

## Preventing HIV in the UK heterosexual population



#### Our strategic goals

All our work is focused on achieving five strategic goals:

- effective HIV prevention in order to halt the spread of HIV.
- early diagnosis of HIV through ethical, accessible and appropriate testing.
- equitable access to treatment, care and support for people living with HIV.
- enhanced understanding of the facts about HIV and living with HIV in the UK.
- eradication of HIV-related stigma and discrimination.

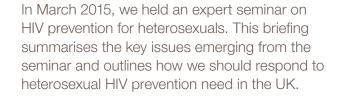
#### **Our vision**

Our vision is a world in which people living with HIV are treated as equal citizens with respect, dignity and justice, are diagnosed early and receive the highest standards of care, and in which everyone knows how, and is able, to protect themselves and others from HIV infection.

NAT is the UK's leading charity dedicated to transforming society's response to HIV.

We provide fresh thinking, expertise and practical resources.

We champion the rights of people living with HIV and campaign for change.





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## HIV in the UK heterosexual population

#### Impact of HIV on heterosexual men and women in the UK

In 2013 Public Health England estimated that 59,500 heterosexual men and women in the UK were living with HIV – representing over half (55%) of the UK epidemic.1

In the same year, 2,490 heterosexual men and women were newly diagnosed with HIV - 42% of new diagnoses. It is estimated that a third of heterosexual men and women living with HIV are not vet diagnosed. 2

As with the UK HIV epidemic overall, the vast majority of cases are in England with the largest number of new diagnoses in 2013 recorded in London.3

Issue: HIV transmission amongst heterosexuals living in the UK is ongoing and contributes significantly to our epidemic.

**Response:** It is time to think again about which heterosexuals acquire HIV in the UK and how we can best meet their prevention needs.

#### **Understanding our heterosexual HIV** epidemic

HIV infections acquired in the UK have been significantly underestimated in the past.<sup>4</sup> A new method is now used by Public Health England which takes into account time of arrival into the UK as well as CD4 count at time of HIV diagnosis.

Public Health England estimates that around 1,500 heterosexuals per year acquire HIV while living in the UK.5 In 2013, 57% of new diagnoses among heterosexuals in 2013 were UK-acquired.6

The contribution of migration to the UK HIV epidemic has declined significantly over the past decade, with a rapid decrease in new diagnoses among people who were born (and acquired HIV) in sub-Saharan Africa.<sup>7</sup>

The UK epidemic continues to reflect the unequal global burden of HIV, however, and African-born heterosexuals are still disproportionately affected by HIV.8 The number of European-born9 heterosexuals diagnosed in the UK has nearly doubled in the past decade.10

<sup>1 (</sup>Brown & Delpech, 2015) 2 (Brown & Delpech, 2015)

<sup>3 (</sup>Public Health England, 2014(2))

<sup>4 (</sup>Rice, Elford, Yin, & C., 2012)

<sup>5 (</sup>Public Health England, 2014(2)) 6 (Public Health England, 2014(3))

<sup>7 (</sup>Delpech, 2015) (Brown & Delpech, 2015) (Public Health England, 2014(2)) 8 (UNAIDS, 2012)

<sup>9</sup> Excluding UK

<sup>10 (</sup>Brown & Delpech, 2015)



59,500

heterosexual men and women living with HIV in the UK



One third of heterosexual men and women living with HIV are not yet diagnosed.



**55%** 

of people living with HIV in the UK are heterosexual men and men 57%

of new diagnoses among heterosexuals in were UK-acquired

2,490

heterosexual men and women were newly diagnosed with HIV in 2013 1,500

heterosexuals per year acquire HIV while living in the UK

Source: Public Health England, 2013 statistics

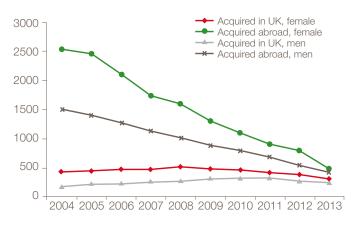
the same period, but is still significant.

The number of new diagnoses among heterosexuals born in the Caribbean and Asia has reduced over

**Issue:** The majority of heterosexuals newly diagnosed acquired their HIV in the UK. African-born men and women continue to be disproportionately affected by HIV but there are still significant numbers diagnosed from other groups.

**Response:** The remit of the future national HIV prevention programme for England should be expanded to meet the needs of all heterosexuals at risk of HIV, with appropriate resources.

## New diagnoses among heterosexual men and women by probable place of acquisition, UK



Source: Public Health England



#### HIV prevention needs of 'black Africans'

The term 'black African' is used frequently to describe the group of UK heterosexuals most affected by HIV, but it is not always clear whether it refers to ethnic identity, region of birth, or some other demographic category. It is important to be clear about how this term is being used, to understand the true nature of the impact of African HIV epidemics on black Africans living in the UK and the UK heterosexual epidemic as a whole.11

In 2013, 62% of newly-diagnosed heterosexuals described their ethnicity as 'black African'. 12 Nearly all of this group (96%) were born in Africa. 3% were UK-born. Additionally, the majority of newly diagnosed people who described their ethnicity as 'black other' (so would not normally be included in figures about 'black Africans') were African-born.<sup>13</sup> It is worth noting also that 5% of white heterosexuals diagnosed with HIV in 2013 and notable minorities of other ethnic groups were born in Africa.14

The annual number of diagnoses among heterosexuals born in Africa has decreased significantly over the past decade, reflecting changing migration patterns. Over the same period, the annual number of diagnoses among UK-born black Africans has remained stable.<sup>15</sup> Although this number is small, it represents 8% of new diagnoses amongst UK-born heterosexuals so is still out of proportion with the number of UK-born black Africans in the general population. It is important to consider the needs of this 'second-generation' (or indeed third or fourth) of African migrants as a potentially distinct population to African-born people - and vice-versa.

