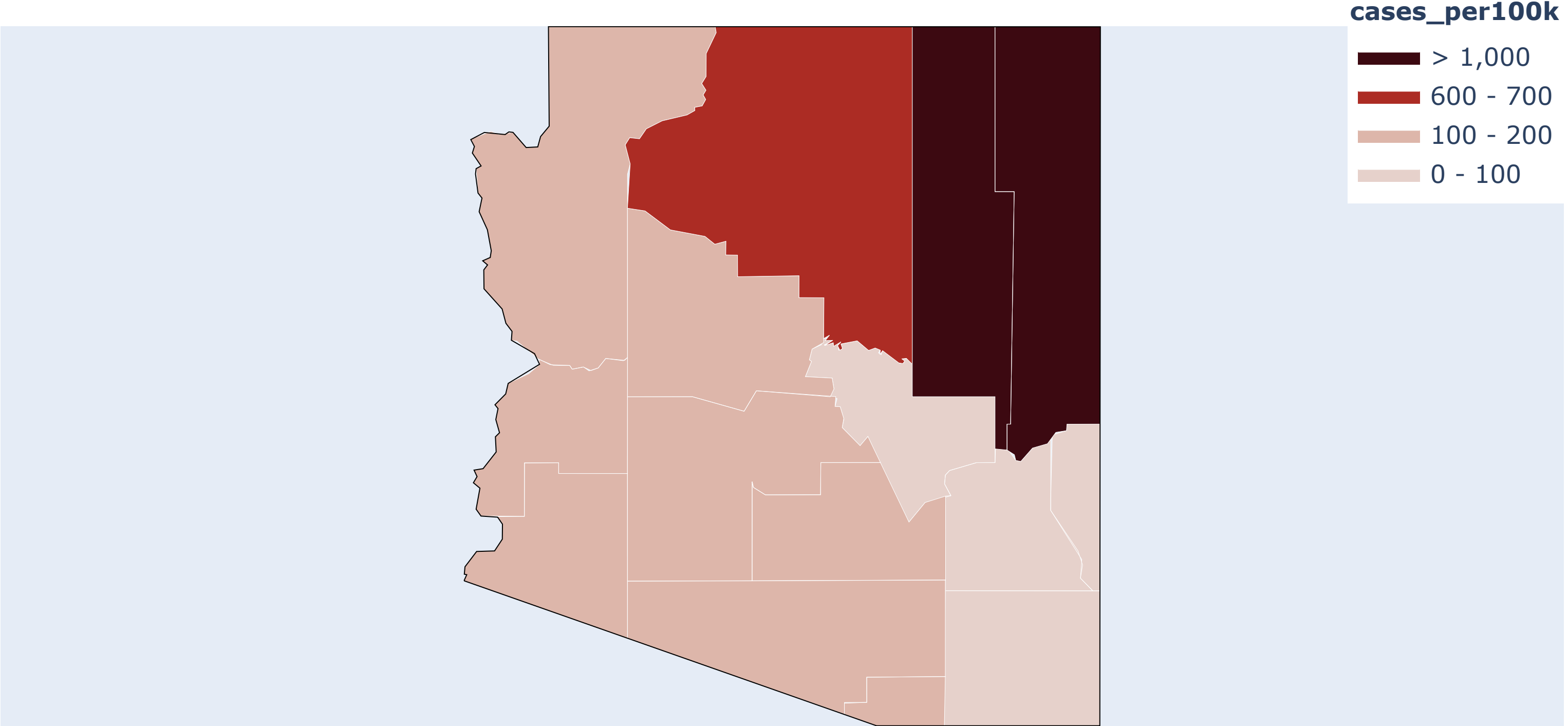
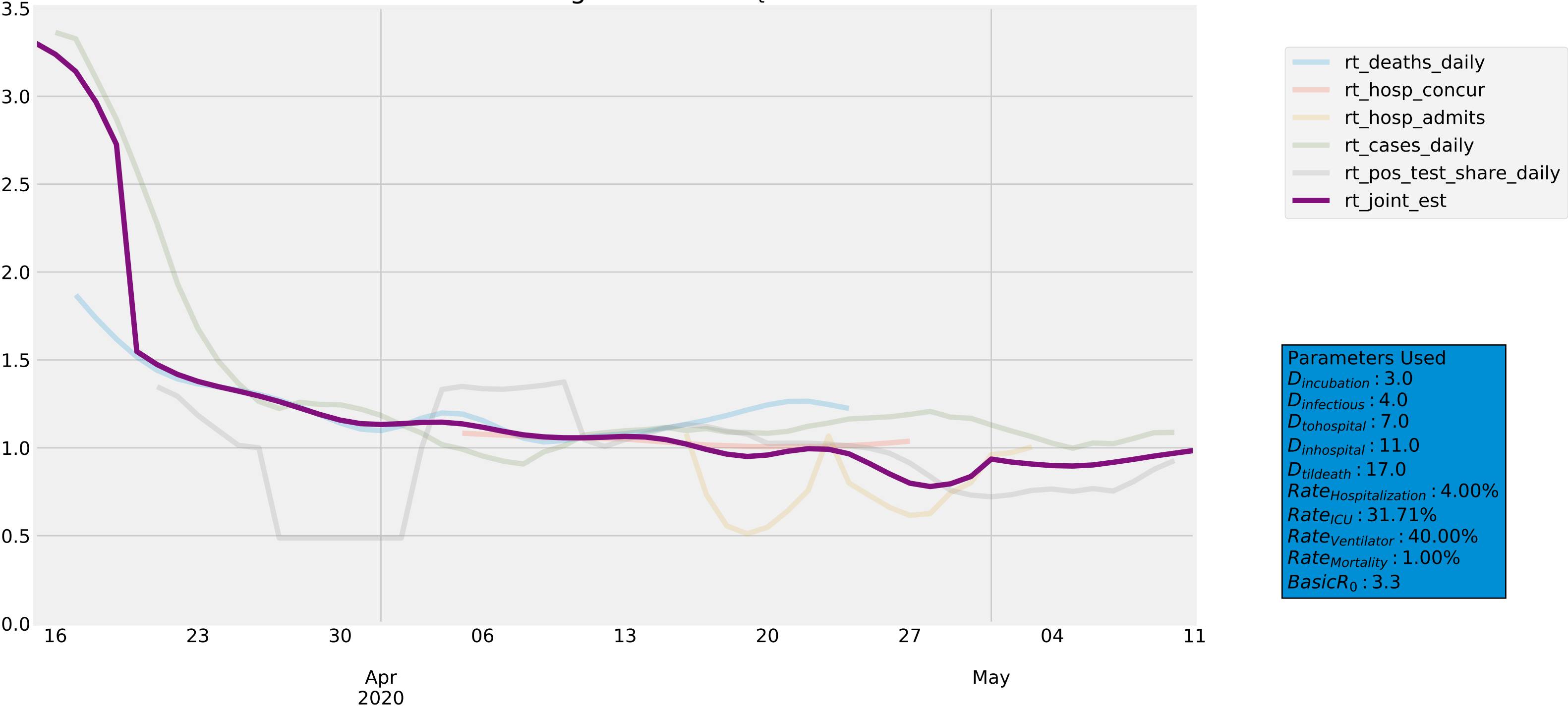


