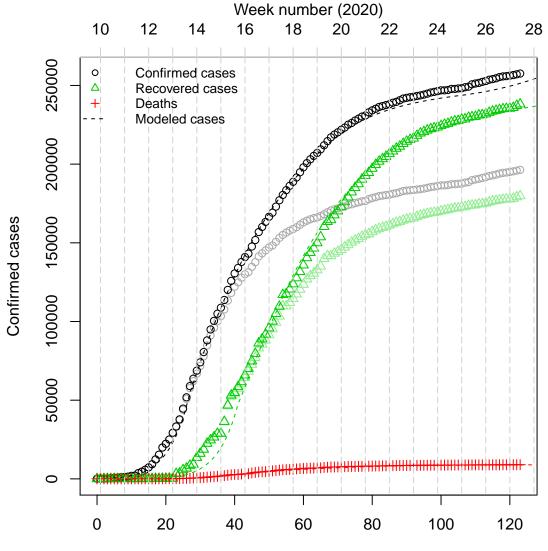
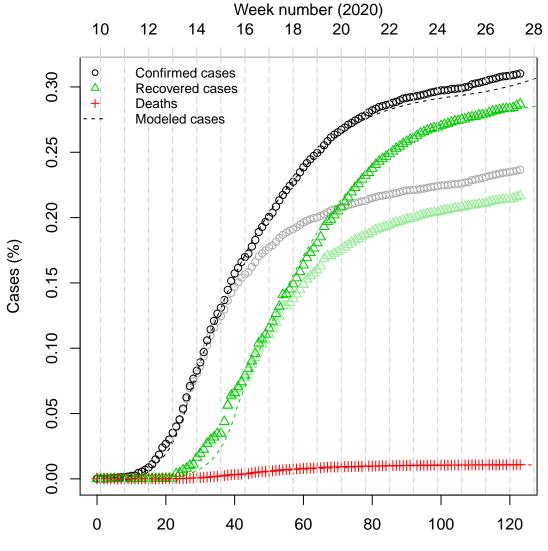


Situation vs Model COVID-19 in Germany

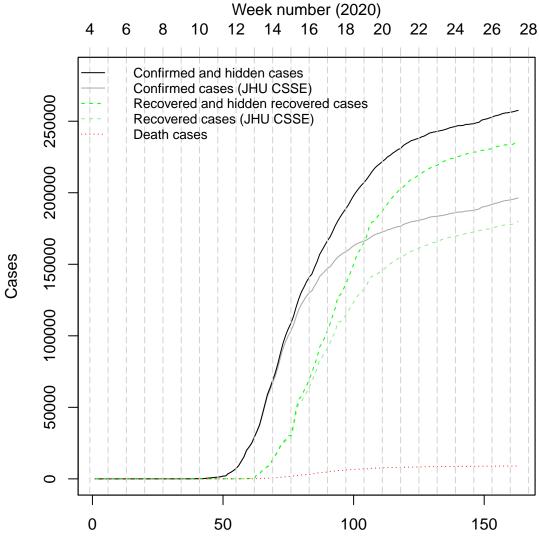


Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Situation vs Model COVID-19 in Germany

