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School-Based HIV/STD Testing Behaviors and Motivations Among Black and Hispanic Teen MSM: Results From a Formative Evaluation

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Abstract

BACKGROUND—This evaluation explores experiences with, and motivations for, human immunodeficiency virus (HIV) and sexually transmitted disease (STD) testing among black and Hispanic school-aged young men who have sex with men (YMSM).

METHODS—Participants were recruited at community-based organizations that serve YMSM in New York City, Philadelphia, and San Francisco. Eligible participants were 13- to 19-year-old black or Hispanic males who reported attraction to or sexual behavior with other males and/or identified as gay or bisexual, and attended at least 90 days of school in the previous 18 months. Participants (N = 415) completed web-based questionnaires and/or in-depth interviews (N = 32).

RESULTS—In the past year, 72.0% of questionnaire participants had been tested for HIV, 13.5% of them at school or school clinic. Participants reported that they would be more likely to get an HIV test if they could be tested close to or at school (34.4%), and 64.4% would use HIV testing if offered in schools. Most interview participants reported willingness to use school-based services if they were offered nonjudgmentally, privately, and confidentially by providers with experience serving YMSM.

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Human Subjects Approval Statement

This formative evaluation was approved by an Institutional Review Board for the Protection of Human Subjects at ICF International in agreement with CDC's ethics policy.

Disclaimer

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the US Centers for Disease Control and Prevention.

CONCLUSION—Schools can provide opportunities to make HIV and STD testing accessible to school-aged YMSM, but the services must be provided in ways that are comfortable to them.

Keywords

HIV testing; STD testing; HIV prevention; adolescent health; school health; services; young men who have sex with men

Young men who have sex with men (YMSM) are disproportionately affected by human immunodeficiency virus (HIV) infection, especially black and Hispanic YMSM. In 2010, 25.7% of all new HIV infections were among youth aged 13–24, and 72.1% of these cases resulted from male-to-male sexual contact. Over half (54.4%) of new HIV infections among YMSM aged 13–24 were among blacks, and 21.6% were among Hispanics.[1]

In addition to HIV, other sexually transmitted diseases (STDs) are problematic for youth. Adolescents and young adults aged 15–24 are at increased risk for chlamydia and gonorrhea, and MSM, including YMSM, are also at increased risk for syphilis.[2] Being infected with other STDs increases a person's risk of acquiring HIV;[3,4] thus, preventing STD infection is one way to reduce risk for HIV transmission. Transmission of HIV is also substantially reduced when individuals with HIV infection are treated with antiretroviral therapies.[5] However, it is estimated that most youth with HIV (59.5%) aged 13–24 do not know they are infected, and as such, are unlikely to be receiving treatment.[6] For these reasons, it is important that YMSM get tested regularly for HIV and other STDs. More specifically, the US Centers for Disease Control and Prevention (CDC) recommends that MSM are tested for HIV and other STDs at least annually.[7,8]

To address the needs of teen black and Hispanic YMSM as they begin engaging in sexual risk behaviors, the CDC's Division of Adolescent and School Health is developing a school-centered project for YMSM aged 13–19. Because the majority of high-school aged youth have not begun engaging in sexual activity,[9] YMSM is defined broadly for this project to include: males who have engaged in same-sex sexual activity as well as those who may not have engaged in same-sex sexual activity, but who identify as gay or bisexual, or who report attraction to other males. The project involves collaboration between schools and YMSM-serving community-based organizations (CBOs). One of the project's goals is to increase HIV and STD testing among black and Hispanic teen YMSM in schools and through referrals from schools to CBOs.

To date, little research is available on the preferences and attitudes of younger teenage YMSM in terms of HIV/STD testing and other sexual health services. Although researchers have called for prevention efforts to focus on YMSM, including prior to them becoming sexually experienced,[10] most research has focused on youth aged 18 and older.[11] Other researchers have pointed out that the existing evidence base provides little data on health care preferences and needs among MSM,[12] and even less is known about teen YMSM. Furthermore, providing sexual health services through school-based health centers[13–16] as well as linking students from schools to community-based providers[17] has increased use of sexual health services by female students, but little is known about whether school-centered approaches increase use of sexual health services by young men or YMSM.

