

# 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 | CC BY

### 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 (2021), 31(5), 451–460. doi:10.1093/beheco/abaa002

Original Article

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

Stephan T. Leu\*, Pratha Sah, Ewa Krzyszczyk, Ann-Marie Jacoby, Janet Mann, and Shweta Bansal

Journal of Infection (2008) 57, 361–373



ELSEVIER

REVIEW

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

Thomas P. Weber<sup>a,\*</sup>, Nikolaos I. Stilianakis<sup>a,b</sup>