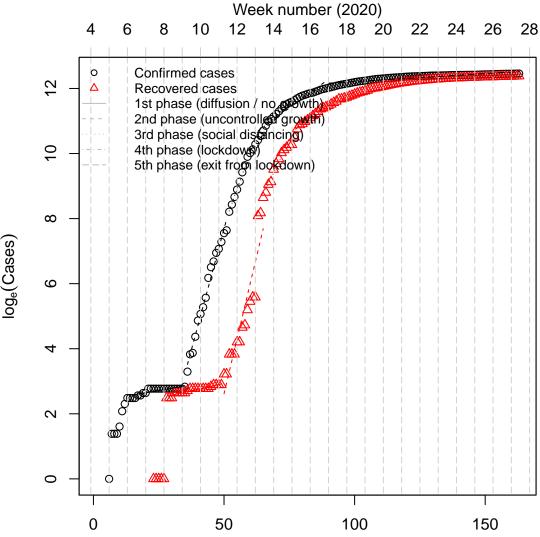


Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

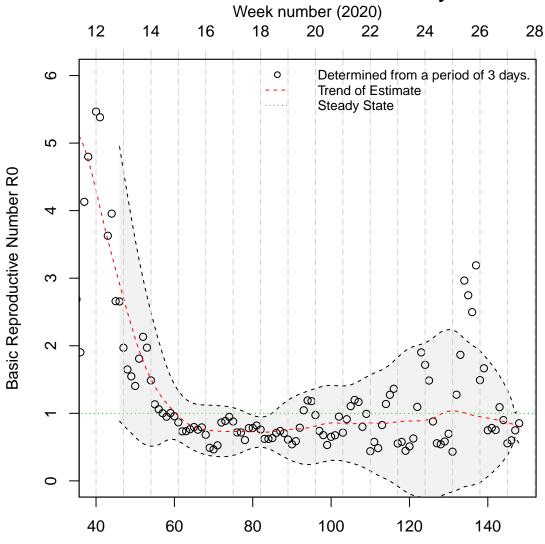


Days after 1/22/20

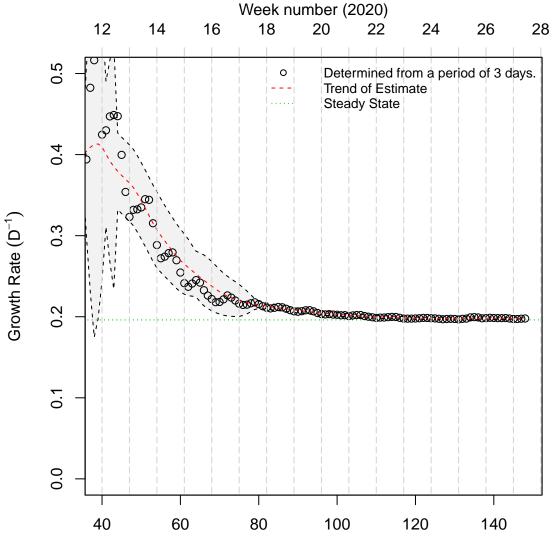
Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



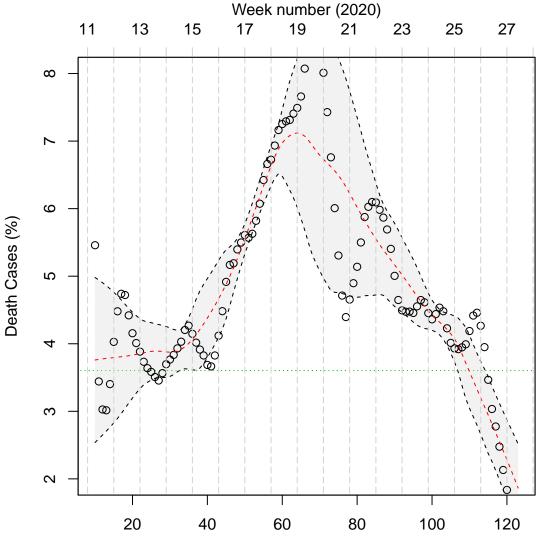
Days after 1/22/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



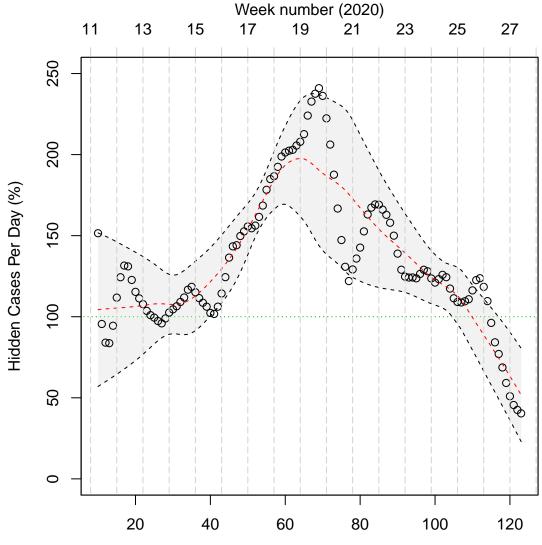
Days after 2/5/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



