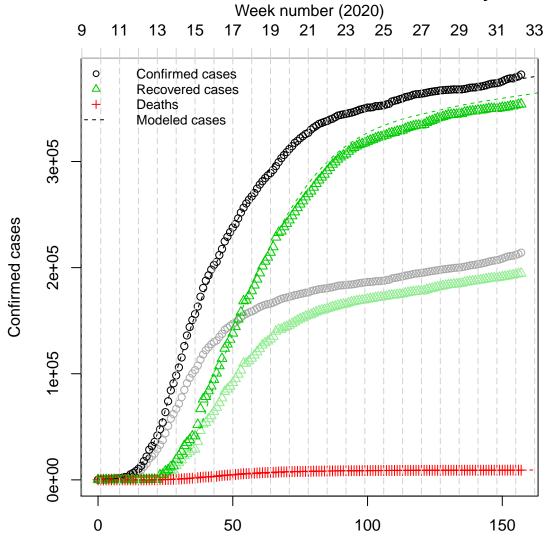
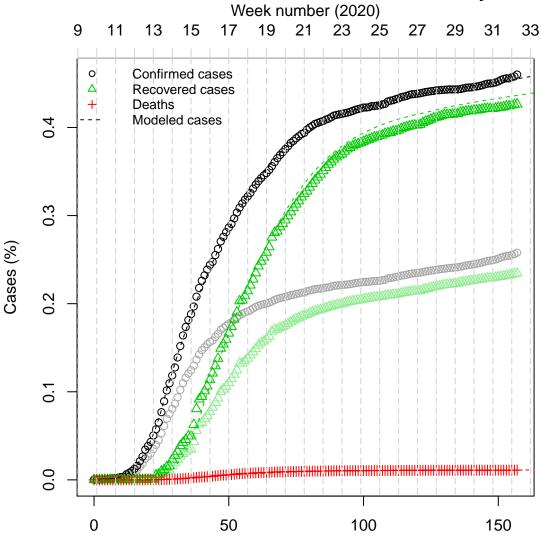
# Situation vs Model COVID-19 in Germany

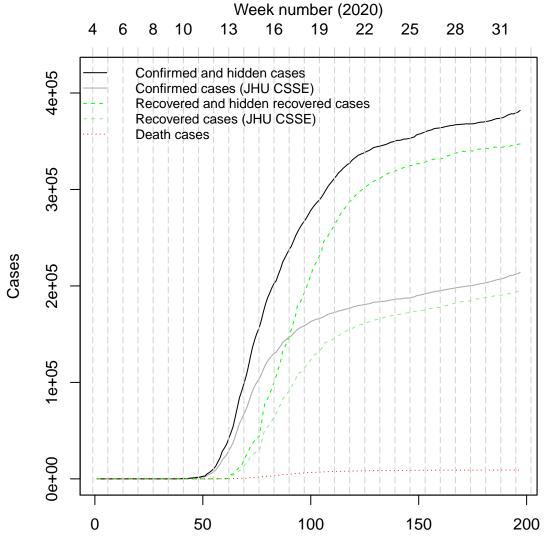


Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de

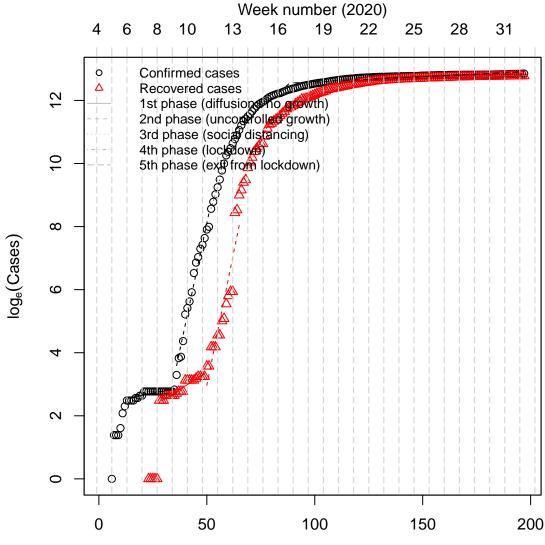
# Situation vs Model COVID-19 in Germany



