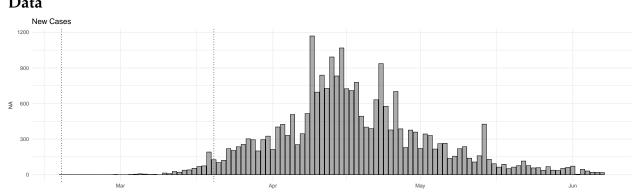
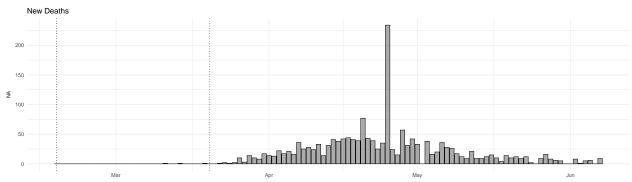
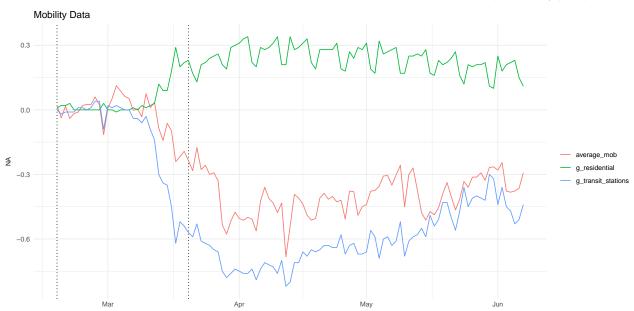
## Ireland

## Data







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

## **Analysis**

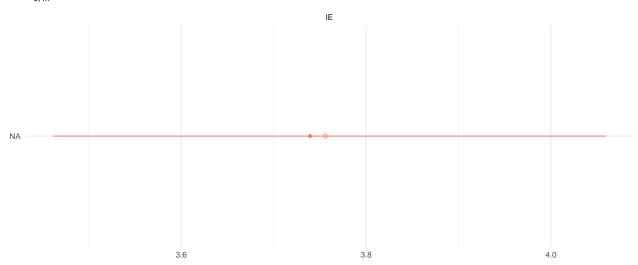
Number of divergent transitions = 0

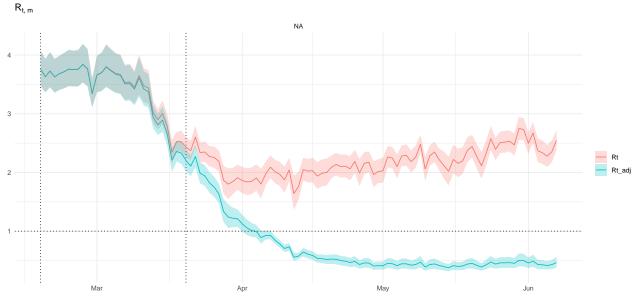
Maximum  $\hat{R} = 1.003412$ 

Minimum Bulk ESS = 1465.34

Minimum Tail ESS = 1126.558

 $R_{0, m}$ 





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

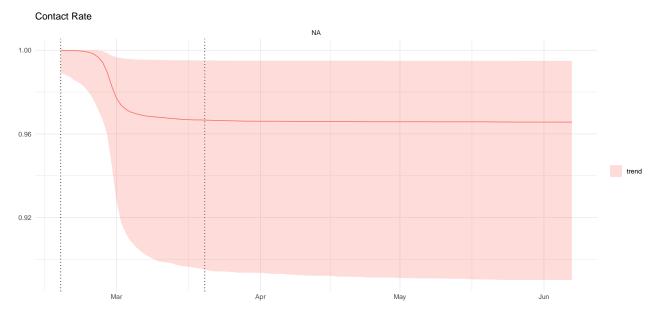
Ribbons represent the 80% credible intervals.

Contact rate function:

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

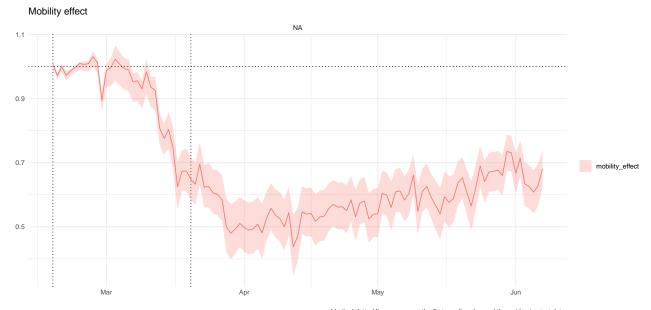
where

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

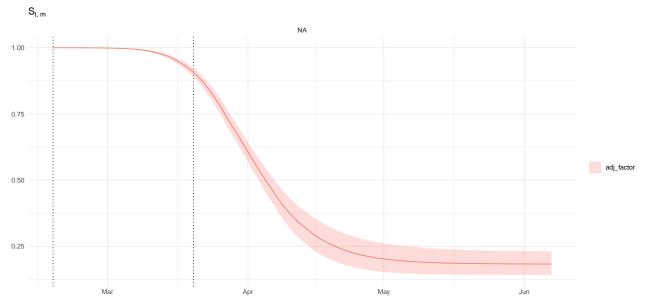


Vertical dotted lines represent the first seeding day and the epidemic start date.

Ribbons represent the 80% credible intervals.

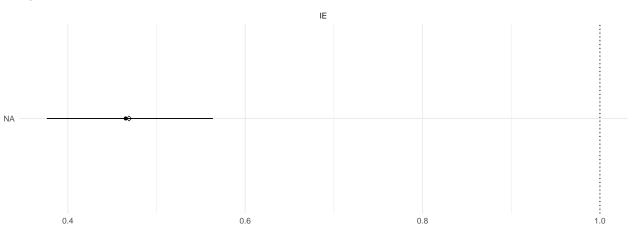


Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.



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





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

