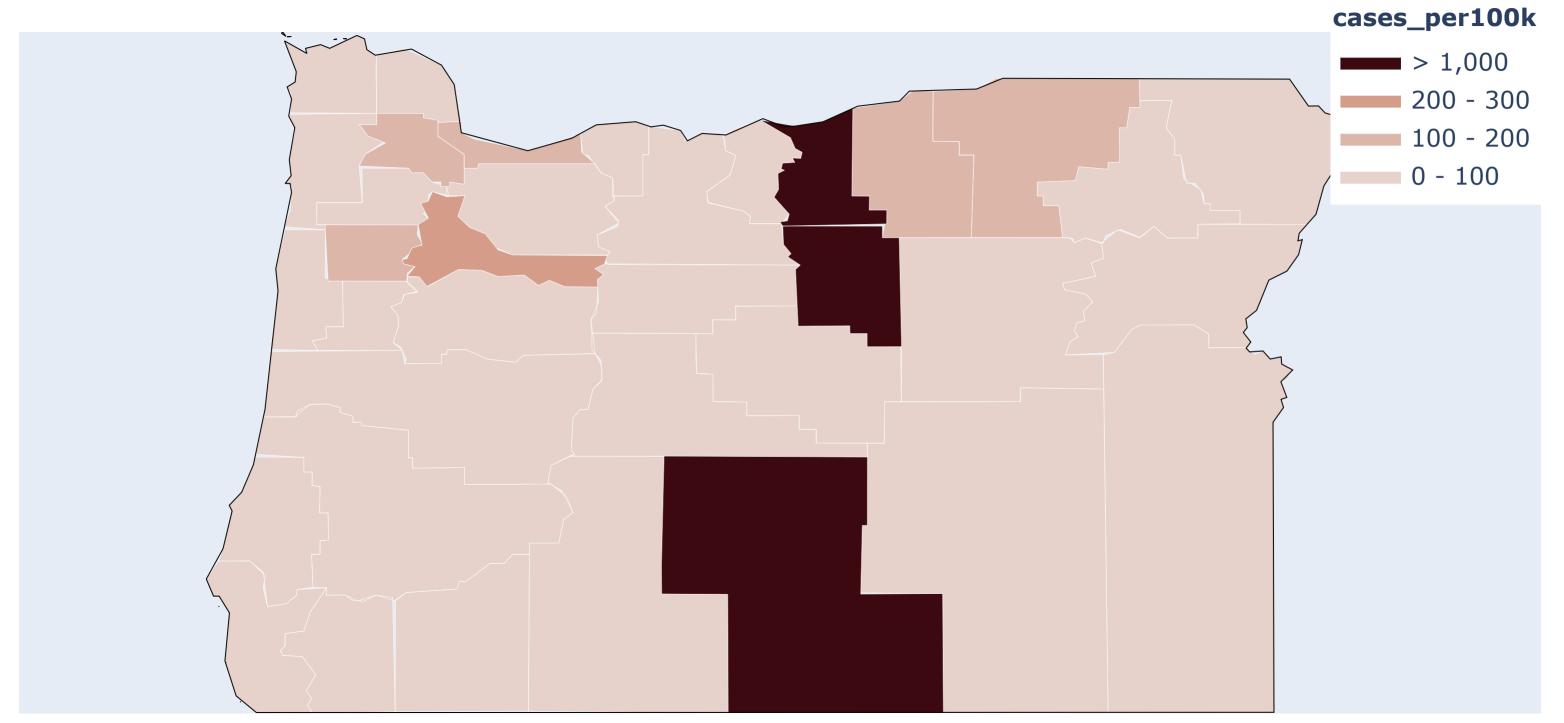
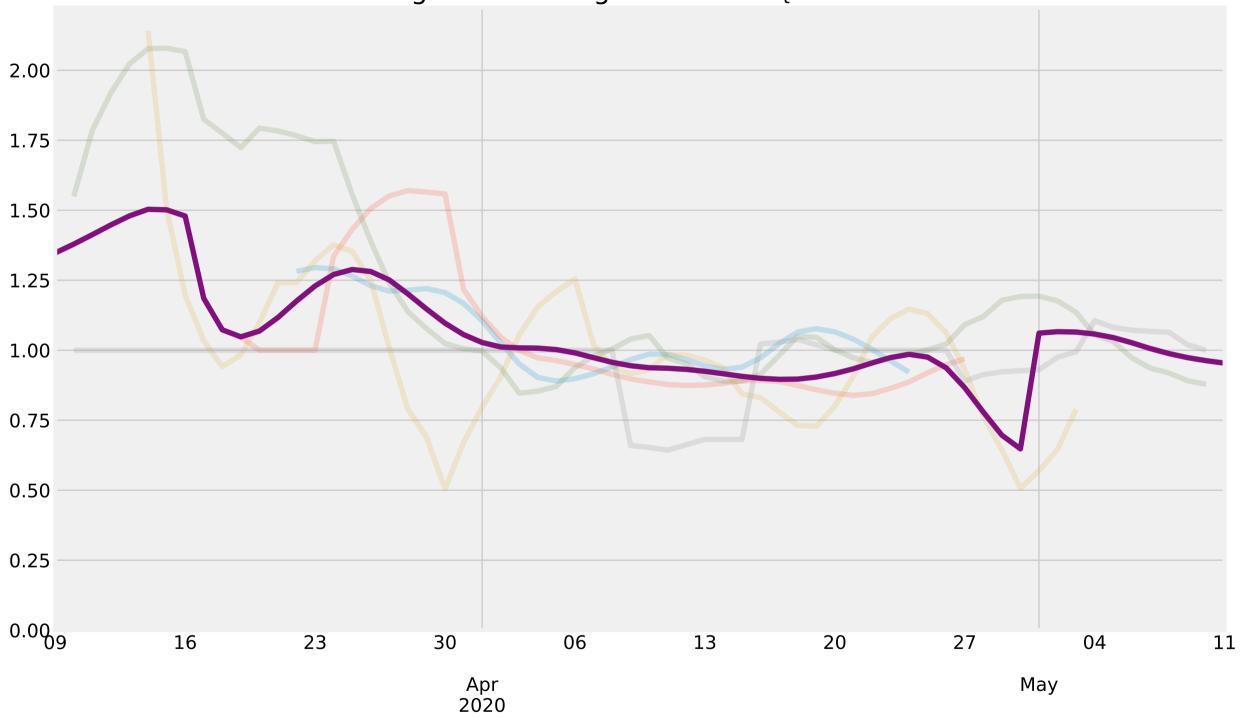
Oregon: COVID-19 Cases Per 100k Residents



