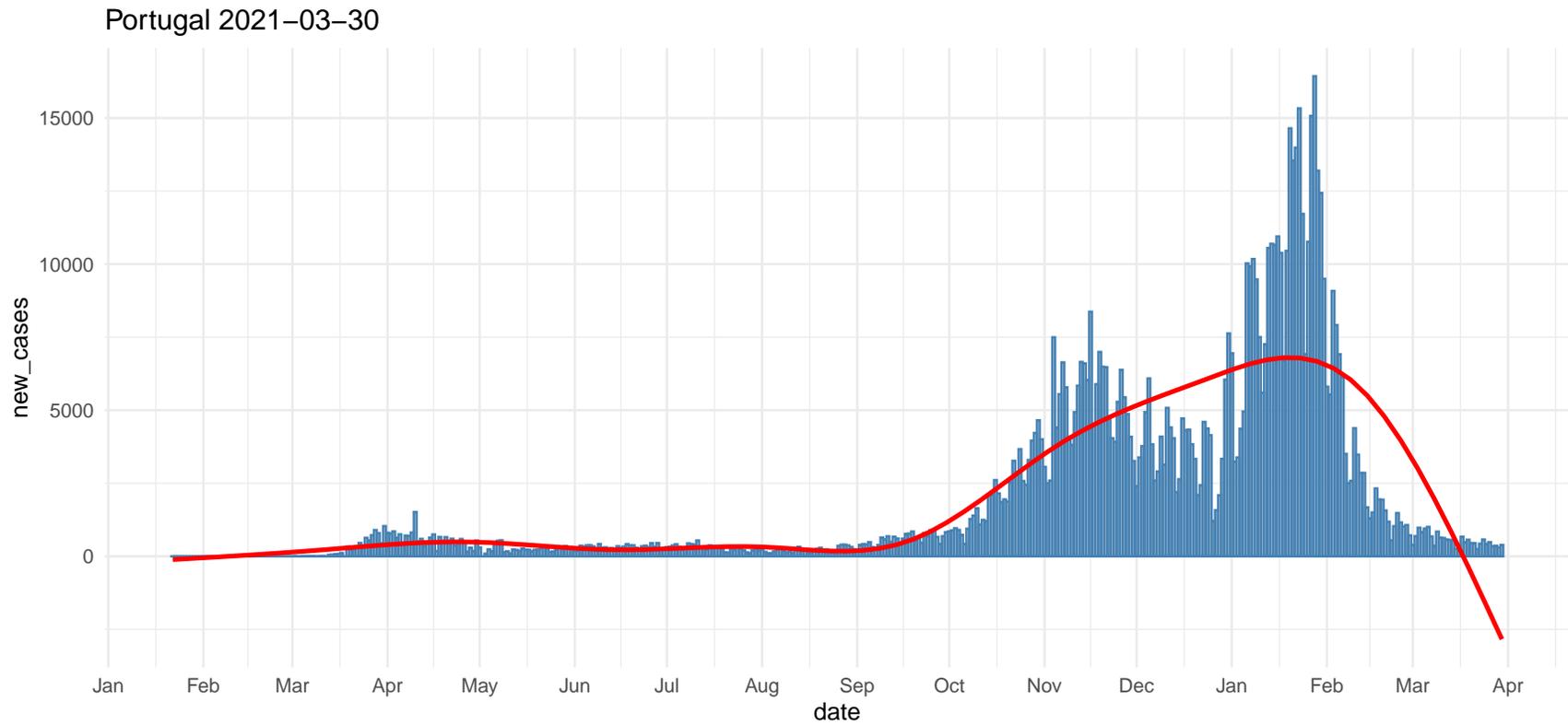
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Portugal

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)

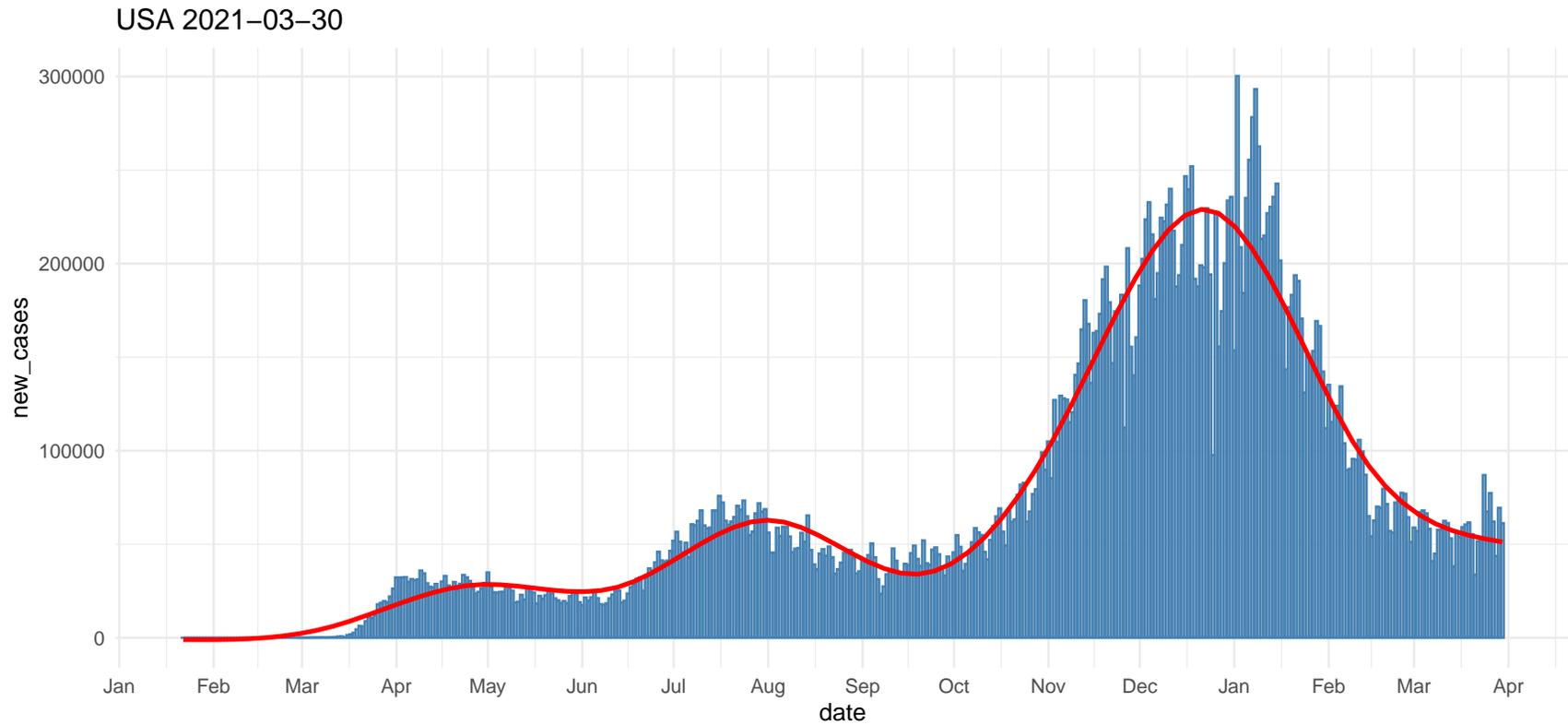


Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## North and South America

### USA

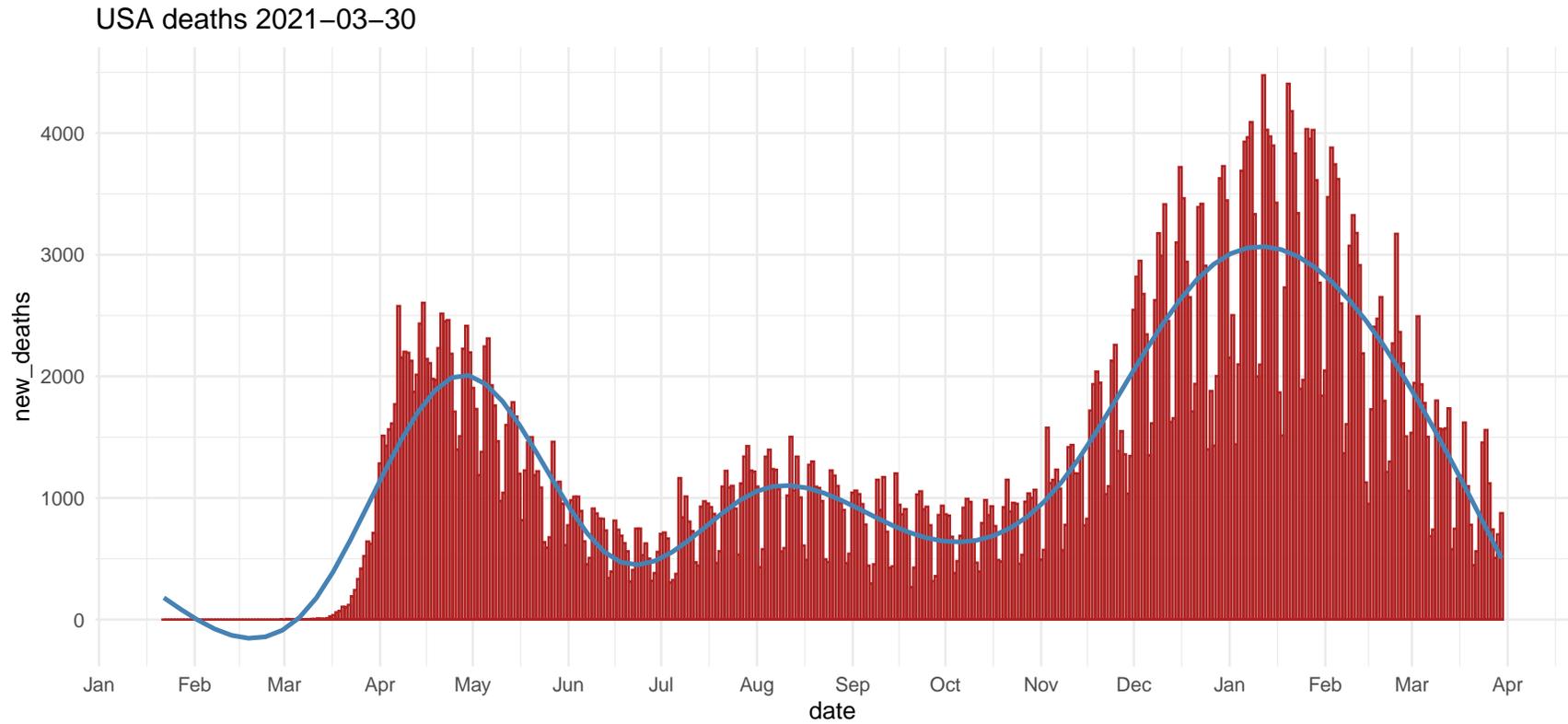
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## USA deaths

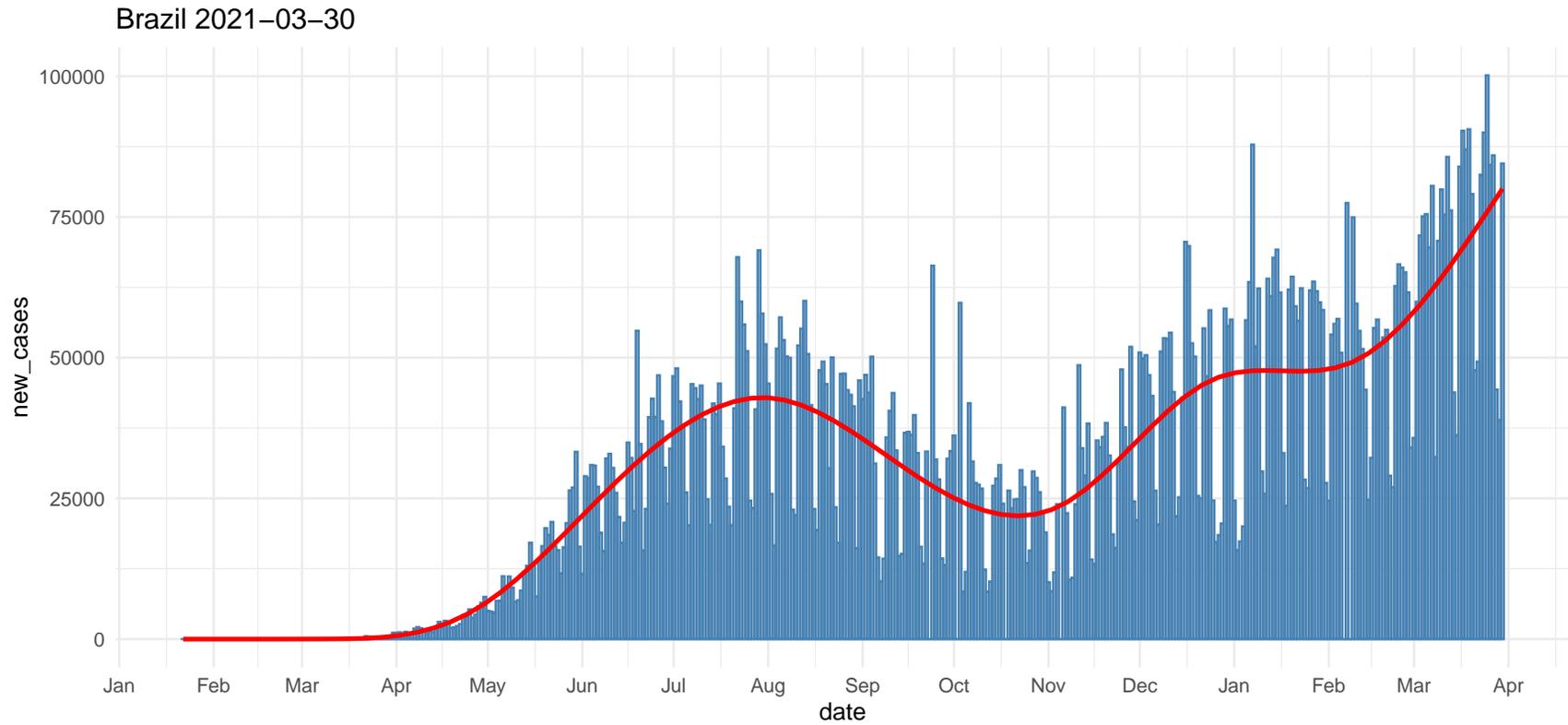
(The amount of new deaths per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Brazil

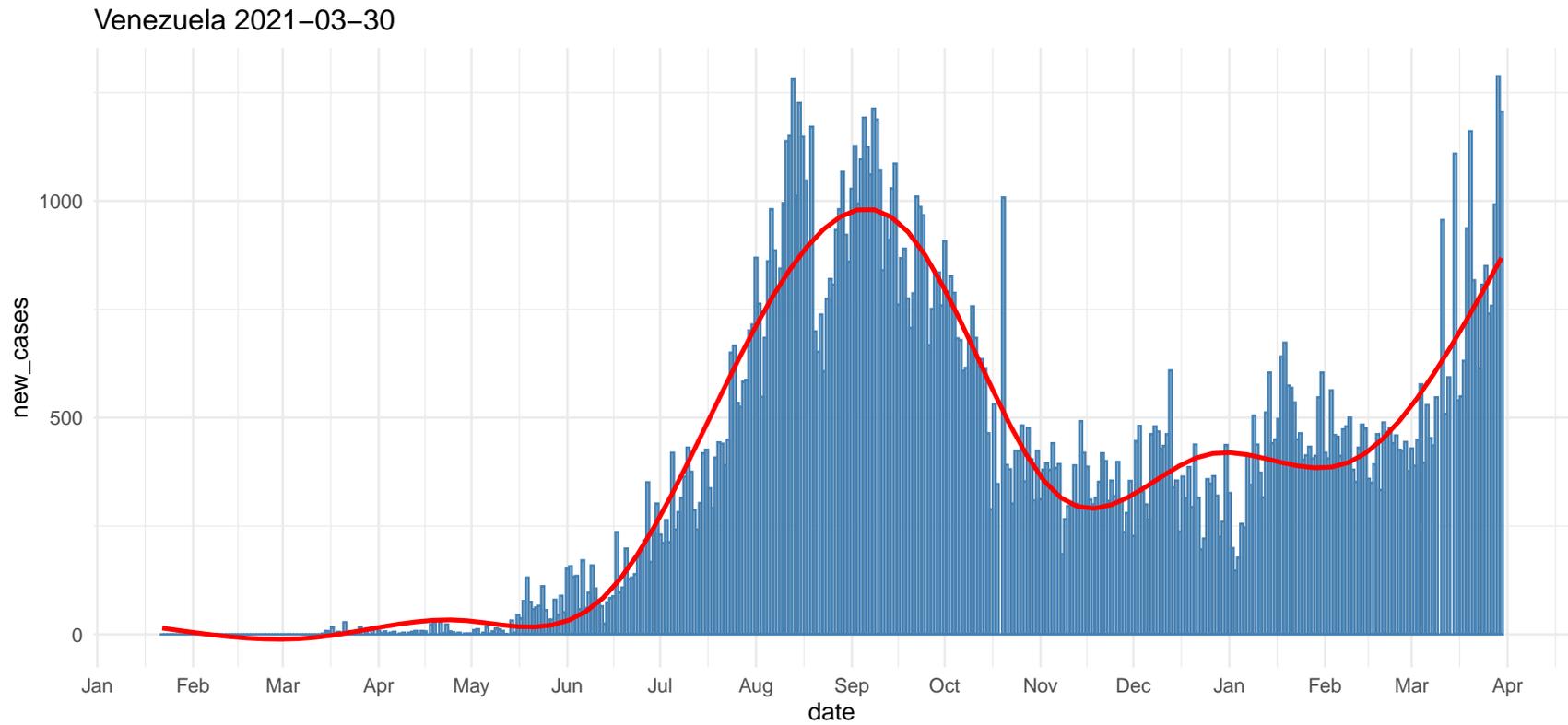
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Venezuela

