African Health & Sex Survey 2013-2014: headline findings

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EXECUTIVE SUMMARY

The African Health and Sex Survey (AHSS) was a large-scale, HIV prevention needs assessment among black African people living in England. It also forms one component of evaluation of the HIV Prevention England intervention *'It Starts with Me'*. AHSS builds on previous surveys with this population in the form of Bass Line 2007/8 and Bass Line 2008/9. The aims of the current research were to:

1. **understand barriers and motivations for HIV testing;**
2. **assess awareness and understanding of HIV testing options;**
3. **understand the extent of condom failure risk behaviours;**
4. **assess the extent of HIV transmission risk behaviour among black African people in England.**

METHODS

The survey was open for online self-completion at www.africanhealthsurvey.com between late September 2013 and the end of January 2014. The link to the survey was promoted via diverse means, including: online advertisements on websites with a large black African readership or client base; dissemination through the networks of a large number of community based organisations that work with black African communities; through the contacts of statutory sector service providers or commissioners; and via paid promotion on Facebook. The survey was optimised for completion on smartphone.

SAMPLE

In total, 1026 people submitted a valid, completed survey, including 633 women (61.7%) and 393 men (38.3%). The sample was normally distributed across the age range and most respondents described themselves as black African (62.1%) or black African British (22.1%). The most common countries of birth included Zimbabwe (21.2%), England (17.9%) and Nigeria (13.9%). The median length of time living in England was 8.8 years. Just under half (44.7%) were living in London at the time they completed the survey. Over three-quarters of respondents (77.9%) had university or college level education.

HIV TESTING

- A tenth (10.9%) of respondents had been diagnosed with HIV, while more than a third (35%) had never tested for HIV
- Among those who had tested negative for HIV, nearly two-thirds (60.7%) had received this negative result within the previous year.
- The overall annual HIV testing rate among respondents to this survey was 36.8%.
- A desire for routine testing or regular health screening was not the principal reason for testing among the vast majority of respondents who had been diagnosed with HIV.
- Only half (50.4%) of those who had not tested were very confident they could get a HIV test in the future if they wanted one.
- When asked to consider where they would like to take an HIV test in the future, most commonly people identified a GP surgery. While testing within a GUM/STI/sexual health clinic was a preferred option overall, people who had never tested were significantly less likely to state this preference than those who had previously tested negative.
- Among those who had never tested, HIV home testing kits (with an immediate result) were considered more favourably than among those who had tested negative.

SEXUAL RISK & PRECAUTION BEHAVIOUR

- More than three-quarters (77.3%) of respondents had been sexually active within the previous year.
- Most respondents (70.5%) were exclusively heterosexually active, while 3.3% were behaviourally bisexual and 3.5% had only same sex partners in the last year.
- Nearly two-thirds (62.8%) of all respondents had a regular sexual partner at the time of completing the survey, of whom more than a quarter (28.4%) indicated they were HIV sero-discordant or potentially discordant.
- In total, 11.5% of the sample indicated that they did not always use condoms during sexual intercourse with a regular partner who they either knew to have a different HIV status to themselves, or whose status they were unaware of.
- A third (31.3%) reported at least one casual sexual partner within the previous 12 months.
- Over a quarter of respondents who had sexual intercourse and had used a condom in the previous 12 months (26%) had experienced condom breakage or condom slippage (condom failure) in the previous 12 months. (12% of the entire sample)
- Actual condom failures, and condom failure risk behaviours, were both more common among younger respondents.

HIV PREVENTION NEED

- Nearly three-quarters (72.7%) of respondents were not aware of the high prevalence of HIV among black African people living in En gland.
- More than two-fifths (44.2%) were not aware that effective treatment of HIV can significantly reduce the likelihood of it being transmitted to sexual partners.
- More than a third (35.8%) were not aware that HIV medication is freely available to any individual in the UK who needs it.
- Younger respondents, and those with lower levels of education, were significantly less likely to know that HIV treatments work better if taken before people become ill.
- Nearly a quarter (24.4%) of respondents who had sex with men in the previous 12 months agreed they would worry what people would think of them if they carried a condom.
- Nearly a fifth (18.4%) were not aware that there are a wide range of condoms (types and sizes) available. This was significantly more common among those who had never tested for HIV and those who had been living in England for 3 years or less.
- Almost a quarter (23.9%) did not know that using the right size condom on the penis can reduce the likelihood of it breaking or slipping off. This was more commonly the case among those never tested (31.4%) and those with lower levels of education (47.7%).

SEXUAL HAPPINESS

- Nearly a quarter (24.1%) of respondents said they were not currently happy with their sex life.
- More than a fifth of all respondents felt that their sex life could be improved by having better quality sex (22.0%) or by feeling more emotionally connected during sex (20.2%).

INTERVENTION COVERAGE

- A fifth (20.4%) of respondents had seen and read all, or most, of the *'It Starts with Me'* intervention.
- An additional 13.6% of people had seen the intervention but not read it.
- Seeing and reading the intervention was more common among women, those in their 30s and 40s and those with higher levels of education.
- Respondents were most likely to have seen the intervention on Facebook, with viewing on other websites also reported.

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GLOSSARY OF KEY TERMS

TERM	DEFINITION
ART	Anti-retroviral therapy: the combination of several medicines used to slow the rate at which HIV makes copies of itself (multiplies) in the body.
Casual partner	In this survey we use this term to refer to partners with whom sex only occurs on a one-off or irregular basis.
Confidence Interval (CI)	The 95% confidence interval (CI) is used to estimate the precision of the OR (see below). A large CI indicates a low level of precision of the OR, whereas a small CI indicates a higher precision of the OR.
GUM	Genito-urinary medicine: a hospital clinic specialising in sexual health.
HIV	Human immune deficiency virus – a viral infection that can be passed during sex.
Missing	The number of respondents not represented (usually because they did not answer a particular question, rather than because they fall into a separate category than the one being discussed).
N =	The number of respondents represented.
Odds Ratio (OR)	A relative measure of effect, evaluating whether the odds of a certain event or outcome is the same for two groups (e.g. 2008/2009 survey respondents vs 2013/2014 respondents).
Range	The highest and the lowest values in a set of data (i.e. if the oldest person is 79 and the youngest is 16, then the range is 16-79).
Regular partner	In this survey we use this term to refer to someone you have sex with on a regular basis.
Sero-concordancy	When two sexual partners share the same HIV status (whether both positive or both negative).
Sero-discordant	Where two sexual partners have a different HIV status (i.e. one is HIV positive and the other is negative).
Significant	If we had done the survey multiple times, this difference would be observed in fewer than one in every twenty surveys ($p<0.05$), purely by chance. In tables significant differences are indicated by green shading within the table.
Sex	In this survey we use the term 'sex' to mean to mean physical contact to orgasm (or close to orgasm) for one or both partners. Sex includes, but is not limited to, vaginal and anal intercourse.
Sexual intercourse	In this survey we use "sexual intercourse" to mean vaginal or anal sex where a penis is inserted into a vagina or anus.
STIs	Sexually transmitted infections.
Viral load	Viral load is the term used to describe the amount of HIV in a body fluid. Undetectable viral load is usually defined as below 50 copies/ml.

1. INTRODUCTION AND METHODS

This report describes the methods and findings of a large survey of sexual health and HIV prevention need among black African people living in England, which took place between September 2013 and January 2014. In this chapter we describe the background to the study, its aims, and methods of enquiry, recruitment strategy and final sample.

1.1 BACKGROUND

The latest Census indicates that 3.3% of the total population of England & Wales describes themselves as Black/African/Caribbean/Black British (Office for National Statistics, 2012). However, data from Public Health England indicates this group accounted for 24% of new HIV diagnoses in 2012 and 32% of the population of people living with HIV in the UK (Aghaizu *et al*, 2013). HIV prevalence among black African men in England and Wales currently stands at 26 per 1000 and 51 per 1000 among black African women (Public Health England, 2013). This population in a key target group for HIV prevention interventions and for care and support programmes for people with diagnosed HIV, as reflected in the activities of HIV Prevention England.

In 2007 Sigma Research conducted the first community survey of HIV prevention need among black African people living in England, *Bass Line* (Dodds *et al*, 2008). This survey was repeated in 2008-09 with 2580 valid responses, assisted by the participation of over 90 collaborating agencies from across the country (Hickson *et al*, 2009). Among the issues explored were: experiences and barriers to HIV testing; sexual risk and precautionary behaviours; and preferences for the delivery of sexual health information and training. The survey generated data essential for the planning and commissioning of HIV prevention and social care interventions for people from black African communities.

Since 2008 there have been a number of developments in both our understanding of the way in which HIV is transmitted, and in the way in which HIV prevention for this population is delivered. Findings published in the intervening years indicate that people with diagnosed HIV who are effectively taking anti-retroviral therapy and who have an undetectable viral load, are unlikely to be infectious (Cohen *et al*, 2011). As a consequence, there has been a further drive for HIV testing among most at risk communities to facilitate early diagnosis and treatment. However, the last *Bass Line* survey reported that 39.5% of the 2542 people who took part had never tested for HIV (Hickson *et al*, 2009) and further data is required regarding the barriers and motivations to HIV testing to help devise more effective and engaging interventions.

Alongside a drive to increase testing rates among black African people is a need to empower people with the information and skills required to negotiate effective use of condoms. Previous research (Hickson *et al*, 2009) indicates that over a third of 2580 respondents had unprotected sex with someone who had a different HIV status to themselves, or with someone whose HIV status they were unsure of, a key transmission risk behaviour. Also of significant concern was the high prevalence of condom failure and potential condom failure behaviours reported in the first *Bass Line* survey (Dodds *et al*, 2008).

1.2 INTERVENTION EVALUATION

In addition to a changing HIV testing environment, and those issues highlighted in previous research, there has been a large-scale reformulation of HIV prevention interventions across England. The revision and re-launch of a survey of black African people in 2013 coincided with an England-wide programme of HIV prevention interventions, called *It Starts with Me*, coordinated by Terrence Higgins Trust (THT) for HIV Prevention England (HPE). The aims of this intervention are, broadly speaking, to increase the awareness of and access to HIV testing services among most at risk populations (including increased awareness of the benefits associated with testing), and to increase awareness of and access to the wide range of condoms available to these populations. The re-running a survey of African people living in England also provided an opportunity to collect valuable data at an early stage of this intervention, which will provide some basis for later comparison and consideration of intervention outcomes.

1.3 AIMS AND OBJECTIVES

In light of previous research, and reflecting the stated outcome aims of the HPE *It Starts with Me*, this research project sought:

(i) to understand the barriers and motivations for HIV testing;

(ii) to assess awareness and understanding of HIV testing options;
(iii) to understand the extent of condom failure risk behaviours and means of avoiding condom failure;
(iv) to assess the extent of HIV transmission risk behaviour among black African people in England.

1.4 SURVEY DEVELOPMENT

The African Health & Sex Survey used a self-completion questionnaire to collect a limited amount of information from a large number of African men and women. As a starting point, the survey items contained in *Bass Line* 2007 and 2008/9 were reviewed in light of the stated research aims, the aims of ISWM, and our increased understanding of HIV treatment for preventative purposes. An initial draft was prepared using existing survey items that had performed well in these previous surveys. Following this, several new survey items were developed that captured information relating to awareness and understanding of the principles of 'treatment as prevention' and new questions were added that could more accurately indicate HIV transmission risk behaviour (specifically, the extent of unprotected vaginal or anal intercourse with HIV sero-discordant partners).

When respondents in *Bass line* 2007 and 2008-09 surveys were invited to leave feedback, the most frequent comment was that the survey was too long. This was also the feedback of a large number of community collaborators. As this execution of the study also relied on smartphone completion (see section 1.5), there was a further requirement for brevity. Research indicates that social or behavioural questionnaires promoted in this medium should be as short as possible, given that people tend to use smartphones for shorter, but more frequent, bursts of time that do not necessarily enable the completion of long and complex surveys (Buskirk & Andrus, 2012). Therefore, we sought to reduce the number of questions by nearly half for this execution of an African survey. This initial survey draft was circulated to all partners within the HIV Prevention England programme, and to the HPE Evaluation Advisory Group, for consideration and comment. As a result of their input, several items relating to preferences and settings for HIV testing were added. In this consultation phase we also received feedback which led to the revision and re-branding of the research in the form of the *African Health & Sex Survey* (as opposed to continuing the previous Bass Line branding).

Two experienced researchers undertook 12 cognitive interviews with African people in a community setting to ensure the clarity, ordering and cultural appropriateness of the survey. Individuals were asked to complete the survey in front of the interviewer and were then interviewed for approximately 20 minutes to see how they read and understood each question and its instructions. Interviewees were paid £10 for their participation. The questionnaire was further refined in light of these interviews.

The final African Health & Sex Survey 2013-14 questionnaire and research methodology received approval from the Research Ethics Committee of the London School of Hygiene & Tropical Medicine.

