

HIV Epidemiology

At present there are an estimated 89000 people living with HIV in England⁽¹⁾, 6000 in Scotland⁽²⁾, 900 in Northern Ireland⁽³⁾ and 1800 in Wales⁽⁴⁾. In the UK the HIV epidemic disproportionately affects white men who have sex with men (MSM) and heterosexuals from countries with more generalised epidemics. However, the population of people living with HIV in the UK is diversifying with increasing proportions of MSM from black, Asian and other minority groups and white heterosexuals. Prevalence of HIV infection is low among injecting drug users as a result of successful needle exchange programmes. The rate of mother to child transmission in the UK is <0.5%.

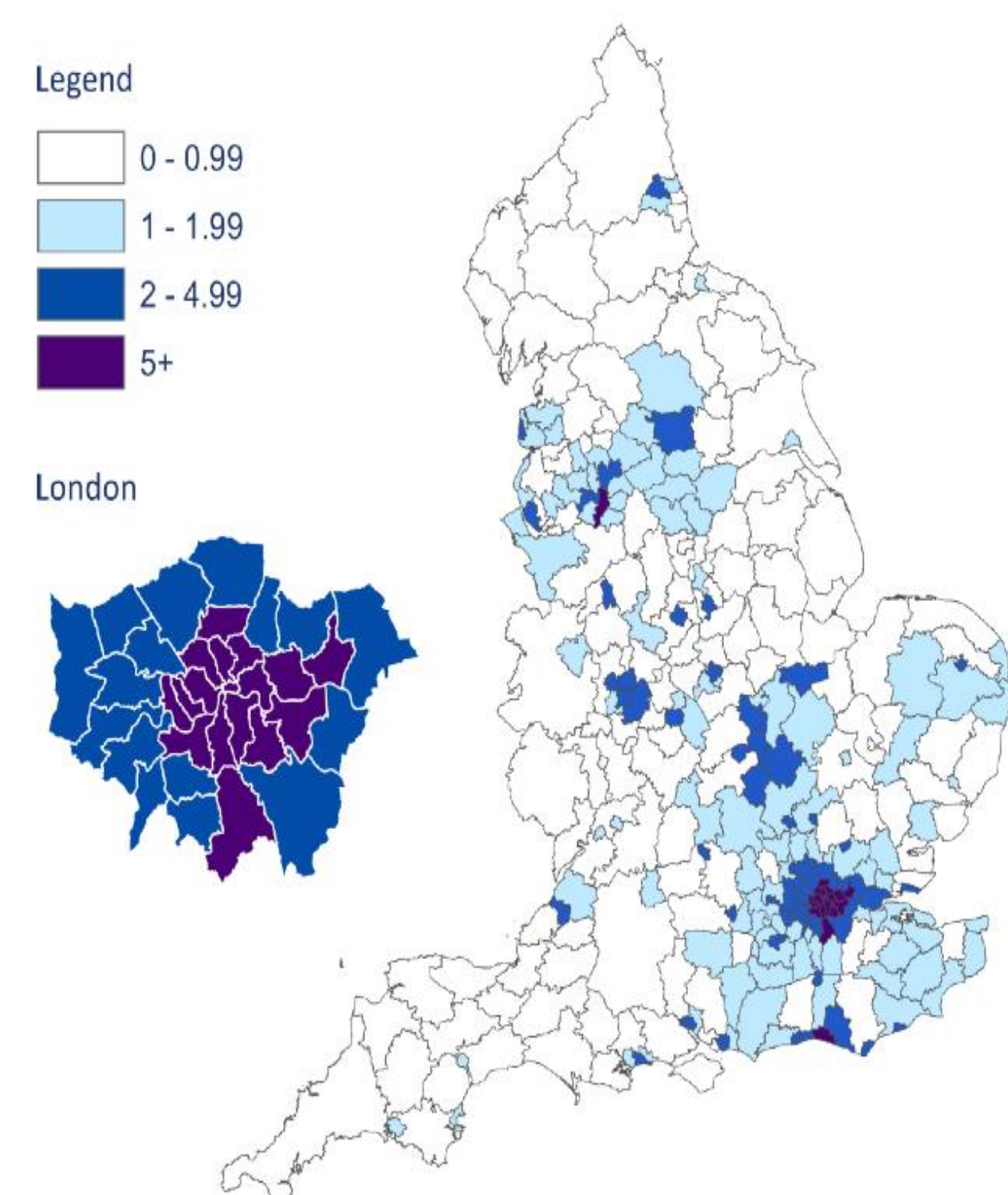


Figure 1: HIV prevalence in the UK

The prevalence of people living with HIV is higher in urban areas with large parts of London, Brighton and Manchester all exceeding a diagnosed prevalence of 5 per 1000 population (**figure 1**). Edinburgh and Glasgow have the highest prevalence, both exceeding 2 per 1000 population. For the first time since the onset of the HIV epidemic the UK has seen a decline in new diagnoses in MSM. This has been focused around 5 large London clinics where the number of men testing positive fell by 35% between 2015 and 2016. A smaller decline has also been seen elsewhere in London and the UK (**figure 2**).