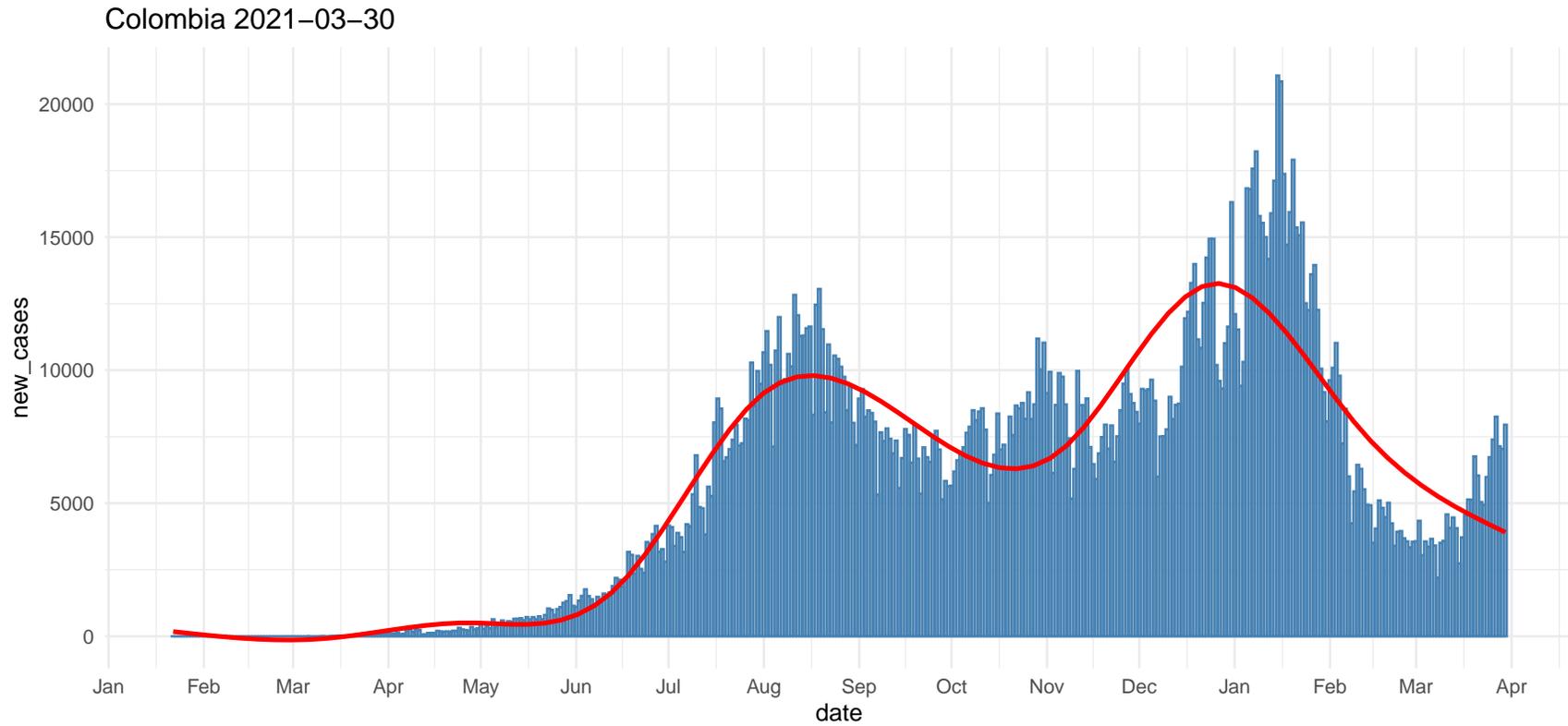
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Colombia

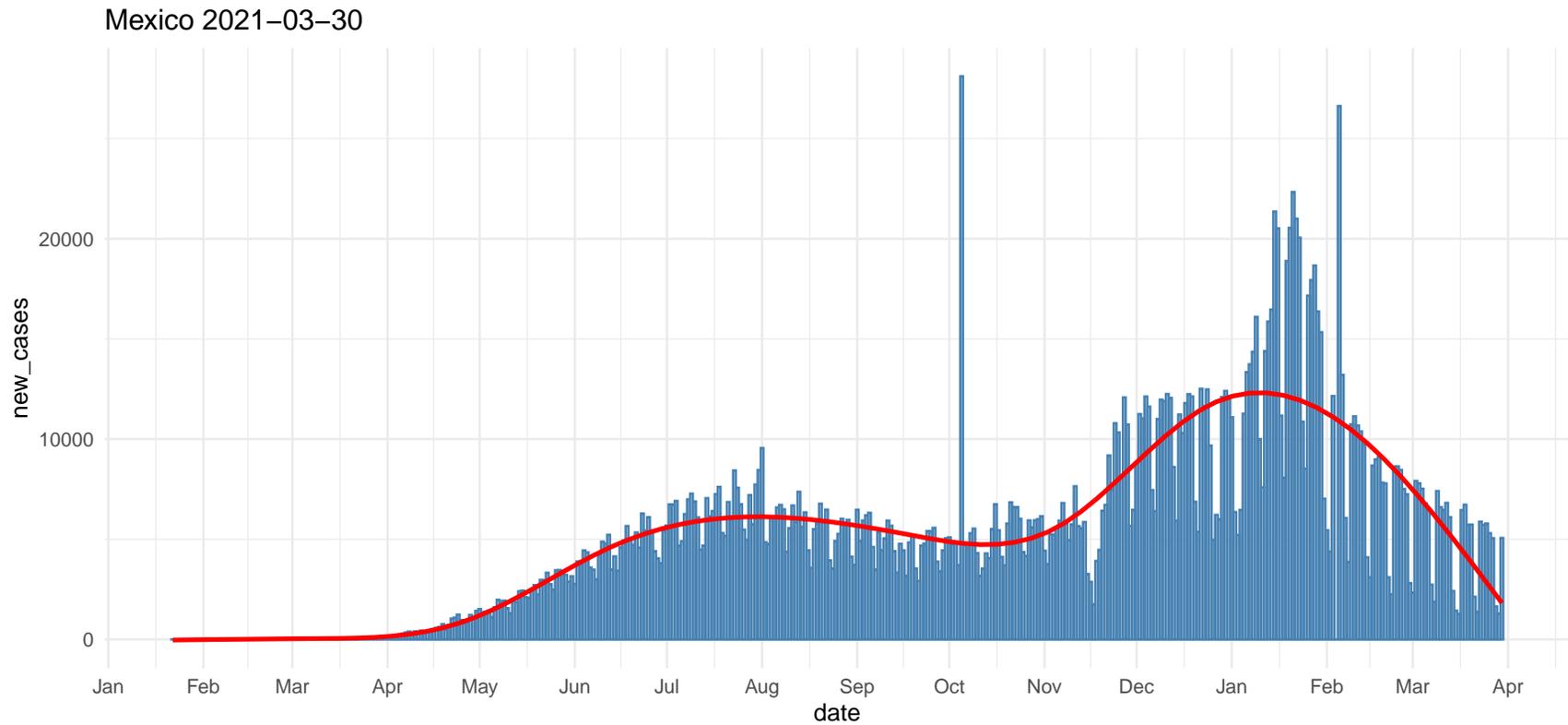
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Mexico

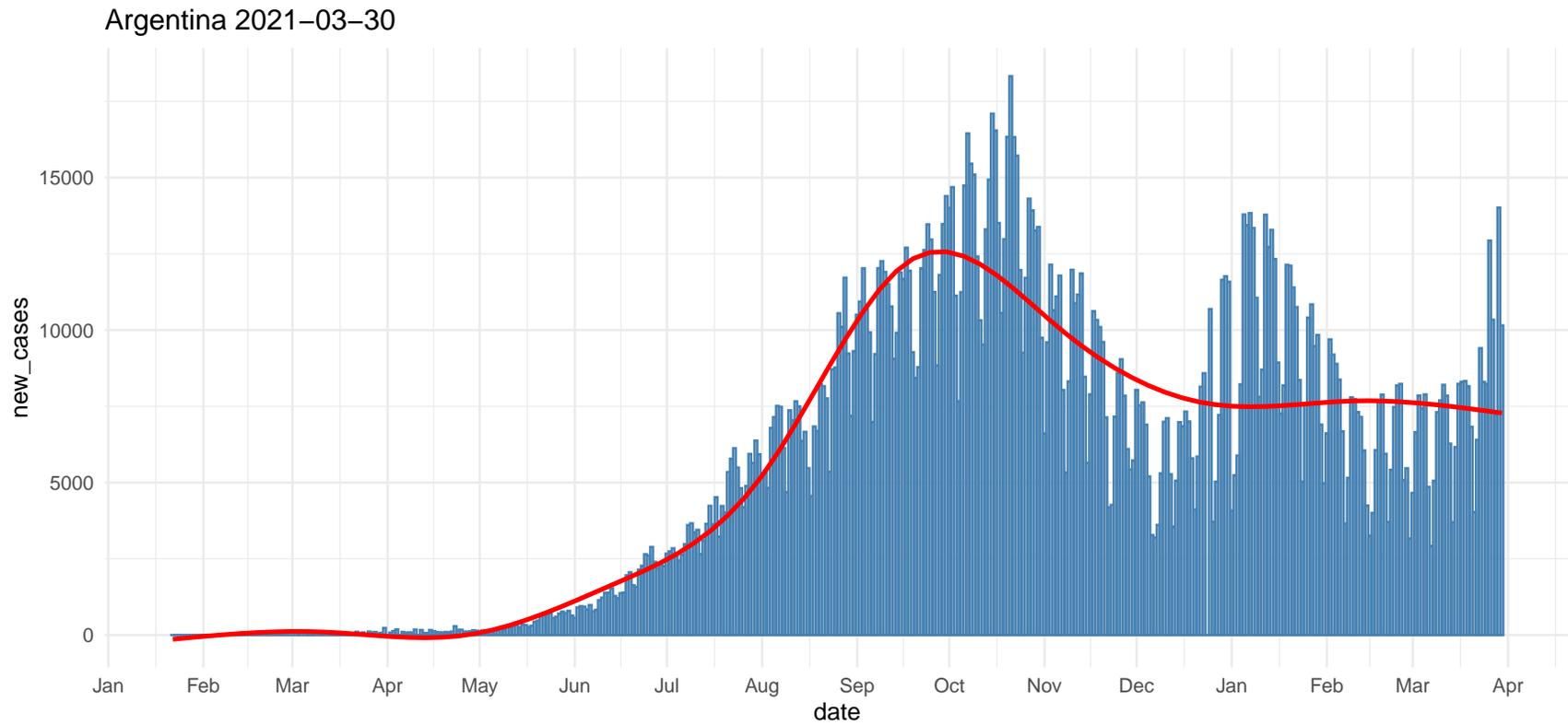
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Argentina

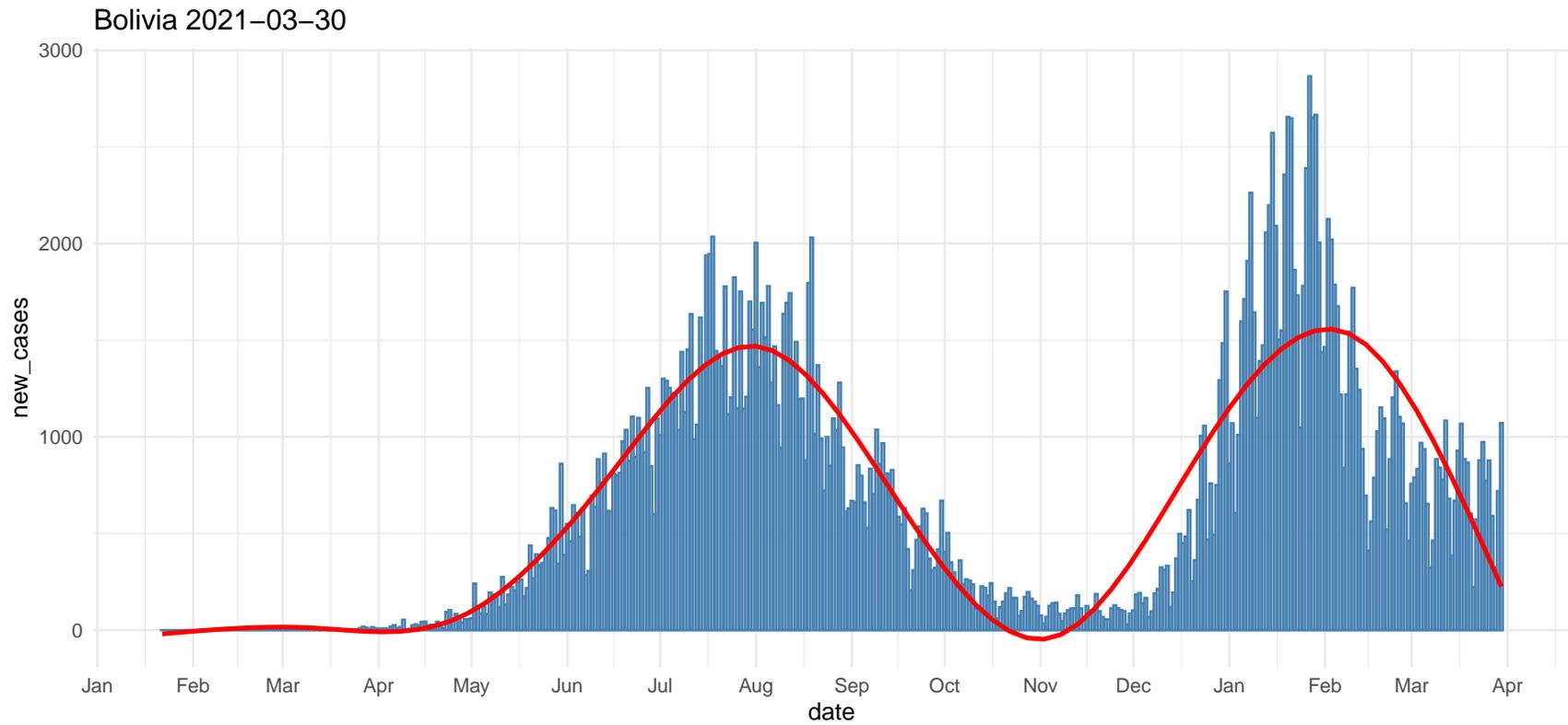
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Bolivia

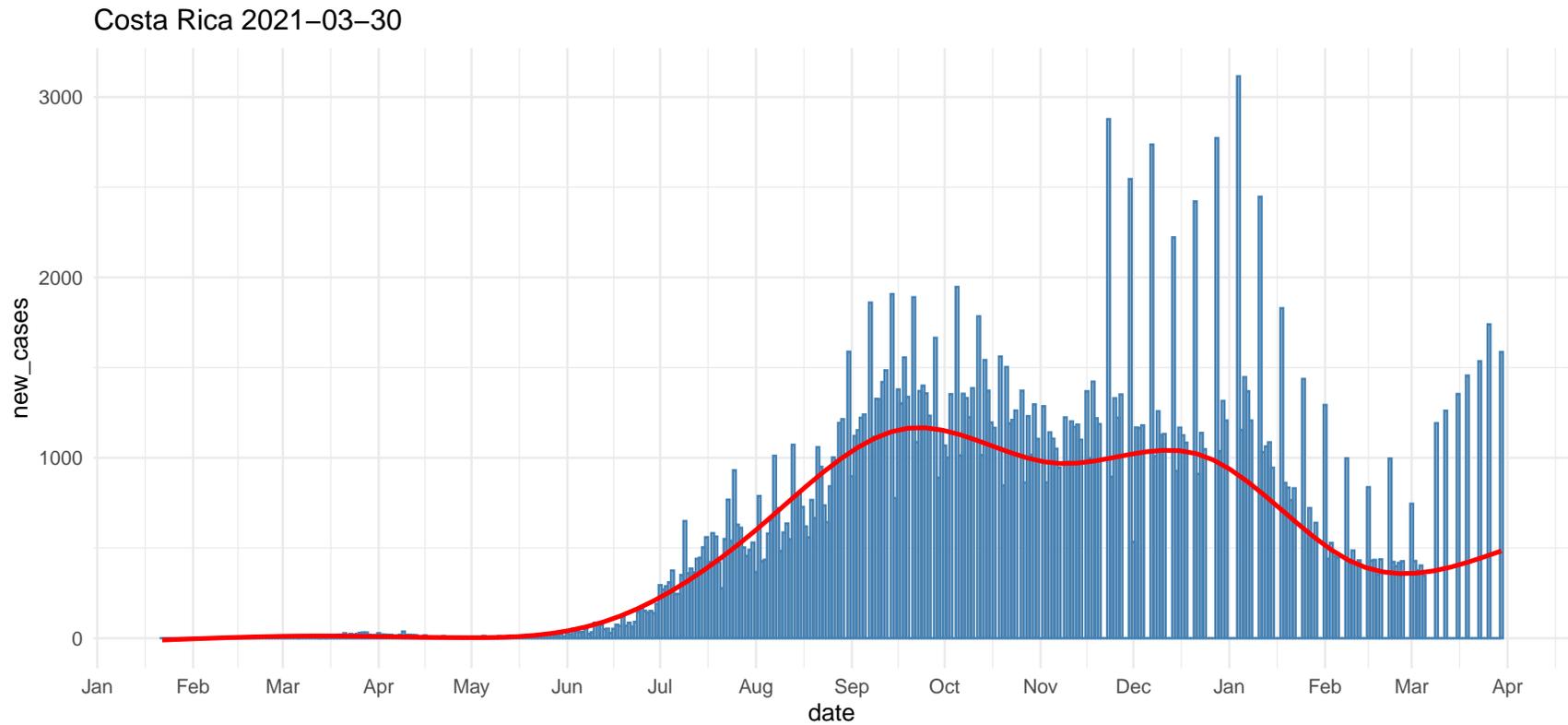
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Costa Rica

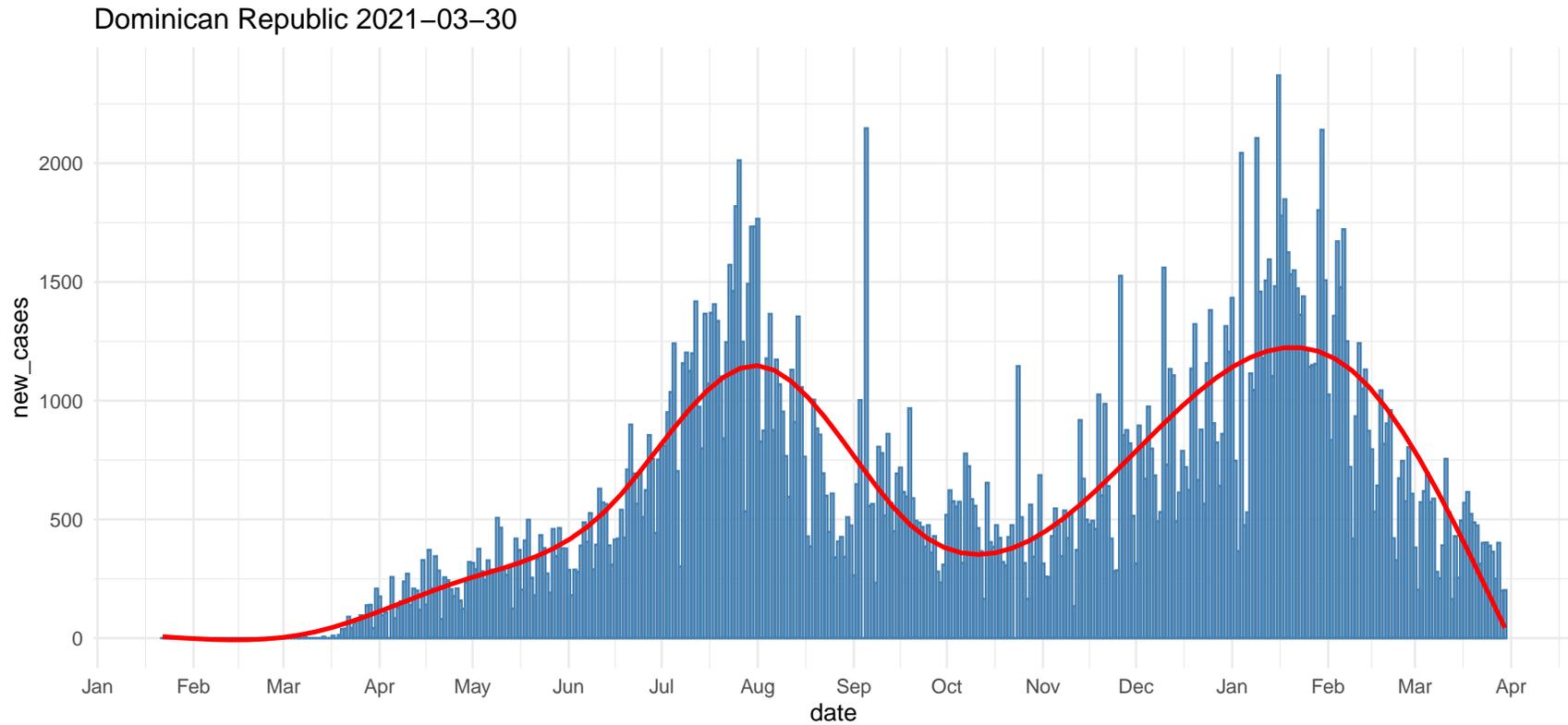
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Dominican Republic

