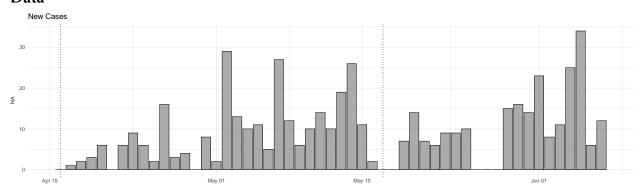
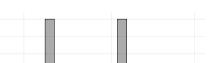
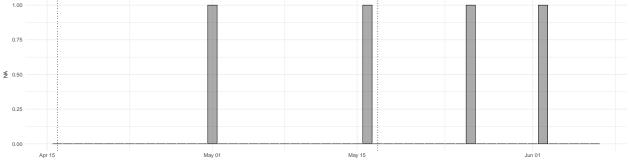
## Cape Verde

## Data

New Deaths







Vertical dotted lines represent the first seeding day and the epidemic start date.



Vertical dotted lines represent the first seeding day and the epidemic start date.

## **Analysis**

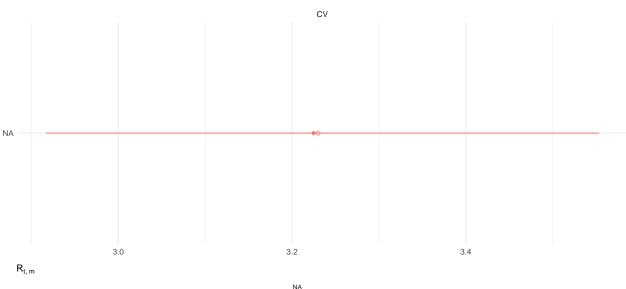
Number of divergent transitions = 0

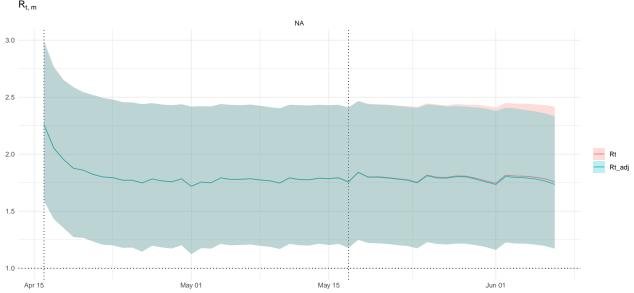
Maximum  $\hat{R} = 1.004769$ 

Minimum Bulk ESS = 1073.203

Minimum Tail ESS = 1189.009

R<sub>0, m</sub>





Vertical dotted lines represent the first seeding day and the epidemic start date.

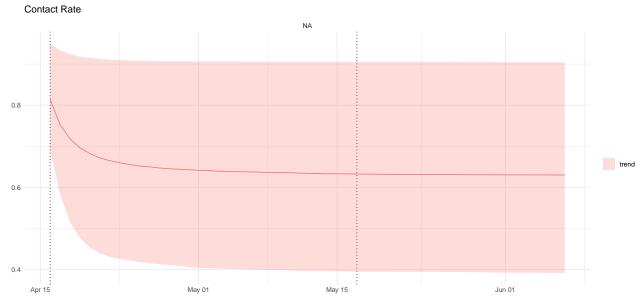
Ribbons represent the 80% credible intervals.

Contact rate function:

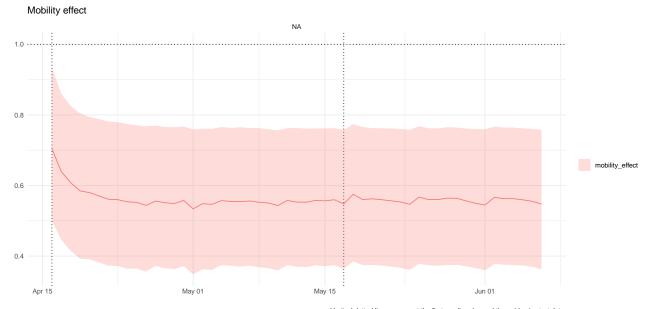
$$cr(t; t^*, \lambda_j, \kappa) = \lambda_j + \frac{1 - \lambda_j}{1 + \exp(\kappa(t - t^*))}$$