1.5 SURVEY DELIVERY

In both previous *Bass Line* surveys participants were recruited both online and via paper-and-pen methods. In 2007, 17% of respondents completed the *Bass Line* survey online and 83% did so via a booklet (paper and pen based) version. In the 2008-09 survey the figures shifted slightly in that 24% completed the survey online while 76% completed the booklet version. In the African Health & Sex Survey 2013/14, we only allowed people to complete the survey online.

Since 2008 there have been significant developments in mobile communications and in the way in which people most frequently access the internet or engage with social networking sites. While internet access in 2008 was primarily via desk based PC's or laptop computers this has shifted markedly towards smartphone (and tablet) internet access in 2013. Data from the UK Office for Communications indicate that by 2011, 54% of mobile phone users used a smartphone. Recent estimates by commercial telecommunication organisations suggest that by 2013 the number of smartphone users probably exceeds 65% of all mobile phone users (We are apps.com, 2013). Commercial data also indicate that over 80% of people aged between 17 and 35 who own a mobile phone will own a smartphone device (eMarketer, 2013).

Smartphone usage data in the UK is not routinely broken down according to ethnicity, however data from a number of sources in the US indicates that the proportion of people from migrant populations using smartphones is higher than among the white American population (Nielson, 2011). One explanation for this may be that smartphones provide cheap(er) and convenient access to email and the internet for individuals who might not be able to afford a desk based computer or laptop. Feedback from our community partners in previous executions of *Bass line* indicate that limited access to the internet was the primary reason why online recruitment was not higher in 2007 and 2008-09. While smartphone usage is lowest among people aged 55 and over (Ofcom, 2013), epidemiological data indicate that it is comparatively younger black African people who are at greatest risk of contracting HIV (Health Protection Agency, 2012). This research, coupled with service provider experiences and perspectives, informed the decision to present the African Health & Sex Survey 2013/14 for online completion only.

The survey was available for completion online in English only. The online questionnaire was prepared and hosted using an online survey instrument www.demographix.com. The design of the online surveys allowed data to be captured and viewed as soon as the respondent had pressed 'submit' at the end of the survey.

1.6 SURVEY PROMOTION

The survey was promoted via online advertisements on websites that formative research indicated as having a large black African readership or client base. After successful testing, a significant proportion of promotion resources were utilised with advertising on Facebook, which can facilitate highly targeted advertising on geography, age and on social or cultural interests that indicate African ethnicity or descent. A series of appropriately sized digital images promoting the survey were developed for this purpose and used in rotation to enhance the likelihood of click-through from the advert to the survey landing page. Online paid advertising also occurred with several African news websites.

In addition to paid survey promotion, we drew upon the support of the HIV Prevention England partners and other HIV or African health charities to promote the survey to their clients and service users across the country. A dedicated URL www.africanhealthsurvey.com was utilised for the survey. Custom promotional banners and buttons for agency websites were provided and all collaborators were encouraged to forward the link to their e-mailing lists. Information about the survey was sent directly to the lead HIV commissioner in every local authority in England, and similar information was posted in a bulletin distributed to all directors of public health. Within the 20 highest HIV prevalence boroughs we undertook enhanced promotion by contacting the local MPs, councils and councillors, as well as any charity or social enterprise body that had links with the African community to raise awareness of survey and to encourage promotion through their diverse networks. The

link to the survey was posted in a number of online fora to which some African people contribute, and was sent to the African or Afro-Caribbean Student Society at every university in England.

With regard to 'offline' promotion, printed posters and business cards were sent to partners for onward distribution to service users to raise awareness of the survey and encourage participation. These carried QR codes which, when scanned by a QR reader on a mobile phone or tablet PC, automatically directed individuals to the survey. Upon completion of the survey, respondents were given the opportunity to email the link to up to 3 friends upon provision of their email addresses.

The survey was open for completion from late September 2013 until the end of January 2014.

1.7 EXCLUSIONS AND FINAL SAMPLE

Not all of the African Health and Sex Survey 2013/14 responses were included in the final sample. The majority of the exclusions were made on the basis they did not meet the inclusion criteria. To be included, respondents had to indicate that they: were at least 16 years of age; in England at the time of completion; identify themselves as African (using a variety of terms) or were born in an African country; and had not already completed the survey. A small number of returns had no demographic information making it impossible to include them in the final sample. Five returns were excluded because there was evidence of repeat responses (indicated by identical responses to some questions and identical patterns of unanswered questions).

The structure of the online survey meant that respondents that did not meet the inclusion criteria in relation to age or being in the UK were asked no further questions and were informed of the reason why. The proportion of returns that were excluded based on these criteria, as well as those identified as invalid are indicated in the table below.

TABLE 1.1 *Survey returns, exclusions and final sample*

Survey returns and exclusions	**N**	**%**
Total Completed	1150	100
Invalid returns (Non- serious responses)	2	0.2
Under 16 years of age	3	0.3
Not in England	69	6.0
Not African	55	4.8
Already completed the survey	5	0.4
Total exclusions (inc. overlap)	124	10.8
Total sample for analysis	1026	89.2

Overall, 1026 (89.2%) of the returns were included in the final analysis. Unique URLs for paid advertising, links embedded within adverts online, and URLs unique to HPE collaborating agencies allowed us to determine the source of most recruits (i.e. how each respondent had found their way to the survey landing page). The following table displays valid responses according to recruitment method. 'Unidentifiable' indicates that the respondent came to the survey landing page directly, either having clicked on the www.africanhealthsurvey.com link or had typed this in to their web browser, perhaps having been in receipt of printed promotional material.

TABLE 1.2 *Source of recruitment of survey respondents*

Source of recruitment	N	% of total sample
Facebook	554	54.0
Unidentifiable	214	20.9
Community based organisations	180	17.5
Other online paid advertising	49	4.8
Sigma mailing list or website	20	1.9
Snowballed from other respondents	9	0.9

The largest number of responses was drawn from paid advertising via Facebook. Only a fifth (17.5%) of responses can be directly attributed to community based organisations, although it is possible that some unidentifiable responses came from off line distribution of printed material. Regardless, this sample represents a significant departure from those obtained in previous Bass Line surveys, in which the vast majority of respondents (circa 75%) were recruited by (and therefore already in contact with) community based HIV and sexual health organisations.

In total, 53.2% of respondents completed the survey on a smartphone or tablet device.

1.8 HOW TO USE THIS REPORT

This report contains the main findings of the African Health Survey 2013-14, a quantitative HIV prevention needs assessment and intervention evaluation for African people in England. Key variables are described in the following 6 thematic chapters, beginning with a comprehensive description of the sample characteristics. Within these chapters, and in relation to certain variables, we provide a comparison of responses according to key demographic criteria, comprising: HIV testing history; gender; age (in 10 year bands); number of years spent living in England; and educational attainment. A complete description of these demographic groups is provided in chapter 2. Response percentages are provided to one decimal place meaning that, in a small number of cases, columns or rows may add up to slightly more or slightly less than 100%.

Differences in responses from individuals in these different groups were established using Chi-square analysis (χ^2) or Analysis of Variance (ANOVA) where appropriate. Where differences were statistically significantly different (in that there is less than a 5% chance that the differences observed occurred entirely by chance) the relevant data is shown within a shaded green box in the table. Only significant differences are described in the text of the report.

Appendix A of this report summarises differences between responses to this survey and responses to Bass line 2007 and 2008-09. Many of the questions in this survey were identical to the previous Bass line surveys, largely because these had previously been demonstrated to be clear and reliable survey items. While it is possible to compare responses to questions from this survey to those undertaken in the past, such comparison should be undertaken carefully and any differences interpreted with caution. The method of recruitment for AHSS was different from that used in Bass Line and this has resulted in a sample that has a significantly different demographic profile.

The intended audience for the report includes people who plan, deliver, and commission HIV prevention programmes targeting African people in England. The survey has collected a large data-set on the HIV prevention needs of Africans in England that complements existing qualitative and quantitative research undertaken with this population (Bourne *et al,* 2011; Fenton *et al,* 2002, Chinouya & Davidson 2003, Weatherburn *et al,* 2003, Mayisha II Collaborative Group 2005, Dodds *et al,* 2008a; Hickson *et al,* 2009).

2. DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

The final sample includes 1026 people living in England who considered themselves African or had been born in an African country. This chapter describes the demographic characteristics of the sample, including: gender; gender of sexual partners; ethnicity; length of time living in England; area of residence; educational attainment; and relationship status.

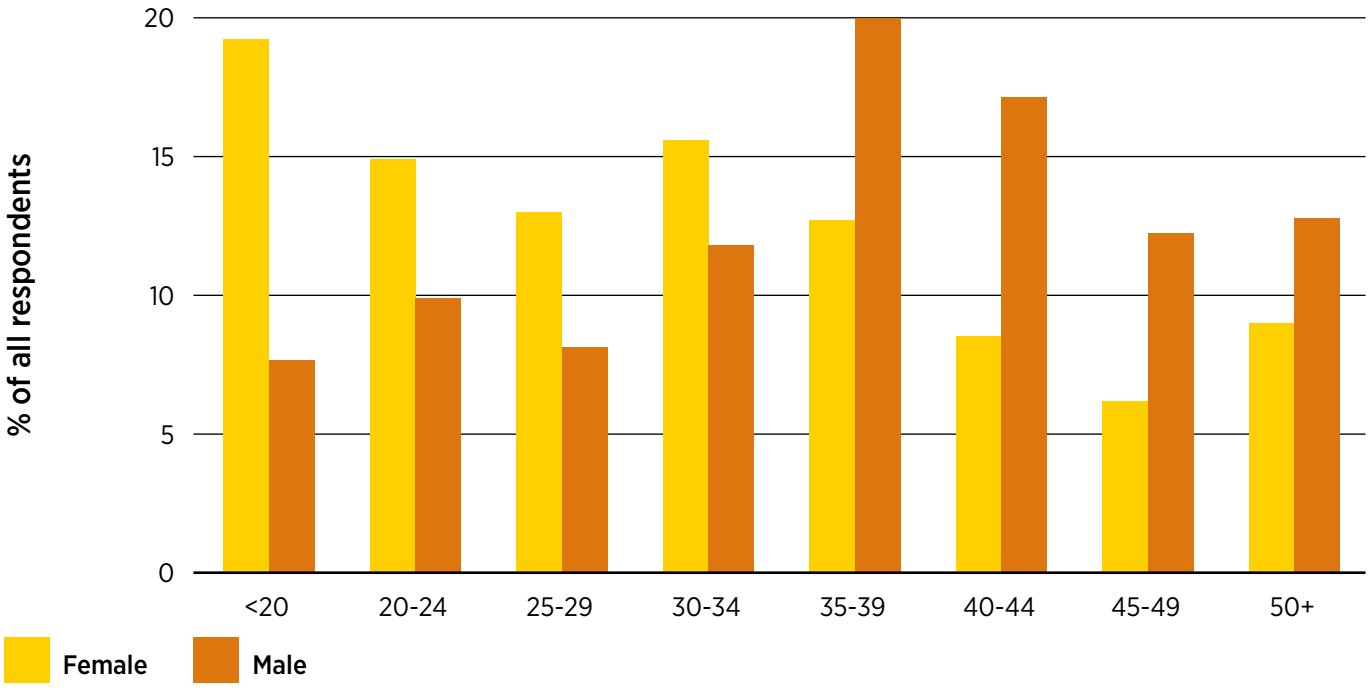
2.1 GENDER

The final sample was made up of fewer men (38.3%, n=393) than women (61.7%, n=633). Comparisons of key variables by gender are displayed throughout chapters 3-7.

2.2 AGE

The respondents' ages ranged from 16 to 101. Overall, the mean age of the sample was 33.8 years (standard deviation 12.5, median 33), slightly older than the previous Bass Line surveys. However unlike previous Bass Line surveys men were on average significantly older (mean 37.2 years, standard deviation 12.2, median 37) than women (mean 31.7 years, standard deviation 12.2, median 30) .

FIGURE 2.1 *Age groups in 5 year bands*



We present detailed age bands in the bar chart here, but throughout the remainder of the report age is collapsed into the following 10 years bands for the purposes of comparison with key variables

TABLE 2.1 *Age profile of respondents by gender, in 10 year bands*

Age band	All		Men		Women	
	N	%	N	%	N	%
< 20	151	14.9	30	7.7	121	19.4
20s	246	24.3	70	18.0	176	28.2
30s	301	29.7	123	31.7	178	28.5
40s	208	20.5	115	29.6	93	14.9
50 +	107	10.6	50	12.9	57	9.1

2.3 ETHNICITY

Self-identification as African or birth in an African country was an inclusion criteria for participation in the study. All respondents were asked *"What is your ethnic group?"* They were asked to choose from the following: Black African, Black African British, African Asian, African Arab/ Maghreb/North African, White African, African Caribbean, Mixed race African, and any *other ethnic group*. The figure shows the proportion indicating each option, with almost two thirds choosing Black African and more than another fifth choosing Black African British. The distribution of ethnicities was broadly similar to the first and second Bass Line surveys.