# Arizona: COVID-19 Cases Per 100k Residents



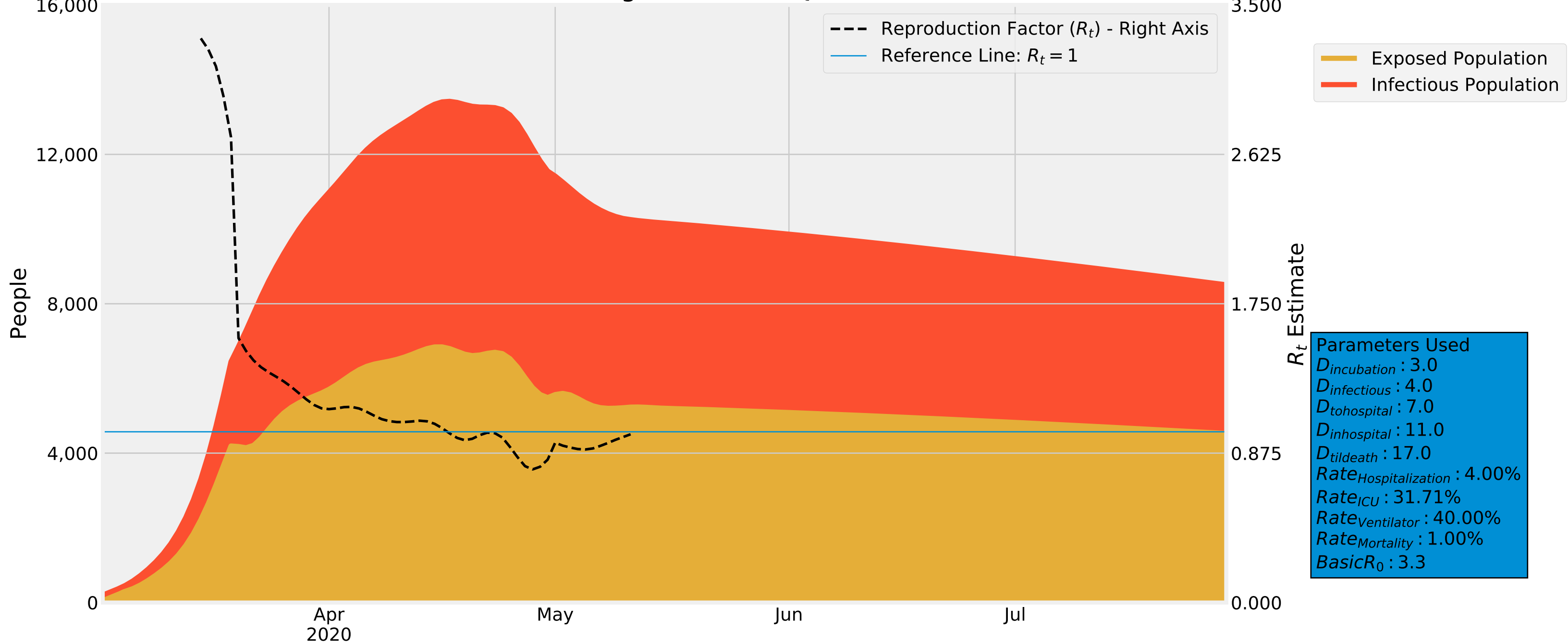
Reproduction Rate ( $R_t$ ) Estimates  
Arizona: No Change in Future  $R_t$  Scenario



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

# Simultaneous Infections Forecast

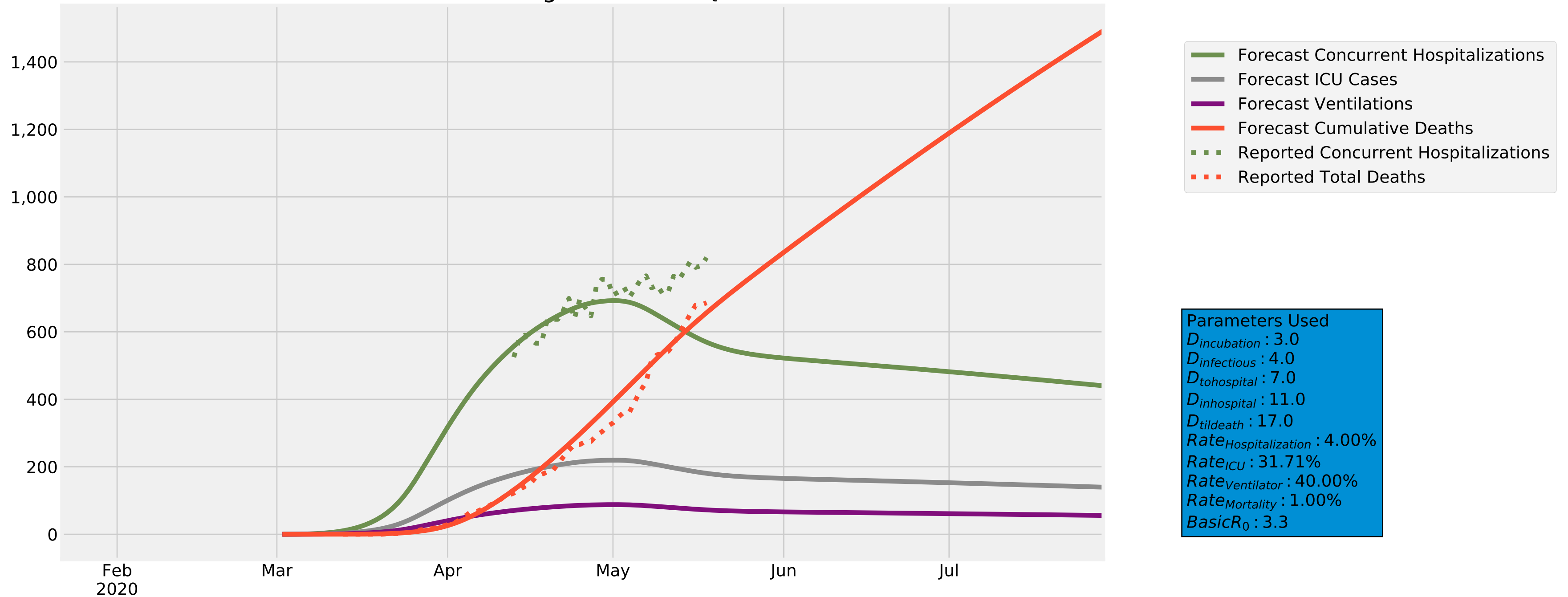
## Arizona: No Change in Future $R_t$ Scenario