Reproduction Rate  $(R_t)$  Estimates Oregon: No Change in Future  $R_t$  Scenario



rt\_deaths\_daily
rt\_hosp\_concur
rt\_hosp\_admits
rt\_cases\_daily
rt\_pos\_test\_share\_daily
rt\_joint\_est

Parameters Used

 $D_{incubation}:3.0$ 

 $D_{infectious}$ : 4.0  $D_{tohospital}$ : 7.0

 $D_{inhospital}: 11.0$ 

 $D_{tildeath}: 17.0$ 

Rate<sub>Hospitalization</sub>: 4.00%

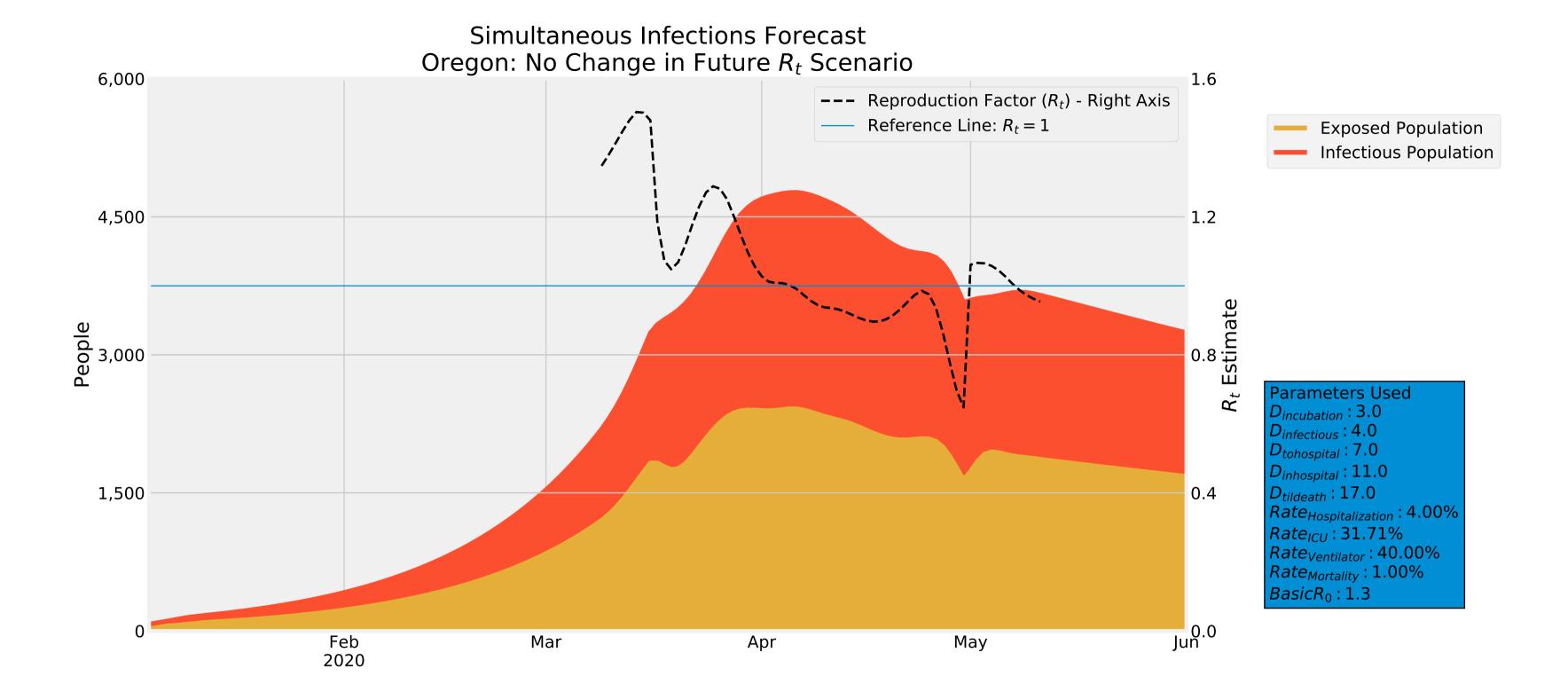
Rate<sub>ICU</sub>: 31.71%

 $Rate_{Ventilator}$ : 40.00%  $Rate_{Mortality}$ : 1.00%

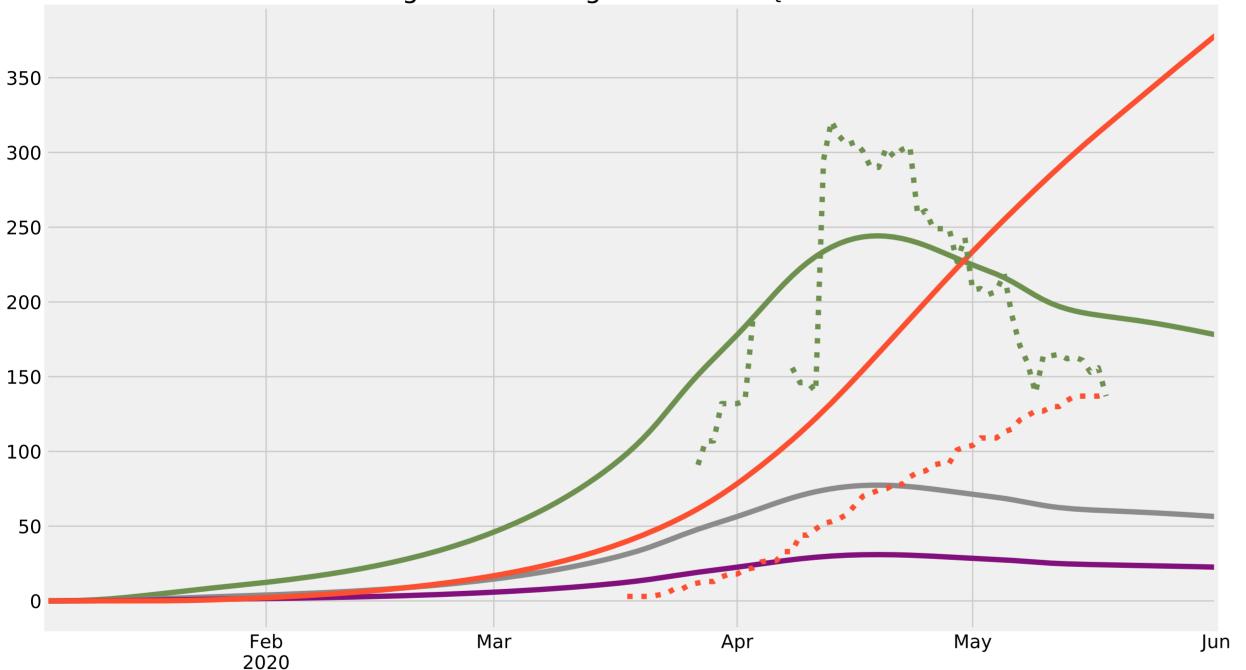
 $BasicR_0: 1.3$ 

Author: Michael Donnelly (twtr: @donnellymjd)

Chart created on 19 May 2020



### Hospitalization and Deaths Forecast Oregon: No Change in Future $R_t$ Scenario



Forecast Concurrent Hospitalizations

Forecast ICU Cases

Forecast Ventilations

Forecast Cumulative Deaths

Reported Concurrent Hospitalizations

Reported Total Deaths

