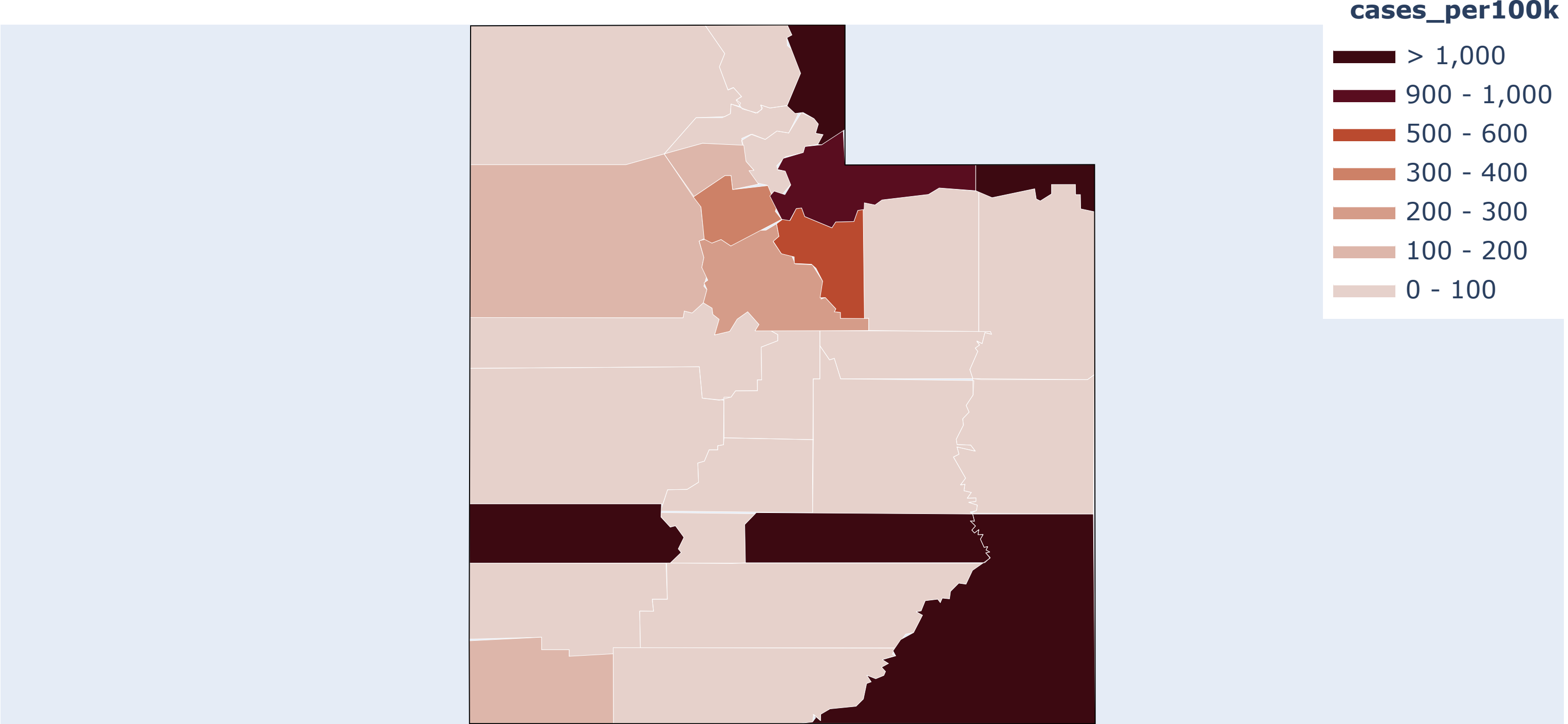
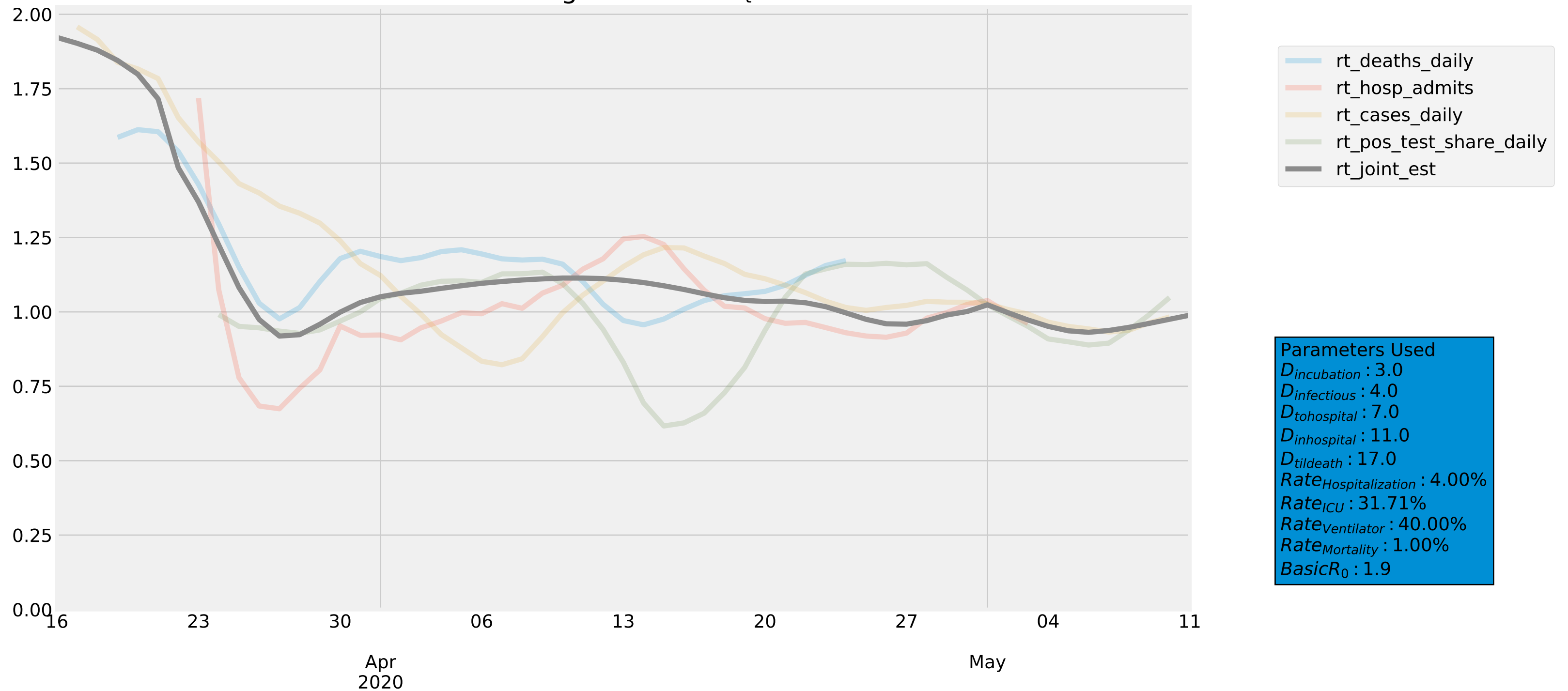


