

# Community-based early HIV testing and treatment to manage and prevent emerging HIV among people who inject drugs

June 17 2024

---



Credit: Unsplash/CC0 Public Domain

Community-based testing and treatment response to Glasgow's HIV outbreak among people who inject drugs (PWID) successfully brought

the 2015 outbreak under control, modeling led by academics at the University of Bristol suggests. The study's findings, [published](#) in the *Journal of Infectious Diseases* (JID), indicate that approximately three times as many people would have been infected by 2020 if these interventions had not been implemented.

The researchers also showed that early implementation of HIV testing and treatment improvements could have further reduced the size of the [outbreak](#). Optimizing HIV testing and treatment before the outbreak was suspected could have prevented it altogether.

The study was carried out in collaboration with NHS Greater Glasgow & Clyde (GGC) and Public Health Scotland after an outbreak of HIV was identified in the PWID GGC region of Scotland in 2015.

PWID are at a higher risk of acquiring blood-borne viruses, such as HIV, through the sharing of needles and syringes. Opioid agonist therapy and needle exchange programs are typically used to prevent the spread of blood-borne viruses, such as HIV, among PWID. However, the Glasgow outbreak occurred despite widespread access to these programs.

With over 150 diagnoses by the end of 2019, the outbreak response involved a multi-service response to scaleup HIV testing and treatment. The improvements in treatment were part of a novel service model change called Glasgow Enhanced HIV Care Outreach (GECHO), which saw the average time from HIV diagnosis to the start of treatment improve from 264 days in 2015 to 23 days in 2019.

GECHO is a change in the way HIV care is delivered to this important group of people living with HIV. The aim of the modeling study was to understand the impact of the testing and treatment interventions, including GECHO, on the outbreak.

Lara Allen, Ph.D. student in the Bristol Medical School and corresponding author, said, "Our study suggests that a community-based approach to HIV testing and treatment could be hugely beneficial for managing emerging HIV outbreaks among PWID. I hope our findings lead to the development of more programs which reduce blood-borne virus transmission among PWID by considering the wider needs of the population."

Matthew Hickman, Professor in Public Health and Epidemiology in Bristol Medical School: Population Health Sciences (PHS) and joint senior author, added, "These findings support the use of 'treatment as prevention' (TasP) interventions for responding to HIV outbreaks among PWID. The study also highlights the importance of a combined approach, as improvements in either testing or treatment alone would not have controlled the outbreak. Our analysis suggests that HIV testing and treatment interventions should be maintained even when HIV appears to be endemically low, as had been the case before the outbreak in Glasgow."

Dr. Erica Peters, Clinical Lead for GECHO in NHS GGC, noted, "It is valuable to have had this academic collaboration led by the University of Bristol with our clinical team here in Glasgow. Evaluating our GECHO care model in a population largely excluded from standard pathways of care has demonstrated the effectiveness of the challenging, but rewarding, work that our nursing and medical team deliver to some of our most vulnerable patients."

"However, given the [financial pressures](#) faced by the health care system, the NHS GGC team is keen in future to understand the cost-effectiveness of the testing and treatment interventions as the outbreak comes under control."

Bristol researchers plan to build from this work and use modeling to

understand factors affecting the success of treatment as prevention interventions in the early stages of HIV outbreaks among PWID more generally.

**More information:** Lara I Allen et al, Testing and Treatment Interventions in Community Settings Key to Controlling a Recent Human Immunodeficiency Virus Outbreak Among People Who Inject Drugs in Glasgow: A Modeling Study, *The Journal of Infectious Diseases* (2024). [DOI: 10.1093/infdis/jiae206](https://doi.org/10.1093/infdis/jiae206)

Provided by University of Bristol

Citation: Community-based early HIV testing and treatment to manage and prevent emerging HIV among people who inject drugs (2024, June 17) retrieved 26 June 2024 from <https://medicalxpress.com/news/2024-06-community-based-early-hiv-treatment.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.