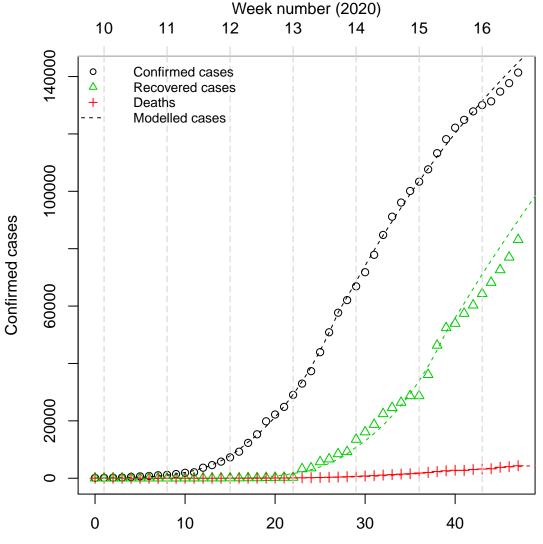
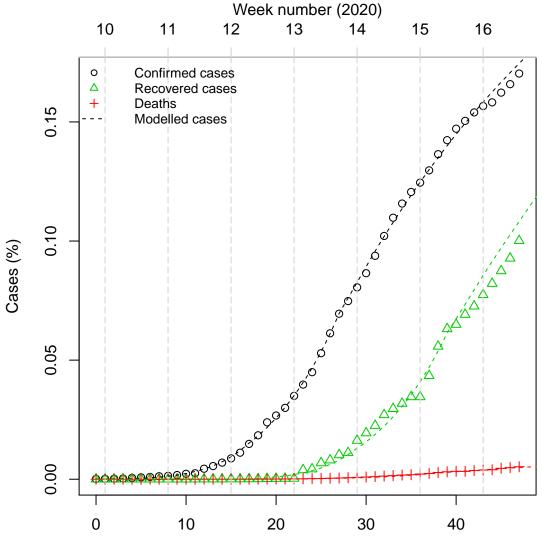
### Situation vs Model COVID-19 in Germany



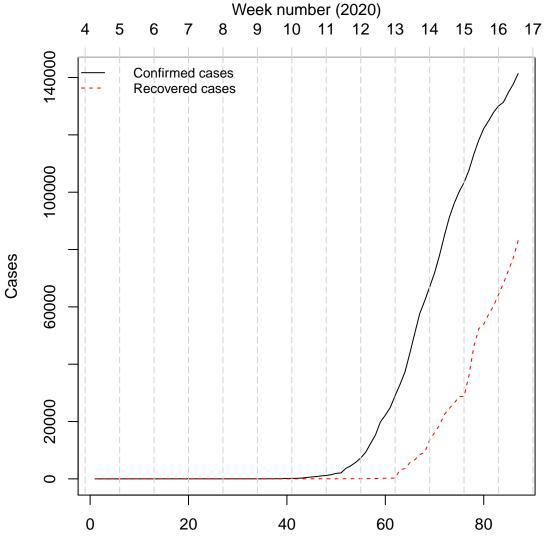
Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Situation vs Model COVID-19 in Germany



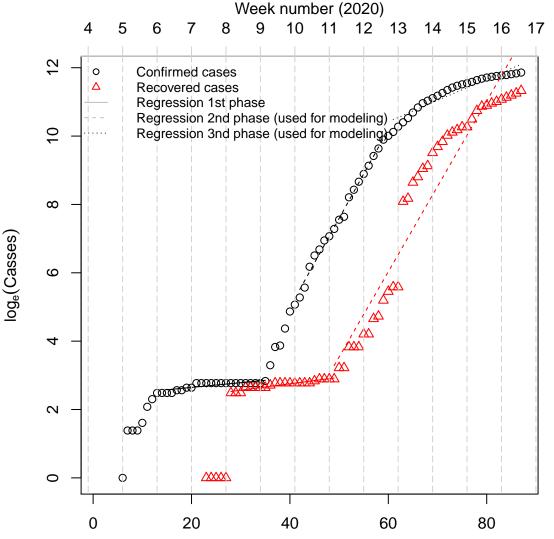
Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### **Situation COVID-19 in Germany**



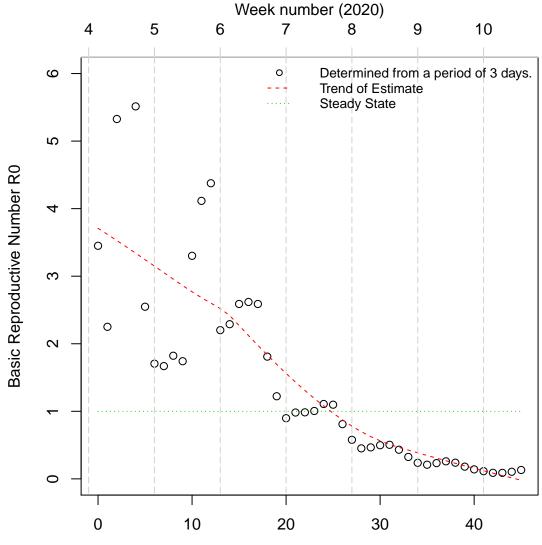
Days after 1/22/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Situation COVID-19 in Germany