# Utah: COVID-19 Cases Per 100k Residents



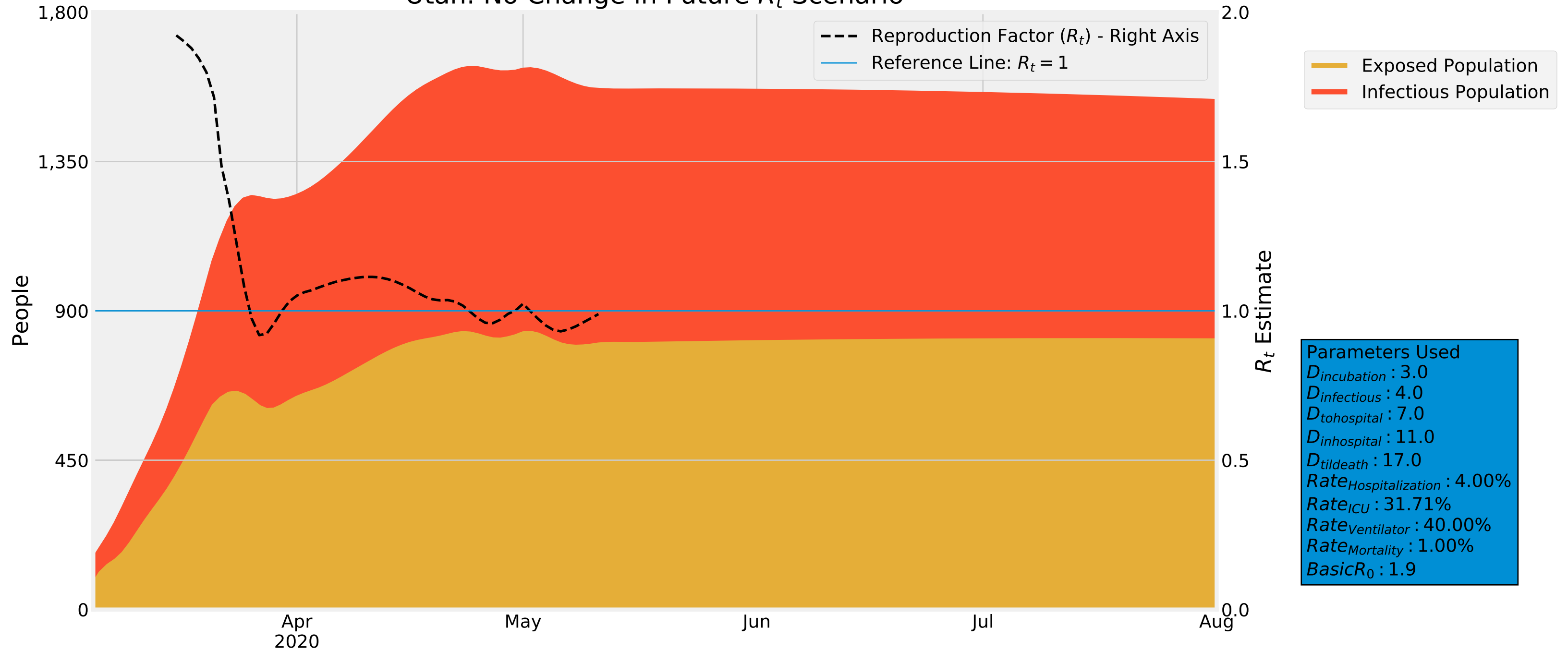
# Reproduction Rate ( $R_t$ ) Estimates Utah: No Change in Future $R_t$ Scenario



Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

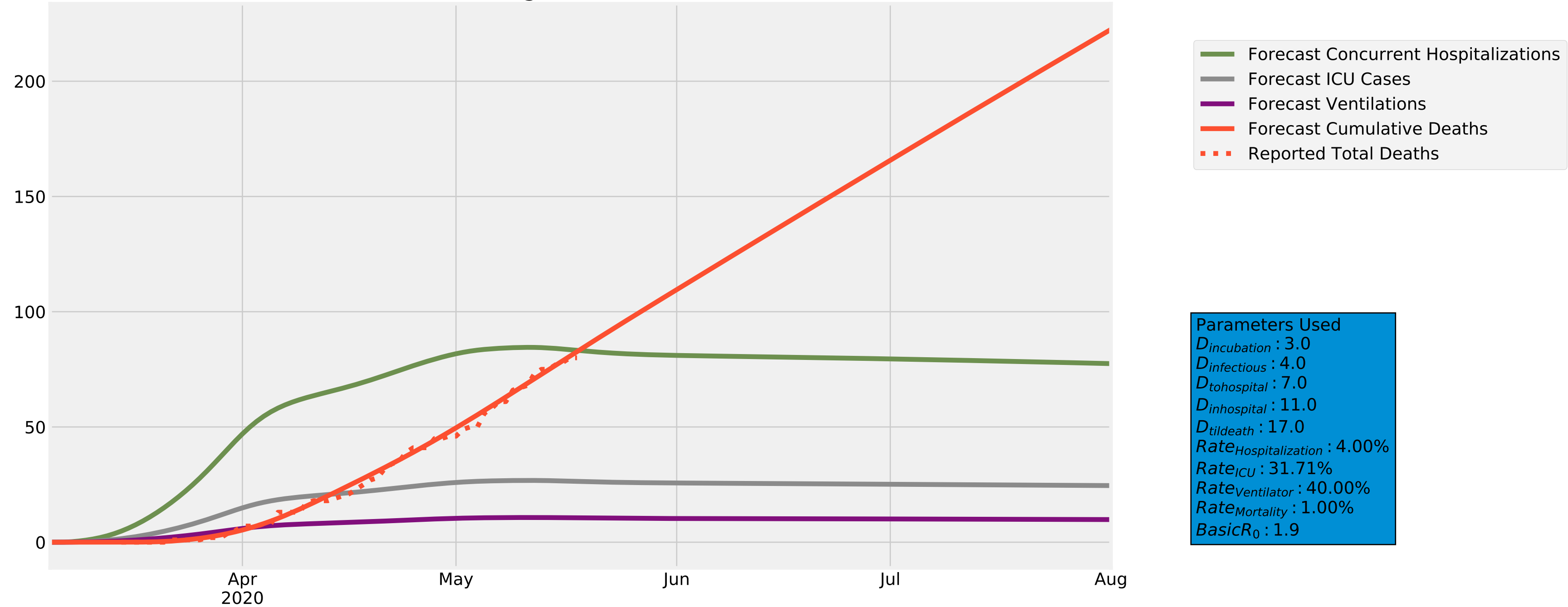
# Simultaneous Infections Forecast

## Utah: No Change in Future $R_t$ Scenario



Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

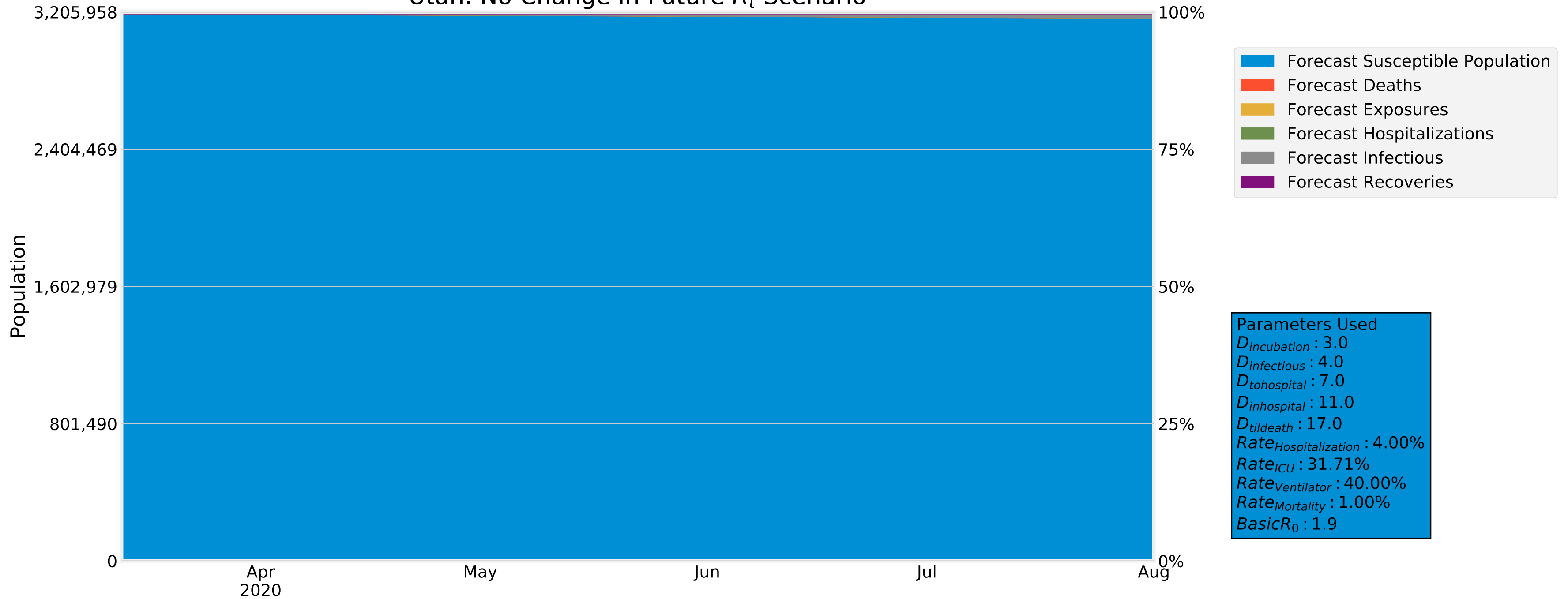
Hospitalization and Deaths Forecast  
Utah: No Change in Future  $R_t$  Scenario



Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

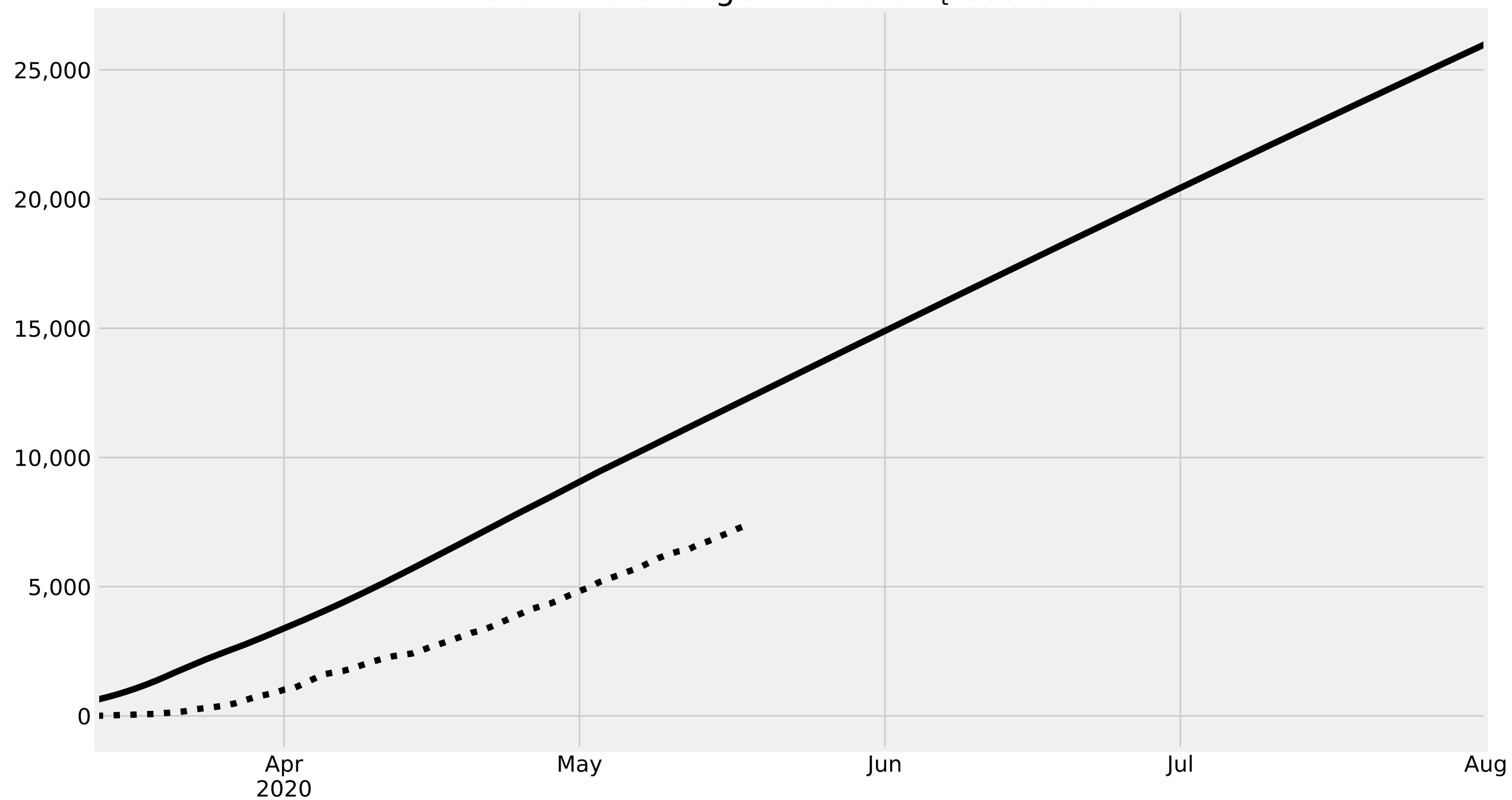
# Population Overview Forecast

## Utah: No Change in Future $R_t$ Scenario



# Cumulative