FIGURE 2.2 *Ethnicity of respondents*

- Other 0.2%
- African Arab/Maghreb/N.African 0.7%
- African Asian 0.9%
- Mixed Race African 2.7%
- White African 4.2%
- African Caribbean 7.1%
- Black African British 22.1%
- Black African 62.1%

2.4 COUNTRY OF BIRTH

Respondents were asked the open ended question: *"What country were you born in?"* In total 80 different countries were represented. African countries accounted for 72.7% of responses, the UK for 18.3%. The remainder of Europe, Asia, North America, Oceania and South America together accounted for 9.0% of responses.

The table below shows the 16 countries in which at least ten respondents were born, the proportion of the total sample that group represents, what proportion of that group were male and the age profile of people from that country.

TABLE 2.2 *Respondent country of birth by gender and age*

Country of birth (n=973, missing 53)	**% All**	**% of country sub-sample that were either gender**		**Average age (median)**
		Male	**Female**	
Zimbabwe	21.2	18.9	22.6	36
United Kingdom (England)	17.9	13.5	20.6	26
Nigeria	13.9	15.9	12.6	31
Ghana	5.0	6.5	4.1	31
Kenya	4.5	5.1	4.1	38
Uganda	4.3	4.9	4.0	39.5
Zambia	3.3	3.0	3.5	37
Republic of South Africa	2.8	3.5	2.3	34
Malawi	2.6	1.4	3.3	36
Congo – Kinshasa	2.4	3.2	1.8	34
Jamaica	1.6	0.8	2.2	38

Country of birth (n=973, missing 53)	% All	% of country sub-sample that were either gender		Average age (median)
		Male	Female	
Cameroon	1.3	2.4	0.7	36
Angola	1.1	1.1	1.2	22
Somalia	1.1	0.8	1.3	19
Ivory Coast	1.0	1.9	0.5	39.5
Sierra Leone	0.9	1.1	1.0	38.5

Zimbabwe, United Kingdom (England), Nigeria, Ghana and Kenya were the top five most common countries of birth (representing almost half of respondents). Overall, nearly a fifth (18.3%) of all respondents were born in the UK, a similar proportion to the 17.3% found among Black Africans aged 19-59 in the Labour Force Survey in 2002 (Lindley, Dale & Dex 2004), and a slightly higher proportion than in the two previous Bass Line surveys (Dodds *et al,* 2008a; Hickson *et al,* 2009).

Both men and women were represented in all country of birth sub-samples although the ratio of men to women varied. The countries of birth with highest male-to-female ratio were Cameroon (69/ 31) and the Ivory Coast (70/30). The two country sub-samples with the lowest male-to-female ratio were the Jamaica (19/81) and Malawi (20/80).

All country of birth sub-samples showed a wide range of ages. The youngest country of birth sub-sample were those born in Somalia, of which more than half (55%) were under the age of twenty. The oldest groups according to country of birth were from Uganda and the Ivory Coast.

2.5 LENGTH OF TIME LIVING IN ENGLAND

Respondents were asked, *"How long, in total, have you lived in England?"* The length of time respondents had lived in England ranged from 1 month to 52 years with a mean of 8.8 years (standard deviation 9.2 years, median 7 years). The following table shows the proportion of respondents who had lived in England for increasing periods of time and the age profile of each group. More than half of those who were born in England had lived in this country all their lives. They are represented in the last row of the table below

TABLE 2.3 *Length of residence in England by age*

Length of time resident in England (n=1018, missing 8)	% All	Average age (median)	Age range
less than 1 year	4.2	28.5	6-101
over 1 year – less than 3 years	6.7	25	16-61
over 3 years – less than 6 years	9.4	26	16-56
over 6 years – less than 10 years	17.7	32	16-69
10 years or more (not born in England)	46.6	38	16-95
10 years or more (born in England)	15.4	25	16-100

The length of time respondents had lived in England was broadly similar to the previous Bass Line surveys. The average (median) age of people who had lived in England for 12 months or less was 28.5 years, generally average age increased as length of time living in England increased with the exception of those who have lived in England their whole lives, who tended to be younger (median age 25 years).

For the purposes of comparing responses to key variables, throughout the remainder of this report time living in England is reported as: less than one year (4.2%, n=43); 1 up to 3 years (6.7%, n=68); 3 up to 6 years (9.4%, n=96); 6 up to 10 years (17.7%, n=180); and 10 years or more (62.0%, n=631). The last of these groups includes all those who have lived in England all their life.

2.6 AREA OF RESIDENCE

Respondents were asked the open-ended question, *"What local authority do you live in?"* If they were unsure of their local authority they were asked to write in the first four digits of their postcode. Only a very small proportion of AHSS 2013/2014 respondents (6.8%, n=70) did not answer this question. The following table shows where all respondents lived, broken down by the 4 Public Health England Regions in England and the 15 Centers that are within each region.

Almost half (44.7%) of those who answered reported living in the London region, with around a quarter (23.2%) in the Midlands and East of England region.

TABLE 2.4 *Respondent area of residence, by PHE regions*

Public Health England (PHE) Regions	**Public Health England Centres** (n=953, missing 73)	**Number of respondents**	**% All**	**% of those that answered**
North of England	North East	21	2.0	2.2
	Cumbria and Lancashire	14	1.4	1.5
	Yorkshire and the Humber	79	7.7	8.3
	Greater Manchester	59	5.8	6.2
	Cheshire and Merseyside	9	0.9	0.9
	Total	182	17.7	19.1
Midlands and East of England	Lincolnshire, Leicestershire, Nottinghamshire and Derbyshire	65	6.3	6.8
	West Midlands	59	5.8	6.2
	Norfolk, Suffolk, Cambridgeshire and Essex	32	3.1	3.4
	Bedfordshire, Hertfordshire & Northamptonshire	65	6.3	6.8
	Total	221	21.5	23.2
London Integrated Region	London Integrated Region	426	41.5	44.7
South of England	Sussex, Surrey and Kent	34	3.3	3.6
	Thames Valley	43	4.2	4.5
	Hampshire, Isle of Wight and Dorset	17	1.7	1.8
	Devon, Cornwall and Somerset	10	1.0	1.0
	Avon, Gloucestershire and Wiltshire	20	1.9	2.1
	Total	124	12.1	13.0

2.7 EDUCATIONAL ATTAINMENT

All respondents were asked, *"What is the highest level of education you have achieved?"* and were offered the responses: none; primary/elementary school; secondary/high school; university/college; other. For ease of reporting, educational attainment was re-coded into the three categories, low, medium and high (as shown in the chart below). However, the use of the word college is context dependent and can imply medium level (high school/A-level equivalent) or higher level (post A-level education) attainment. In some settings, the word college might refer to A-level or specialist school whereas in others it might mean training in specialist trades such as plumbing, mechanics and other vocational training. To some people, college can also be used to refer to a university institution. This means that the high proportion of respondents with higher educational attainment will include some medium level responses (particularly among the respondents aged below twenty years who said they had higher education attainment).

FIGURE 2.3 *Educational attainment groups*

Low (primary or no education 4.0% Medium (secondary) 17.7% High (university or college) 77.9%

Most respondents had a high level of education (77.9%, n=787), 17.7% (n=179) reported medium attainment and only a small proportion reported low educational attainment (4.4%, n=44).

There was no significant difference in educational attainment between men and women.

The level of educational attainment showed a relationship with the length of stay in the UK. The longer respondents had been in the UK, the more likely they were to have achieved a higher educational level, compared to those that had been in the UK for less time, maintaining a trend from the previous surveys (Dodds *et al,* 2008a; Hickson *et al,* 2009). These three educational attainment groups are used throughout the report to compare responses to key variables.

2.8 SUMMARY

- The total number of eligible respondents was 1026.
- The survey recruited significantly more women (61.7%) than men (38.3%).
- More than a third (39.2%) of respondents were under the age of 30. This was a significantly higher proportion than previous surveys of black African people in England.
- Almost two-thirds (62.1%) described themselves as black African, while another 22.1% described themselves as black African British.
- Two thirds (62%) had lived in England for more than 10 years, including 15% who had lived here all their lives.
- Nearly half (45%) of respondents were resident in London at the time of participation.
- More than three-quarters (77.9%) had a high level of educational attainment.

3. HIV TESTING HISTORY

In line with the overarching HPE programme goals, and the 'It Starts with Me' intervention specifically, AHSS asked a series of detailed questions regarding HIV testing history, recency of testing, setting for previous testing and/or future test setting preferences, and monitoring of diagnosed HIV. These are described in turn and demographic variation in responses is explored in relation to key variables.

3.1 ESTABLISHING HIV STATUS

All respondents were asked, *"Have you ever received an HIV test result?"* A total of 1018 people provided an answer (missing 8). Those who answered 'yes' were asked the result of this test.

Two thirds (65%) of respondents had received an HIV test result at some point in their lives, including 54.1% who had received an HIV negative result on their last test. Overall, 10.9% of all respondents had received an HIV positive diagnosis, which equates to 16.8% of those who had ever tested for HIV.

TABLE 3.1 *HIV testing history*

HIV testing history	Among all respondents	
	N	%
Diagnosed with HIV infection	110	10.9
Tested and last test HIV negative	545	54.1
Never received an HIV test result	353	35
N (missing)	**1008** (18)	

Testing history varied significantly by age and educational attainment, as shown in table 3.2 below.

Shaded cells indicate statistically significant differences in responses.

TABLE 3.2 *HIV testing history by key demographic groups*

	N (missing)	HIV testing history		
		% never received an HIV test result	% tested positive	% last test negative
Whole sample	1008 (18)	35.0	10.9	54.1
Gender				
Male	1008 (16)	36.5	9.6	53.9
Female		34.1	11.7	54.2
Age				
16-19	997 (29)	78.7	3.3	18.0
20s		36.0	2.9	61.2
30s		23.2	7.4	69.4
40s		21.7	19.8	58.5
50 +		30.7	34.7	34.7
Education				
Low	995 (31)	50.0	33.3	16.7
Medium		60.7	10.7	28.7
High		28.3	9.8	61.9
Length of time in UK				
Less than 1 year	1004 (22)	31.7	14.6	53.7
1 up to 3 years		50.0	11.8	38.2
3 up to 6 years		42.6	7.4	50.0
6 up to 10 years		34.3	10.7	55.1
10 years or more		32.6	11.2	56.2

In general, older people were more likely to have tested for HIV and have been diagnosed with HIV. More than three quarters (78.7%) of those aged under 20 had not tested for HIV, which likely reflects their shorter sexual careers. Respondents with high levels of education were considerably more likely to have tested for HIV. Those with lower education had the lowest rates of testing (50.0% had never received a test result) but were also most likely to have tested HIV positive (33.3%). HIV testing history did not vary significantly according to gender or length of time living in the UK.

3.2 RECENCY OF HIV TESTING

Those respondents who reported their last test was negative (n=545) were asked *when* they had last tested.

TABLE 3.3 *Length of time since last negative HIV test*

Recency of testing	Respondents tested negative	
	N	%
Within the last month	73	13.5
Within the last year but not the last month	255	47.2
Within the last 5 years but not the last year	148	27.4
More than 5 years ago	64	11.9
N (missing)	**540** (5)	

Nearly two thirds (60.7%) of those who had tested negative had done so within the last year, with 13.5% having done so within the previous month. Only 11.9% had last tested more than 5 years ago.

If recency of testing negative is collapsed into 'tested within the last 12 months' and 'tested more than 12 months ago' then it is possible to compare this by key demographic groups.

