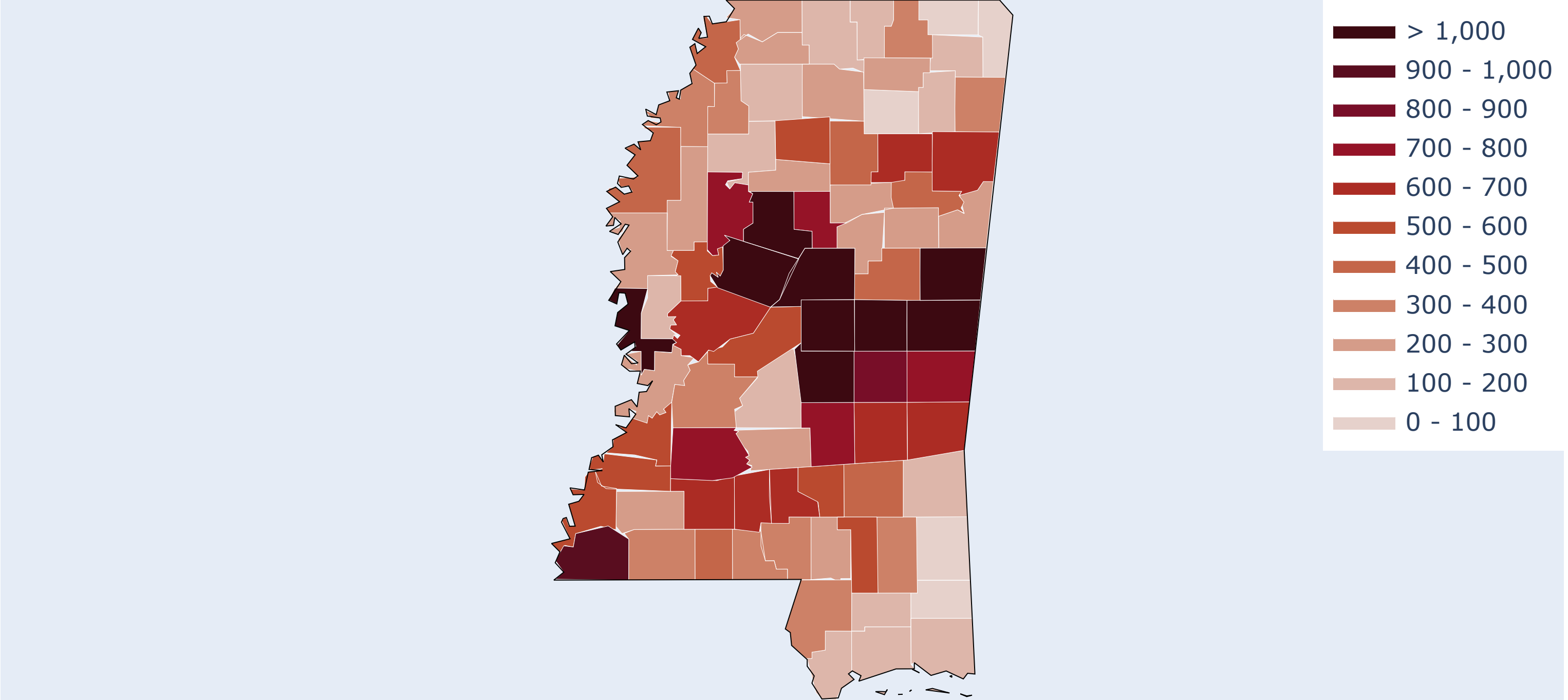
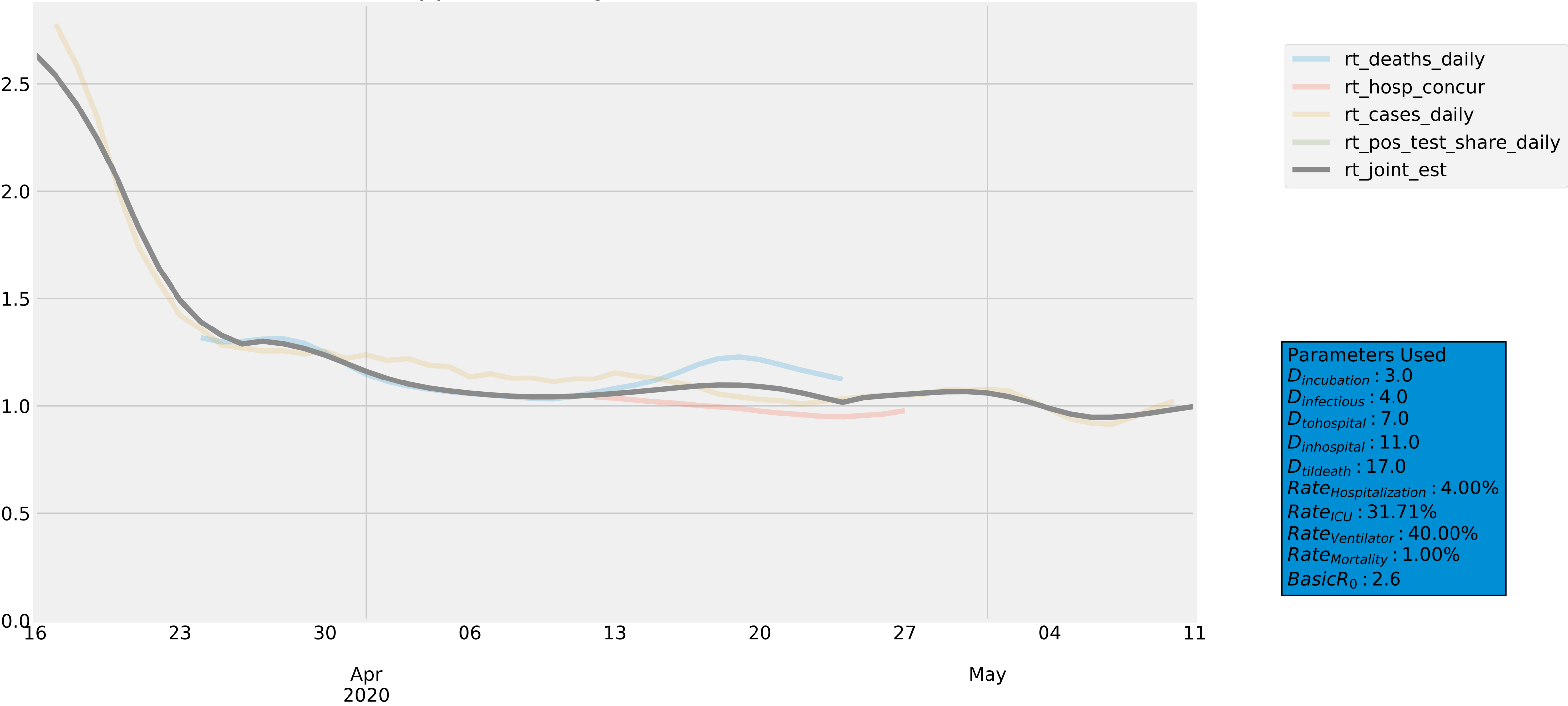


