

Modeling the Dynamics of COVID-19

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Data Source

- ☒ Local
☐ Our World In Data

Continent

Europe

Country

Ukraine

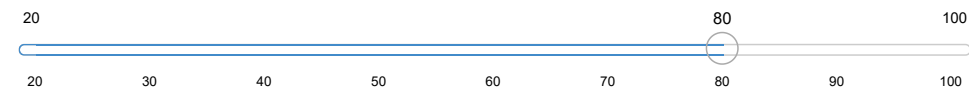
Modeling Period

2020-04-04

to

2020-06-01

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



Variable of Interest

- ☒ New Cases
☐ New Deaths

Ukraine

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

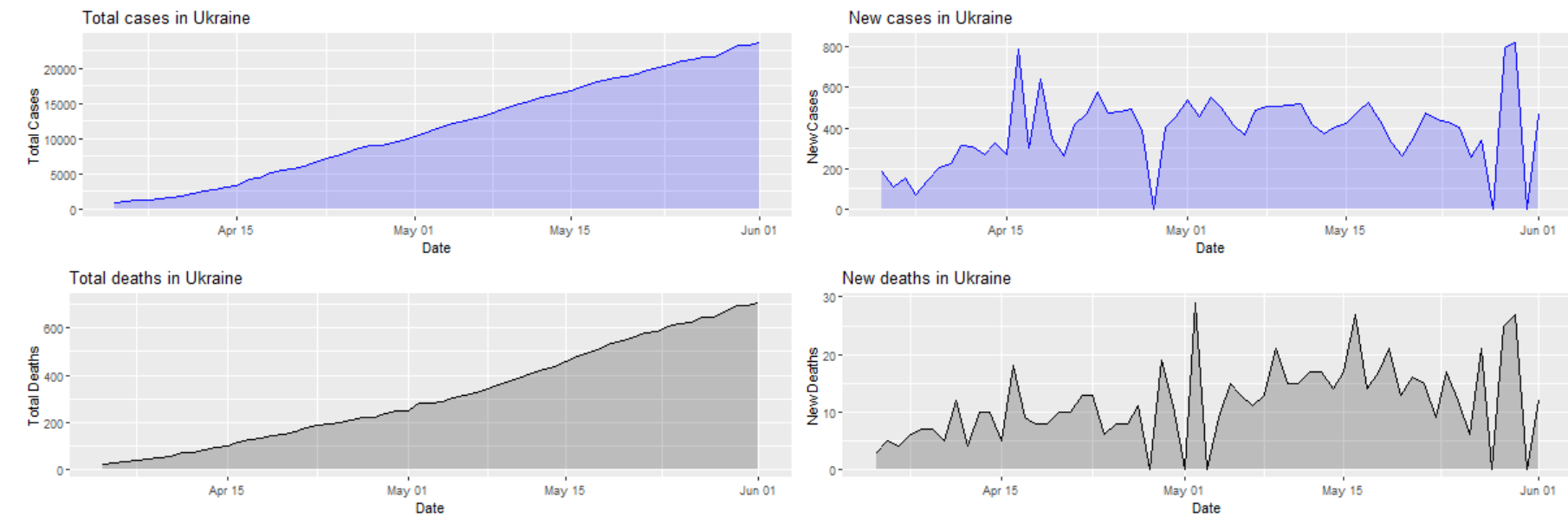
The first case was reported on: **2020-04-04**

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

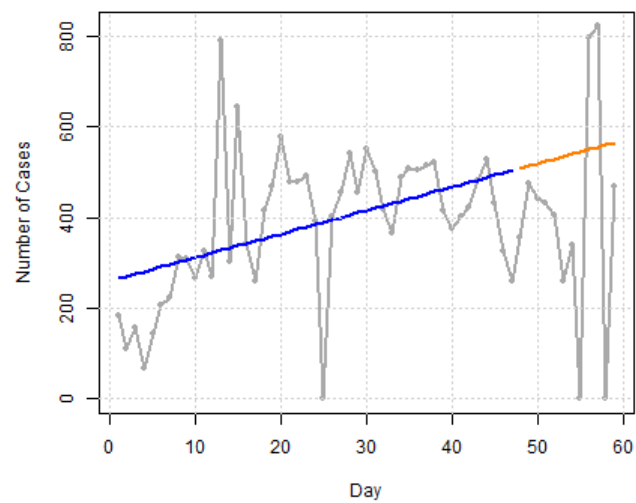
The total cumulative number of cases by the last day in the selected period is **23672** cases.

