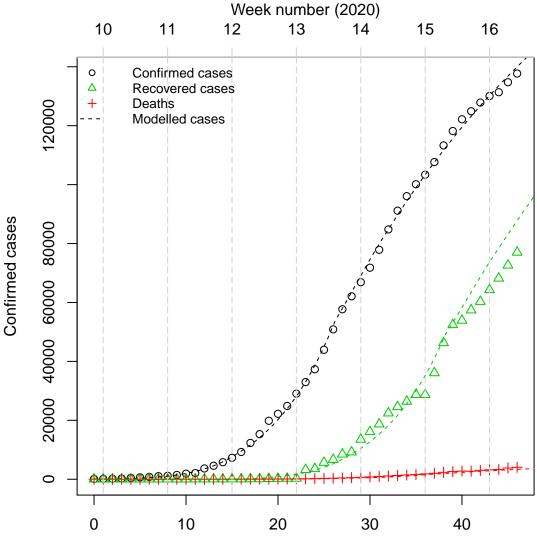
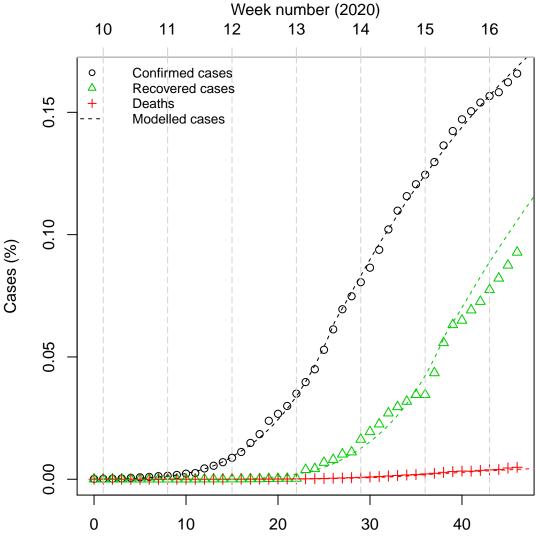
## Situation vs Model COVID-19 in Germany



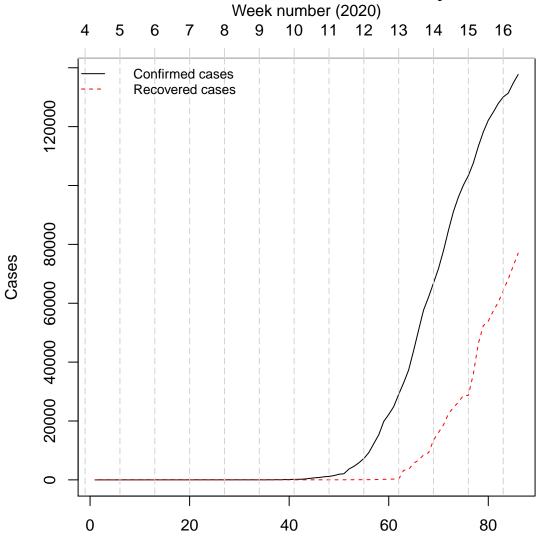
Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Situation vs Model COVID-19 in Germany



Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

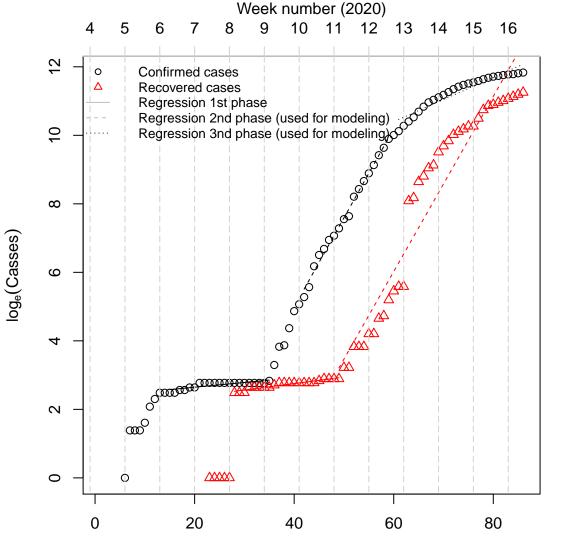
#### **Situation COVID-19 in Germany**



Days after 1/22/20

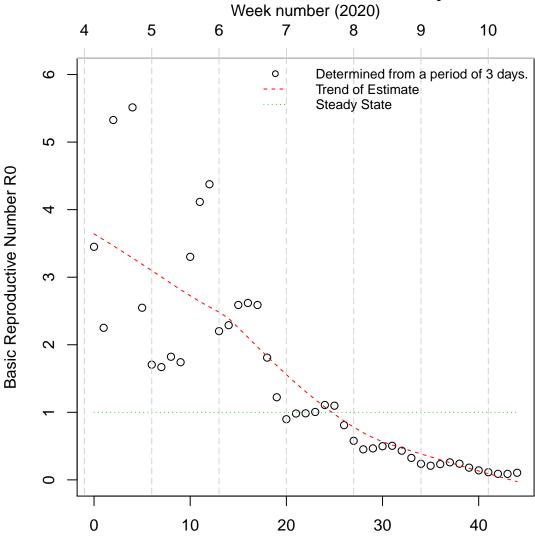
Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Situation COVID-19 in Germany



Days after 1/22/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

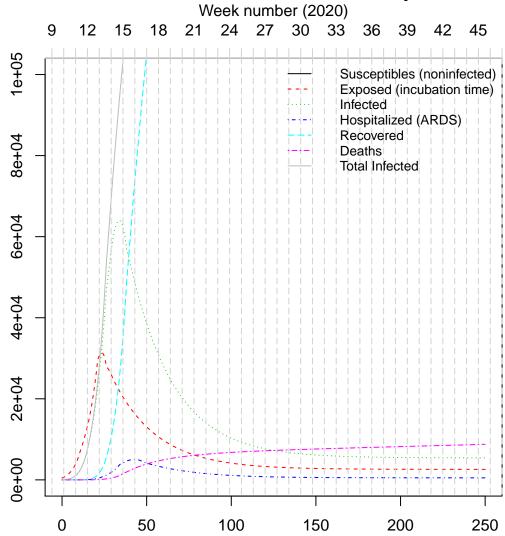
## **Situation COVID-19 in Germany**



Days after 3/3/20

Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

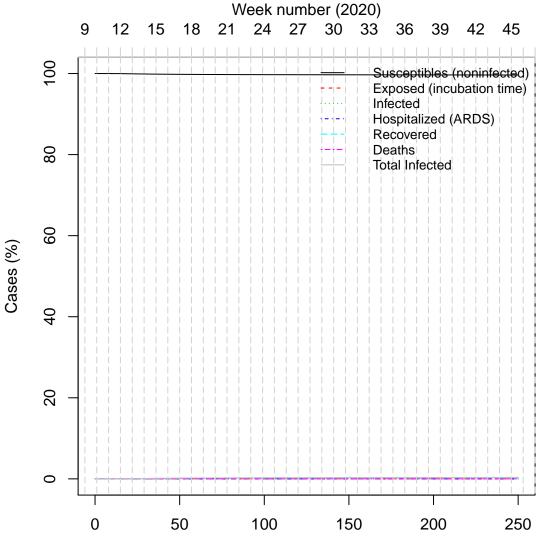
## Forecast COVID-19 in Germany



Cases

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Forecast COVID-19 in Germany

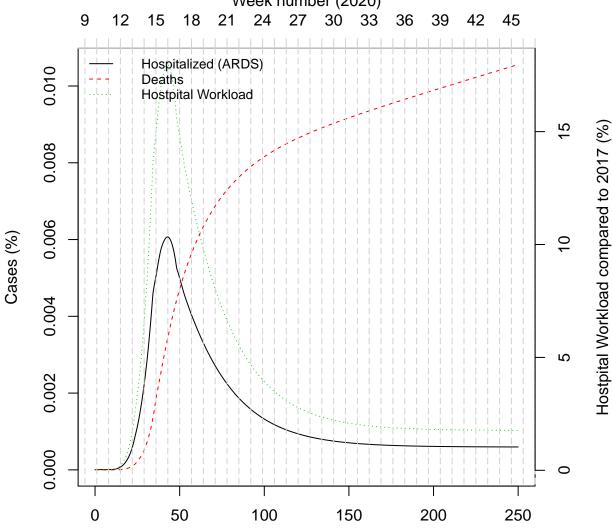


Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Forecast COVID-19 in Germany Week number (2020) Hospitalized (ARDS) Deaths Hostpital Workload Hostpital Workload compared to 2017 (%) Cases

