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Perception of HIV transmission of main sex partners among men who have sex
with men

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B.A., Fisk University, 2014

Thesis Committee Chair: Patrick Sullivan, DVM PhD

An abstract of

A thesis submitted to the Faculty of the

Rollins School of Public Health of Emory University

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in Epidemiology

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Abstract

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By Shayla Nolen

Accounting for 55% of new diagnoses, men who have sex with men (MSM) have been disproportionately affected by HIV for over three decades. One-to-two third of the new diagnoses are acquired from a main sex partner. With such a large proportion of transmission from main partners, there are only a few studies that focus on their role and MSM's perception of contracting HIV from their main partner. Data from a national online survey was utilized to determine the perception of HIV transmission from main sex partners among MSM. A multivariate analysis was conducted using a logistic regression to estimate the odds ratios. Of 1112 MSM, 16% (n=182) accurately identified the HIV transmission from main partners to be 32% or higher. Gender of previous partners (p-value= 0.0069) and race/identity (p-value=<0.0001) were associated with perception of main partner transmission. Men who have sex with men and women (MSMW) (aOR= 1.50, 95% CI: 1.09, 2.07) were more likely to correctly predict the HIV transmission from main partners in comparison to men who have sex with men only (MSMO). In addition, Black MSM (aOR=1.51, 95% CI: 1.16, 1.96) were more likely to identify it as $\geq 32\%$ than their White counterparts. Previous studies have noticed that age is associated with contracting HIV from a main partner; however, our findings demonstrate that knowledge of transmission does not differ by age group. Further investigation needs to take place to determine the reasons certain population are, or are not, aware of the risk of main partner transmission and to develop prevention methods to reduce the infection rate from main partners within the MSM population.

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Introduction

In comparison to other groups, HIV severely affects Men who have sex with men (MSM) (1). In the United States, the predicted MSM percentage equates to 2% of the total population, however, MSM account for 55% of individuals living with HIV(2, 3). From 2005-2014, infection rates among various racial groups within the MSM population increased: Black/African Americans increased by 22%, Hispanics by 20%, Asian American by 101% and American Indian/ Alaska Native by 63% (1, 3). Although all racial minority groups displayed a percentage increase in new diagnoses, Black MSM continue to be the largest racial group affected with an estimated 10,100 new infections in 2014 (4). As for age groups among MSM, the group that has increased the most within the MSM population is 25-34 year olds. From 2008-2014, this group increased by 35%; surpassing 13-24 year olds as being the largest age group with new diagnoses (3).

Although there has been an increase within various groups, the overall prevalence of MSM has only increased by less than 1% between 2010-2014 (1, 3). The introduction of various prevention methods, such as antiretroviral therapy (ART) and pre-exposure prophylaxis (PrEP), is the cause of the stabilization of the overall prevalence (5). However, condom use among MSM has declined, especially in primary (or main) partner relationships due to the high frequency of unprotected sex that they are participating in (6, 7). Garamel and Golub conducted a cross sectional study with 164 HIV-negative MSM and found that 90% had recent condomless sex with a primary partner (6). With the increase in

condomless sex, HIV transmission from primary partners among MSM is estimated to be 32% in the United States (8).

Within the MSM population, main partner transmission attribute one-to-two thirds of new diagnoses (7, 8). Unfortunately, there have been few studies to further analyze MSM's awareness of the high transmission from main sex partners(9). We conducted an analysis that looked at the perceived transmission from main partners among MSM. Data from a national MSM survey was used to describe the demographics, sexual behaviors and characteristics of MSM and to determine the likelihood of men being aware of the high possibility of contracting HIV from their main partner.

Methods

MSM in the US were recruited through online Facebook advertisements and Black Gay Chat and asked to complete a secure online survey (Appendix A). Data was collected through November 30 - December 19, 2010 (10). Demographics, sexual history and behaviors, technology and adherence were assessed. Men who have had sex with a man and were at least 18 years old were eligible to take the survey. The Emory University Institutional Review Board determined the study to be exempt from review.

Accurately identifying the risk of transmission among main sex partners among MSM was the primary outcome of interest. This variable was assessed through the question "Again, thinking of an average group of 100 newly HIV-infected men who have sex with men, how many do you think were infected from their main partner/ husband/ boyfriend?" The sample (n=1112) was restricted to include only men who had answered the main partner perception question.

Based off of the findings of Steven Goodeau et al., the outcome variable was transfigured into a dichotomous variable at 32%, which is the estimated percentage of HIV transmission from main sex partners within the MSM population (8). The demographic (age, city, race/identity, insurance type, employment and education) and sexual risk behaviors and characteristics (sexual orientation, gender of all sex partners, ever tested for HIV and HIV status) were included in the analysis. These variables were recorded using median and interquartile range for continuous variables and proportions for categorical variables.

Age was tested for normality against the main partner perception variable. Based off of the p-value ($p < 0.0001$), age was not normal. Thus, a Wilcoxon rank sum test was performed and determined age was statistically significant because the p-value < 0.20 ($p = 0.0637$).

A bivariate analysis with the primary outcome was conducted to find the crude odds ratios and 95% confidence intervals. Chi-square test was used to determine statistical significance for the categorical variables and *t*-test for age. Model selection took place among variables that were statistically significant, p-value < 0.20 . Those selected to be included in the final model were inputted into a multivariate logistic regression model and the adjusted odds ratios, 95% confidence intervals and p-values were found. Data were analyzed using SAS 9.4 software package (Cary, North Carolina).

Further analysis took place in order to determine the distribution of percentages of predicted HIV transmission among different types of partners (main, regular, casual and other). The average percentages of each of the partner

types were calculated and stratified by race/ identity, age, region and HIV status. Bar graphs were created to illustrate the distribution of the stratified groups.

Results

The online survey acquired 3424 respondents through the online advertisements. Of those respondents, only 2785 (81%) were men who had sex with at least one man and between the ages of 18-99 years old. Once the restriction of answering main partner perception question was applied, the sample included 1112 (32%). An analysis took place to evaluate the characteristics of incomplete surveys. Those who were least likely to complete the survey were younger, Black/African American, less than a high school education, from one of the southern states and were HIV negative.

Table 1 describes the demographic and behavioral characteristics of the sample. Of the 1112 men, the median age was 32 years old with a racial distribution being 7% Black/African American (n=76), 11% Hispanic (n=127), 73% White/Caucasian (n=808) and 9% being categorized as other (n=101). Eighty-three percent of men had higher than a high school education and almost 70% were currently employed (n=760). Most of the men reported being homosexual/ gay (95%, n=1055). When asked about the gender of previous sexual partners, 40% have had sex with both men and women; whereas, 60% have only had sex with men. As for HIV status, 762 (69%) were negative and 172 (15%) were positive, while 178 have never been tested for HIV (16%).

For those who perceived HIV transmission through main sex partners among MSM as being less than 32%, the median age was 31, which is younger

than the groups that accurately identified the transmission rate as being at least 32% (median=34). There were 29 Black/African Americans (16%), 16 Hispanics (9%), 124 White/Caucasians (68%) and 13 Other (7%) in the $\geq 32\%$ category (n=182). Variables that were statistically significant (p-value < 0.20) were age (p=0.0637), race/ identity (p= < 0.0001), region (p=0.1012), sexual orientation (p=0.0860), gender of previous partners (p=0.0069) and HIV status (p=0.0505). Based off of Table 2, Black/African Americans were more likely (aOR=3.40, 95% CI: 2.06,5.62) to correctly recognize that the average percentage of HIV transmission was at least 32% (p-value < 0.0001). Also, men residing in the Midwestern states (OR=0.62, 95% CI:0.40, 0.97) and western states (OR=0.66, 95% CI: 0.44, 0.99) were least likely to identify it as $\geq 32\%$ (both p-values < 0.05) in comparison to those in southern states. Even though HIV status was statistically significant, there was only a significant difference between positive and negative individuals (p < 0.05).