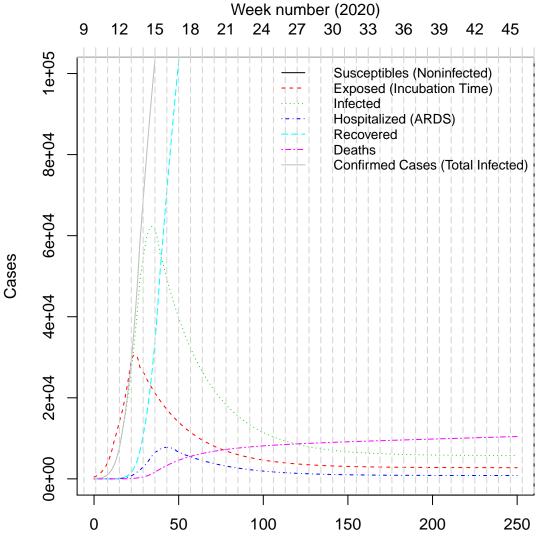
Days after 1/22/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### **Situation COVID-19 in Germany**



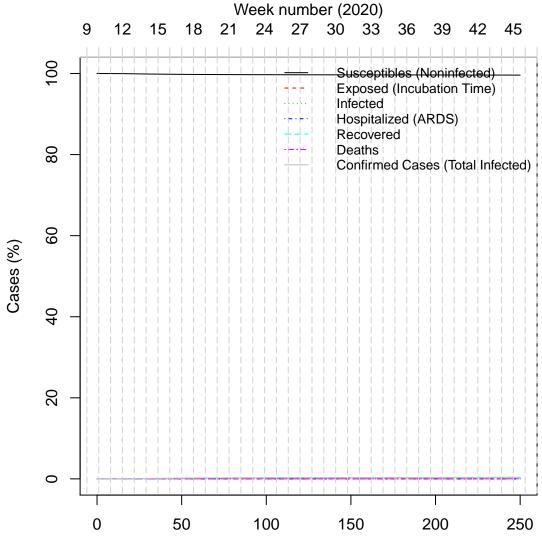
Days after 3/3/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Forecast COVID-19 in Germany



Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

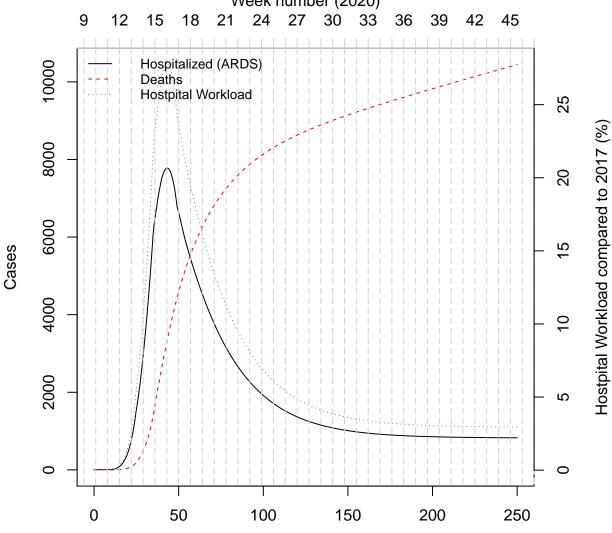
### Forecast COVID-19 in Germany



Days after 3/1/20

Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

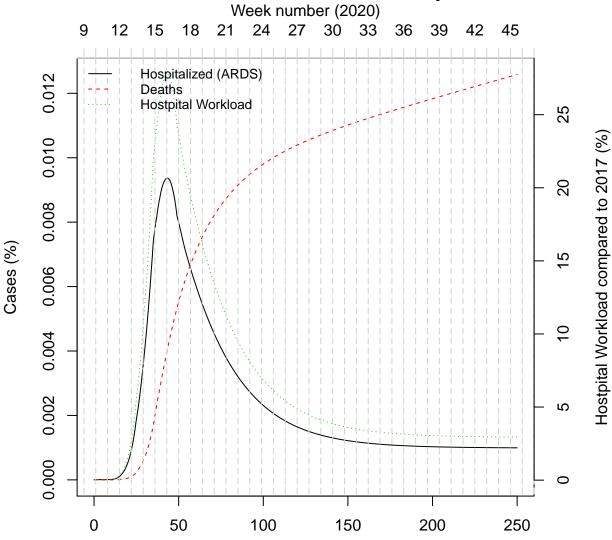
### Forecast COVID-19 in Germany Week number (2020)