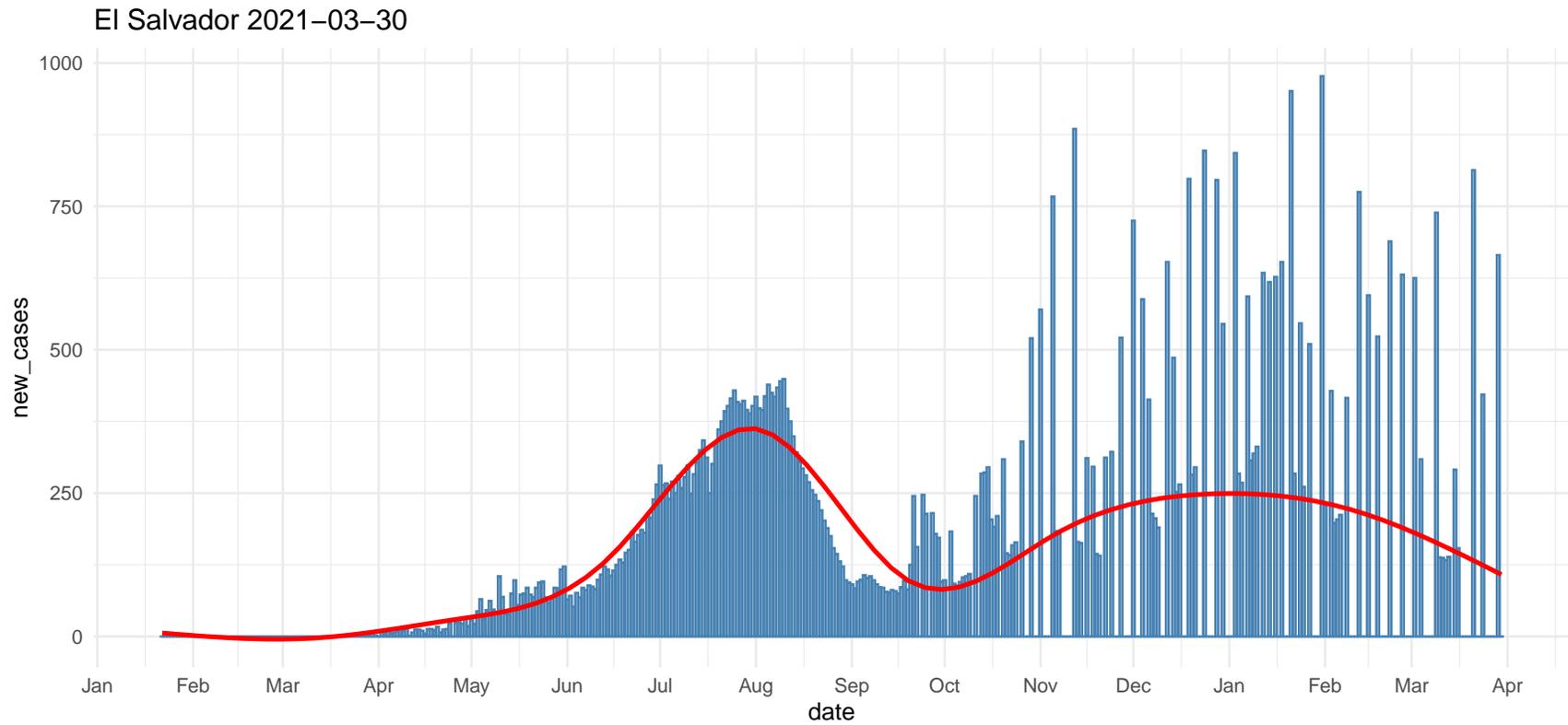
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## El Salvador

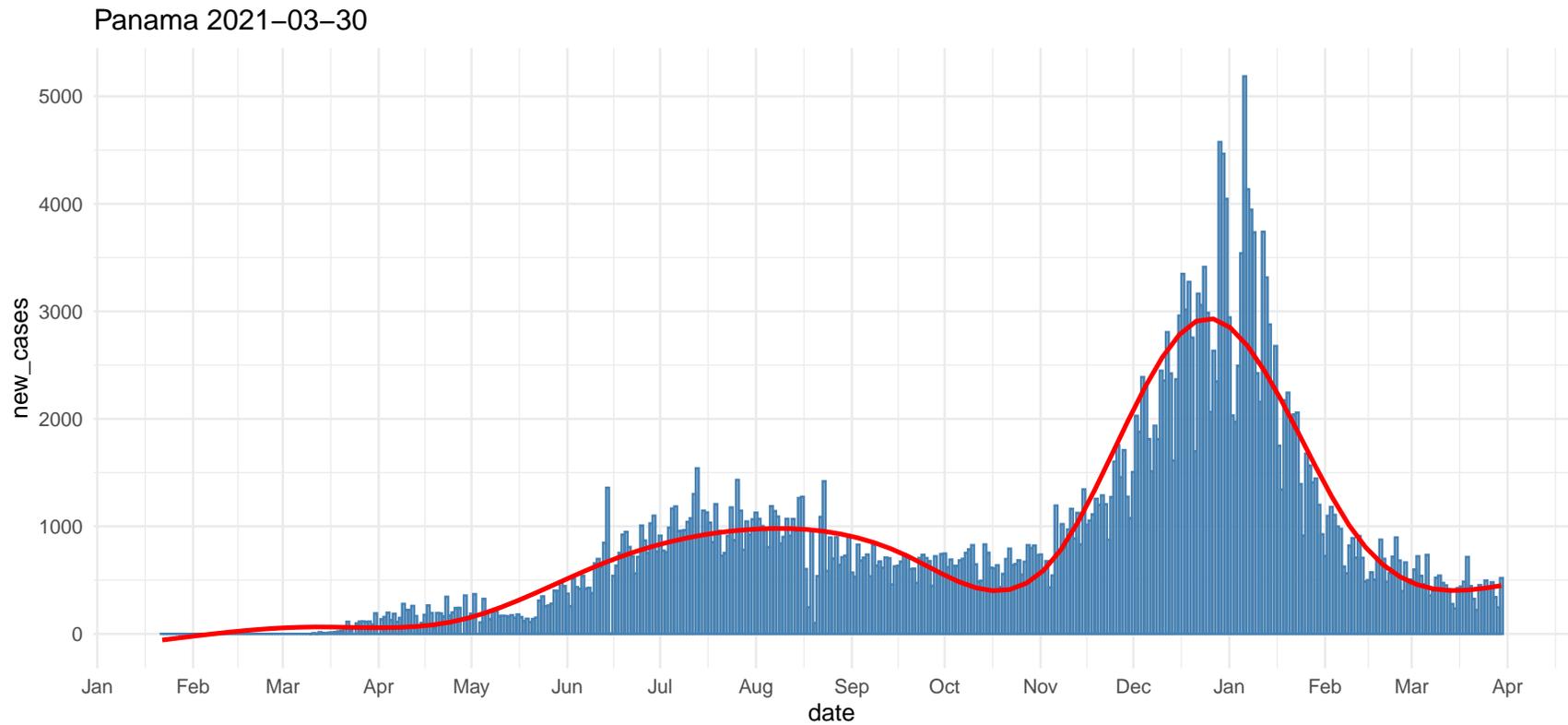
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Panama

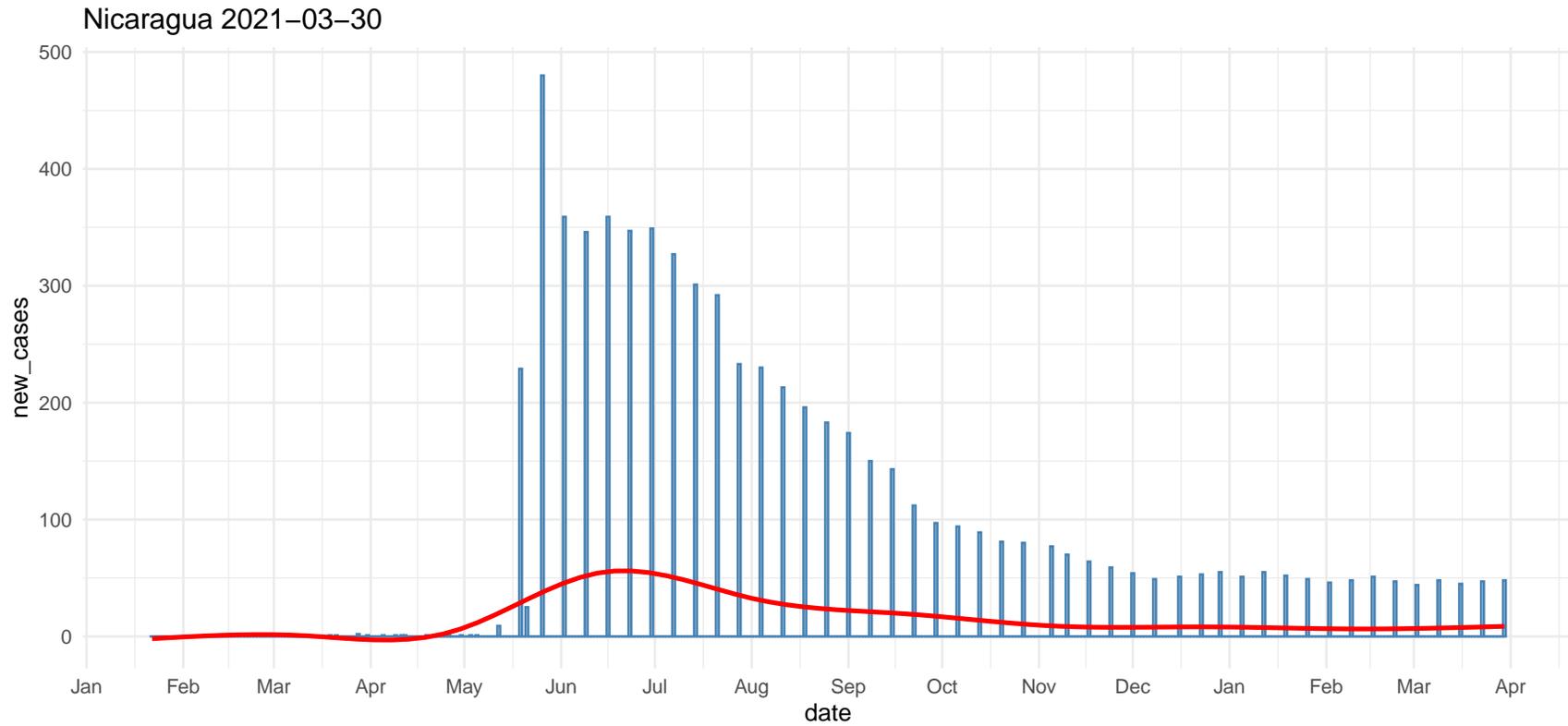
(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

## Nicaragua

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve)



Source: Johns Hopkins University  
Created by Carlos Delgado Salas

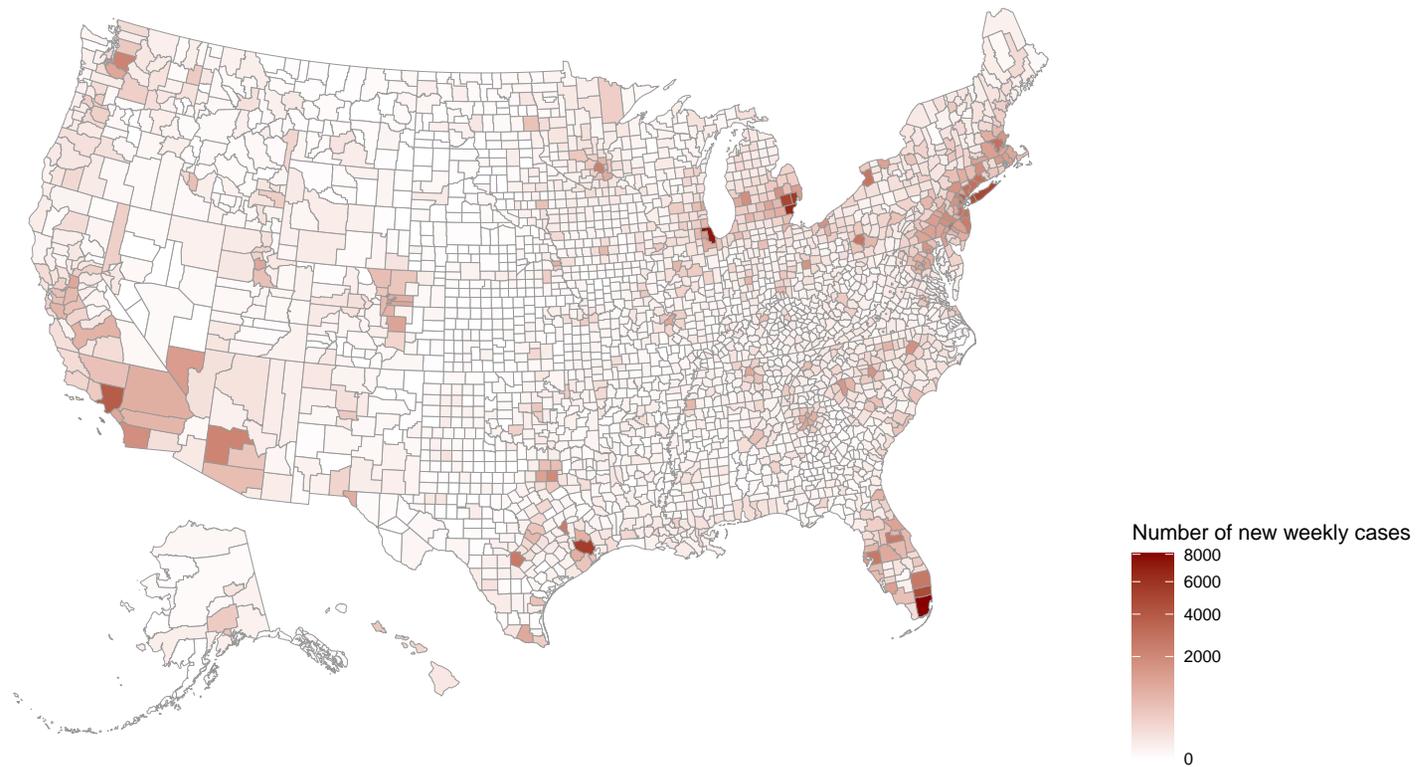
## Plots for different states in the USA

### US county map

US by county and new cases in the last week. This is a “Hotspot Map”.

(The map has a square root transformation to make more contrast between countries refer to legend to match number)

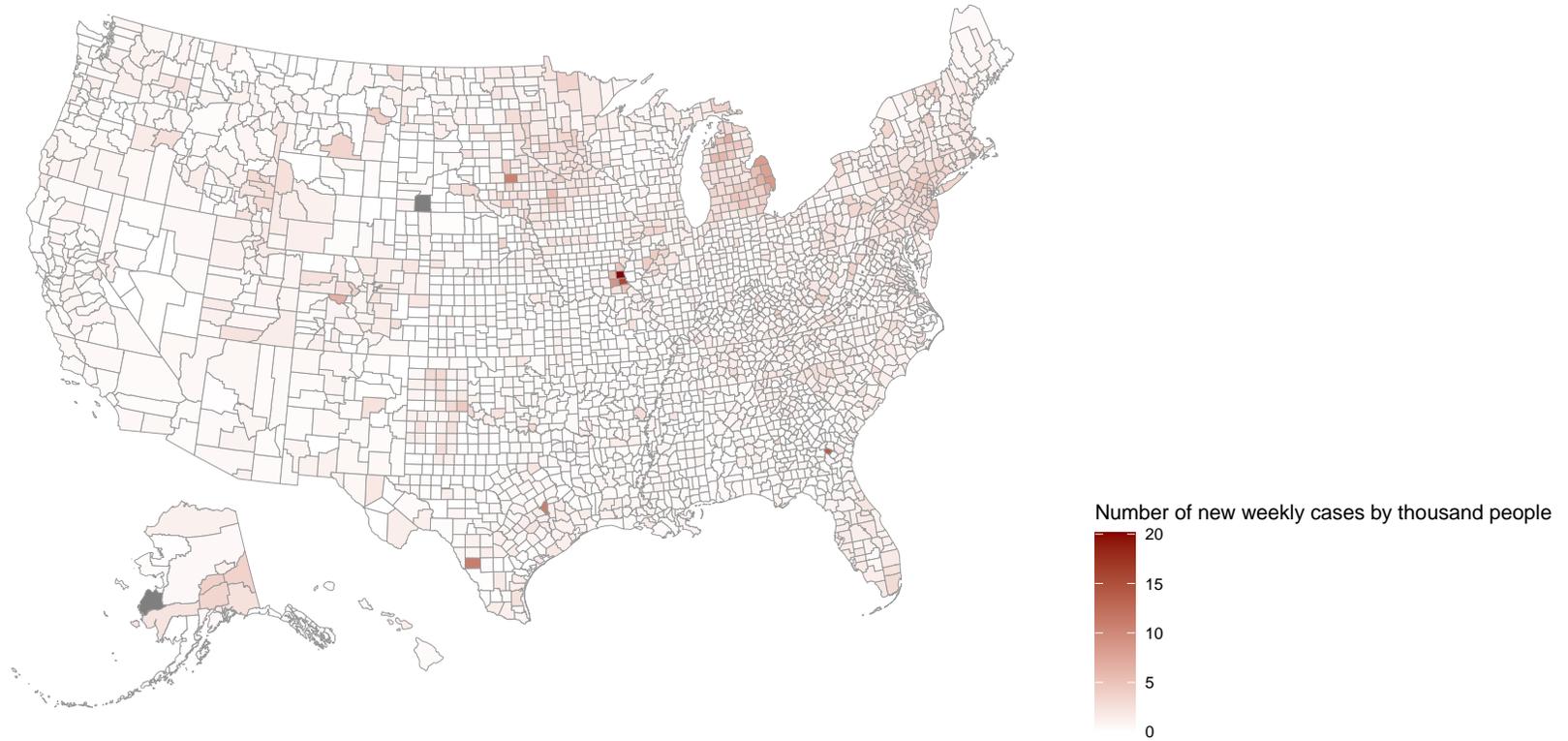
New COVID-19 cases in last week (2021-03-30)