Once the final model was created, the adjusted ORs were reported for the two variables that were included in the model (Table 2). When each race/ identity group was compared to White/Caucasians, they all were statistically significant, p-value < 0.05 . Black/ African Americans were 1.51 times more likely to correctly identify the HIV transmission between main sex partners among MSM as being at least 32% in comparison to their White/Caucasian counterparts. However, Hispanic and those categorized as other were least likely to identify it as at least 32% (aOR=0.66 and aOR=0.44 respectively). Gender of previous partners was also significant. Men who have sex with men and women (MSMW) are 50% more likely to 1.50 times more likely to perceive main partner

transmission as being $\geq 32\%$ than men who have sex with men only (MSMO) (95% CI: 1.09, 2.07).

Perception of HIV transmission based off of the type of partner was stratified by race/ identity in Figure 1. While Hispanic, White/Caucasian and Other were similar to the overall group's percentages, Black/African Americans were different. On average, they accounted 28.3% of HIV transmission came from main sex partners, whereas the other groups assumed it was between 18.9-20.3%. Each of those groups thought that transmission from casual sex partners was around 50%; Black/African Americans, however, thought it was almost 40%. As for Figures 2-4, the stratified groups did not show a significant difference in partner type percentages from the overall group.

Discussion

Less than 16% of the survey respondents in the sample correctly identified the proportion of new HIV infections in MSM arising from main partners was at least 32%. Black MSM and men who have sex with both men and women (MSMW) were more likely to correctly report the proportion of new HIV infections from main partners. The reasons that these two groups are liable to believe that the transmission rate is $\geq 32\%$ can be discovered in studies regarding their HIV behaviors.

Black MSM were 51% more likely to classify main partner transmission as $\geq 32\%$ than White MSM. However, Hispanic and those categorized as other were least likely to believe this (34% and 56%, respectively). For over three decades, HIV has disproportionately affected Black MSM in comparison to other races (1).

In response, there has been a surplus of prevention and intervention programs that are targeting this population in order to reduce the impact (11, 12). Along with prevention programs being developed, the Centers for Disease Control and Prevention (CDC) has launched several campaigns to educate Black MSM, such as Act Against AIDS campaign (13). With the influx of resources being developed to decrease the prevalence of HIV transmission, Black MSM are becoming more knowledgeable of HIV, its prevalence within their community and preventative measures to combat infection (14, 15). These educational resource might explain why Black MSM were more likely to accurately identify the role of main partners in HIV transmission because they are knowledgeable about HIV or perceive it to be higher than average due to the high prevalence in their community. Also, Black men are more likely to have sex partners that are of the same race in comparison to other racial groups in the MSM population (16, 17). With a combination of being aware of the disproportionate impact of HIV among Black MSM and primarily choosing sex partners who are also Black, they may be more likely to believe that the possibility of contracting HIV from their main partner as being equal to or higher than 32%. Thirty-eight percent of Black MSM in our study accurately predicted main partner transmission as at least 32%; whereas, less than 15% of the other racial groups, including White MSM, accurately predicted risk of HIV transmission to be 32% or greater. These results demonstrate that Black MSM are the only racial group that is statistically different in terms of awareness of the role of main partners in HIV transmission, compared to their White counterparts.

We also found that men who have sex with men and women (MSMW) were 50% more likely to determine that main partner transmission was $\geq 32\%$ compared to men who have sex with men only (MSMO). Although there are no previous studies that estimate the role of main partner transmission of MSMW, there are studies that demonstrate a common belief among MSMW that male sex partners are considered to be unsafe compared to their female partners (18, 19). This belief would lead them to report higher risk of transmission from male main partners. In 2008, Brian Dodge, conducted a qualitative study that included 30 at-risk MSMW. “In general, throughout the interviews, male sexual partners were cited as being ‘more active,’ ‘not trustworthy,’ and ‘riskier’ in comparison to female sexual partners” (18). A cross sectional study found that among 103 MSMW, 43% had unprotected sex with female partners but not male partners (19). However, only 19.4% reported having unprotected sex with both their male and female partners (19). Also, MSMW in this study were less likely to have a male main partner, they were exclusively casual partners (19, 20); and of those with female main partners, they were more likely to use a condom during intercourse with their male partners (19). Due to the belief that male partners are risky, MSMW are likely to accurately believe that main partner transmission is high. So, when comparing the likelihood of predicting the risk of transmission between main partners is at least 32%, MSMW would more likely predict a higher transmission rate than MSMO.

Region of residence was significantly associated with perception of risk from main partners for the bivariate analysis but was dropped during model selection. Age was also not included in our final model. However, previous

studies have noticed an association between age and main partner transmission. Younger MSM are more likely to become infected from a main partner than older MSM, this is partly due to difference in duration of partnerships (7). Older men are more likely to be with their main partner for a long duration of time, thus reducing the possibility of having a partner with an unrecognized HIV infection. Although transmission differs between age groups, our findings show that awareness of the infection risk from main partners is the same across all age groups.

Although we were able to identify those who were likely to predict main partner transmission as being at least 32%, there were a number of limitations with this study that could have affected the results. First, the data used was from a cross sectional study of social media users who chose to participate in a sexual health survey. So, the sample does not thoroughly depict the MSM population, resulting in loss of generalizability. Another reason for loss of generalizability is that many participants were excluded from the sample because of missing answers in the main partner question. Second, the results of the study are self-reported. The results could be affected by social desirability and recall bias. Finally, Misclassification of categorical variables could take place because of the numerous groups that were too small to analyze on their own that were collapsed together.

Although there were limitations in our study, we evaluated the perception of HIV transmission from main partners among MSM. An understanding of how knowledgeable this population is about infection from main partners was attained. We noticed that MSMW and Black MSM were more likely to predict the

transmission rate as being at least 32%; however, it is possible that there are factors affecting each of these groups that are causing them to endorse the role of main partners. The next step is to further understand the reasons certain population are, or are not, aware of the risk of main partner transmission and to develop prevention methods to reduce the infection rate from main partners within the MSM population.

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Tables

Table 1. Demographic and behavioral characteristics of 1112 men who have sex with men (MSM) who completed an online survey on HIV prevention, United States, 2010

	Total (N=1112) N (%)	< 32% (n=930) n (%)	≥ 32% (n=182) n (%)	p-value ^h
Age (Years), Median (interquartile range)	32 (23-44)	31 (22-43)	34 (24-46)	0.0637 ⁱ
Race/ Identity				<0.0001
Black/ African American	76 (7)	47 (5)	29 (16)	
Hispanic	127 (11)	111 (12)	16 (9)	
White/ Caucasian	808 (73)	684 (74)	124 (68)	
Other ^a	101 (9)	88 (9)	13 (7)	
Region				0.1012
Northeast	191 (17)	158 (17)	33 (18)	
Midwest	252 (23)	218 (23)	34 (19)	
South ^b	344 (31)	275 (30)	69 (38)	
West	325 (29)	279 (30)	46 (25)	
Education				0.4142
High School or Less ^c	189 (17)	152 (16)	37 (20)	
Some College, Associate or Technical	428 (38)	362 (39)	66 (36)	
Complete College	495 (45)	416 (45)	79 (44)	
Insurance Type				0.9080
Private	553 (50)	460 (50)	93 (51)	
Public	77 (7)	63 (7)	14 (8)	
Multiple	136 (12)	114 (12)	22 (12)	
None or Don't Know	346 (31)	293 (31)	53 (29)	
Currently Employed				0.5291
Yes	760 (68)	632 (68)	128 (70)	
No ^d	352 (32)	298 (32)	54 (30)	
Sexual Orientation				0.0860
Homosexual/ Gay	1055 (95)	887 (95)	168 (92)	
Other ^e	57 (5)	43 (5)	14 (8)	
In Your Entire Life Have You Had Sex With:				0.0069
Only Men	668 (60)	575 (62)	93 (51)	
Both Men and Women	444 (40)	355 (38)	89 (49)	
Ever Been Tested for HIV				0.4886
Yes	934 (84)	778 (84)	156 (86)	
No	178 (16)	152 (16)	26 (14)	

Table 1, continued.

