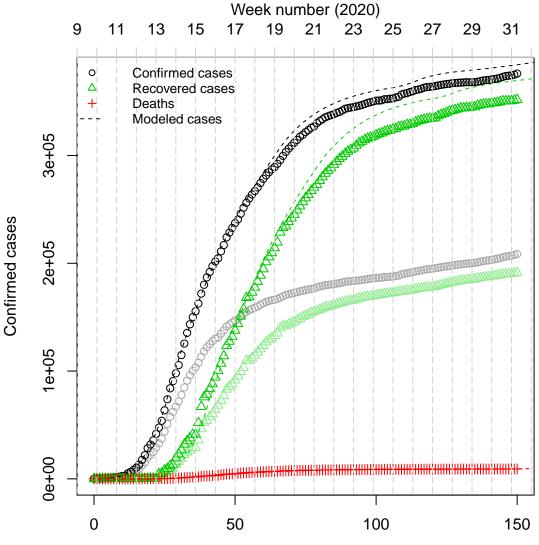
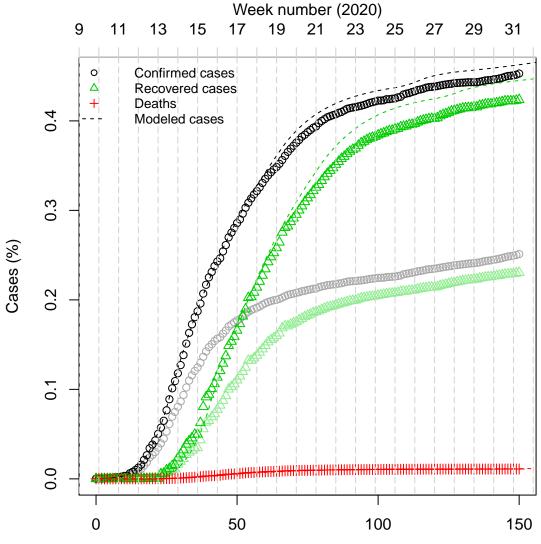
# Situation vs Model COVID-19 in Germany



Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

# Situation vs Model COVID-19 in Germany



Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

4e+05

3e+05

2e+05

1e+05

0e+00

0

Cases

Week number (2020) 16 18 20 22 24 26 28 30 32 10 12 Confirmed and hidden cases Confirmed cases (JHU CSSE) Recovered and hidden recovered cases Recovered cases (JHU CSSE) Death cases