# Mississippi: COVID-19 Cases Per 100k Residents



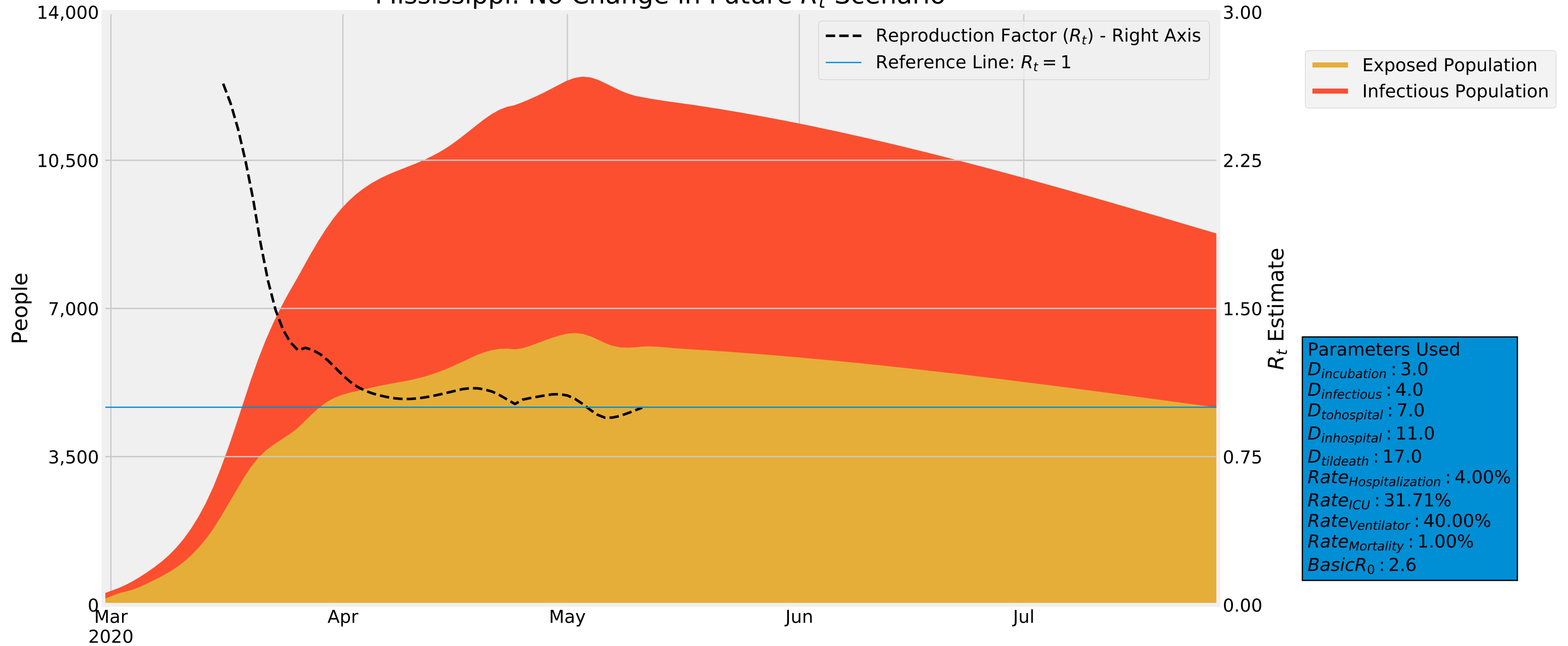
Reproduction Rate ( $R_t$ ) Estimates  
Mississippi: No Change in Future  $R_t$  Scenario



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

# Simultaneous Infections Forecast

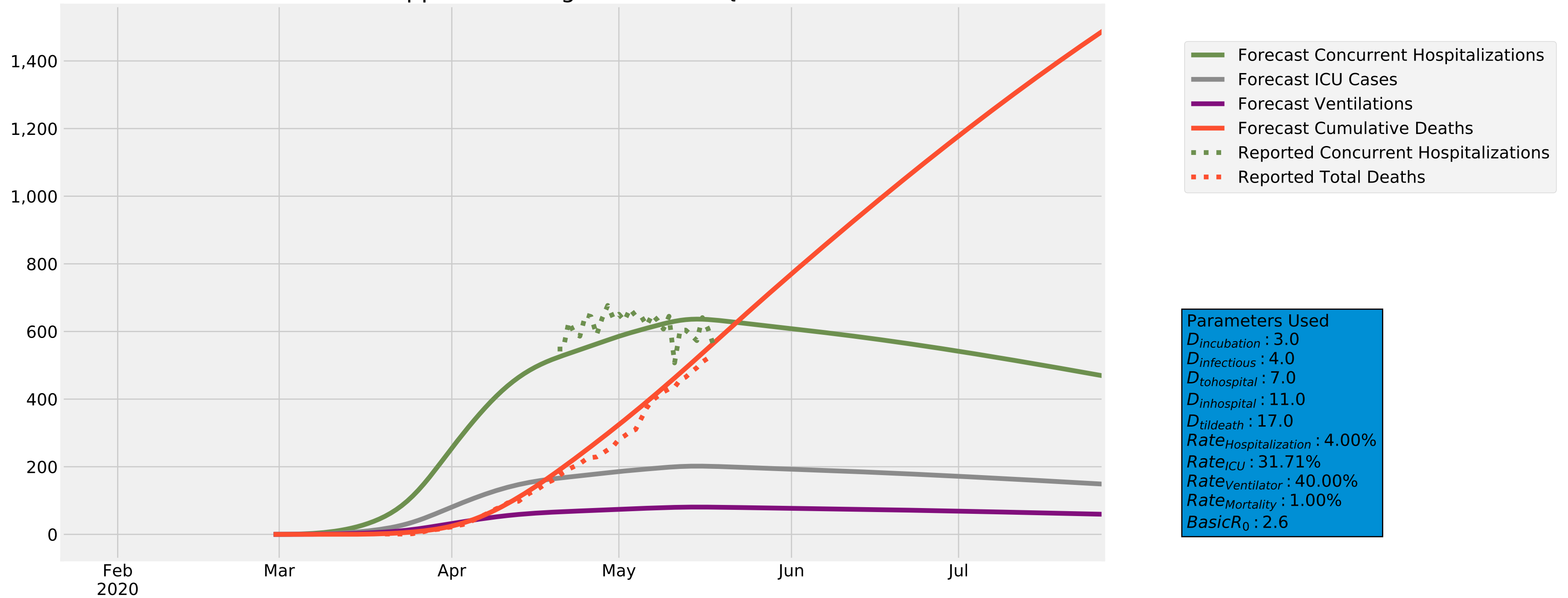
## Mississippi: No Change in Future $R_t$ Scenario