Days after 3/1/20

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### Forecast COVID-19 in Germany



Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Scenario 1 no social distancing and no shutdown Week number (2020) 24 45 12 15 18 21 36 39 8e+07 Susceptibles (Noninfected) Exposed (Incubation Time) Infected Hospitalized (ARDS) Recovered Deaths Confirmed Cases (Total Infected) 6e+07 Cases 4e+07 2e+07 00+<del>0</del>0

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

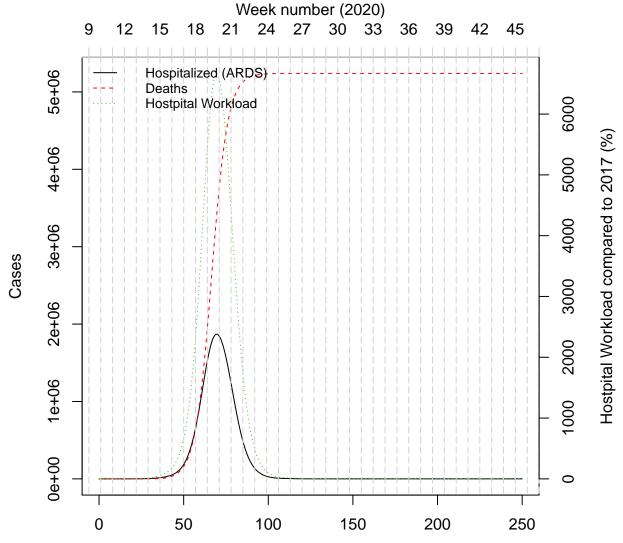
100

0

### Senario 1 no social distenining / no shutdown Week number (2020) Susceptibles (Noninfected) Exposed (Incubation Time) Infected Hospitalized (ARDS) Recovered Deaths Confirmed Cases (Total Infected) Cases (%)

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Scenario 1 no social distancing and no shutdown

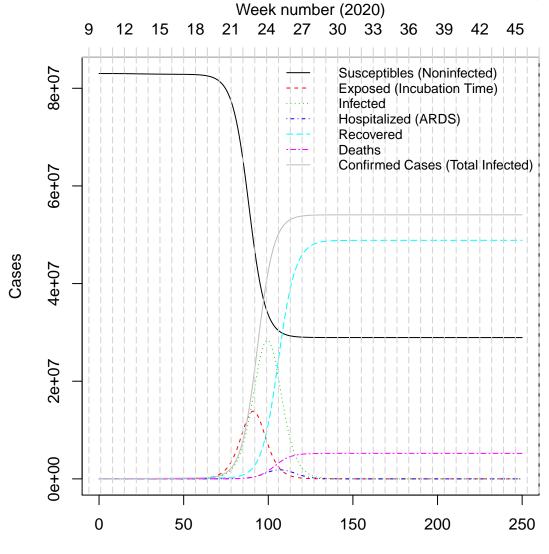


Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 1 no social distancing and no shutdown Week number (2020) Hospitalized (ARDS) Deaths Hostpital Workload Hostpital Workload compared to 2017 (%) Cases (%)

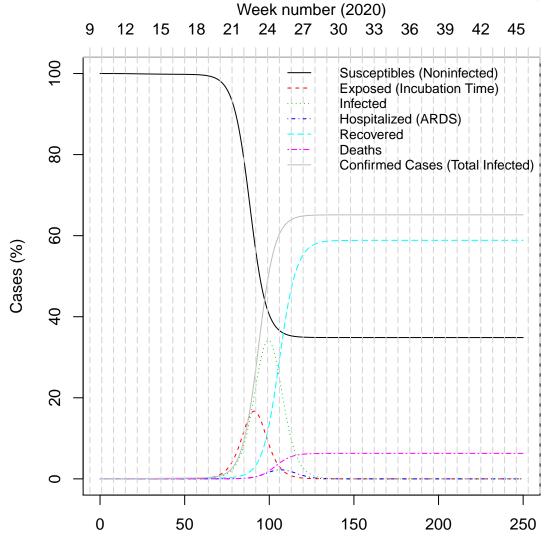
Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Scenario 2 exit after day 50 without social distancing