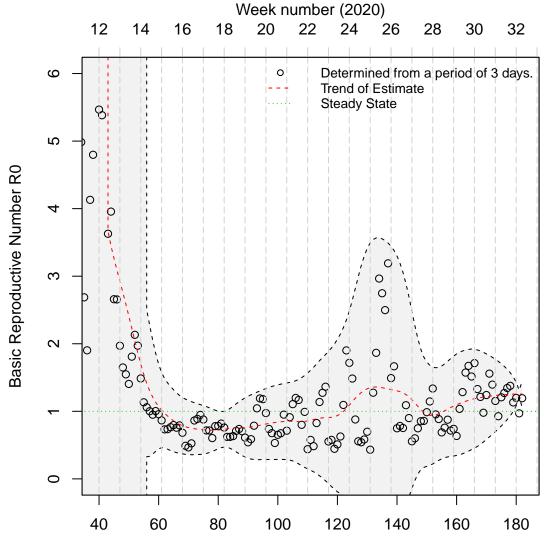
Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



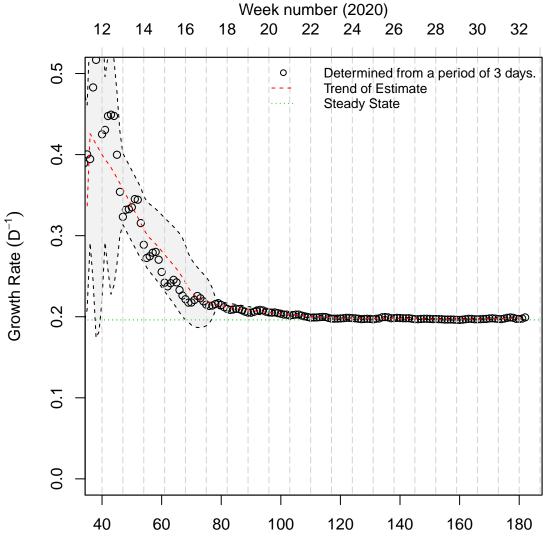
Days after 1/22/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



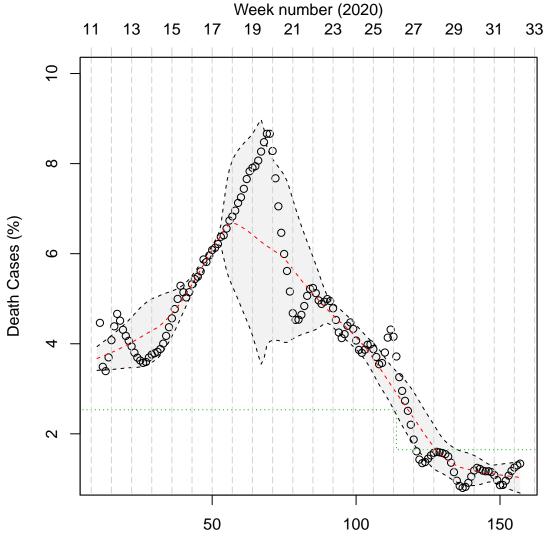
Days after 1/22/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



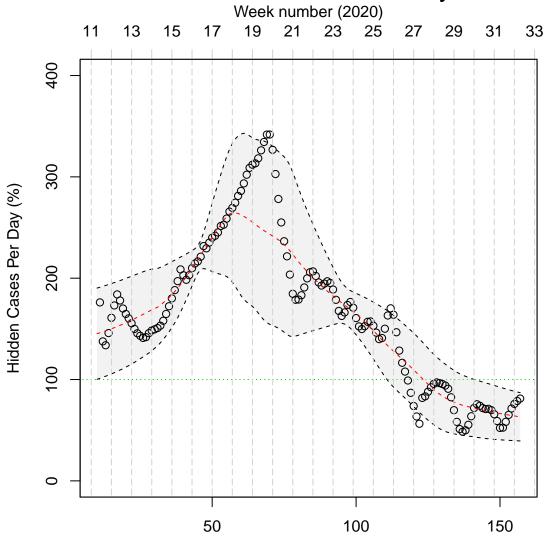
Days after 2/5/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



