

Corona (Covid-19) Forecast - No Lockdown Scenario

Italy

2020-05-18

Methodology

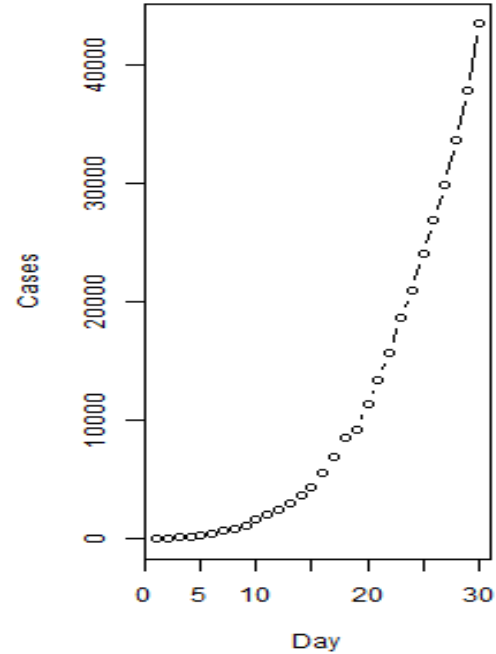
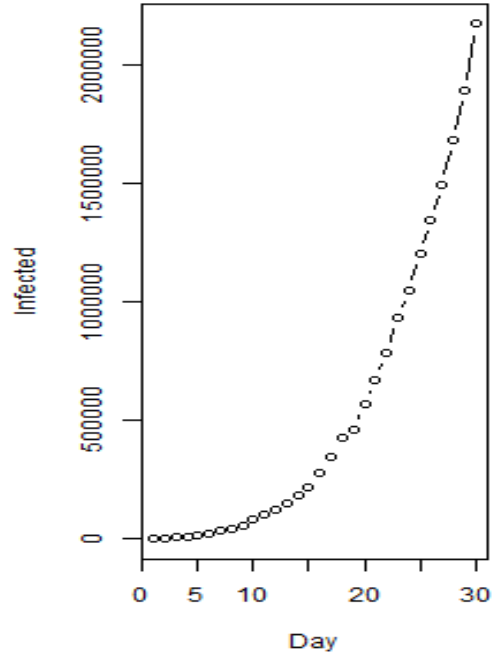
- The SIR epidemiological model is used to forecast active infections and cases. Forecast horizon is 365 days, counted from the date of the first case recorded in country. Future changes in social restrictions and medical developments may affect the forecast.
- **NOTE:** Italy model fitted from the first day where at least 4 cases were reported.

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 30/01/2020 and lockdown occurred on 12/03/2020, 42 days later.
- For more details on the forecast assumptions click [here](#).

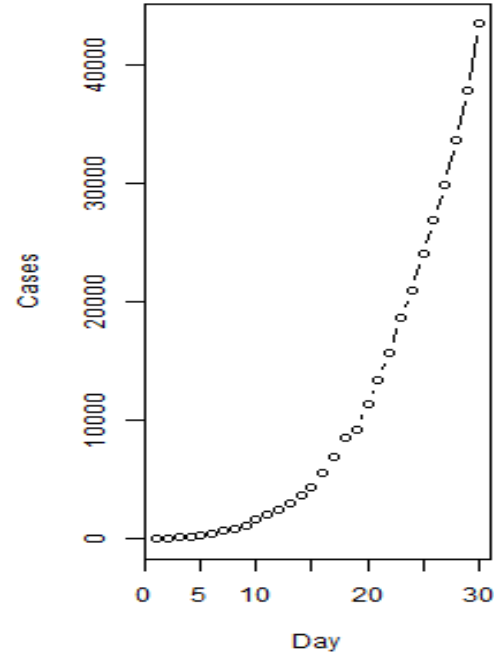
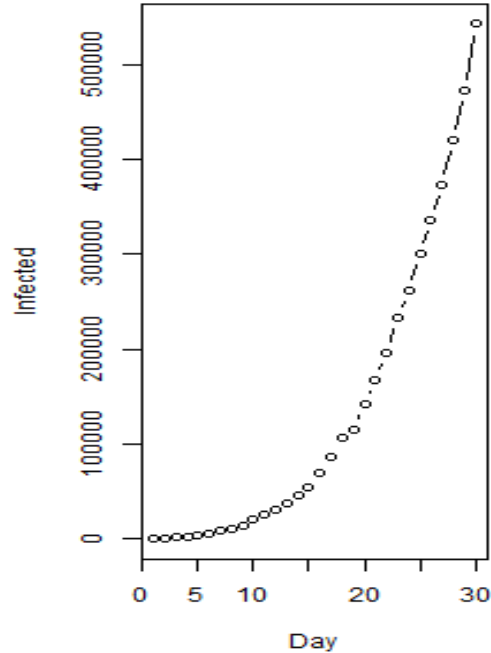
Infections and reported cases (low end fatality)

Past infections and reported cases (lower scenario)



Infections and reported cases (high end fatality)

