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An outbreak of HIV amongst people who inject drugs: A phylogenetic analysis

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Disclosure

• None
Background

- People who inject drugs (PWIDs) are at high risk of acquiring HIV.

- There are 9-22 million PWIDs worldwide with an estimated 1-5 million infected with HIV.

- Since the introduction of harm reduction measures in the 1990s prevalence of HIV in PWIDs in Glasgow has remained low.
Glasgow

- Largest city in Scotland and 3rd largest in the UK
- Census in 2011 - population was around 600,000
- Glasgow has one of the highest prevalence of drug use in Scotland
HIV is on the rise in Dublin

There has been a spike in the number of cases among drug users.

URGENT ACTION is needed to tackle a spike in the number of HIV cases in Dublin, the director of an inner city drug service has said.

The HSE has confirmed that there have been 13 new cases of the virus in the capital since 2014, prompting an investigation.

Control measures have been put in place by all clinics and health services, a statement from the HSE read, including advising them to take steps to increase awareness about safe injecting practices and safe sex.

“The HSE is conducting an epidemiological study which includes newly infected persons to examine possible risk factors and enable us to make recommendations for control,” it added.

HIV OUTBREAK IN SOUTHEASTERN INDIANA

- General Information about HIV
- You Are Not Alone Campaign
- HIV Treatment Works

State health officials are working closely with local health departments, health care providers and others to contain the spread of HIV in southeastern Indiana. Disease intervention specialists are in the area, interviewing each newly identified HIV positive individual to obtain information about needle sharing and sex partners, as well as recommending care coordination services, medical care and HIV prevention information.

State health officials announced that the number of HIV cases in the southeastern Indiana outbreak is 181 (177 confirmed cases and four preliminary positive).

Homelessness and Other Risk Factors for HIV Infection in the Current Outbreak Among Injection Drug Users in Athens, Greece

- Vana Sypsa, PhD, Dimitrios Paraskevias, PhD, Meni Malliori, PhD, Georgios K. Nikolopoulos, PhD, Anestasios Panopoulos, MSc, Maria Kantzaneou, PhD, Antigoni Karatsoulidou, PhD, Mina Psachogiou, PhD, Anestasios Fotiou, MSc, Anastasia Parnisis, PhD, Marita Van De Laar, PhD, Lucas Wessing, PhD, Don Des Jarlais, PhD, Samuel R. Friedman, PhD, and Angelos Hatzakis, PhD

Large NNRTI-Resistant Transmission Cluster in Injection Drug Users from Saskatchewan

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Outbreak in Glasgow

• Early 2015 we noticed there were 13 new cases of HIV in the Glasgow PWID population, which was unusual.

• All were subtype C and had E138A and V179E mutations in the RT region that give NNRTI resistance.

• Data from Scotland's Needle Exchange Surveillance Initiative: Prevalence in PWIDs in 2011-12: 0.3%, 2015-16: 1.9%
Breakdown of total HIV cases in GGC from 2010-2015
Phylogenetics

- Were these cases linked?
Subclusters
Summary

• Despite access to needle exchange facilities and accessible addiction services, HIV still poses a significant risk to PWIDs.
• The identification of a ‘unique strain’ facilitated its detection in this Glasgow cohort.
• The outbreak is ongoing despite harm reduction measures being in place.
• Real time phylogenetics
Recent and Rapid Transmission of HIV Among People Who Inject Drugs in Scotland Revealed Through Phylogenetic Analysis
Manon Ragonnet-Cronin, Celia Jackson, Amanda Bradley-Stewart, Celia Aitken, Andrew McAuley, Norah Palmateer, Rory Gunson, David Goldberg, Catriona Milosevic, Andrew J Leigh Brown

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