TABLE 3.4 *Time since last negative HIV test by key demographic groups*

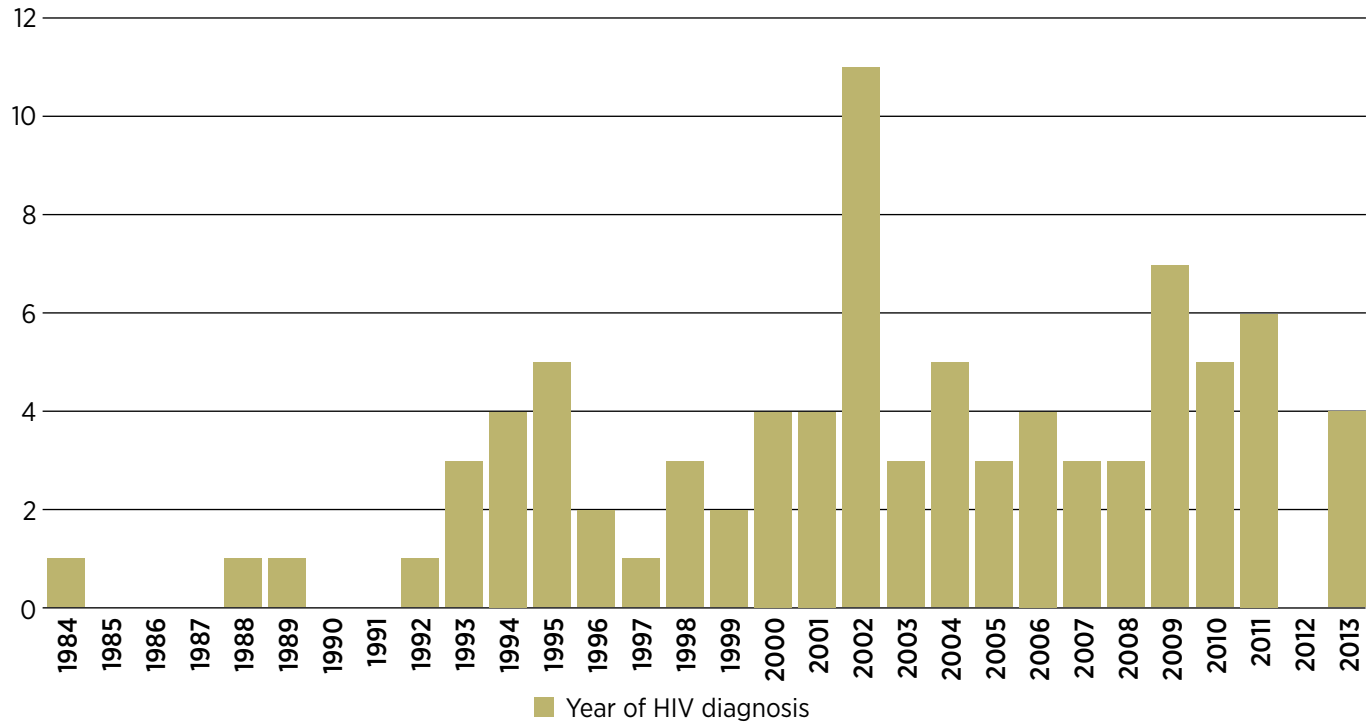
	N (missing)	% tested negative in the last 12 months	% tested negative more than 12 months ago
All those tested negative	540 (5)	60.7	39.3
Age			
16-19	533 (12)	76.9	23.1
20s		67.6	32.4
30s		62.0	38.0
40s		54.2	45.8
50 +		41.2	58.8
Education			
Low	533 (12)	85.7	14.3
Medium		64.7	35.3
High		60.2	39.8

	N (missing)	% tested negative in the last 12 months	% tested negative more than 12 months ago
All those tested negative	540 (5)	60.7	39.3
Length of time in UK	538 (7)		
Less than 1 year		52.4	47.6
1 up to 3 years		73.1	26.9
3 up to 6 years		57.4	42.6
6 up to 10 years		59.8	40.2
10 years or more		61.4	38.6

The likelihood of having recently tested negative decreased steadily over time. Younger respondents were significantly more likely to have tested negative within the previous 12 months than older respondents. Time since last testing negative did not vary by educational attainment level, length of time living in the UK or gender.

The 110 people who said they had been diagnosed with HIV were asked in what year they received their diagnosis. Nearly half (n=52) had been diagnosed with HIV within the previous 10 years, while 23 individuals had received their diagnosis within the previous 5 years.

FIGURE 3.1 *Year of diagnosis among respondents with diagnosed HIV*



The overall annual HIV testing rate among respondents to this survey, not already diagnosed with HIV, was 36.8%.

Of the 332 people in the sample who tested in the last year, 4 were diagnosed with HIV (1.2%).

3.3 REASONS FOR HIV TESTING (OR NOT)

All those who said they had received a HIV diagnosis (either positive or negative, n=655) were asked, *"Why did you test on that occasion?"* and were presented with a list of possible response options to which they could tick all that apply. Those who selected 'other reason' were asked to describe this in a free text response box.

TABLE 3.5. *Reasons for testing for HIV*

Reason for testing (N=584, missing 71)	All those who have tested		Diagnosed HIV positive		Last HIV test negative	
	N	%	N	%	N	%
It was part of routine health screening	156	26.7	12	10.9	144	30.4
I like to test regularly	155	26.5	12	10.9	143	30.2
It was part of antenatal screening	89	15.2	9	8.2	80	16.9
I became ill	53	9.1	37	33.6	16	3.4
Because of a particular risk I took	49	8.4	8	7.3	41	8.6
My doctor suggested that I take a test	40	6.8	14	12.7	26	5.5
Because my partner wanted me to test	31	5.3	2	1.8	29	6.1
Because I am a member of a high risk group	23	3.9	5	4.5	18	3.8
Because my partner told me they were HIV positive	16	2.7	11	10.0	5	1.1
Other reason	70	12.0	17	15.5	53	11.2

Other reasons for testing among those who test result was negative included: a lack of trust of current or recent partners (and concerns regarding their sexual health); for the purposes of an insurance application or when beginning new employment; beginning a new relationship and wanting peace of mind; and simply because a test was offered to them.

Other reasons for testing among those who had been diagnosed HIV positive included: having a partner who was ill, or who had died; as part of an insurance application; or because of encouragement from family members

Among all those who had tested for HIV, most did so because they like to test regularly (26.5%) or as part of routine health screening (26.7%). This is in line with recommendations from numerous public health and health promotion organisations that people in high-risk groups should test on a regular basis. Only relatively small proportions of people had tested because their doctor had recommended it (8.4%) or because their partner wanted them to test (5.3%).

As we might expect, it was more common for respondents with diagnosed HIV to have tested because of becoming ill (33.6%) compared to those who tested negative (3.4%). A desire for regular or routine testing was not the primary motivation for many of those whose last test was positive (only 10.9% of those tested positive indicated this as their reason for testing).

Those individuals who indicated that their doctor had suggested they take a HIV test (n=40) were asked what kind of doctor this was. Nearly half (48.7%, n=19) indicated it was their family doctor/GP; 12.8% (n=5) said it was a doctor in a GUM/STD/Sexual health clinic; one individual said it was a doctor on a maternity ward; and 35.9% (n=14) said it was a doctor in another hospital setting.

A total of 353 people (35% of all respondents) had never received an HIV test and a further 64 people had received a negative test result but this was more than 5 years ago. All these respondents were asked why they have not tested for HIV (or why they have not tested within the previous 5 years). They were presented with a list of potential options and could tick all that apply. Those who selected 'other reason' were asked to describe this in a free text response box.

TABLE 3.6 *Reasons for not testing for HIV (or not testing within previous 5 years)*

Reason for not testing	All those who not tested or not tested within last 5 years	
	N	%
I have no reason to think I have HIV	260	63.1
I have never had intercourse	84	20.4
It's not important for me to know my status	36	8.7
I don't know where to get tested	32	7.8
I am too afraid I might have HIV	27	6.6
I am afraid of being treated differently if I have HIV	22	5.3
I am afraid of being treated differently if I take a test	21	5.1
It would cause problems in my relationship	15	3.6
Other reason	30	7.3
N (missing)	**412** (5)	

Other reasons for not testing among those who last test result was negative included: difficulties giving blood (or concerns relating to needles); being in a long-term relationship; or a lack of time or opportunity.

Other reasons for not testing among those who had not tested for HIV included: always having safer sex; having been in a monogamous, long-term relationship; and because they hadn't found the time to do so yet.

Nearly two thirds (63.1%) of those who had not tested (or last tested more than 5 years ago) said this was because they had no reason to think they had HIV. Only relatively small proportions of respondents said the reason they had not tested was because they did not know where to get tested (7.8%) or because they were too afraid they might have HIV (6.6%).

3.4 CONFIDENCE IN FUTURE TESTING

Respondents whose last HIV test result was negative and those who had not tested were asked, *"How confident are you that you could get a HIV test in the future if you wanted one?"* and were provided response options on a 5-point confidence scale.

TABLE 3.7 *Confidence in future HIV testing by testing history*

Level of confidence (n=890, missing 8)	All those not diagnosed HIV positive		Last HIV test negative		Not tested	
	N	%	N	%	N	%
Very confident	619	69.6	443	81.9	176	50.4
Quite confident	140	15.7	62	11.5	78	22.3
A little confident	60	6.7	16	3.0	44	12.6
Not at all confident	26	2.9	8	1.5	18	5.2
Don't know	45	5.1	12	2.2	33	9.5

Taken as a whole, the vast majority of respondent were very confident (69.6%) or quite confident (15.7%) they could get an HIV test in the future if they wanted one. However, the difference in responses between people whose last test was negative and those not tested were significant. While 81.9% of those whose last test result was negative were very confident they could get another test in the future, only 50.4% of those never tested gave the same response.

3.5 SETTING FOR HIV TESTING

Those who received a negative HIV test result were asked, *"Where did you take your last HIV test?"* while those who had been diagnosed HIV positive were asked, *"Where did you receive your positive HIV test result?"* Regardless of the diagnosis, they were presented with the same list of possible responses and an 'elsewhere/ other' option (for which they were asked to provide further information).

TABLE 3.8 *Setting for HIV testing by testing history*

Setting	All those who have tested		Diagnosed HIV positive		Last HIV test negative	
	N	%	N	%	N	%
At a hospital in a GUM, STI/ sexual health or HIV clinic	277	47.4	49	45.0	228	47.9
At an antental clinic (during pregnancy)	64	11.0	5	4.6	59	12.4
At a GP surgery/local doctor	59	10.1	13	11.9	46	9.7
At a hospital at another type of out-patient clinic	48	8.0	8	7.3	40	8.4
At a private health care clinic	28	4.8	3	2.8	25	5.3
In a hospital on a ward (as an in-patient)	27	4.6	13	11.9	14	2.9
At an HIV or African organisation	24	4.1	1	0.9	23	4.8
While donating blood	13	2.2	4	3.7	9	1.9
In a hospital at Accident & Emergency (A&E)	8	1.4	5	4.6	3	0.6
I used a home sampling kit that I sent to the lab for a result	8	1.4	1	0.9	7	1.5
Elsewhere/other	29	5.0	7	6.4	22	4.6
N (missing)	**585** (70)		**109** (1)		**476** (69)	

Other HIV test settings included: at an occupational health unit; at a community event; at a school health clinic; or at a pharmacy.

Among all those who had tested, the most common setting was within a GUM/STI or sexual health clinic (47.4%). Around a tenth of respondents had been tested within a GP surgery (10.1%) or at an antenatal clinic (11%). Only a relatively small proportion of respondents had tested at a HIV or African organisation (4.1%).

Those who had tested HIV positive were more likely

to have taken this diagnostic test in a hospital as an in-patient, or in a hospital at accident and emergency than was the case for those whose last test result was negative.

Those who had tested positive for HIV were asked whether they had first been diagnosed with HIV in the UK. Around a quarter (n=28, 25.9%) said they had been diagnosed outside of the UK, including the following countries: Zimbabwe (n=5); Kenya (n=4); Uganda (n=3); South Africa (n=3); Nigeria (n=2); Zambia (n=2); and one person each in the case of Afghanistan, Djibouti, Fiji, Ghana, the Netherlands, Sudan and Swaziland.

3.6 SETTING PREFERENCE FOR FUTURE HIV TESTING

All respondents who had not tested (n=353), or whose last HIV test result was negative (n=545), were asked, *"If you were to take an HIV test in the future, where would you prefer to test?"*

TABLE 3.9 *Setting preference for future HIV testing by testing history*

Preferred setting for HIV testing	All those who do not have diagnosed HIV		Last HIV test negative		Not tested	
	N	%	N	%	N	%
At a GP surgery/local doctor	269	30.2	160	29.7	109	31.0
At a GUM, STD or sexual health clinic	258	29.0	196	36.4	62	17.6
At home using a testing kit that would give me an immediate result	160	18.0	88	16.3	72	20.5
At a private health care clinic	64	7.2	28	5.2	36	10.2
At an HIV or African organisation	59	6.6	31	5.8	28	8.0
At home using a sampling kit that I sent to the lab for a result	52	5.8	20	3.7	32	9.1
At an antenatal clinic	11	1.2	7	1.3	4	1.1
Elsewhere/other	18	2.0	9	1.7	9	2.6
N (missing)	**892** (6)		**539** (6)		**353** (0)	

Other settings for testing suggested by those who last HIV test result was negative included: in their country of origin; in a community setting; or within a generic hospital setting. These suggestions were echoed by those who had not tested for HIV.

Overall, the most preferred settings for a future HIV test is within a GP surgery (30.2%), closely followed by a GUM/STI or sexual health clinic (29.0%). HIV testing kits that provide an immediate result were three times as popular as sampling kits that are sent to the lab for a result (18.0% Vs. 5.8%)

However, significant and striking differences appear between those who have tested at some point in the past and those who had not. While among those who had previously tested for HIV, 36.4% said they would prefer to test in a GUM/STI or sexual health clinic in the future, less than half (17.6%) as many people who had never tested stated this as their preferred setting. Those who had not previously tested were more likely to state home testing kits (with an immediate result) or home sampling kits (where the result is sent away for) as their preferred means of future testing than were those who had previously tested negative.

Comparing where people had previously tested and the desired setting for hypothetical future tests, we can see that while remaining popular fewer people would prefer to test in a hospital or GUM setting, many of which would prefer to test through their GP service or by using a home testing kit that gave an immediate result.