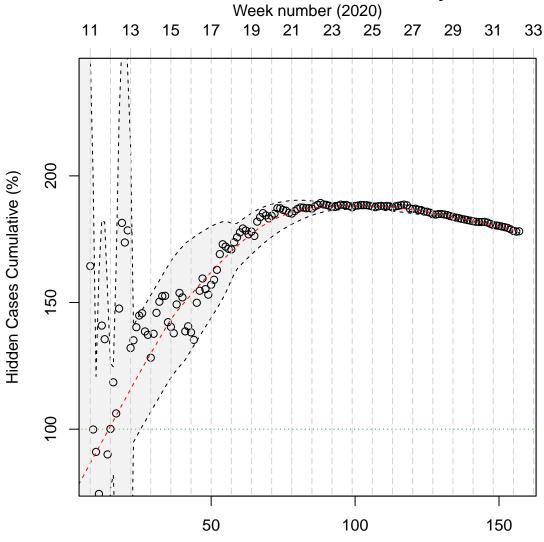
Days after 2/5/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de

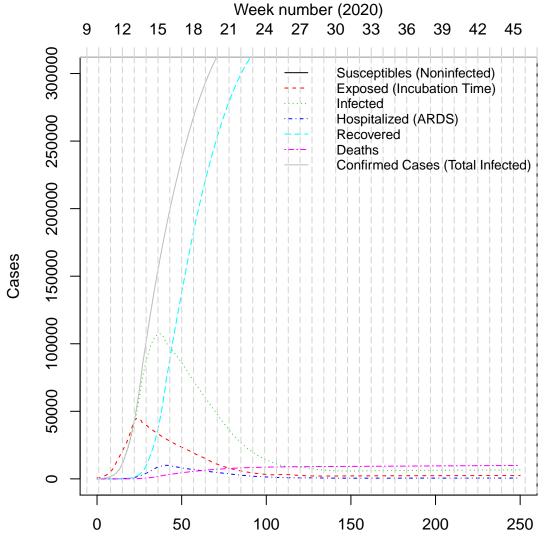


Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



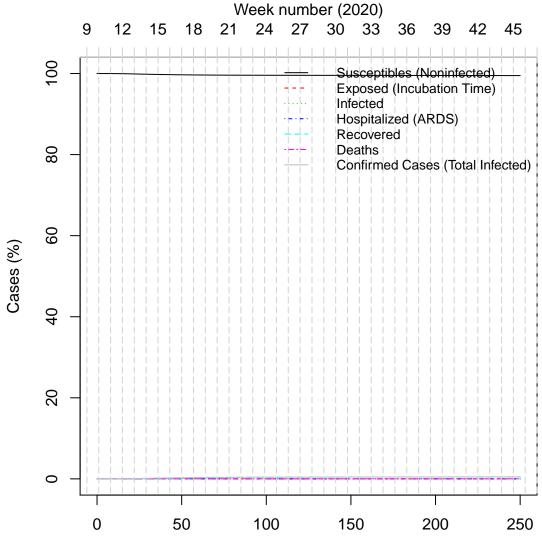
Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de

# Forecast COVID-19 in Germany



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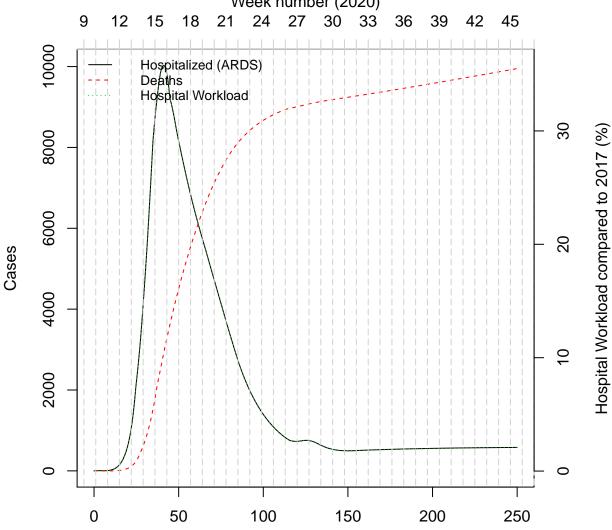
# Forecast COVID-19 in Germany