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

# Hospitalization and Deaths Forecast

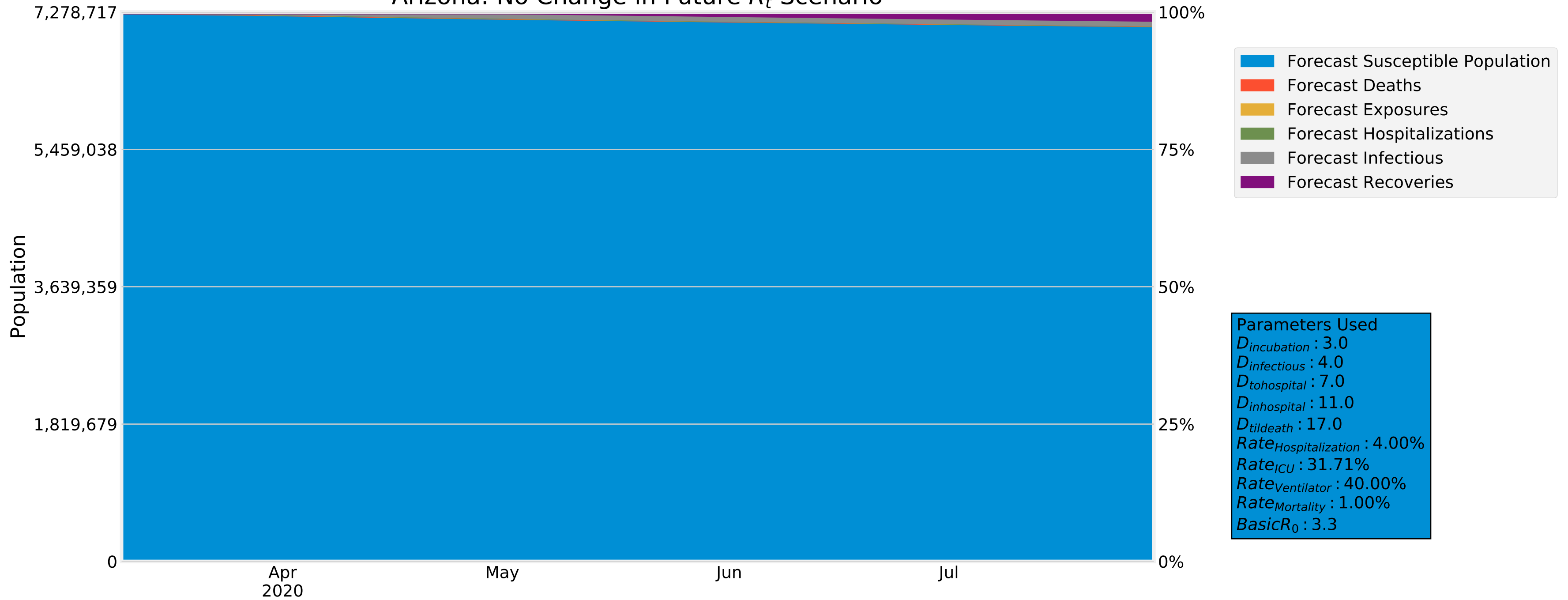
## Arizona: No Change in Future $R_t$ Scenario