Infections Forecast

## Utah: No Change in Future $R_t$ Scenario



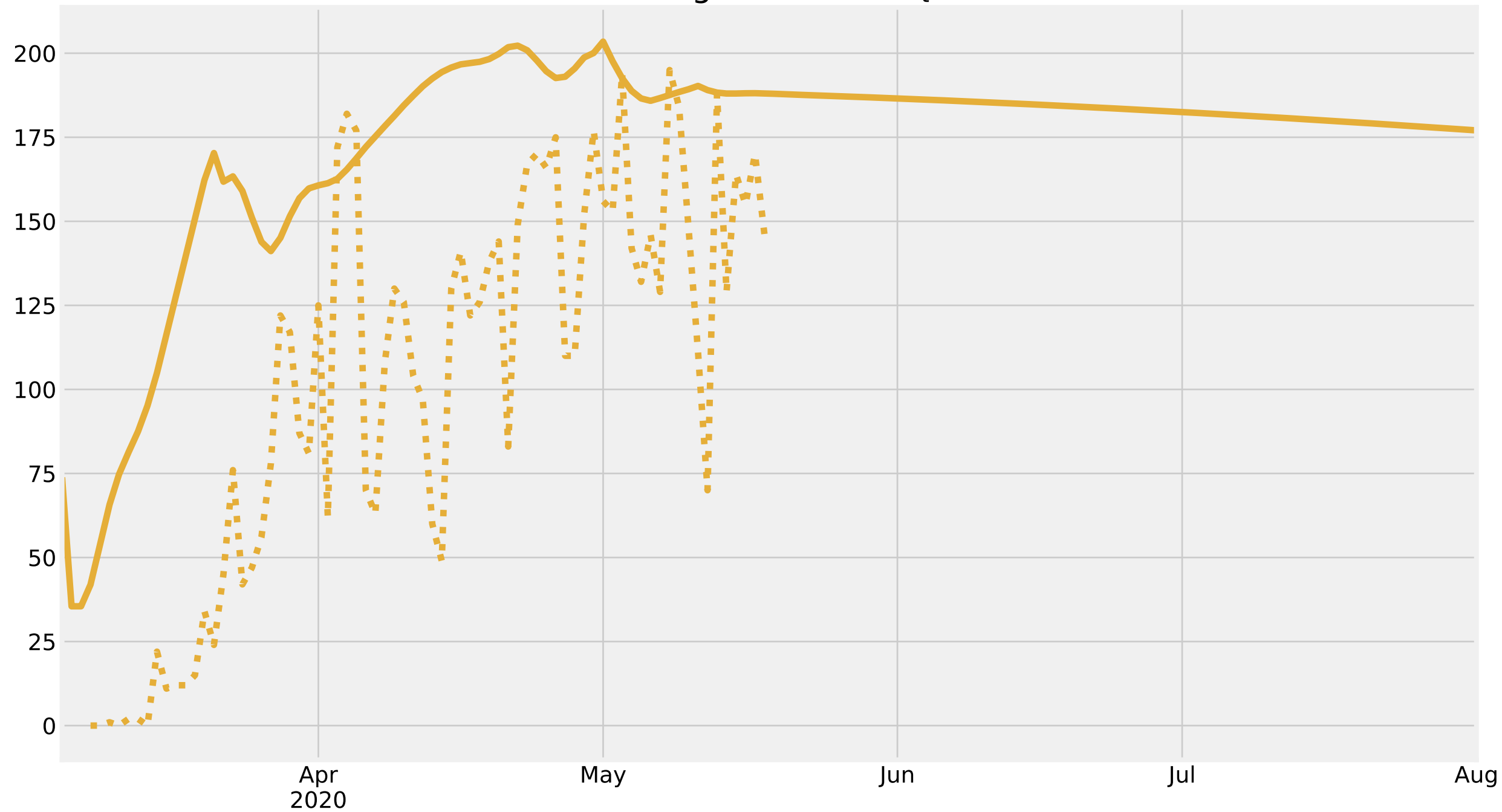
— Forecast Cumulative Infections  
- - - Reported Cumulative Infections