HIV Status				0.0505
Positive	172 (15)	133 (14)	39 (22)	
Negative ^f	762 (69)	645 (70)	117 (64)	
Never Been Tested ^g	178 (16)	152 (16)	26 (14)	

^a Includes 12 Native American/Alaska Native, 9 Asian/ Pacific Islander, 45 Multi-racial, 28 Other, 2 who preferred not to answer and 13 missing

^b 10 missing were included

^c Includes 154 who completed High school or GED, 21 who had some high school, 4 who had less than high school, 2 who ever attended school and 8 missing

^d 7 missing were included

^e 2 Heterosexual/ Straight, 43 Bisexual, 3 Unsure, 7 Other and 2 missing

^f Includes 732 who are Negative, 4 Indeterminant/ Inconclusive, 13 did not receive results, and 12 prefer not to answer

^g 8 missing were included

^h p-values based off of Chi-square test

ⁱ p-value of age was found using Wilcoxon ranked sum test

Table 2. Bivariate and multivariate logistic regression analysis of MSM who correctly identified main partner transmission to be $\geq 32\%$, 2010

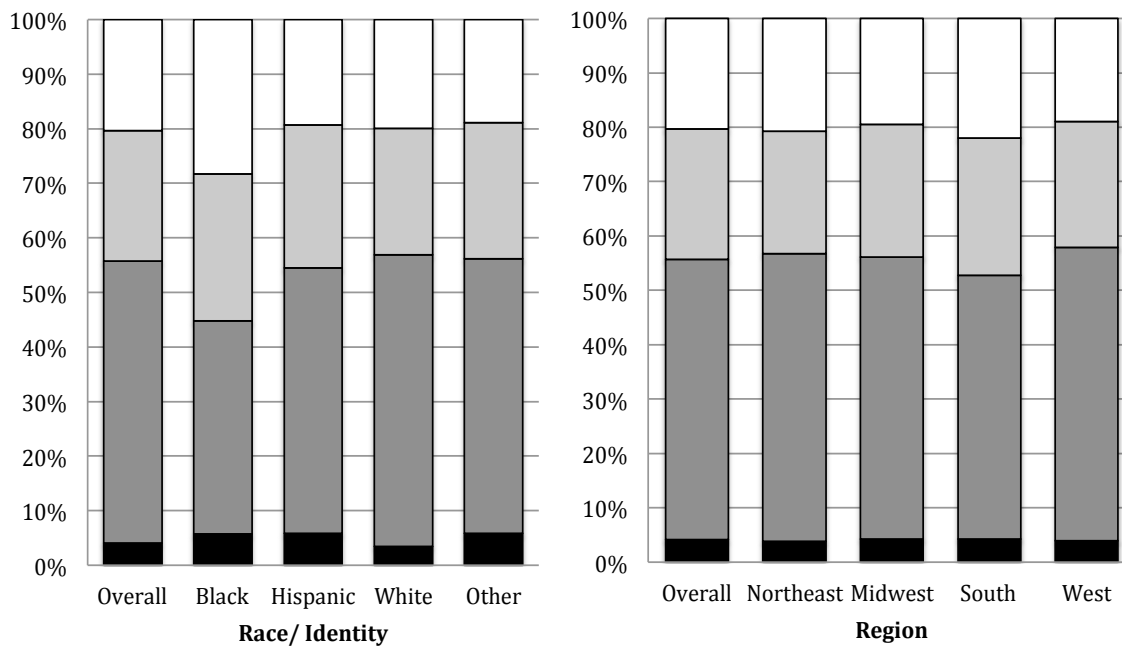
	Crude Odds Ratio OR (95% CI)	Adjusted Odds Ratio ^a aOR (95% CI)
Age	1.01 (1.00, 1.02) [‡]	-
Race/ Identity		
Black/ African American	3.40 (2.06, 5.62) ^{***}	1.51 (1.16, 1.96) [*]
Hispanic	0.80 (0.46, 1.39)	0.66 (0.51, 0.86) [*]
White/ Caucasian	1.0 (referent)	1.0 (referent)
Other	0.81 (0.44, 1.50)	0.44 (0.26, 0.74) [*]
Region		Not Included
Northeast	0.83 (0.53, 1.32)	
Midwest	0.62 (0.40, 0.97) [*]	
South	1.0 (referent)	
West	0.66 (0.44, 0.99) [*]	
Education		Not Included
High School or Less	1.0 (referent)	
Some College, Associate or Technical	0.75 (0.48, 1.17)	
Completed College	0.78 (0.51, 1.20)	
Insurance Type		Not Included
Private	1.12 (0.77, 1.61)	
Public	1.23 (0.64, 2.35)	
Multiple	1.07 (0.62, 1.83)	
None or Don't Know	1.0 (referent)	
Currently Employed		Not Included
Yes	1.12 (0.79, 1.58)	
No	1.0 (referent)	
Sexual Orientation		Not Included
Homosexual/ Gay	0.58 (0.31, .99) [‡]	
Other	1.0 (referent)	
In Your Entire Life Have You Had Sex With:		
Only Men	1.0 (referent)	1.0 (referent)
Both Men and Women	1.55 (1.13, 2.13) ^{**}	1.50 (1.09, 2.07) ^{**}
Ever Been Tested for HIV		Not Included
Yes	1.17 (0.74, 1.84)	
No	1.0 (referent)	
HIV Status		Not Included
Positive	1.62 (1.08-2.43) [*]	
Negative	1.0 (referent)	
Never Been Tested	0.94 (0.60-1.49)	

[‡]p<0.20, *p<0.05, **p<0.01, ***p<0.001

^a Adjusted ORs were found for variables that were included in the final logistic regression model

Figures

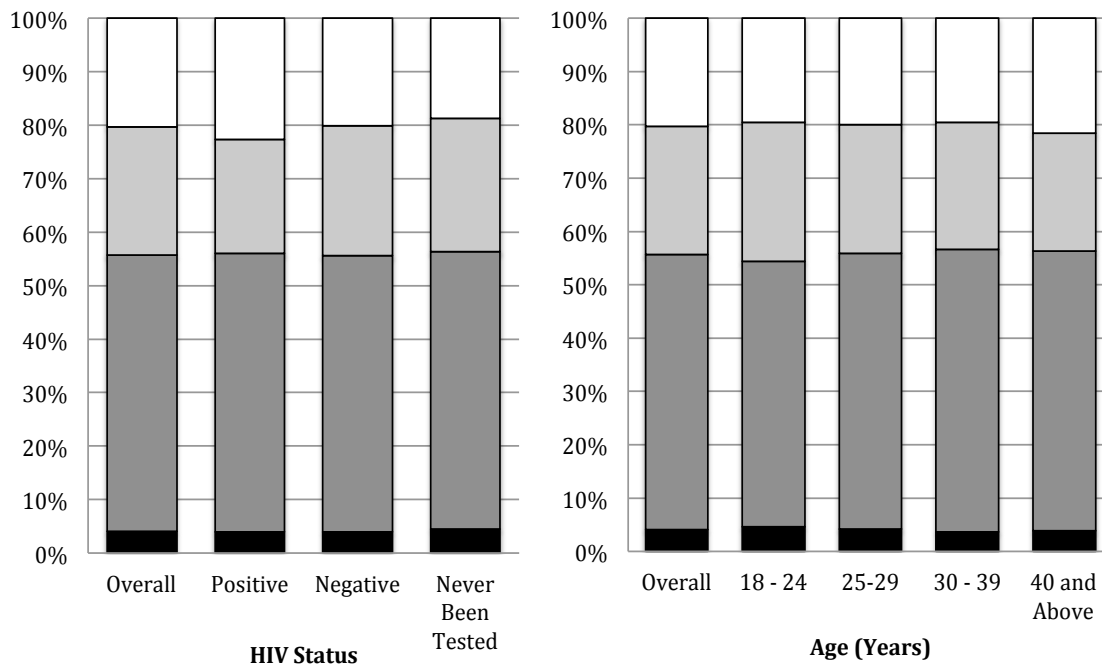
Figure 1. Perceived Percentage of HIV Transmission among MSM, stratified by groups