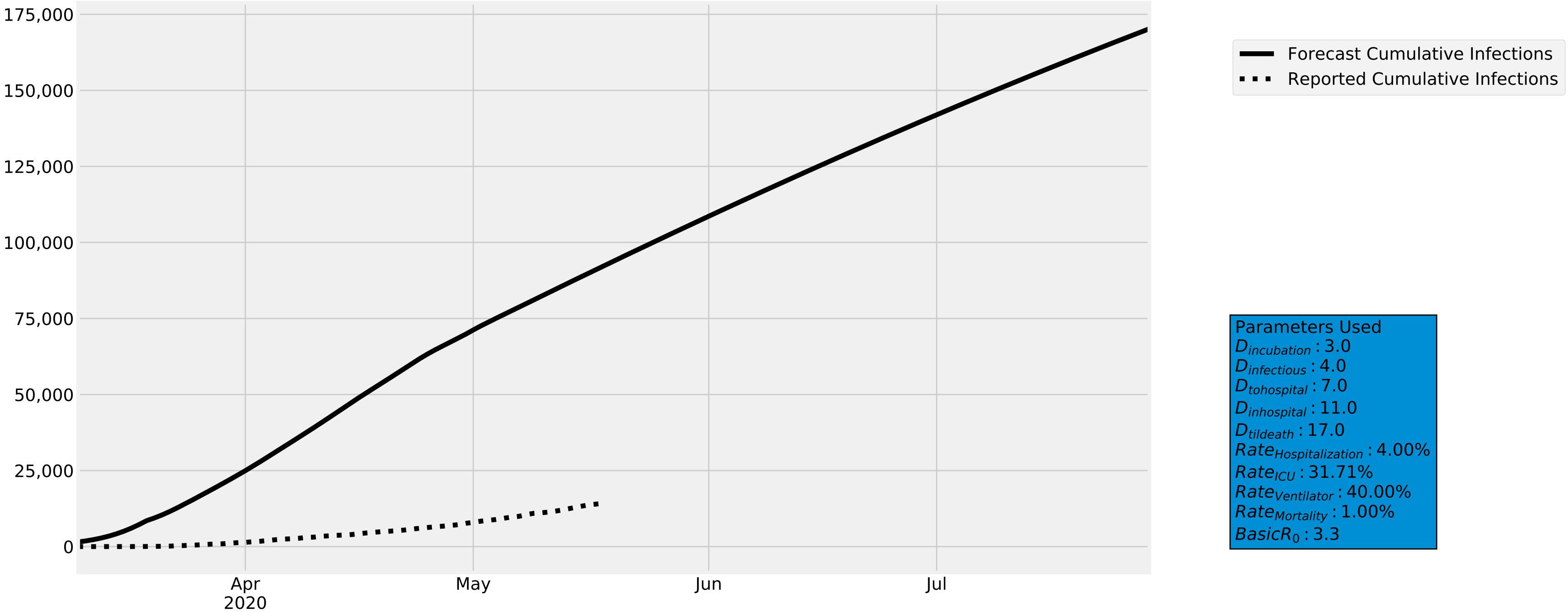
Author: Michael Donnelly (twtr: @donnellymjd)  
Chart created on 19 May 2020