3.7 HIV TREATMENT AND CARE

Access to HIV monitoring, care and treatment is essential for all individuals who have diagnosed HIV. Respondents with diagnosed HIV (n=110) were asked, *"When did you last see a health professional for monitoring of your HIV infection?"*

TABLE 3.10 *Length of time since last visit to a health professional for monitoring HIV*

When did you last see a health professional for monitoring of your HIV infection?	Respondents with diagnosed HIV %	
	Actual	Cumulative
In the last 24 hours	2.0	2.0
In the last 7 days	3.0	5.0
In the last 4 weeks	9.1	14.1
In the last 6 months	37.4	51.5
In the last 12 months	46.5	98.0
In the last 5 years	1.0	99.0
More than 5 years ago	1.0	100.0
Never	0	–
N (missing)	**99** (11)	

Over half (51.5%) of respondents with diagnosed HIV had seen health professional for monitoring of their HIV infection within the previous 6 months, and 98.0% had done so within the previous 12 months.

All respondents who had been diagnosed with HIV were also asked whether they were currently taking antiretroviral treatment (ART). The vast majority (92.7%) said they were, while 7.3% said they were not.

All but one of the respondents with diagnosed HIV had seen a health professional for HIV infection monitoring at some point within the previous 5 years. They were all asked what their viral load was the last time they attended for monitoring.

Over four-fifths (81.5%) of respondents with diagnosed HIV reported that they had an undetectable viral load the last time it was monitored. Only small numbers of people were told their viral load test result but could not remember it, and only one person indicated that they did not know what viral load means.

TABLE 3.11 *Viral load testing and result among respondents with diagnosed HIV*

What was the result of your viral load test the last time you had your HIV infection monitored?	Respondents with diagnosed HIV	
	N	%
Undetectable	88	81.5
Detectable	7	6.5
I was told but I don't remember the result	9	8.3
It was measured but I was not told the result	1	0.9
It was not measured	1	0.9
I don't remember	1	0.9
I don't know what viral load means	1	0.9
N (missing)	**108** (2)	

3.8 SUMMARY & IMPLICATIONS FOR INTERVENTION PLANNING

- A tenth (10.9%) of respondents had been diagnosed with HIV, while more than a third (35%) had never tested for HIV.
- Among those who had tested negative for HIV, nearly two-thirds (60.7%) had received this negative result within the previous year.
- The overall annual HIV testing rate among respondents to this survey was 36.8%.
- Amongst those who tested for HIV in the previous year 1.2% had been diagnosed positive with HIV.
- A third of those with diagnosed HIV had tested because they became ill. A desire for routine testing or regular health screening was not the principal reason for testing among the vast majority of respondents who had been diagnosed with HIV.
- The most common reason given for not having tested for HIV was that they had no reason to think they had HIV.
- Only half (50.4%) of those who had not tested were very confident they could get a HIV test in the future if they wanted one.
- Nearly half of those who had received a HIV test result (either positive or negative) had done so from a GUM/STI or sexual health clinic. Only a small proportion (4.1%) had tested at an African or HIV agency.
- When asked to consider where they would like to take an HIV test in the future, most commonly people identified a GP surgery. While testing within a GUM/STI/sexual health clinic was a preferred option overall, people who had never tested were significantly less likely to state this preference than those who had tested negative.
- Among those who had never tested, HIV home testing kits (with an immediate result) and, to a lesser extent, home sampling kits were considered more favourably than among those who had tested negative. This indicates that a range of testing settings and options may help to encourage higher rates of testing and reduce undiagnosed infection among this group.

4. SEXUAL RISK & PRECAUTION BEHAVIOUR

Sexual transmission is the main route of HIV infection for black African people living in England (Aghaizu *et al,* 2013). As such, the African Health & Sex Survey contained a series of questions exploring sexual behaviours that allow for the possibility of HIV transmission. This chapter starts by describing the gender of respondent's sexual partners before describing sexual behaviour with regular and non-regular partners. Through a flow of sexual behaviour variables, we illustrate the proportion of respondents who reported engaging in sexual intercourse that carried a risk of HIV transmission. We then outline condom failure behaviours and incidence of condom breakage or slippage.

4.1 GENDER OF SEXUAL PARTNERS

The sexual behaviour section of the survey began by ascertaining the gender of respondents' sexual partners within the last year. As shown in figure 4.1, the majority (70.5%, n=723) had sex exclusively with opposite sex partners within the last year. Overall, 6.8% (n=70) had sex with a same sex partner, either exclusively or in addition to opposite sex partners. A total of 22.7% (n=233) had not had a sexual partner within the last year. Table 4.1 displays the gender of sexual partners according to the gender of survey respondents. Men were more likely to report exclusively same sex partners than were women (5.9% vs. 1.7%). Women were considerably more likely to report no sexual partners (27.0% vs. 15.8%).

FIGURE 4.1 *Gender of sexual partners in the last year %*

- Same sex partners only 3.3%
- Both opposite and same sex partners 3.5%
- No sexual partners 22.7%
- Opposite sex partners only 70.5%

TABLE 4.1 *Gender of sexual partners by gender of respondents*

Gender of respondents	Opposite sex partners only	Same sex partners only	Both same and opposite sex partners	No sexual partners
Male	73.3 (288)	5.9 (23)	5.1 (20)	15.8 (62)
Female	68.7 (435)	1.7 (11)	2.5 (16)	27.0 (171)

It is notable that nearly a quarter of all respondents (22.7%, n=233) had not had sex within the previous year. As a consequence, these respondents were not asked the series of questions described in sections 4.2 and 4.3 as they relate to regular and casual sex partners. Only a small proportion of respondents (6.8%, n=70) had a same sex partner in the last year. Unfortunately this is an insufficient number for further statistical analysis specific to this group.

4.2 SEX WITH REGULAR PARTNERS

All those who indicated they had at least one sexual partner within the last year were asked a series of questions to establish whether they had a regular sexual partner, the gender of this regular partner and whether they had sexual intercourse with this partner. If they had more than one regular sexual partner they were asked to consider the partner they had sex with most often. Respondents were told that: *"In this survey we use the term "sex" to mean physical contact to orgasm (or close to orgasm) for one or both partners. Sex includes, but is not limited to, vaginal and anal intercourse."* Those with a regular sexual partner were also asked whether they had sexual intercourse with this partner within the previous 12 months. Respondents were told that: *"In this survey we use "sexual intercourse" to mean vaginal or anal sex where a penis is inserted into a vagina or anus."*

In total, 62.8% (n=642) of all respondents indicated they currently had at least one regular sexual partner at the time of completing the survey. This comprised 81.4% (n=642) of those who were sexually active within the previous year. Table 4.2 displays how regular sexual partnerships were distributed by gender of respondents and gender of sexual partners. It also displays the proportion of respondents had sexual intercourse with their regular partner.

TABLE 4.2 *Regular sexual partnerships by gender of respondents*

Gender of respondents	Regular male partner only		Regular female partner only		Both regular male and female		No regular sexual partner
	Sex	Sexual intercourse	Sex	Sexual intercourse	Sex	Sexual intercourse	
Male	3.8 (15)	3.8 (15)	62.1 (243)	58.6 (229)	2.3 (9)	2.3 (9)	31.7 (124)
Female	56.9 (359)	54.1 (339)	1.6 (10)	–	1.0 (6)	0.8 (5)	40.6 (256)

Of those who had sex within the previous 12 months, the majority of men (94.8%) (n=253) and women (91.7%) (n=344) with a regular sexual partner, had sexual *intercourse* with this partner. Given the definition of sexual intercourse that was provided, women could not be classed as having sexual intercourse with other women.

4.2.1 Sero-concordancy with regular partners

All respondents who reported having sexual intercourse with a regular partner were asked if they had the same HIV status as that partner. Table 4.3 below displays initial responses and then the collapsed categories of 'concordant HIV status' (both have the same HIV status) and 'Known discordant/potentially discordant HIV status' (if they had a different HIV status OR if they were not aware of the HIV status of their sexual partner).

TABLE 4.3 *HIV sero-concordance with regular partners*

	All respondents engaging in sexual intercourse with a regular partner (n = 595 missing 2)				
	N	**%**		**N**	**%**
Both HIV positive	36	6.1	Concordant HIV status	426	71.6
Both HIV negative	390	65.5			
Sero-discordant	50	8.4	Known discordant/potentially discordant HIV status	169	28.4
Don't know	119	20.0			

The majority of respondents reported they had sexual intercourse with a sero-concordant regular partner, including 65.5% where both they and their partner were HIV negative, and 6.1% where both were HIV positive. A fifth (20.0%) said they did not know the HIV status of their regular partner, while 8.4% said they did not have the same status as each other (i.e. are sero-discordant). In total, 28.4% had sexual intercourse with a regular male partner whose status was unknown or was sero-discordant. Sex without condoms in this situation represents a key HIV transmission risk behaviour.

4.2.2 Condom use with regular partners

Respondents reporting sexual intercourse with a regular partner were then asked how often they used condoms with this partner and asked to indicate regularity of use on a 6-point scale.

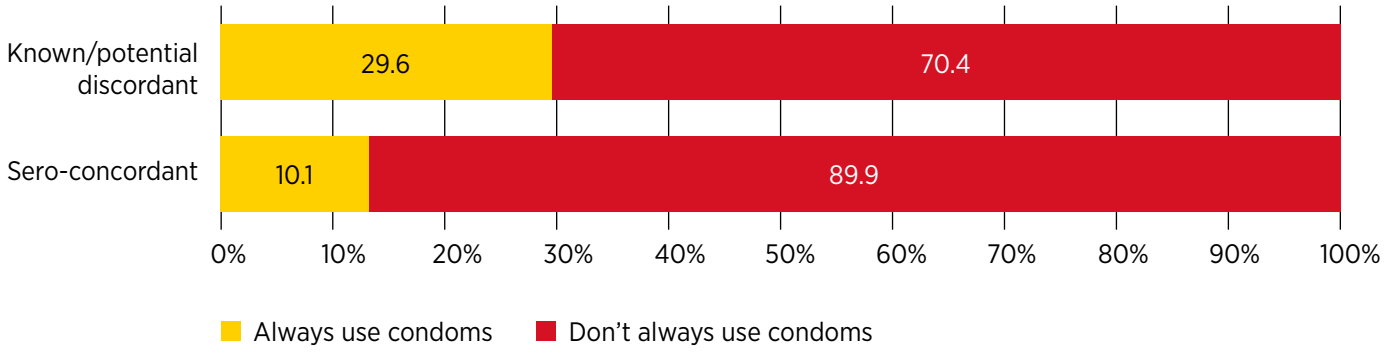
TABLE 4.4 *Regularity of condom use with regular partners*

Regularity of condom use with regular partners	**Respondents engaging in sexual intercourse with a regular partner** (N = 595 missing 2)	
	N	**%**
Never	311	52.3
Rarely	88	14.8
Sometimes	62	10.4
Often	17	2.9
Very often	24	4.0
Always	93	15.6

Only 15.6% of respondents indicated that they always used condoms with their regular sexual intercourse partner. The majority (84.4%) had engaged in some unprotected or condomless sexual intercourse with this regular partner, including 52.3% who had not utilised condoms at all in the previous 12 months.

In order to make an assessment of risk behaviour, Figure 4.2 illustrates the regularity of condom use collapsed to 'always' or 'not always' (incorporating those who very often, often, sometimes, rarely or never use condoms) and the sero-concordancy of sexual intercourse.

FIGURE 4.2 *Condom use with regular partners by sero-concordancy of sexual partnerships*



Only a small minority (10.1%) of respondents with a regular sexual partner they believed to be of the same HIV status always used condoms with that partner in the last year. The vast majority (89.9%) of those who reported their relationship was sero-concordant had engaged in some condomless intercourse with this partner. A higher proportion of those in known sero-discordant or potentially sero-discordant partnerships always used condoms (29.6%), although more than two-thirds (70.4%) did not.

Finally, table 4.5 displays the same cross-tabulation as a proportion of respondents who had sexual intercourse with a regular partner in the previous 12 months.

TABLE 4.5 *Primary HIV risk behaviour among respondents engaging in sexual intercourse with regular partners*

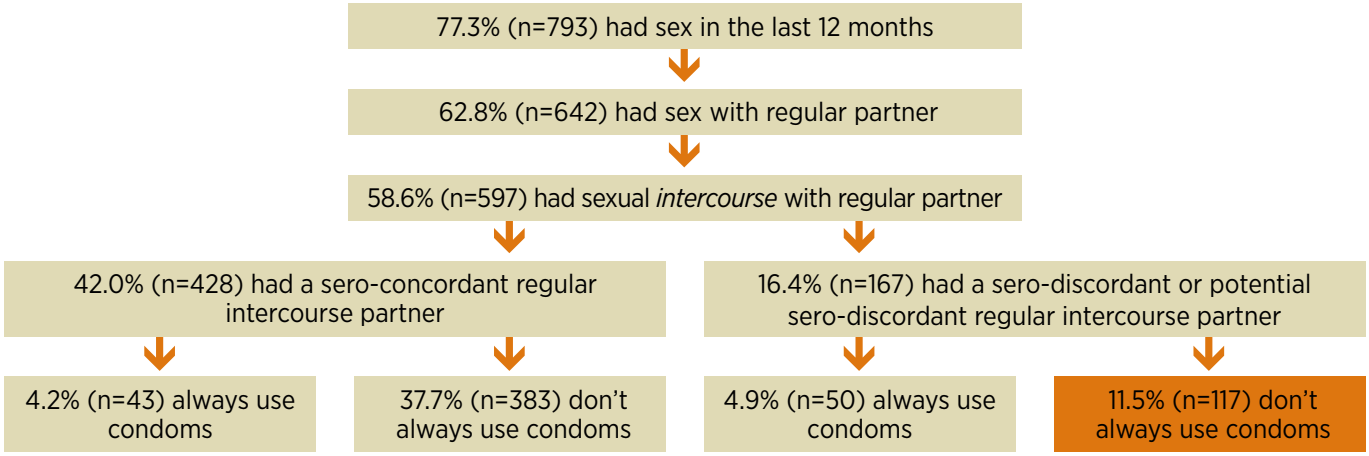
Sero-concordancy with regular partner (n= 593, missing 4)	**Regularity of Condom use with regular intercourse partner**	
	Always %	**Not always %**
Concordant HIV status	7.3	64.2
Known discordant/potentially Discordant HIV status	8.4	20.1

In total, a fifth (20.1%) of all respondents engaging in sexual intercourse with a regular partner who was known to be discordant, or where there was a potentially discordancy, had not always worn a condom for sexual intercourse with this partner. This is a key HIV transmission risk behaviour.