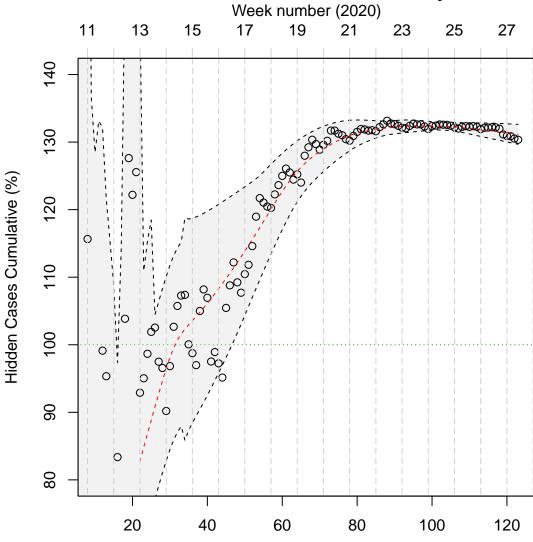
Days after 2/5/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



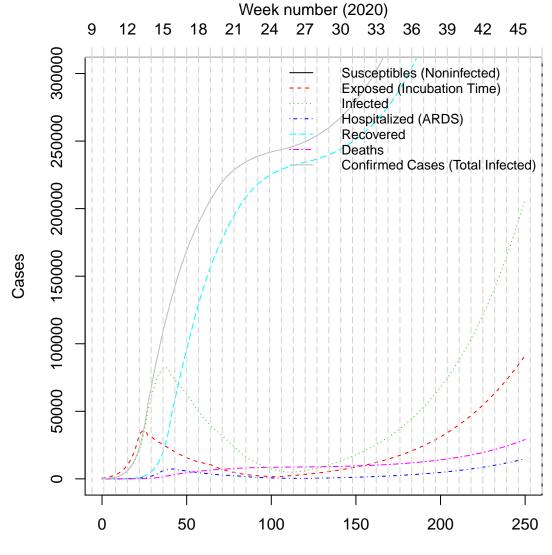
Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



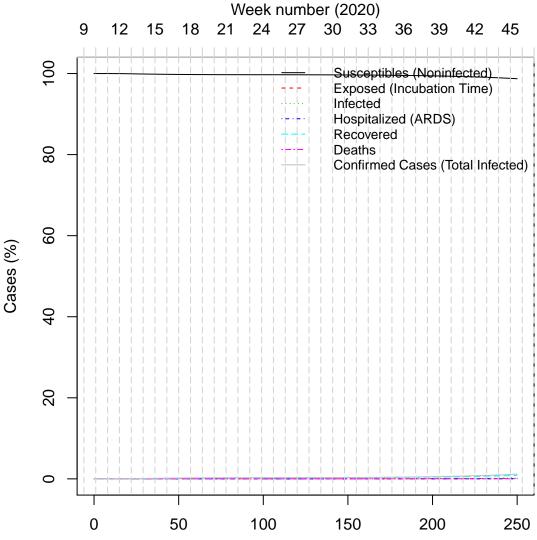
Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



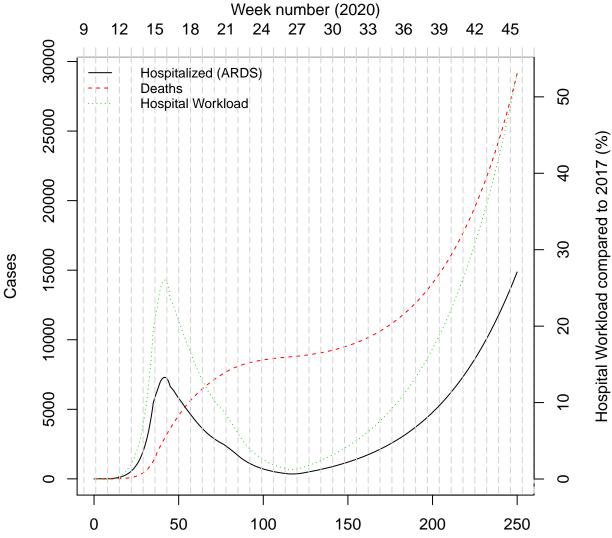
Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



