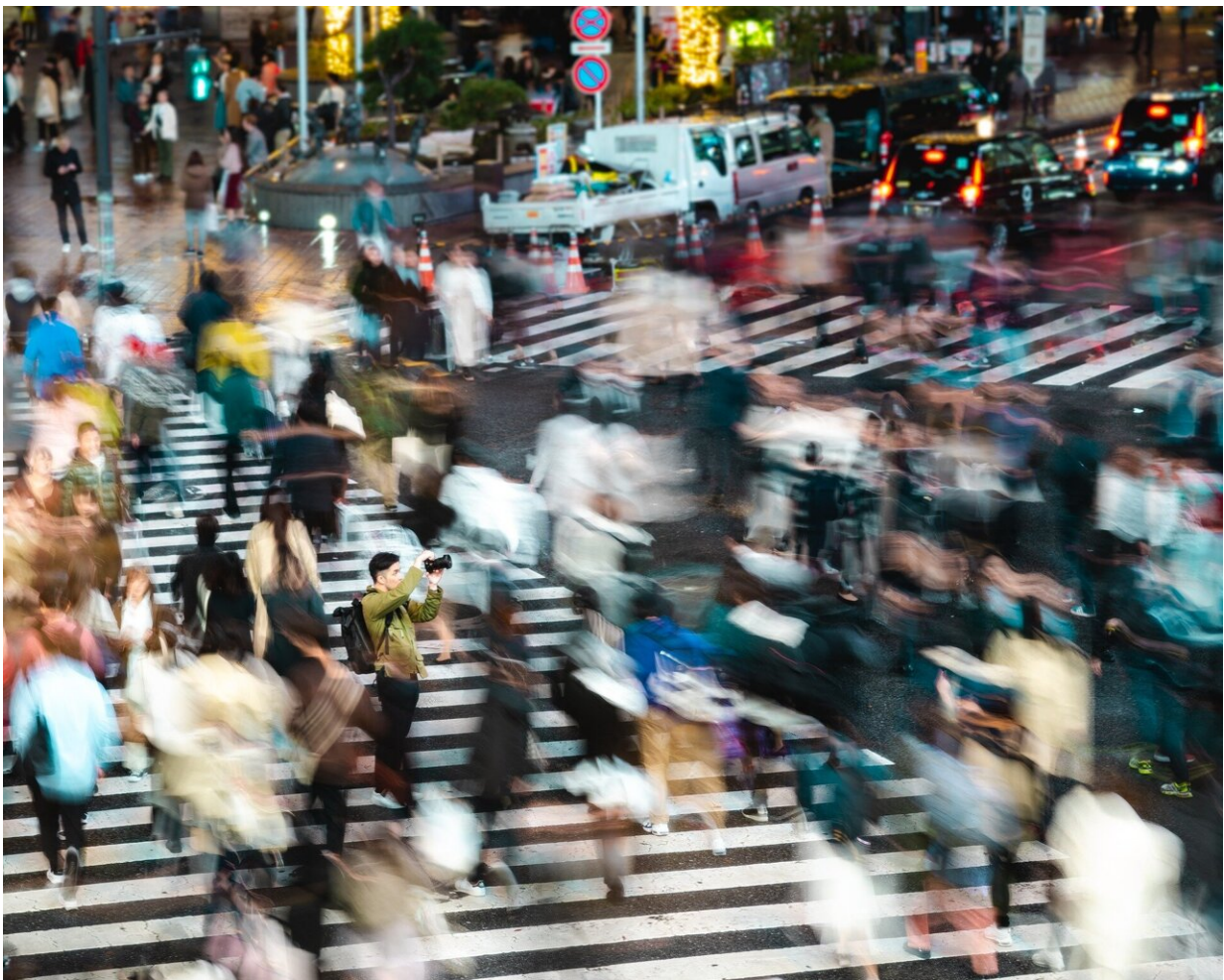


HIV and hepatitis C virus monitoring needs to increase to achieve global elimination goals, says study

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Countries must intensify efforts to track HIV and hepatitis C virus (HCV) incidence among people who inject drugs, and to prioritize this group in prevention and elimination work, according to new University of Bristol-led research, published online in *The Lancet Gastroenterology & Hepatology*.