4.2.3 Sexual risk behaviour with regular partners

Data presented in sections 4.2.1 and 4.2.2 describe a flow of responses based on sex in the last year, sex with a regular partner, sero-concordancy, condom use and potential risk behaviour. The following figures illustrate the same flow of questions but present the data as an absolute proportion of all those taking part in the survey.

FIGURE 4.3 *Total proportion of respondents reporting sex with a regular partner, sexual intercourse & potential risk behaviour*



Among <u>all</u> respondents to the survey, a total of 11.5% reported engaging in sexual intercourse with a sero-discordant or sero-unknown regular partner where they did not utilise condoms on all occasions.

4.3 CASUAL SEXUAL INTERCOURSE PARTNERS

All respondents, regardless of whether they indicated they had a regular male or female partner, were asked whether they had any other sexual intercourse partners in the last year. We refer to these as 'casual' sexual partners.

Nearly a third (31.3%) of **all** respondents reported a casual sexual intercourse partner in the previous year. Significantly more male respondents reported a casual sexual partner (40.7%, n=158) than female respondents (25.4%, n=159).

4.3.1 Number of sexual intercourse partners

In total, 802 respondents indicated they had a sexual partner, either regular or casual (or both), within the previous 12 months. These respondents were asked how many people they had sexual intercourse with in total (including their regular partner, if applicable).

TABLE 4.6 *Number of sexual intercourse partners within the previous 12 months*

Number of sexual intercourse partners	All respondents (n=1012, missing 14)		All sexually active respondents (n=779, missing 14)	
	N	%	N	%
None	275	27.2	42	5.4
One	473	46.7	473	60.7
Two	74	7.3	74	9.5
Three	70	6.9	70	9.0
Four	33	3.3	33	4.2
Five	22	2.2	22	2.8
Between 6 and 10	34	3.4	34	4.4
Between 11 and 20	12	1.2	12	1.5
21 or more partners	19	1.9	19	2.4

Just under three quarters (72.8%) of the whole sample had an intercourse partner in the preceding 12 months and 27.2% did not. Among those who were sexually active in the previous 12 months, the vast majority (94.6% n=737) had engaged in sexual intercourse with one or more partners.

Almost half the sample had only a single intercourse partner in the preceding 12 months (46.7%) and a very small proportion had more than 20 partners (1.9%). Amongst those who were sexually active, nearly two-thirds (60.7%) had only a single intercourse partner. A small minority had higher than 20 intercourse partner (2.4%).

4.3.2 Condom use with casual partners

A total of 317 (31.3%) respondents said they had sexual intercourse with one or more casual partners in the preceding 12 months. These respondents were asked, *"How often have you used condoms with this/these sexual partners in the last 12 months?"*

TABLE 4.7 *Regularity of condom use with casual sexual intercourse partners*

Regularity of Condom use	All respondents with casual sexual intercourse partners (n=313, missing 4)		Male respondents with casual sexual intercourse partners (n=156, missing 2)		Female respondents with casual sexual intercourse partners (n=157, missing 2)	
	N	%	N	%	N	%
Never	68	21.7	31	19.9	37	23.6
Rarely	30	9.6	16	10.3	14	8.9
Sometimes	46	14.7	28	17.9	18	11.5
Often	25	8.0	13	8.3	12	7.6
Very often	37	11.8	16	10.3	21	13.4
Always	107	34.2	52	33.3	55	35.0

A fifth said that they had not used a condom at all with their casual sexual intercourse partners (21.7%) and just over a third (34.2%) always used a condom. Overall a majority of 65.8% had some potential exposure to HIV and other sexually transmitted infections, although this is dependent on the infection status of their partner(s). Female and male respondents did not significantly vary in their reported use of condoms with causal partners.

4.4 FEMIDOM USE

All respondents who engaged in any form of sex with a member of the opposite gender in the last year (n=759) were asked, *"Have you or a partner used a femidom (female condom) during sexual intercourse in the last 12 months?"*

Only a very small minority (4.6%) of heterosexually active people had used a Femidom in the past year. Around a tenth (11.0%) indicated they did not know what a Femidom is.

TABLE 4.8 *Femidom use in the previous 12 months*

Femidom use in the last year	All heterosexually active respondents (n=753, missing 6)		Men with a female partner (n= 306, missing 2)		Women with a male partner (n=447, missing 4)	
	N	%	N	%	N	%
No	635	84.3	252	82.4	383	85.7
Yes	35	4.6	16	5.2	19	4.3
I don't know what a Femidom is	83	11.0	38	12.4	45	10.1

4.5 CONDOM FAILURE AND CONDOM FAILURE RISK BEHAVIOURS

A total of 450 respondents (43.9% of total sample) said they had sexual intercourse and had used a condom on at least one occasion with at least one person within the previous 12 months. Those individuals were asked, *"Have you or a sexual partner had a condom come off or break during sexual intercourse in the last 12 months?"* A total of 26% (n=117) said they had.

The same respondents who reported having used a condom during sexual intercourse in the last 12 months were then asked a series of questions about the way in which they had used condoms in the last 12 months. All of the methods of condom use described in table 4.12 increase the likelihood of condom failure (breakage or slippage) occurring.

TABLE 4.9 *Behaviours that facilitate condom failure among respondents engaging in sexual intercourse*

Have you or your sexual partner done this when you have had sex using condoms in the last 12 months? Of those using condoms in the previous year (n=427, missing 23)	**Yes** % (n)	**No** % (n)
Having intercourse for over half an hour without changing the condom	19.4 (83)	80.6 (344)
Using a condom without water-based lubricant	16.9 (72)	83.1 (355)
Using saliva as a lubricant	13.3 (57)	86.7 (370)
Using a condom that's too short for the penis	11.5 (49)	88.5 (378)
Tearing the condom with jewellery or fingernails	8.2 (35)	91.8 (392)
Unrolling the condom before putting it on the penis	7.5 (32)	92.5 (395)
Using a condom that's too big or too baggy	7.3 (31)	92.7 (396)
Using a condom that is past its expiry date	6.8 (29)	93.2 (398)
One or more of the above		**43.8 (187)**
None of the above		56.2 (240)

A significant proportion of respondents (43.8%) who used condoms during sexual intercourse reported at least one behaviour that increases the likelihood of condom failure. Nearly a fifth (19.4%) said they had sexual intercourse for over half an hour without changing the condom, while 16.9% used condoms without water-based lubricants. Just over one in ten (11.5%) reported using a condom that was too short for the penis.

Table 4.10 shows how experience of actual condom failure, and reported experience of one or more of these condom failure risk behaviours within the previous 12 months varies by demographic groups.

TABLE 4.10 *Experience of condom failure by key demographic groups*

	% Respondents who had experienced condom failure	% Respondents who report one or more condom failure risk behaviours
Among those who had used a condom during intercourse in previous 12 months.	26.0	43.8
% n/total n (missing)	117/450 (33)	187/427 (23)
HIV Status		
Diagnosed positive	7.0	33.3
Last test negative	29.0	43.3
Never received a test result	29.5	49.6
Age		
16-19	26.4	60.4
20s	32.6	50.4
30s	30.1	38.4
40s	16.9	30.3
50 +	9.5	38.1
Education		
Low	64.3	92.9
Medium	31.6	49.3
High	23.6	40.6
Length of time in UK		
Less than 1 year	38.9	58.8
1 up to 3 years	20.7	50.0
3 up to 6 years	31.8	40.0
6 up to 10 years	29.1	46.8
10 years or more	24.0	41.8

Respondents with low levels of education were significantly more likely to report having experienced condom failure within the last 12 months (64.3%) than were people with medium (31.6%) or high levels of education (23.6%). Similarly, those with lower levels of education were more likely to report one or more condom failure risk behaviours (92.9%) than were those with a medium (49.3%) or high level of education (40.6%). However, caution should be taken in the interpretation of this finding due to the comparatively small number of people with a low level of education featuring in this analysis (n=14).

In general, younger respondents were more likely to report condom failure and condom failure risk behaviours than were older respondents. Nearly two-thirds (60.4%) of 16-19 year olds and around half (50.4%) of those in their twenties reported a condom failure risk behaviour in the past year, compared with around a third of those in their thirties (38.4%) and forties (30.3%).

As might be expected, respondents who reported at least one of the behaviours that may facilitate condom failure (shown in table 4. 9) were considerably more likely to have experienced condom failure during sex within the last 12 months. Of those who reported at least one of the eight condom failure risk behaviours, 41.2% (n=77) had actually experienced condom failure, compared to only 15% (n=36) of those who had not engaged in any condom failure risk behaviours.

4.6 SUMMARY & IMPLICATIONS FOR INTERVENTION PLANNING

- More than three-quarters (77.3%) of respondents had been sexually active within the previous year, while 22.7% had not.
- Most respondents (70.5%) were exclusively heterosexually active, while 3.3% were behaviourally bisexual and 3.5% had only same sex partners in the last year.
- Nearly two-thirds (62.8%) of all respondents had a regular sexual partner at the time of completing the survey.
- Nearly a third of respondents (28.4%) with a regular partner indicated they were HIV sero-discordant or potentially discordant.
- In total, 11.5% of the sample indicated that they did not always use condoms during sexual intercourse with a regular partner who they either knew to have a different HIV status to themselves, or whose status they were unaware of. This represents a primary HIV transmission risk behaviour.
- A third (31.3%) reported at least one casual sexual partner within the previous 12 months. A minority of respondents had both regular and casual partners.
- Only a small minority of heterosexually active respondents (4.6%) had used a femidom within the previous year. Eleven per cent said they did not know what a femidom was.
- Over a quarter of respondents who had sexual intercourse and had used a condom in the previous 12 months (26%) had experienced condom breakage or condom slippage (condom failure) (12% of the entire sample).
- Actual condom failures, and condom failure risk behaviours, were both more common among younger respondents. Interventions to reduce condom failure should seek to over serve younger black African people.

5. HIV PREVENTION NEED: KNOWLEDGE & EFFICACY INDICATORS

A person's willingness and ability to utilise condoms and/or manage their potential exposure to HIV and/or manage how and why they take HIV treatments is, at least in part, informed by their knowledge and understanding of HIV and safer sex. AHSS sought to establish participants' understanding and awareness of: the prevalence of HIV; how HIV is transmitted; and how HIV treatments operate. It also posed questions relating to condom use self-efficacy (the extent to which a person believes they have the skills and power to engage in a given behavior) and assessed participants' awareness of the range of condoms available. These are considered key HIV prevention knowledge and efficacy indicators and improved knowledge and understanding in these areas are Intermediate Aims of the *'It Starts with Me'* national programme.

Within the survey, indicators of prevention need were assessed in two formats. In the first, knowledge items were headed *All of the following statements are TRUE – did you know this before today?* Respondents were then provided with what we and our collaborators consider ten statements of fact. For each, respondents were asked to give one of the four responses:

- ☐ I knew this before today
- ☐ I wasn't sure if this was true or not
- ☐ I didn't know this
- ☐ I don't understand this statement

Giving respondents facts about HIV and asking them to indicate whether or not they knew this already probably under-estimates unmet need as some people will say they knew this when they did not, but fewer are likely to say they did not know this when they did. Although this method gives a more optimistic picture than is the case, it increases the educational value of the survey and minimises the probability that respondents finish the survey believing incorrect information which is the danger of *true / false* question formats.

The second question format related to condom use efficacy. Respondents were presented with three short statements and asked to agree or disagree on a five point scale:

- ☐ Strongly agree
- ☐ Agree
- ☐ Don't know / does not apply
- ☐ Disagree
- ☐ Strongly disagree

5.1 HIV TRANSMISSION AND TREATMENT KNOWLEDGE INDICATORS

All participants (regardless of HIV testing history) were presented with eight true statements about HIV prevalence, transmission and treatment and asked whether they knew these already. All those who indicated they did not know the statement to be true, and those who said they were not sure or did not understand can be said to be in HIV prevention need. That is, there is a role for HIV health promotion to improve such knowledge and understanding as part of HIV prevention efforts.

