Transmission Dynamics and Disease Burden of Influenza

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There are important gaps in our understanding of the global burden and spatial transmission dynamics of influenza. Based on retrospective analysis of a variety of epidemic and pandemic seasons in the Americas, Europe, Africa and Asia, we will discuss how disease burden may vary with geography due to differences in seasonality, underlying socio-economic conditions, and co-circulation of other respiratory and non-respiratory pathogens. Further, we will discuss the role of work commutes, air traffic, population size and density, and school cycles on the spatial transmission of epidemic and pandemic viruses.