1a. Stratified by Race/ Identity

1b. Stratified by Census Region

Main
 Regular
 Casual
 Other



1c. Stratified by HIV Status

1d. Stratified by Age Categories

Men's Health Survey

Introduction, age, sex and race

Thank you for your interest in our survey. Please take note of the following information:

1. Your answers are anonymous: we don't have any information about who you are beyond the questions you answer.
2. Some questions are about sensitive topics; you can choose not to answer any question that you are not comfortable with.
3. If you have any questions or comments, you may contact the Principal Investigator, Dr. Patrick Sullivan, at PSSULLI@EMORY.EDU.

What is your age?*

What is your sex?*

Male

Female

Race, education, residence

Do you consider yourself to be Hispanic or Latino?

- Yes
- No
- Don't Know
- Prefer not to answer

Which racial group do you consider yourself to be in?

- Asian/Pacific Islander
- Black/African-American
- White/Caucasian
- Native American/Alaska Native
- Multi-Racial
- Prefer not to answer
- Other: _____

You indicated that you are multiracial. Please check all of the racial groups you consider yourself to be in.

- Asian/Pacific Islander
- Black/African American
- White/Caucasian
- American Indian/Alaskan Native
- Other

What is the highest grade in school you completed?

- College, post graduate, or professional school
- Some college, Associate's degree, and/or Technical school
- High school or GED
- Some high school
- Less than high school
- Never attended school
- Don't Know

What state do you live in?

- Alabama
- Alaska
- American Samoa
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Federated States of Micronesia
- Florida
- Georgia
- Guam
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky

- Louisiana
- Maine
- Marshall Islands
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Northern Mariana Islands
- Ohio
- Oklahoma
- Oregon
- Palau
- Pennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virgin Islands

- Virginia
 - Washington
 - West Virginia
 - Wisconsin
 - Wyoming
-

Health Insurance

Are you currently employed?

- Yes
- No

What kind of health insurance or coverage do you currently have?

- Private health insurance or HMO
 - Medicaid
 - Medicare
 - Tricare/Champus
 - Veterans Administration coverage
 - No health insurance
 - Some other health insurance
 - Don't know
-

Orientation, knows gay/bi men

What is your sexual orientation?

- Homosexual/ Gay
- Heterosexual/ Straight

- Bisexual
 - Unsure
 - Other: _____
-

Sex partner types

We would now like to you to answer some questions about your relationships.

In your entire life, have you had sex with:*

- Only women
 - Only men
 - Both men and women
 - I've never had sex
-

Technology Questions

We are interested in finding better ways to communicate with the community about ways to prevent HIV. The following questions explore how different people use mobile phones (cell phones) and the Internet to communicate.

Do you currently have a mobile phone (cell phone) with activated service?

- Yes
- No

Do you share a mobile phone with someone else?

- Yes
- No

A smart phone is a mobile phone that allows easy Internet browsing and may have other capabilities beyond voice calls and text messaging. Do you currently have a smart phone?

- Yes
- No

How likely are you to have a smartphone in the next year?

- Very likely
- Somewhat likely
- Somewhat unlikely
- Very Unlikely

Which of the following smart phones or mobile phones do you have?
(mark all that apply)

- Blackberry
- G1/Google/Android
- iPhone
- Nokia smart phone (E62, E71x, etc.)
- Palm Treo/Centro running PalmOS (not Windows Mobile)
- Windows Mobile smart phone (Motorola Q, Samsung SCH-I phones, Instinct, Dash, Touch, etc.)
- Cell phone without smart phone features
- Other

How often do you access the Internet over your mobile phone?

- Often
- Occasionally

- Rarely
- Never

Is your cell phone GPS enabled (that is, it can identify where you are)?

- Yes
- No
- Don't know

Technology Cont. - Mobile Service Plans

For the next several questions, please think about the mobile phone that you are most likely to use for personal calls or text messages.

What kind of service plan do you have for this mobile phone?

- I have a prepaid account, where I buy credits and then use them.
- I have a service contract where I pay a bill to the phone company each month for my service
- My company pays for my cell phone
- Don't Know

Which wireless (cell phone) carrier do you use?

- Alltel
- AT&T
- Cellular One
- Sprint
- T-Mobile
- Verizon
- Pre-paid phone carrier (e.g., Boost Mobile, Virgin Mobile, Tracphone)
- Metro-PCS

- Other (Please specify): _____
- I don't have a cell phone for personal use

How many times in the last 12 months has your phone been temporarily disconnected?

- Never
- Once
- Twice
- 2-5 times
- More than 5 times
-

Text Messages, Page 2

In the past 12 months, have you used your mobile phone to send or receive text messages (SMS or texting)?

- Yes
- No
- Don't know

About how many text messages do you send or receive every day with this phone?

- More than 10 texts per day
- 6 - 10 texts per day
- 1 - 5 texts per day
- I don't text every day
- Don't Know

About how often do you send or receive text messages with this phone?

- Every day

- A few times a week
- A few times a month
- A few times a year
- Don't know

Does your current cell phone plan include text messaging?

- Yes, I have unlimited text messaging
- Yes, I have a set number of included text messages each month
- No, I pay for each text message I send or receive
- Don't know

Would you be willing to receive text messages on your phone as part of an HIV research study, if it did not cost you anything to receive the messages?

- Yes
- No
- Don't Know

Technology Cont. - Current Use of Mobile Phone or Computer

The following questions will ask you about some of the different ways you may use your computer or cell phone.

Below is a list of some things people do with their cell phones. In the past 6 months, how often have you done these things with your cell phone?

	Daily	Few times a week	Few times a month	Less than once a month	Never
Watch a short 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

minute video					
Listen to a podcast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play games	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meet a new friend (non-sexual)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meet a new sex partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get health related information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get HIV or STD related information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use a social network site or club (e.g., Facebook, Twitter, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I typically access the Internet (check all that apply):

- At work
- At the library
- At a friend's house
- At home
- At a community center
- Other (please specify)
- I never access the internet

Below is a list of some things people do with their computers. In the past 6 months, how often have you done these things?

	Daily	Few times a week	Few times a month	Less than once a month	Never
Watch a short 3 minute video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listen to a podcast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Play games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meet a new friend (non-sexual)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meet a new sex partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get health related information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get HIV or STD related information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use a social network site or club (e.g., Facebook, Twitter, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receive an instant message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

 Technology Cont. - Future use of applications

The following questions ask you about your interest in using different applications that deal with HIV and sexual health.