# Population Overview Forecast

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



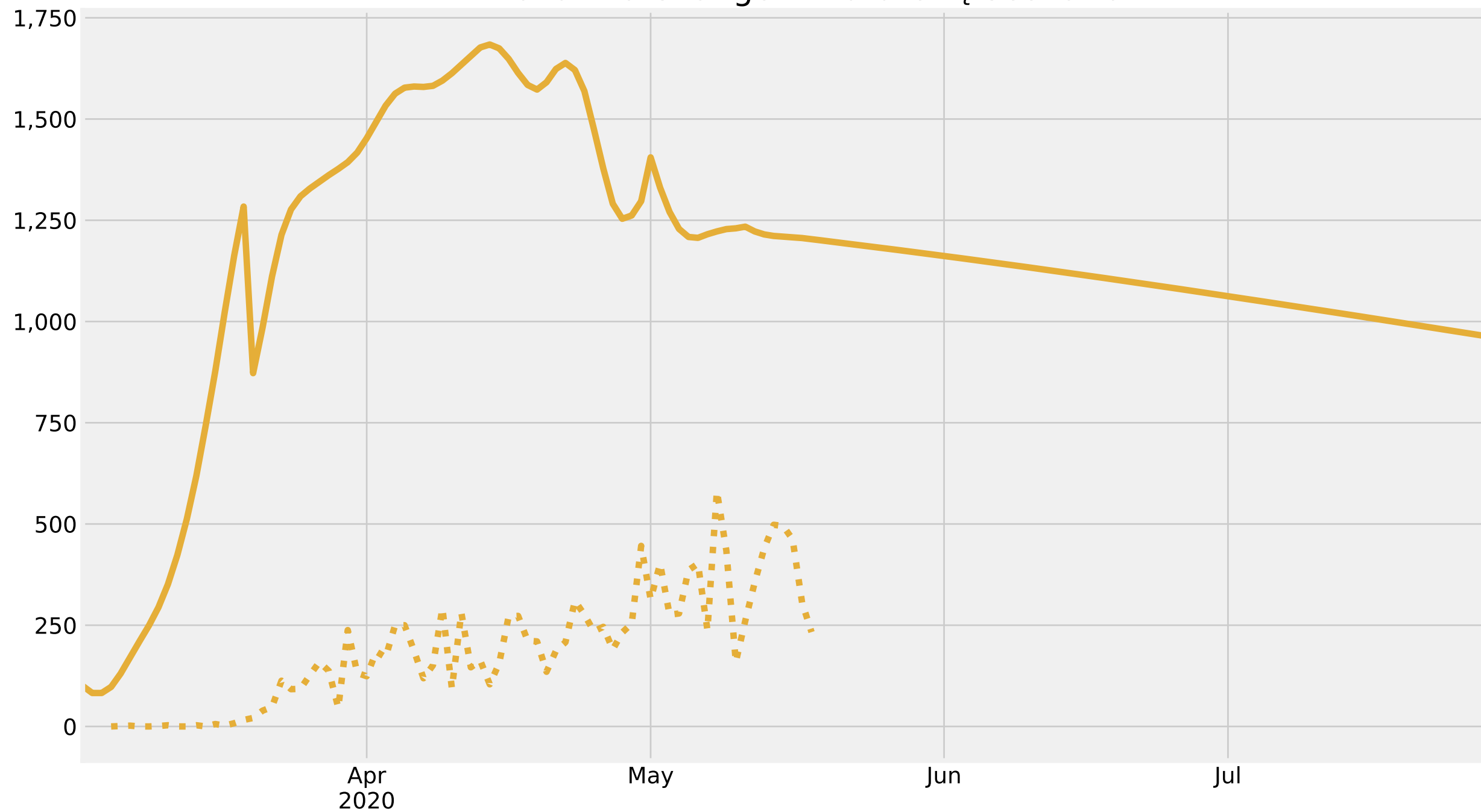
Cumulative Infections Forecast  
Arizona: No Change in Future  $R_t$  Scenario