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

# Hospitalization and Deaths Forecast

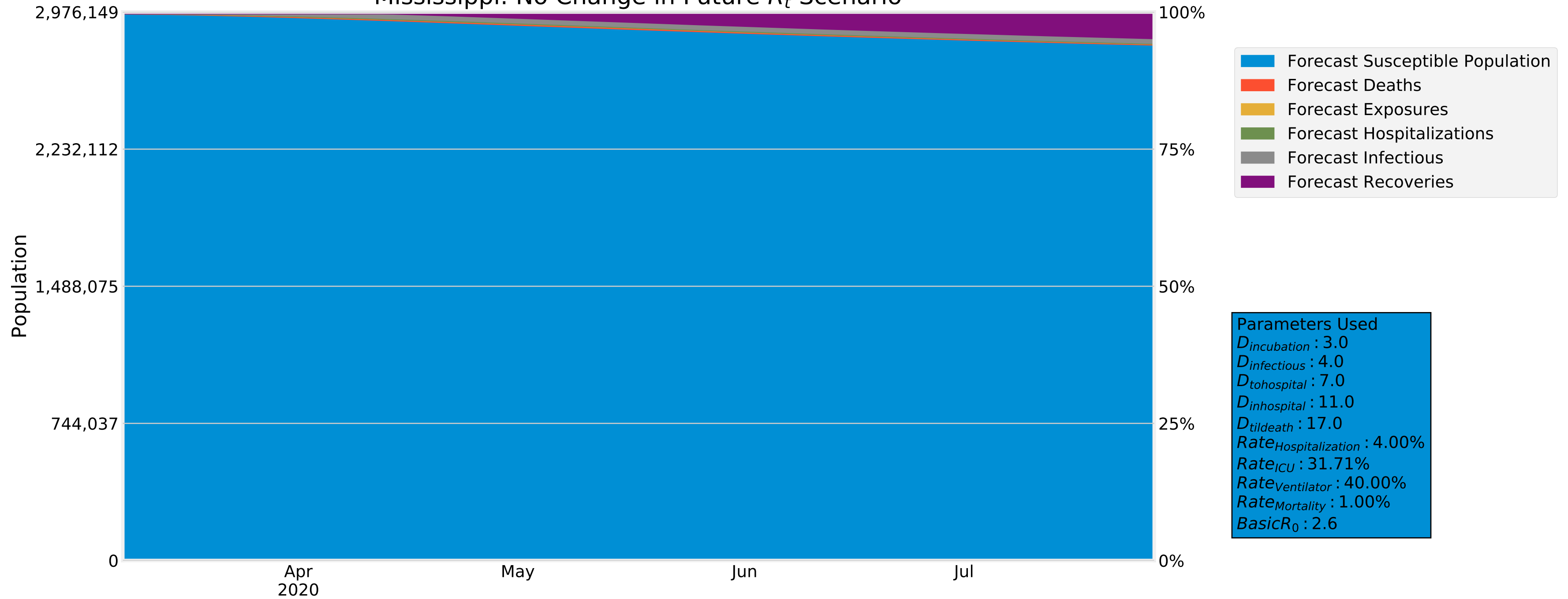
## Mississippi: No Change in Future $R_t$ Scenario



