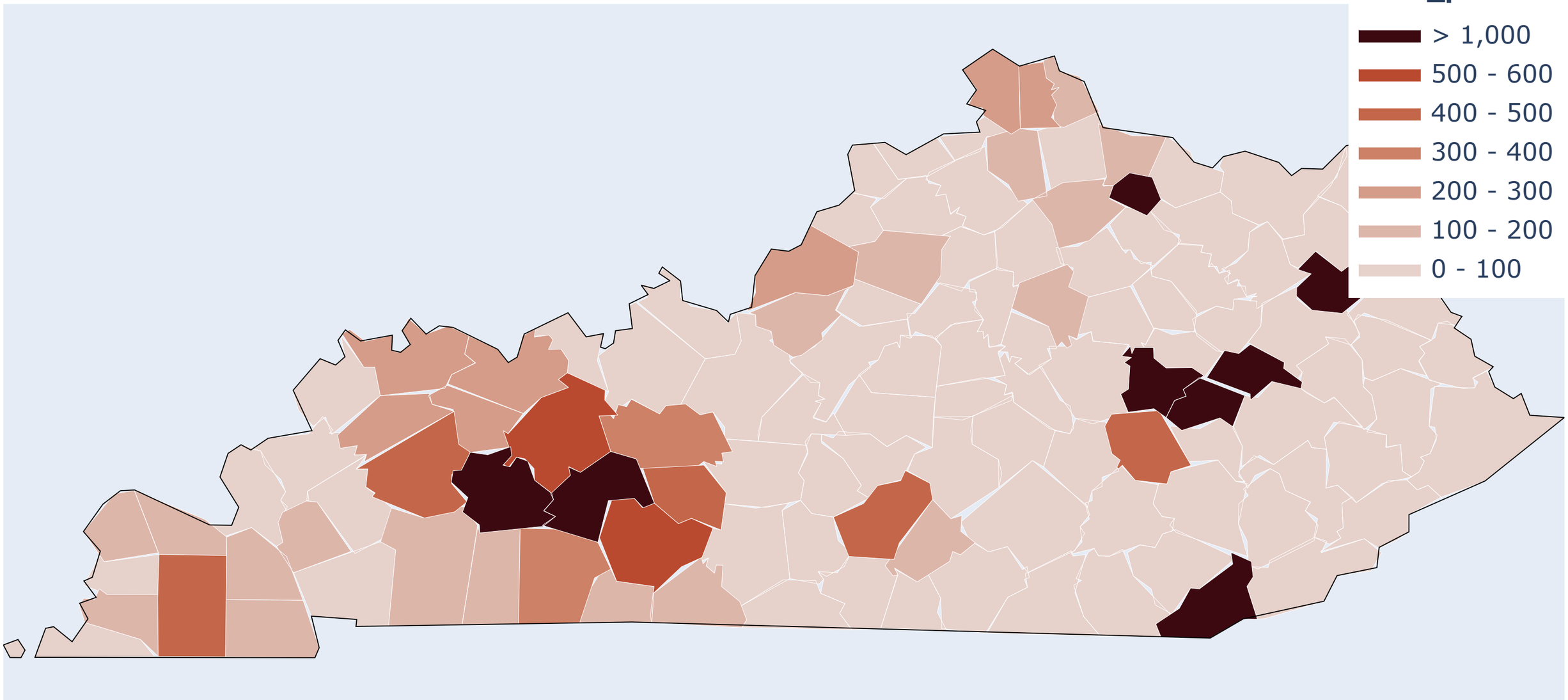
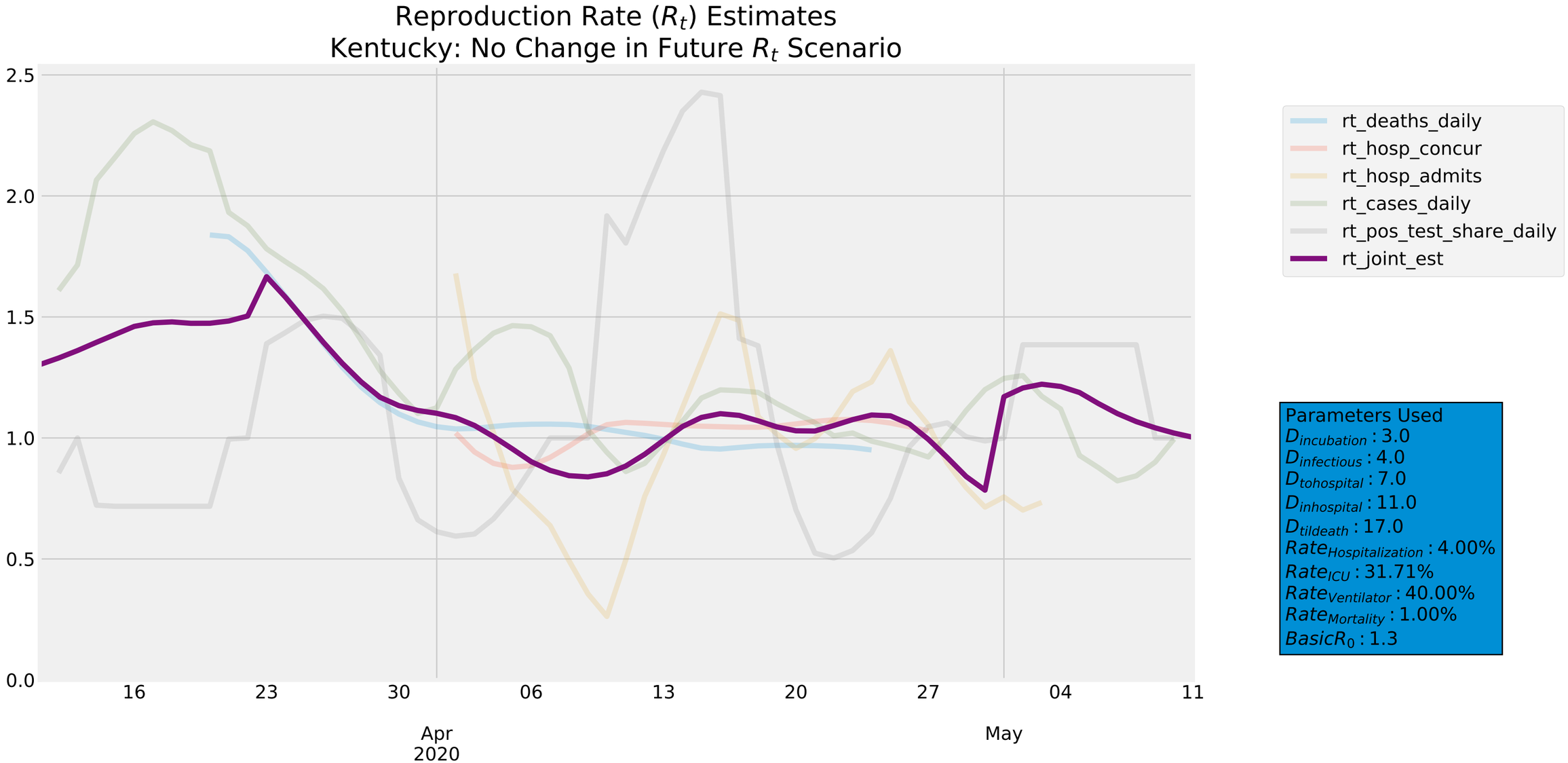