UNAIDS and WHO have recommended targets for ending the HIV/AIDS epidemic and eliminating HCV as a public health threat by 2030. To validate these targets, countries must measure HIV and HCV incidence and document a decline over time. People who inject drugs are one of the key risk groups for HIV and HCV infection, so it is important for countries to track HIV and HCV incidence in this high-risk group.

Bristol Medical School researchers sought to address this by summarizing global HIV and primary HCV incidence data among people who inject drugs together with age- and sex- or gender-specific incidence data. They conducted a systematic review and meta-analysis by searching for relevant studies published between 2000 and 2022.

Data on HIV and HCV incidence in people who inject drugs was limited. Globally, only 14% and 12% of countries have at least one estimate on these measures, respectively. In many cases, estimates are not recent, not nationally representative, and were usually constrained to a city within a country.

The availability of estimates was also geographically skewed, with few estimates from middle-income countries for HCV, and only one HIV and HCV incidence estimate from low-income countries.

Although limited, available data suggest that HIV and HCV incidence are high in this population—on average 1.7 per 100 person per year for HIV and 12.1 per 100 person per year for HCV. These figures mean that, on average, if 100 people who inject drugs uninfected with HIV

and HCV were followed for one year, nearly 2 would acquire HIV and 12 would acquire HCV. However, there is considerable variability in these estimates: the ranges are 0.1–31.8 per 100 person per year for HIV and 0.2–72.5 per 100 person per year for HCV.

Additionally, [young people](#) who inject drugs were found to have on average a 1.5-times greater risk of HIV and HCV than older people who inject drugs, and women had a 1.4-times greater risk of HIV and a 1.2-times greater risk of HCV than men.

The findings suggest there is a pressing need for most countries to scale-up measurement and monitoring of HIV and HCV incidence among people who inject drugs, and to prioritize this population in prevention and elimination efforts. In addition, given that young people who inject drugs and women who inject drugs have higher risk of getting infected with both HIV and HCV, age-appropriate and gender-appropriate prevention measures are urgently needed to reach and engage with these vulnerable risk subgroups.

Dr. Adelina Artenie, Senior Research Associate in Mathematical Epidemiology in Bristol Medical School: Population Health Sciences (PHS) and corresponding author of the paper, said, "It can be challenging and expensive to measure HIV and HCV incidence, which is probably why so few estimates are available.

"Given how incomplete the data on HIV and HCV incidence are among people who inject drugs, the true scale of these epidemics globally remains unknown. If there are no data to understand the scale of transmission in a country, we cannot expect timely action to reduce it. This means that people who inject drugs could be overlooked when prevention and treatment strategies are put in place to eliminate HIV and HCV in a country.

"We hope that our [systematic review](#) draws attention to the importance of monitoring the HIV and HCV epidemics among people who inject drugs and to the need to prioritize them for prevention and care."

Peter Vickerman, Professor of Infectious Disease Modeling from the Bristol Medical School: PHS and NIHR Health Protection Research Unit (NIHR HPRU), the paper's senior author, explained, "There is a global move to eliminate HIV and HCV but either we have no data on the risk of infection among people who injects drugs, or the risk is generally high.

"To be able to reach elimination, we need to improve interventions for this vulnerable group and collect data to show that we have achieving progress. Both of these things need to be improved.

"One option is to use routine collected programmatic data that includes repeat HIV and/or HCV testing. This data is collected in many programs for people who inject drugs, but is rarely analyzed to estimate incidence rates and trends over time."

A [previous study](#) done by the research team has shown the utility of this type of data for documenting decreases in HIV incidence in challenging settings. These results are promising because this data is available in many settings but under-utilized, suggesting a way forward for improving the evidence base for how we are progressing towards elimination.

More information: Adelina Artenie et al, Incidence of HIV and hepatitis C virus among people who inject drugs, and associations with age and sex or gender: a global systematic review and meta-analysis, *The Lancet Gastroenterology & Hepatology* (2023). [DOI: 10.1016/S2468-1253\(23\)00018-3](#)

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