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



Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 1 no social distaining and no lockdown Week number (2020) 24 45 12 15 18 21 36 39 42 Susceptibles (noninfected) Exposed (incubation time) Infected Hospitalized (ARDS) Recovered Deaths Total Infected

8e+07

6e+07

4e+07

2e+07

00+<del>0</del>0

0

50

100

Cases

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

200

250

#### Senario 1 no social distenining / no lockdown Week number (2020) Susceptibles (noninfected) Exposed (incubation time) Infected Hospitalized (ARDS) Recovered Deaths Total Infected Cases (%)

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 1 no social distaining and no lockdown Week number (2020) 45 12 15 18 36 5e+06 Hospitalized (ARDS) Deaths Hostpital Workload Hostpital Workload compared to 2017 (%) 4e+06 3e+06 2e+06 1e+06 00+<del>0</del>0

Cases

0

50

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

150

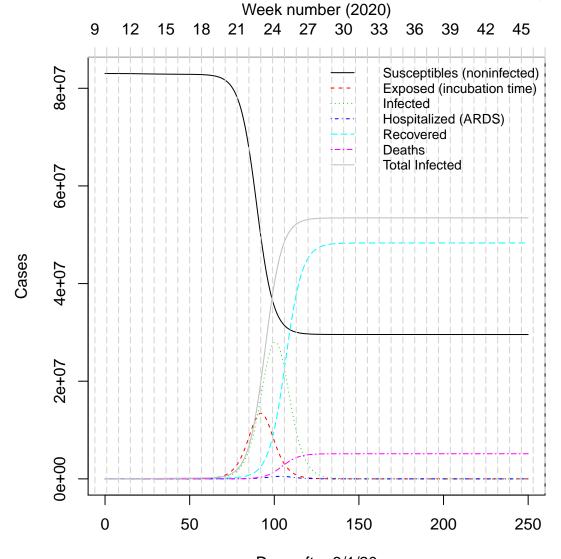
200

100

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

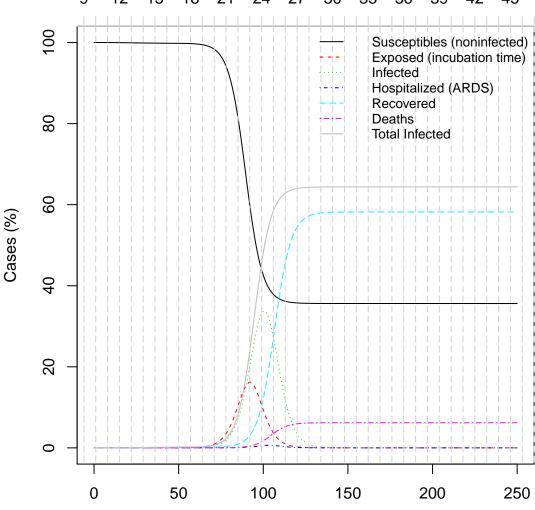
Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 2 exit after day 50 without social distaining



Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

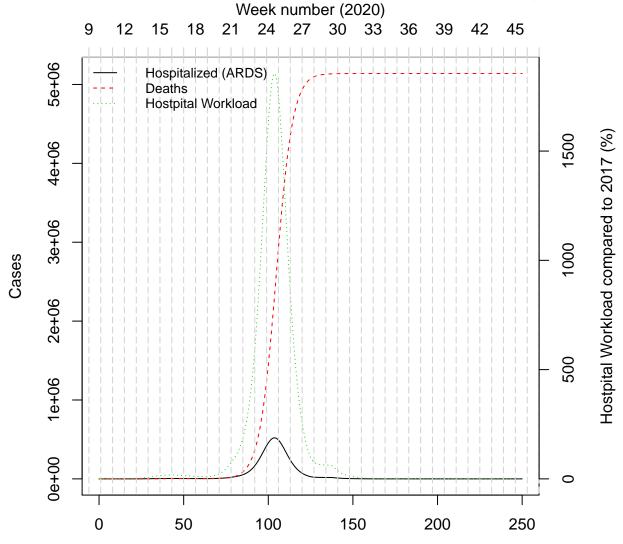
# Scenario 2 exit after day 50 without social distaining Week number (2020) 9 12 15 18 21 24 27 30 33 36 39 42 45