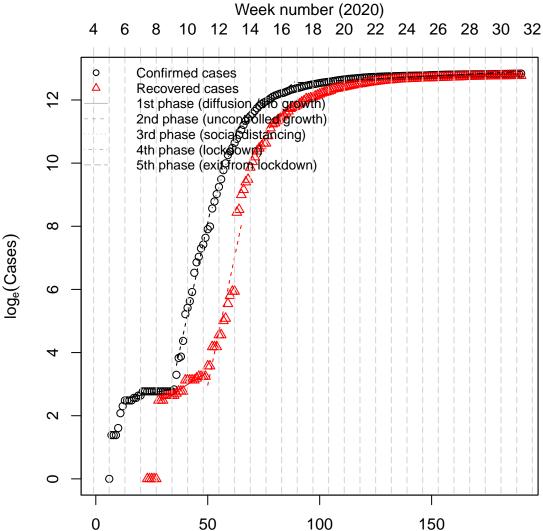
Days after 1/22/20

100

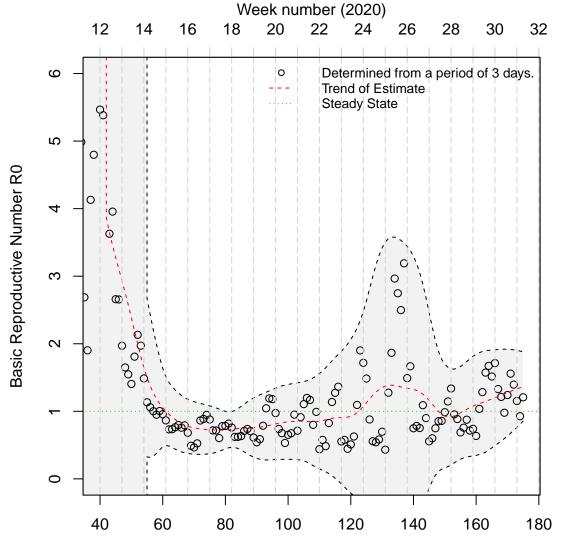
50

150

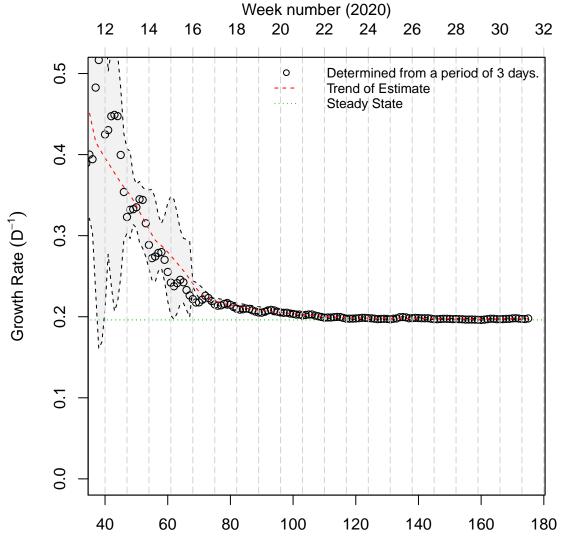
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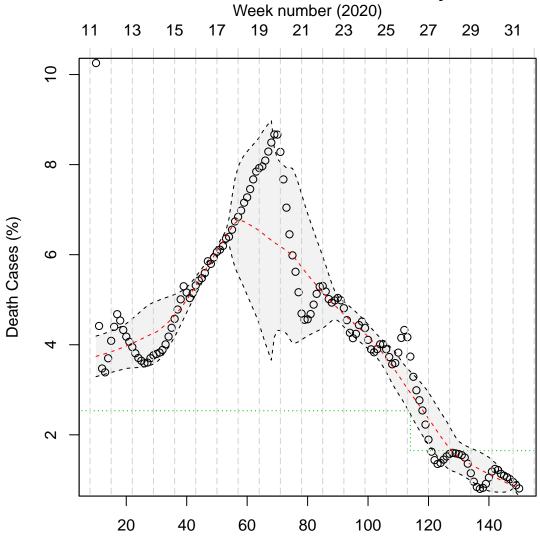
Days after 1/22/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de



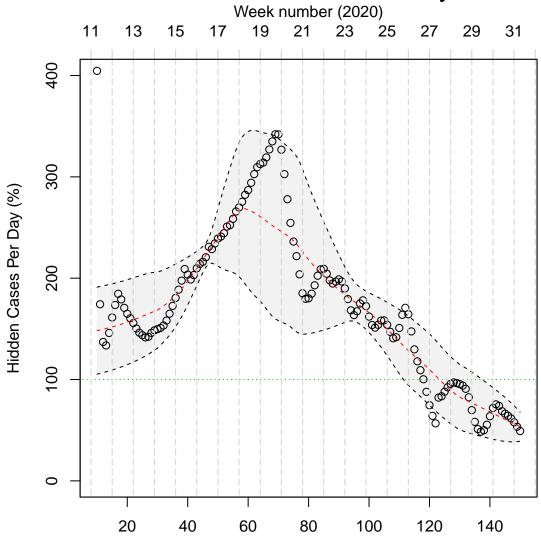
Days after 2/5/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de



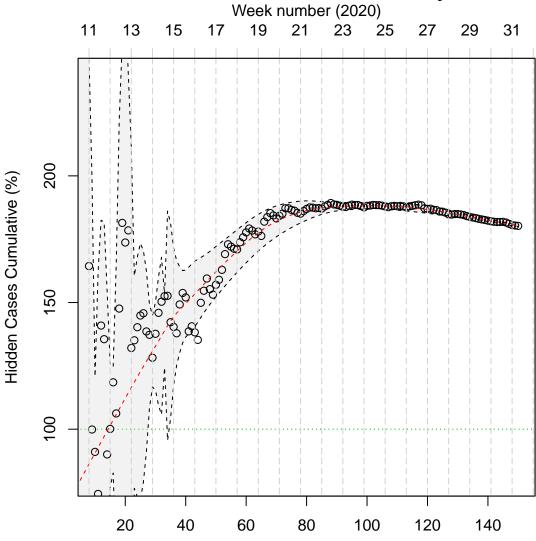
Days after 2/5/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de