How likely are you to use a website or cell phone application that would allow you to:

	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely
read about new ways to prevent HIV/STDs?	()	()	()	()
chat with another provider about HIV or STDs?	()	()	()	()
hear the stories of men who do not have HIV describing how they stay healthy sexually?	()	()	()	()
hear the stories of couples where one partner has HIV and the other doesn't to learn how they stay healthy sexually?	()	()	()	()
hear how couples successfully make agreements	()	()	()	()

about open relationships?				
receive a text or instant message reminder about an activity I need to do regularly (e.g., such as taking a medication)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
keep track of the people and kind of sex I had?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
find a place to get HIV tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please check each of the following online networking sites you visit at least once a week (mark all that apply):

- Skype
- Encounter
- Adam4Adam
- Facebook
- FourSquare
- LinkedIn
- MySpace
- Twitter
- Tumblr
- Grindr
- ManHunt
- DaddyHunt
- Gay.com

- Other sites
- I use networking sites less than once a week
- I don't use networking sites at all

Which features do you currently use on social networking websites? (mark all that apply)

- Ask an expert bulletin board
- Read about the latest health research posted by experts
- Chat Room for real time chats
- Private chat with another member
- Search for member with similar interests/profile
- Topical (Subject) Forums/Bulletin Board Discussions
- I don't use any of these features

Ever tested for HIV and when

Have you ever been tested for HIV?

- Yes
- No
- Don't know

In what year did you was your most recent HIV test?

- 2010
- 2009
- 2008
- 2007
- 2006
- 2005

- 2004
 - 2003
 - 2002
 - 2001
 - 2000
 - 1999
 - 1998
 - 1997
 - 1996
 - 1995
 - 1994
 - 1993
 - 1992
 - 1991
 - 1990 or before
-

Date of last HIV test

In what month of [question("value"), id="337"] was your most recent HIV test?

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

I don't remember which month

Details of last HIV test

When you got tested in [question("value"), id="338"] [question("value"), id="337"], where did you get tested?

- Private doctor's office (including HMO)
- Community health center/public health clinic
- HIV counseling and testing site
- HIV/AIDS street outreach program/Mobile Unit
- Hospital (inpatient)
- Emergency room
- Sexually transmitted disease clinic
- Drug treatment program
- Correctional facility (jail or prison)
- Blood bank/Plasma center
- Military
- At home
- Other: _____

What was the result of your most recent HIV test in [question("value"), id="337"]?

- Negative
 - Positive
 - Indeterminant/Inconclusive
 - Didn't get the results of my last HIV test
 - Prefer not to Answer
-

New Page

To what extent do you agree with the following statements?

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
The Internet is a good place to get reliable information about HIV and STDs.	()	()	()	()
I rely on the Internet more than my health provider to get information about HIV or STDs.	()	()	()	()
I currently discuss with a health care provider or counselor ways I can reduce my risk for HIV.	()	()	()	()
I seek out stories of men who do not have HIV describing how they stay healthy sexually.	()	()	()	()
I seek out the stories of couples where one partner has HIV and the other doesn't	()	()	()	()

to learn how they stay healthy sexually.				
I seek out the stories of how couples successfully make agreements about open relationships.	()	()	()	()
I would look at content about HIV/STDs using my mobile phone or computer without worrying that others could find out.	()	()	()	()

To what extent do you agree with the following statements?

	Agree strongly	Agree somewhat	Disagree somewhat	Disagree strongly
The Internet is a good place to get reliable information about HIV and STDs.	()	()	()	()
I rely on the Internet more than my health provider to	()	()	()	()

get information about HIV or STDs.				
I currently discuss with a health care provider or counselor ways I can prevent transmitting HIV to others.	()	()	()	()
I seek out the stories of couples where one partner has HIV and the other doesn't to learn how they stay healthy sexually.	()	()	()	()
I seek out the stories of how couples successfully make agreements about open relationships.	()	()	()	()
I would look at content about HIV/STDs using my mobile phone or computer without worrying that others could find	()	()	()	()

Maximizing adherence (to help build adherence intervention component of PUMA)

The next questions will ask you about any medications you take regularly (either daily or a few times a week). Currently a pill a day to prevent HIV is being tested. Your responses to these questions will help us understand how easy or difficult it might be for someone to take an HIV medication for prevention.

Are you currently taking any medications on a regular basis? This includes prescribed medications, over-the-counter medications, vitamins, and supplements.

Yes

No

How often are you prescribed or recommended to take these medications? Please check all that apply.

Daily

A few times a week

A few times a month

Less than once a month

What types of medications are you prescribed or recommended to take on a daily basis (please mark all that apply)?

Vitamins or supplements

Medications for blood pressure, high cholesterol, or diabetes

Antidepressant or mood medications

Allergy medications

Medication for asthma

Pain medications

Other (please specify)

What types of medications are you prescribed or recommended to take a few times a week (please mark all that apply)?

Vitamins or supplements

- Medications for blood pressure, high cholesterol, or diabetes
- Antidepressant or mood medications
- Allergy medications
- Medication for asthma
- Pain medications
- Other (please specify)

Many people find it difficult to take medications every day. Please rate your ability to take your medication every day over the last 30 days. Would you say that it was:

- Poor
- Fair
- Good
- Very Good
- Excellent

In the past 30 days, have you missed taking at least one dose of your medication?

- Yes
- No

Please let us know in the last month whether you missed taking your medications or it was more difficult for you to take your medications because of any of the following reasons (mark all that apply):

- I was away from home
- I was busy
- I forgot to take it at the time I usually take it
- I was concerned about or was having side effects
- I did not want others to find out that I am taking pills
- I had a change in my daily routine
- I was really tired
- I felt sick or ill

- I felt depressed or overwhelmed or angry
- I had to go through a lot of trouble to get a refill
- I was drinking or using drugs/I was hungover/
- I was planning to go out drinking or use drugs and did not want the drug in my body
- I didn't want to take it
- I couldn't afford it
- Other (please specify)

What is the main thing that makes taking your medication every day difficult or just not possible to do on some days?

What is the main thing that makes taking your medication a few times a week difficult or just not possible to do on some days?

What helps the most in remembering to take your medication daily?

What helps the most in remembering to take your medication a few times a week?

Partial Efficacy

A recent study has shown that an anti-HIV pill was 44% effective in reducing HIV infections when taken on a daily basis by gay and bi men. We would like to ask you whether you have heard about these results and how different people might understand them.

Before this survey, had you heard about these results?

- Yes
- No

Where had you heard about these results? (Check all that apply)

- From a friend or acquaintance
- From a health care provider (doctor, nurse, etc.)
- In a newspaper or magazine
- In a community forum
- On the radio / TV
- On the internet
- From another survey or study
- Other (please specify)
- Don't Know

This study showed that the pill reduced HIV infections by 44% in men who took the pill. If you were a part of this study, what do you think these results would mean for you? (check all that apply)

- If I have sex 100 times without a condom, I'll be protected the first 44 of those times if I took the pill every day.
- I will be protected from HIV if I took the daily pill 44% of the time.
- If I take double the dose, I will be protected all of the time.
- The daily pill may be expected to prevent 44% of the infections that would occur in a population if the pill wasn't taken.
- If I had sex while taking the daily pill, my chances of getting HIV will be 44% less than if I hadn't been taking the pill.
- Other (please specify):
- I am not sure what this means

Partial Efficacy Part 2

Here are some more questions about the recent study has shown that an anti-HIV pill was 44% effective in reducing HIV infections when taken on a daily basis by gay and bi men.

Knowing that, in this study, a daily pill reduced HIV infections by 44%, how likely would you be to take a pill to prevent HIV?

- Extremely likely
- Very likely
- Moderately likely
- Slightly likely
- Not likely at all

Why would you be unlikely to take a daily pill to prevent HIV? (Check all that apply)

- Concerns about potential side effects
- Concerns that I would increase risk taking behavior
- Don't feel that I am at risk for HIV
- Don't like taking pills
- Don't think the pill will protect me from getting infected with HIV
- Concerns that if HIV medications are used now, they wouldn't work in the future if I became HIV positive
- Concerns that others might think I am HIV-positive
- Concerns that this would limit the availability of HIV medications for people infected with HIV
- Concerned it is too expensive
- Already using a strategy for HIV prevention that is effective (please specify)
- Other (please specify)
- Don't know

Given that the daily pill is 44% effective in preventing HIV, how would this affect your use of condoms if you were taking the pill?