The decline has been attributed to a combination of strategies: 1) Increased first HIV testing in MSM 2) Increased repeat HIV testing in MSM 3) Early initiation of ART 4) Availability of PrEP and 5) Condom use.

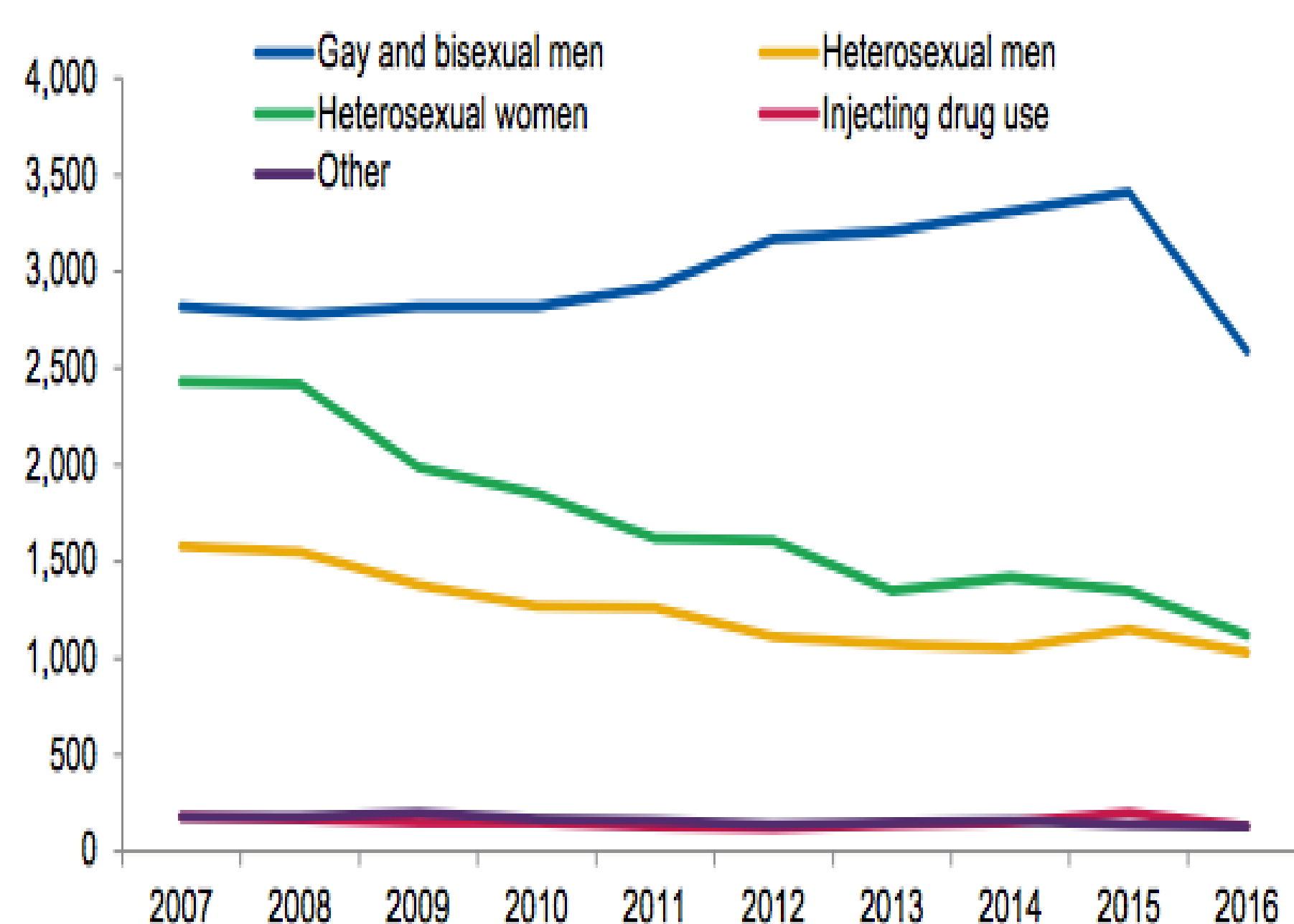


Figure 2: UK HIV yearly incidence

UK funding cuts: generics and costs

In the UK there is a National Health Service (NHS) which provides free health care. PLWH also have access to free anti-retroviral therapy (ART). Over the last few years, there have been NHS budget cuts across the health service.

HIV services:

The HIV drug budget is reducing whilst the number of PLWH who need ART is increasing. We are treating more people with less money whilst maintaining high standards of care for patients.

Starting ART: Different regions of the UK negotiate different prices for drugs. Each region has a prescribing policy based on cost which states 1st, 2nd and 3rd line ART. To prescribe certain ART, MDT approval is needed.

