



Modeling the Dynamics of COVID-19

Supervised by Dr. Sawsan Hilal
Built by Aisha Khalid and Ahmed Khedr

Data Source

- ☒ Local
☐ Our World In Data

Continent

Europe

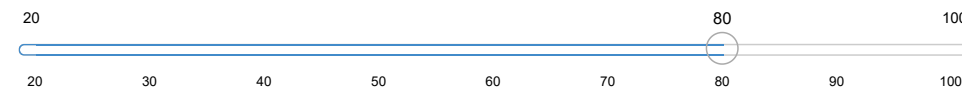
Country

Germany

Modeling Period

2020-04-04 to 2020-06-01

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



Variable of Interest

- ☒ New Cases
☐ New Deaths

Germany

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

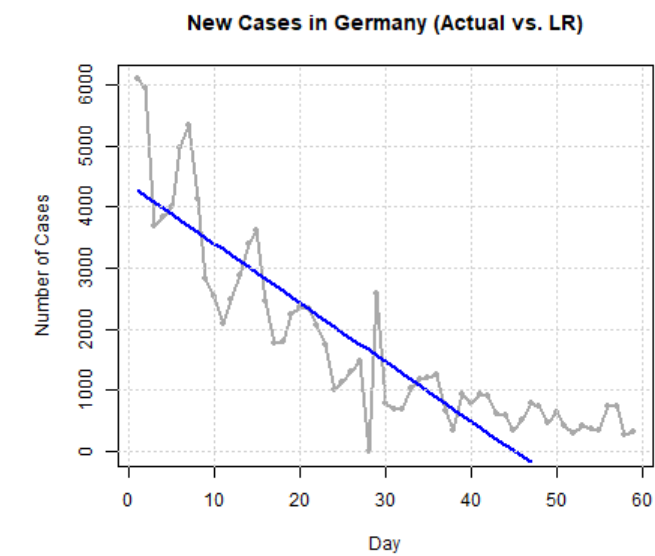
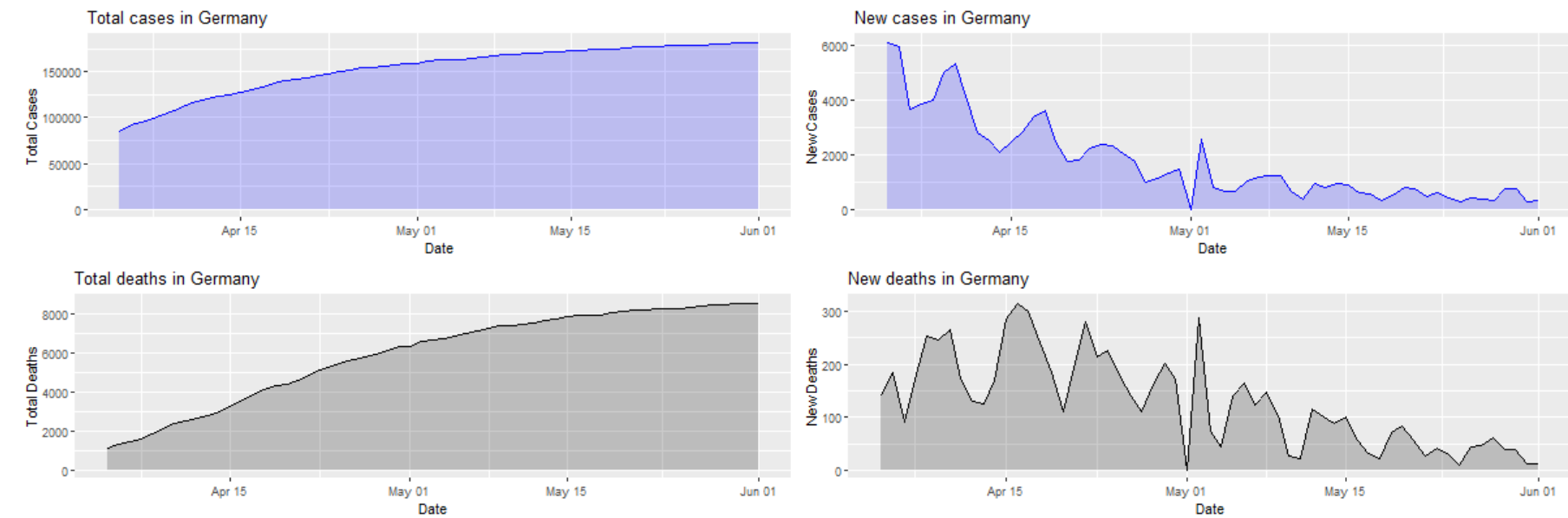
The first case was reported on: **2020-04-04**

