

Outline

1. The model and its mathematical description
2. Some applications
 - (a) Mesoscopic localization
 - (b) Heterogeneous transmission settings**
 - (c) Context-sensitive behavior

Heterogeneous transmission settings

The context of contacts matters for transmission

- ▷ COVID-19
- ▷ Influenza A
- ▷ STIs
- ▷ ...

What are the possible effects of ignoring context?

JAMA Insights

Indoor Air Changes and Potential Implications for SARS-CoV-2 Transmission

Joseph G. Allen, DSc, MPH; Andrew M. Ibrahim, MD, MSc



REVIEW | Open Access |

Behaviour of aerosols and their role in the transmission of SARS-CoV-2; a scoping review

José Miguel Robles-Romero, Gloria Conde-Guillén, Juan Carlos Safont-Montes, Francisca María García-Padilla , Macarena Romero-Martín

Behavioral Ecology (2020), 31(5), 451–460. doi:10.1093/beheco/ara092

Original Article

Sex, synchrony, and skin contact: integrating multiple behaviors to assess pathogen transmission risk

Stephan T. Leu^{a,*}, Pratha Sah, Ewa Krzyszczyk, Ann-Marie Jacoby, Janet Mann, and Shweta Bansal

Journal of Infection (2008) 57, 361–373



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REVIEW

Inactivation of influenza A viruses in the environment and modes of transmission: A critical review

Thomas P. Weber^{a,*}, Nikolaos I. Stilianakis^{a,b}