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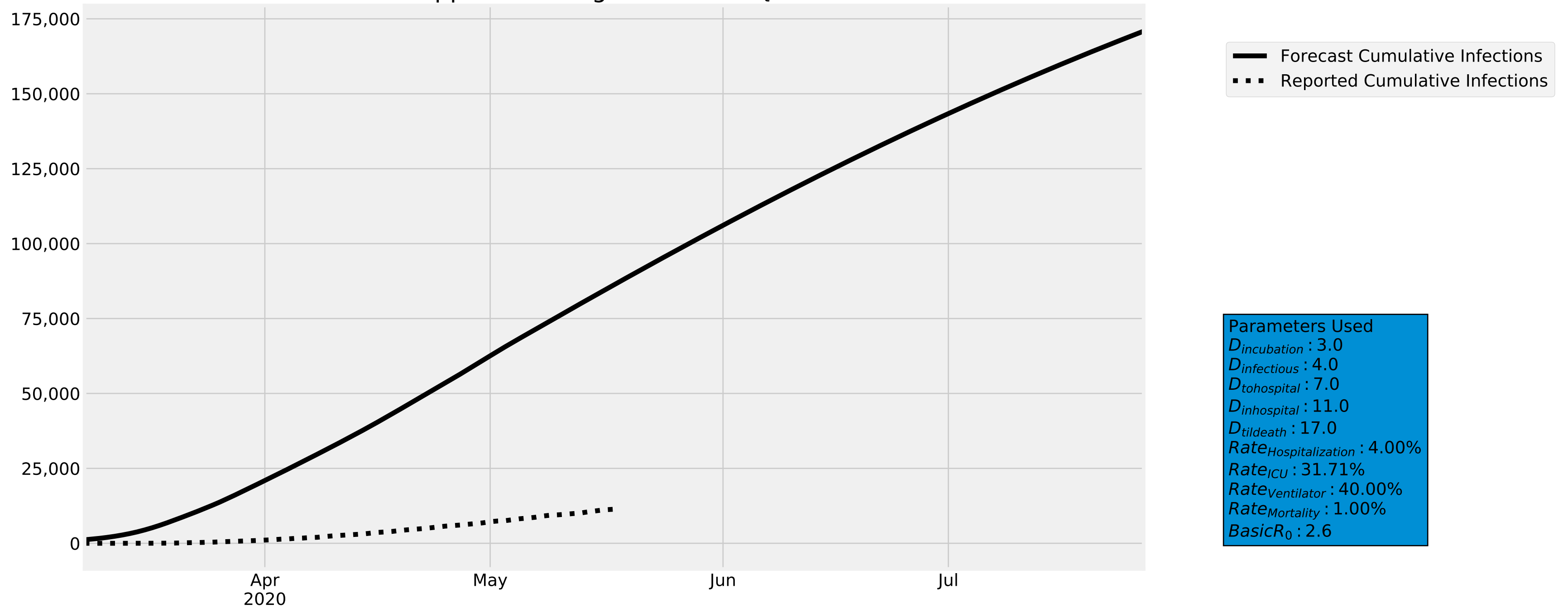
# Population Overview Forecast