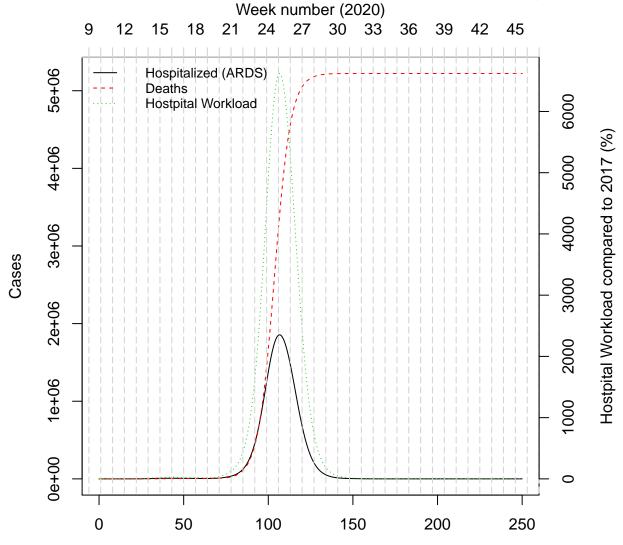
Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Scenario 2 exit after day 50 without social distancing



Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

### Scenario 2 exit after day 50 without social distancing



Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 2 exit after day 50 without social distancing Week number (2020) 12 15 18 36 45 Hospitalized (ARDS) Deaths 9 0009 Hostpital Workload Hostpital Workload compared to 2017 (%) 2 3000 က $\alpha$

Cases (%)

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

50

### Scenario 3 exit after day 50 with social distancing Week number (2020) 9 24 45 12 15 18 21 36 39 42 8e+07 Susceptibles (Noninfected) Exposed (Incubation Time) Infected Hospitalized (ARDS) Recovered Deaths Confirmed Cases (Total Infected) 6e+07 Cases 4e+07 2e+07 00+<del>0</del>0

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

0

### Scenario 3 exit after day 50 with social distancing Week number (2020) Susceptibles (Noninfected) Exposed (Incubation Time) Infected Hospitalized (ARDS) Recovered Deaths Confirmed Cases (Total Infected) Cases (%)

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

# Scenario 3 exit after day 50 with social distancing Week number (2020) Hospitalized (ARDS) Deaths Hostpital Workload Hostpital Workload compared to 2017 (%)

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

# Scenario 3 exit after day 50 with social distancing Week number (2020) 12 15 18 36 45 Hospitalized (ARDS) Deaths Hostpital Workload 2000 Hostpital Workload compared to 2017 (%) 3 Cases (%) $\alpha$

Days after 3/1/20 Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

50

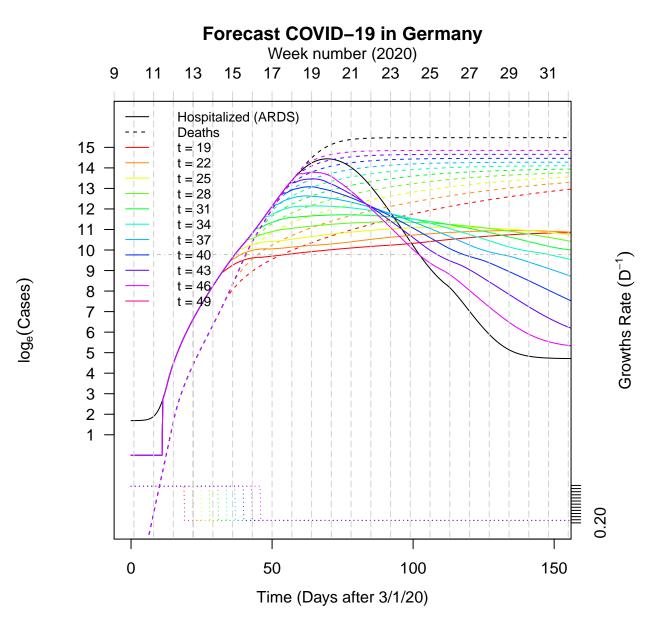
#### Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 25 27 29 31 Hospitalized (ARDS) 5000000 Deaths R0 = 0.4R0 = 0.64500000 R0 = 0.84000000 R0 = 1R0 = 1.2R0 = 1.43500000 R0 = 1.6R0 = 1.83000000 Growths Rate $(\mathsf{D}^{-1})$ R0 = 2R0 = 2.22500000 R0 = 2.42000000 1500000 1000000 500000 0 0.32 0 50 100 150 Time (Days after 3/1/20)

Created by Sören Thiering (04/18/2020). Email: soeren.thiering@hs-anhalt.de

#### Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 19 25 27 29 31 Hospitalized (ARDS) 5000000 Deaths t = 19t = 22 4500000 t = 25t = 284000000 t = 31 t = 343500000 t = 37 t = 403000000 Growths Rate $(\mathsf{D}^{-1})$ t = 43t = 462500000 t = 492000000 1500000 1000000 500000 0 0.20 150 0 50 100

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Time (Days after 3/1/20)



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