West Nile virus forecast model submission form Email completed form to vbd-predict@cdc.gov

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Model description

Provide a brief summary of the model methods with sufficient detail for another modeler to understand the approach being applied. If multiple models are used, describe each model and how they were combined.

We generated historical empirical distributions of human neuroinvasive West Nile virus cases at the county, state and national scale from 2003 to 2018. Using these distributions we determined the optimal weighting between the different spatial scales to forecast probabilities of the number of human neuroinvasive West Nile virus cases. Our current model weights 0.7, 0.2 and 0.1 to the county, state and national distribution, respectively.

Variables		
List each variable used and its temporal relationship to the forecast. If multiple models are used, specify which enter into each model.		
1. Historical annual West Nile virus human cases		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
Computational resources		
Describe the programming languages and software tools that were used to write and execute the forecasts.		
Data analysis was done in MATLAB.		
Publications		
Note whether the model was derived from previously published work and, if so, provide references.		
To our knowledge this model has not previously been published.		
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Portion advanced		
Participation agreement		
By submitting these forecasts, the team agrees to abide by the project rules and data use		
agreements.		
Team lead name Date		
Nicholas DeFelice 4/27/2020		