Leaders’ Briefing: Addressing late HIV diagnosis through screening and testing

This briefing provides Public Health leaders with an overview of HIV screening and testing to address the challenge of late HIV diagnoses. It is accompanied by an evidence summary on the impact and economics of HIV screening and testing. The documents are available online here.

National policy on HIV screening and testing
The Department of Health has included three high-level sexual health indicators in the Public Health Outcomes Framework; reducing late-stage HIV diagnoses, chlamydia diagnoses among 15-24 year olds, and under 18 conceptions. A Framework for Sexual Health Improvement sets out national ambitions for good sexual health, and presents a package of interventions and actions to improve sexual health outcomes – including opportunistic screening and testing for HIV. The expansion of HIV screening and testing is critical to reducing late HIV diagnoses and controlling HIV transmission.

The rationale for opportunistic HIV screening and testing
- Individuals with HIV have a near-normal life expectancy if diagnosed early and treated promptly
- Earlier diagnosis of HIV also delivers lower treatment and care costs
- However, in the UK we know that:
  - 1 in 5 of those living with HIV remain undiagnosed (an estimated 22,000 undiagnosed HIV infections)
  - Nearly half of new HIV diagnoses (47%) are being diagnosed late (CD4 <350)
  - 1 in 4 people newly diagnosed with HIV had a missed opportunity for earlier diagnosis in medical services in the previous year
- It is estimated that the majority of onward transmission is from those with undiagnosed HIV. Once diagnosed, individuals are less likely to pass on their infection due to treatment and behaviour change
- Increased rates of HIV screening and testing are critical to reducing late HIV diagnoses and the undiagnosed fraction, and therefore controlling the epidemic

PHE advises that comprehensive HIV screening and testing is essential to a local sexual health service, and encourages all areas to review provision against policies summarised in this document.
### Six common questions about HIV screening and testing

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tr>
<td>What is the potential impact on late HIV diagnoses?</td>
<td>Promoting HIV screening and testing can reduce the number and proportion of individuals presenting with a late HIV diagnosis, at both population and service levels.</td>
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<tr>
<td>What is the potential impact on HIV transmission?</td>
<td>Mathematical models suggest increased testing, and early commencement of treatment will decrease the incidence of HIV in most at-risk populations, such as men who have sex with men.</td>
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<td>Is it cost-effective?</td>
<td>HIV screening and testing is cost-effective. NICE estimate significant cost savings from reduced onward transmission, and lower treatment costs are associated with earlier HIV diagnosis. In the USA, the return on investment for HIV screening and testing was estimated as 1.95 for every 1 invested. This ratio increased with higher local prevalence of HIV.</td>
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<td>What is a high prevalence area?</td>
<td>An area where the estimated prevalence of undiagnosed HIV is greater or equal to one per 1,000 population aged 16-59. In general this will be the case if the prevalence of diagnosed HIV infection is 2 per thousand or greater. A list of these areas is available <a href="#">here</a>.</td>
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<td>Where should HIV screening and testing be promoted?</td>
<td>National guidelines recommend that all patients attending a) antenatal services should be screened for HIV; b) genitourinary medicine services should be HIV tested; and c) presenting with an indicator condition or reporting high-risk behaviour should be tested for HIV. In areas of high HIV prevalence HIV screening should be extended to hospital general medical admissions and women undergoing pregnancy termination. HIV testing initiatives in the community should be promoted according to local need.</td>
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<td>What are the harms associated with HIV screening and testing?</td>
<td>In lower prevalence populations the positive predictive value of HIV screening tests (such as a point of care test without a confirmatory test) is reduced, so that rapid referral to clinical services for confirmatory testing is essential.</td>
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### HIV screening and testing activity in your area

Your local Public Health England Centre sexual health team would be happy to discuss HIV screening and testing in your area. Their contact details can be found [here](#). Public Health England publishes annual HIV data tables, where you can compare your area data to the national average and to other local authorities – including diagnosed HIV prevalence and late HIV diagnosis rates. The PHE HIV & STI Web Portal offers registered users tools to produce detailed local analyses from several years of data – accessed [here](#). Data to inform local planning of sexual health services, including HIV screening and testing, are available in the PHE sexual and reproductive health profiles. Local authorities’ STI and HIV epidemiology reports (LASERs) are also available from your local PHE team.
**Consideration for local actions**

Local Public Health Leaders have an opportunity to build on progress in tackling HIV by establishing and/or maintaining opportunistic HIV screening and testing in appropriate medical and community services. This will require coordination between the major commissioners of HIV prevention, treatment, and care, that is: local authorities, clinical commissioning groups, and NHS England. Commissioners are advised to ensure that they:

- are up to date with local data on the prevalence of diagnosed HIV, late HIV diagnoses, and the proportion of the population that are at high-risk of infection
- are aware of the coverage being achieved by HIV screening in antenatal services and by opt-out HIV testing in genitourinary medicine clinics
- if in a high prevalence area, promote the establishment of HIV screening in hospital general medical admissions and women undergoing termination of pregnancy
- review whether local policies and practice reflects current National HIV testing guidelines, for specific indicator conditions
- offer training and support for HIV testing, as well as other sexual health issues, in local primary care services
- establish, support and evaluate community testing initiatives, according to local needs

**Useful resources**

- UK National HIV Testing Guidelines
- National Institute for Health and Care Excellence Public Health Guidance on HIV Testing (PH33 and PH34)
- Public Health Outcomes Framework
- A Framework for Sexual Health Improvement