Days after 3/1/20

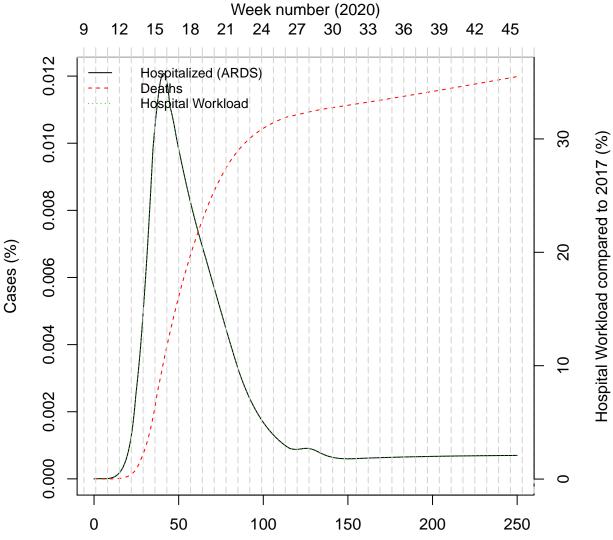
Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de

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



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# Forecast COVID-19 in Germany



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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 (08/06/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

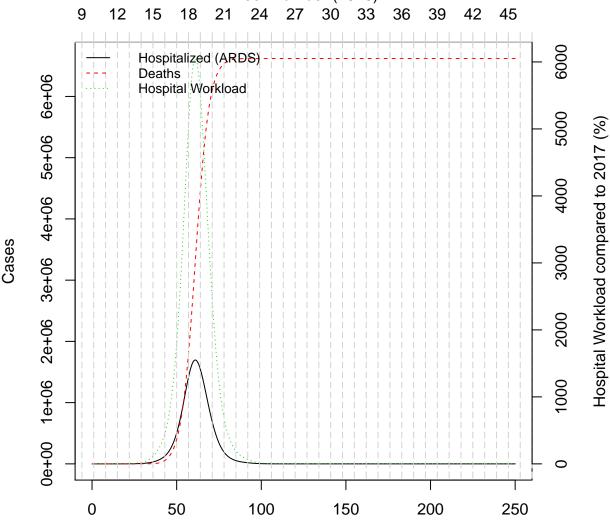
100

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 (08/06/2020). Email: soeren.thiering@hs-anhalt.de

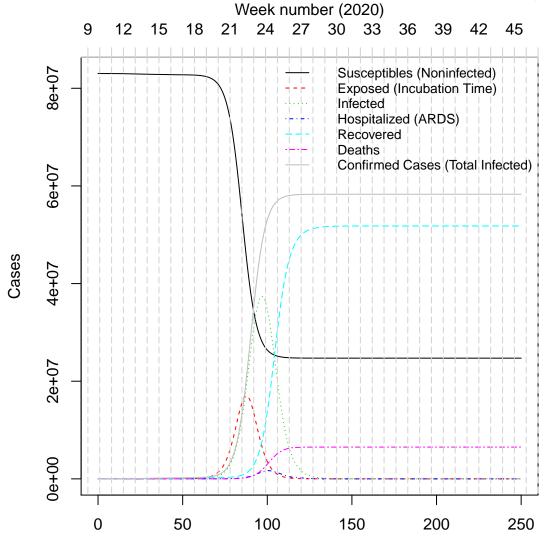
# Scenario 1 no social distancing and no lockdown Week number (2020)



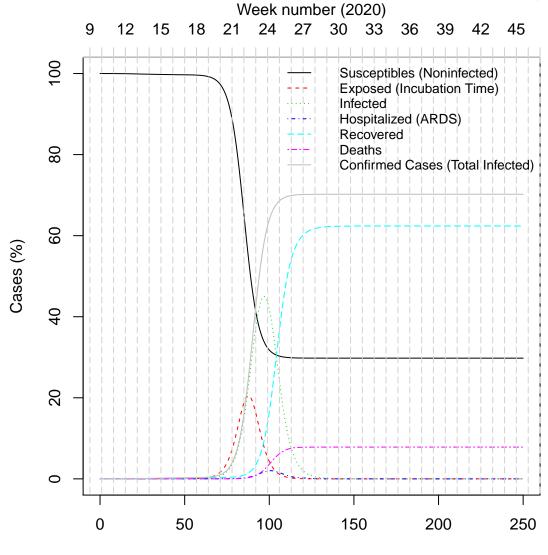
Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de

