Modeling the Dynamics of COVID-19

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Data Source
- ◉ Local
- ○ Our World In Data

Continent

Europe ▼
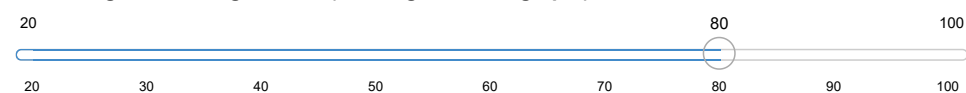
Country

Spain ▼

Modeling Period

| 2020-04-04 | to | 2020-06-01 |

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

20 ——————————————— 80 ——————— 100

Variable of Interest
- ◉ New Cases
- ○ New Deaths

Spain

The study timeframe starts from **2020-04-04** until **2020-06-01** covering **59** days.
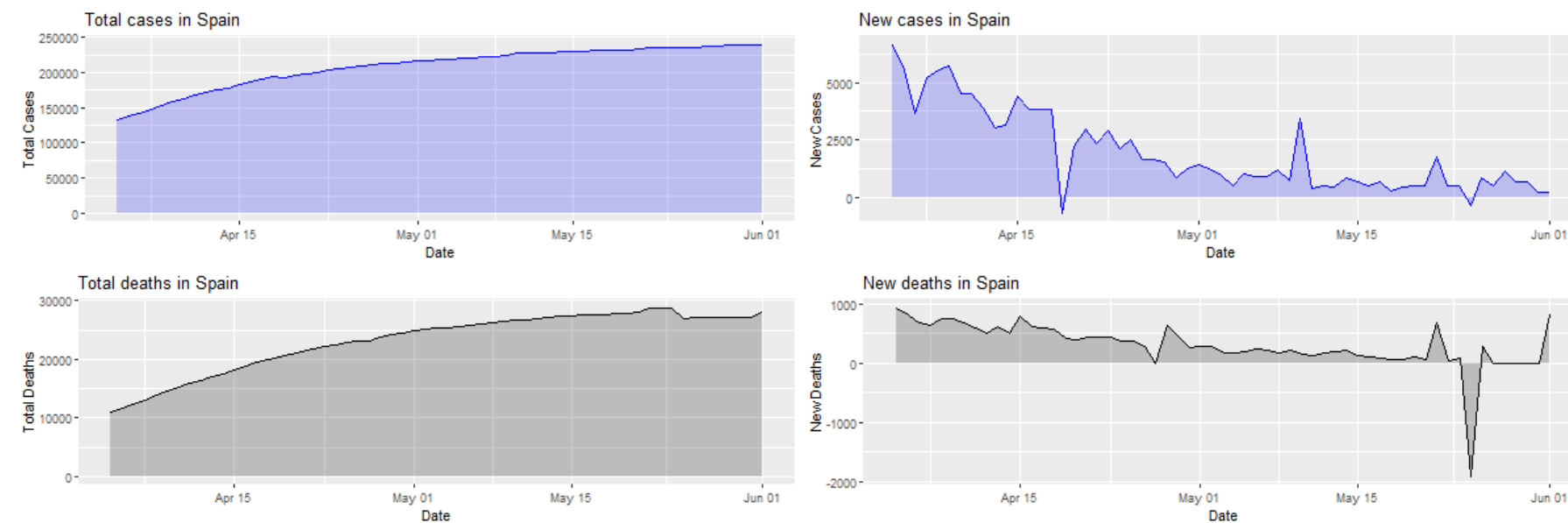The first case was reported on: **2020-04-04**
The first death was reported on: **2020-04-04**
The total cumulative number of cases by the last day in the selected period is **239638** cases.
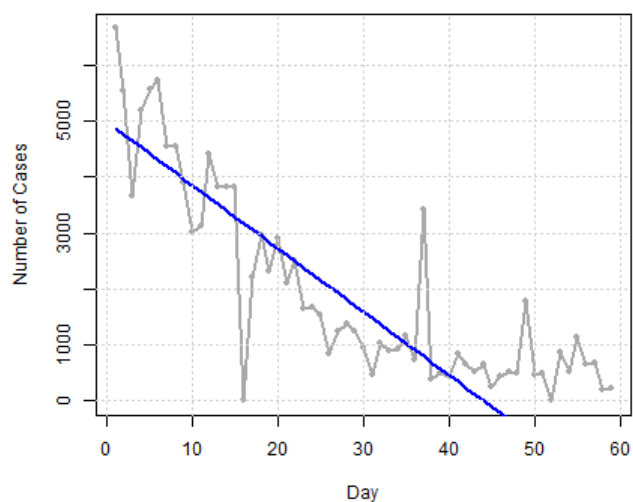The total number of deaths by the last day in the selected period is **27940** deaths.