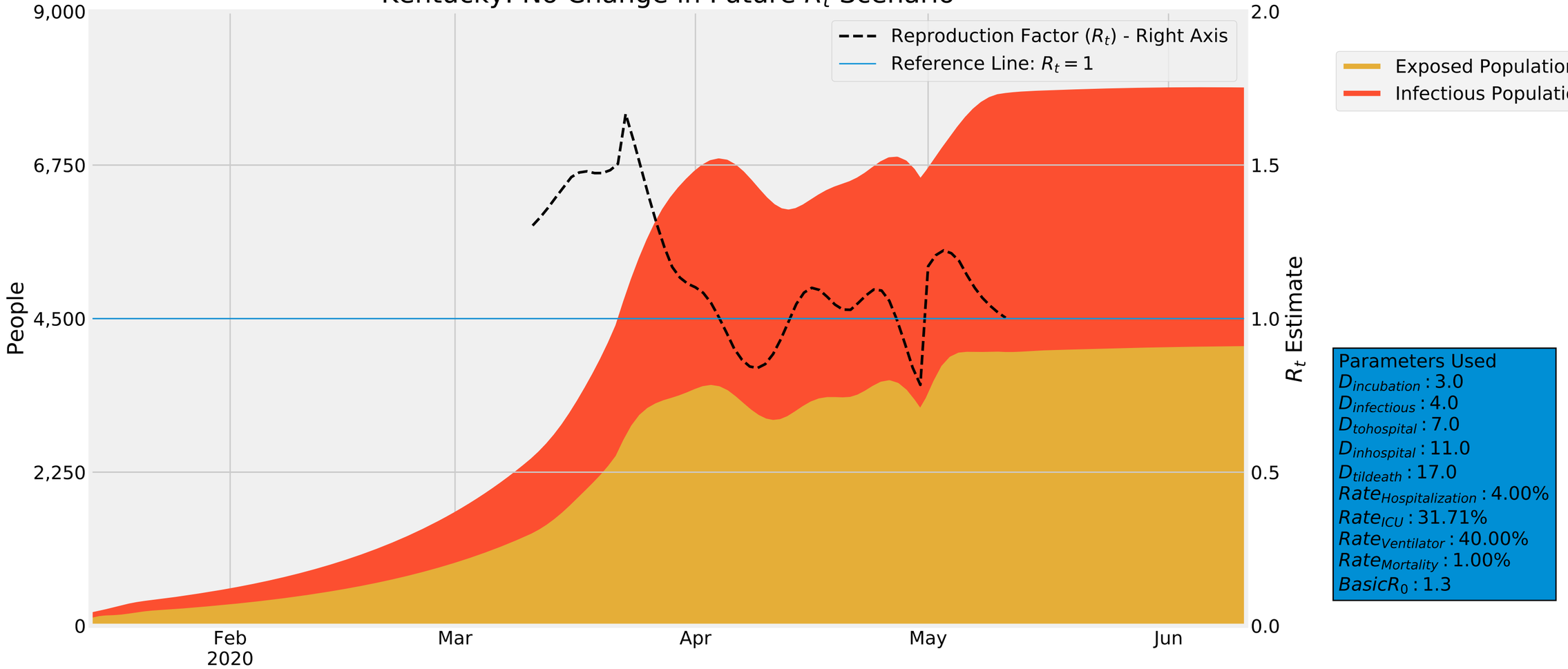
Kentucky: COVID-19 Cases Per 100k Residents