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



# Cumulative Infections Forecast

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

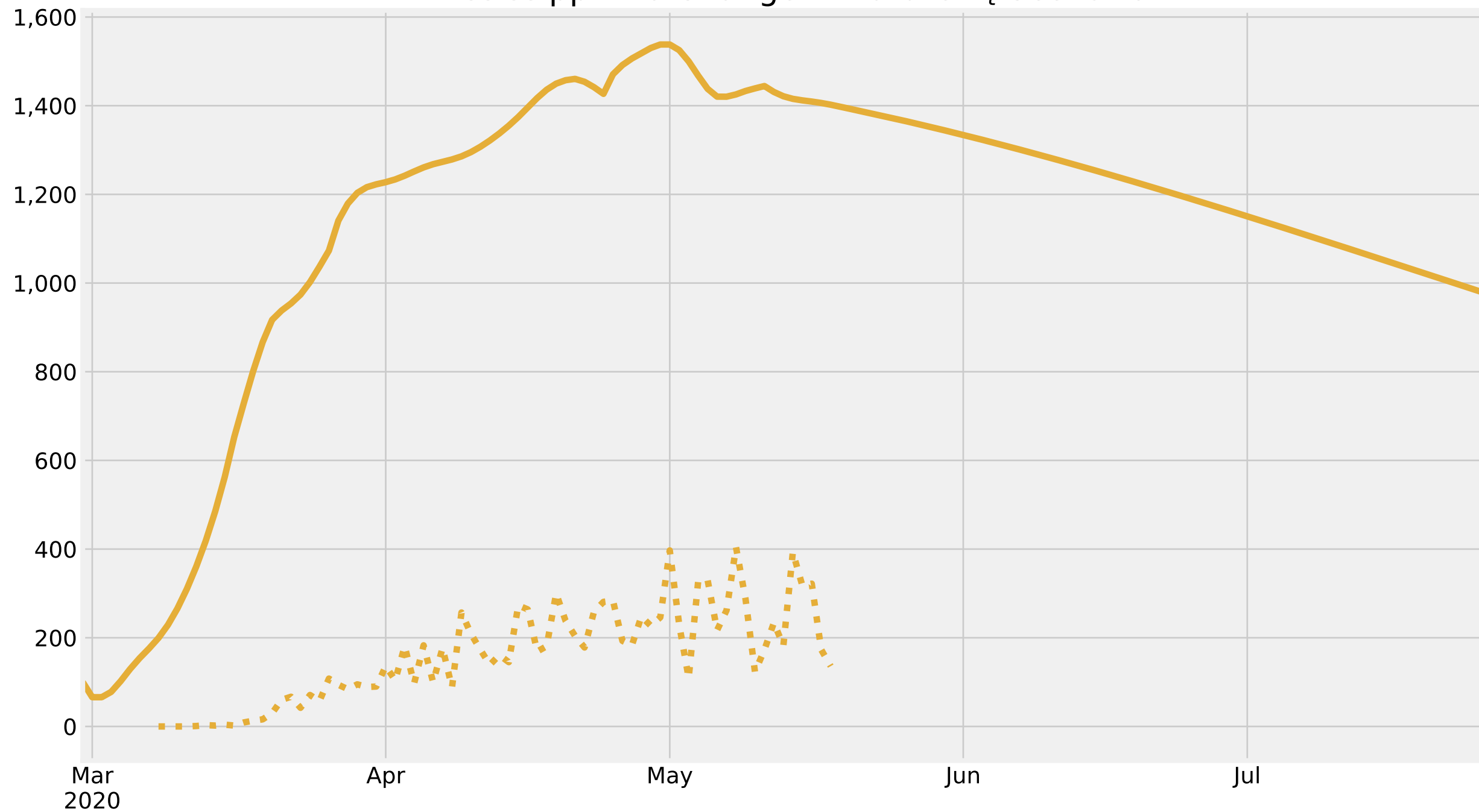


Parameters Used  
 $D_{incubation}$  : 3.0  
 $D_{infectious}$  : 4.0  
 $D_{tohospital}$  : 7.0  
 $D_{inhospital}$  : 11.0  
 $D_{tildeath}$  : 17.0  
 $Rate_{Hospitalization}$  : 4.00%  
 $Rate_{ICU}$  : 31.71%  
 $Rate_{Ventilator}$  : 40.00%  
 $Rate_{Mortality}$  : 1.00%  
 $BasicR_0$  : 2.6