#### Parameters Used

 $D_{incubation}:3.0$ 

 $D_{infectious}$ : 4.0  $D_{tohospital}$ : 7.0

D<sub>inhospital</sub>: 11.0  $D_{tildeath}: 17.0$ 

Rate<sub>Hospitalization</sub>: 4.00%

*Rate<sub>ICU</sub>*: 31.71%

Rate<sub>Ventilator</sub>: 40.00%

Rate<sub>Mortality</sub>: 1.00%

 $BasicR_0: 1.3$ 

Author: Michael Donnelly (twtr: @donnellymjd)

Chart created on 19 May 2020

Population Overview Forecast Oregon: No Change in Future  $R_t$  Scenario 100% 4,217,737 Forecast Susceptible Population Forecast Deaths Forecast Exposures Forecast Hospitalizations 3,163,303 75% Forecast Infectious Forecast Recoveries Population 2,108,869 50% Parameters Used  $D_{incubation}: 3.0$ D<sub>infectious</sub>: 4.0 D<sub>tohospital</sub>: 7.0  $D_{inhospital}: 11.0$  $D_{tildeath}: 17.0$ 1,054,434 25% Rate<sub>Hospitalization</sub>: 4.00% Rate<sub>ICU</sub>: 31.71% Rate<sub>Ventilator</sub>: 40.00% Rate<sub>Mortality</sub>: 1.00%  $BasicR_0: 1.3$ 

