

Supplementary Materials for

Informing an investment case for Japanese encephalitis vaccine introduction in Bangladesh

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Table S1 Figs. S1 to S4

Supplementary Text

Table S1. Mixed effects multivariate logistic regression models and corresponding Widely Applicable Bayesian Information Criterion (WAIC).

| Random effects | WAIC |
|---|---------|
| $Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(household) + f(spatial\ field)$ | 1050.33 |
| $Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(community) + f(spatial\ field)$ | 1050.34 |
| $Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(spatial\ field)$ | 1050.53 |
| $Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(household) + f(community) + f(spatial\ field)$ | 1050.42 |
| $Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(household) + f(community)$ | 1056.41 |
| Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(community) | 1056.60 |
| $Seroprevalence \sim -1 + Intercept + offset(log(age)) + f(household)$ | 1092.39 |
| Seroprevalence ~ -1 + Intercept + offset(log(age)) | 1092.41 |

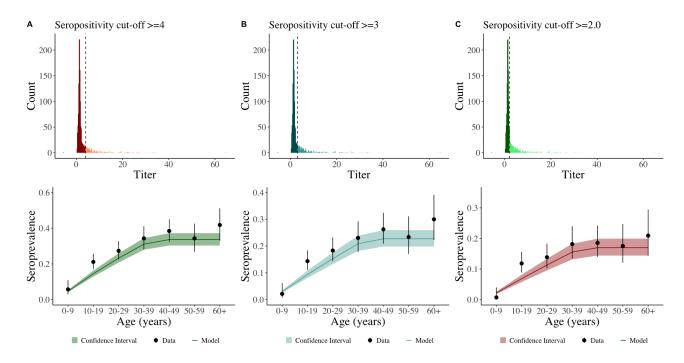


Fig. S1. Sensitivity analysis around JEV titer cut point. Titer is the relative median fluorescence intensity value, obtained dividing the median fluorescence intensity measured over a background control.

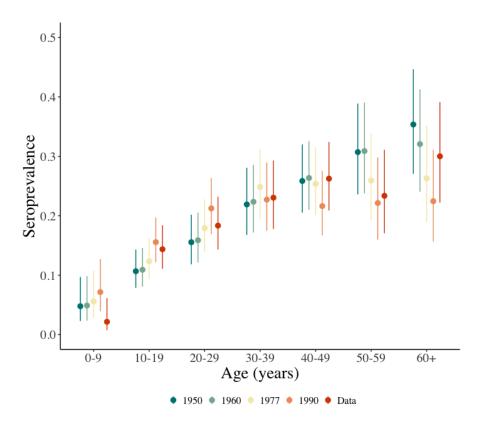


Fig. S2. Sensitivity analysis around JEV introduction year. Figure shows JEV IgG seroprevalence and 95%CI (point and range) by age group and coloured by JEV introduction year (1950, 1960, 1977, 1990).

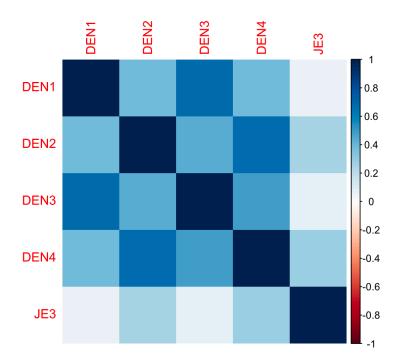


Fig. S3. Mean relative fluorescence intensity of the JEV antigen with the mean relative fluorescence intensity to the four DENV1-4 antigens.

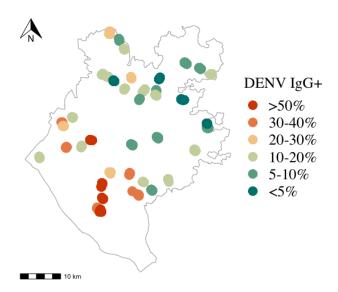


Fig. S4. Map of sampled communities locations in Chapai Nawabganj and proportion of human individuals of DENV IgG seropositive.