

# Modeling the Dynamics of COVID-19

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## Data Source

- ☒ Local  
☐ Our World In Data

## Continent

Europe

## Country

Netherlands

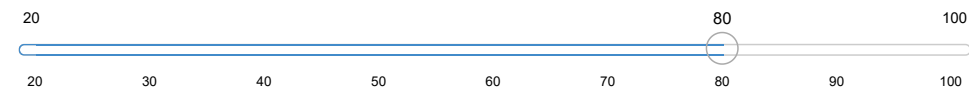
## Modeling Period

2020-04-04

to

2020-06-01

## Percentage of Training Dataset (Training vs. Testing Split):



## Variable of Interest

- ☒ New Cases  
☐ New Deaths

## Netherlands

The study timeframe starts from **2020-04-04** until **2020-06-01** covering **59** days.

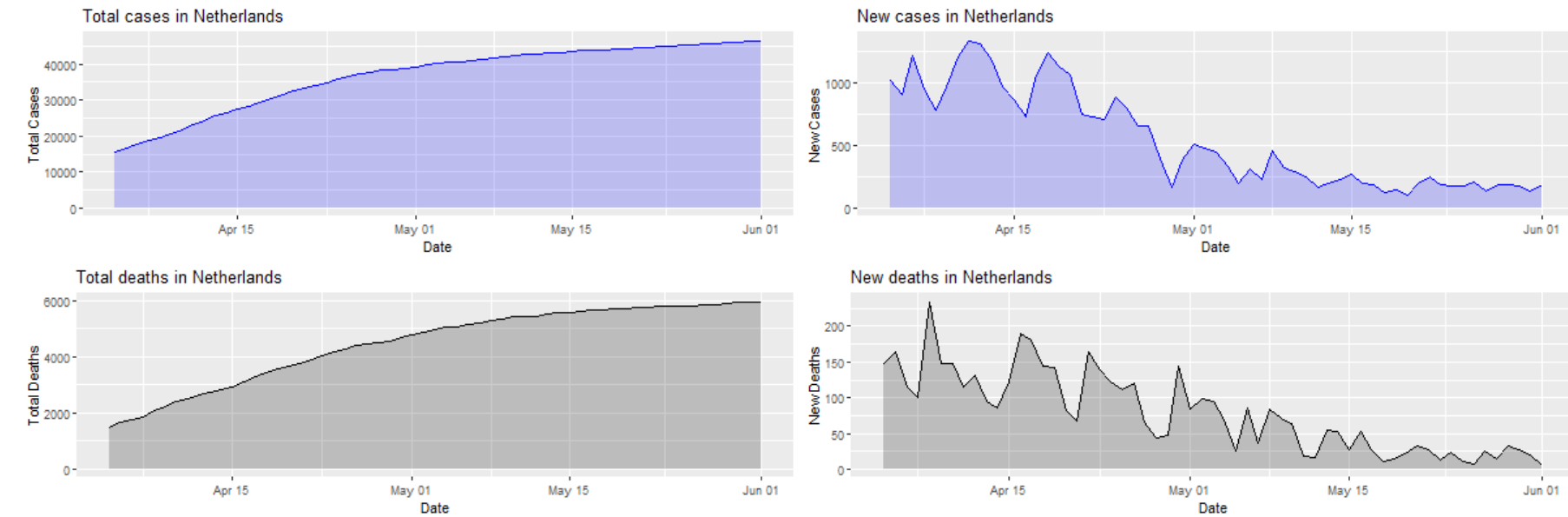
The first case was reported on: **2020-04-04**

The first death was reported on: **2020-04-04**

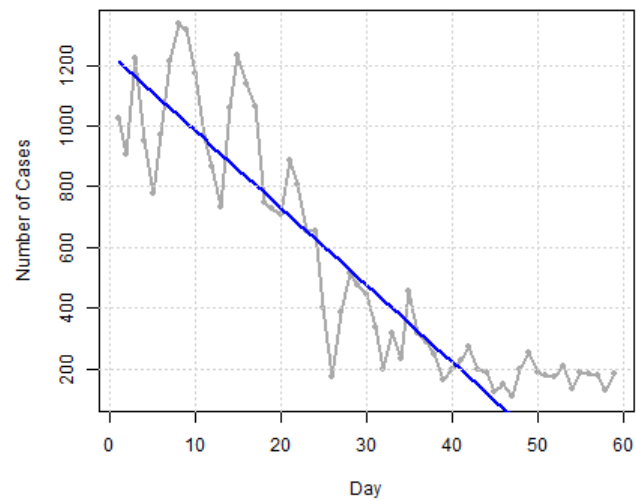
The total cumulative number of cases by the last day in the selected period is **46442** cases.

