



Modeling the Dynamics of COVID-19

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Data Source

- ☒ Local
☐ Our World In Data

Continent

Europe

Country

Bulgaria

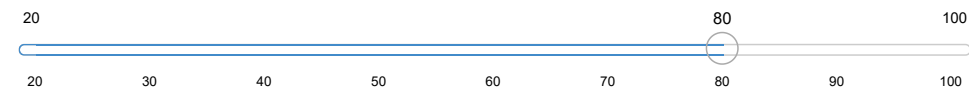
Modeling Period

2020-04-04

to

2020-06-01

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



Variable of Interest

- ☒ New Cases
☐ New Deaths

Bulgaria

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

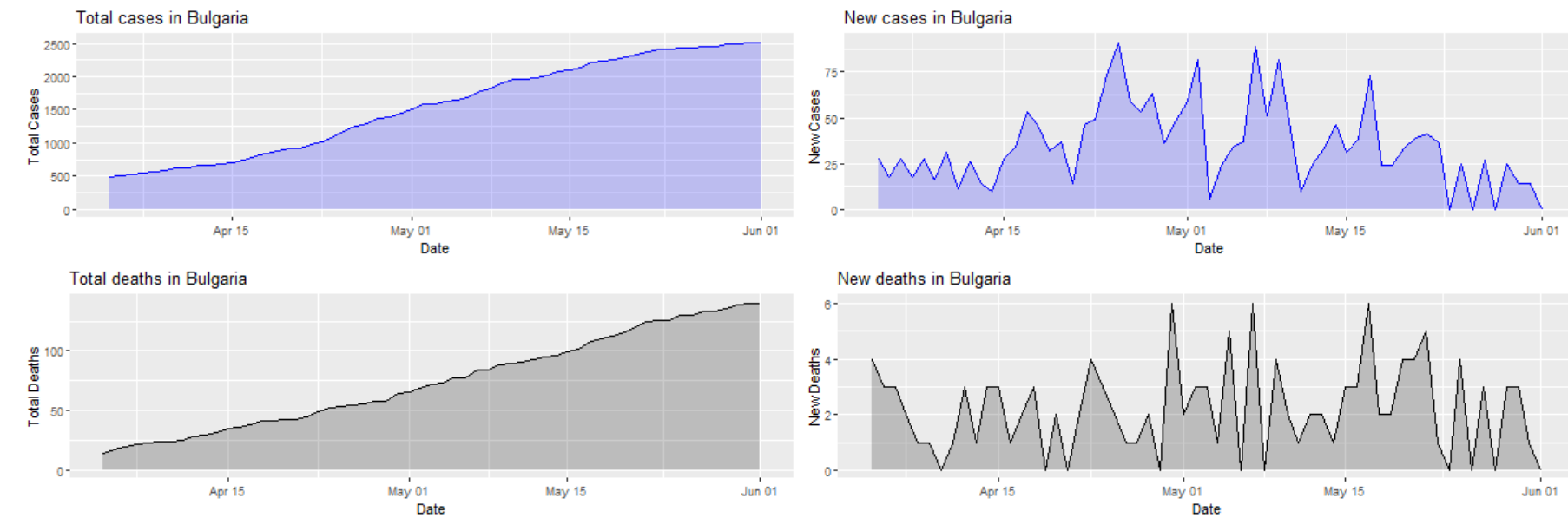
The first case was reported on: **2020-04-04**

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

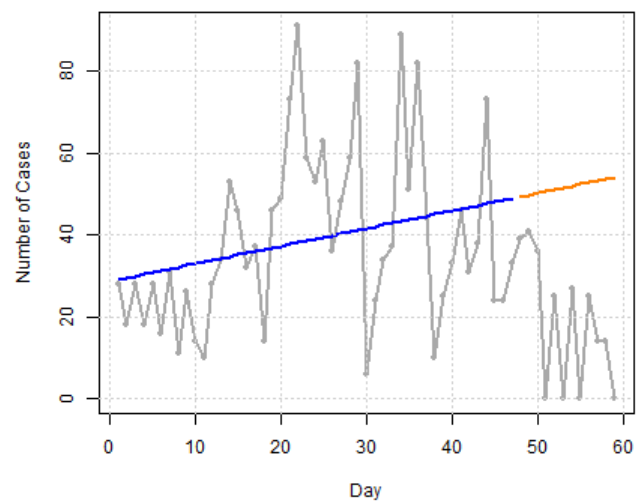
The total cumulative number of cases by the last day in the selected period is **2513** cases.

