

Incidence of Bacterial Sexually Transmitted Infections and Associated Risk Factors Among a Longitudinal Cohort of Black MSM in the United States

Lead Investigator(s):

Kenneth Mayer

Institution: Fenway Institute

Email: khmayer@gmail.com

Co-investigator(s): Lao-Tzu Allan-Blitz

Background

Bacterial sexually transmitted infections (STIs) increase the risk for HIV transmission and acquisition through mucosal inflammation and recruitment of cells susceptible to HIV infection, as well as by increasing the concentration of HIV in mucosal fluids of HIV-infected individuals. Furthermore, many risk factors for bacterial STIs are common to HIV infection, thus serving as a marker of risk behavior. Black MSM are at a disproportionate risk for HIV and STIs compared to other races, and correlates of incident STIs have not been adequately borne out in the literature.

Specific Aims and Hypotheses

Aim 1: To determine the incidence of *Treponema pallidum*, rectal or urethral *Neisseria gonorrhoeae* or *Chlamydia trachomatis* infection at 6 months and at 12 months among Black MSM enrolled in HPTN 061

Aim 2: To determine the correlates of incident *Treponema pallidum*, urethral or rectal *Neisseria gonorrhoeae* or *Chlamydia trachomatis* infections among Black MSM enrolled in HPTN 061

Relevance to HPTN 061 and/or BSMH HIV prevention research or community engagement

Given the disproportionate incidence of STIs among Black MSM, as well as the increased risk for HIV transmission and acquisition conferred by incident STIs, our study will provide valuable insights into the targets for prevention efforts.

Study Design and Analysis

We will first establish the incidence of bacterial STIs at 6 months and at 12 months. We will then use a generalized estimating equation to calculate adjusted incident rate ratios for correlates of incident STIs. We will then look for correlates of incident bacterial STI, based on demographics (e.g. age, study site, income/education, and sociobehavioral variables (e.g. substance use, depression, specific sexual practices), and structural issues (e.g. history of incarceration).