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*Necessary and sufficient conditions for instability in an SI model.* Preliminary report.

In a spatial epidemiological model, it is important to study the movements of populations and determine if patches of susceptible and infective individuals exist. In this study we examine a spatial *SI* model with cross-diffusion and determine the necessary and sufficient conditions for Turing instability. Numerical simulations are provided to verify the results. (Received September 15, 2014)