COVID-19 Linear Regression for daily new cases per country
Regression equation in excel date code:

\[ y = -101.55x + 4,465,727.03 \]

Daily declining rate= 101 cases per day

When \( y = 0 \), \( x = \text{May 25, 2020} \)

Average wave Period: 6 Days

Average declining rate based on recorded results= 106 cases per day
Linear Regression of Peak Periods: Spain

Recorded results
Projected results
Linear regression line

Regression equation in excel date code:

\[ y = -103.81x + 4,567,253.13 \]

Daily declining rate = 104 cases per day

When \( y = 0 \), \( x \) = June 15, 2020

Average wave period: 7 days
Average declining rate based on recorded results = 88 cases per day

Daily New Cases
Date

Germany

Linear Regression of Peak Periods: Germany

Regression equation in excel date code:
y = -161.40x + 7,095,529.06

Daily declining rate = 161 cases per day
When y = 0, x = May 12, 2020

Average wave period: 7 days

Average declining rate based on recorded results = 144 cases per day
Regression Line for Peak Periods: Switzerland

Regression equation in excel date code:
\[ y = -33.65x + 1,479,032.83 \]

Daily declining rate = 34 cases per day

When \( y = 0 \), \( x = \) May 3, 2020

Average wave period: 6 days

Average declining rate based on recorded results = 88 cases per day
Regression Line for Peak Periods: France

Regression line equation:
\[ y = -4424\ln(x) + 16356 \]

Average daily declining rate: 553 cases per day
When \( y = 0 \), \( x = \) May 13, 2020

Average declining rate based on recorded results: 793 cases per day

Average wave period: 4 days

Recorded data
Projected results
Logarithmic regression line

Days After First Peak

Days

May 3, 2020
April 29, 2020
April 25, 2020
April 21, 2020
April 16, 2020
April 14, 2020
April 10, 2020
April 7, 2020
April 3, 2020
Regression Line for Peak Periods: Cyprus

Regression equation line in excel date code:

\[ y = -126.35x + 5,556,293.07 \]

Daily declining rate = 126 cases per day

When \( y = 0 \), \( x = \text{May 24, 2020} \)

Average wave period: 7 days

Average declining rate based on recorded results = 162 cases per day