# FACTORS ASSOCIATED WITH SEVERE BACTERIAL INFECTIONS IN PEOPLE WHO INJECT DRUGS: A SINGLE-CENTER OBSERVATIONAL STUDY

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## **Background:**

People who inject drugs are at increased risk for several bacterial infections such as bacteremia, endocarditis, and osteomyelitis resulting in severe morbidity and high care costs. Limited data exist surrounding the injection drug use practices and behaviors that may increase the risk of these infections.

#### Methods:

Individuals admitted to a single hospital in New York City with severe bacterial infection, between August 2020 and June 2021, were recruited to partake in an in-depth survey examining potential factors, both demographic and injection drug use behavioral, associated with severe bacterial infections.

#### **Results:**

Thirty-four participants were recruited with injection drug use-associated severe bacterial infection. The mean age of participants was 36.5 years with the 19 (56%) of patient admitted with infective endocarditis. The mean length of hospital stay of all participants was 32.2 days, 94% received medication for opioid use disorder while admitted, while 35% left prior to treatment completion with a patient directed discharge or elopement. Eight-two percent of participants injected daily in the prior 30 days, with an average of 276 injections per participant. Fifty percent of participants reported requiring multiple sticks per injection event 'always' or 'very often' with 94% reporting reuse of their own syringes in the prior month.

### **Conclusion:**

Severe bacterial infections in people who inject drugs resulted in prolonged and complex hospitalization that culminate in suboptimal outcomes despite aggressive measures to engage patients in medication for opioid use disorder. Numerous non-sterile injection drug use practices were commonly identified indicating a potential gap in current infection prevention harm reduction messaging.

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