**Issue:** When assessing the prevention needs of heterosexuals living in the UK, region of birth and ethnicity are often conflated - especially for the black African population.

**Response:** An effective HIV prevention response for 'black African' heterosexuals must carefully untangle the assumptions which are made about place of birth, place of acquiring HIV and ethnicity.

#### Heterosexual men who have sex with men

This report focuses primarily on the HIV prevention needs of those exposed through heterosexual contact. But 'heterosexuality' is not only a description of sexual activity - it can also describe sexual orientation and/or sexual identity.

Phylogenetic analysis of new HIV diagnoses between 2002 and 2010 indicates that at least 6% of self-reported heterosexual men may have been infected with HIV through sex with other men – and as many as 21% of black African heterosexual men. 16

The term 'men who have sex with men' (MSM) is intended to encompass the full range of men engaging in same-sex sexual activity, regardless of their expressed sexual orientation or identity.

**Issue:** We cannot assume that prevention activities targeted towards gay men will reach men who self-identify as heterosexual.

**Response:** The prevention needs of heterosexual-identifying men who are MSM need to be considered by both MSM and heterosexual prevention efforts.

**Response:** Appropriate prevention materials should be available for men who have sex with men but who do not identify as gay or bisexual and may be uncomfortable with 'gay scene' media.

<sup>11 (</sup>Brown & Delpech, 2015)

<sup>11 (</sup>Brown & Delpech, 2014)
12 (Public Health England, 2014(2))
13 (Brown & Delpech, 2015) (Brown & Delpech, 2015)
14 (Brown & Delpech, 2015). Slide: Heterosexual men and women living with diagnosed HIV infection, by ethnicity: UK, 2013

<sup>15 (</sup>Brown & Delpech, 2015)

<sup>16 (</sup>Hue, et al., 2014)



#### Heterosexual risk behaviours of those diagnosed with HIV

There is limited recent research into which behaviours of heterosexual men and women are associated with HIV transmission in the UK. In general, our advice to heterosexuals about HIV prevention relies on population-level analyses of the epidemic in the UK. The most comprehensive heterosexual HIV risk assessment we have available - the African Health and Sex Survey - was commissioned specifically because of the elevated HIV prevalence in this population.

Public Health England routinely publishes data on the route of exposure, ethnicity and country of origin of people newly diagnosed with HIV, but it does not report any information on the partners of heterosexual men and women who are diagnosed HIV positive. This means we are unable to conclude whether HIV acquisition in individuals usually considered at lower risk (e.g. a white British-born woman) reflects specific sexual risk behaviours (e.g. high partner numbers), contact with individuals from populations with higher HIV prevalence (e.g. an African-born man), or some combination of factors.

Research involving lower-risk-group heterosexuals diagnosed between 1987 and 2003 found that they were more likely to report 'high risk' sexual behaviour than the general UK heterosexual population - including greater partner numbers and reporting that they never used condoms.<sup>17</sup>

However, even at the time of publishing (2006), the authors observed that behaviour differences between newly diagnosed heterosexual and the general population were diminishing over time due to significant changes in the sexual behaviour and attitudes of the general population.<sup>18</sup> The 2010-2012 National Survey of Sexual Attitudes and Lifestyles (Natsal) survey found an increase in women's reported number of sexual partners over a lifetime (7.7 in 2010-12 compared to 6.5 in 1999-2001), while men's reported number decreased (from 12.6 in 1999-2001 to 11.7 in 2010-2012).19 Partner numbers have always been an important factor in HIV prevention for men who have sex with men (MSM). Will the recent and rising popularity of locationbased online dating apps amongst heterosexual men and women mean a further increase in partner numbers and therefore HIV risk?

People who already have another sexually transmitted infection are more likely to acquire HIV. In 2013, 5.9% of newly diagnosed heterosexual men and 2.8% of newly diagnosed women had chlamydia, gonorrhoea and/or syphilis at the time of diagnosis (however, four times as many newlydiagnosed MSM - 25% - had a co-current STI at the time of diagnosis).<sup>20</sup>

Sex while travelling abroad in higher prevalence countries is associated with HIV acquisition, including in populations who in the UK are normally considered at low risk. A study of UK born adults<sup>21</sup> diagnosed with HIV<sup>22</sup> between 2002 and 2010 found that 15% acquired HIV abroad - either on holiday, or while visiting parts of the world where they have ancestral roots. Compared with UK born adults who had acquired their HIV in the UK, newly diagnosed men and women in this group were much more likely to be heterosexual, older, and to have reported sex with a commercial sex worker (5% compared with 1%).23

<sup>18 (</sup>Gilbart, et al., 2006) 19 (University College London (UCL), the London School of Hygiene & Tropical Medicine (LSHTM), NatCen Social Research (NatCen)., 2013) 20 (Public Health England, 2014(2))

<sup>21</sup> All exposure routes. Not only heterosexuals. 22 Diagnosed in England, Wales and Northern Ireland

<sup>23 (</sup>Rice, et al., 2012)



Finally, it must be kept in mind that 17% of the general public are unaware that HIV is passed on through sex without a condom between a man and a woman. Knowledge about HIV transmission risks is lower amongst people from black and minority ethnic groups.<sup>24</sup>

Issue: There is an urgent need to update and improve our understanding of the risk factors and behaviours associated with HIV transmission in heterosexuals, especially those from lower risk populations.