- I would use condoms less frequently while taking the daily pill
- I would use condoms more frequently while taking the daily pill
- I would not change my condom use while taking the daily pill
- I would not use the daily pill

If you were taking this pill, how afraid would you be of other people thinking that you were HIV-positive?

- Extremely afraid
- Very afraid
- Moderately afraid
- Slightly afraid
- Not afraid at all

Do you agree or disagree with the following statement? "Based on the results of this study, I think a daily pill for HIV prevention should be readily available for HIV-negative men who have sex with men and transgender women"

- Yes
- No

Risk Compensation Part 1

The next set of questions will ask you about your thoughts on the risks of having anal sex without a condom.

Please answer the following questions:

	Very much	Somewhat	A little	Not at all	N/A (I don't engage in that activity)
If you had anal sex as a TOP without a condom, to what extent do you believe that you would be at risk of getting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

HIV?					
If you had anal sex as a BOTTOM without a condom, to what extent do you believe that you would be at risk of getting HIV?	()	()	()	()	()
If someone else in your community had anal sex as a TOP without a condom, to what extent do you believe that he/she would be at risk of getting HIV?	()	()	()	()	()
If someone else in your community had anal sex as a BOTTOM without a condom, to what extent do	()	()	()	()	()

you believe that he/she would be at risk of getting HIV?					
If you had anal sex as a TOP without a condom, to what extent would it provide you with pleasure or other benefits?	()	()	()	()	()
If you had anal sex as a BOTTOM without a condom, to what extent would it provide you with pleasure or other benefits?	()	()	()	()	()
To what extent do you feel pressure from other people to have anal sex without a condom?	()	()	()	()	()

To what extent can someone in your community avoid having anal sex without a condom?	()	()	()	()	()
--	-----	-----	-----	-----	-----

Risk Compensation Part 2

As we mentioned earlier, a daily pill was recently shown to reduce HIV infections by 44% when taken by HIV-negative gay and bi men. Now, please answer these same questions imagining that you were taking this pill.

Imagine that you are taking a pill that is 44% effective in preventing infections when taken by HIV-negative gay and bi men. Answer the following questions *assuming that you are taking this pill*.

	Very much	Somewhat	A little	Not at all	N/A (I don't engage in that activity)
If you had anal sex as a TOP without a condom while taking the pill, to what extent do you believe that you would be at risk of	()	()	()	()	()

getting HIV?					
If you had anal sex as a BOTTOM without a condom while taking the pill, to what extent do you believe that you would be at risk of getting HIV?	()	()	()	()	()
If someone else in your community had anal sex as a TOP without a condom while taking a pill, to what extent do you believe that he/she would be at risk of getting HIV?	()	()	()	()	()
If someone else in your community	()	()	()	()	()

had anal sex as a BOTTOM without a condom while taking a pill, to what extent do you believe that he/she would be at risk of getting HIV?					
If you had anal sex as a TOP without a condom while taking this pill, to what extent would it provide you with pleasure or other benefits?	()	()	()	()	()
If you had anal sex as a BOTTOM without a condom while taking this pill, to what extent would it	()	()	()	()	()

provide you with pleasure or other benefits?					
To what extent would you feel pressure from other people to have anal sex without a condom while taking this pill?	()	()	()	()	()
To what extent could someone in your community avoid having anal sex without a condom while taking this pill?	()	()	()	()	()

TDS Questions

Which of the following describe your pattern of HIV testing?

Please mark each statement with a True if the statement describes you well, False if the statement does not describe how you currently use HIV-testing, and Not Applicable (NA) if the answer does not apply to your particular situation.

	True	False	N/A
I get tested if I have had sex without condoms with an HIV-infected partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get tested if I have had sex without condoms with a partner whose HIV status I'm not sure of.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get tested if I am starting a relationship with a new partner and we want to be able to have sex without condoms together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't have a plan for how I use HIV testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I get tested on a regular basis, regardless of what I've been doing sexually, or specific relationships

True

False

You indicated that you get tested on a regular basis. How frequently do you get tested?
Every _____ months.

Were there times in the past year that you thought about getting tested for HIV but decided not to?

Yes

No

Please mark each of the following statements as True or False about the reason(s) you didn't get tested.

	True	False
I did not feel comfortable having tests results in my medical record.	<input type="checkbox"/>	<input type="checkbox"/>
I did not feel comfortable with the health care workers, counselors, and/or clinic where the testing would be done.	<input type="checkbox"/>	<input type="checkbox"/>
The testing site was not conveniently located.	<input type="checkbox"/>	<input type="checkbox"/>
I did not want to find	<input type="checkbox"/>	<input type="checkbox"/>

out the results.		
I did not want others to find out the results.	<input type="checkbox"/>	<input type="checkbox"/>
I did not want others to know I was being tested.	<input type="checkbox"/>	<input type="checkbox"/>
I did not feel I was at risk for becoming infected.	<input type="checkbox"/>	<input type="checkbox"/>
I did not have time.	<input type="checkbox"/>	<input type="checkbox"/>
The test was too expensive.	<input type="checkbox"/>	<input type="checkbox"/>

If you chose not to get tested for another reason not mentioned above, please specify here.

Have you and a partner gotten HIV tested together in the last year?

Yes

No

What was the reason for getting tested together? (check all that apply)

We were just starting a relationship

A health care provider suggested my partner get tested

- A health care provider suggested that I get tested
- He had a potential HIV exposure
- I had a potential HIV exposure
- He gets tested regularly and wanted me to be tested, too
- I get tested regularly and wanted him to be tested, too
- He needed an HIV test for work, school or travel
- I needed an HIV test for work, school or travel
- I was concerned about my partner's HIV status
- Other (please specify)

TDS Questions Continued (HIV negative or Unknown)

Some types of HIV prevention strategies require frequent HIV testing. If you were participating in an HIV prevention program that required frequent HIV testing, would you consider performing home testing if it required:

	Definitely would	Possibly would	Probably would not	Definitely would not
That you prick your finger to get a drop of blood	()	()	()	()
That you swab your mouth with a Q-tip	()	()	()	()
That you read the test	()	()	()	()

results yourself				
That you mail in the test and call in for results	()	()	()	()

Several companies are developing kits that could be purchased and would allow for testing for HIV by you in your home, and you would have your result in less than one hour. The whole test and result would be done at home. If such home test kits were available, please answer the following questions:

	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree
I would prefer to test at home, rather than a clinic or community-based organization	()	()	()	()	()
I would prefer to test at a clinic or community-based organization, rather than at home	()	()	()	()	()
I would use these test kits for myself	()	()	()	()	()
I would use these test	()	()	()	()	()

kits for me and my main sex partner (someone that you feel committed to above all others -- this is someone you might call your boyfriend, significant other, life partner, or husband)					
I would use these test kits for me and my other non-main, regular partner(s)	()	()	()	()	()
I would use these test kits for me and new sex partners	()	()	()	()	()

Several companies are developing HIV tests that can be performed at home. Please describe your likelihood to use a home HIV antibody test kit by marking each statement in the grid:

	Strongly agree	Agree	Disagree	Strongly disagree
I would like to use a home HIV test, and would test myself	()	()	()	()

regularly				
I would like to use a home HIV test if I had a sexual encounter that made me think that I could have become HIV infected	()	()	()	()
I would like to use a home HIV test if the cost was substantially lower than the cost of getting tested by a medical provider	()	()	()	()
I would like to use a home HIV test because it would offer me more privacy than being tested in a health care facility	()	()	()	()
I would like to use a home HIV test to screen all partners	()	()	()	()
I would like	()	()	()	()

to use a home HIV test with partners I have sex with regularly in order to make decisions about whether we would engage in unprotected sex				
I would like to use a home test with new partners in order to make decision about whether we would engage in unprotected sex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would not like to use a home HIV test because I would be concerned that I might not fully understand the results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would not like to use a home HIV test because I would be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

concerned about getting an HIV positive test result while I was alone				
I would not like to use a home HIV test because I would be concerned that it would not be as accurate as a test that I could get in a health care facility	()	()	()	()
I would not like to use a home HIV test because I would prefer the counseling that would be provided by a professional	()	()	()	()
I would never use a home HIV test to screen new partners because I would not be comfortable doing this	()	()	()	()
I would never use a home HIV	()	()	()	()

test to screen partners because I would not trust the accuracy of the test				
I would never use a home HIV test to screen partners because I would be concerned that they might not want to have sex with me after I suggest that they test with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

New Page for those already reporting anal sex

For each statement about discussing HIV-status, please mark the response that best describes what you generally have done over the last 12 months.