Days after 3/1/20

Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 2 exit after day 50 without social distaining

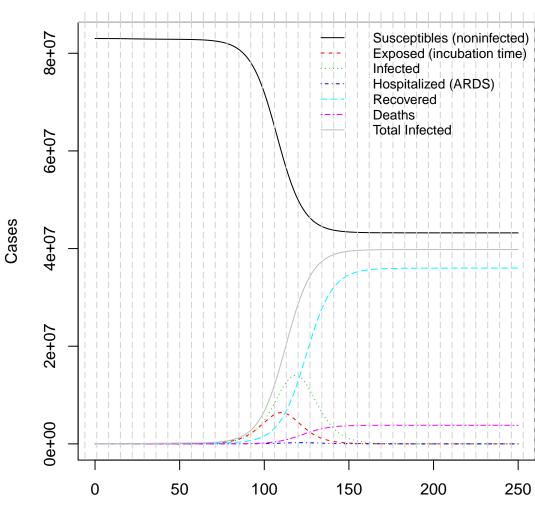


Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 2 exit after day 50 without social distaining Week number (2020) Hospitalized (ARDS) Deaths Hostpital Workload Hostpital Workload compared to 2017 (%) Cases (%) $\alpha$

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

# Scenario 3 exit after day 50 with social distaining Week number (2020) 9 12 15 18 21 24 27 30 33 36 39 42 45



Days after 3/1/20

Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

### Scenario 3 exit after day 50 with social distaining Week number (2020) Susceptibles (noninfected) Exposed (incubation time) Infected Hospitalized (ARDS) Recovered Deaths Total Infected Cases (%)

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 3 exit after day 50 with social distaining Week number (2020) 45 12 15 18 36 39 Hospitalized (ARDS) Deaths 800 Hostpital Workload Hostpital Workload compared to 2017 (%) 3e+06 009 2e+06 1e+06 00+<del>0</del>0 0 50 100 150 200 250

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

## Scenario 3 exit after day 50 with social distaining Week number (2020) 12 15 18 36 45 Hospitalized (ARDS) Deaths 800 Hostpital Workload Hostpital Workload compared to 2017 (%) 3 Cases (%) $\alpha$ 50 100 150 200 250 0

Days after 3/1/20 Created by Sören Thiering (04/17/2020). Email: soeren.thiering@hs-anhalt.de

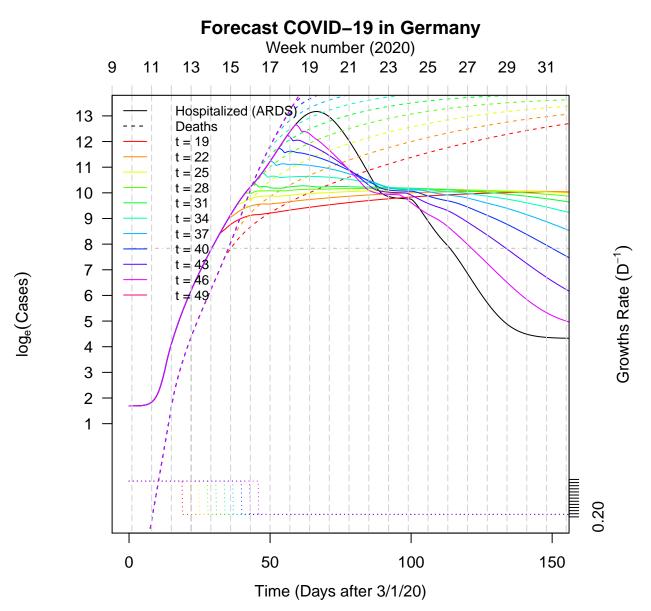
#### Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 25 27 29 31 Hospitalized (ARDS) 5000000 Deaths R0 = 0.44500000 R0 = 0.6R0 = 0.84000000 R0 = 1R0 = 1.23500000 R0 = 1.4R0 = 1.6R0 = 1.83000000 Growths Rate $(\mathsf{D}^{-1})$ R0 = 2R0 = 2.22500000 R0 = 2.42000000 1500000 1000000 500000 0 0.32 0 50 100 150 Time (Days after 3/1/20)

Created by Sören Thiering (04/17/2020). 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 = 194500000 t = 22t = 254000000 t = 28t = 31 3500000 t = 34t = 37t = 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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