The total number of deaths by the last day in the selected period is **140** deaths.

Cases vs. Deaths Overview

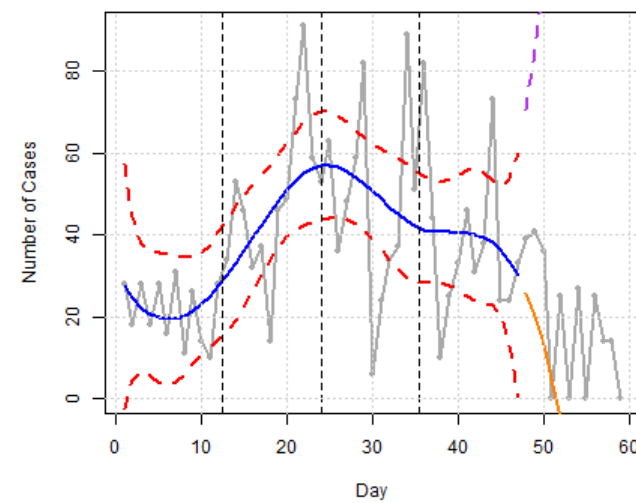


New Cases in Bulgaria (Actual vs. LR)



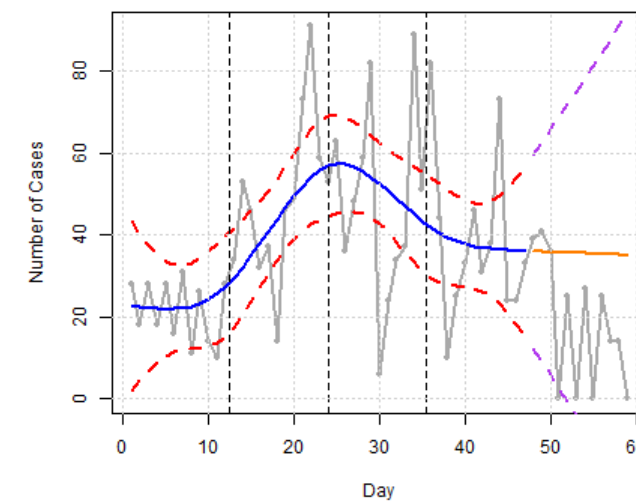
AIC = 423.714
BIC = 429.264
Training MSE = 423.96
Testing MSE = 1,374.82

New Cases in Bulgaria (Actual vs. Cubic Spline)



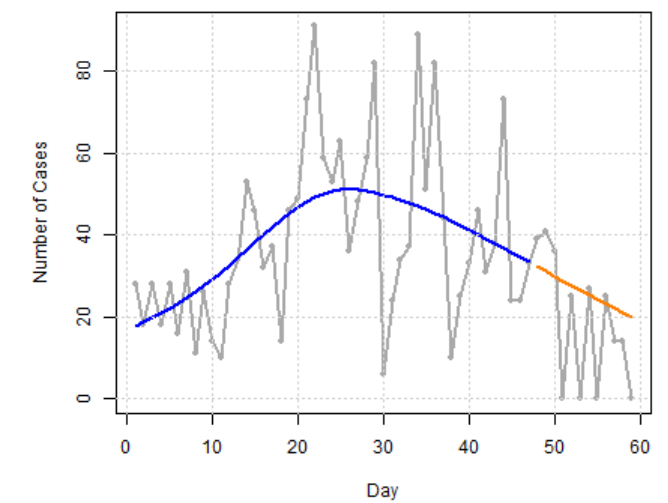
AIC = 420.063
BIC = 434.864
Training MSE = 317.1
Testing MSE = 4,451.07

New Cases in Bulgaria (Actual vs. Natural Spline)



AIC = 416.651
BIC = 427.752
Training MSE = 321.09
Testing MSE = 522.42

New Cases in Bulgaria (Actual vs. Smoothing Spline)



Degrees of Freedom = 3.954
AIC = 31,098.19
BIC = 31,105.51
Training MSE = 330.75
Testing MSE = 234.84