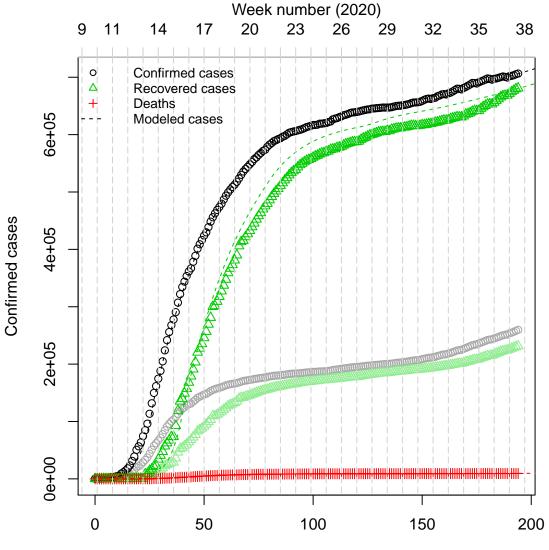
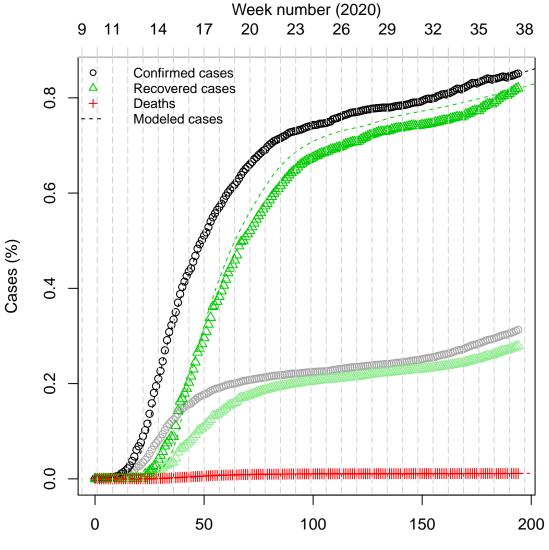
Situation vs Model COVID-19 in Germany

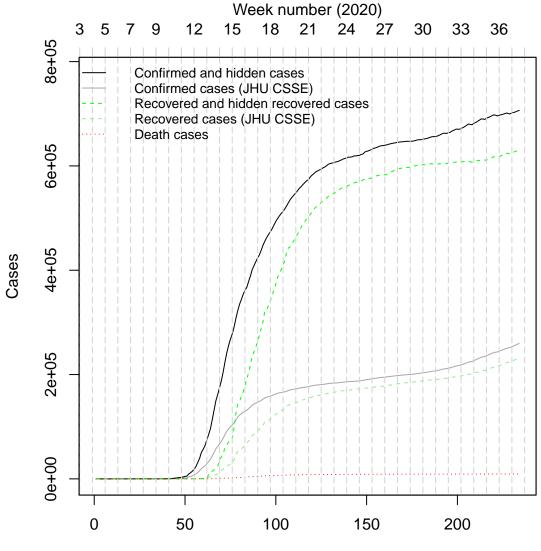


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Situation vs Model COVID-19 in Germany

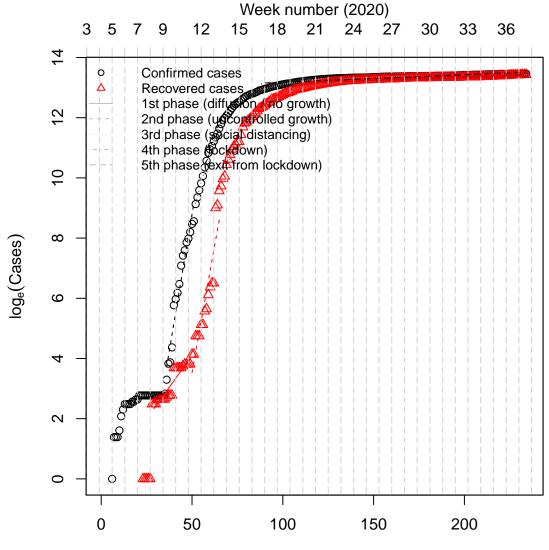


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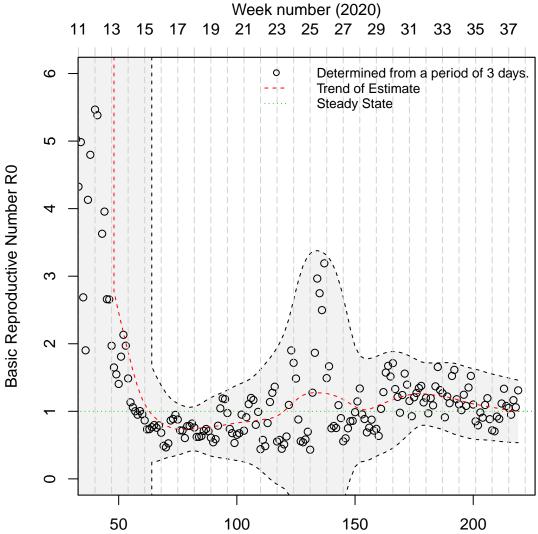