Apr

May

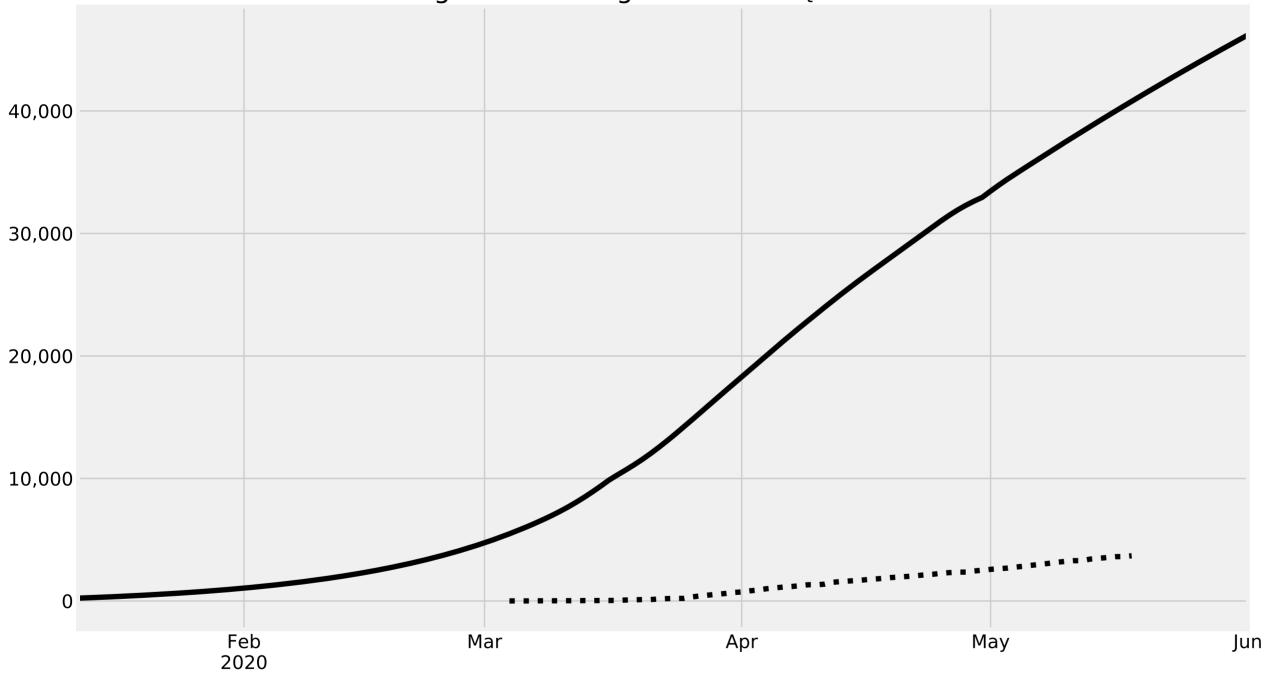
Feb

2020

Mar

Jun

### **Cumulative Infections Forecast** Oregon: No Change in Future $R_t$ Scenario



Forecast Cumulative Infections • • • Reported Cumulative Infections

Parameters Used

 $D_{incubation}$ : 3.0  $D_{infectious}$ : 4.0  $D_{tohospital}$ : 7.0 D<sub>inhospital</sub>: 11.0