Response: Public Health England should re-invest in interviews of newly diagnosed heterosexuals to discuss risk factors and behaviours, to help identify who is most in need of prevention support.

**Response:** Public Health England research into HIV acquisition among UK-based heterosexuals travelling abroad should be updated and included in regular data collection.

#### Heterosexual HIV acquisition in areas of 'low prevalence'

Current public health guidance recommends increased offers of HIV testing in NHS services in areas of high HIV prevalence, including for all new GP registrants and general medical admissions in high prevalence areas. However, HIV diagnoses figures from 2013 shows that newly-diagnosed white heterosexuals (who would not otherwise be routinely offered HIV testing) are more likely to live in areas of lower HIV prevalence, where optout testing is not recommended. There are also significant numbers of black African heterosexuals diagnosed in areas of lower prevalence.

**Issue:** Efforts to normalise HIV testing in high prevalence areas, whilst essential, are likely to miss a significant proportion of heterosexuals living with undiagnosed HIV - who are not reached by other targeted prevention interventions.

Response: All sexual health commissioners should use available surveillance data to consider whether there is unmet prevention need, including in non-African heterosexual populations, and invest in appropriate services.

	of new diagnoses by revalence areas – by 2013	Prevalence ≥2/1,000	Prevalence <2/1,000	Total	% diagnosed in lower-prevalence areas
MSM		22,713	10,242	32,955	31%
Heterosexual	Black African	16,201	6,778	22,979	29%
	Black Caribbean	1,346	249	1,595	16%
	White	3,341	4,449	7,790	57%
	Other ethnicity	2,882	996	3,878	26%
PWID		771	493	1,264	39%
Other		953	525	1,478	36%
Unknown		1,412	559	1,971	28%
Total		49,619	24,291	73,910	

24 NAT. 2014)



#### Anal sex

The risk of HIV transmission during anal sex is thought to be 18 times higher than for vaginal sex. HIV transmission studies and prevention interventions for heterosexuals are mainly built on an assumption of vaginal sex as the primary route of transmission. The most recent Natsal survey has found an increase in the number of respondents reporting anal sex. In 2010-12, 15% of women reported anal sex, compared with 11% in 1999-2001.

Issue: Heterosexuals increasingly report anal sex, which tends not to be a primary focus of heterosexual HIV prevention interventions.

Response: HIV prevention efforts should consider specific behavioural risks and prevention needs of heterosexuals, for example anal sex and partner numbers, just as we do for MSM.





## 2. Our current response

#### Investment in HIV prevention for heterosexuals across the UK

In England, where 93% of new diagnoses are made, HIV prevention comes within the public health responsibilities of local authorities.

In addition, from 2012 to 2015, the Department of Health commissioned HIV Prevention England (HPE), the English national HIV prevention programme, which has funding of £2.45 million per year to invest in the needs of MSM and black African heterosexual men and women.

The only national strategic document covering HIV prevention for England is currently the Framework for Sexual Health Improvement, which pulls together existing thinking on prevention and identifies priorities for action. For black African heterosexuals, there is NICE guidance to encourage update of HIV testing – this is a key tool for prevention in this population, but as a document it does not take the place of a strategic planning framework.

Scotland has a Sexual Health and Blood Borne Virus Framework. HIV prevention in Scotland is primarily the responsibility of Health Boards, with additional projects funded directly by the Scottish Government and local authorities. In Northern Ireland, there is no specific budget allocation for HIV prevention funding, which will be determined by local health boards. The Welsh Government

provided specific funding for HIV prevention as part of the Sexual Health and Wellbeing Action Plan for Wales (2010-2015) and Health Boards also have a prevention remit as part of their overall sexual health and HIV responsibilities.

**Issue:** The greatest investment in HIV prevention specifically for heterosexuals has been in England, where the vast majority of new cases are diagnosed. However, national prevention funding here has exclusively targeted people of black African ethnicity.

**Response:** The remit of the future national HIV prevention programme for England should be expanded to meet the needs of all heterosexuals at risk of HIV, with appropriate resources.



#### **Local prevention services in England**

Open-access sexual health clinics are a mandated service within local authorities' public health responsibilities, but primary HIV prevention is not.

The Public Health Outcomes Framework for England includes an indicator about HIV late diagnosis. However, NAT's survey of local authority spending on primary HIV prevention found that for the year 2014/15, 60% of high-prevalence local authorities had not invested in any HIV testing services outside of sexual health clinics.

The same survey found that in 2014/15, high prevalence local authorities collectively invested £10.3 million in primary HIV prevention.<sup>25</sup> This included £5.8 million allocated to prevention which was not specifically targeted towards prevention for MSM, substance users or sex workers – so would be expected to reach local heterosexual populations with HIV prevention needs, as identified by the commissioner. Some local authorities' responses indicated that they were clearly targeting at-risk black and minority ethnic populations. Overall, however, there was no relation between local authorities' HIV prevalence and their approach to HIV prevention, either in amounts invested or in interventions commissioned.

**Issue:** Local investment in HIV prevention services in England varies greatly from area to area but this variation does not reflect prevalence rates. Moreover, it is not always clear which heterosexual populations are being targeted by interventions.

Response: All sexual health commissioners should use available surveillance data to consider whether there is unmet prevention need, including in non-African heterosexual populations, and invest in appropriate services.