Days after 1/22/20

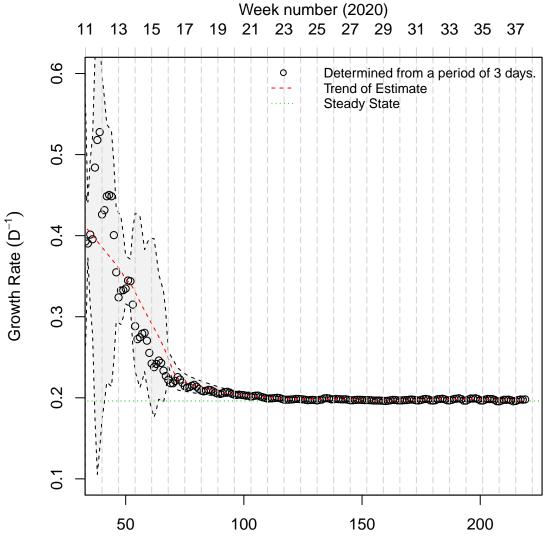
Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de



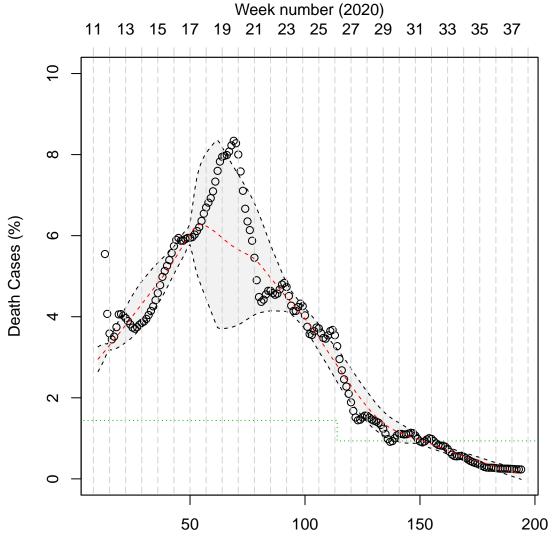
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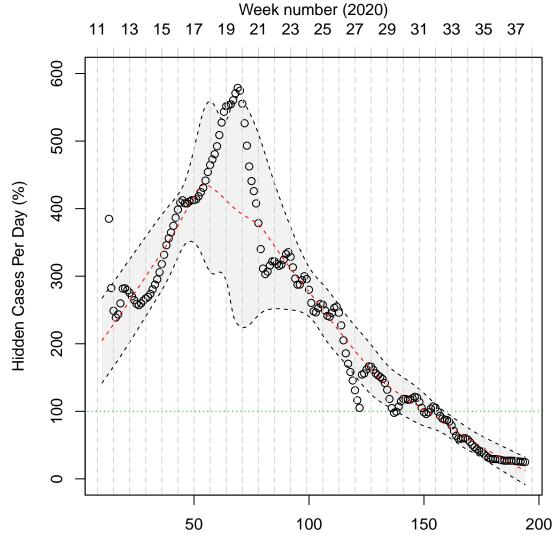
Days after 2/5/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de



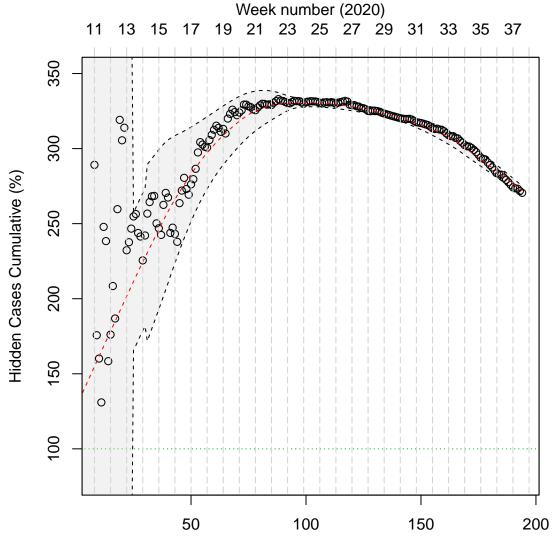
Days after 2/5/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de