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

# Daily Exposures Forecast

## Mississippi: 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%

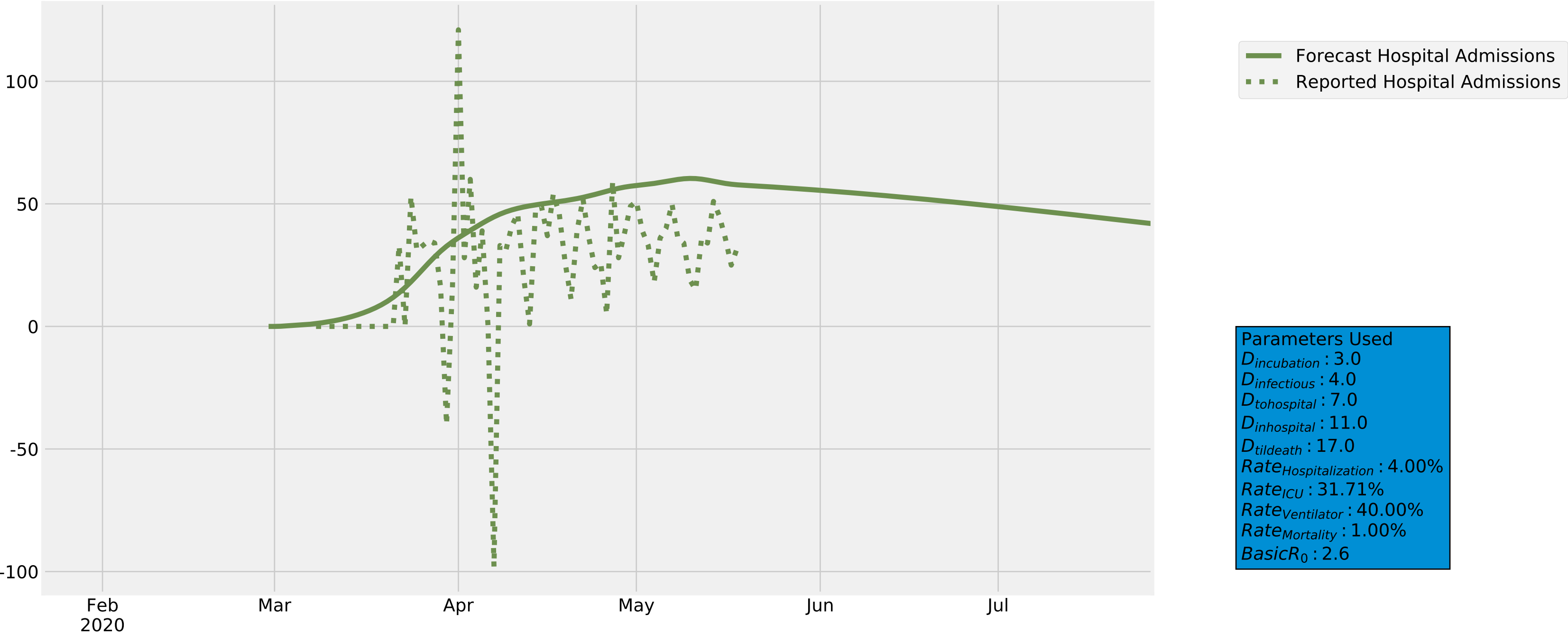
$Rate_{Mortality}$  : 1.00%

$BasicR_0$  : 2.6

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Chart created on 19 May 2020

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