TABLE 5.1 *HIV prevalence, transmission and treatment (knowledge indicators)*

HIV Knowledge indicator	% Knew this	% Not Known	% Not sure	% Do not understand	% in need
At least 1-in-20 of all Africans living in England have HIV infection (n=1012, missing 14)	27.4	20.4	50.0	2.3	72.7
Effective treatment of HIV, using medication, significantly reduces the risk of HIV being passed on to others (n=1011, missing 15)	55.9	19.7	22.1	2.4	44.2
HIV medication is available free of charge to anyone in the UK who has diagnosed HIV (n=1012, missing 14)	64.1	12.6	22.3	0.9	35.8
HIV medicines work better if people with HIV start taking them early (before they start getting ill) (n=1009, missing 11)	78.7	8.2	12.0	1.1	21.3
There are HIV medicines that can help people with HIV to stay healthy. (n=1010, missing 16)	90.2	4.5	4.3	1.1	9.9
There is no cure for HIV infection once someone has it. (n=1014, missing 12)	91.9	4.5	2.0	1.6	8.1
HIV is never passed on through shaking hands or touching people. (n=1014, missing 12)	93.8	3.0	2.7	0.6	6.3
A person with HIV can pass it to a partner during sexual intercourse, without a condom (n=1016, missing 10)	96.4	1.3	1.4	1.0	3.7

Four knowledge items are particularly striking when considering HIV prevention need – those relating to: the prevalence of HIV among Africans living in England (in need = 72.7%); the role of HIV treatments in reducing the risk of HIV being passed to others (in need = 44.2%); the fact that HIV medications are free in the UK to anyone who requires them (in need = 35.8%); and the fact that HIV medicines work better if people with HIV start taking them before they start getting ill (21.3%). Below, variation in these four key knowledge items is explored by comparing across key demographic groups.

TABLE 5.2 *Demographic variation in knowledge related HIV prevention need*

	At least 1-in-20 of all Africans living in England have HIV infection **– % in need**	Effective treatment of HIV, using medication, significantly reduces the risk of HIV being passed on to others **– % in need**	HIV medication is available free of charge to anyone in the UK who has diagnosed HIV **– % in need**	HIV medicines work better if people with HIV start taking them early **– % in need**
Whole Sample % n/total n (missing)	72.7 735/1012 (14)	44.2 446/ 1011 (15)	35.8 363/1012 (14)	21.3 215/1009 (17)
Gender				
Male	77.3	47.5	39.5	22.7
Female	69.7	42.0	33.7	20.4
HIV testing history				
Diagnosed positive	55.0	16.5	15.7	112.7
Last test negative	69.2	40.9	29.7	13.4
Never tested	83.6	58.2	52.3	36.3

	At least 1-in-20 of all Africans living in England have HIV infection **– % in need**	Effective treatment of HIV, using medication, significantly reduces the risk of HIV being passed on to others **– % in need**	HIV medication is available free of charge to anyone in the UK who has diagnosed HIV **– % in need**	HIV medicines work better if people with HIV start taking them early **– % in need**
Age				
16-19	86.6	54.5	53.4	40.4
20s	76.2	47.1	42.4	21.3
30s	67.2	43.6	31.8	17.6
40s	69.2	35.9	27.7	13.5
50 +	66.7	40.2	23.8	21.0
Education				
Low	81.4	65.1	55.8	55.8
Medium	85.5	55.8	53.8	38.2
High	69.3	40.3	31.0	15.5
Length of time in UK				
Less than 1 year	81.0	50.0	64.3	43.9
1 up to 3 years	91.0	46.3	63.6	16.4
3 up to 6 years	79.8	44.2	44.2	31.6
6 up to 10 years	74.2	47.2	36.7	19.8
10 years or more	68.7	42.9	29.5	19.4

There was significant demographic variation in responses to these statements, with a similar trend observed in relation to each. People who had never tested for HIV were significantly less likely than those whose last test was negative and those who had diagnosed HIV to know that HIV medicines work best when taken early, that 1 in 20 Africans in England have HIV, that HIV medication is available free of charge to anyone in England who needs it, and that effective HIV treatment reduces the likelihood of transmission.

Respondents with a low level of education were similarly in greater need in relation to all of the statements compared to those with medium and high levels of education and, as a general trend, so were younger respondents (those aged under 30) compared to older ones. With the exception of the statement relating to how effective treatment of HIV can reduce the likelihood of transmission, people who had lived in the UK for 3 years or less were in significantly greater HIV prevention need than those who had been living in the UK for longer.

5.2 CONDOM USE EFFICACY INDICATORS

Respondents were asked the extent to which they agreed with three statements relating to condom use self-efficacy. Unfortunately, due to a survey routing error, responses were only captured from those respondents who reported sex with men (i.e. heterosexually active women and homosexually active men). Data relating to men who have sex only with women (n=288) and those who indicated they had no sexual partners (n=233) within the previous 12 months were not captured. Women who said they only have sex with women within the previous 12 months (n=15) were deliberately not presented with these statements. Respondents indicating that they do not agree with an affirmative statement, and those who do agree with a negative statement can be consider in need for the purposes of HIV prevention.

TABLE 5.3 *Condom use efficacy indicators (of those who had sex with men)*

Statement	Strongly agree	Agree	Don't know/ does not apply	Disagree	Strongly disagree	% in need
I sometimes have a problem getting hold of condoms (n=489, missing 5)	4.3	6.1	19.0	27.6	42.9	10.4
If I carried a condom I would worry about what people thought of me (n=487, missing 7)	12.7	11.7	16.6	22.8	36.1	24.4
I can ensure condoms are used with a sexual partner if I want them to be used (n=488, missing 6)	53.7	21.5	15.2	5.1	4.5	9.6

Nearly a quarter (24.4%) of respondents who reported sex with men said they agreed or strongly agreed that they would worry what others thought of them were they to carry a condom. One in ten (10.4%) said they sometimes had a problem getting hold of condoms and a similar proportion (9.6%) disagreed that they could ensure a condom was used with a sexual partner. The following table presents how HIV prevention need relating to these efficacy indicators varies by key demographic characteristics. Given the routing error relating to gender of sexual partners, the cross-tabulation of gender and condom use efficacy is not included in the table.

TABLE 5.4 *Demographic variation in condom use self-efficacy*

	I sometimes have a problem getting hold of condoms **– % in need**	If I carried a condom I would worry about what people thought of me **– % in need**	I can ensure condoms are used with a sexual partner if I want them to be used **– % in need**
Among those who had sex with men	10.4	24.4	9.6
% n/total n (missing)	51/489 (5)	119/ 487 (7)	47/488 (6)
HIV testing history			
Diagnosed positive	11.1	22.2	14.8
Last test negative	6.5	20.6	7.2
Never tested	18.0	32.6	13.0
Age			
16-19	25.9	24.1	17.2
20s	10.7	31.3	8.1
30s	3.8	19.0	6.4
40s	10.1	20.3	12.7
50 +	10.3	21.1	10.3
Education			
Low	43.5	43.5	21.7
Medium	19.1	29.4	13.2
High	7.1	22.6	8.4
Length of time in UK			
Less than 1 year	22.2	22.2	22.2
1 up to 3 years	9.4	25.0	6.2
3 up to 6 years	19.0	31.0	9.5
6 up to 10 years	10.1	35.1	7.6
10 years or more	8.9	21.3	9.9

The extent of demographic variation in relation to these statements is somewhat mixed. A significantly higher proportion of people with low levels of educational attainment agreed they sometimes had problems getting hold of condoms (43.5%) compared to those with medium (19.1%) and high (7.1%) levels of education. People who had never tested for HIV were significantly more likely to agree they have problems getting hold of condoms (18.0%) compared to those testing positive (11.1%) and those whose last test was negative (6.5%). There were no significant differences according to how long respondents had been living in the UK.

A similar pattern is observed in relation to responses to the statement: *'If I carried a condom I would worry about what people thought of me'*. Those with low levels of educational attainment were more likely to agree with this statement (43.5%) – and thus be in HIV prevention need – than those with medium (29.4%) and high (22.6%) levels of education. Respondents who had never tested for HIV were more likely to be in need (32.6%) than those who had tested positive (22.2%) or those whose last test was negative (20.6%). There were no significant differences according to how long respondents had been living in the UK.

There were no significant differences in the extent of need relating to whether respondents felt they could ensure condoms are used with a sexual partner if they want them to be used.

5.3 CONDOM USE KNOWLEDGE INDICATORS

Two questions were posed to all respondents which assessed their knowledge of condom availability and efficient usage. These statements were not presented to women who reported they only had sex with women (n=15).

TABLE 5.5 *Condom use knowledge indicators (whole sample except exclusively homosexually active women)*

Statement	% Knew this	% Not Known	% Not sure	% Do not understand	% in need
There are a wide range of types and sizes of condoms available (e.g. latex or plastic, different thickness, different lengths). (n=1003, missing 8)	81.6	12.2	4.7	1.6	18.4
Using the right size condom on a penis can reduce the likelihood of it breaking or slipping off. (n=1002, missing 9)	76.1	16.3	6.2	1.4	23.9

Almost a fifth of respondents (18.4%) were not aware (or not sure) that there are a wide range of condoms available. Nearly a quarter of respondents (23.9%) were not aware (or not sure) than using the right size condom on a penis can reduce the likelihood of it breaking or slipping off. The following table presents how HIV prevention need relating to these efficacy indicators varies by key demographic characteristics.

TABLE 5.6 *Demographic variations in condom use knowledge indicators*

	There are a wide range of types and sizes of condoms available **– % in need**	Using the right size condom on a penis can reduce the likelihood of it breaking of slipping off **– % in need**
Whole Sample*	18.4	23.9
% n/total n (missing)	185/1003 (8)	239/1002 (9)
Gender		
Male	20.6	24.7
Female	17.1	23.3
HIV testing history		
Diagnosed positive	18.1	17.8
Last test negative	13.4	20.5
Never tested	26.5	31.4
Age		
16-19	22.4	29.7
20s	15.5	22.7
30s	20.5	25.1
40s	16.2	19.8
50 +	17.3	21.9
Education		
Low	46.5	47.7
Medium	31.0	37.6
High	14.1	19.1
Length of time in UK		
Less than 1 year	33.3	32.6
1 up to 3 years	31.3	40.9
3 up to 6 years	27.7	37.6
6 up to 10 years	22.5	25.3
10 years or more	13.5	19.2

* Except exclusively homosexually active women (n=15)

More than a quarter (26.5%) of those never tested for HIV were not aware that there are a wide range of types and sizes of condoms available, compared to 18.1% of those diagnosed HIV positive and 13.4% of those whose last test was negative. Nearly half (46.5%) of those with low levels of education were not aware there are a range of condoms available, compared to 31.0% of those with medium and 14.1% of those with high levels of education. Respondents who had been living in the UK for longer were more likely to be aware of this and, therefore, less likely to be in HIV prevention need.

Nearly a third of those who had never tested for HIV (31.4%) did not know that using the right size condom on a penis can reduce the likelihood of it breaking or slipping off, compared to 20.5% of those whose last test was negative and 17.8% of those who had diagnosed HIV. Almost half (47.7%) of those with low levels of education did not know that using the right size condom can reduce breakage or slippage, compared to 37.6% of those with medium and 19.1% of those with high levels of education. As a general trend, those who had been living in the UK were more likely to be aware of this and, therefore, less likely to be in HIV prevention need.

5.4 SUMMARY & IMPLICATIONS FOR INTERVENTION PLANNING

- Nearly three-quarters (72.7%) of respondents were not aware of the high prevalence of HIV among black African people living in England. This figure is even higher among those never tested for HIV (83.6%) and those aged under 20 (86.6%).
- More than two-fifths (44.2%) were not aware that effective treatment of HIV can significantly reduce the likelihood of it being transmitted to sexual partners.
- More than a third (35.8%) were not aware that HIV medication is freely available to any individual in the UK who needs it. This figure was significantly higher among younger respondents and those who had been living in the UK for less time.
- Younger respondents and those with lower levels of education were significantly less likely to know that HIV treatments work better if taken before people become ill.
- Nearly a quarter (24.4%) of respondents who had sex with men in the previous 12 months agreed they would worry what people would think of them if they carried a condom.
- One in ten (10.4%) respondents who had sex with men said they sometimes had trouble getting hold of condoms. This was more common among those who had never tested for HIV (18%) and those with lower levels of education (43.5%). One in ten did not feel they could ensure a condom was used during sex if they want one to be used.
- Nearly a fifth (18.4%) were not aware that there are a wide range of condoms (types and sizes) available. This was significantly more common among those who had never tested for HIV and those who had been living in the UK for three years or less.
- Almost a quarter (23.9%) did not know that using the right size condom on the penis can reduce the likelihood of it breaking or slipping off. This was more commonly the case among those never tested (31.4%) and those with lower levels of education (47.7%).