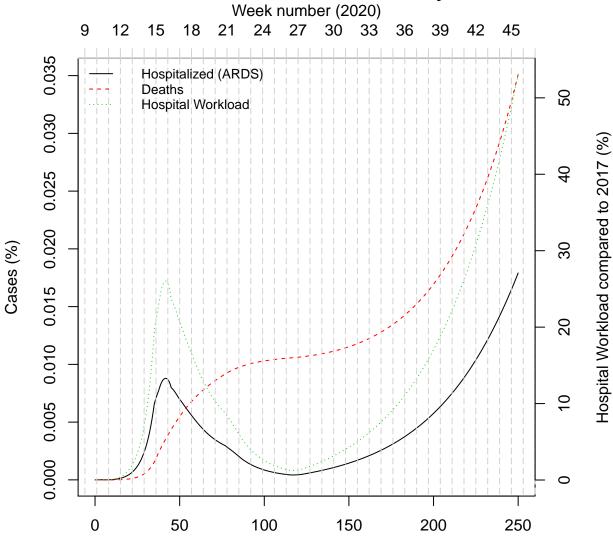
Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de



Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 1 no social distancing and no lockdown Week number (2020) 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+00

Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

0

Scenario 1 no social distancing / no lockdown 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 (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 1 no social distancing and no lockdown Week number (2020) 45 12 15 18 36 Hospitalized (ARDS) 5e+06 Deaths Hospital Workload Hospital Workload compared to 2017 (%) 4e+06 3e+06 Cases 2e+06 1e+06 0e+00

Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

150

200

100

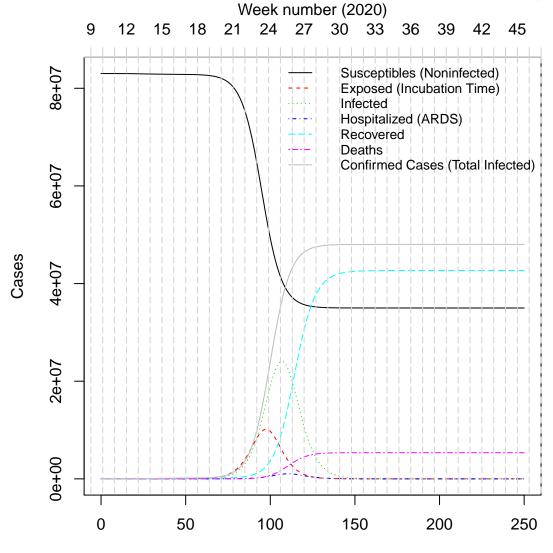
0

50

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

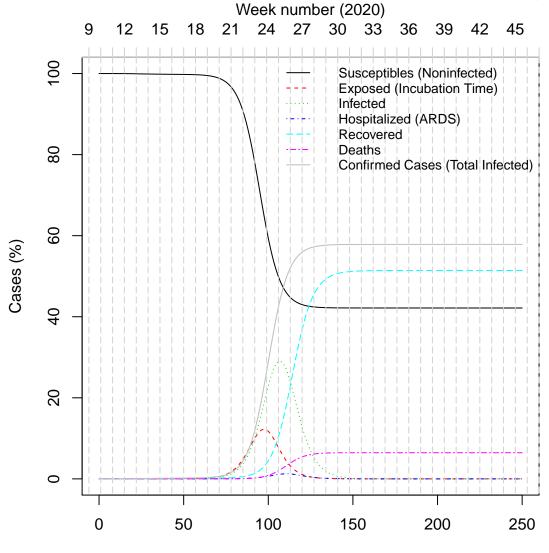
Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing



