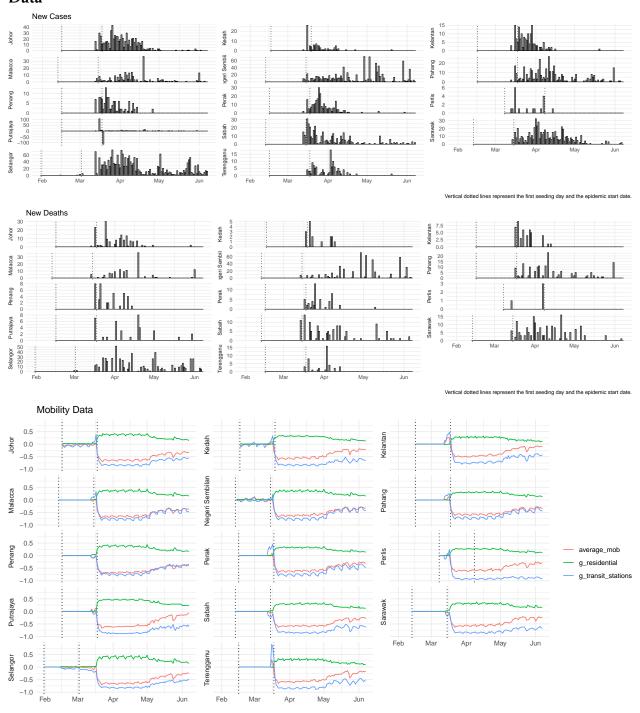
## Malaysia

#### Data



### **Analysis**

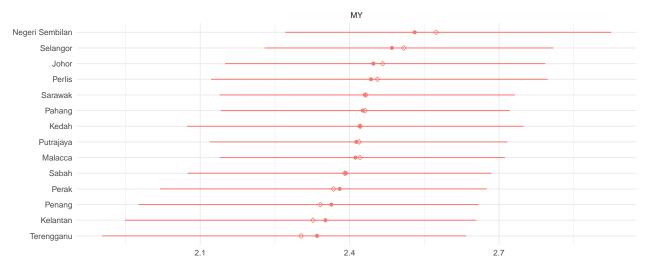
Number of divergent transitions = 0

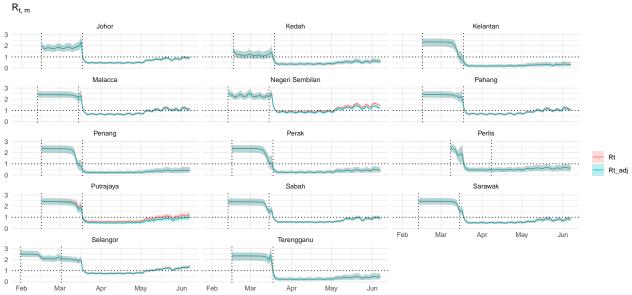
Maximum  $\hat{R} = 1.008435$ 

Minimum Bulk ESS = 1042.939

Minimum Tail ESS = 1150.212

 $R_{0, m}$ 





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

Ribbons represent the 80% credible intervals.

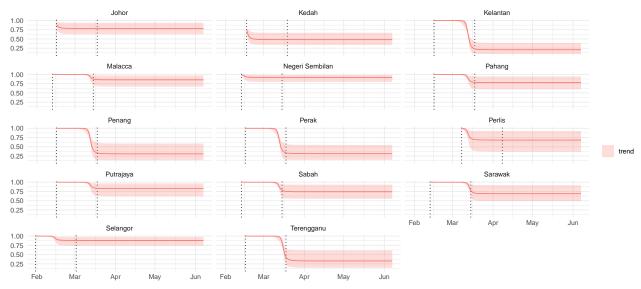
Contact rate function:

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

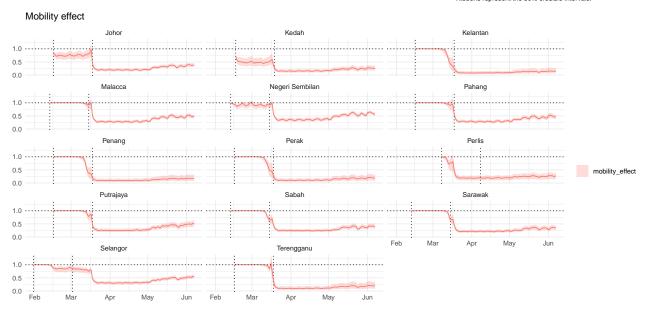
where

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

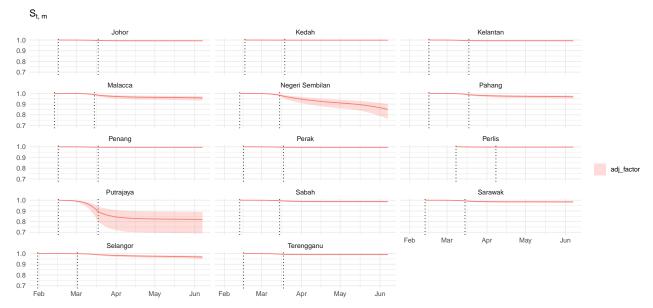




Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.

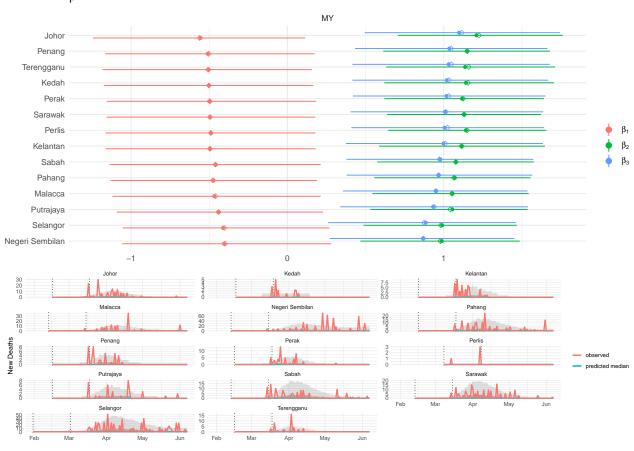


Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.



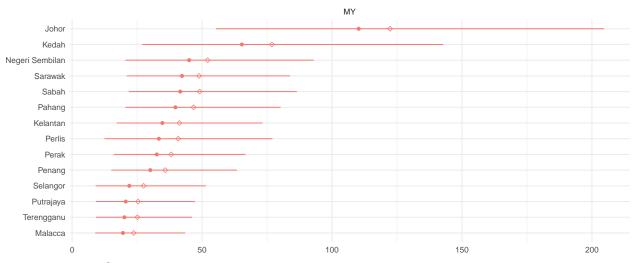
Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.

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

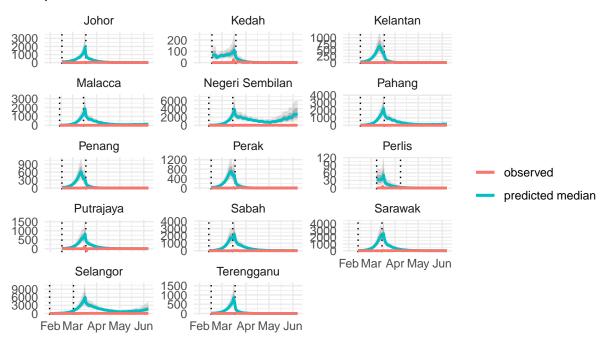


Solid black line: observed new deaths. Grey ribbon: posterior predicted new deaths. Vertical dotted lines represent the first seeding day and the epidemic start date.

#### Imputed Cases



# 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.