6. SEXUAL HAPPINESS

Definitions and charters of health and health promotion emphasise that health means more than just the absence of infection or disease (World Health Organisation, 1983; World Health Organisation, 2005). It also encompasses a sense of well-being and more general life satisfaction. The same holds true for sexual health specifically and it is crucial that sexual health and HIV interventions take account of sexual happiness or satisfaction in their development and implementation. This chapter begins by considering responses concerning happiness with sex lives, ways in which sex might be improved, and then considers how these responses vary by key demographic characteristics.

6.1 HAPPINESS WITH SEX LIFE

All respondents were asked, *"Are you currently happy with your sex life?"* Overall, 24.1% (n=240) of people said no. Table 6.1 below displays how responses to this question varied by key demographic groups.

There were no statistically significant differences in responses between within different demographic groups.

TABLE 6.1 *Potential facilitators of improved sexual happiness*

	% of respondents not happy with their sex life		% of all respondents	
	%	N	%	N
Having better quality sex	35.4	85	22.0	224
Feeling more emotionally connected during sex	37.5	90	20.2	205
Having more sex with the partner I have	25.4	61	18.2	185
Having sex in new places	19.6	47	15.4	156
Having a regular sexual partner	32.1	77	15.3	155
Feeling more confident about sex	20.8	50	13.9	141
Trying out new types of sex	17.5	42	12.5	127
Having sex with more people	11.2	27	6.4	65
Not sure	11.7	28	9.9	101
Other	8.3	20	4.3	44
I'm happy with my sex life as it is	**1.7**	**4**	**42.0**	**427**

6.2 MAKING SEX BETTER

Regardless of their answer to the question above, all respondents were asked, *'What, if anything would help to make your sex life better?'* They were presented with a series of options and could tick all that apply. Options were developed from a review of sexual happiness and well-being literature, and in consultation with community partners. Table 6.1 displays results of all respondents, and responses specific to those who previously said they were not happy with their sex life.

Other potential facilitators of better sex mentioned by respondents included: Getting married and having sex within marriage; having less or no sex; having less fear of STIs (inc. HIV); being able to trust a sexual partner; having sex with the 'right' person; role-playing; and more open communication with a sexual partner.

The most commonly selected potential facilitator of better sex among all respondents was having better quality sex (22.0%), closely followed by feeling more emotionally connected during sex (20.2%) and having more sex with the partner they have (18.2%). A broadly similar pattern in responses is visible from those who indicated they were not currently happy with their sex life, although in every instance the proportion of people selecting that option is significantly higher.

It is notable that when presented with a list of options that may facilitate better sex, only 42.0% of all respondents said they were happy with their sex life as it is, a significantly lower proportion than the 75.9% who said they were happy with their sex life when asked directly (described in 6.1).

6.3 SUMMARY & IMPLICATIONS FOR INTERVENTION PLANNING

- Nearly a quarter (24.1%) of respondents said they were not currently happy with their sex life.
- When presented with a list of options relating to how their sex life could be improved, only 42% said they were happy with their sex life as it is.
- More than a fifth of all respondents felt that their sex life could be improved by having better quality sex (22.0%) or by feeling more emotionally connected during sex (20.2%).

7. INTERVENTION COVERAGE

AHSS 2013-2014 was used to assess the coverage of the HPE 'It Starts with Me' (ISWM) social marketing intervention. This intervention began in its initial form in May 2013 and has progressed in several waves (intervention blasts), relating to condom use, HIV testing, and HIV treatments.

All respondents were shown two executions of the 'It Starts with Me' intervention, shown opposite. Respondents were then asked, *"Do you remember seeing these or any other 'It Starts with Me' adverts or posters?"* and given the following response options:

- ☐ I recognise it but have never looked closely at or read it
- ☐ I've seen it and have read most or all of it
- ☐ No, I have not seen it

In total, 1011 people provided a response (missing 15) with 13.6% (n=137) indicating they recognised it but had never looked closely at it or read it; 20.4% (n=206) had seen it and read most or all of it; while 66.1% (n=668) had not seen it. Table 7.1 below shows variation by key demographic groups.

TABLE 7.1 *Intervention coverage by key demographic groups*

	N (missing)	**% Recognise but not read it**	**% Read most or all of it**	**% Not seen it**
Whole sample	1011 (15)	13.6	20.4	66.1
Gender				
Male	1011 (15)	17.8	17.3	64.9
Female		10.9	22.3	66.8
Age				
16-19	999 (27)	9.4	6.7	83.9
20s		15.6	14.8	69.5
30s		14.4	25.8	59.9
40s		11.2	25.4	63.4
50 +		18.4	24.3	57.3
Education				
Low	999 (27)	21.4	11.9	66.7
Medium		17.5	15.3	67.2
High		12.3	22.1	65.6
Length of time in UK				
Less than 1 year	1006 (20)	14.3	16.7	69.0
1 up to 3 years		13.4	13.4	73.1
3 up to 6 years		15.1	14.0	71.0
6 up to 10 years		16.9	19.2	63.8
10 years or more		12.3	22.8	64.9
HIV STATUS				
Never tested for HIV	998 (28)	13.0	8.6	78.4
Last HIV test negative		12.5	22.7	64.8
Diagnosed HIV positive		20.4	46.3	33.3

Men were more likely than women to recognise the intervention but not have read it (17.8% vs. 10.9%), while women were more likely to have read most or all of it (22.3% vs. 17.3). Intervention coverage appears considerably lower among those under 20 and is highest in older people. Total recognition was highest among people aged 50 and over, this may be an artefact of a small sample of such individuals. Respondents with a high level of education were significantly more likely to have read most, or all, of the intervention poster (22.1%) than those with medium (15.3%) or low levels of education (11.9%).

All those who had seen the intervention (whether they had read it or not) (n=343) were asked *where* they had seen it. They were presented with a list of options to which they could tick all that apply.

TABLE 7.2 *Settings in which 'It Starts with Me' intervention was seen*

Where did you see ISWM?	**Respondents who recognised ISWM**		**All respondents**
	N	**%**	**%**
On Facebook	126	36.7	12.5
On the back of a bus	90	26.2	8.9
At a GUM, STI or sexual health clinic	83	24.2	8.2
On a Website	67	19.5	6.6
In a Magazine (e.g. The Promota)	49	14.3	4.8
In a printed Newspaper (e.g. Testify, Nigerian Watch)	25	7.3	2.5
On Twitter	12	3.5	1.2
I don't know where I saw them	28	8.2	2.8
Somewhere else	76	22.2	7.5
N (missing)		**343** (0)	**1011** (15)

The most common setting for viewing the intervention was on Facebook, followed by on the back of a bus and within a GUM, STI or sexual health clinic. Only relatively small proportions had seen the intervention in magazines or printed newspapers.

7.1 SUMMARY & IMPLICATIONS FOR INTERVENTION PLANNING

- A fifth (20.4%) of respondents had seen and read all, or most, of the 'It Starts with Me' intervention.
- An additional 13.6% of people had seen the intervention but not read it.
- Seeing and reading the intervention was more common among women, those over 30 and those with higher levels of education.
- Respondents were most likely to have seen the intervention on Facebook, with viewing on other websites also reported. This may indicate a growing role of HIV prevention for black African people in online spaces.
- Large proportions of respondents had seen the intervention on the back of buses and in GUM or sexual health clinics.

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APPENDIX A: Changes in HIV prevention need among black Africans in England

In addition to acting as a HIV prevention needs assessment of the black African population in England, the *African Health & Sex Survey* (AHSS) also sought to establish whether there has been any significant change in HIV prevention need among this population between the time of the *last Bass Line* survey (2008/2009) and the time the current survey was conducted (2013/2014). In order to accomplish this, some identical questions were used in AHSS to enable comparison with the last survey. The indicators of HIV prevention needs assessed in this appendix directly relate to the 8 key expected outcomes of the *'It Starts with Me'* intervention produced by HIV Prevention England (described on page 11 of the main report).

A.1 METHOD OF SURVEY COMPARISON

The methods of survey recruitment for AHSS were somewhat different from those employed in *Bass Line* 2008/2009 (the former being entirely online with promotion via social media and the latter primarily promoted face-to-face during outreach with paper and pen data collection). We therefore examined univariate associations between the health outcomes and categorical demographic variables (age, education, ethnic group, gender, male sex partners in the previous year, female sex partners in the previous year, length of time living in the UK and HIV testing history).

We then compared each of the health outcomes across the two surveys using multiple logistic regressions. Firstly, unadjusted odds ratios (and 95% confidence intervals) were calculated for the health outcome in the second survey relative to the first. We then ran the model again controlling for those demographics that showed a univariate association with that health outcome with a probability of 0.2 (20%) or below. This resulted in an adjusted odd ratio and 95% confidence interval. When the confidence interval crosses 1.0 we are 95% confident the second survey result was different to the first. Results are displayed in table A.1. Figures highlighted with green indicate statistically significant differences.

A.2 RESULTS

After controlling for potential confounders, over the two surveys we saw significant improvements in HIV testing related needs, including: more people knowing that medication can keep people with HIV healthy and that medication needs to be taken early in infection; fewer people are afraid to know their HIV status; more people feeling it is important for them to know their HIV status; more knowing where to get an HIV test and more being confident that they can access an HIV test.

Behaviourally we saw a significant increase in the proportion of respondents who had tested for HIV in the last 12 months. This is despite a reduction in the proportion of people aware of the prevalence of HIV among Africans in England.

We also saw less condom failure related behaviours in the second survey and consequent fall in experience of condom failure. This was despite an increase in the proportion of people using saliva as a lubricant with condoms.

TABLE A.1 *Comparison of HIV prevention need in responses to AHSS 2013/2014 and Bass Line survey 2008/2009*

VARIABLE	2008/2009 %	2013/2014 %	ODDS RATIO (CI)	ADJUSTED ODDS RATIO* (CI)
HIV Testing Behaviours				
% Diagnosed with HIV	12.2	10.9	0.88 (0.70 – 1.11)	0.82 (0.62 – 1.06)
% Never tested for HIV	39.6	35.0	0.82 (0.70 – 0.96)	0.84 (0.71 – 1.01)
% Tested negative within the last year (of all those tested negative)	54.1	60.7	1.32 (1.07 – 1.62)	1.50 (1.19 – 1.88)
HIV Testing Needs				
% Who did not have confidence in getting an HIV test if they wanted one (of those not diagnosed with HIV)	22.1	14.7	0.61 (0.49 – 0.76)	0.71 (0.56 – 0.90)
% Who said it was not important for them to know their HIV status (of those never tested)	14.2	9.8	0.66 (0.44 – 0.98)	0.64 (0.42 – 0.98)
% Too afraid to test (of those never tested)	9.7	6.6	0.66 (0.41 – 1.06)	0.58 (0.35 – 0.95)
% Don't know where to test (of those never tested)	6.5	8.3	1.31 (0.82 – 2.08)	1.15 (0.71 – 1.85)
% Don't know there's no cure for HIV (all)	10.8	8.1	0.72 (0.56 – 0.94)	0.86 (0.65 – 1.15)
% Don't know HIV medications work better if taken early (all)	37.0	21.3	0.46 (0.39 – 0.55)	0.44 (0.36 – 0.53)
% Don't know HIV medications can help people stay healthy (all)	15.6	9.8	0.59 (0.47 – 0.74)	0.61 (0.47 – 0.79)
% Don't know HIV medications are free (all)	37.0	35.9	0.95 (0.82 – 1.10)	1.00 (0.87 – 1.23)
% Don't know 1 in 20 Africans in the UK have HIV (all)	68.8	72.6	1.20 (1.02 – 1.42)	1.38 (1.15 – 1.64)
Condom Failure Experiences and Behaviours				
% Experienced condom failure in the previous 12 months (all)	17.8	12.0	0.63 (0.50 – 0.78)	0.74 (0.58 – 0.94)
% Used a condom that was past its expiry date (all)	5.5	3.0	0.54 (0.36 – 0.82)	0.67 (0.44 – 1.02)
% Unrolled the condom before putting it on (all)	4.5	3.3	0.73 (0.49 – 1.09)	0.79 (0.52 – 1.21)
% Tearing the condom with jewellery or fingernails (all)	**5.3**	**3.7**	0.67 (0.50 – 0.99)	0.59 (0.39 – 0.89)
% Not used additional water-based lubricant (all)	7.5	7.5	1.00 (0.76 – 1.34)	0.96 (0.71 – 1.30)
% Using saliva as a lubricant (all)	4.2	6.0	1.46 (1.04 – 2.05)	1.55 (1.08 – 2.23)
% Using a condom that is too short for the penis (all)	5.6	5.1	0.90 (0.64 – 1.27)	1.00 (0.70 – 1.43)
% Using a condom that is too big or baggy (all)	2.5	3.1	1.27 (0.81 – 1.98)	1.40 (0.87 – 2.25)
% Having intercourse for over half an hour without changing the condom (all)	9.3	8.7	0.93 (0.71 – 1.21)	0.96 (0.72 – 1.28)
% Engaging in any one of the condom failure behaviours listed (all)	24.4	19.4	0.75 (0.62 – 0.90)	1.79 (0.64 – 0.98)

* Adjusted for demographic variables associated with the health outcome at p=0.20 or below.