#### Testing as a tool for heterosexual prevention

HIV testing is a vital tool for prevention, especially in high-prevalence populations where there are significant numbers of undiagnosed people. At least 50% of new HIV infections are thought to originate with someone who does not know their HIV positive status.<sup>26</sup> Only around two-thirds of HIV positive heterosexuals are diagnosed and accessing treatment and care.27

Guidance on HIV testing for heterosexuals<sup>28</sup> focuses on those who have had sexual contact with partners who are known to be HIV positive, MSM, or known to be from a country of high-HIV prevalence, in addition to anyone diagnosed with another STI. It also recommends testing for everyone living in areas with higher HIV prevalence (≥2 diagnoses per 1,000).

Heterosexual men and women of black African ethnicity experience higher rates of undiagnosed HIV compared with those in other ethnic groups and are also more likely to be diagnosed late.<sup>29</sup> For this reason, increasing opportunities for black African men and women to take an HIV test has been a major focus of our prevention response for heterosexuals in recent years.

85% of respondents<sup>30</sup> to the African Health and Sex Survey 2013-14 were very confident or quite confident that they could get an HIV test if they wanted one.<sup>31</sup> Additionally, 79% knew that HIV treatment is more effective if started early and 64%<sup>32</sup> knew that HIV treatment is freely available to all who need it in England. However, only 27%<sup>33</sup> of respondents were confident in their knowledge of the elevated prevalence of HIV among African people living in the UK.34

<sup>26 (</sup>Marks, Crepax, & Janssen, 2006) 27 (Brown & Delpech, 2015)

<sup>28 (</sup>British HIV Association, British Association of Sexual Health and HIV, British Infection Society, 2008) (NICE, 2011)

<sup>29</sup> Brown & Delpech, 2015) 30 And 86% of African-born respondents (Who made up around 70% of the sample. 18% of all respondents were UK-born.) Personal Communication, David Reid, Sigma, London School of Hygiene and Tropical Medicine

<sup>31 (</sup>Bourne, Reid, & Weatherburn, African Health and Sex Survey 2013-14: Headline findings, 2014)

<sup>32 65%</sup> African-born Personal Communication, David Reid. 33 30% African-born. Personal Communication, David Reid.

<sup>34 (</sup>Bourne, Reid, & Weatherburn, African Health and Sex Survey 2013-14: Headline findings, 2014)

<sup>25</sup> Behavioural and testing interventions with a stated intention of preventing HIV

Everyone has a right to know their HIV status and should have the opportunity to test. Men and women who are considered at elevated risk of HIV due to demographic or behavioural factors should be actively encouraged to test.

The impact of testing as an HIV prevention strategy, however, does differ depending on the population in question. For example, based on current Public Health England estimates of undiagnosed HIV among heterosexuals, services would need to test only 49 black African women in order to identify one previously-undiagnosed woman. By comparison, services would need to test 10,897 non-black African women, on average, per positive result.35

Issue: The increased offer and uptake of HIV testing, as recommended in current guidelines, is a powerful tool for HIV prevention in high prevalence populations. However, it does not seem realistic to propose universal, repeat HIV testing for all sexually active heterosexual adults living in the UK.

•••••

Response: NHS providers, local authorities, Clinical Commissioning Groups and NHS England need to implement NICE and BHIVA/BASHH/BIS guidance on HIV testing as a matter of urgency.

#### How many HIV tests are needed among heterosexuals for each positive result?

England and Wales 2013

#### **HIV Prevention England**

HIV Prevention England was commissioned to target heterosexual prevention interventions exclusively towards those of black African ethnicity. These interventions did not differentiate between those UKborn and those born in Africa (although, as shown in section 1, it is the latter population who are most affected by HIV.)

The programme consists of high-profile national campaigns ('It starts with me' and 'National HIV testing week'), provision of HIV home-sampling kits to target populations, online information and support, local services delivered by community organisations, and engagement work with commissioners and decision-makers (plus monitoring and evaluation of these activities). HPE has been re-commissioned for an additional year (2015-16), with £1.2 million funding. There was no national investment in England for heterosexual HIV prevention for people of non-African ethnicities.

Unlike previous national prevention programmes<sup>36</sup>, HPE has not been informed by a strategic planning framework<sup>37</sup> or similar consensus document, which outlines guiding assumptions about the HIV prevention needs it aims to meet and the specific behaviours it wishes to influence in target populations.

#### **Black African men** Non-black African men **Black African women** Non-black African women Tests needed for each positive result 2,130 7,500 Estimated number living with undiagnosed HIV infection (95%CRI) 1.46% 0.01% 2.03% 0.01% Estimated prevalence of undiagnosed infection Estimated prevalence of undiagnosed infection Estimated prevalence of undiagnosed infection Estimated prevalence undiagnosed infection 339,052 **23,187,8<u>86</u>** 22,228,756 369,082

<sup>35 (</sup>Bourne, Reid, & Weatherburn, African Health and Sex Survey 2013-14: Headline findings, 2014)

<sup>36</sup> CHAPS for MSM and NAHIP for black Africans 37 Making it Count for CHAPs and The Knowledge, the Will and the Power for NA-



Instead, the MSM and African components of HPE shared three broad-brush goals: to increase HIV testing in order to reduce undiagnosed and late diagnosed HIV; to support sustained condom use and other behaviours which prevent HIV infection; and to tackle stigma within both communities and more widely.

**Issue:** HIV Prevention England did not develop a heterosexual-specific strategy for HIV prevention.

**Response:** There is a need to develop a new strategic planning framework for HIV prevention amongst heterosexuals, similar to that which has guided previous MSM and black African prevention. This should include evidence-based and nuanced recommendations about sub-populations most at risk and realistic behavioural strategies to reduce HIV risk for all heterosexuals.