where

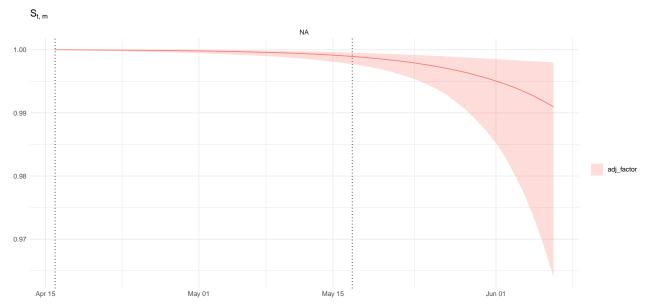
$$\begin{split} &\lambda_{j} \sim \texttt{Beta}(3,1) \\ &\kappa \sim \texttt{NegHalfNormal}(0,1). \end{split}$$



Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.



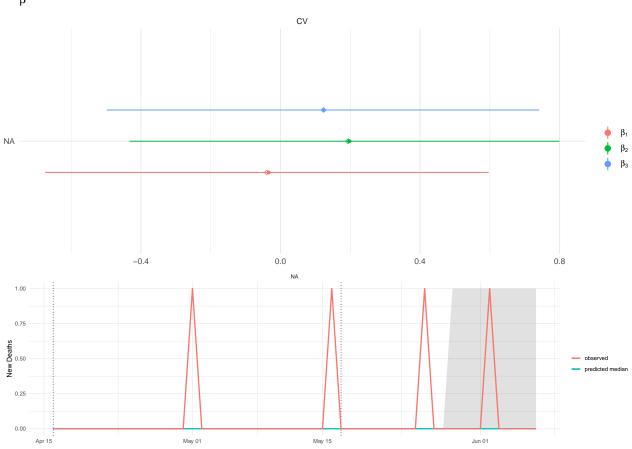
Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.



Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.

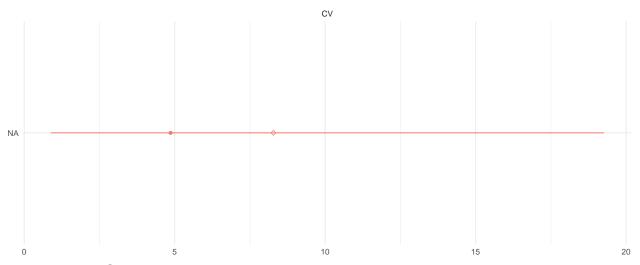
Mobility linear model:  $\beta_1 \cdot X_{residential} + \beta_2 \cdot X_{transit} + \beta_3 \cdot X_{average}$ .



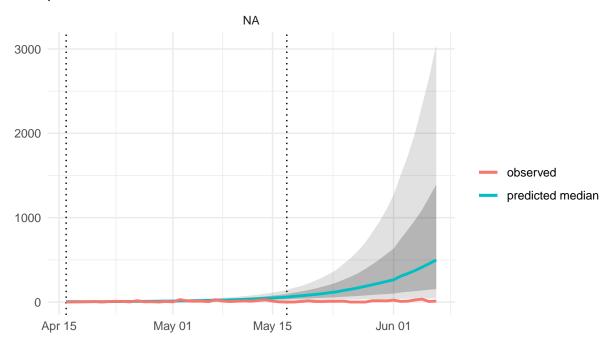


Solid black line: observed new deaths. Grey ribbon: posterior predicted new deaths. Vertical dotted lines represent the first seeding day and the epidemic start date.





## New Cases predicted vs observed



Solid black line: observed new deaths. Grey ribbon: posterior predicted new deaths. Vertical dotted lines represent the first seeding day and the epidemic start date.