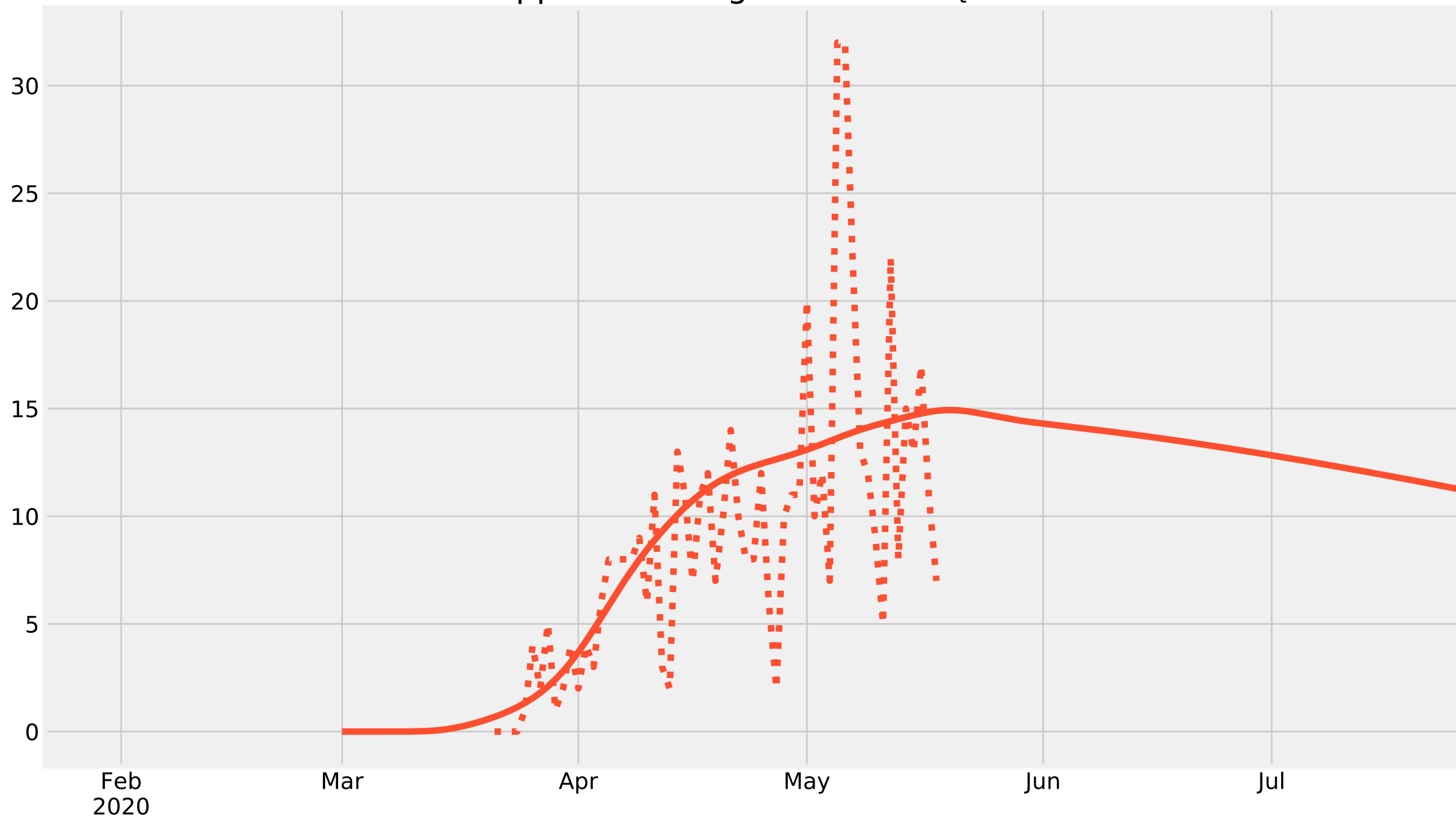
Parameters Used  
 $D_{incubation}$  : 3.0  
 $D_{infectious}$  : 4.0  
 $D_{tohospital}$  : 7.0  
 $D_{inhospital}$  : 11.0  
 $D_{tildeath}$  : 17.0  
 $Rate_{Hospitalization}$  : 4.00%  
 $Rate_{ICU}$  : 31.71%  
 $Rate_{Ventilator}$  : 40.00%  
 $Rate_{Mortality}$  : 1.00%  
 $BasicR_0$  : 2.6