How many of your anal sex partner(s) did you tell your HIV status?

- All of my sex partners
- More than half but not all of my sex partners
- About half of my sex partners
- Fewer than half but some of my sex partners
- None of my sex partners

How many of your anal sex partner(s) told you their HIV status?

- All of my sex partners
- More than half but not all of my sex partners
- About half of my sex partners
- Fewer than half but some of my sex partners
- None of my sex partners

I talk about HIV status with sex partners....

	True	False	N/A
...only after I have gotten to know and plan to see them for a long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...only if they initiate the conversation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...if I think their HIV status may be different than mine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...if I think their HIV status is the same as mine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... if we are deciding whether to have anal sex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

...if we are deciding who will be the top and who the bottom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...if we are deciding whether or not to use a condom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...if a condom breaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...if they say what their HIV status is on their internet profile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...If they didn't say what their HIV status is on their internet profile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Before you have anal sex with a new partner for the first time, how often do you....

	Always	Most but not always	Less than half of the time	Never
ask his HIV status?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
if he is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HIV negative, ask when he was last tested?				
if he is HIV negative, ask whether he's had sex without a condom in the last few months?	()	()	()	()
if he is HIV positive, ask if he is on treatment?	()	()	()	()
if he is HIV positive, ask what his viral load is?	()	()	()	()
if he is HIV positive, ask when his last T cell count was?	()	()	()	()

For each statement about discussing HIV-status, please mark the response that best describes what you generally have done over the last 12 months.

Have you had anal sex with a male partner in the past 12 months?

- Yes
 No

How many of your anal sex partner(s) did you tell your HIV status?

- All of my sex partners
 More than half but not all of my sex partners
 About half of my sex partners
 Fewer than half but some of my sex partners
 None of my sex partners

How many of your anal sex partner(s) told you their HIV status?

- All of my sex partners
 More than half but not all of my sex partners
 About half of my sex partners
 Fewer than half but some of my sex partners
 None of my sex partners

I talk about HIV status with sex partners....

	True	False	N/A
...only after I have gotten to know and plan to see them for a long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...only if	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

they initiate the conversation			
...if I think their HIV status may be different than mine	()	()	()
...if I think their HIV status is the same as mine	()	()	()
... if we are deciding whether to have anal sex	()	()	()
...if we are deciding who will be the top and who the bottom	()	()	()
...if we are deciding whether or not to use a condom	()	()	()
...if a condom breaks	()	()	()
...if they say what their HIV status is on their internet profile	()	()	()
...If they didn't say what their HIV status	()	()	()

is on their internet profile			
------------------------------	--	--	--

Before you have anal sex with a new partner for the first time, how often do you....

	Always	Most but not always	Less than half of the time	Never
ask his HIV status?	()	()	()	()
if he is HIV negative, ask when he was last tested?	()	()	()	()
if he is HIV negative, ask whether he's had sex without a condom in the last few months?	()	()	()	()
if he is HIV positive, ask if he is on treatment?	()	()	()	()
if he is	()	()	()	()

HIV positive, ask what his viral load is?				
if he is HIV positive, ask when his last T cell count was?	()	()	()	()

New Page

The US Centers for Disease Control and Prevention (CDC) estimates that more than 30,000 men who have sex with men (MSM) in the US become newly HIV infected each year.

If you were to think about an average group of 100 recently HIV-infected men who have sex with men, how many do you think got infected from :

_____ Receptive anal sex/being a bottom?

_____ Insertive anal sex /being a top?

_____ Receptive oral sex/partners' penis in their mouth with ejaculation?

_____ Insertive oral sex/their penis in partner's mouth?

_____ Other

Again, thinking of an average group of 100 newly HIV-infected men who have sex with men, how many do you think were infected from

_____ their main partner/husband/boyfriend?

_____ regular sex partner(s) who are not their main partner?

_____ casual or anonymous sex partner(s)?

_____ Other?

Who or what do you depend on to get information about how much risk there is from different sexual practices.

	Depend on this a lot	Depend on this a little	Don't depend on this at all	Not applicable
Boyfriend/partner	()	()	()	()
Other sex partners	()	()	()	()
Friends	()	()	()	()
Family	()	()	()	()
Healthcare Provider	()	()	()	()
HIV test counselor	()	()	()	()
Other counselor	()	()	()	()
Print media (books, newspapers, magazines)	()	()	()	()
Internet	()	()	()	()
Television	()	()	()	()
Advice column	()	()	()	()
Pornography	()	()	()	()
Community/Organizations	()	()	()	()

Name of MRMSp

In the next few screens we're going to ask some questions about your most recent male sex partner -- that is, the last guy you had sex with.

To make the questions easier to ask, we'd like you to enter a nickname for this partner -- not his real name, but maybe his initials, a pet name you have for him, or a word that will remind you of where you met him or what you liked best about him.

What is a nickname for the last man you had sex with?

MRMSP Age and race

We will next ask some questions about [question("value"), id="266"] .

Some questions will be about [question("value"), id="266"] in general and some will be about your relationship with [question("value"), id="266"].

What is [question("value"), id="266"]'s current age?
(if you are unsure of the exact age, choose an age that you think is close)

- 19 or younger
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
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- 94
- 95
- 96
- 97
- 98
- 99
- 100
- (don't know)

Which of the following statements about [question("value"), id="266"]'s age is most true?

- He is more than 10 years younger than I am
- He is 2-10 years younger than I am
- He is within a year of my age
- He is 2-10 years older than I am
- He is more than 10 years older than I am
- Don't know

Is [question("value"),id="266"] Hispanic?

- Yes
- No
- Don't know

What race is [question("value"),id="266"]? (*check one*)

- Asian/Pacific Islander
- Black/African-American
- White/Caucasian
- Native American/Alaska Native
- Mixed race
- Other: _____
- Don't know

You indicated that [question("value"),id="266"] is of mixed-race. Which terms describe [question("value"),id="266"]?

- Asian/Pacific Islander
- Black/African American
- White/Caucasian
- American Indian/Alaskan Native

Other

Is [question("value"),id="266"] someone that you feel or felt committed to above all others (someone you might call your boyfriend, significant other, life partner, or husband)?

Yes

No

Is [question("value"),id="266"] an exchange partner (*someone who you have sex with in exchange for money, drugs, food, or something else of value*)?

Yes

No

Please rate the strength of your relationship with [question("value"),id="266"] on a scale from 1 (weak) to 10 (strong):

(*weak*)

1

2

3

4

5

6

7

8

9

(*strong*)

10

In what year did you first have sex with [question("value"), id="266"]?

- 2010
- 2009
- 2008
- 2007
- 2006
- 2005
- 2004
- 2003
- 2002
- 2001
- 2000
- 1999
- 1998
- 1997
- 1996
- 1995
- 1994
- 1993
- 1992
- 1991
- 1990 or before

New Page

In what month of [question("value"), id="331"] did you first have sex with [question("value"), id="266"]?