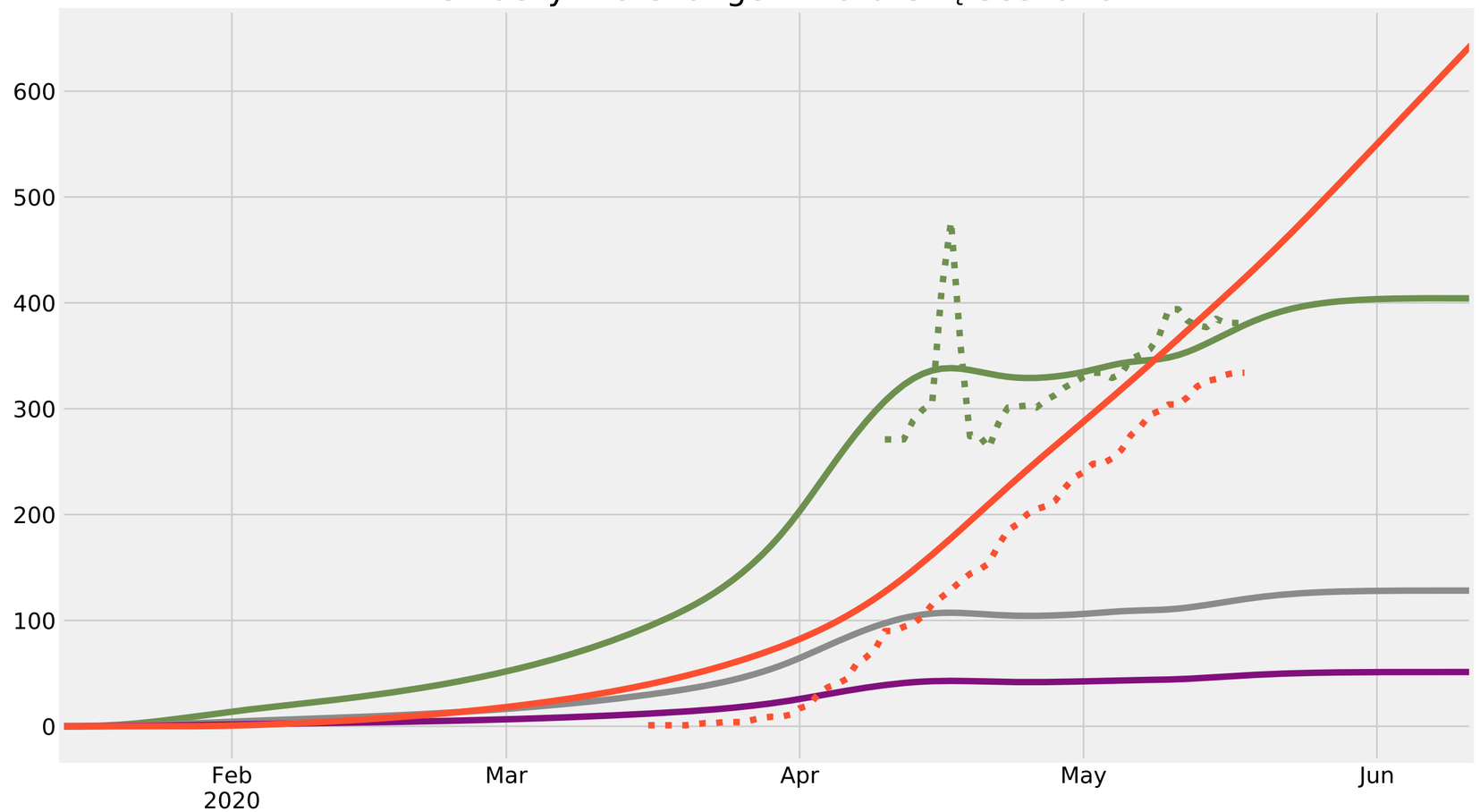
Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Simultaneous Infections Forecast
Kentucky: No Change in Future R_t Scenario



