BACKGROUND

- When implemented at a public health scale, “Combined prevention and care” for HIV among persons who inject drugs (PWID) has been remarkably effective in preventing HIV transmission within PWID.
- The combination of needle and syringe programs (NSP), opiate substitution treatment (OST) for opioid use disorders, and anti-retroviral treatment (ART) for HIV infection has prevented HIV epidemics among PWID and has “ended” many ongoing high-seroprevalence epidemics among PWID (where the epidemics occurred prior to implementation of combined prevention and care).
- Despite the known effectiveness of “combined prevention and care,” outbreaks of rapid HIV transmission have recently occurred in Europe, North America, and the Middle East—areas where such interventions should have been available to prevent the outbreaks.

OBJECTIVE

- Describe recent HIV outbreaks globally in order to understand why the outbreaks occurred, and what can be done to avoid similar outbreaks in the future.

METHODS

- An international research group of public health professionals battling HIV outbreaks among PWID was formed by the European Monitoring Center for Drugs and Drug Addiction, with the aim to conduct a comparative analysis of the outbreaks.
- Publications and conference presentations on the outbreaks were compiled and a standardized template was constructed for structured comparisons.
- A mixed qualitative/quantitative synthesis was developed through successive rounds of data analyses and interpretation among members of the group.
- Selected key aspects of the outbreaks (date, size, prior conditions/precipitating factor, highly vulnerable subgroups, public health response and current situation) are compared.

RESULTS

HIV outbreaks occurred from 2011 through 2016 (and are still occurring in some locations) among PWID in Athens, Greece; Bucharest, Romania; Dublin, Ireland; Glasgow, Scotland; Luxembourg; Tel Aviv, Israel; Saskatchewan, Canada; Scott County Indiana, United States; and Tel Aviv, Israel.

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- There was substantial variation in the size of the outbreaks from under 100 (Dublin, Luxembourg, Tel Aviv) to approximately 1,000-1,200 (Athens, Bucharest) new HIV infections. Outbreaks occurred in areas that had not implemented large-scale combined prevention programming (Athens, Indiana), or where funding was interrupted (Bucharest) but also in areas where combined prevention had been implemented but changes in patterns of drug use (increased use of cocaine or novel psychoactive substances (NPS)) may have led to high rates of injection risk behavior (Bucharest, Dublin, Glasgow, Luxembourg, Tel Aviv).

- Current situation - HIV cases and risks reduced but poly drug use continues as a vulnerability.