Cases vs. Deaths Overview

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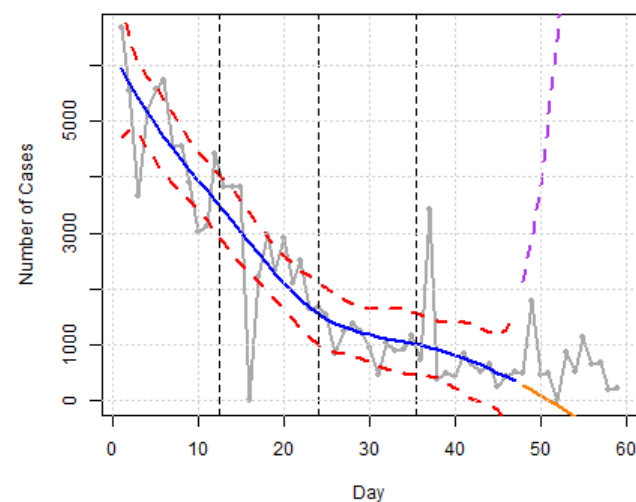

New Cases in Spain (Actual vs. LR)

AIC = 777.784
BIC = 783.335
Training MSE = 792,594.5
Testing MSE = 3,111,569

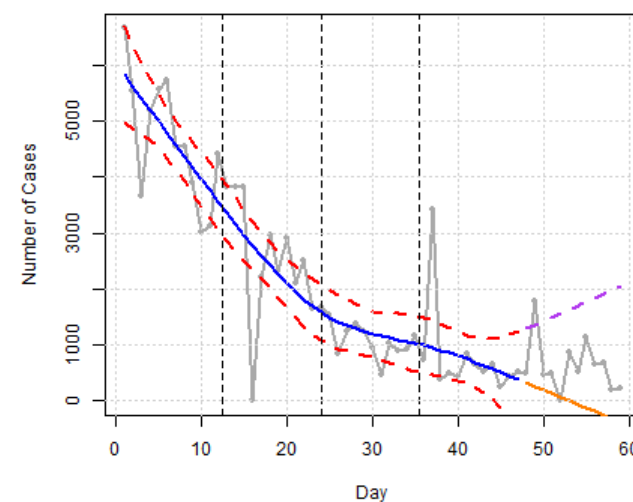**New Cases in Spain (Actual vs. Cubic Spline)**

AIC = 770.174
BIC = 784.975
Training MSE = 544,913.1
Testing MSE = 971,668.4

New Cases in Spain (Actual vs. Natural Spline)
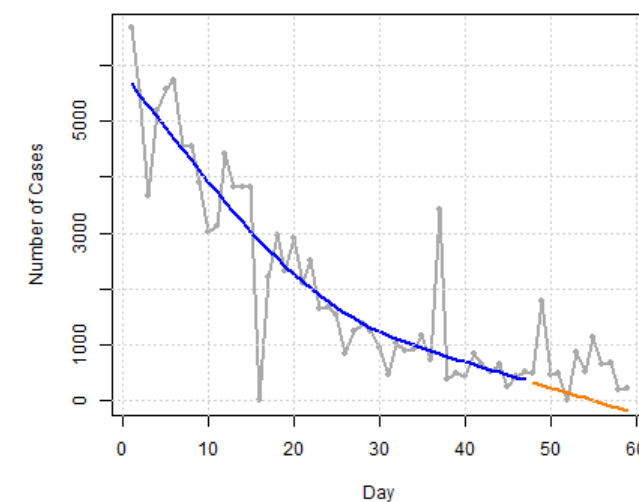
AIC = 766.27
BIC = 777.371
Training MSE = 546,024.7
Testing MSE = 619,599.7

New Cases in Spain (Actual vs. Smoothing Spline)

Degrees of Freedom = 3.446
AIC = 52,324,249
BIC = 52,324,255
Training MSE = 556,640.9
Testing MSE = 493,356