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Understanding heterogeneity in HIV transmission dynamics among high risk populations: a mathematical modeling approach

Concentrated HIV epidemic is characterized by the transmission of HIV largely in defined vulnerable populations, namely high risk groups: injection drug users (IDUs), sex workers (female, male and transgender), and their sexual partners. As a result, targeted intervention strategies among high risk populations are seen as high public health priorities in many settings. However, heterogeneity in the mixing patterns among these high risk populations has been shown to sustain the epidemic and complicate the delivery of intervention strategies. This talk will focus on understanding heterogeneity in the dynamical interplay between high risk populations using mathematical modeling. This research is in progress.