The total number of deaths by the last day in the selected period is **5956** deaths.

## Cases vs. Deaths Overview

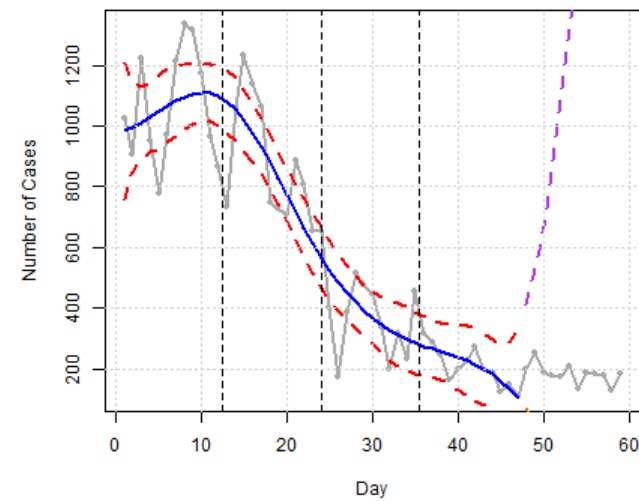


New Cases in Netherlands (Actual vs. LR)



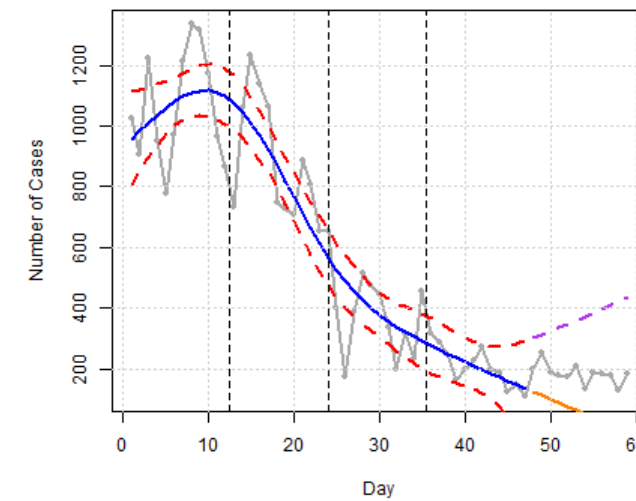
AIC = 620.897  
BIC = 626.448  
Training MSE = 28,142.61  
Testing MSE = 97,536.29

New Cases in Netherlands (Actual vs. Cubic Spline)



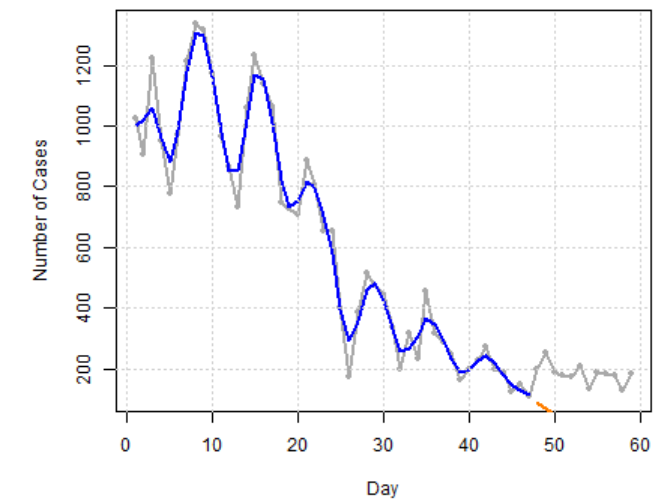
AIC = 609.912  
BIC = 624.713  
Training MSE = 18,007.62  
Testing MSE = 284,706.2

New Cases in Netherlands (Actual vs. Natural Spline)



AIC = 606.215  
BIC = 617.316  
Training MSE = 18,124.19  
Testing MSE = 17,322.93

New Cases in Netherlands (Actual vs. Smoothing Spline)



Degrees of Freedom = 23.114  
AIC = 282,918.1  
BIC = 282,960.9  
Training MSE = 3,009.28  
Testing MSE = 46,605.82