## Targeted prevention for black African heterosexuals

Social media messages were a key component of HIV Prevention England's 2012-2015 campaign It Starts With Me and the Terrence Higgins Trust conducted detailed market research with the target audiences (MSM and black African heterosexuals). They found that HIV testing messages which depicted people of a range of ethnicities were more popular with black African people than were those featuring exclusively 'African' images. The London HIV Prevention Programme (LHPP) has had similar feedback in its market research.<sup>38</sup> This is contrary to the logic of most health promotion campaigns, which would aim to show target audiences people who 'look like them'.

This reflects the stigmatised nature of HIV generally, and specifically the HIV stigma experienced by black Africans living in the UK.<sup>39</sup> HPE received comments including those below about the African-only version of their campaign:

"It makes people feel as if HIV only affects black people"

"I feel this singles out a certain racial demographic".

By contrast, respondents said the multi-ethnic advert was more likely to make them think differently about testing and African men specifically said they were more likely to be motivated to test after viewing the diverse advert.

**Issue:** Black Africans living in the UK need appropriately-targeted HIV prevention interventions – but many service users prefer not to see exclusively African campaign materials.

**Response:** Heterosexual HIV prevention resources must be appropriately weighted and messages tailored towards the needs of Africanborn heterosexuals. However, ethnicity does not need to be at the foreground of all messages about testing and safer sex between men and women at risk of HIV.

38 (Barker, Ball, & Isitt, 2013) 39 See also (NAT, 2014)

#### The role of NHS services

NHS services without a specialist sexual health remit are crucial to reaching heterosexual men and women who may not perceive themselves to be at risk of HIV.

There is a widely accepted list of HIV 'indicator conditions', diagnoses which are strongly associated with HIV infection. A recent Europe-wide study of routine testing of people presenting with these conditions found positive rates of 2.5% overall.<sup>40</sup> Particularly striking were the positive rates (5.3%) for those tested following the presentation of glandular fever-type symptoms, which may point towards primary HIV infection – the first few weeks during which someone is much more infectious. However, less than half of UK clinical guidelines relating to indicator conditions mention HIV testing.41

The evidence for the effectiveness of opt-out testing for new registrants in GP surgeries in high prevalence areas – recommended since 2008 - also continues to mount. 42 43 44

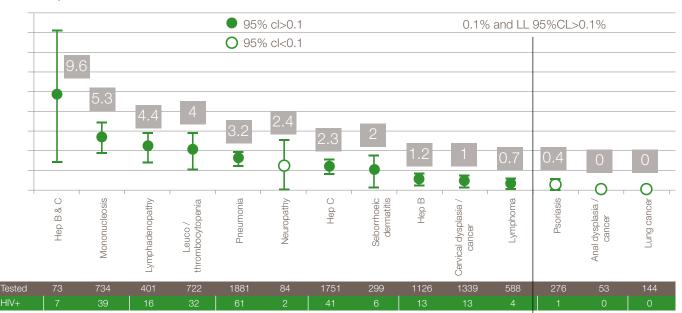
A recent randomised control trial in East London found that double the number of patients offered opt-out testing at registration were diagnosed with HIV (32 patients) compared with the control group who received care as usual without the opt-out offer at registration (14 patients).45

**Issue:** Opt-out testing for GP registrants and general medical admissions in high prevalence areas has great potential to reduce undiagnosed HIV and therefore contribute to the prevention of onwards transmission – but the role of NHS services to offer HIV tests does not end here. The proactive offer of an HIV test for all presenting with symptoms of indicator conditions, especially those which may indicate primary infection, could have a huge impact.

**Response:** The whole of the NHS must take responsibility for HIV diagnosis, not only HIV specialist clinics or GPs with dedicated funding to test. Good clinical care demands that HIV be included in any differential diagnosis for symptoms which may point to primary or advanced HIV infection.

#### **HIV** prevelance by indicator condition

Source: M Rayment, 2015



40 (Rayment, The effectiveness of indicator condition based HIV testing across Europe: results from HIDES-2, a prospective multi-centre study, 2015)
41 Of sixty clinical guidelines published since the BHIVA/BASHH/BIS 2008 Testing Guidelines: 26 made any mention of HIV testing and 20 actually recommended

42 (Health Protection Agency, 2011) 43 (British HIV Association, British Association of Sexual Health and HIV, British Infection Society, 2008) 44 (NICE, 2011)

<sup>45</sup> Promotion of rapid testing for HIV in primary care (RHIVA2): a cluster-randomised controlled trial THE LANCET (Leber, et al., 2015)s

Sex and Relationships Education (SRE) is not compulsory in schools in England or Scotland. In Northern Ireland and Wales, where there is statutory SRE, HIV is a recommended topic to cover, but not itself required by law.

Sex and relationships education in schools

Compulsory education about HIV and AIDS has been retained in the draft English National Curriculum but only as part of the science curriculum for ages 14-16. (This curriculum only applies to maintained schools, not free schools or academies).

A 2011 survey found that 28% of young people aged 16 or over had not learnt about HIV at school.<sup>46</sup>

**Issue:** HIV education, including information on prevention in the context of safer sex, is not being provided to all pupils in the UK.

**Response:** All school pupils in the UK deserve equal access to education about HIV, in a way which is directly relevant to their current and future sexual lives. Statutory sex and relationships education as part of personal, social health and economic (PSHE) education should be introduced in England and Scotland and all nations should have consistent guidance on teaching HIV within the PSHE curriculum.



## 3. Tools and opportunities for heterosexual HIV prevention

#### Using what we've got

In respect of HIV testing, in particular, there is a significant degree of consensus about the best ways to reduce late and undiagnosed HIV, expressed in the following evidence-based guidance:

BHIVA, BASHH and BIS. 2008. UK national guidelines for HIV testing.