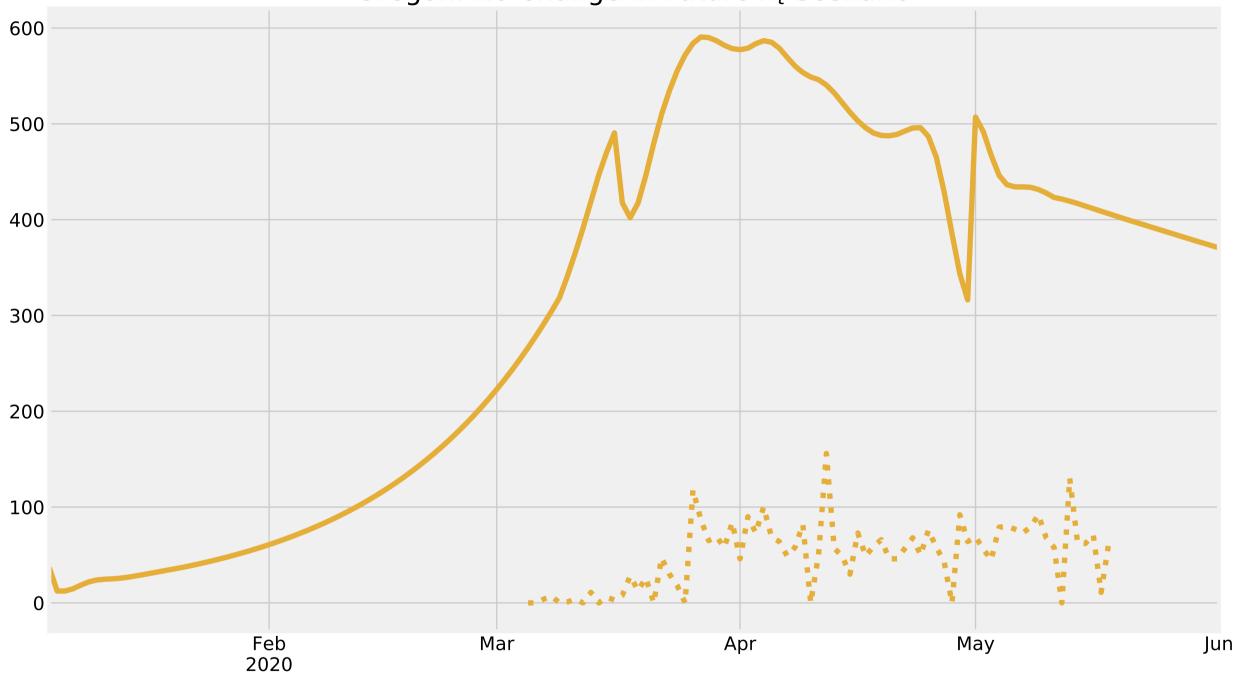
 $D_{tildeath}$ : 17.0

Rate<sub>Hospitalization</sub>: 4.00% Rate<sub>ICU</sub>: 31.71%

Rate<sub>Ventilator</sub>: 40.00% Rate<sub>Mortality</sub>: 1.00%

 $BasicR_0: 1.3$ 

# Daily Exposures Forecast Oregon: No Change in Future $R_t$ Scenario



Forecast Daily New Infections (Exposed) Reported Daily New Infections (Exposed)