## US county map

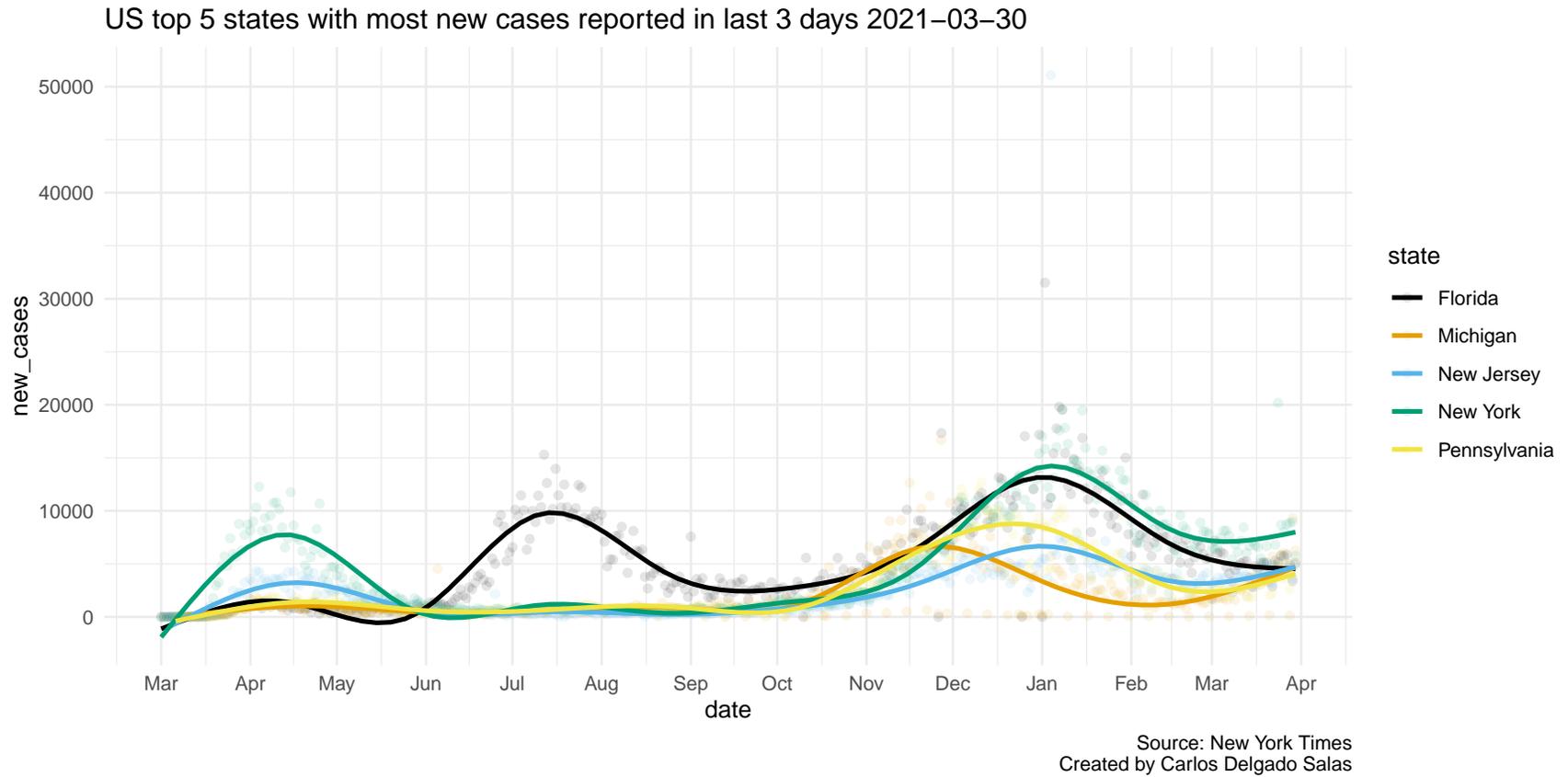
US by county and new cases in the last week by thousand people.

New COVID-19 cases in last week by thousand people (2021-03-30)



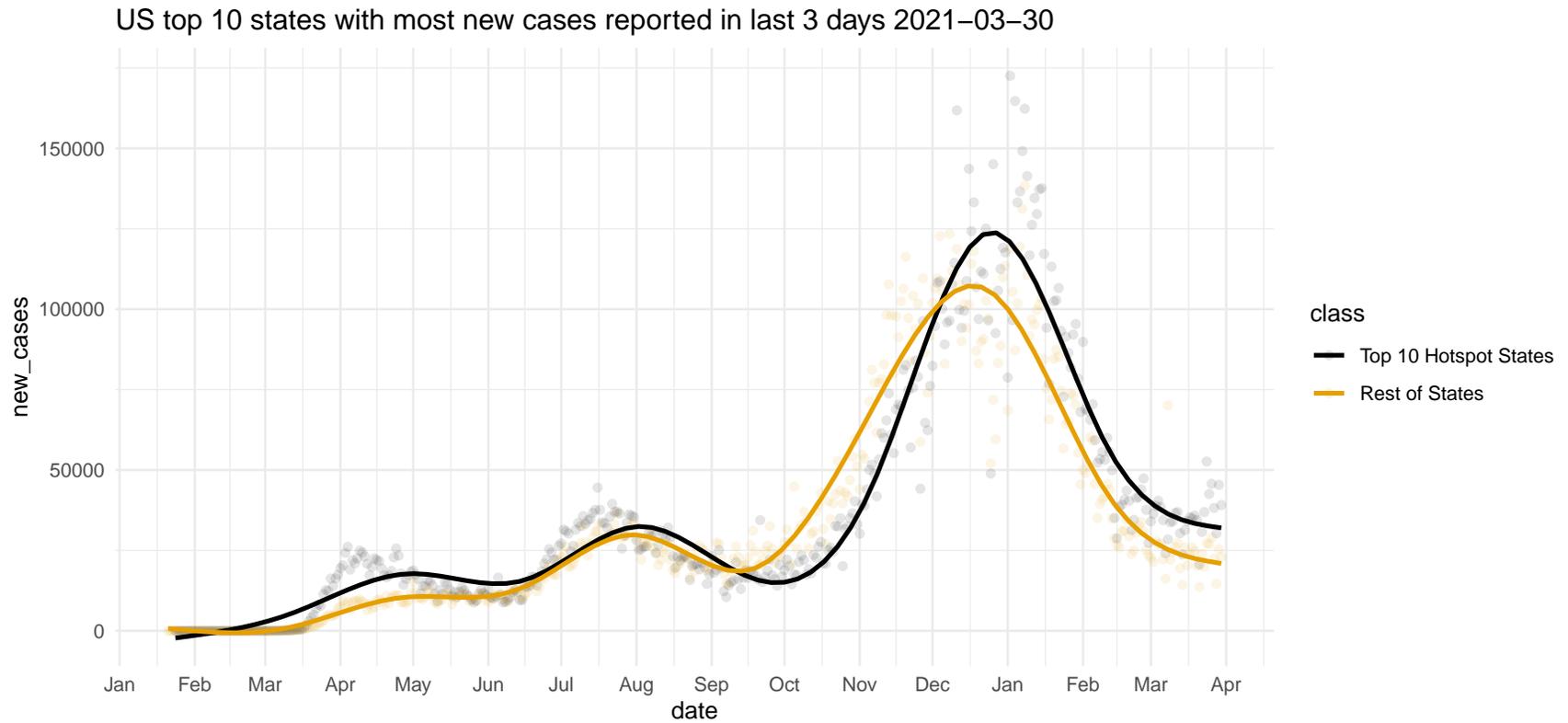
### Top 5 States with most cases

These are the top 5 States in the United States with most reported new COVID-19 cases in the last 3 days.



### Top 10 Hostspots States with most cases

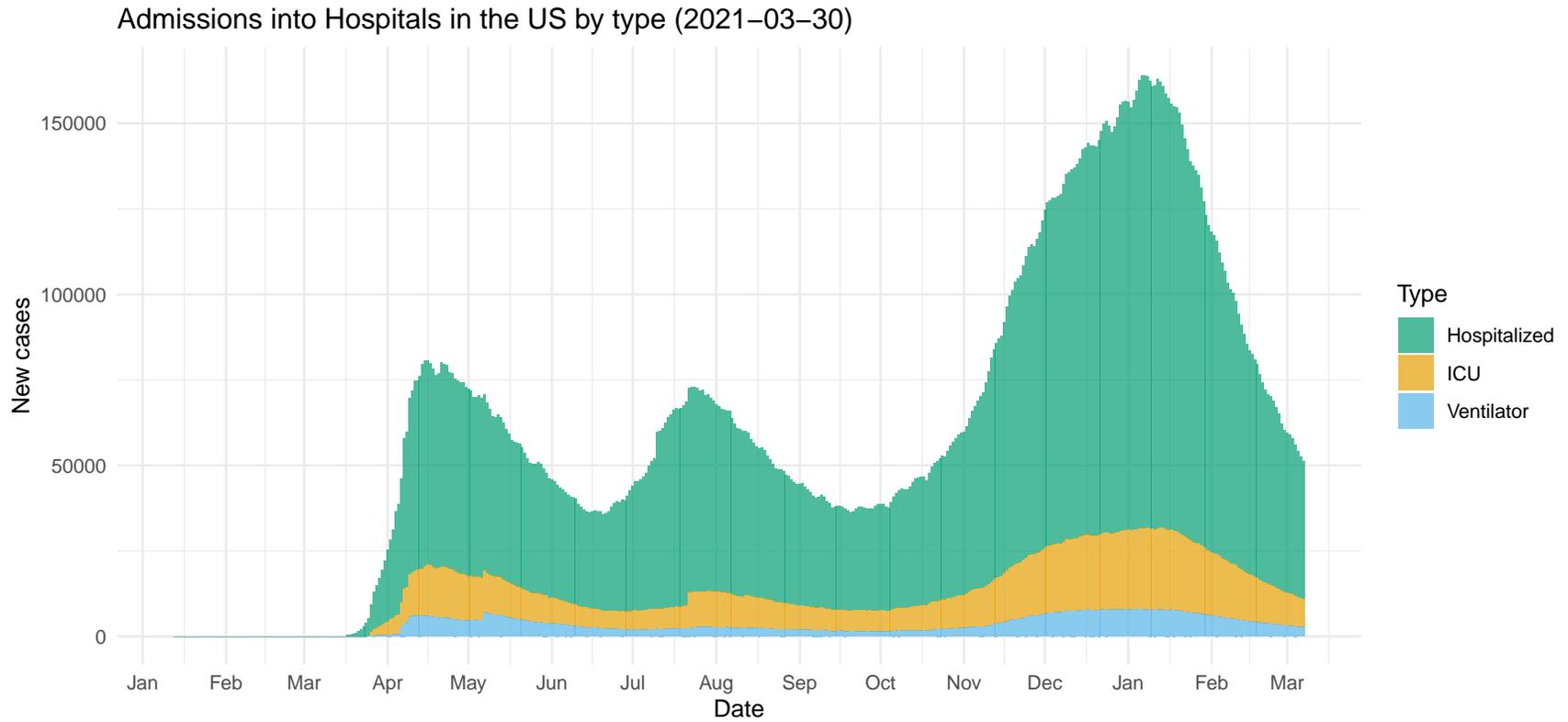
These are the top 10 States in the United States with most reported new COVID-19 cases in the last 3 days (New York, Michigan, Florida, New Jersey, Pennsylvania, Texas, California, North Carolina, Illinois, Massachusetts) against the rest of the States in the US



Source: New York Times  
Created by Carlos Delgado Salas

## Hospitalizations, ICU and Ventilator

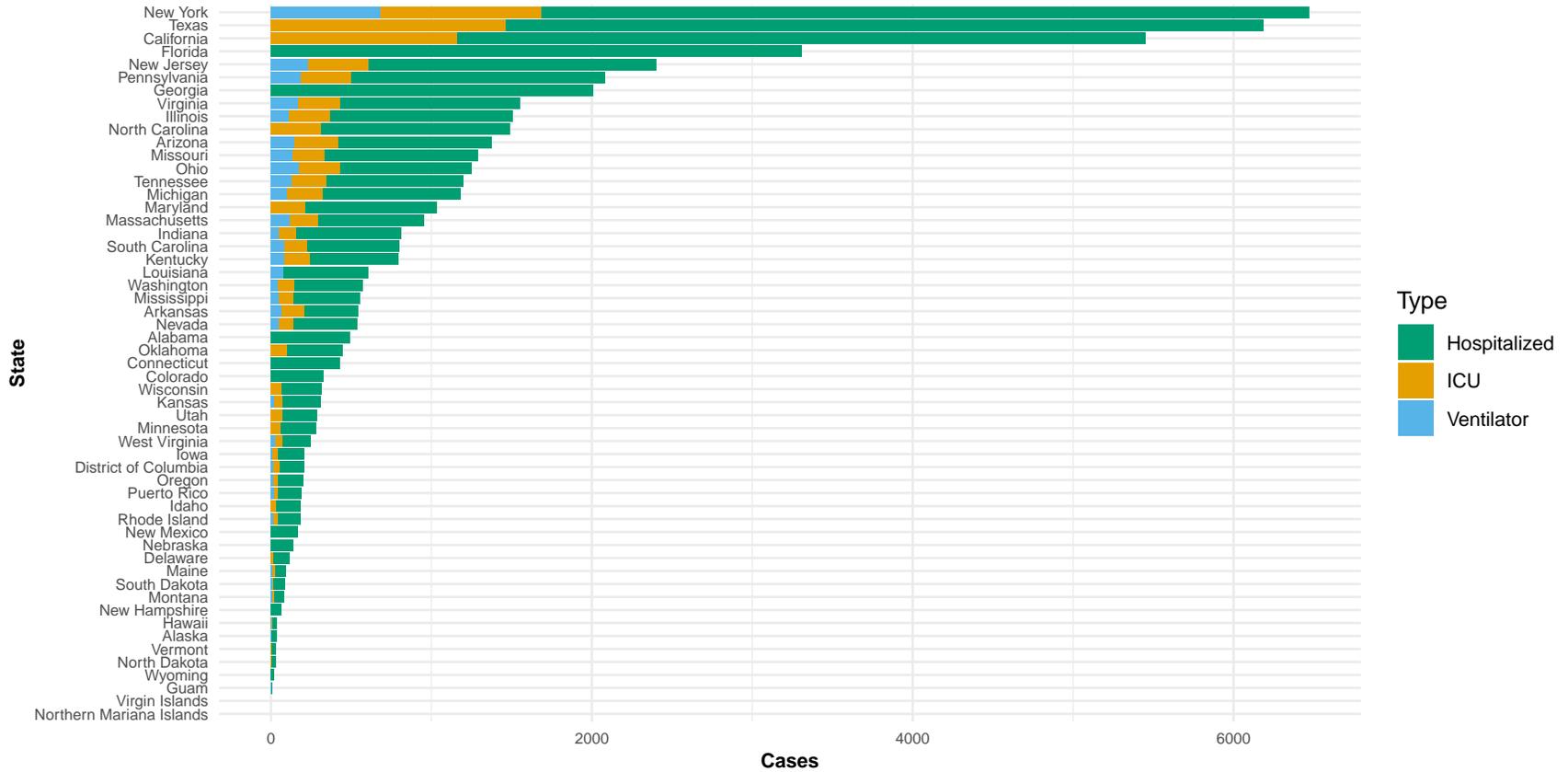
These are the number of cases as of 2021-03-07 that have been admitted to a hospital since the pandemic began.



Source: COVID-19 Tracking  
Author: Carlos Delgado Salas

## Hospitalizations, ICU and Ventilator on 2021-03-07 by State

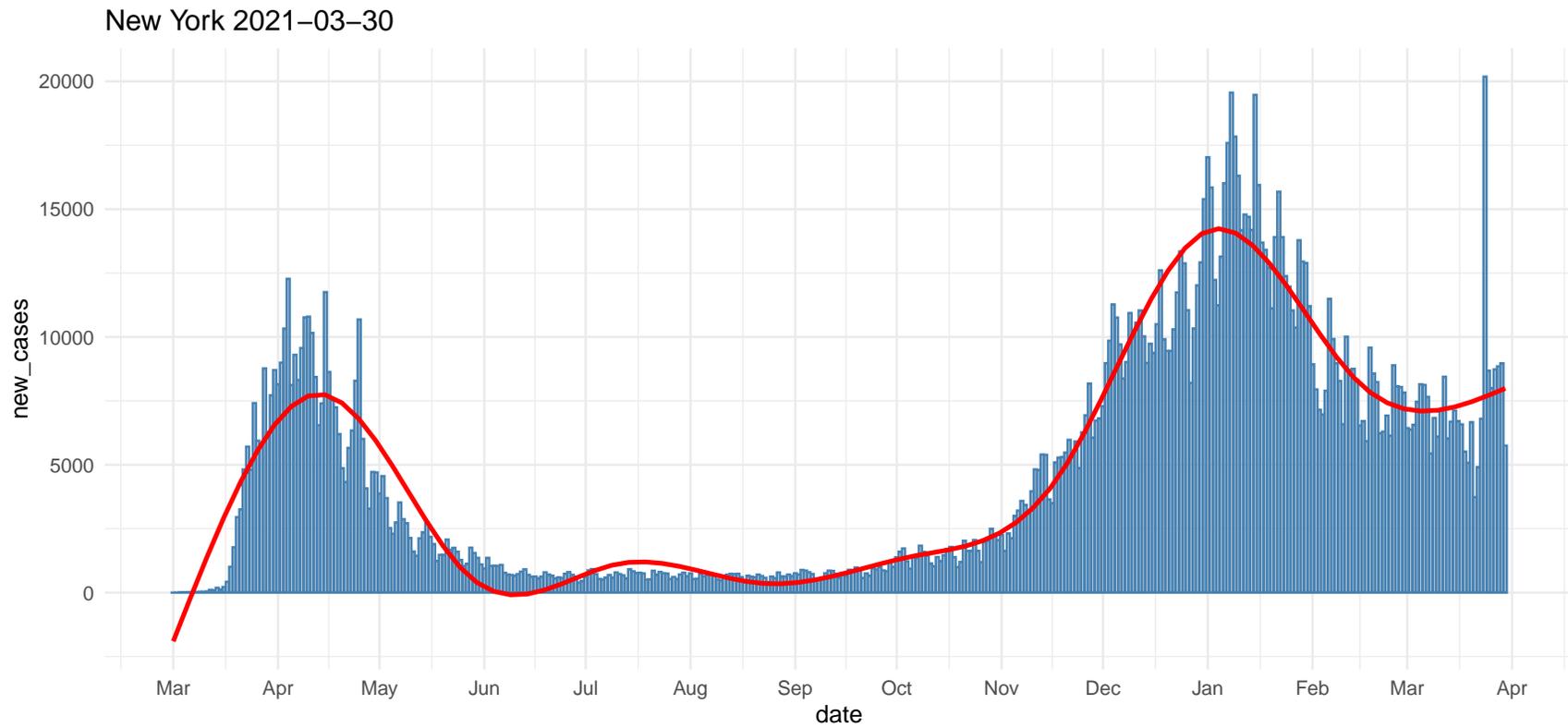
These are the number of cases as of 2021-03-07 that have been admitted to a hospital per State.