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

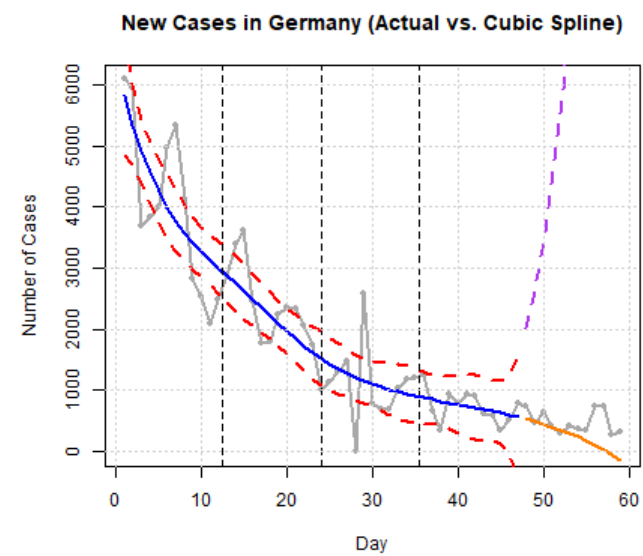
The total cumulative number of cases by the last day in the selected period is **181815** cases.

The total number of deaths by the last day in the selected period is **8511** deaths.

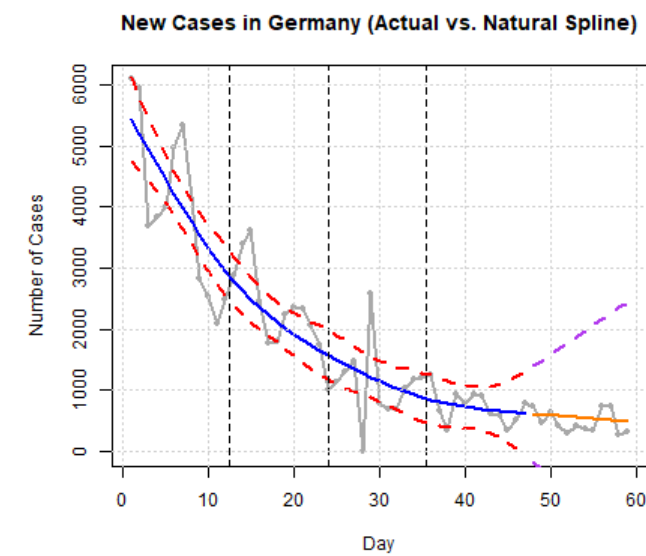
Cases vs. Deaths Overview



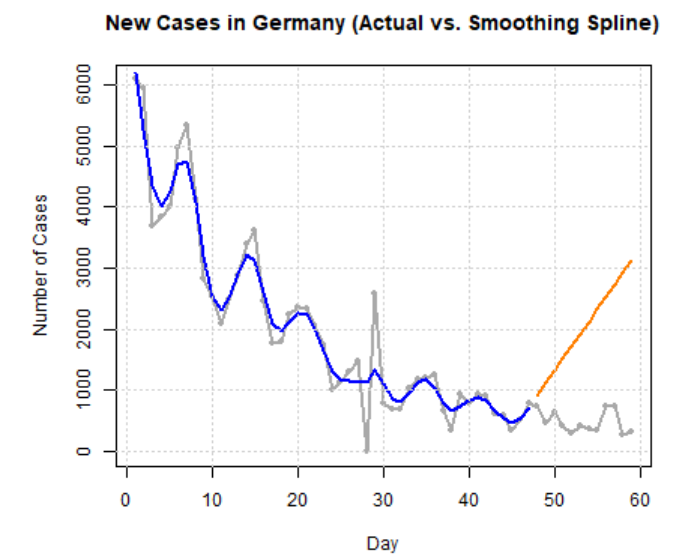
AIC = 762.691
BIC = 768.242
Training MSE = 574,893.2
Testing MSE = 1,773,228



AIC = 748.03
BIC = 762.832
Training MSE = 340,182.2
Testing MSE = 116,617.4



AIC = 745.557
BIC = 756.658
Training MSE = 351,410.7
Testing MSE = 32,743.51



Degrees of Freedom = 19.271
AIC = 11,113,405
BIC = 11,113,441
Training MSE = 118,227.3
Testing MSE = 2,950,817