Parameters Used

D<sub>incubation</sub>: 3.0

 $D_{infectious}$ : 4.0  $D_{tohospital}$ : 7.0

 $D_{inhospital}: 11.0$ 

 $D_{tildeath}: 17.0$ 

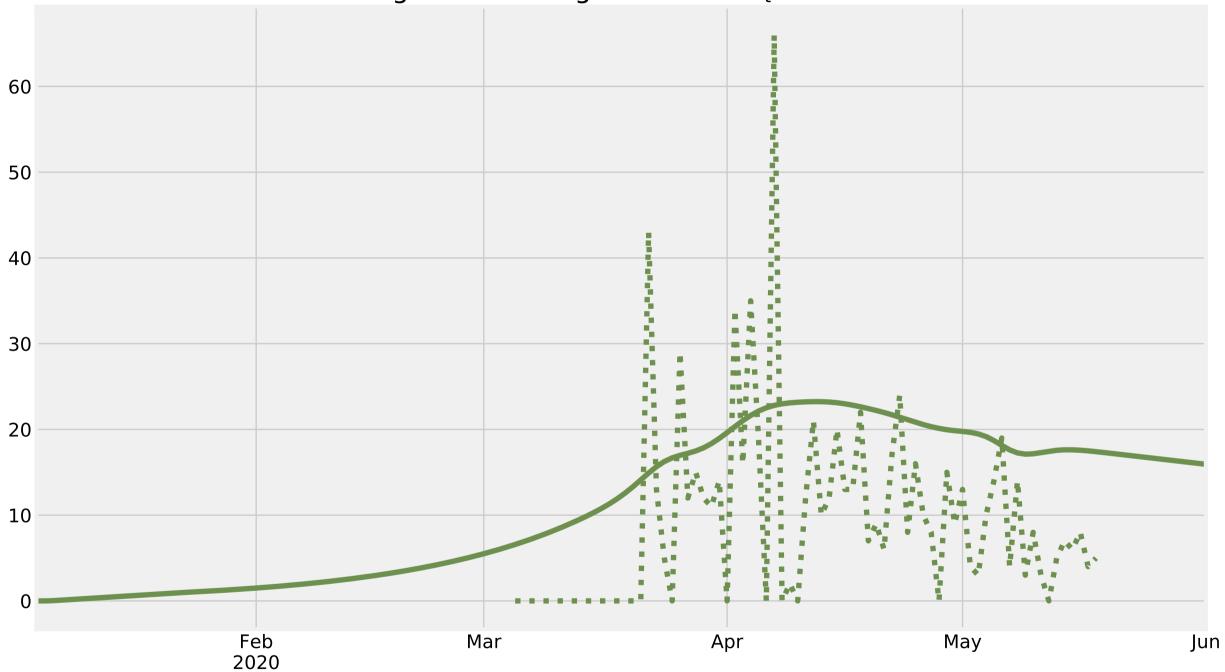
Rate<sub>Hospitalization</sub>: 4.00%

Rate<sub>ICU</sub>: 31.71%

Rate<sub>Ventilator</sub>: 40.00% Rate<sub>Mortality</sub>: 1.00%

 $BasicR_0: 1.3$ 

## Daily Hospital Admissions Forecast Oregon: No Change in Future $R_t$ Scenario



Forecast Hospital Admissions Reported Hospital Admissions

Parameters Used

 $D_{incubation}: 3.0$ 

 $D_{infectious}$ : 4.0  $D_{tohospital}$ : 7.0

D<sub>inhospital</sub>: 11.0

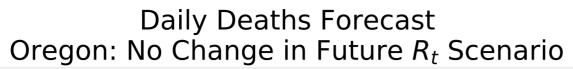
 $D_{tildeath}: 17.0$ 

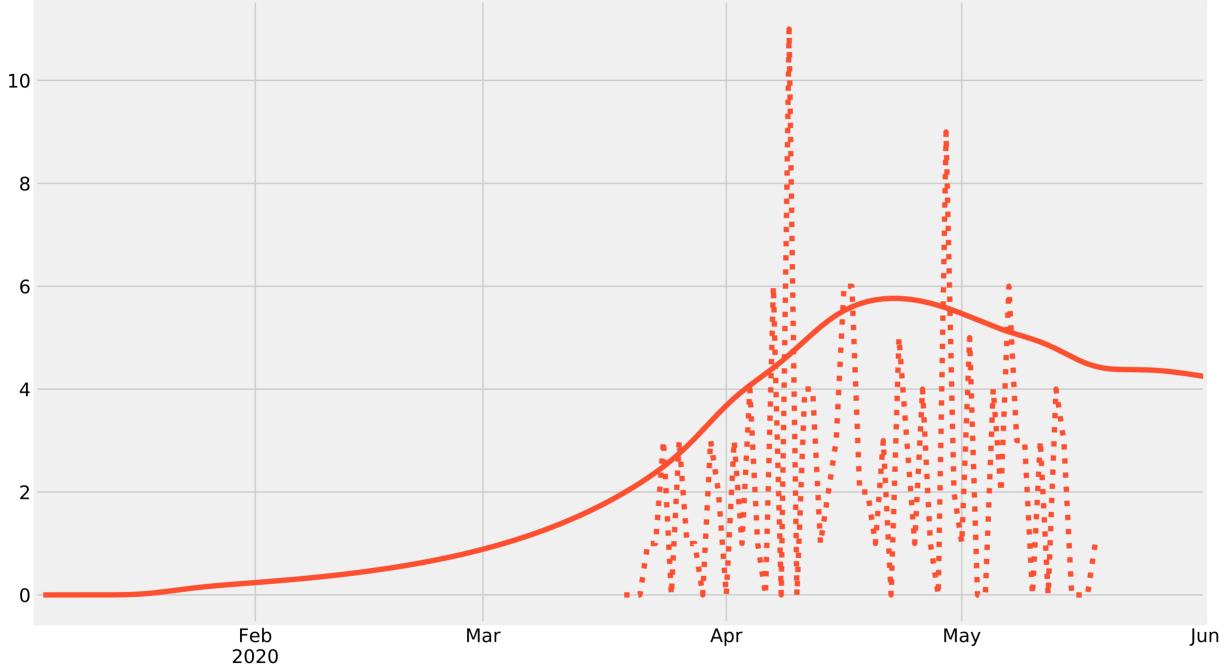
 $Rate_{Hospitalization}: 4.00\%$ 

Rate<sub>ICU</sub>: 31.71%

Rate<sub>Ventilator</sub>: 40.00%  $Rate_{Mortality}: 1.00\%$ 