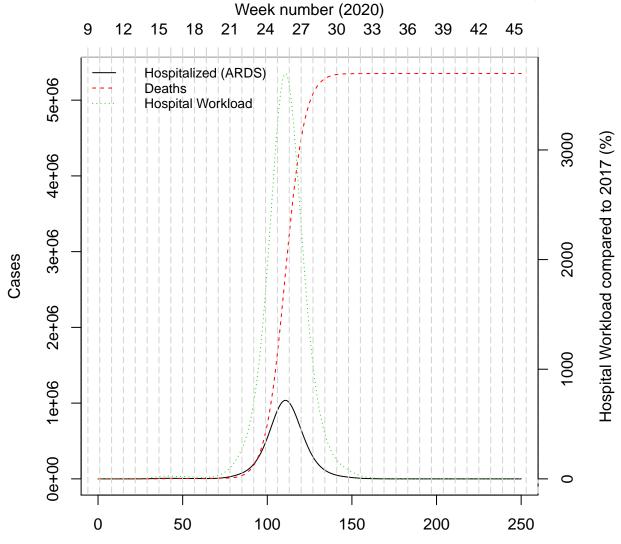
Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing



Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing



Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing Week number (2020) Hospitalized (ARDS) Deaths Hospital Workload Hospital Workload compared to 2017 (%) α

Cases (%)

Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 3 exit after day 50 with social distancing Week number (2020) 9 24 45 12 15 18 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+00

Days after 3/1/20 Created by Sören Thiering (07/03/2020). 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 (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 3 exit after day 50 with social distancing Week number (2020) 24 45 12 15 18 36 5e+06 Hospitalized (ARDS) Deaths Hospital Workload 3000 Hospital Workload compared to 2017 (%) 4e+06 3e+06 2000 Cases 2e+06 1e+06 00+00

Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

0

Scenario 3 exit after day 50 with social distancing Week number (2020) 45 12 15 18 36 Hospitalized (ARDS) Deaths 9 Hospital Workload Hospital Workload compared to 2017 (%) 2 Cases (%) က α

Days after 3/1/20 Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

0

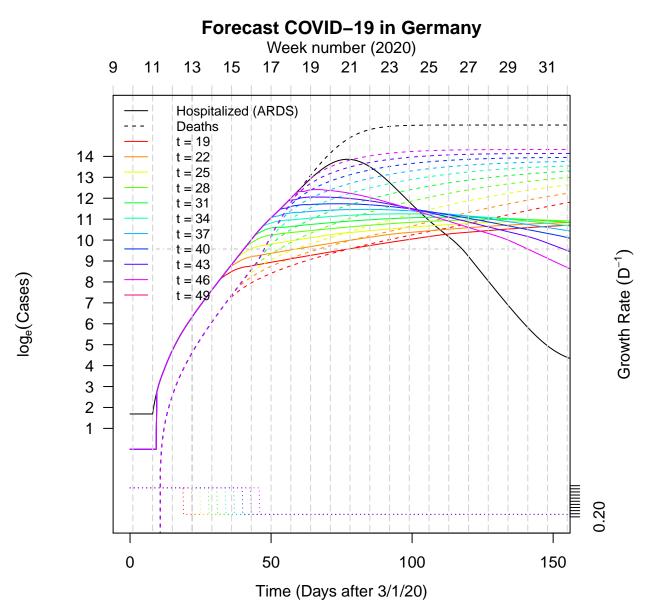
Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 25 27 29 31 5500000 Hospitalized (ARDS) Deaths 5000000 R0 = 0.4R0 = 0.64500000 R0 = 0.8R0 = 14000000 R0 = 1.2R0 = 1.43500000 R0 = 1.6R0 = 1.83000000 Growth Rate (D^{-1}) R0 = 2R0 = 2.22500000 R0 = 2.42000000 1500000 1000000 500000 0 0 50 100 150 Time (Days after 3/1/20)

Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 25 27 29 31 5500000 Hospitalized (ARDS) Deaths 5000000 t = 19t = 224500000 t = 25t = 284000000 t = 31t = 343500000 t = 37t = 40Growth Rate (D⁻¹) 3000000 t = 43t = 462500000 t = 492000000 1500000 1000000 500000 0 0.20 150 0 50 100

Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de

Time (Days after 3/1/20)



Created by Sören Thiering (07/03/2020). Email: soeren.thiering@hs-anhalt.de