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UK HIV transmission drops in the wake of COVID-19

A big drop in UK new HIV diagnoses in 2020 had been linked to less testing due to the COVID-19 pandemic—but the fall has been sustained in 2021 despite increased testing. Tony Kirby reports.



One of the big secondary effects of the COVID-19 pandemic has been its impact on other health conditions. For most infectious diseases, incidence fell due to reduced social contact through enforced lockdowns. However, for some chronic conditions and acute events, such as heart attacks and stroke, some people deferred seeking vital medical attention for fear of contracting COVID-19 or putting further strain on health services.

Newly reported HIV diagnoses fell substantially from 2019 to 2020—across the whole UK population by a third, from 4408 to 2961; and by 41% among men who have sex with men (MSM), from 1882 to 1109. However, these falls were accompanied by substantial drops in testing due to sexual health clinic closures during COVID-19. Testing at such clinics fell 30% across the whole population, with a very uneven distribution: whereas testing in MSM fell just 7%, testing fell 33% among heterosexuals. Therefore, it was difficult to know how much declines in new HIV diagnoses represented genuine decreases in HIV transmission.

However, new evidence shows that, even though overall HIV testing in sexual health clinics increased to above 2019 (pre-COVID) levels in 2021, new HIV diagnoses in 2021 are almost the same as in 2020, suggesting a genuine and sustained drop in HIV transmission from 2019 to 2020 that has been maintained to 2021.

The data are in *HIV testing, PrEP, new HIV diagnoses, and care outcomes for people accessing HIV services: 2022 report* published by the UK Health Security Agency (UKHSA), and the accompanying annual data tables. In the general population in 2021 there were 2955 new HIV diagnoses, and among MSM there were 1081—both

very similar to numbers in 2020. Especially among MSM, these figures represent a continued downward trend from the peak of new diagnoses during the decade 2010–19. In 2014, the UK hit a high of 3229 new HIV diagnoses in MSM. Thus the fall to 1081 in 2021 is a drop of two-thirds. London has seen even steeper declines: there were 1542 new HIV infections in MSM in 2014, and just 300 in 2021—an 80% drop. Across the UK general population new HIV diagnoses fell 63% in this period, and among the London general population it fell by 70%.

“PrEP has the potential to do so much more, with recent data... revealing that no local authority has more than five women accessing it”

Laura Waters, recent past Chair of the [British HIV Association \(BHIVA\)](https://www.bhiva.org/), points out that the larger falls in new HIV diagnoses for MSM are not surprising because this population has benefited from targeted prevention campaigns and is generally more conscious of HIV risk. “Many MSM are confident to access sexual health services, which increases the frequency of testing and improves access to pre-exposure prophylaxis [PrEP]”, she told *The Lancet HIV*. She added that although PrEP has had a huge impact, it is not the only factor driving down HIV transmission, which was already beginning to fall before the end of the last decade when PrEP became widely available (and free on the UK National Health Service, since 2020). “Changes in treatment guidelines in 2014, meaning that almost everyone was starting antiretroviral treatment immediately or within weeks of diagnosis, plus the steady decline in

people living with undiagnosed HIV thanks to better testing, have all made their mark on decreased transmission.”

Sheena McCormack, who led the PROUD trial, which proved efficacy of PrEP, would like a few more years’ worth of data after COVID-19 to be sure that the 2019–21 changes reflect a genuine decrease in transmission. “PrEP was a new intervention and it attracted new populations of mostly MSM to clinics and testing, and gained enormous peer-led momentum”, said McCormack. “Amongst those who came to clinic for PrEP were a substantial number who already had HIV infection who were subsequently immediately put on antiretroviral treatment.”

“PrEP is a brilliant intervention that’s highly effective at protecting against HIV”, said Ian Green, Chief Executive at the UK-based LGBTQ+ and HIV advocacy charity the [Terrence Higgins Trust](https://www.tht.org.uk/) (THT). “Currently its benefits are still primarily impacting gay, bisexual and other men who have sex with men, and particularly those based in London.”

Waters, McCormack, and Green all agree that although PrEP has done much to prevent new HIV diagnoses, it could do much more. “It is also important to emphasise that funding cuts and service pressures due to the monkeypox outbreak have created delays in PrEP access which could prevent achieving the target of zero transmissions”, said Waters, who fears such access issues could cause a small upswing in infections. She points to a recent report led by THT and partners, with data from 1120 people in England struggling to access PrEP found that the most common waiting time for a PrEP appointment at a sexual health clinic was 12 weeks (35%), with more than half (57%) waiting more than 12 weeks.

