

# Corona (Covid-19) Forecast - No Lockdown Scenario

Germany

2020-05-18

# Methodology

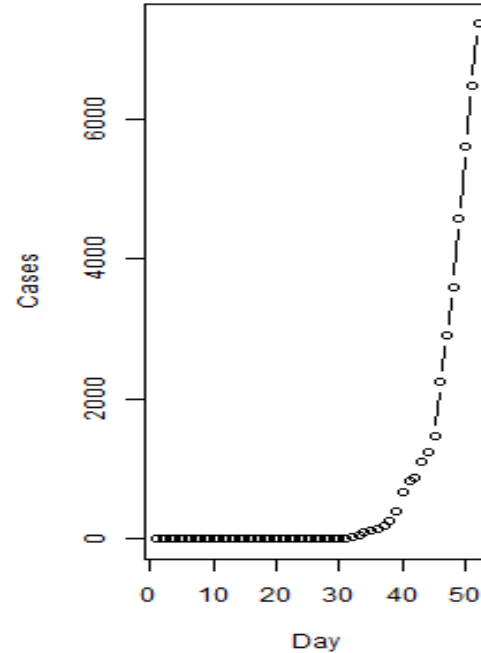
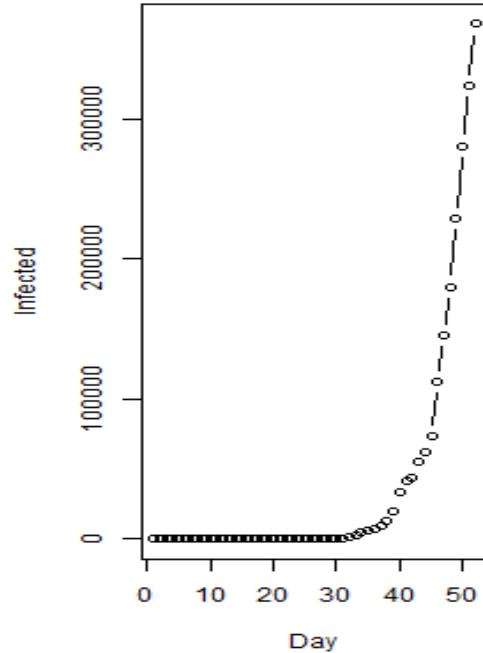
- The SIR epidemiological model is used to forecast active infections and cases. Forecast horizon is 365 days, counted from the date of the first case recorded in the country. Future changes in social restrictions and medical developments may affect the forecast.

# Assumptions

- High end fatality scenario: infection to case ratio of 12.5 to 1. Assumes: 50% symptomatic, of which 16% present as cases – meaning 8% of total infections present as cases (12.5 to 1).
- Low end fatality scenario: infection to case ratio of 50 to 1. Assumes: 50% symptomatic, of which 4% present as cases – meaning 2% of total infections present as cases (50 to 1).
- WARNING: Early sero-survey data used to estimate infections - however studies thus far have suffered from sampling and test kit issues. Sero-survey data may not be relevant to your country.
- The first case occurred on 28/01/2020 and lockdown occurred on 22/03/2020, 54 days later.
- For more details on the forecast assumptions click [here](#).