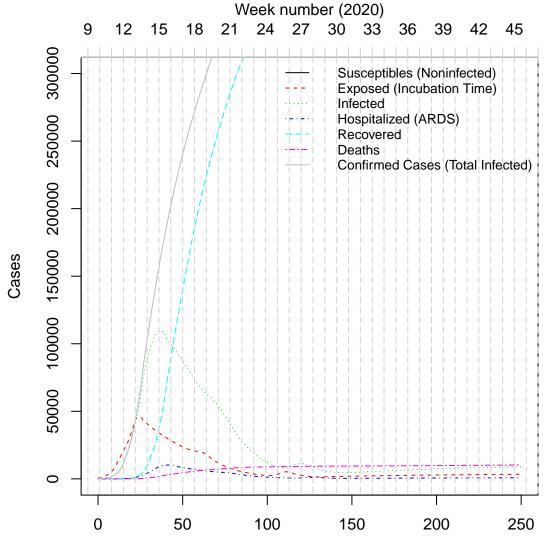
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Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

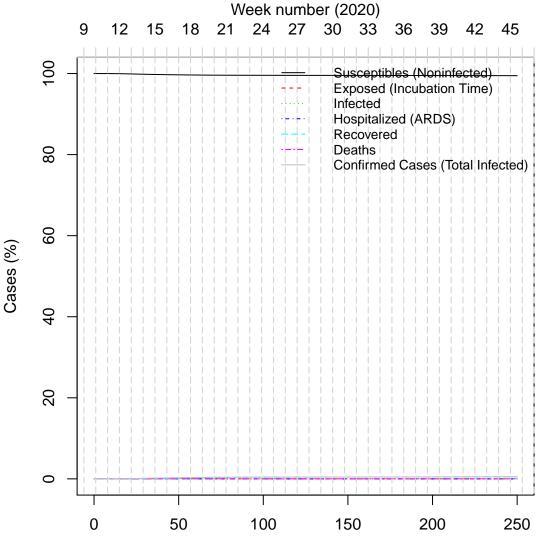


Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

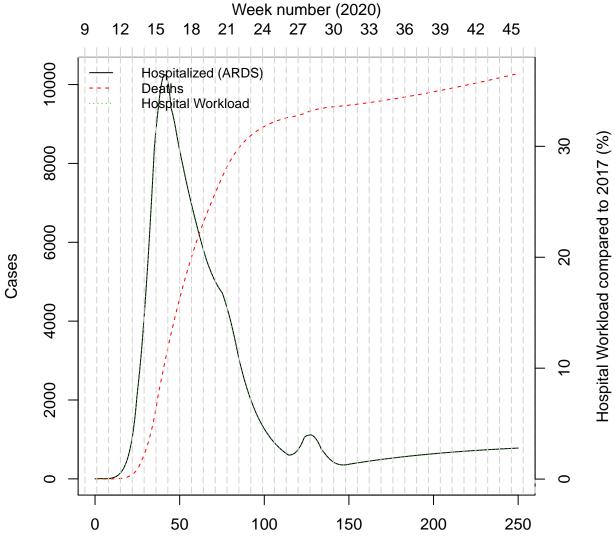


Days after 3/1/20

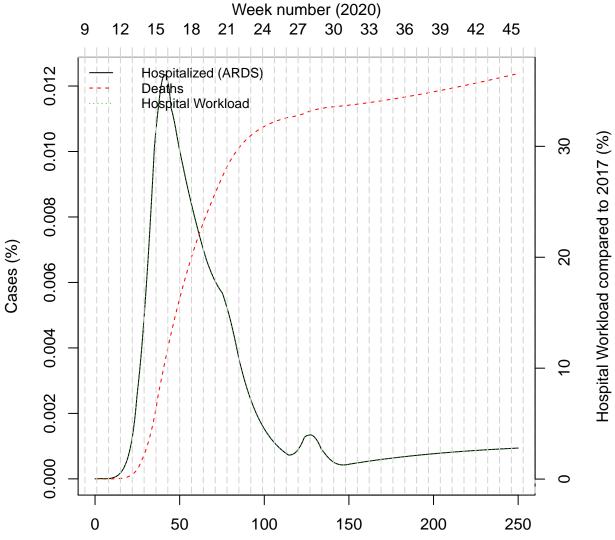
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# Scenario 1 no social distancing and no lockdown Week number (2020) 24 45 12 15 18 21 36 39 8e+07 Susceptibles (Noninfected) Exposed (Incubation Time) Infected Hospitalized (ARDS) Recovered Deaths Confirmed Cases (Total Infected) 6e+07 Cases 4e+07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

Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

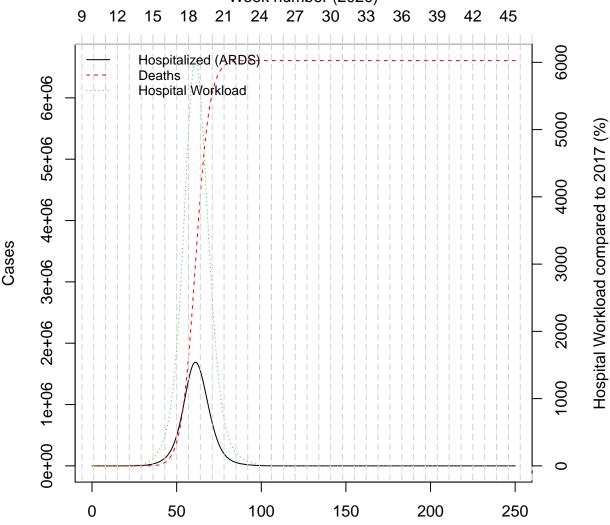
0

50

# 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 (07/31/2020). Email: soeren.thiering@hs-anhalt.de

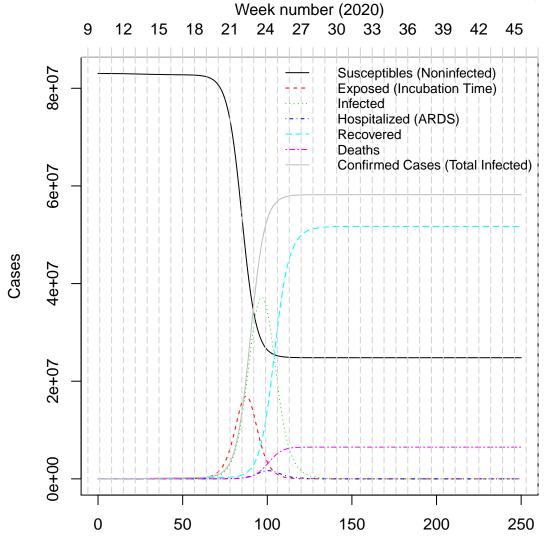
# Scenario 1 no social distancing and no lockdown Week number (2020)



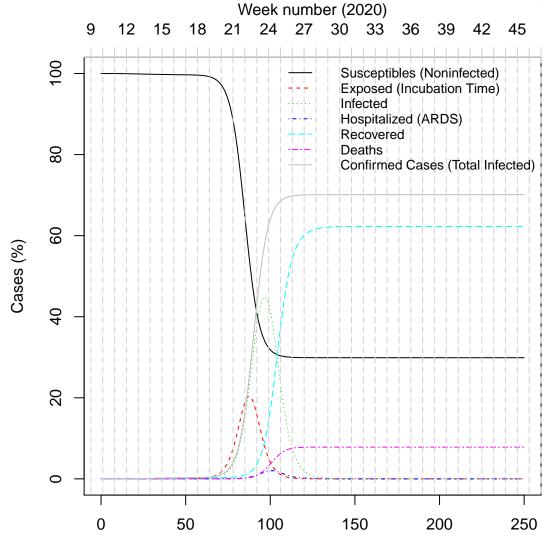
Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

# Scenario 1 no social distancing and no lockdown Week number (2020) 12 15 18 36 45 0009 $\infty$ Hospitalized (ARDS) Deaths Hospital Workload Hospital Workload compared to 2017 (%) 9 Cases (%) 3000 2000 $\alpha$ 50 100 150 200 250 0

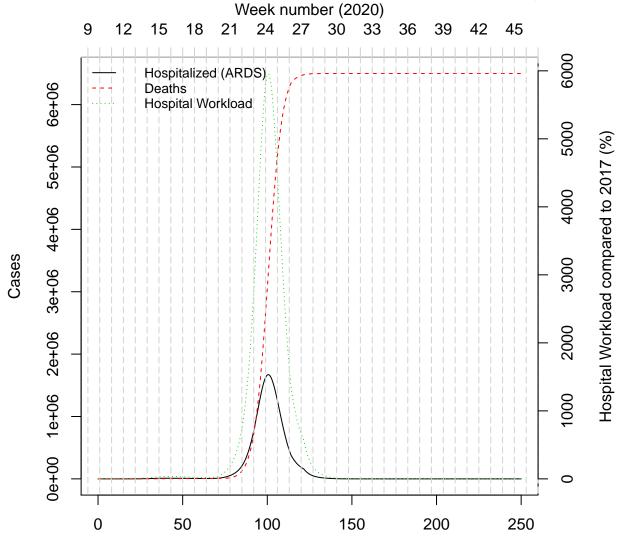
Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de