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%  
 $BasicR_0$  : 3.3

# Daily Exposures Forecast

## Arizona: 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%

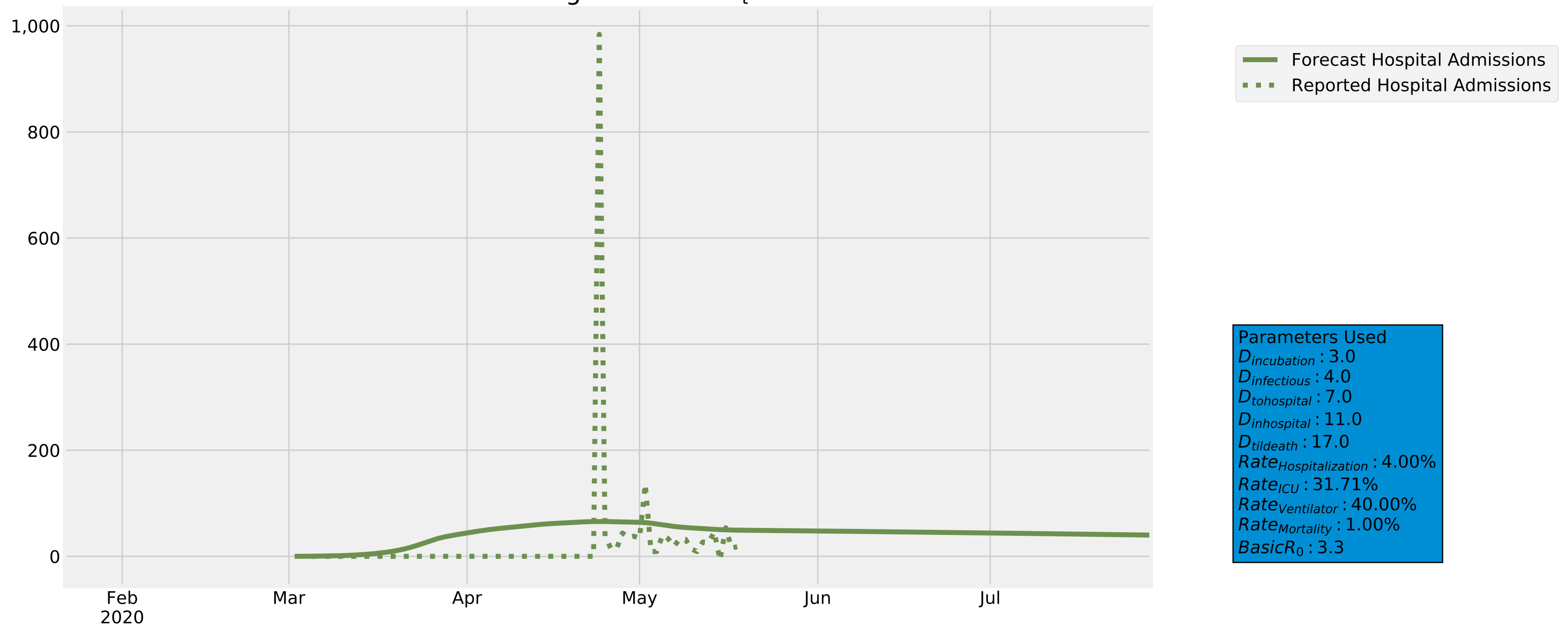
$BasicR_0$  : 3.3

Author: Michael Donnelly (twtr: @donnellymjd)