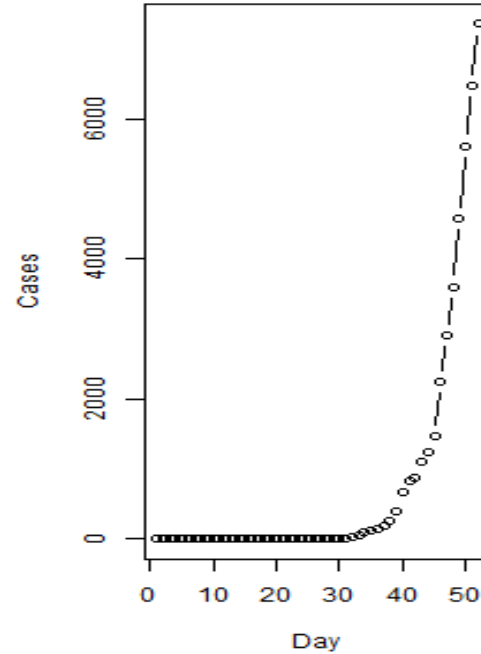
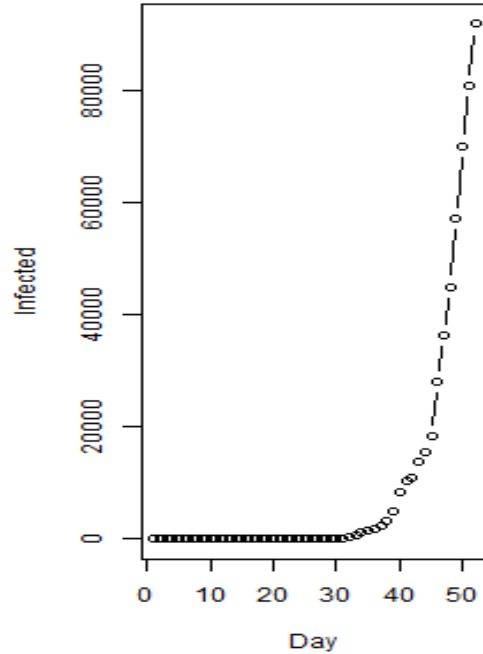
# Infections and reported cases (low end fatality)

Past infections and reported cases (lower scenario)



# Infections and reported cases (high end fatality)

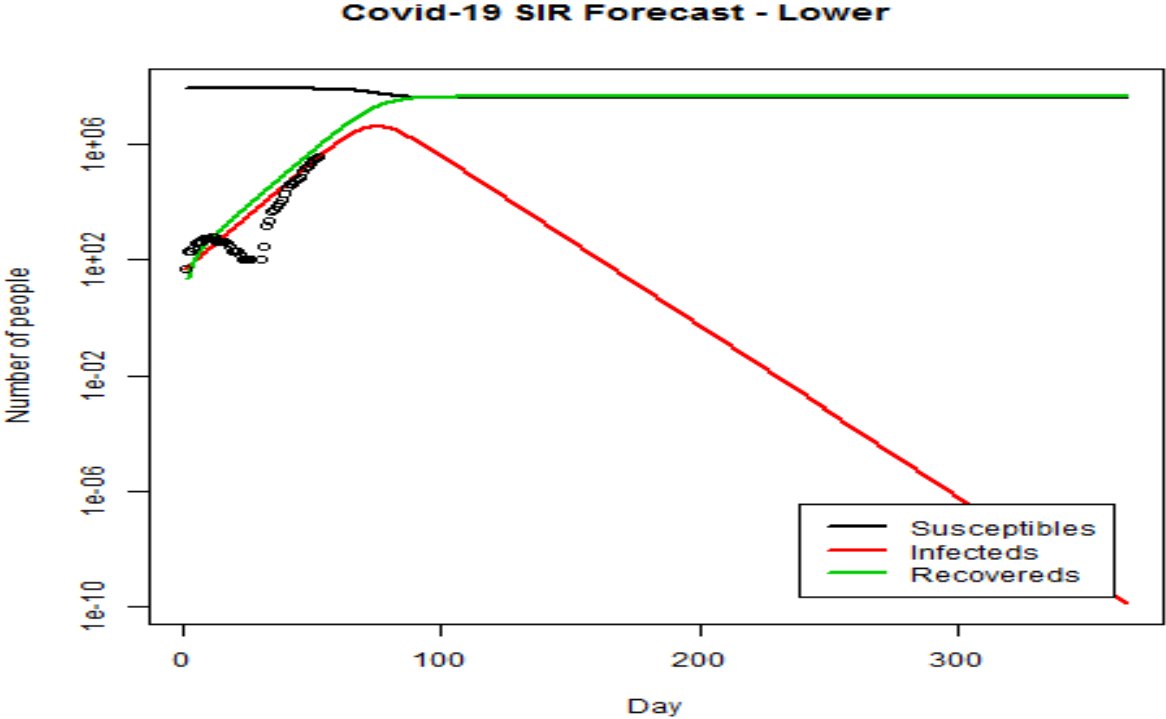
Past infections and reported cases (upper scenario)