## New York

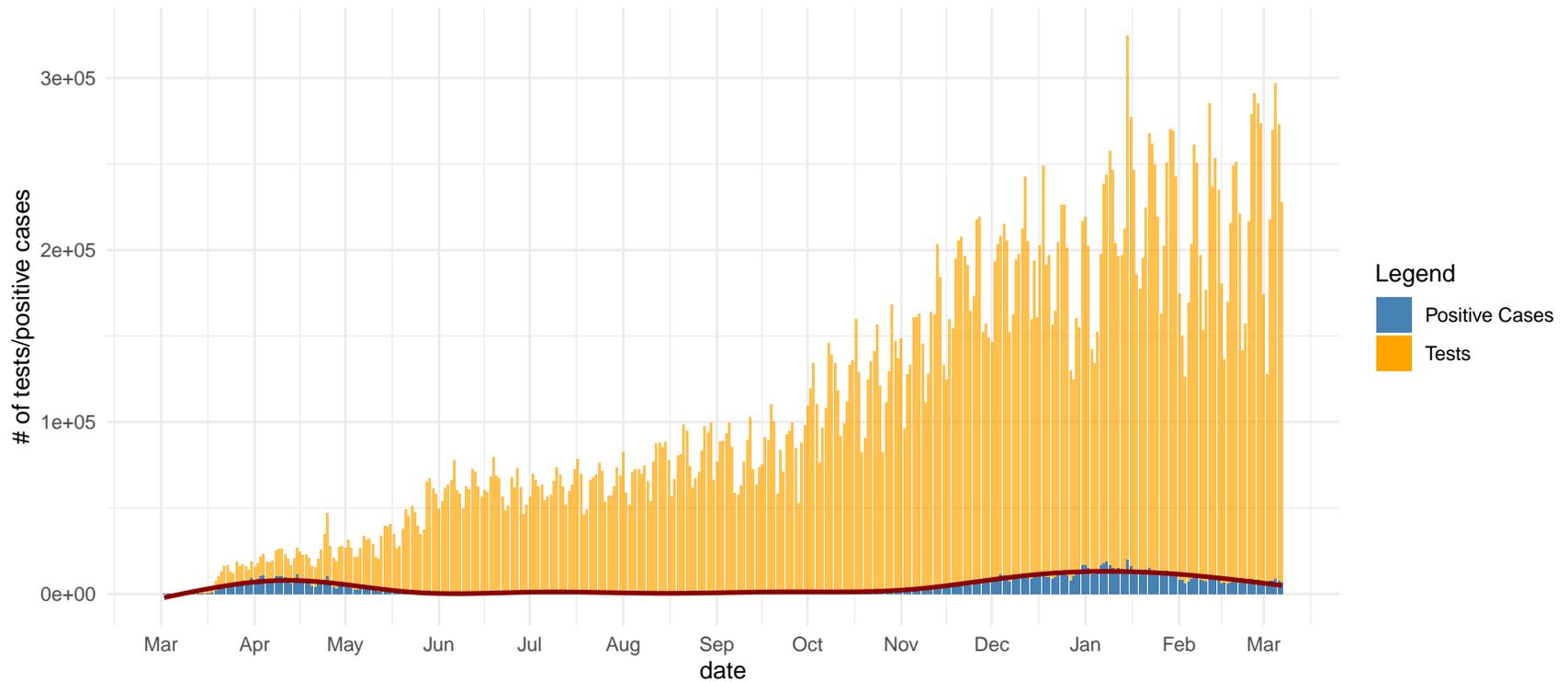
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

New York daily COVID-19 tests and positive cases 2021-03-07

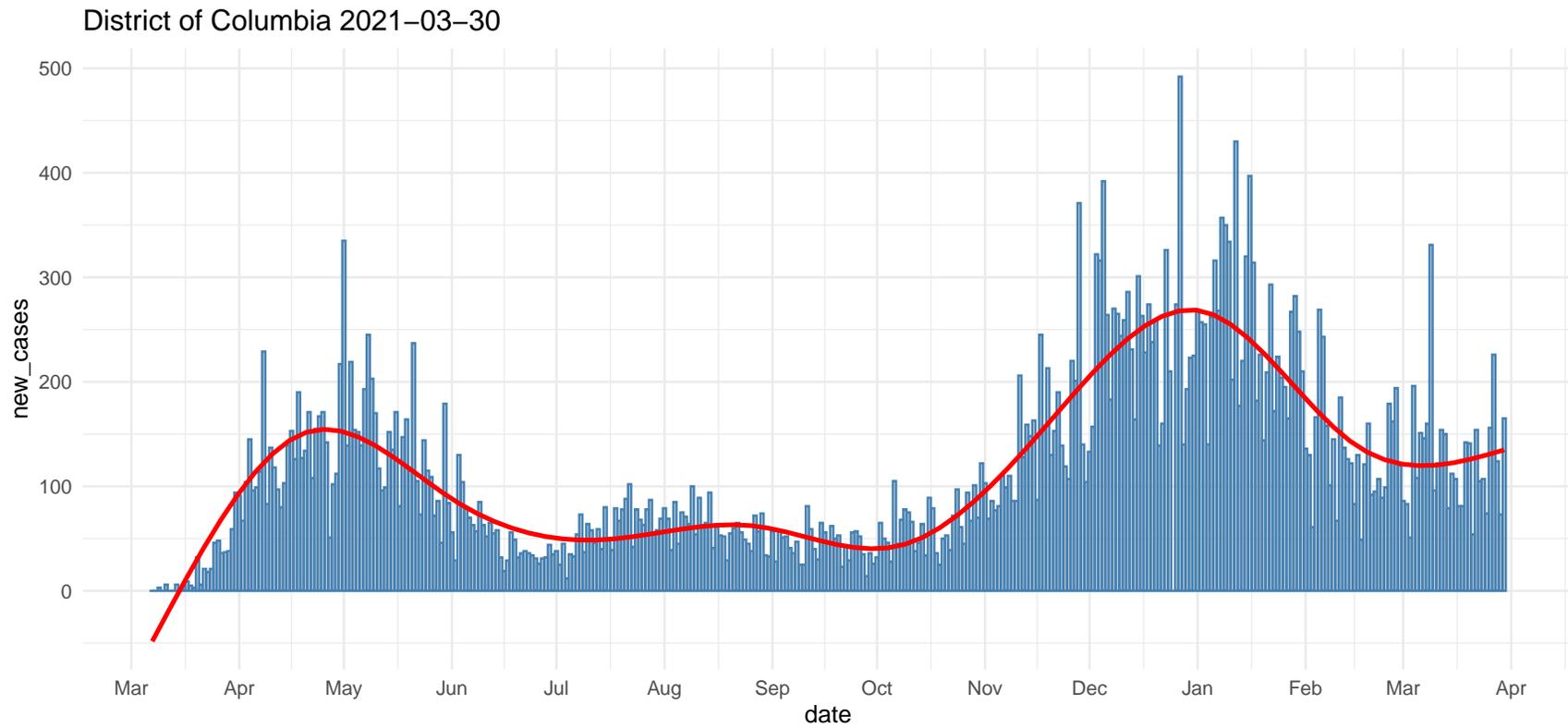


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## District of Columbia

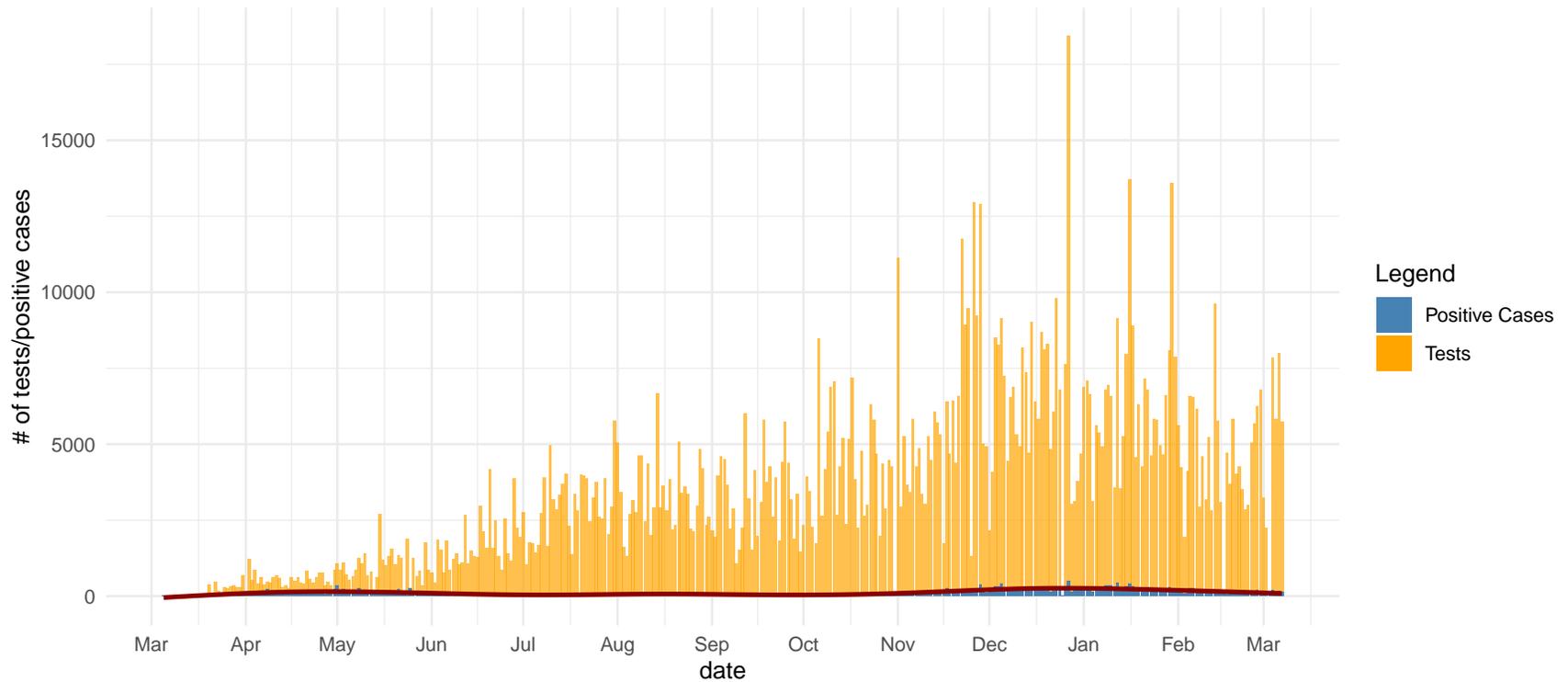
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

District of Columbia daily COVID-19 tests and positive cases 2021-03-07

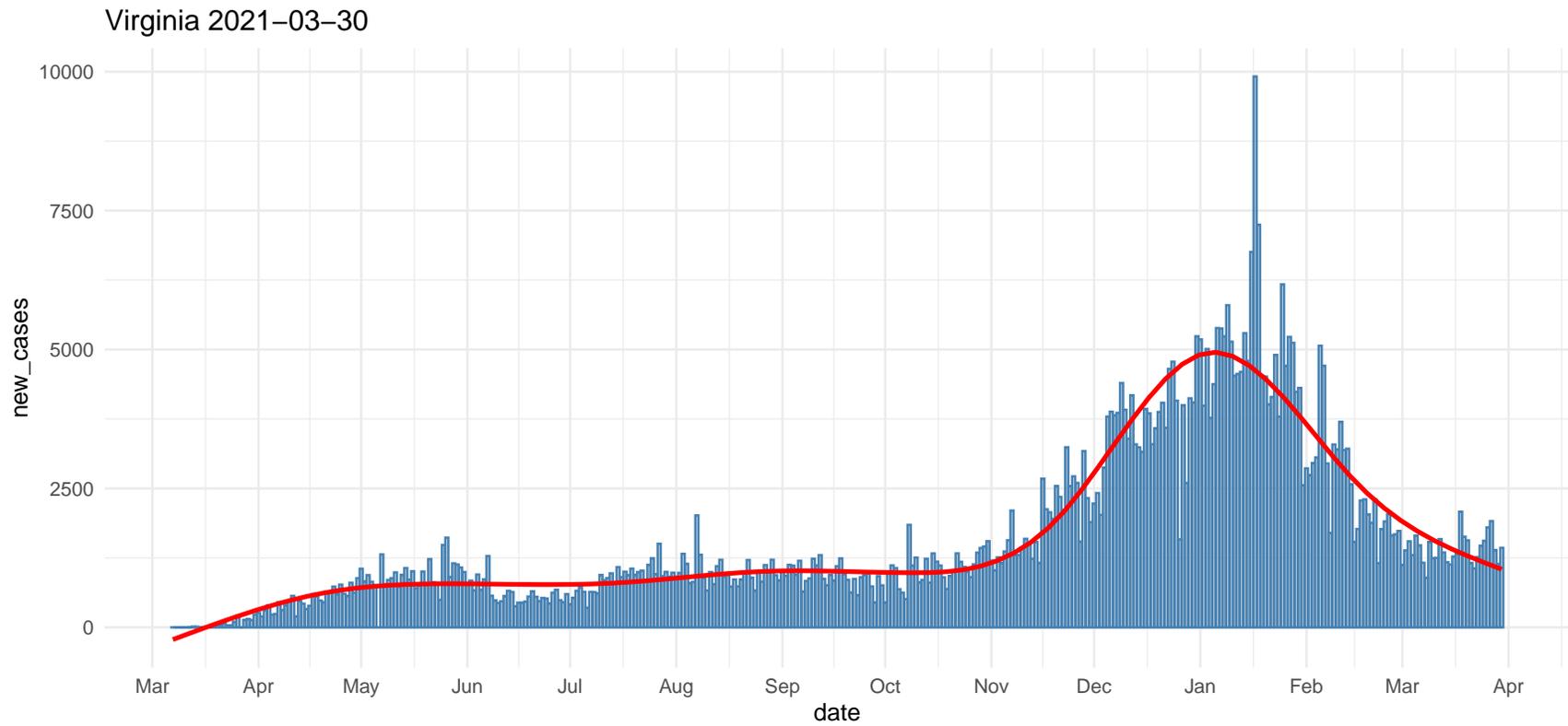


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Virginia

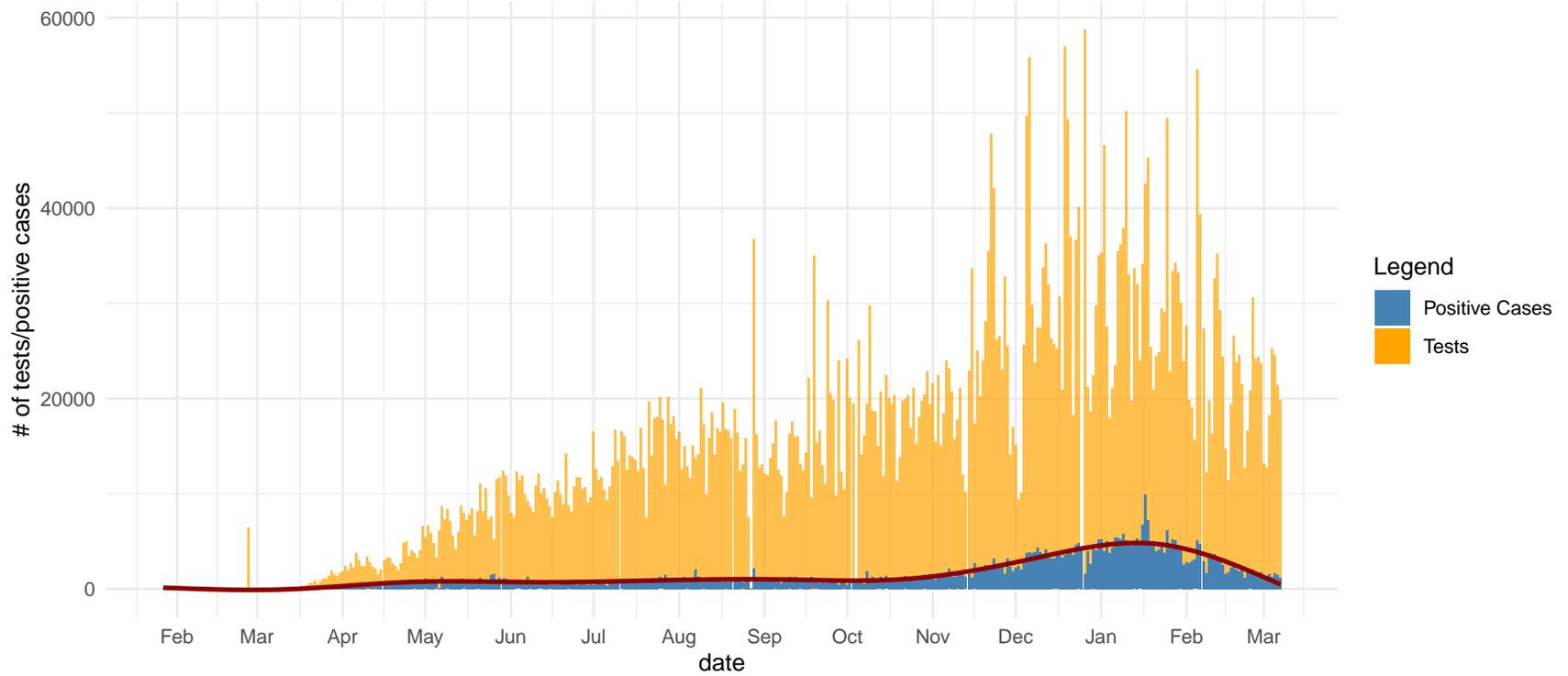
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Virginia daily COVID-19 tests and positive cases 2021-03-07

