



Modeling the Dynamics of COVID-19

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Data Source

- ☒ Local
☐ Our World In Data

Continent

Europe

Country

United Kingdom

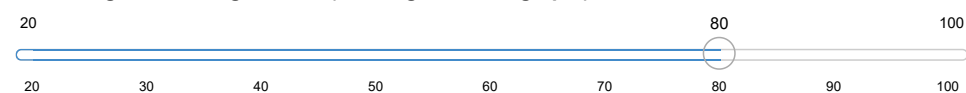
Modeling Period

2020-04-04

to

2020-06-01

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



Variable of Interest

- ☒ New Cases
☐ New Deaths

United Kingdom

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

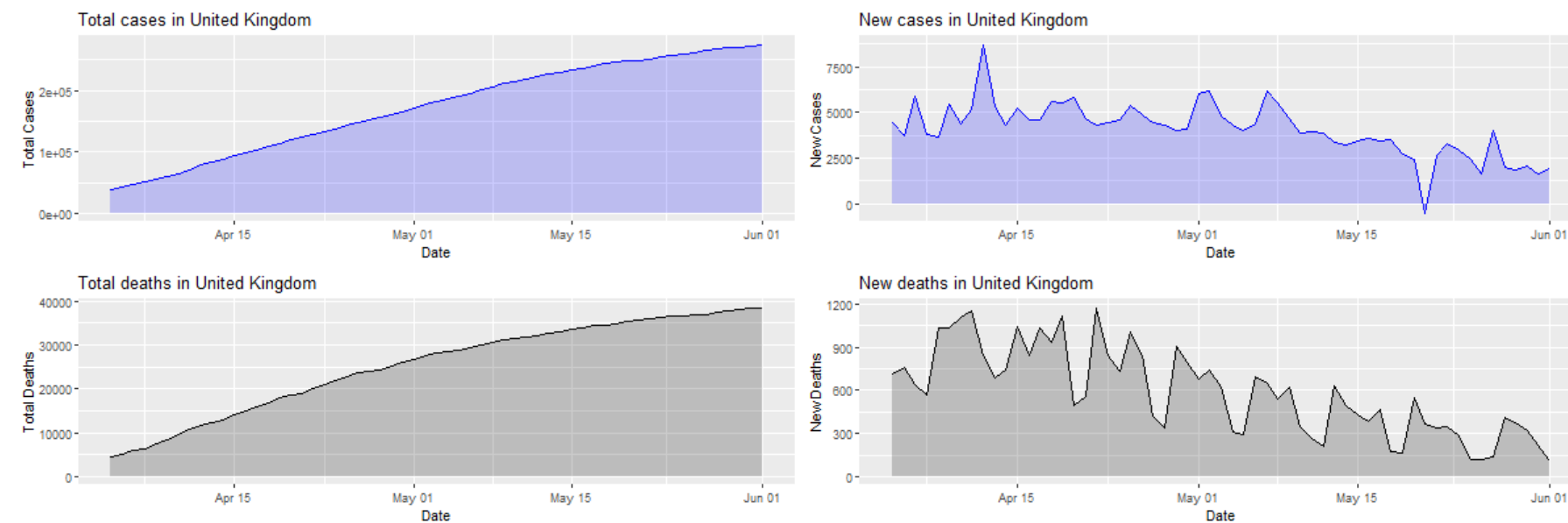
The first case was reported on: **2020-04-04**

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

The total cumulative number of cases by the last day in the selected period is **274762** cases.

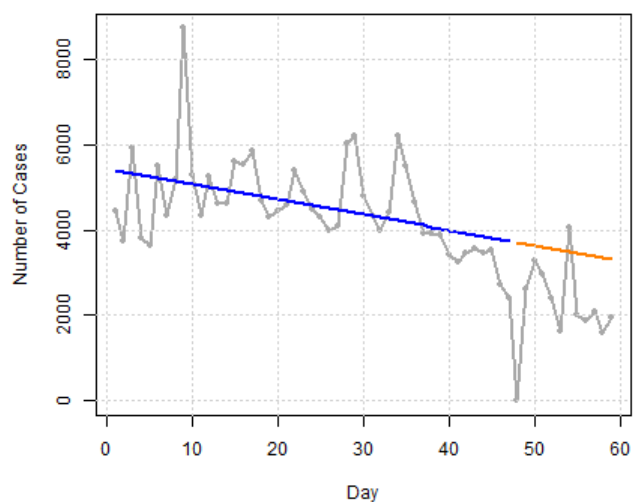
The total number of deaths by the last day in the selected period is **38489** deaths.