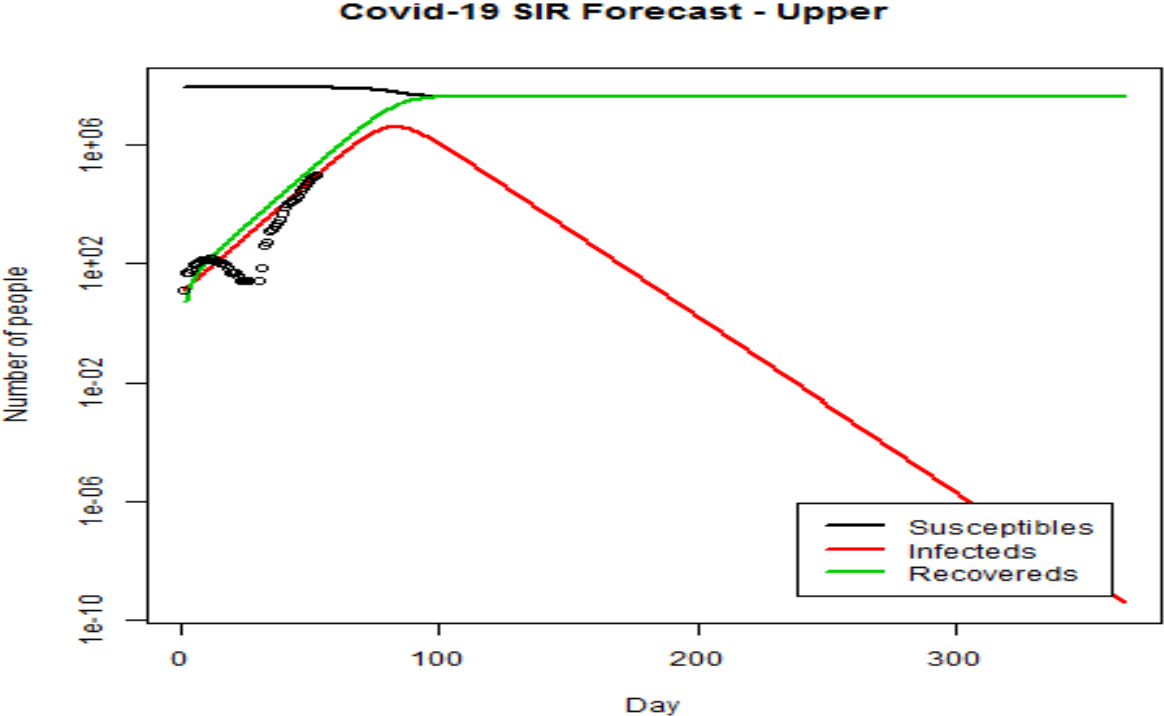
## Forecast - 365 days\*

Descriptors	Lower	Upper
Total cases	213,184	850,164
Single worst day (new cases peak)	8,224	32,728
Total infections	10,659,175	10,627,050
Total fatalities	10,367	41,342
IFR %	0.097	0.39
CFR %	4.9	4.9
Reproduction number	1.4	1.4
Infectious window	10	10
Fit period	52	52
IC	50	12.5
Beta	0.59	0.59
Gamma	0.41	0.41

# Corona Forecast - 365 day - Lower Boundary (Log Scale)



# Corona Forecast - 365 day - Upper Boundary (Log Scale)





## Forecast - Active Cases - Milestones

Milestone	New
30th Day	16
60th Day	2,832
90th Day	24,554
120th Day	679
150th Day	12

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