The total number of deaths by the last day in the selected period is **708** deaths.

Cases vs. Deaths Overview



New Cases in Ukraine (Actual vs. LR)



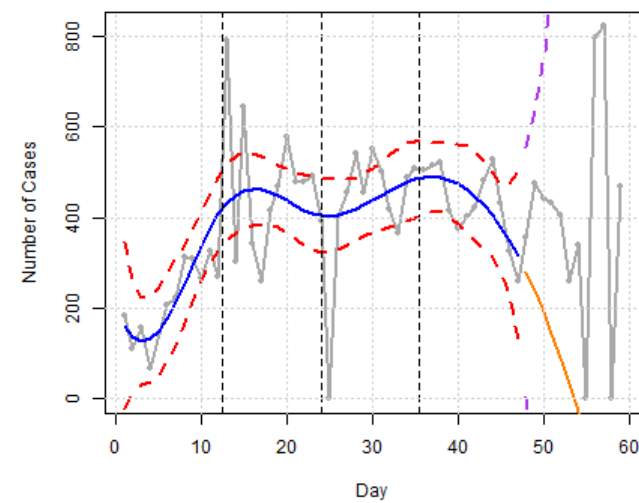
AIC = 601.672

BIC = 607.222

Training MSE = 18,694.54

Testing MSE = 77,154.39

New Cases in Ukraine (Actual vs. Cubic Spline)



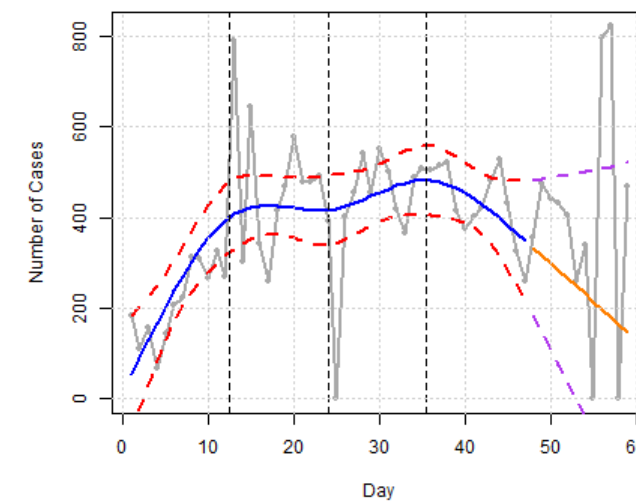
AIC = 590.74

BIC = 605.541

Training MSE = 11,975.62

Testing MSE = 286,743.8

New Cases in Ukraine (Actual vs. Natural Spline)



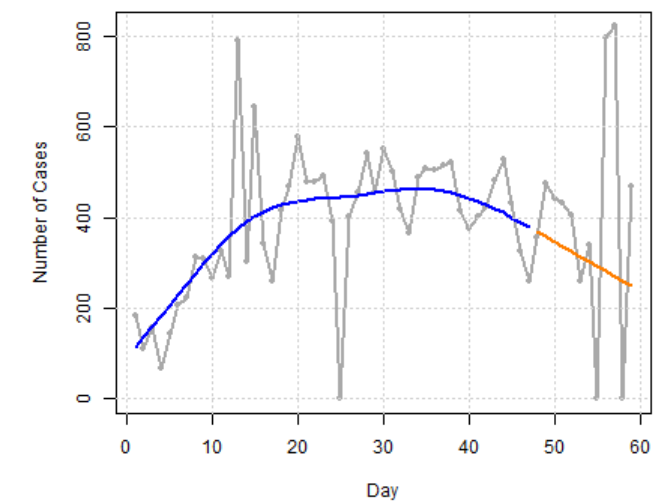
AIC = 590.154

BIC = 601.255

Training MSE = 12,877.89

Testing MSE = 87,434.92

New Cases in Ukraine (Actual vs. Smoothing Spline)



Degrees of Freedom = 4.41

AIC = 1,234,550

BIC = 1,234,558

Training MSE = 13,133.41

Testing MSE = 67,941.79