NICE. 2011. Increasing the uptake of HIV testing among black Africans in England. NICE Guidance

MEDFASH and BASHH. 2014. Standards for the management of sexually transmitted infections (STIs).

Health Protection Agency. 2011. Time to Test for HIV: Review of expanded HIV testing in healthcare and community services in England.

In addition to recommendations about appropriate settings and target populations for HIV testing offers, these resources outline services' responsibilities in relation to partner notification (a 2013 national audit found that 23.5% of heterosexuals who took an HIV test following partner notification were also HIV positive.<sup>47</sup>) There is also clear guidance on identifying patients who may be experiencing the symptoms of HIV primary infection, the period within a few weeks of HIV acquisition when people are at their most infectious.

Not all of these recommendations will have the desired impact for heterosexual men and women who are from lower-risk populations and living in lower-prevalence areas (although partner notification and testing of people with indicator conditions will). Nevertheless, they are successful, proven cost-effective strategies for reducing undiagnosed HIV which have not yet been rolled out in all recommended settings.48 49

**Issue:** Existing recommendations to reduce rates of undiagnosed and late diagnosed HIV are evidencebased and could have a real impact but have not been consistently implemented.

**Response:** NHS providers, local authorities, Clinical Commissioning Groups and NHS England need to implement NICE and BHIVA/BASHH/BIS guidance on HIV testing as a matter of urgency.

<sup>47 (</sup>Rayment, 2013 Joint BASHH & BHIVA National Audit of Partner Notification of adults newly diagnosed with HIV infection, 2014)

<sup>48 (</sup>British HIV Association, 2011) 49 (NAT. 2014)

## 3

#### **Gendered perspective**

The UK's response to HIV has never been driven by a gendered analysis on why men and women acquire HIV through heterosexual sex, despite such an approach becoming the norm internationally.<sup>50</sup> Such an analysis highlights the impact of gender norms and identities on health outcomes – and is especially relevant when considering sexual relationships between men and women.

The gendered perspective is by no means completely absent from our understanding of the epidemic, and there are important contributions made to it by clinicians, researchers, community organisations and networks such as PozFem and the Sophia Forum. But it has never been truly integrated into our prevention response.

This may be because in the context of the UK epidemic - which is not a generalised one - heterosexual HIV prevention has focused primarily on ethnicity and/or place of birth as key predictors at risk.

A gendered perspective increases our understanding of HIV transmission risk factors within heterosexual partnerships for people of all backgrounds. It also adds to our understanding of health-seeking behaviours in men and women and how best to reach at-risk heterosexuals with HIV prevention and testing information.

**Issue:** Gender is not the only social determinant of HIV transmission (poverty, homophobia, transphobia and other culturally-specific issues will be relevant), but it is an important gap in the UK's approach to HIV prevention for heterosexuals which must be addressed.

**Response:** A new strategic planning framework for heterosexual prevention must take a gendered approach to HIV acquisition.

The knowledge that antiretroviral treatment can stop transmission, when used by HIV positive people or by their HIV negative partners, should revolutionise how we approach heterosexual HIV prevention.

Evidence for treatment as prevention (TasP) comes predominantly from heterosexual studies, chiefly the HPTN052 trial which found a 96% reduction in heterosexual HIV transmission<sup>51</sup> when the HIV positive partner was on antiretroviral therapy. BHIVA treatment guidelines recommend clinicians have a conversation with all patients about the option of commencing antiretroviral treatment earlier than is clinically recommended, for preventative benefit. NHS England proposes to commission TasP on the same basis. However, high rates of late diagnosed HIV amongst black African heterosexuals also suggest that early treatment commencement may have less impact on overall viral load for this population than, for example, MSM – as the majority currently need to commence treatment as soon as they are diagnosed for clinical reasons, anyway.

Only 56% of respondents to the African Health and Sex Survey were aware of the preventive impact of HIV treatment. Similarly, the Plus One study of African HIV sero-discordant couples in England found that nearly one-quarter of respondents were not aware of the relationship between viral load and infectiousness.<sup>52</sup>

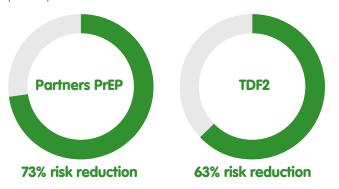
The Clinical Reference Group (CRG) for HIV in England is also developing recommendations for future funding for pre-exposure prophylaxis (PrEP), whereby certain HIV negative people will be prescribed antiretroviral drugs to prevent them acquiring HIV. Whereas the CRG will be able to draw on the recent UK PROUD study when considering PrEP for MSM, there are no UK and European studies relating to use of PrEP by heterosexuals. However, studies from generalised epidemics show that PrEP is a powerful tool for higher risk heterosexuals.

New prevention technologies

<sup>50</sup> See for example, UNAIDS - http://www.unaids.org/en/resources/presscentre/unaidsspeeches/2015/20150317\_SP\_CSW; UN Women - http://www.unwomen.org/en/what-we-do/hiv-and-aids; PEPFAR - http://www.pepfar.gov/documents/organization/206633.pdf

<sup>51</sup> Assumed by researchers to be vaginal sex but see also box on anal sex 52 (Bourne, et al., 2011)

The Partners trial of daily PrEP in Kenya and Uganda, for example, was halted 18 months early after an interim review found a 73% risk-reduction in the group who received Truvada (the PrEP drug also used in the PROUD study), compared to those receiving a placebo.53 The TDF2 study in Botswana found a 63% reduction in risk among those participants who received Truvada.