Parameters Used  
 $D_{incubation}$  : 3.0  
 $D_{infectious}$  : 4.0  
 $D_{tohospital}$  : 7.0  
 $D_{inhospital}$  : 11.0  
 $D_{tildeath}$  : 17.0  
 $Rate_{Hospitalization}$  : 4.00%  
 $Rate_{ICU}$  : 31.71%  
 $Rate_{Ventilator}$  : 40.00%  
 $Rate_{Mortality}$  : 1.00%  
 $BasicR_0$  : 1.9

Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

# Daily Exposures Forecast

## Utah: No Change in Future $R_t$ Scenario

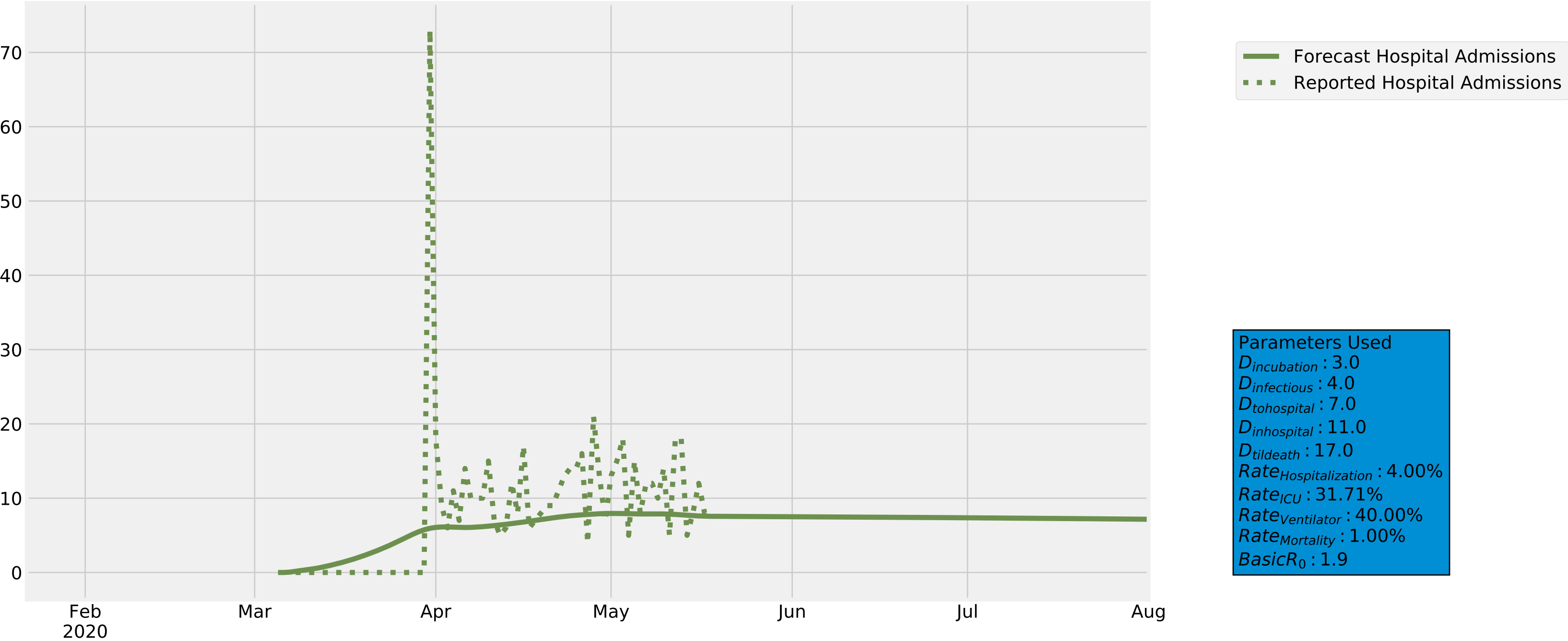


Forecast Daily New Infections (Exposed)  
Reported Daily New Infections (Exposed)

Parameters Used  
 $D_{incubation}$  : 3.0  
 $D_{infectious}$  : 4.0  
 $D_{tohospital}$  : 7.0  
 $D_{inhospital}$  : 11.0  
 $D_{tildeath}$  : 17.0  
 $Rate_{Hospitalization}$  : 4.00%  
 $Rate_{ICU}$  : 31.71%  
 $Rate_{Ventilator}$  : 40.00%  
 $Rate_{Mortality}$  : 1.00%  
 $BasicR_0$  : 1.9

Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

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

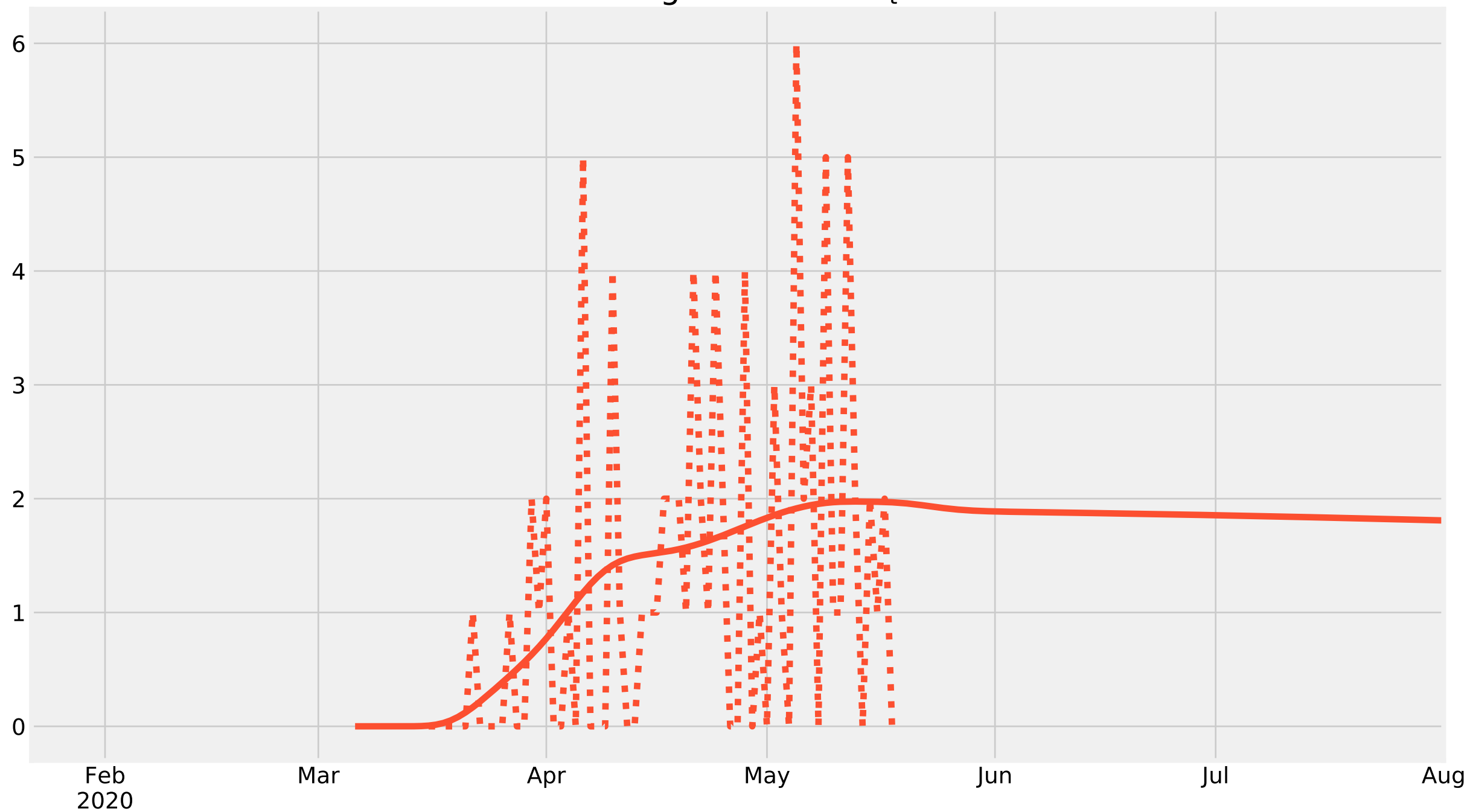


Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020



# Daily Deaths Forecast

## Utah: No Change in Future $R_t$ Scenario

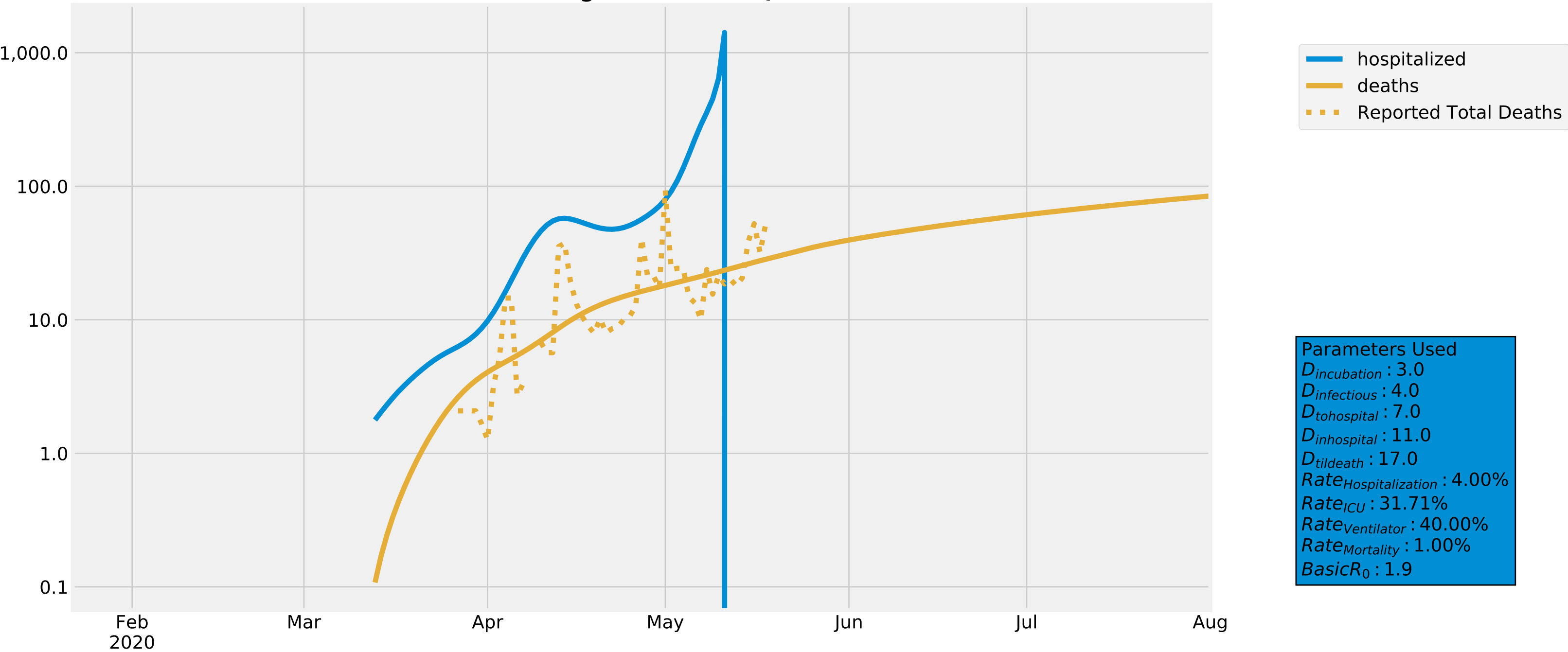


Forecast Daily Deaths  
Reported Daily Deaths

Parameters Used  
 $D_{incubation} : 3.0$   
 $D_{infectious} : 4.0$   
 $D_{tohospital} : 7.0$   
 $D_{inhospital} : 11.0$   
 $D_{tildeath} : 17.0$   
 $Rate_{Hospitalization} : 4.00\%$   
 $Rate_{ICU} : 31.71\%$   
 $Rate_{Ventilator} : 40.00\%$   
 $Rate_{Mortality} : 1.00\%$   
 $BasicR_0 : 1.9$

Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

Doubling Rate Forecast  
Utah: No Change in Future  $R_t$  Scenario



Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020