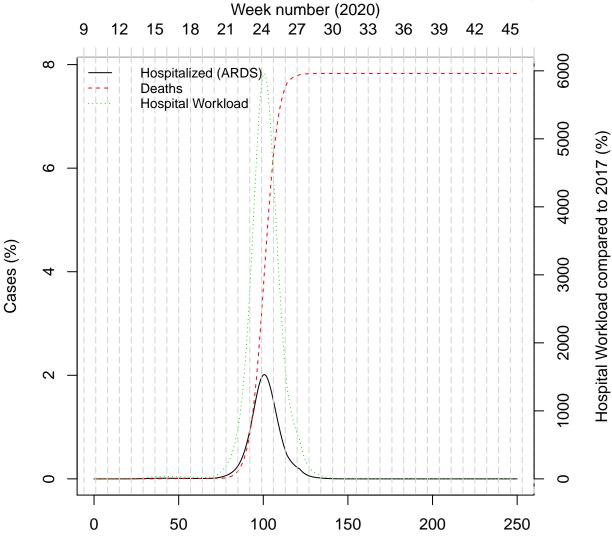
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Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

# Scenario 3 exit after day 50 with social distancing 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+<del>0</del>0

Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

0

50

### 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 (07/31/2020). Email: soeren.thiering@hs-anhalt.de

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

Cases

Days after 3/1/20

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# Scenario 3 exit after day 50 with social distancing Week number (2020) 45 12 15 18 36 Hospitalized (ARDS) Deaths 3.0 2500 Hospital Workload Hospital Workload compared to 2017 (%) 2.5 2000 2.0 1500 1.5 0.5 0.0

Cases (%)

0

50

Days after 3/1/20 Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

100

#### Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 25 27 29 31 Hospitalized (ARDS) 6500000 Deaths 6000000 R0 = 0.4R0 = 0.65500000 R0 = 0.8R0 = 15000000 R0 = 1.24500000 R0 = 1.4R0 = 1.64000000 R0 = 1.8Growth Rate $(\mathsf{D}^{-1})$ R0 = 23500000 R0 = 2.23000000 R0 = 2.42500000 2000000 1500000 1000000 500000 0 0.32 0 50 100 150

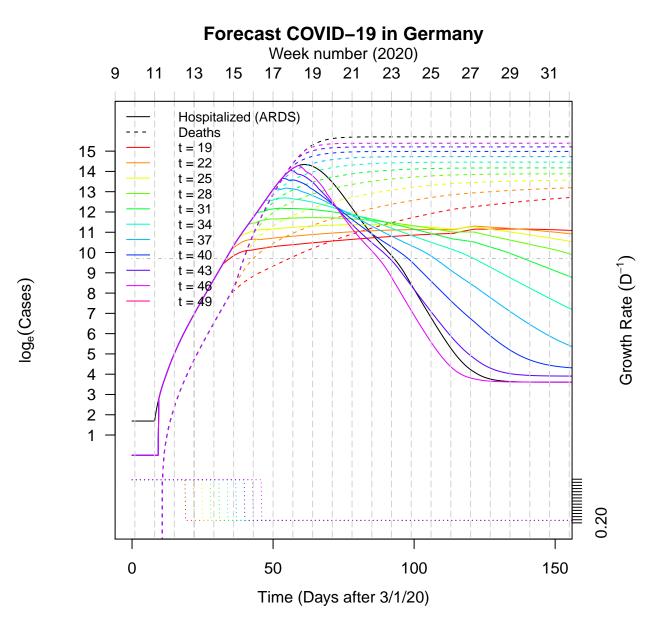
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Time (Days after 3/1/20)

#### Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 25 27 29 31 Hospitalized (ARDS) 6500000 Deaths 6000000 t = 19t = 225500000 t = 25t = 285000000 t = 31 4500000 t = 34t = 374000000 t = 40Growth Rate $(\mathsf{D}^{-1})$ t = 433500000 t = 463000000 t = 492500000 2000000 1500000 1000000 500000 0 0.20 0 50 100 150

Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de

Time (Days after 3/1/20)



Created by Sören Thiering (07/31/2020). Email: soeren.thiering@hs-anhalt.de