**Issue:** Pre-exposure prophylaxis and treatment as prevention offer benefits for heterosexuals at higherrisk of HIV acquisition.

**Response:** Treatment as Prevention must be explained and offered to all heterosexuals diagnosed with HIV in line with BHIVA guidelines and NHS England Commissioning Policy, once agreed.

**Response:** Pre-exposure prophylaxis, once commissioned, must be offered to all heterosexuals at risk of HIV who have the potential to benefit from it and who wish to take it.

#### Integrated sexual health services

In recent years, NHS services have moved towards greater integration of sexual health services, dismantling traditional boundaries between community sexual and reproductive health (CRSH) services (sometimes known as contraceptive and sexual health (CASH) or family planning services) and genitourinary medicine (GUM/GU) clinics.54

GUM clinics offer consultant-led specialist ('Level 3') services for the treatment of sexually transmitted infections (STIs) and is the main service meeting the sexual health needs of MSM. CRSH, by contrast, is chiefly associated with the reproductive and sexual health needs of women and will offer testing and treatment to patients who appear to have STIrelated needs ('Level 2' services).

HIV testing guidelines and standards for STI management recommend HIV testing for all men and women in all Level 2 and Level 3 services. 55 In 2013, 77% of heterosexual men and 67% of heterosexual women attending a GUM clinic were tested for HIV, compared with 86% of MSM.<sup>56</sup>

Both CRSH and GUM services exist to meet sexual health needs, but it is the latter which is given the greater prominence in policy discussions about HIV prevention and testing. The importance of GUM for MSM prevention and testing means the service has developed significant HIV expertise. But CRSH has a more holistic and potentially attractive offer for heterosexual women in particular, including those who would not consider themselves to have STIrelated needs. A more holistic and less infectionfocused service may also be more appealing to some heterosexual men.

Not all women will become pregnant but many more use NHS services to access hormonal contraception. While not all will be using it to avoid pregnancy, most are and would, in many cases, disclose they are having condomless sex with a male partner/s.

53 (Baeten, 2011)

<sup>54</sup> GU clinics offer Level 3 (specialist services) and must be led by a specialist GUM consultant. CRSH services offer Level 1 (asymptomatic) and Level 2 (complex/specialist) STI services, in addition to contraceptive services. (MEDFASH and BASHH,

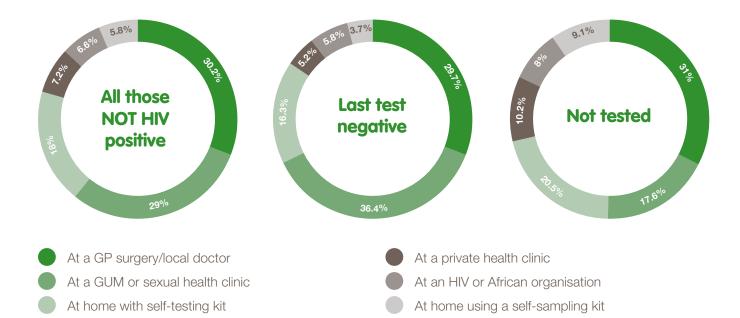
<sup>55</sup> All Level 2 and Level 3 services, which may be provided by GUM or CRSH. (MED-FASH and BASHH, 2014)

<sup>56 (</sup>Public Health England, 2014(2))



#### "If you were to take an HIV test in the future, where would you prefer to test?"

Responses to the African Health and Sex Survey 2013-14.



The African Health and Sex Survey asked participants for their preferred setting for an HIV test, including the options 'at a GUM, STI/sexual health or HIV clinic' and 'at a GP surgery/local doctor'<sup>57</sup> While both of these settings have a reproductive health remit and offer contraception, this would not be immediately clear to a respondent who did not have experience of sexual health services in the NHS. It would be interesting to see how African women in particular have responded if asked whether they would consider HIV testing and support with staying HIV negative as part of routine contraceptive and/or reproductive health services.

**Issue:** The integration of CRSH and GUM presents opportunities for mainstreaming HIV prevention and testing interventions for heterosexual women (from both higher and lower risk populations) who may attend an integrated sexual health clinic primarily for contraceptive access.

**Response:** Fully integrated sexual health services should be a key site of HIV prevention and testing interventions for heterosexuals. In addition to existing recommendations for HIV testing of sexual health clinic attendees who have needs related to STIs, integrated sexual health services should integrate HIV prevention and testing messages into all services, including contraceptive and reproductive health services.

<sup>57</sup> Other options listed: at home using a testing kit that would give me an immediate result, at a private health care clinic, at an HIV or African organisation, at home using a sampling kit that I sent to the lab for a result. (Bourne, Reid, & Weatherburn, African Health and Sex Survey 2013-14: Headline findings, 2014)

#### **Self-testing**

HIV self-tests, which provide an instant result at home which is then confirmed with a laboratory, are now on sale in England, Wales and Scotland. These are likely to appeal to those who believe they may have put themselves at risk but do not feel comfortable attending a sexual health service (amongst other reasons). Self-tests therefore have potential to reduce undiagnosed HIV amongst heterosexuals who are not reached by existing services. One fifth of respondents to the African Health and Sex Survey who had never tested for HIV said that a self-test at home was their preferred future setting for testing.<sup>58</sup> However, the anonymous nature of the tests poses questions for how surveillance data about newly diagnosed self-testers will be collected. This data is crucial for our understanding of the epidemic as well as how successful prevention interventions have been. In addition, the cost of self-tests may be prohibitive for many, unless commissioned or subsidised by public health services.

