#### POPULATION SIZE ESTIMATION OF PEOPLE WHO INJECT DRUGS IN GEORGIA

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## **Background:**

Monitoring and estimating the prevalence of intravenous drug use are very important tasks to develop agendas towards improvement of both behavioral and social environment affecting the drug use as well as prevention of transmission of pathogens such as HIV and hepatitis C virus (HCV). The main objective of the study was to estimate the population size of people who inject drugs (PWID) in Georgia, country with a high prevalence of HCV infection.

#### Methods:

The study was conducted by non-governmental organization "Health Research Union" with support from Global Fund to Fight AIDS, Tuberculosis and Malaria. Bio-Behavioral Surveillance Survey (IBSS) was conducted using Respondent Driven Sampling (RDS) in seven cities of Georgia (in total 2005 PWID participated). Parallel household survey was conducted (680 participants) among the general population. The network scale-up method (NSU) and the multiplier benchmark method (MBM), two different methods for estimating the size of hidden populations, have been applied. Linear, Poisson, and Negative Binomial regression models were constructed to estimate the prevalence in the remaining regions in Georgia. Consensus estimates were obtained by the triangulation approach.

# **Results:**

Estimated number of PWID in Georgia per 18-64-year-old population in 2021 was 49,700 (mean) with 95% Confidence Interval (95% CI) from 44,900 to 54,000, which corresponds to the national prevalence of 2.23% (95% CI = 2.02%-2.44%) per 18-64-year-old population. The estimated number of PWID per general population was 51,000 (95% CI = 45,400-57,700) which corresponds to the national prevalence of 1.39% (95% CI=1.23%-1.56%) per general population of Georgia.

### **Conclusion:**

The PWID estimated prevalence in Georgia is higher than the average prevalence for the Eastern Europe, region with the highest PWID prevalence in the World. The reported PWID population size estimates will aid with the planning and evaluation of activities for substance abuse, HIV and viral hepatitis prevention, treatment and care programs.