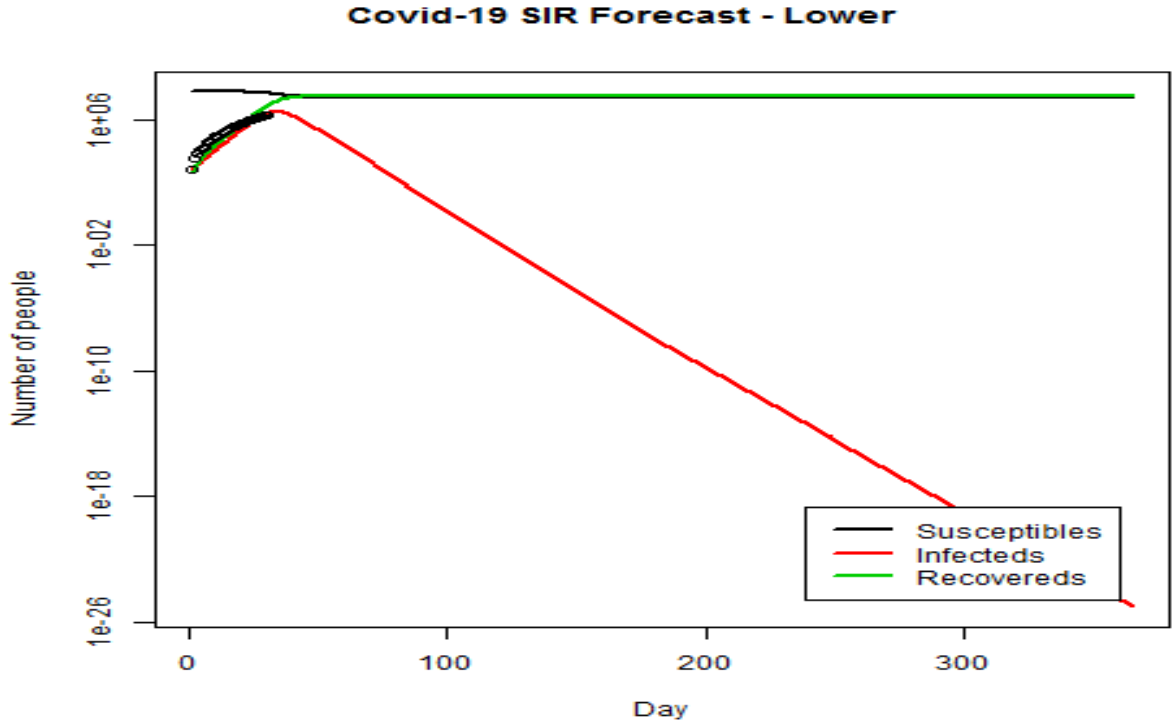
Past infections and reported cases (upper scenario)



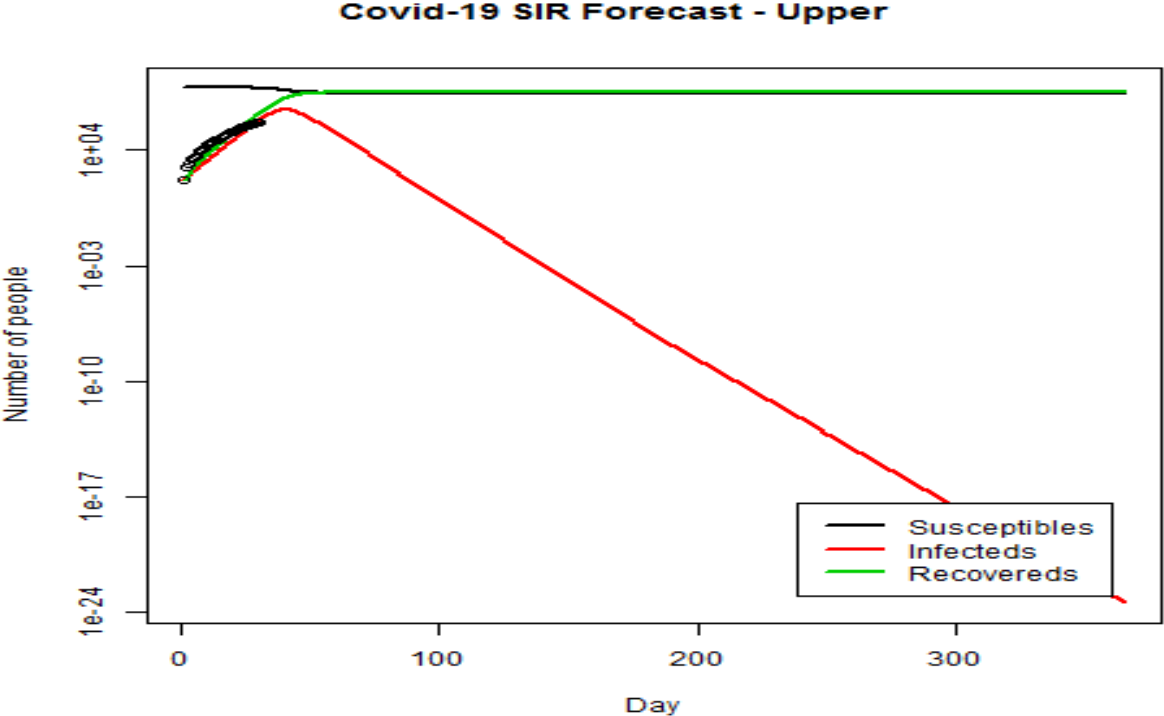
Forecast - 365 days*

Descriptors	Lower	Upper
Total cases	94,639	352,115
Single worst day (new cases peak)	6,349	22,587
Total infections	4,731,964	4,401,440
Total fatalities	14,331	53,320
IFR %	0.3	1.2
CFR %	15	15
Reproduction number	1.4	1.4
Infectious window	10	10
Fit period	30	30
IC	50	12.5
Beta	1	1
Gamma	0.69	0.71

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



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



Forecast - Active Cases - Milestones

Milestone	New
30th Day	5,395
60th Day	758
90th Day	1
120th Day	0
150th Day	0

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