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

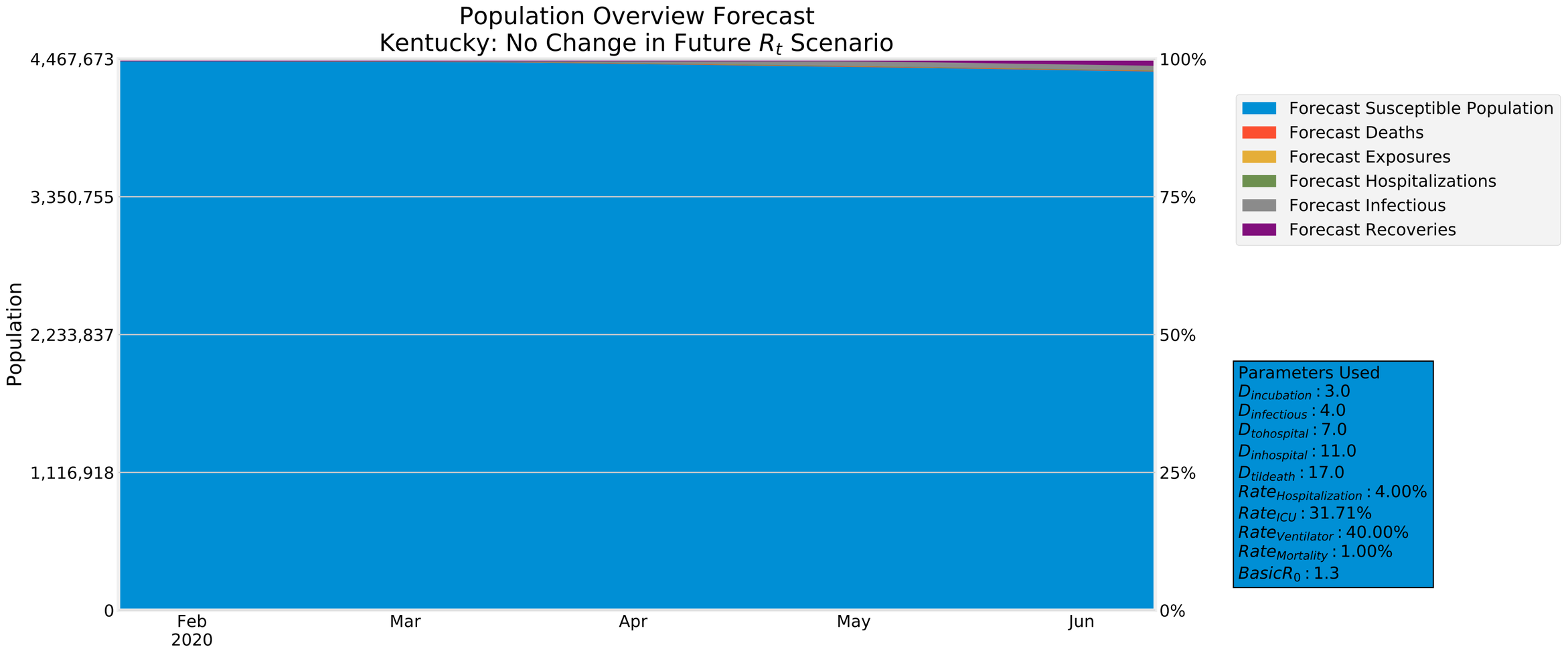
Hospitalization and Deaths Forecast
Kentucky: No Change in Future R_t Scenario