Cases vs. Deaths Overview



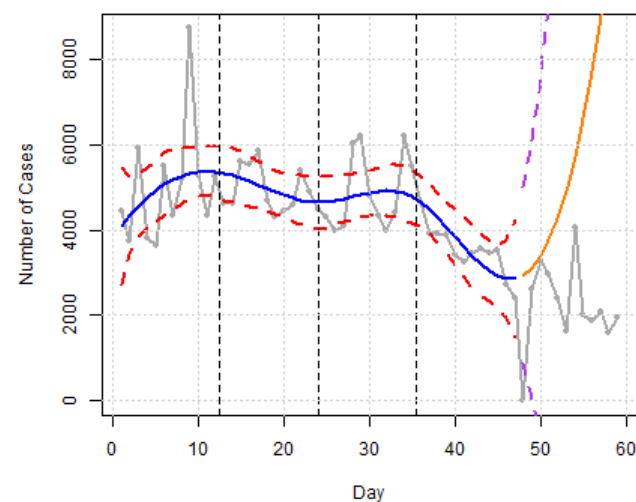
The data contains negative values which have been set as zero (0).

New Cases in United Kingdom (Actual vs. LR)



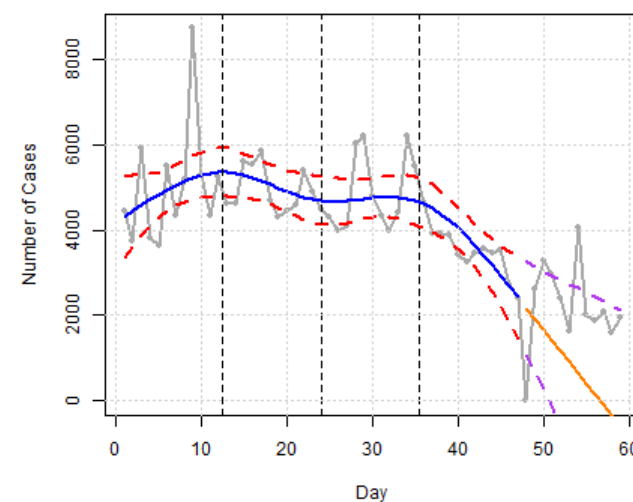
AIC = 784.973
BIC = 790.523
Training MSE = 923,577.6
Testing MSE = 2,642,491

New Cases in United Kingdom (Actual vs. Cubic Spline)



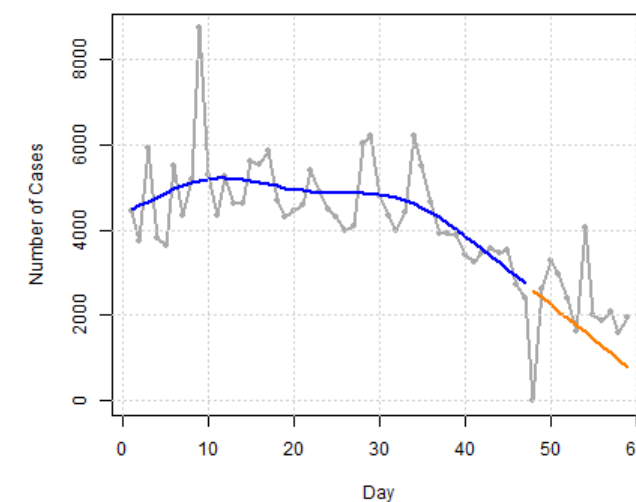
AIC = 779.846
BIC = 794.647
Training MSE = 669,413.4
Testing MSE = 26,006,026

New Cases in United Kingdom (Actual vs. Natural Spline)



AIC = 777.011
BIC = 788.112
Training MSE = 686,221.4
Testing MSE = 3,705,894

New Cases in United Kingdom (Actual vs. Smoothing Spline)



Degrees of Freedom = 4.905
AIC = 64,479,815
BIC = 64,479,824
Training MSE = 685,955.4
Testing MSE = 1,507,615