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Understanding epidemics from mathematical models: Details of the 2010 dengue epidemic in Bello (Antioquia, Colombia)

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## Highlights

- Mathematical model for dengue epidemic in Bello was fitted to the real data.
- Entomological parameters were obtained from experimental laboratory assays.
- The initial conditions are relevant to fit a mathematical model for dengue.
- The R0 for dengue epidemic in 2010 occurred in Bello ranged between 1.5 and 2.7.
- Transmission probabilities m and h have inverse relationship.

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