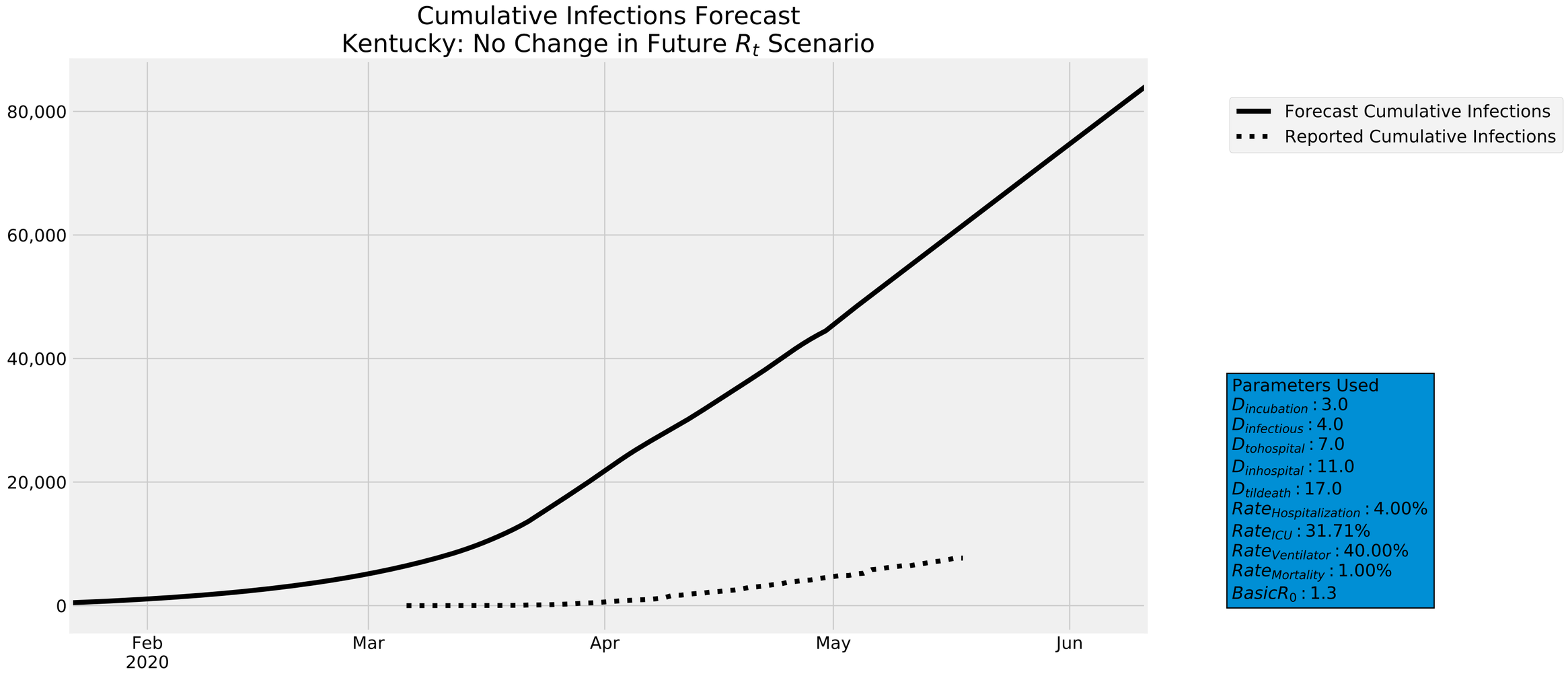


Forecast Concurrent Hospitalizations
Forecast ICU Cases
Forecast Ventilations
Forecast Cumulative Deaths
Reported Concurrent Hospitalizations
Reported Total Deaths

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 1.3

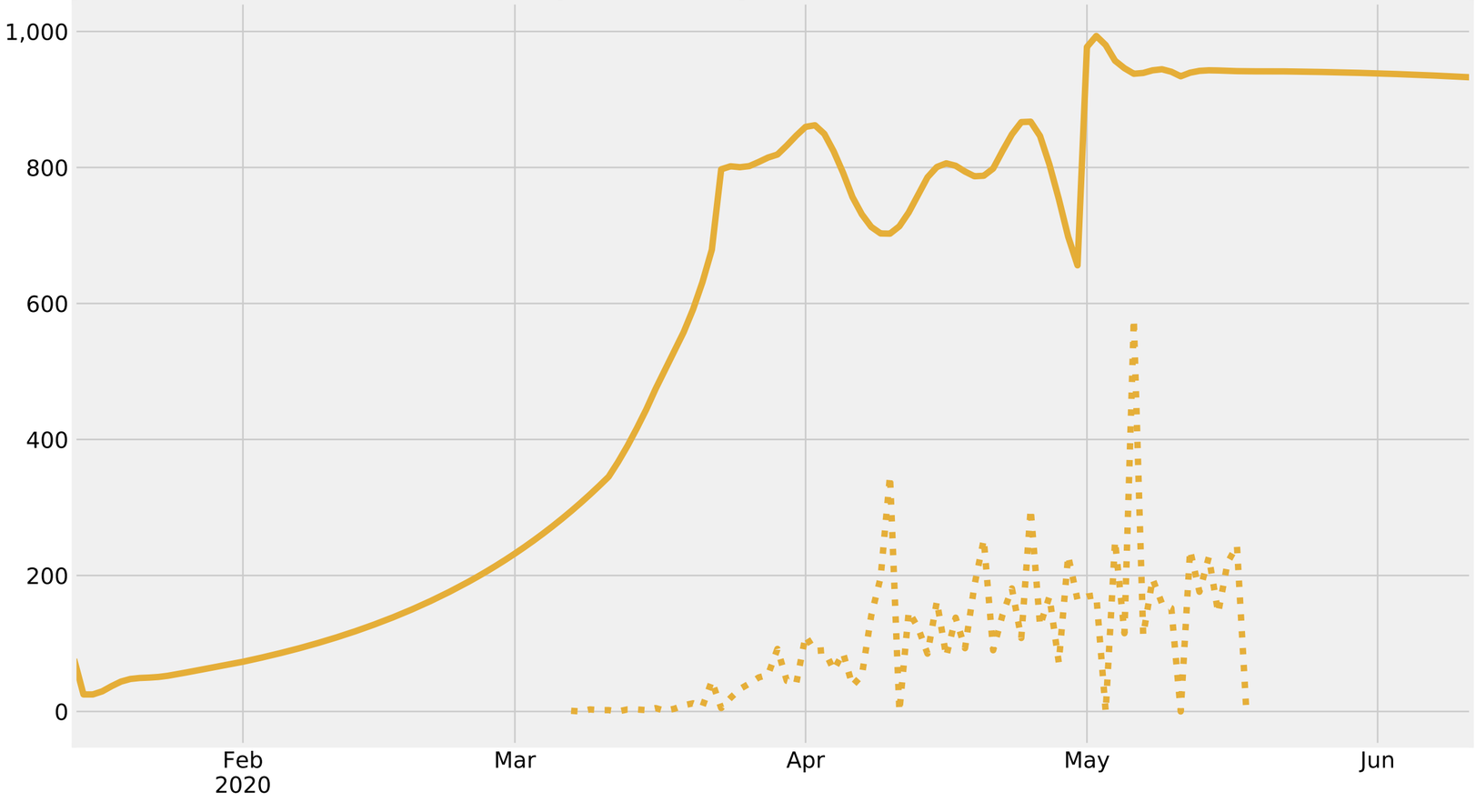
Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020