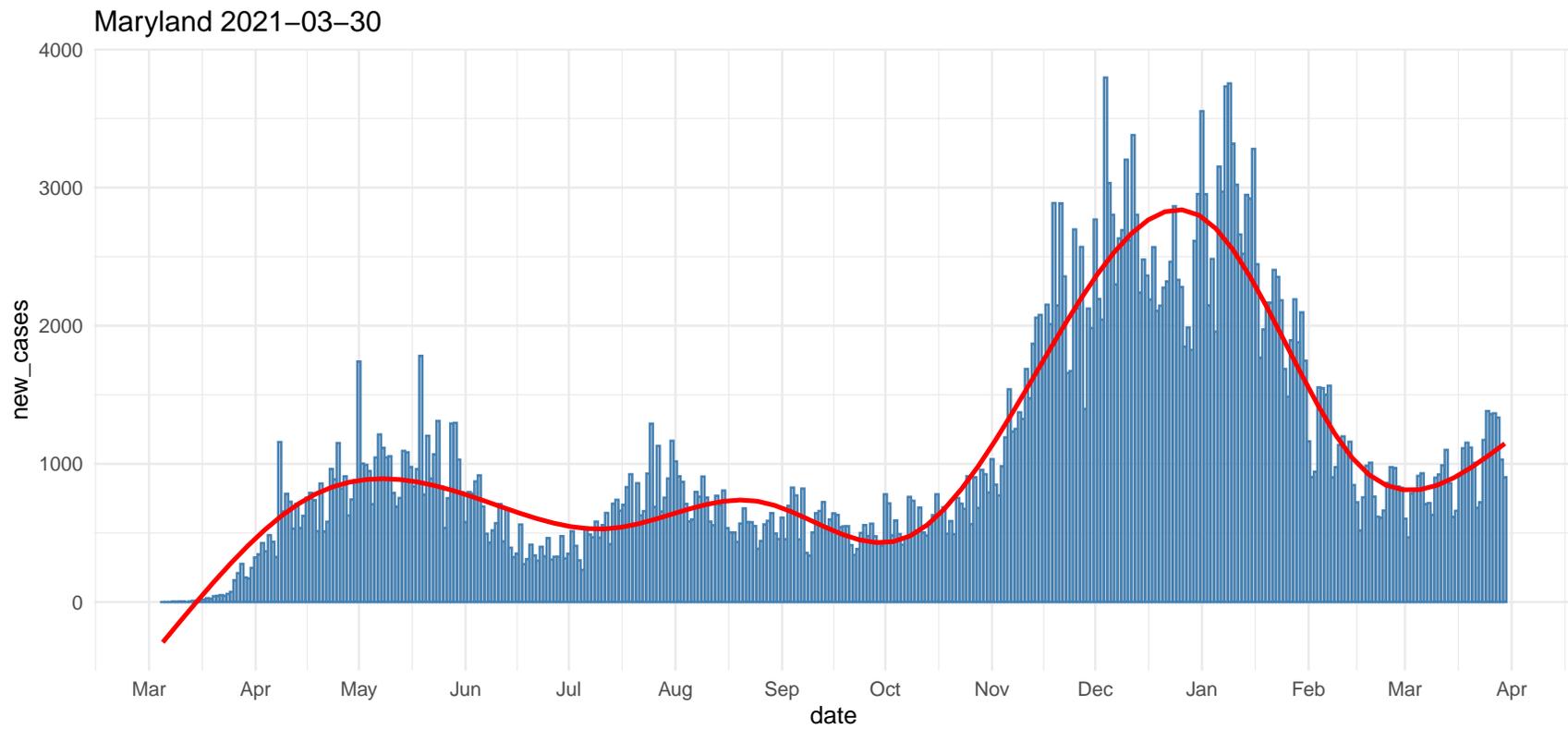


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Maryland

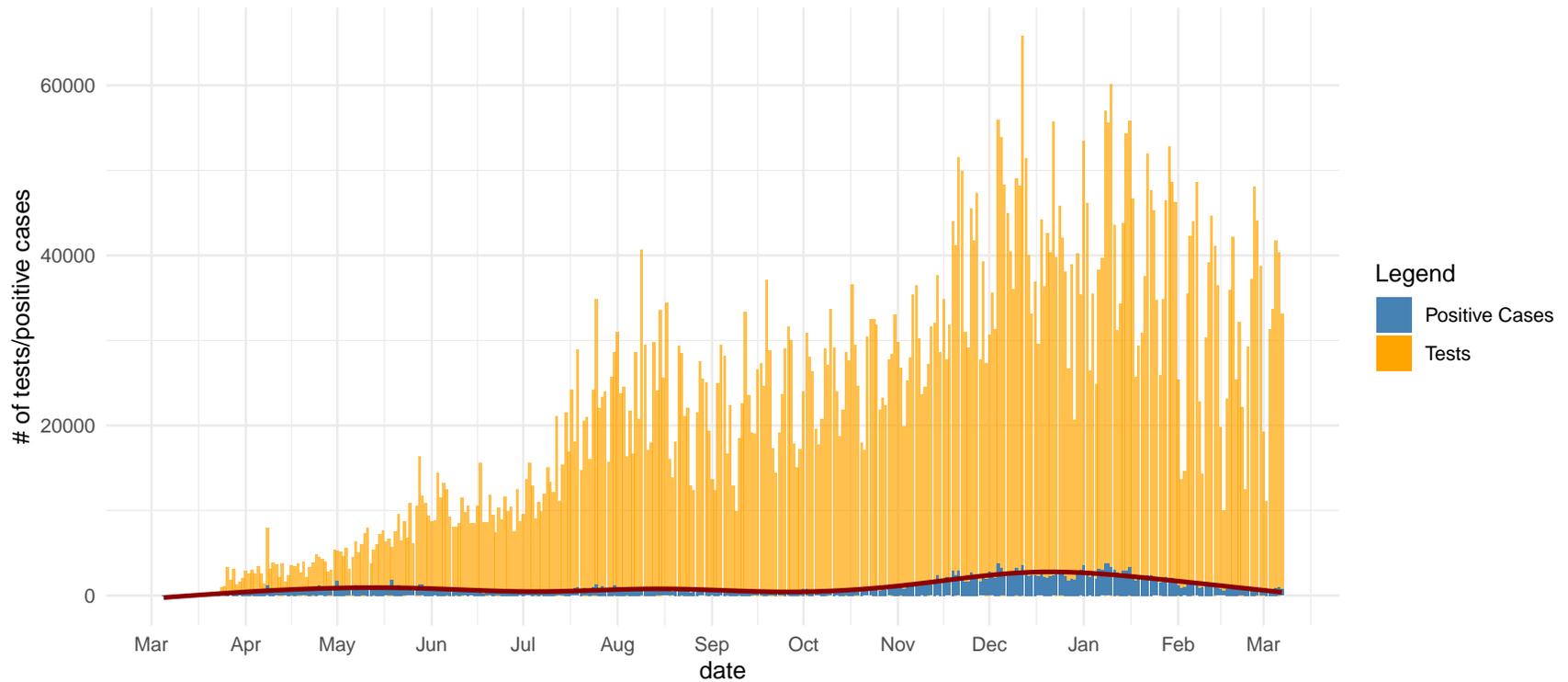
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Maryland daily COVID-19 tests and positive cases 2021-03-07

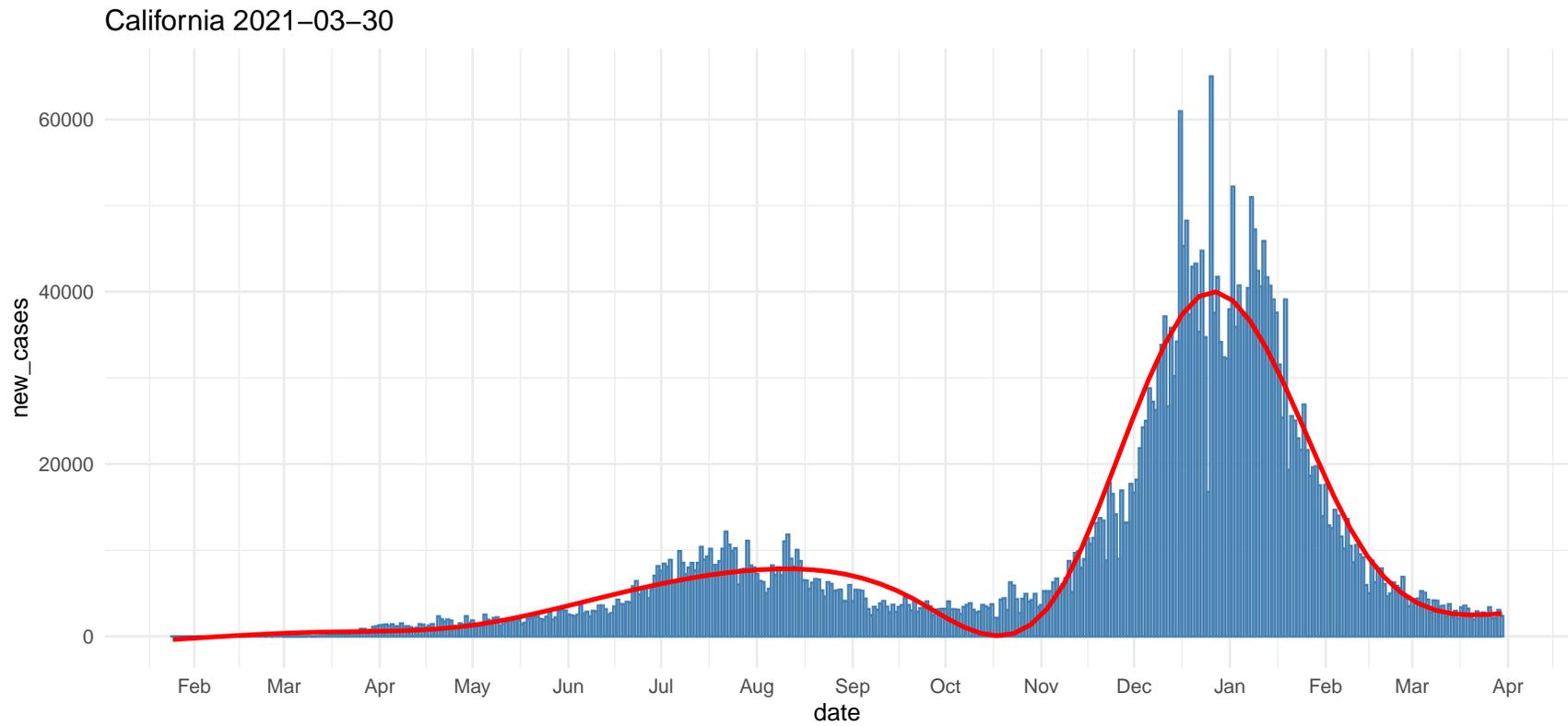


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## California

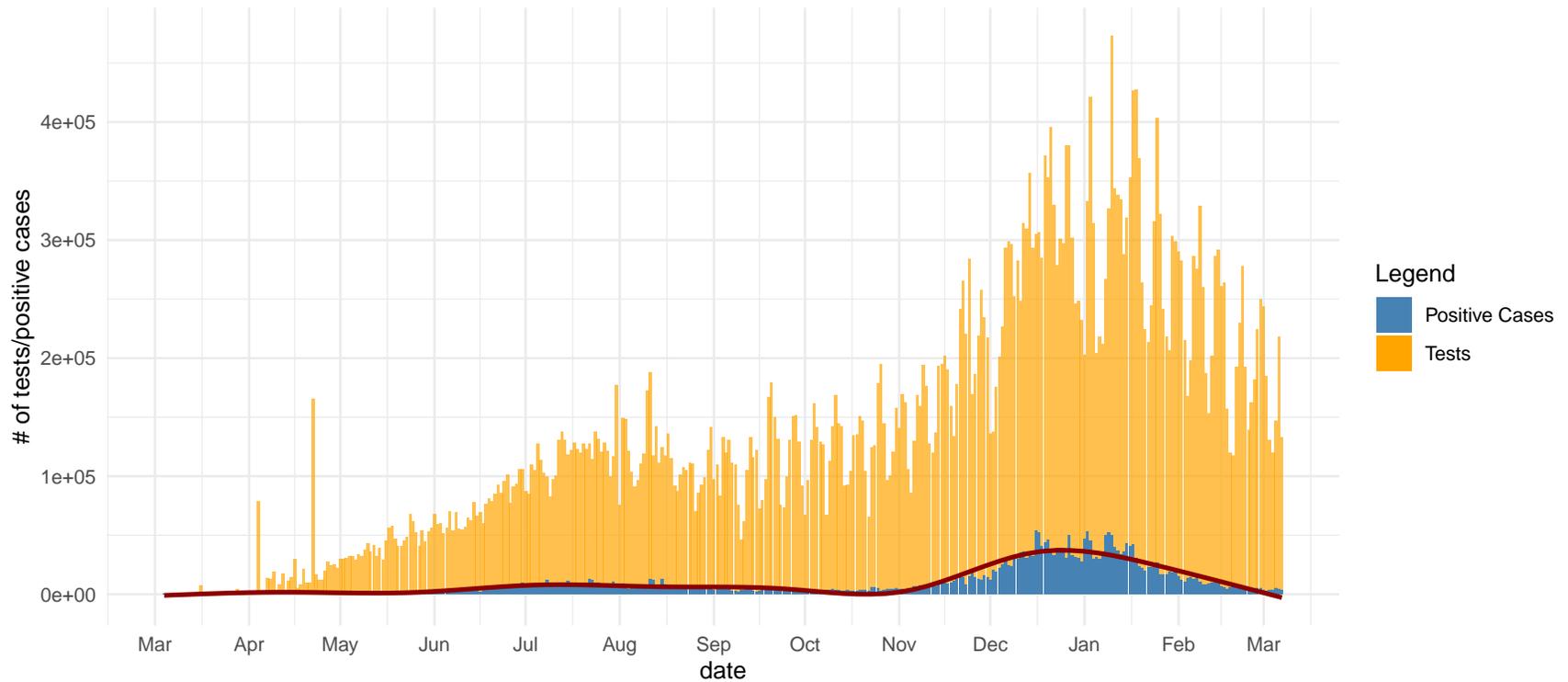
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

California daily COVID-19 tests and positive cases 2021-03-07

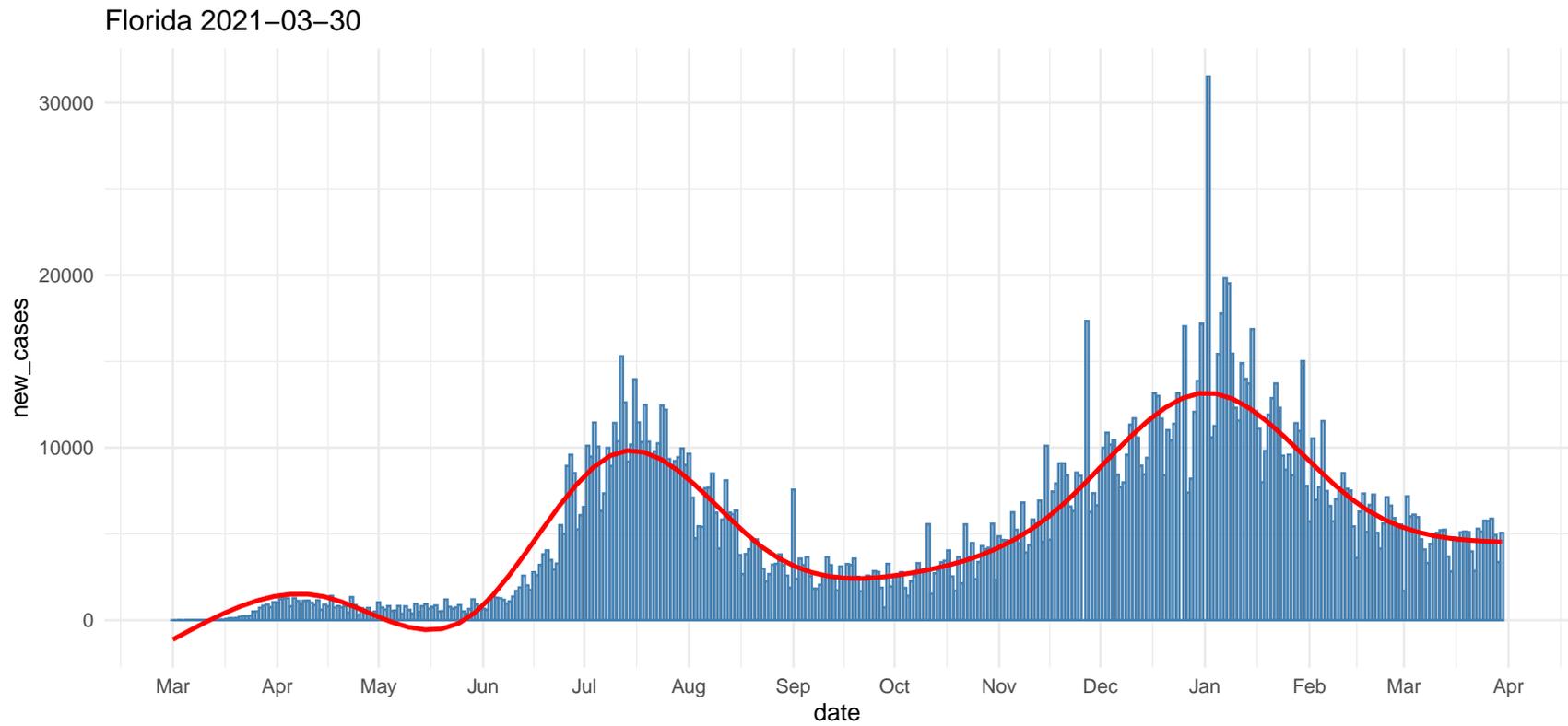


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Florida

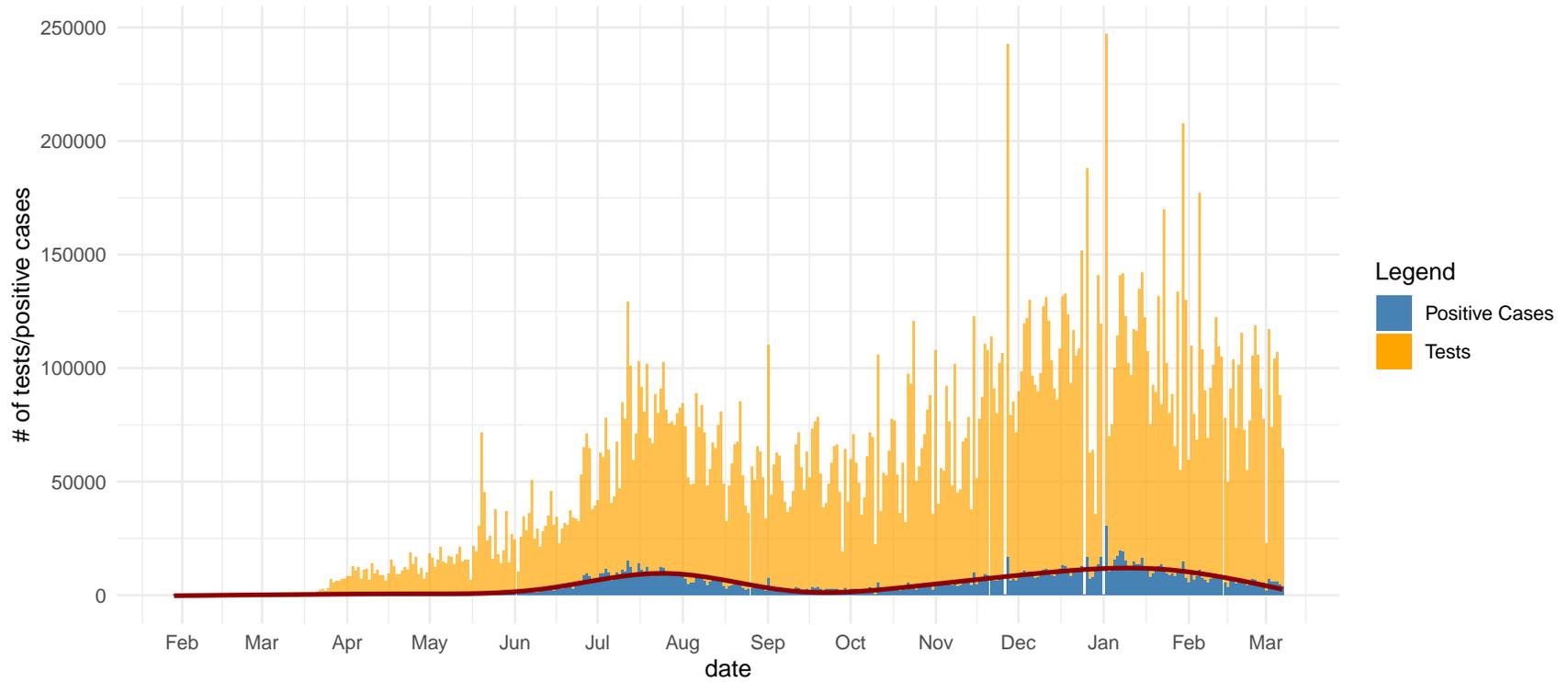
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Florida daily COVID-19 tests and positive cases 2021-03-07