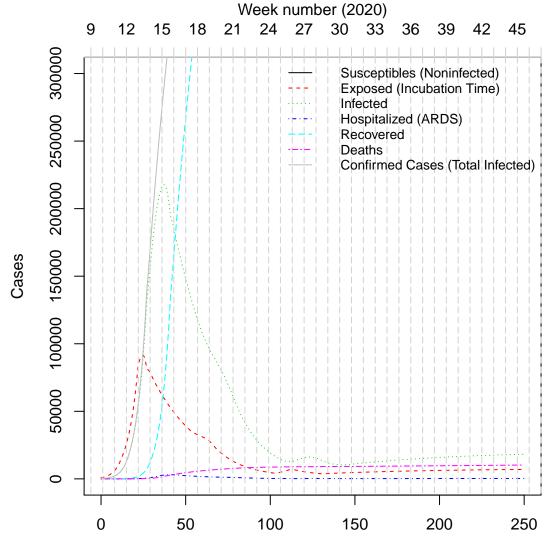
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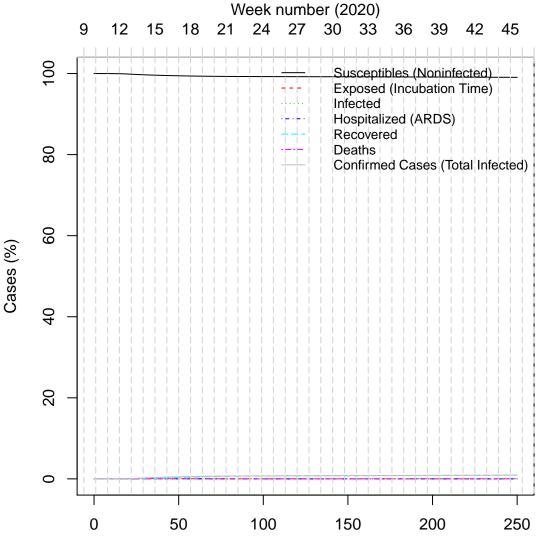


Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

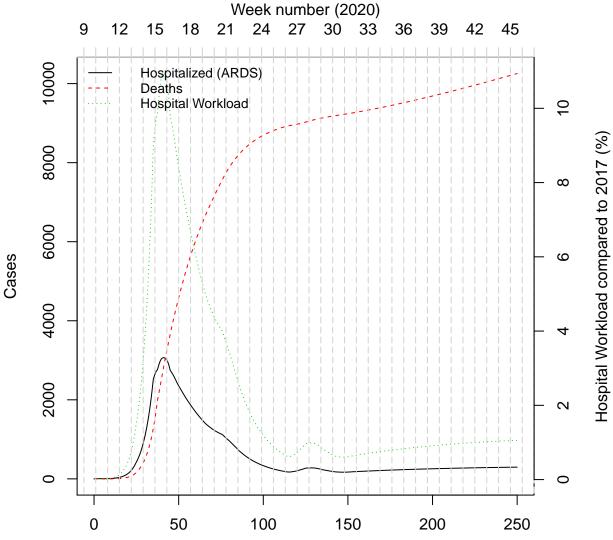


Days after 3/1/20

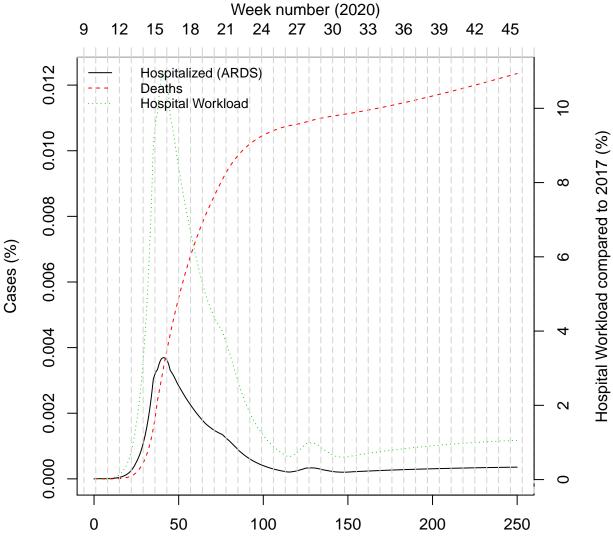
Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de