 $BasicR_0: 1.3$ 





Forecast Daily Deaths • • Reported Daily Deaths

Parameters Used

 $D_{incubation}: 3.0$ 

 $D_{infectious}$ : 4.0  $D_{tohospital}$ : 7.0

D<sub>inhospital</sub>: 11.0

 $D_{tildeath}$ : 17.0

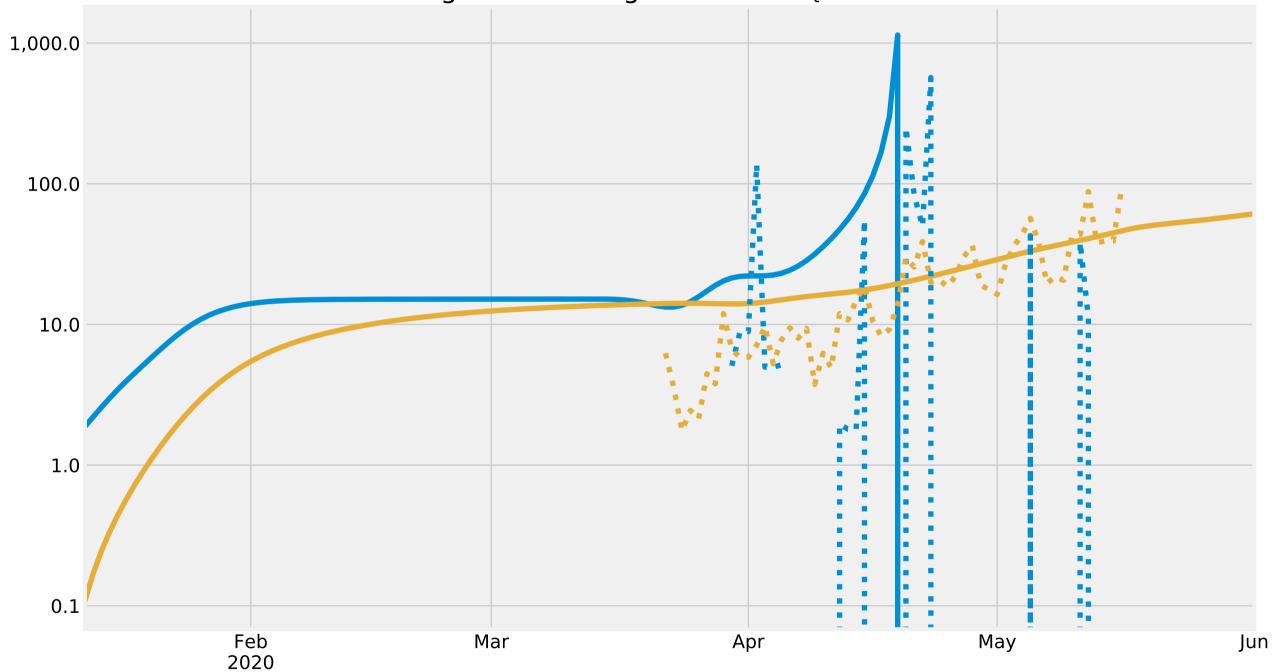
Rate<sub>Hospitalization</sub>: 4.00%

Rate<sub>ICU</sub>: 31.71%

Rate<sub>Ventilator</sub>: 40.00% Rate<sub>Mortality</sub>: 1.00%

 $BasicR_0: 1.3$ 





hospitalized

deaths

Reported Concurrent Hospitalizations

Reported Total Deaths

Parameters Used

D<sub>incubation</sub>: 3.0 D<sub>infectious</sub>: 4.0 D<sub>tohospital</sub>: 7.0 D<sub>inhospital</sub>: 11.0

 $D_{tildeath}: 17.0$ 

 $Rate_{Hospitalization}: 4.00\%$ Rate<sub>ICU</sub>: 31.71% Rate<sub>Ventilator</sub>: 40.00% Rate<sub>Mortality</sub>: 1.00%

 $BasicR_0: 1.3$