Population Overview Forecast
Kentucky: No Change in Future R_t Scenario
Population
4,467,673
3,350,755
2,233,837
1,116,918
0
100%
75%
50%
25%
0%
Feb
2020
Mar
Apr
May
Jun
Forecast Susceptible Population
Forecast Deaths
Forecast Exposures
Forecast Hospitalizations
Forecast Infectious
Forecast Recoveries
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%
$BasicR_0$: 1.3



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

Daily Exposures Forecast
Kentucky: 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%
$BasicR_0$: 1.3

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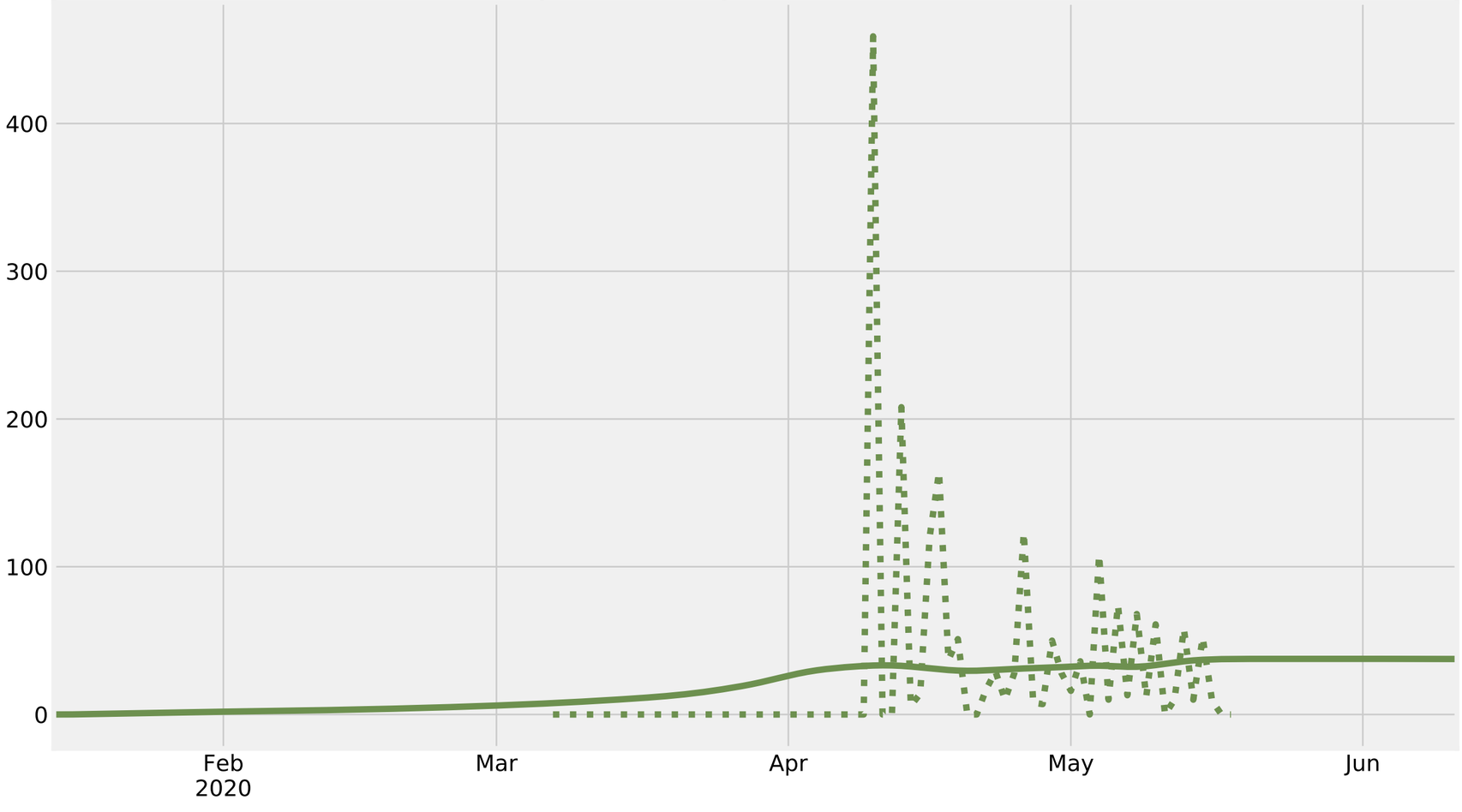
Chart created on 19 May 2020

