

**Ruan, Shigui; Wang, Wendi; Levin, Simon A.**

**The effect of global travel on the spread of SARS.** (English) Zbl 1089.92049

Math. Biosci. Eng. 3, No. 1, 205-218 (2006).

Summary: The goal of this paper is to study the global spread of SARS. We propose a multiregional compartmental model using medical geography theory (central place theory) and regarding each outbreak zone (such as Hong Kong, Singapore, Toronto, and Beijing) as one region. We then study the effect of the travel of individuals (especially the infected and exposed ones) between regions on the global spread of the disease.

**MSC:**

92D30 Epidemiology

91D20 Mathematical geography and demography

34D05 Asymptotic properties of solutions to ordinary differential equations

Cited in 41 Documents

**Keywords:**

basic reproduction number; global travel; medical geography; central place theory

**Full Text:** [DOI](#)