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



# Daily Deaths Forecast

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

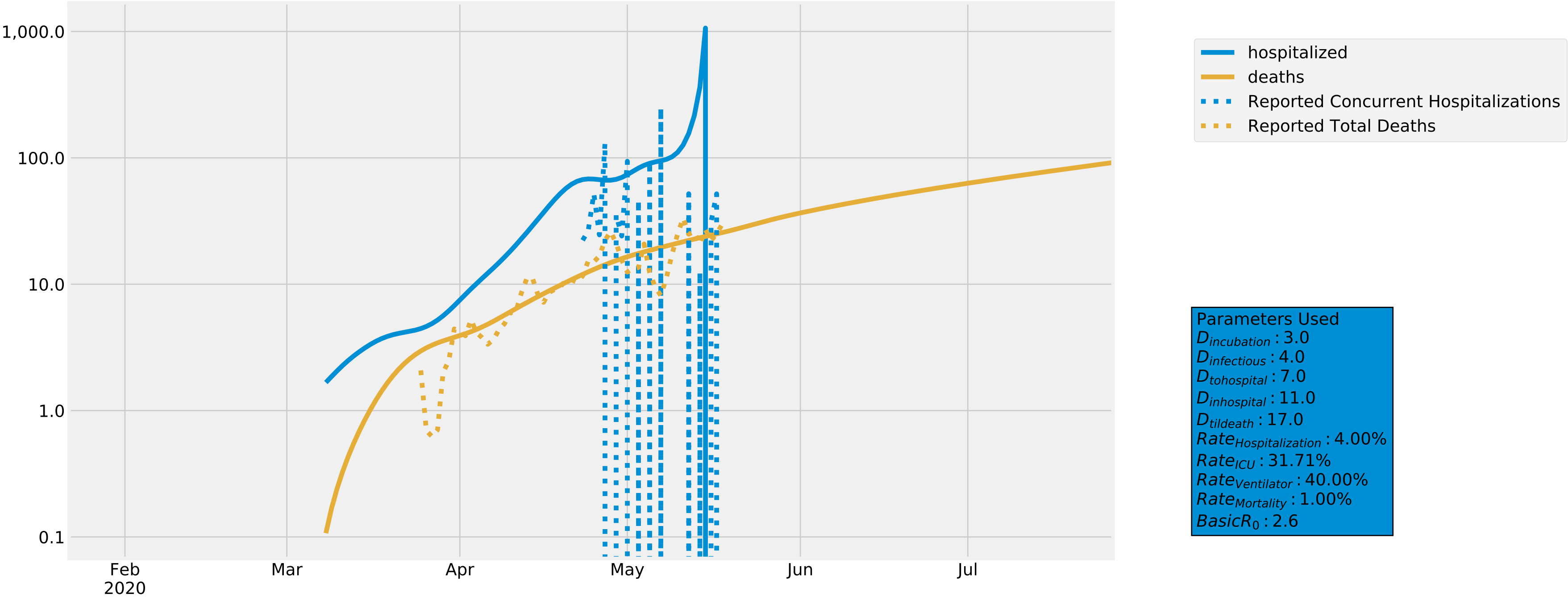


Forecast Daily Deaths  
Reported Daily Deaths

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%  
 $BasicR_0$  : 2.6

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

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



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