Switching ART: Generic ART or cheaper alternatives can lead to huge cost savings. During a consultation cheaper alternative regimens are discussed with patients, but the choice to switch remains with them. Only clinically appropriate switches are discussed. Possible switches are listed below:

Previous regimen	Switch regimen
Branded abacavir and lamivudine (Kivexa)	Generic abacavir and lamivudine
Prolonged release nevirapine (Viramune)	Generic prolonged release nevirapine
Branded FTC, TDF and efavirenz (Atripla)	Generic efavirenz and truvada (FTC/TDF)
Darunavir/ritonavir	Darunavir/cobicistat
Atazanavir/ritonavir	Atazanavir/cobicistat

As a result of drug cost switches (in table 1) almost £10 million was saved in the financial year 2016/2017.¹ Whilst many switches were smooth, some PLWH needed to switch back to their old regimen or a different regimen due to side effects and tablet size.

Sexual Health services funding:

Between 2016-18, there have been cuts to STI testing and treatment services and significant reductions in funding for sexual health promotion, prevention and advice – cuts greater than in any other public health service.

Overall, local authority budgets for sexual health were reduced by £30 million – a 5% cut.

There have been significant increases in the rates of diagnosis for certain diseases, including a 12% increase in the diagnosis of syphilis – the largest number of diagnoses reported since 1949.

For instance, Lambeth council in central London cut funding for sexual health promotion, prevention and advice by over 85% between 2016/17 and 2017/18 yet this area has the highest level of new STIs in England. There have also been recent changes in the provision of sexual health services across Lambeth and Southwark in London, with three out of six clinics closing and more services being delivered online.

Many services have also been closed outside of London, with others being taken over by private companies, where care is reported to be of lower quality with impaired access to research studies (including the PrEP Impact study).

PrEP funding:

Despite evidence for the efficacy of PrEP and cost-effectiveness mathematical modelling, the UK Government has decided against its free provision on the NHS, in England (March 2016). This was legally challenged by the National AIDS Trust leading to an urgent review. BHIVA released a statement guiding clinicians and informing best practice related to PrEP in May 2016, which was followed by the government stating that 'more evidence' was needed and the release of £2 million to fund the PrEP Impact Study (June 2016).

Current PrEP Access in the UK

England – the *PrEP Impact* trial started recruiting in Oct 17 with 10,000 places available to subjects aged ≥ 16 for a 3 year period. The aims are to assess how many people need PrEP, how many want to take it and for how long.

Scotland – PrEP is available on the NHS to people considered eligible attending sexual health clinics, who are aged ≥ 16 and resident in Scotland.

Wales – GUM clinics are currently running the *PrEPARED* trial for 3 years which is open to any Wales resident aged ≥ 18, meeting the eligibility criteria with no cap on numbers.

Northern Ireland – all GUM clinics in Northern Ireland are assessing people for eligibility and referring to a centralised service in Belfast. The project is running for 2 years and has no cap on numbers. Participants must be aged 16 or over and resident in Northern Ireland.

Online sources - Generic versions of PrEP, bioequivalent to the branded Truvada® (Gilead Ltd) can be bought online without prescription via websites such as www.iwantprepnw.co.uk. This was set up by activists after evaluating the authenticity of online pharmacies. In the UK, buying online drugs is legal under UK import law. A study by 56 Dean Street in London evaluated TDF/FTC plasma concentrations and clinical outcomes in 234 MSM purchasing generic truvada online (mostly Tenvir-EM® Cipla Pharmaceuticals, Mumbai, India).⁽⁸⁾ All individuals had adequate exposure to both FTC and TDF, above formal pharmacokinetic targets for PrEP. This supported the authenticity of generic formulations bought online. Pricing is around £40/month.

It is difficult to estimate the exact numbers using PrEP in the UK. Around 1300 people have been prescribed PrEP in Scotland since July 17, the vast majority of whom (96.8%) are MSM, with 82% choosing daily dosing.¹ A recent UK survey of PrEP use showed that 21% of subjects had tried to access PrEP since January 2018 and been unable to; 72% of these were living outside London.

References

- 1) Brown et al. Public Health England Nov 2017. 2) Health Protection Scotland and Glasgow Caledonian University. Blood borne viruses and sexually transmitted infections: Scotland 2017. 3) HSC Public Health Agency. HIV Surveillance in Northern Ireland 2016: An analysis of data for the calendar year 2015. 4) Communicable Disease Surveillance Centre. HIV and STI trends in Wales. Public Health Wales. June 2018. 5) <http://www.aidsmap.com/Nearly-a-quarter-of-people-who-want-PrEP-currently-cant-get-it-UK-survey-finds/page/3297439/>. 6) Waters L et al. 4th Joint Conference BHIVA and BASHH, April 2018. 7) <http://i-base.info/guides/starting/nhs-changes-and-generic-drug>. 8) Wang et al. HIV Medicine (2018), 19,1-6