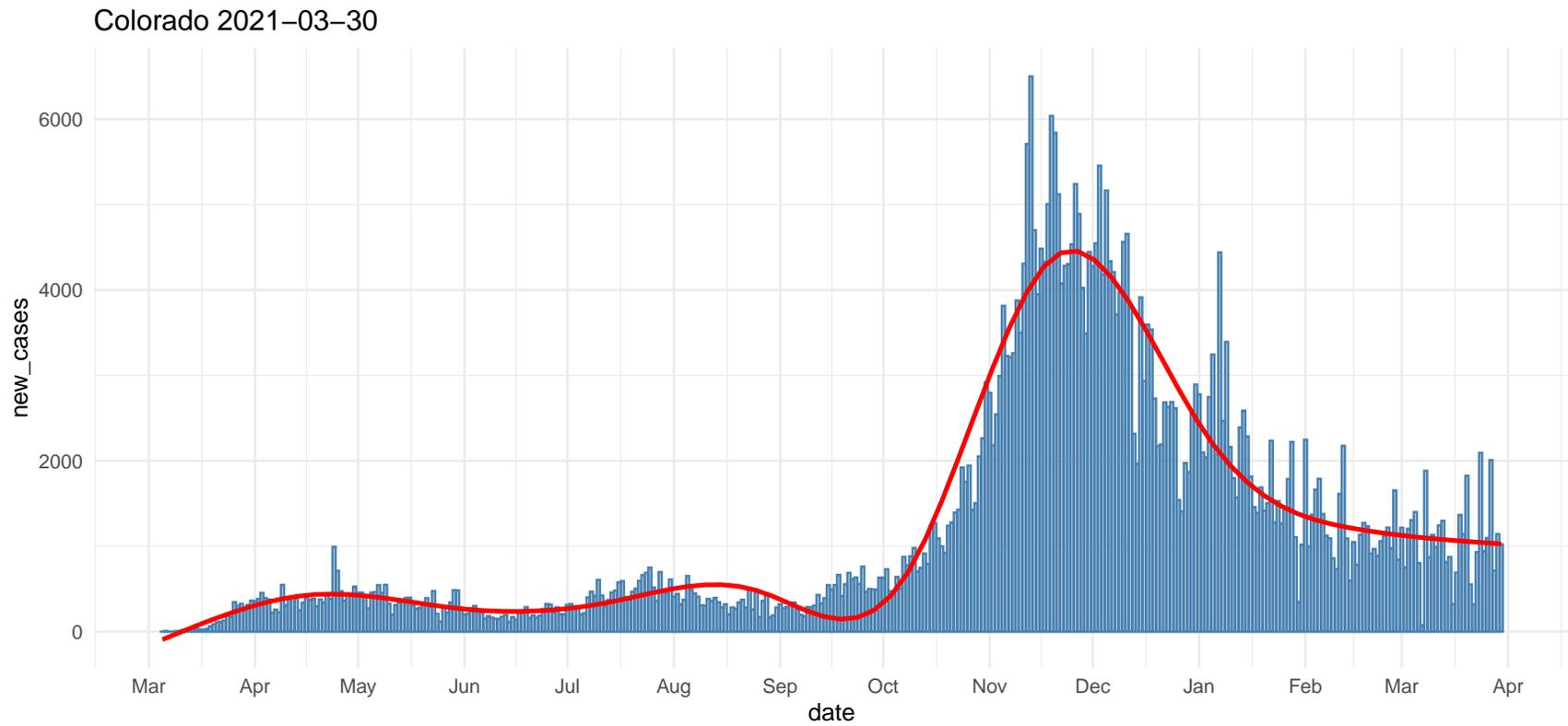


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Colorado

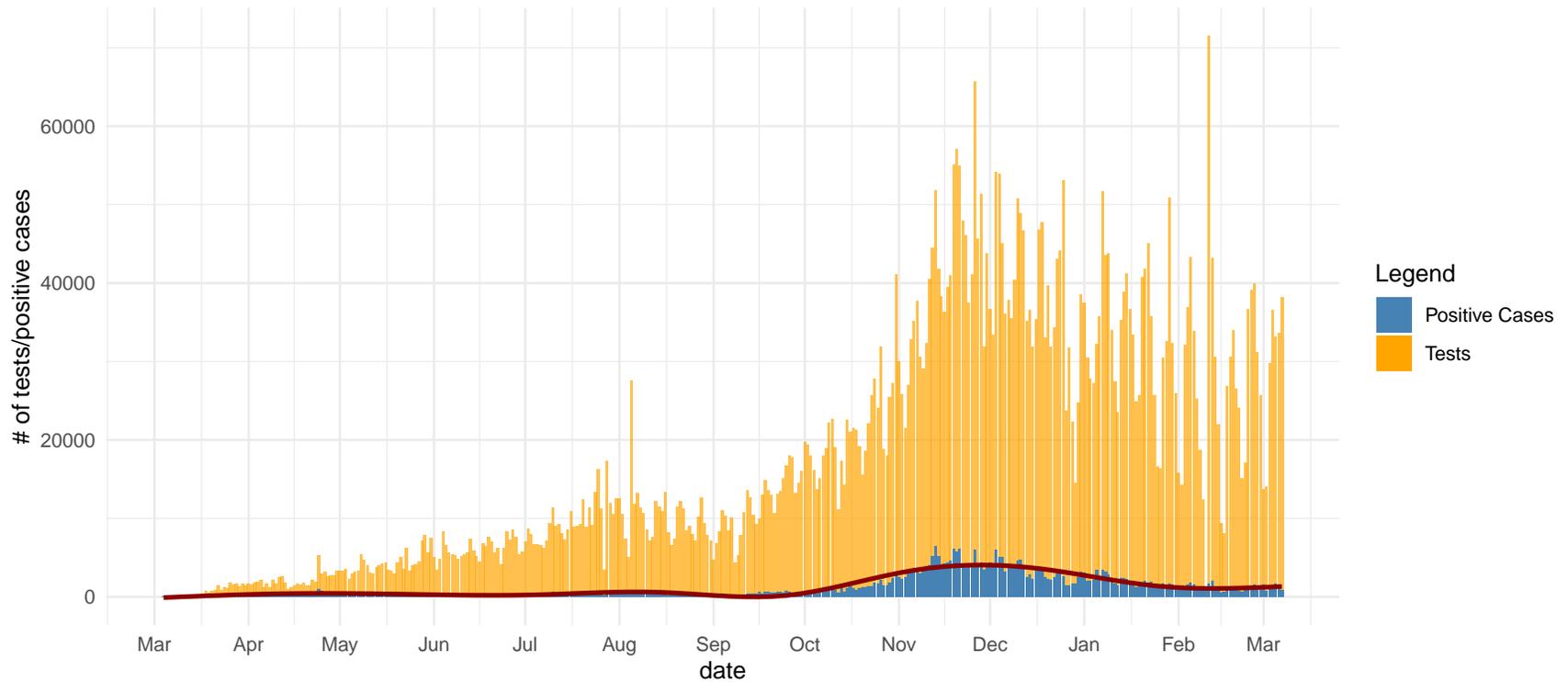
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Colorado daily COVID-19 tests and positive cases 2021-03-07

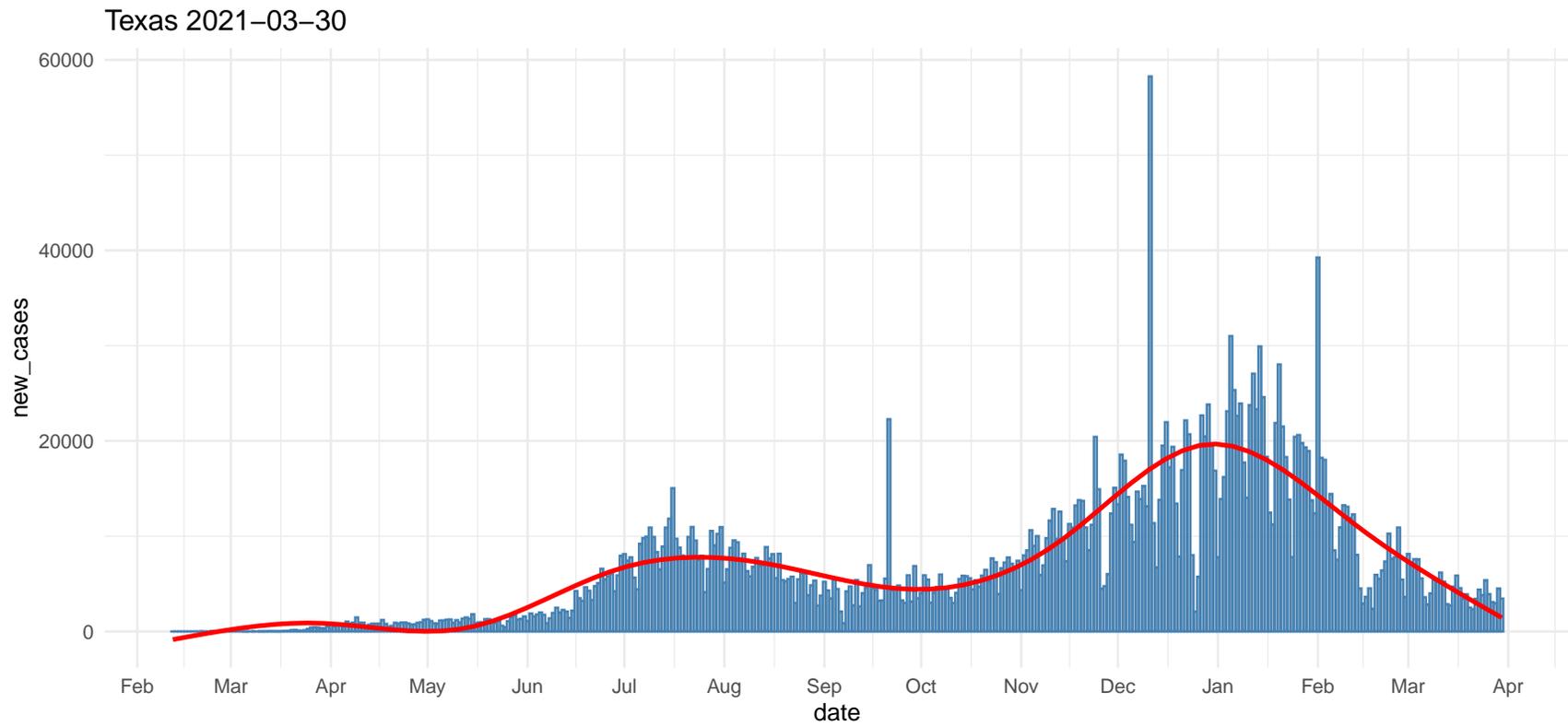


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Texas

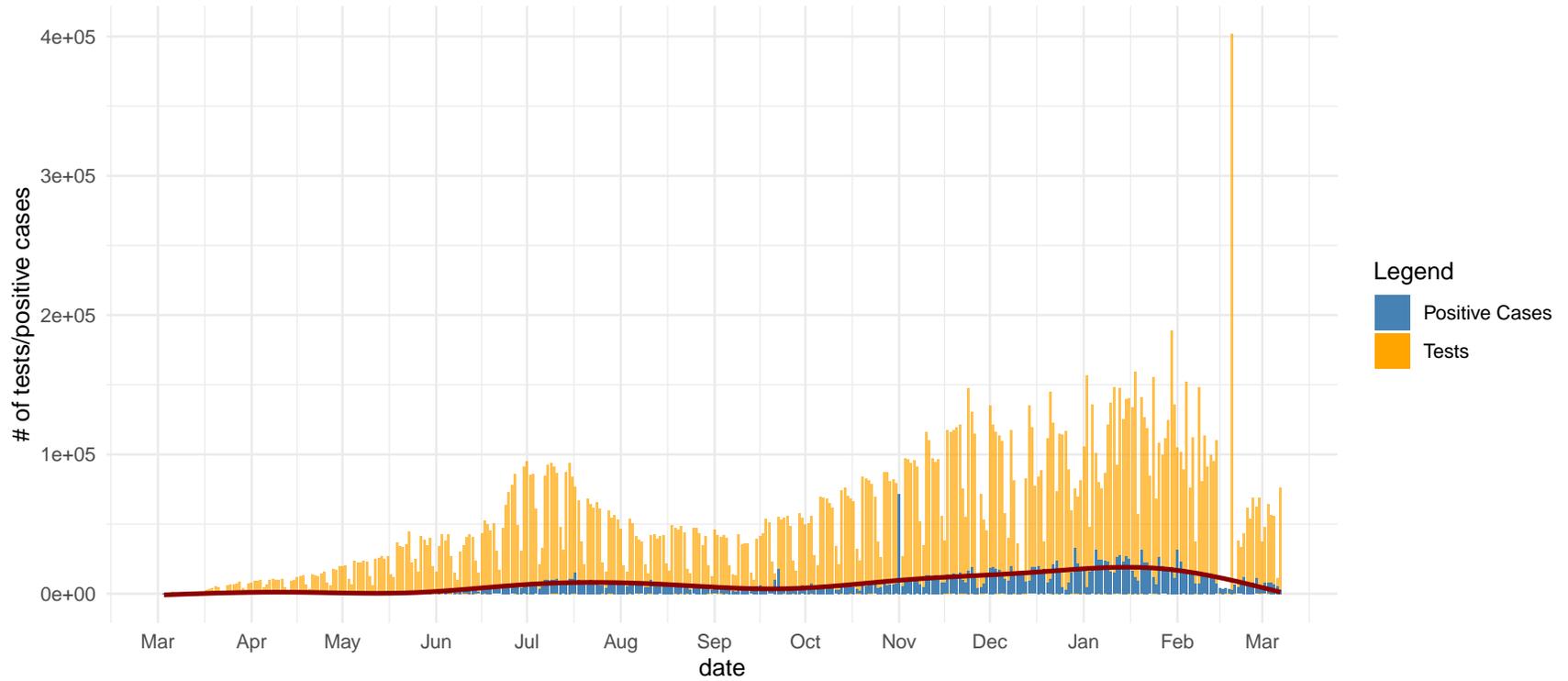
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Texas daily COVID-19 tests and positive cases 2021-03-07

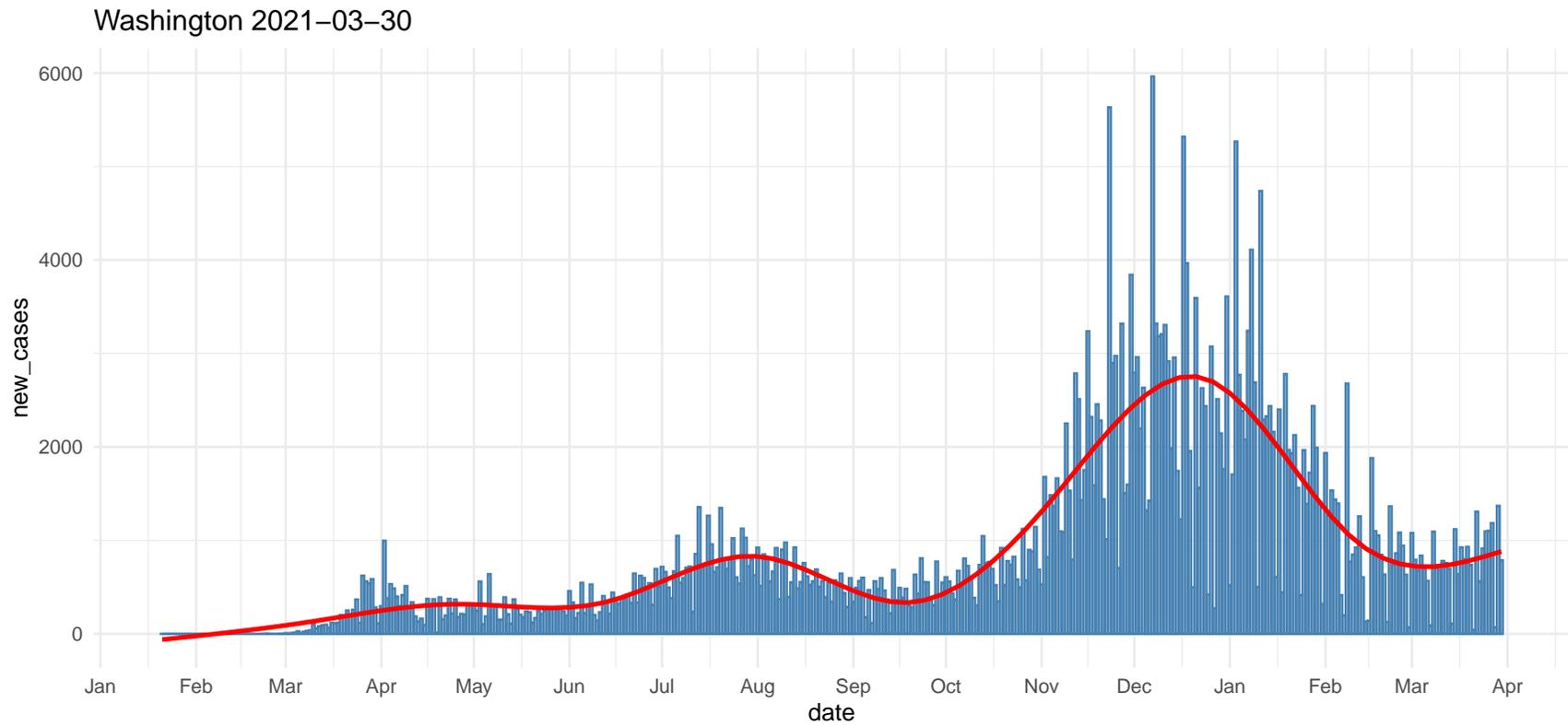


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Washington (State)