**Issue:** Self-tests have great potential to encourage testing amongst heterosexuals at risk of HIV but the cost could limit access.

Response: NHS and public health commissioners should consider providing selftests to heterosexuals at elevated risk of HIV.

#### Social media and online technologies

Social media offers new channels for targeting health messages to specific populations, making campaigns much more affordable and cost-effective than traditional media campaigns. HPE's 'It Starts With Me' campaign had real success with using online ads on social media to target MSM and black African heterosexuals on Facebook, Twitter and online dating sites.59

HPE used social media to promote a free homesampling service with key audiences and found that demand for the sampling kits had a very close relationship to online marketing of the tests. HPE had greater success reaching MSM on social media compared to black Africans, but 50% of the black African clients who ordered home sampling kits from HPE had come via social media. While black Africans were a minority of those ordering home sampling kits from HPE (5.4% of orders in phase 1 and 9.8% of orders in phase 2), there was a higher positivity rate amongst black Africans who tested than MSM clients (3.6% positivity in phase 1 and 2.6% in phase 2 – compared to 1.8% and 0.8% for MSM).60

There are limits to what social media can achieve in terms of health outcomes. A systematic review and meta-analysis of randomised control trials on the use of interactive online sexual health promotions found that while they may improve sexual health knowledge, self-efficacy, intentions and behaviour, it is less clear if this positive impact translates into better sexual health.<sup>61</sup>

**Issue:** Social media offers cost-effective channels for health and HIV messages.

**Response:** Interventions which aim to reach black Africans and other specific sub-populations most affected by HIV should target appropriate social media channels, even when messaging is not ethnically specific.

<sup>58 (</sup>Bourne, Reid, & Weatherburn, African Health and Sex Survey 2013-14: Headline findings, 2014)

<sup>59</sup> Social media algorithms target content to specific audiences based on their expressed interests. Google rules did not allow self-sampling HIV kits to be advertised so targeted adverts were limited to social networks and dating sites. 60 (Brady, 2014)

<sup>61 (</sup>Wayal, et al., 2014)



# 4. Action plan for preventing HIV in the heterosexual population

Based on the issues raised in the above sections, the following action plan outlines how we should respond to HIV in the UK heterosexual population.

#### Things to think about

It is time to think again about which heterosexuals acquire HIV in the UK and how we can best meet their prevention needs.

An effective HIV prevention response for 'black African' heterosexuals must carefully untangle the assumptions which are made about place of birth, place of acquiring HIV and ethnicity.

The prevention needs of heterosexual-identifying men who are MSM need to be considered by both MSM and heterosexual prevention efforts.

HIV prevention efforts should consider specific behavioural risks and prevention needs of heterosexuals, for example anal sex and partner numbers, just as we do for MSM. Heterosexual HIV prevention resources must be appropriately weighted and messages tailored towards the needs of African-born heterosexuals. However, ethnicity does not need to be at the foreground of all messages about testing and safer sex between men and women at risk of HIV.

A new strategic planning framework for heterosexual prevention must take a gendered approach to HIV acquisition.

Treatment as Prevention must be explained and offered to all heterosexuals diagnosed with HIV in line with BHIVA guidelines and NHS England Commissioning Policy, once agreed.

Pre-exposure prophylaxis, once commissioned, must be offered to all heterosexuals at risk of HIV who have the potential to benefit from it and who wish to take it.

#### Things to do

The remit of the future national HIV prevention programme for England should be expanded to meet the needs of all heterosexuals at risk of HIV, with appropriate resources.

Appropriate prevention materials should be available for men who have sex with men but who do not identify as gay or bisexual and may be uncomfortable with 'gay scene' media.

Public Health England should re-invest in interviews of newly diagnosed heterosexuals to discuss risk factors and behaviours, to help identify who is most in need of prevention support.

Public Health England research into HIV acquisition among UK-based heterosexuals travelling abroad should be updated and included in regular data collection.

There is a need to develop a new strategic planning framework for HIV prevention amongst heterosexuals, similar to that which has guided previous MSM and black African prevention. This should include evidence-based and nuanced recommendations about sub-populations most at risk and realistic behavioural strategies to reduce HIV risk for all heterosexuals.

Fully integrated sexual health services should be a key site of HIV prevention and testing interventions for heterosexuals. In addition to existing recommendations for HIV testing of sexual health clinic attendees who have needs related to STIs, integrated sexual health services should integrate HIV prevention and testing messages into all services, including contraceptive and reproductive health services.

Interventions which aim to reach black Africans and other specific sub-populations most affected by HIV should target appropriate social media channels, even when messaging is not ethnically specific.

#### Things to do immediately

All sexual health commissioners should use available surveillance data to consider whether there is unmet prevention need, including in non-African heterosexual populations, and invest in appropriate services.

NHS providers, local authorities, Clinical Commissioning Groups and NHS England need to implement NICE and BHIVA/BASHH/BIS guidance on HIV testing as a matter of urgency.

The whole of the NHS must take responsibility for HIV diagnosis, not only HIV specialist clinics or GPs with dedicated funding to test. Good clinical care demands that HIV be included in any differential diagnosis for symptoms which may point to primary or advanced HIV infection.

All school pupils in the UK deserve equal access to education about HIV, in a way which is directly relevant to their current and future sexual lives. Statutory sex and relationships education as part of personal, social health and economic (PSHE) education should be introduced in England and Scotland and all nations should have consistent guidance on teaching HIV within the PSHE curriculum.

NHS and public health commissioners should consider providing self-tests to heterosexuals at elevated risk of HIV.

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