- January
- February
- March
- April

- May
- June
- July
- August
- September
- October
- November
- December
- I don't remember which month

In what month of 2010 did you first have sex with [question("value"), id="266"]?

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- I don't remember which month

Did you and [question("value"),id="266"] talk about both your HIV status and his HIV status before you first had sex?

- Yes
- No

What was [question("value"),id="266"]'s status at that time?

- HIV-negative
 - HIV-positive
-

New Page

In what year did you most recently have sex with [question("value"), id="266"]?

- 2010
 - 2009
 - 2008
 - 2007
 - 2006
 - 2005
 - 2004
 - 2003
 - 2002
 - 2001
 - 2000
 - 1999
 - 1998
 - 1997
 - 1996
 - 1995
 - 1994
 - 1993
 - 1992
 - 1991
 - 1990 or before
-

Last sex timing and activities

In what month of [question("value"), id="334"] did you most recently have sex with [question("value"), id="266"]?

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December
- I don't remember which month

In what month of 2010 did you most recently have sex with [question("value"), id="266"]?

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- I don't remember which month

The last time you had sex with [question("value"),id="266"], what kinds of sex did you have?

Please check all the types of sex you had.

- Oral sex (penis in the mouth)
 - Anal sex (penis in the butt)
 - Mutual masturbation (J/O)
 - Frottage (rubbing against each other)
-

Last sex details (prurient)

Now we'd like to ask you about the last time you had sex with [question("value"),id="266"].

The last time you had sex with [question("value"),id="266"], did you have receptive anal sex? (this means that you were the bottom)

- Yes
- No
- Don't know

Did [question("value"),id="266"] use a condom the last time you had receptive anal sex (when you were the bottom)?

Choose one:

- [question("value"),id="266"] did not use a condom
- [question("value"),id="266"] used a condom part of the time
- [question("value"),id="266"] used a condom the whole time
- [question("value"),id="266"] used a condom, but it broke
- Don't know

What was the main reason [question("value"),id="266"] did not use a condom the last time you had receptive anal sex?

- A condom wasn't available.
- A condom was available, but I didn't want to use one.
- A condom was available, but [question("value"),id="266"] didn't want to use one.
- Other reason, *please specify*:: _____

The last time you had sex with [question("value"),id="266"], did you have insertive anal sex? (this means that you were the top).

- Yes
- No
- Don't know

Did you use a condom the last time you had insertive anal sex with [question("value"),id="266"] (when you were the top)?

Choose one:

- I did not use a condom
- I used a condom part of the time
- I used a condom the whole time
- I used a condom, but it broke
- Don't Know

What was the main reason why you did not use a condom the last time you had insertive anal sex with [question("value"),id="266"]? (choose only one)

- A condom wasn't available.
- A condom was available, but I didn't want to use one.
- A condom was available, but [question("value"),id="266"] didn't want to use one.
- Other reason, *please specify*:: _____

Oral sex and condoms

The last time you had oral sex with [question("value"),id="266"], check which of these things happened -- or both.

- I gave him a blow job (his penis was in my mouth)
- He gave me a blow job (my penis was in his mouth)

When [question("value"),id="266"]'s penis was in your mouth, was he wearing a condom?

- Yes
- No

When your penis was in [question("value"),id="266"]'s mouth, were you wearing a condom?

- Yes
- No

Last sex: where, alcohol, drugs

We'd next like to ask some questions about the situation in which you and [question("value"),id="266"] last had sex.

Where were you and [question("value"),id="266"] the last time you had sex?

- My home
- [question("value"),id="266"]'s home
- Bath house
- Sex club

- Sex resort
- On vacation in a different city
- Local hotel room
- Circuit party or rave
- Public restroom
- Park
- Car
- The home that [question("value"),id="266"] and I share
- Truck stop/rest area
- Other, *please specify*:: _____

The last time you had sex with [question("value"),id="266"], were you buzzed or drunk on alcohol?

- Yes
- No
- Don't know

The last time you had sex with [question("value"),id="266"], were you high on drugs?

- Yes
- No
- Don't know

You indicated that you were high on a drug.

Please indicate which ones.

Select all that apply:

- Amphetamine, meth, speed, crystal, crank, ice - *not injected*
- Amphetamine, meth, speed, crystal, crank, ice - *injected*
- Downers (Valium, Ativan, Xanax)
- Pain killers (Oxycontin, Percocet)
- Hallucinogens such as LSD

- Ecstasy
- Club drugs such as GHB, ketamine
- Marijuana
- Poppers (amyl nitrite)
- Crack - *not injected*
- Crack - *injected*
- Cocaine - *smoked or snorted*
- Cocaine – *injected with no other drugs*
- Heroin, smoked or snorted but not injected
- Heroin - *injected with no other drugs*
- Heroin and cocaine - *injected together (speedballs)*
- Other drugs, *please specify:*

The last time you had sex with [question("value"),id="266"], did you know his HIV status?

- Yes
- No
- Don't know

What was [question("value"),id="266"]'s HIV status at that time?

- HIV-negative
- HIV-positive

Hot states

This page asks some things about the last time you had sex with [question("value"),id="266"]. Think back to that time, and how you might have felt just

before you had sex. Then please read the questions carefully, and mark any that apply to that last time you had sex with [question("value"),id="266"].

Check all statements that apply to the last time you had sex with [question("value"),id="266"]:

- [question("value"),id="266"] did not want to use a condom
- [question("value"),id="266"] was very, very hot and sexy
- I was lonely and depressed and had sex in order to feel good
- I was in love with [question("value"),id="266"]
- I was feeling very, very hot and horny
- I trusted [question("value"),id="266"] a lot
- I had to interrupt sex in order to look for condoms
- I felt like bringing up condoms would spoil a romantic, magic moment
- I was having sex in a public place and was afraid of getting caught
- I wanted to feel really close and connected to [question("value"),id="266"]
- I was having sex with a group of people, and none of them was using a condom
- I or [question("value"),id="266"] was having difficulty maintaining an erection
- I was afraid of losing [question("value"),id="266"]
- I really wanted to please [question("value"),id="266"]
- I was in a bookstore, sex club, backroom, or bathhouse, and was having a really good time
- [question("value"),id="266"] asked me to trust him
- I was too drunk/high to remember
- I felt afraid of [question("value"),id="266"] and could not mention condoms
- I felt [question("value"),id="266"] would abandon me if I asked to use condoms

Did you plan/intend to have sex that day? By plan/intend, I mean that you either arranged to meet someone to have sex, went to a place where you might meet a sex partner, or set up a time to have sex with your partner.

- Yes
- No

How far ahead of time had you planned to have sex?

- I planned to have sex more than 3 days ahead of time
- I planned to have sex 1-3 days ahead of time
- I planned to have sex several hours ahead of time
- I planned to have sex several minutes ahead of time

Have you ever had anal sex (even once in your lifetime)?

- Yes
- No

Planning, if last sex not anal sex

Now please think about the last time you had anal sex.

Thinking about the last time you had anal sex, did you plan/intend to have sex that day? Plan/intend means that you either arranged to meet someone to have sex, went to a place where you might meet a sex partner, or set up a time to have sex with your partner.

Yes

No

How far ahead of time had you planned to have sex?

I planned to have sex more than 3 days ahead of time

I planned to have sex 1-3 days ahead of time

I planned to have sex several hours ahead of time

I planned to have sex several minutes ahead of time

The last time you had anal sex, did you or your partner use a condom?

Yes

No

Thank You!

Thank you for taking our survey. Your response is very important to us.

If you have questions or comments, you may contact the Principal Investigator, Dr. Patrick Sullivan of Emory University, at PSSULLI@EMORY.EDU

To find an HIV testing location near you, please visit:

www.hivtest.org

To get more information about HIV, please visit:

www.cdc.gov/hiv

Otherwise, you can close your browser.