Chart created on 19 May 2020

# Daily Hospital Admissions Forecast

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

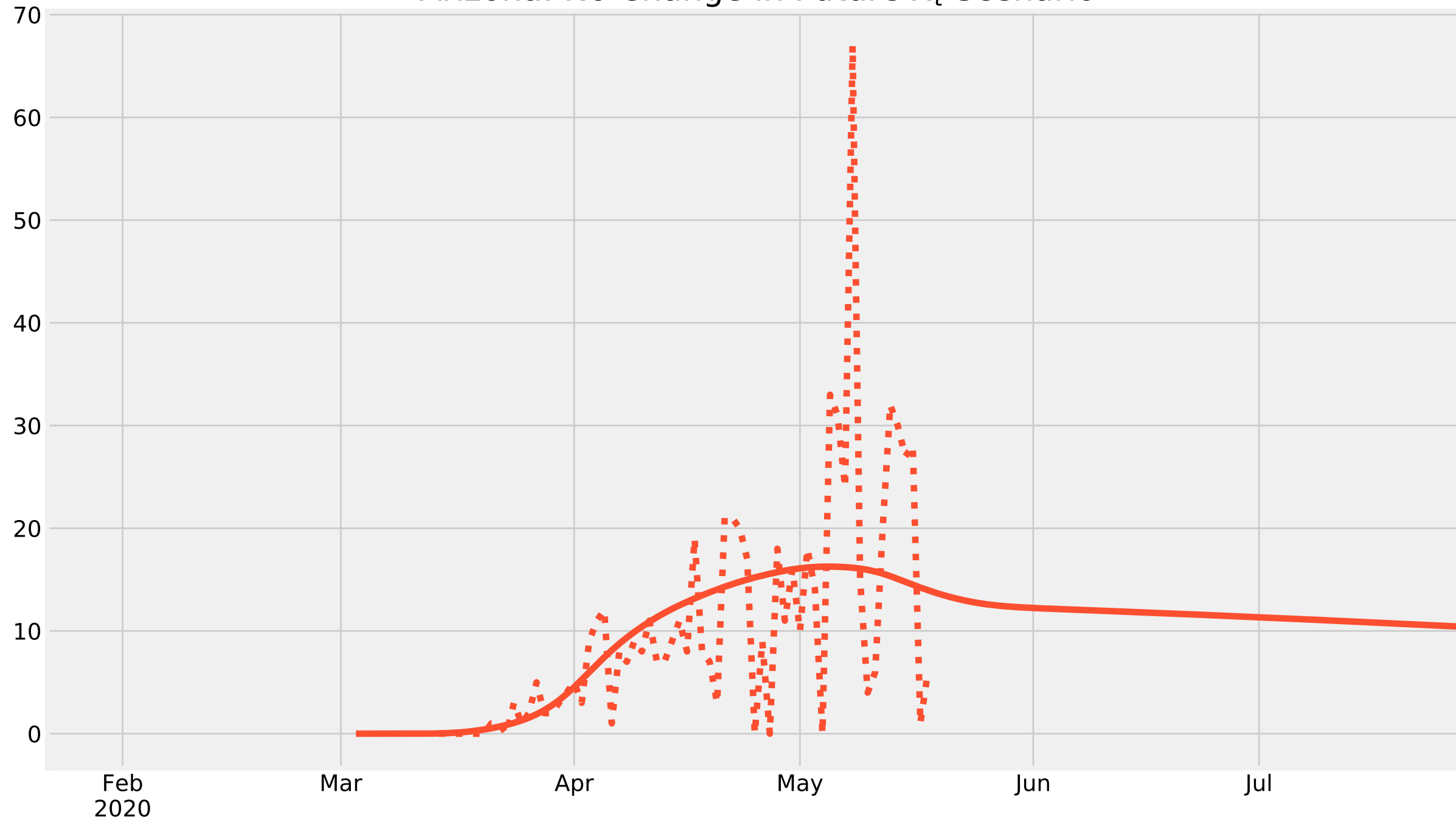


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# Daily Deaths Forecast

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

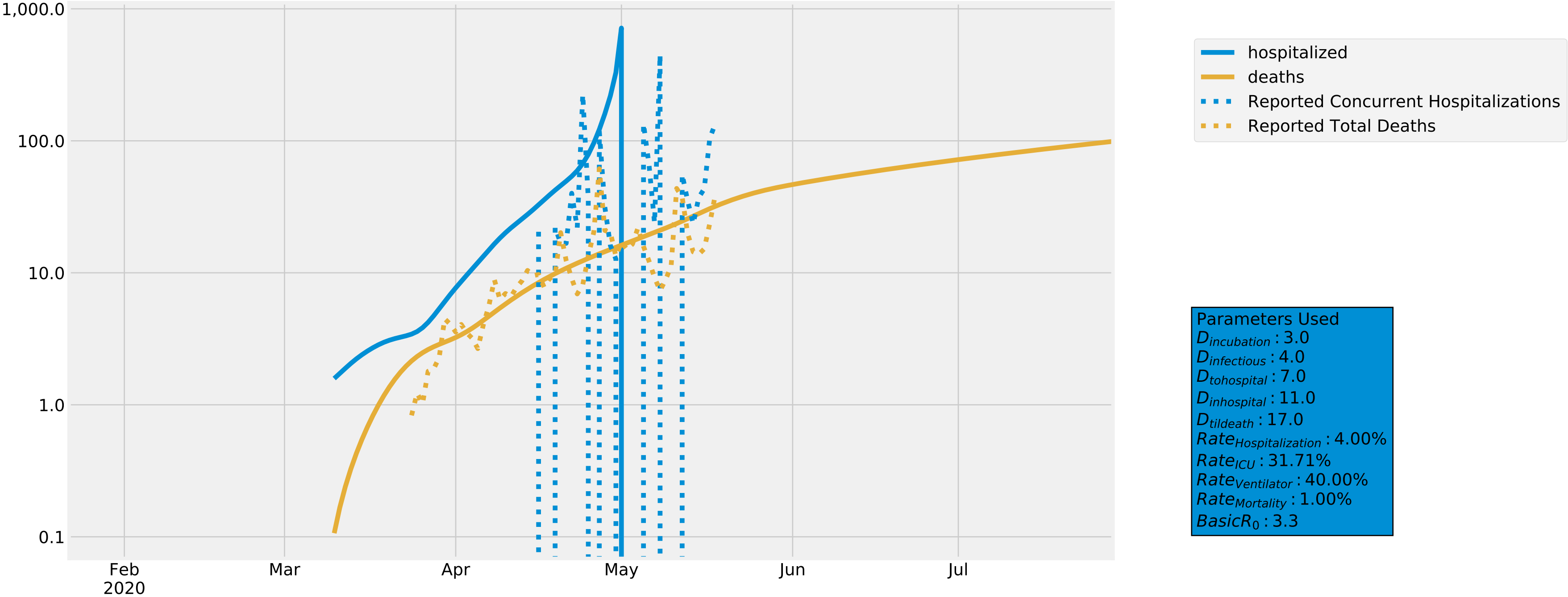


— Forecast Daily Deaths  
- - - Reported Daily Deaths

Parameters Used  
 $D_{incubation} : 3.0$   
 $D_{infectious} : 4.0$   
 $D_{tohospital} : 7.0$   
 $D_{inhospital} : 11.0$   
 $D_{tildeath} : 17.0$   
 $Rate_{Hospitalization} : 4.00\%$   
 $Rate_{ICU} : 31.71\%$   
 $Rate_{Ventilator} : 40.00\%$   
 $Rate_{Mortality} : 1.00\%$   
 $BasicR_0 : 3.3$

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

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



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