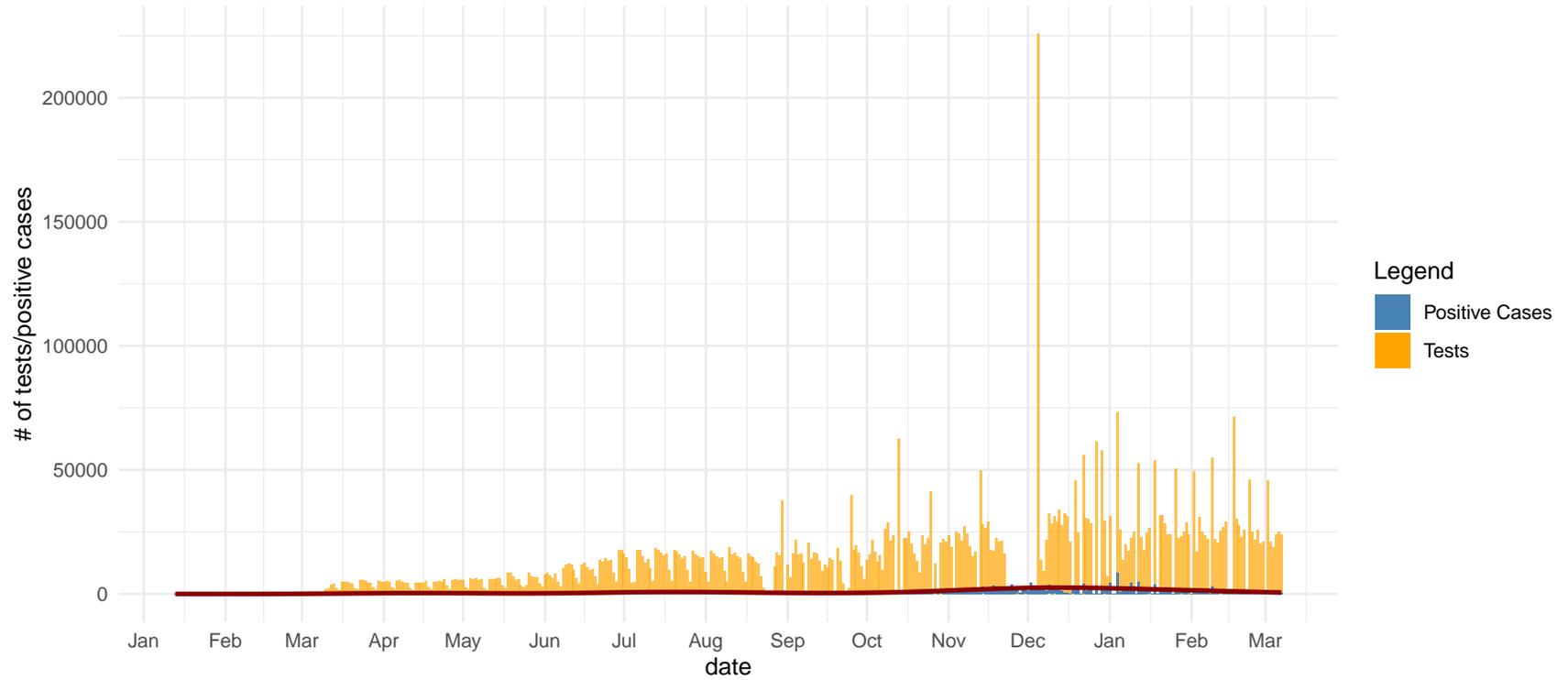
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Washington daily COVID-19 tests and positive cases 2021-03-07

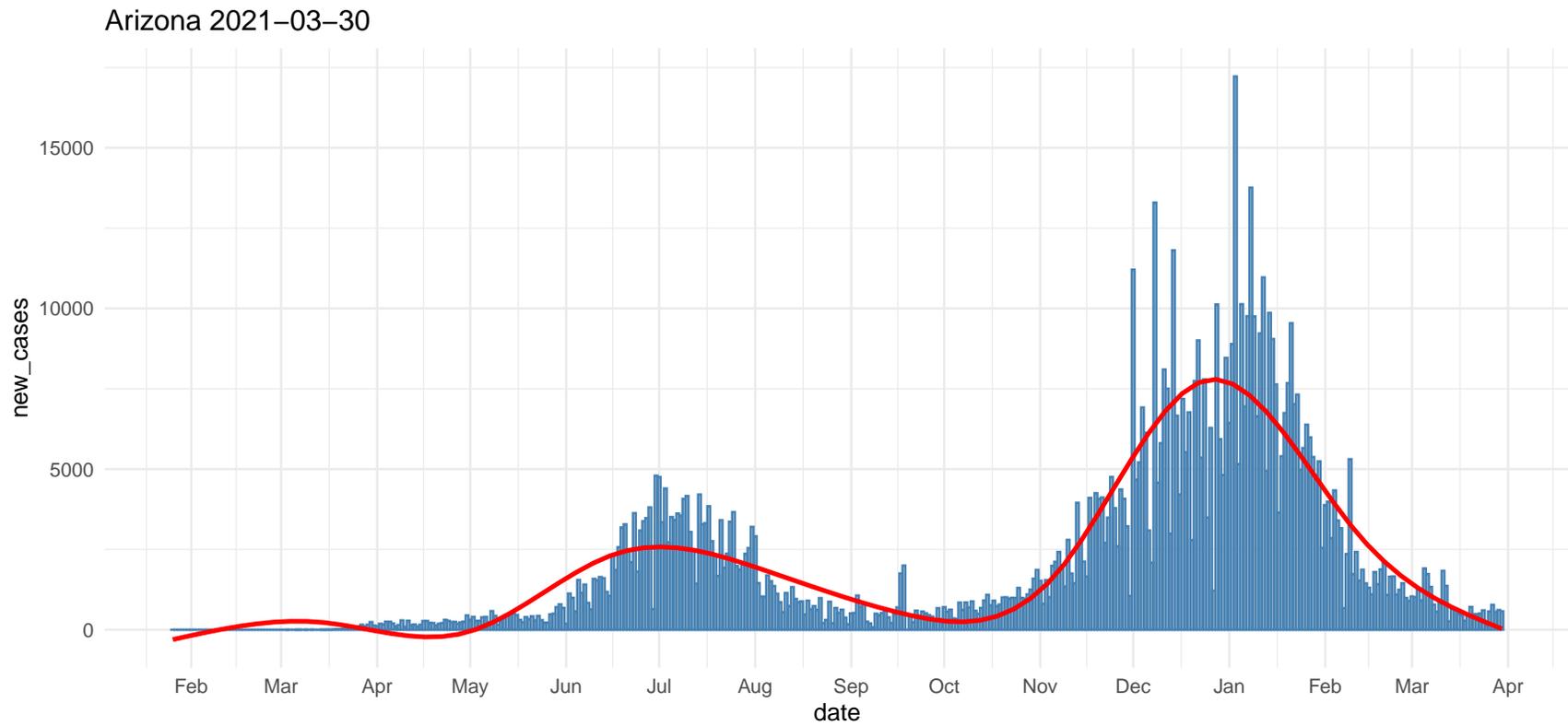


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Arizona

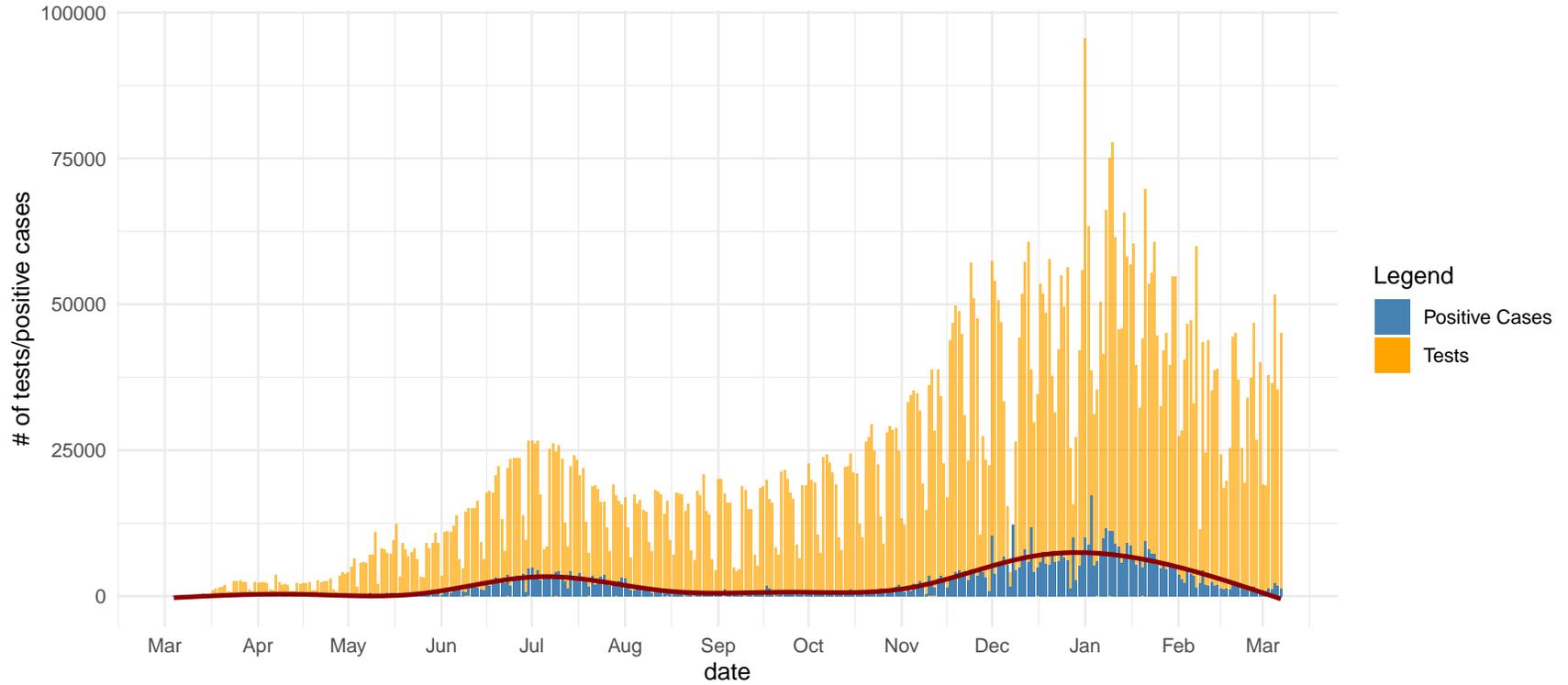
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Arizona daily COVID-19 tests and positive cases 2021-03-07

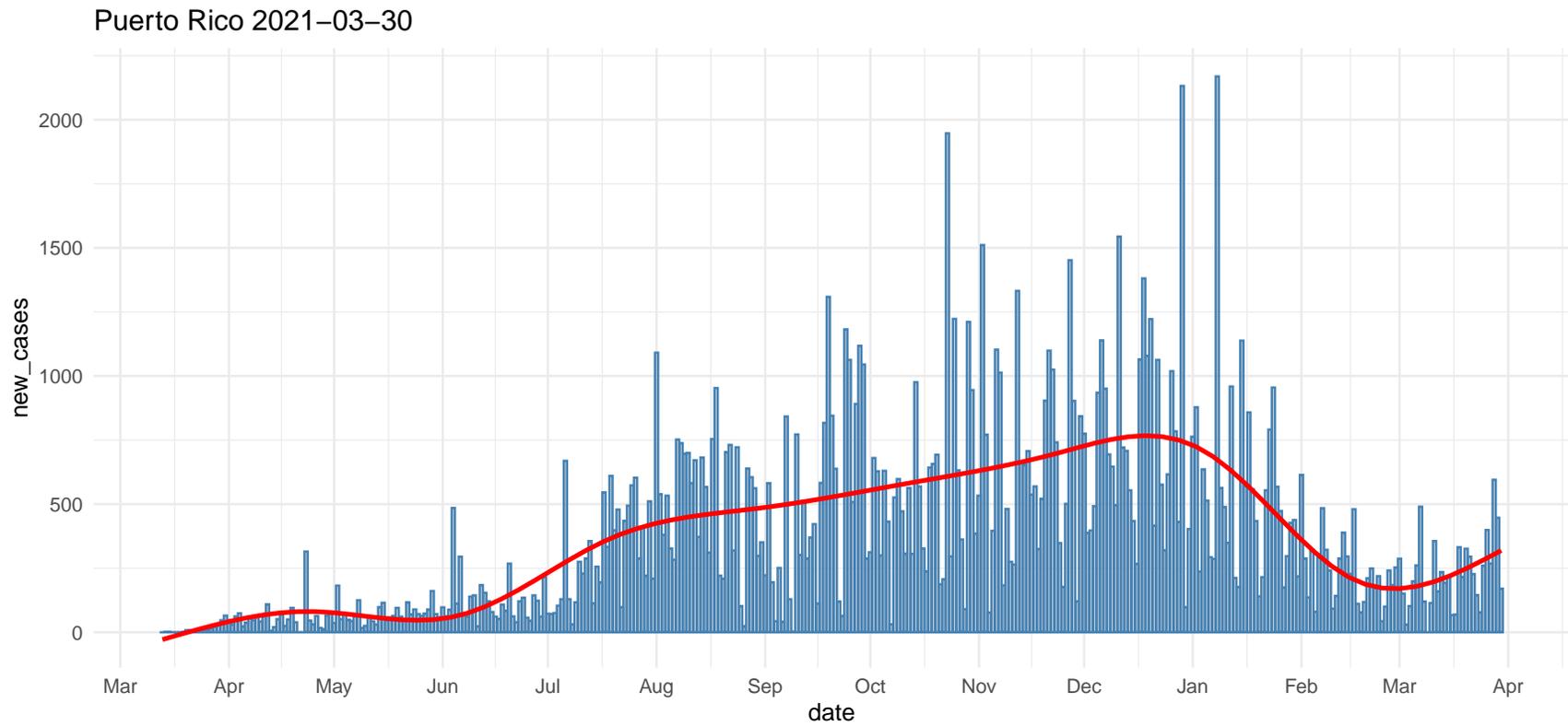


Source: CovidTracking.com  
Created by Carlos Delgado Salas

## Puerto Rico

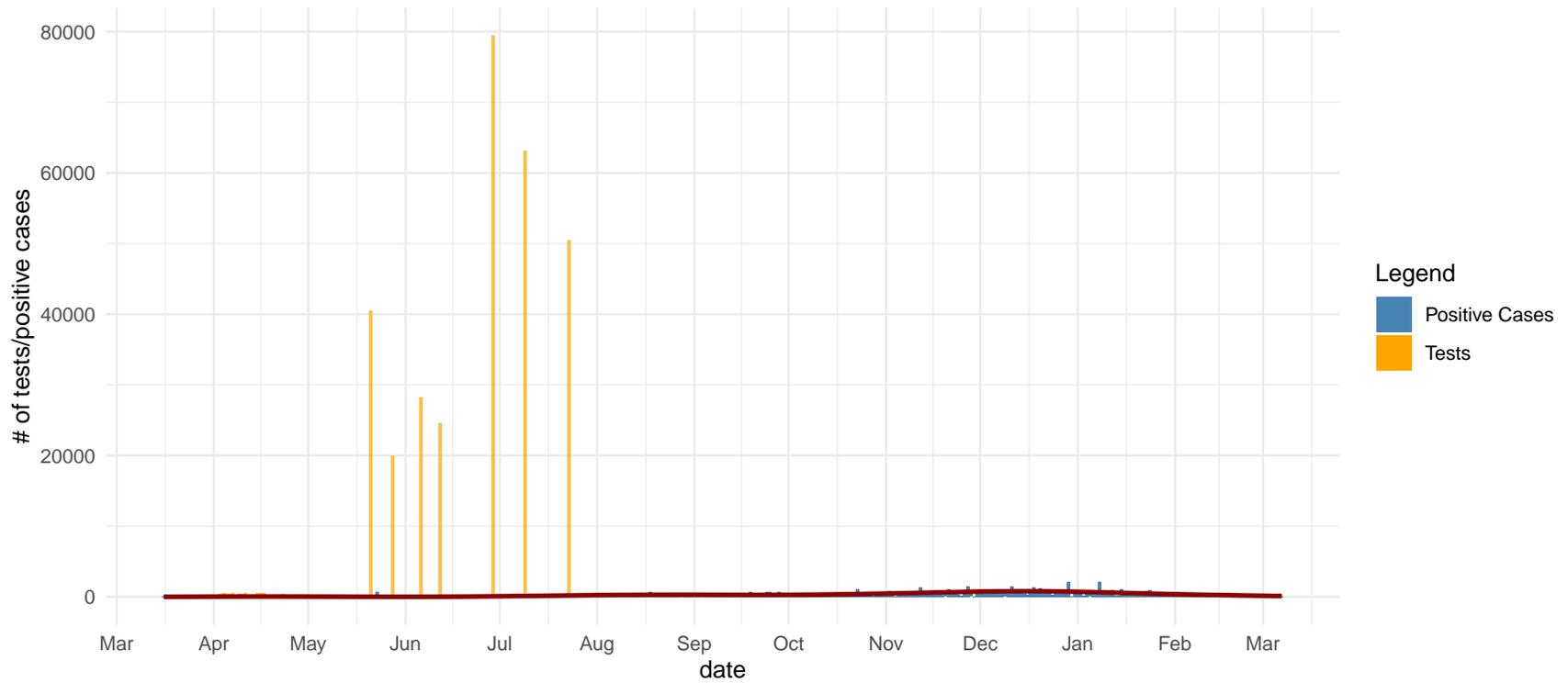
Total Cases (with Loess Curve) and Total Cases (with Loess Curve) + Total testing

(The amount of new cases per day are shown in a bar and a Loess regression curve is fitted into the data to smoothen the curve) (These graphs may vary since they come from different data sources)



Source: New York Times  
Created by Carlos Delgado Salas

Puerto Rico daily COVID-19 tests and positive cases 2021-03-07



Source: CovidTracking.com  
Created by Carlos Delgado Salas