Published Online

March 10, 2023

[https://doi.org/10.1016/S2352-3018\(23\)00055-3](https://doi.org/10.1016/S2352-3018(23)00055-3)

For more on the **HIV testing, PrEP, new HIV diagnoses, and care outcomes for people accessing HIV services: 2022 report** see <https://www.gov.uk/government/statistics/hiv-annual-data-tables/hiv-testing-prep-new-hiv-diagnoses-and-care-outcomes-for-people-accessing-hiv-services-2022-report#new-hiv-diagnoses>

For more on **HIV data tables** see <https://www.gov.uk/government/statistics/hiv-annual-data-tables>

For more on **British HIV Association (BHIVA)** see <https://www.bhiva.org/>

For more on **Terrence Higgins Trust** see <https://www.tht.org.uk/>

For the **THT report on PrEP access in England** see <https://www.tht.org.uk/news/new-report-reveals-extent-barriers-prep-access-england>

For more on the **Towards Zero Action Plan** see <https://www.gov.uk/government/publications/towards-zero-the-hiv-action-plan-for-england-2022-to-2025/towards-zero-an-action-plan-towards-ending-hiv-transmission-aids-and-hiv-related-deaths-in-england-2022-to-2025>

For more on the **Emergency Department opt-out HIV, hepatitis B, and hepatitis C report** see <https://www.england.nhs.uk/long-read/emergency-department-opt-out-testing-for-hiv-hepatitis-b-and-hepatitis-c-the-first-100-days/>

“PrEP has the potential to do so much more, with recent data on PrEP uptake in the UK revealing that no local authority has more than five women accessing it”, Green told *The Lancet HIV*. “You can’t access something you don’t know about, and that’s why we’re working to increase awareness of PrEP in all communities affected by HIV in the UK. We’re also calling for PrEP access to be extended to primary care settings to reach those who don’t usually attend sexual health clinics—this includes community pharmacies and general practitioners.”

Green also explained that the testing picture in 2021 is mixed, with testing in sexual health clinics in MSM recovering to above pre-COVID levels, but testing in heterosexuals still lagging behind. This is a situation that must be urgently addressed because, he says, it is impossible to end HIV transmission without achieving it across all populations and right across the country. “Many more people are now getting tested for HIV through testing kits they order online to do at home. This is a great innovation and one we want to see available right across the country, 365 days of the year. But there is inequity in who is accessing testing this way which means it’s crucial access to testing in a wide range of other settings is scaled up to overcome the digital exclusion some are currently experiencing.”

Waters said that testing and PrEP provision must be expanded beyond sexual health services. She explains: “There have already been moves to increase non-sexual-health-service testing and we need to do the same for PrEP by delivering it in primary care and direct from pharmacies. We also need to educate and support all health care and peer services to feel confident to discuss PrEP and signpost people appropriately.”

On World AIDS Day 2021, the UK Government announced *Towards Zero—An action plan towards ending*

HIV transmission, AIDS and HIV-related deaths in England—2022 to 2025. Included in this plan were a wide range of targets, including reducing the number of new diagnoses by 65% from the 2019 number of 2860 to under 600 in 2025. Such an ambitious decrease cannot solely rely on sexual health clinics and postal or online testing kits. Among the innovative ideas in this action plan is a project to use opt-out HIV testing in emergency departments in areas of the UK where HIV prevalence is over 5 per 1000 people aged 15–59 years.

A pilot phase of this project has now been completed. Although initially focused on HIV, the pilot programme was able to connect with another UK project aimed at eliminating hepatitis B and C, so that in many cases tests for all three infections could be done for all people entering emergency departments in high HIV prevalence areas (where blood tests form part of the care they are receiving). This first part of the opt-out testing pilot was focused on facilities in the areas of highest diagnosed HIV prevalence: London, Brighton, Manchester, Salford, and Blackpool. Some sites were already doing testing for these viruses (not all on an opt-out basis). The opt-out HIV testing project was launched in April 2022, building on existing testing in emergency departments at some sites. The initial data cover April to July, 2022, and 28 emergency departments in these areas. In just these 3 months, 128 new HIV diagnoses were recorded and a further 65 people already diagnosed but not in treatment were reconnected with care pathways. A total of 325 new hepatitis B and 153 new hepatitis C diagnoses were also recorded.

Green applauded these results and said the approach must now be adopted in the areas of the next-highest HIV prevalence (2–5 per 1000). These include

Milton Keynes, Nottingham, Leeds, and Bolton. “These early results from this approach found that those diagnosed in emergency departments were more likely to be women, of Black ethnicity, and heterosexual than those diagnosed via the sexual health department”, he explained. “It diagnoses people who are very unlikely to test anywhere else, and means they are found before their health deteriorates to the point where they need to be hospitalised.”

The UK achieved the UNAIDS 95-95-95 goal in 2020. “Whilst the UK’s achievement of 95-95-95 targets is laudable, and the attainment of zero new HIV transmissions seems inevitable, these figures mask just how far away that seemingly close goal really is”, said Waters. “In 2021, almost 12 000 people living with HIV were thought to be living with a transmissible level of virus, of whom only one in three were undiagnosed. This means that new transmissions are more likely to be driven by people who struggle to access care or take HIV treatment.”

Waters asserts that HIV testing alone cannot eliminate HIV transmission and that all people living with HIV must be adequately supported to attain viral suppression. She highlights that expansion of PrEP “will require the drugs we use to be accessible beyond specialist HIV pharmacies”.

“The steady decline in diagnoses over recent years is fantastic, but the plateau between 2020 and 2021 means we need to up our game, not relax due to the UK success in achieving 95-95-95, and increase investment in testing, prevention and treatment support to reach everyone in need. We have the tools to reach zero HIV transmission, but we need trained staff and funded services to implement those tools”, Waters concludes.

Tony Kirby