# 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 (%) 2000 $\alpha$ 50 100 150 200 250 0

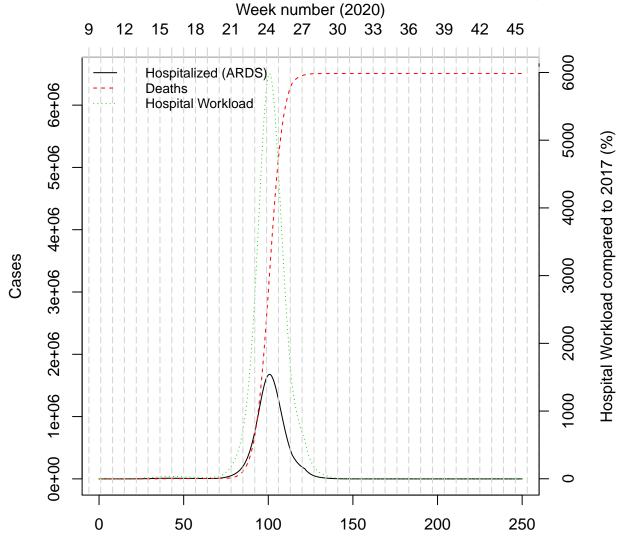
Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



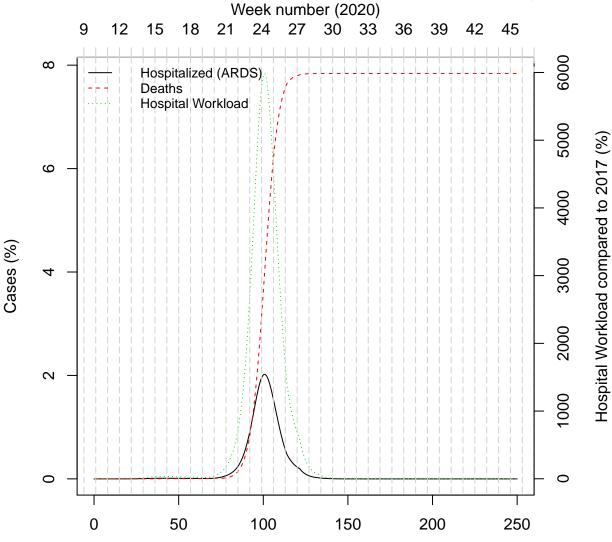
Days after 3/1/20 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de



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# 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 (08/06/2020). 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 (08/06/2020). 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 Created by Sören Thiering (08/06/2020). Email: soeren.thiering@hs-anhalt.de

# Scenario 3 exit after day 50 with social distancing Week number (2020) 45 12 15 18 36 39 Hospitalized (ARDS) Deaths 2500 Hospital Workload Hospital Workload compared to 2017 (%) 2.5 2.0 1500 Cases (%) 1.5 0.5 0.0

Days after 3/1/20 Created by Sören Thiering (08/06/2020). 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 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

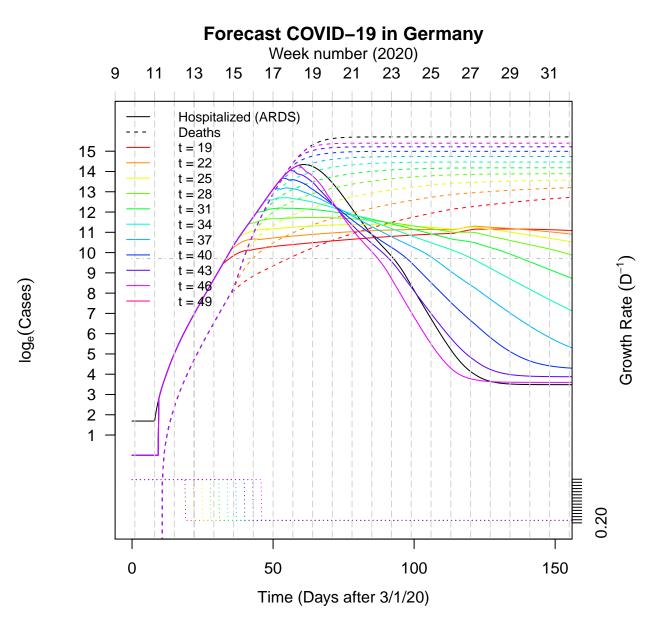
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Time (Days after 3/1/20)

#### 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

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Time (Days after 3/1/20)



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