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Scenario 1 no social distancing and no lockdown Week number (2020) 24 45 12 15 18 21 36 39 Susceptibles (Noninfected) Exposed (Incubation Time) Infected Hospitalized (ARDS) Recovered Deaths Confirmed Cases (Total Infected)

8e+07

6e+07

4e+07

2e+07

00+00

0

50

Cases

Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

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 (09/13/2020). Email: soeren.thiering@hs-anhalt.de

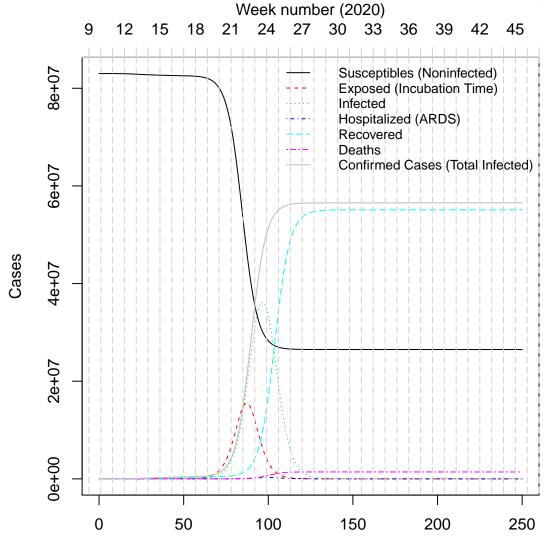
Scenario 1 no social distancing and no lockdown Week number (2020) Hospitalized (ARDS) Deaths Hospital Workload Hospital Workload compared to 2017 (%) Cases

Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 1 no social distancing and no lockdown Week number (2020) 24 45 12 15 18 36 Hospitalized (ARDS) 1000 Deaths Hospital Workload 1.5 Hospital Workload compared to 2017 (%) Cases (%) 0.5 0.0 0 50 100 150 200 250

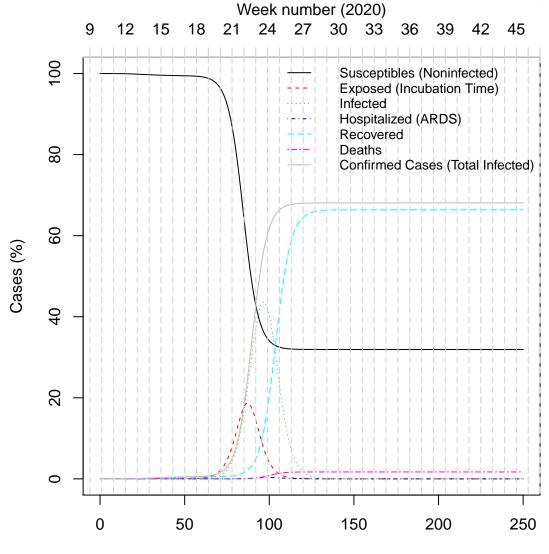
Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing



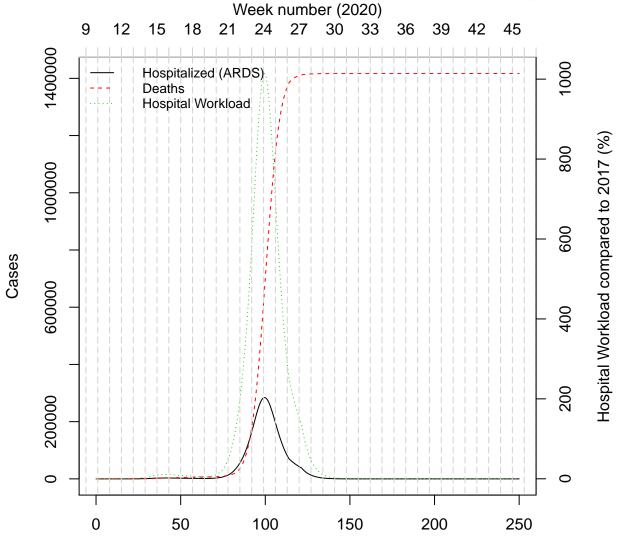
Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing



Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing



Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 2 exit after day 50 without social distancing Week number (2020) 9 45 12 15 18 36 39 1000 Hospitalized (ARDS) Deaths Hospital Workload Hospital Workload compared to 2017 (%)

1.5

0.5

0.0

0

50

Cases (%)

Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

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 (09/13/2020). Email: soeren.thiering@hs-anhalt.de

