

Modeling heroin-related EMS calls in space and time

Zehang Li

Yale School of Public Health

E-mail: lizehang@gmail.com

Abstract: Opioid use and overdose have become an important public health issues in the United States. However, understanding the spatial and temporal dynamics of opioid overdose incidents and effects of public health interventions and policy changes can be challenging. Effects may be heterogeneous across space and time, and may exhibit spillovers to regions in which the intervention did not take place. In this talk, we discuss considerations in mapping the risk of overdose in small areas over time, and models to characterize the dynamics of overdose incidents. We also outline a framework for estimating causal impacts of public health interventions from surveillance data under spatial-temporal confounding.