Daily Hospital Admissions Forecast
Kentucky: No Change in Future R_t Scenario

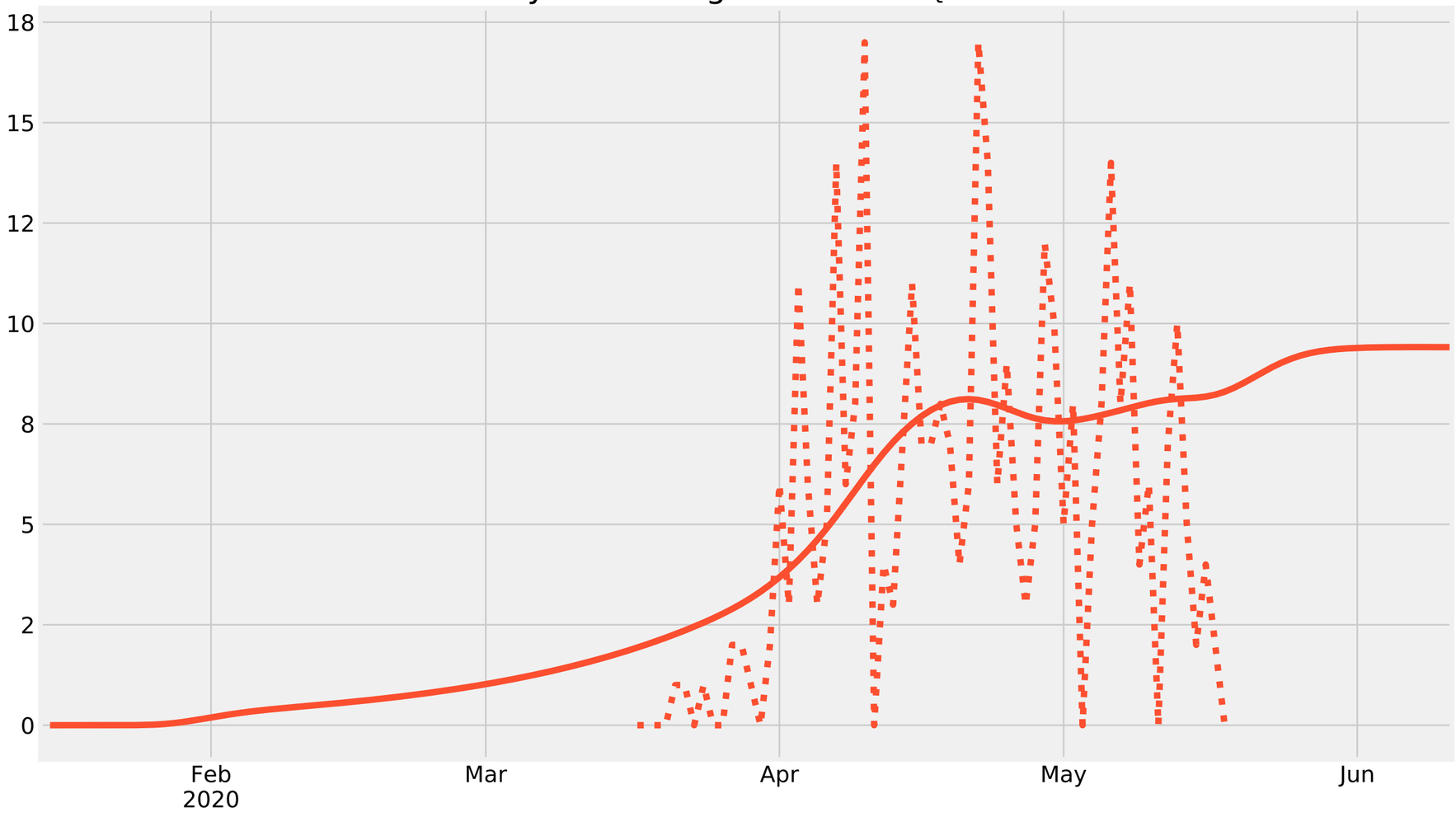


Forecast Hospital Admissions
Reported Hospital Admissions

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 1.3

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

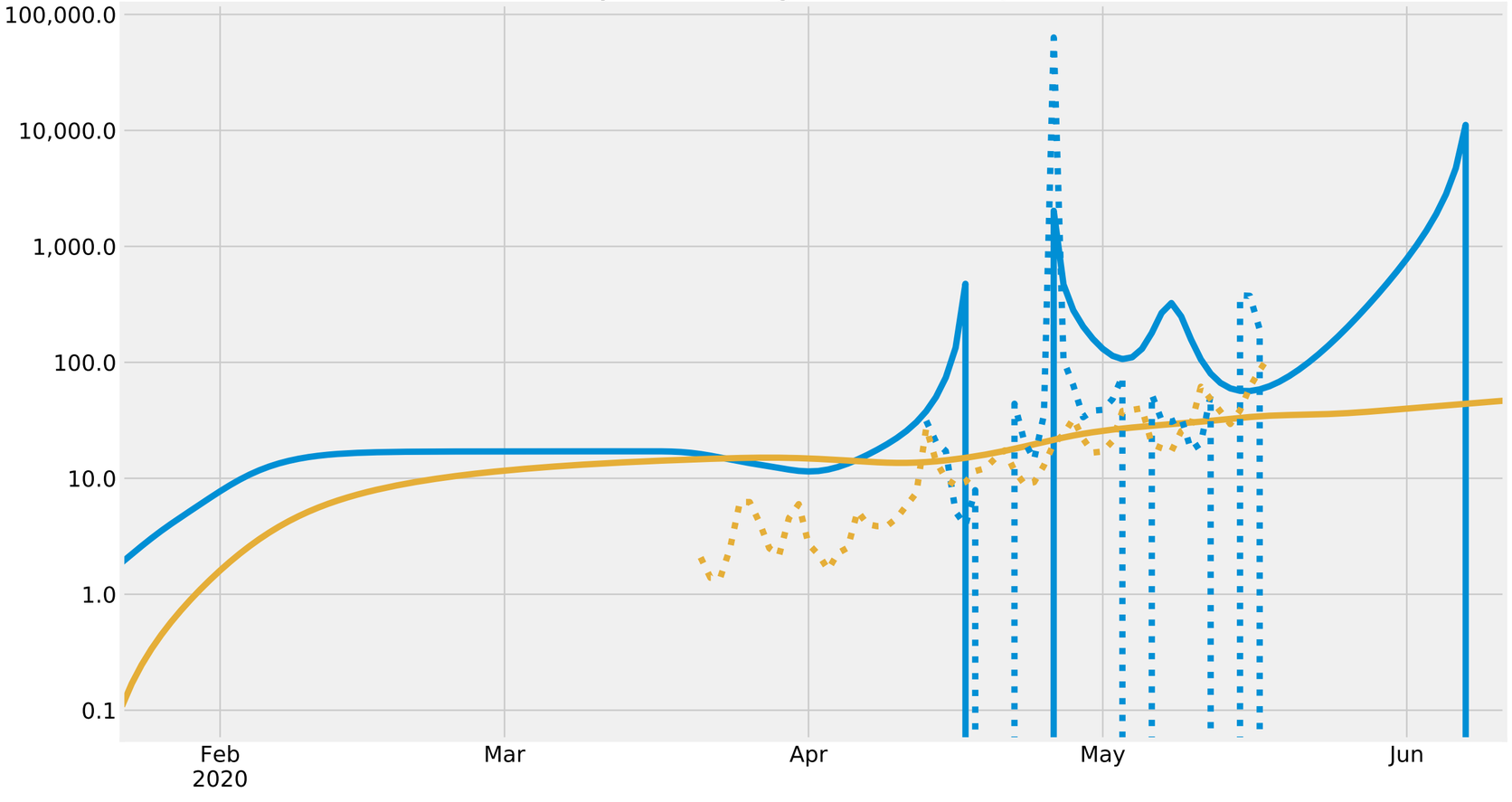
Daily Deaths Forecast
Kentucky: No Change in Future R_t Scenario



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%
$Basic R_0$: 1.3

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

Doubling Rate Forecast
Kentucky: No Change in Future R_t Scenario



hospitalized
deaths
Reported Concurrent Hospitalizations
Reported Total 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%
$BasicR_0$: 1.3

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Chart created on 19 May 2020