150

200

250

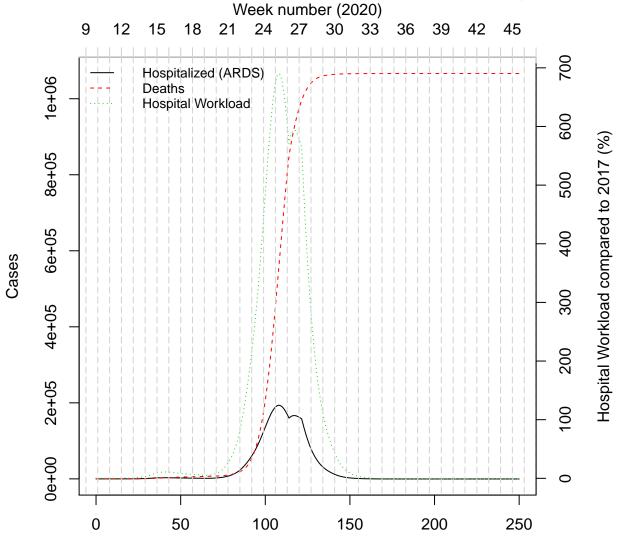
100

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 (%)

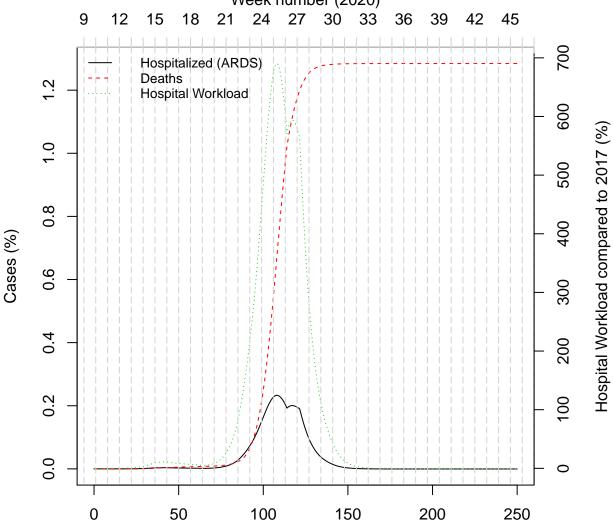
Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 3 exit after day 50 with social distancing



Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Scenario 3 exit after day 50 with social distancing Week number (2020)



Days after 3/1/20 Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

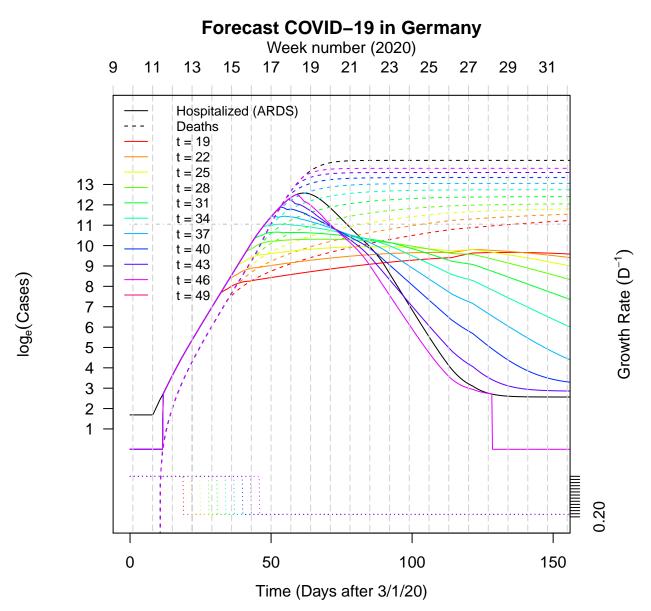
Forecast COVID-19 in Germany Week number (2020) 9 11 13 15 17 19 25 27 29 31 Hospitalized (ARDS) 1400000 Deaths R0 = 0.4R0 = 0.61200000 R0 = 0.8R0 = 1R0 = 1.21000000 R0 = 1.4R0 = 1.6R0 = 1.8Growth Rate (D^{-1}) 800000 R0 = 2R0 = 2.2Cases R0 = 2.4600000 400000 200000 0 0.32 0 50 100 150 Time (Days after 3/1/20)

Created by Sören Thiering (09/13/2020). Email: soeren.thiering@hs-anhalt.de

Forecast COVID-19 in Germany Week number (2020) 9 19 31 11 13 15 17 25 27 29 Hospitalized (ARDS) 1400000 Deaths t = 19 t = 22 1200000 t = 25t = 28t = 31 1000000 t = 34t = 37t = 40Growth Rate (D^{-1}) 800000 t = 43t = 46Cases t = 49600000 400000 200000 0 0.20 150 0 50 100

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Time (Days after 3/1/20)



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