In light of this research gap, we conducted a formative evaluation to inform the development of CDC DASH's school-centered YMSM project to ensure appropriately designed HIV/STD prevention services that meet the needs of teen YMSM and help increase their preventive service utilization. The purpose of the evaluation was to understand experiences with and motivations for accessing HIV prevention services, with a focus on HIV and STD testing, among black and Hispanic teen YMSM, and to describe the characteristics YMSM desire in school-based HIV prevention services.

METHODS

Participants

Data collection methods included an anonymous web-based questionnaire and in-depth individual interviews with black and Hispanic YMSM in New York City, Philadelphia, and San Francisco (the cities of the 3 school districts that were participating in the CDC/DASH YMSM project). Youth were eligible to participate in the evaluation if they (1) identified as male; (2) identified as black race, multiracial race including black, or Hispanic ethnicity; (3) were aged 13 to 19; (4) indicated attraction to, and/or sexual behavior with, other males, and/or identified their sexual orientation as gay or bisexual; and (5) attended at least 90 days of school in the previous 18 months.

Overall, 419 youth were recruited for and started the questionnaire, but 4 youth exited it before answering questions about sexual orientation and have been excluded from the analyses (N = 415). Overall, 200 youth completed the questionnaire in New York and 188 in Philadelphia. Due to recruitment challenges in San Francisco, only 27 completed the questionnaire. A total of 32 youth were interviewed (11 in New York, 12 in Philadelphia, and 9 in San Francisco).

Procedure

Both the questionnaire and interviews were administered at CBOs that serve black and Hispanic YMSM. A convenience sample of youth were recruited through CBOs instead of schools to reach youth who met our definition of YMSM without requiring them to disclose sexual orientation in schools and possibly causing them undue harm or discomfort.

Recruitment—Recruitment for the questionnaire occurred over a 5-month period beginning in June 2012, and interview recruitment occurred in June and July 2012. CBO staff promoted the questionnaire and interviews during regular activities, and distributed cards promoting participation during HIV/STD testing, street outreach, and activities at schools.

Eligibility screening—The CBOs screened youth for both questionnaires and interviews simultaneously using a single screening process. First, CBOs administered a short survey to interested youth that included questions about participant sex, race, ethnicity, age, sexual attraction, identity, and behavior, and school attendance to determine study eligibility. If a youth was found eligible based on the survey, CBO staff reviewed the eligibility criteria with the youth. Once the youth was determined eligible and was interested in participation, the

CBOs provided a space for the youth to participate in the questionnaire on site and/or scheduled an interview with the youth. Some youth may have participated in both the questionnaire and interview, but because the questionnaire was anonymous, it is unknown which youth participated in both. Once participants had been secured, the survey used for eligibility screening was shredded by the CBOs to protect participants' confidentiality; all results presented in this article are based on questionnaire and interview results only and do not include any data from the screening process.

Consent and incentives—Parental consent was waived for youth under age 18; youth were permitted to consent for themselves and were provided informed consent at the start of the questionnaire and interviews. Participants were given gift card incentives ($15–$25).

Instruments

Questionnaire—The CBOs directly administered the web-based questionnaire on site in a private space with a study-dedicated computer. The questionnaire was only in English and included 53 items and took an average of 25 minutes to complete. Because the evaluation team was unable to find suitable questions from existing instruments that would address the key questions of the evaluation, the team developed new questionnaire and interview questions. The questionnaire included questions about demographic information, HIV/STD testing history and venues for accessing testing; use of HIV prevention and support services at school and interest in using school-based services; school staff with whom YMSM feel comfortable talking; feelings about safety at school; exposure to HIV/STD prevention media campaigns; and trusted sources of sexual health information.

Although the screening process included questions about race, ethnicity, age, and the study's definition of YMSM, questions about these characteristics were also included on the questionnaire. Youth were considered YMSM if they responded that they were either attracted to guys or both guys and girls; identified as gay or bisexual; would most like to have sex with guys, both guys and girls, transguys, or transgirls; or had had any kind of sex (oral, vaginal or anal) with guys, both guys and girls, transguys, or transgirls. All but 4 of the questionnaire participants met our definition of YMSM. Although these 4 youth did not indicate that they were YMSM based on their questionnaire responses, they previously had been determined to be eligible for participation in the study through the CBO's screening process which included meeting the study's definition of YMSM and therefore, were included in the analytic sample.

Interview—CBOs provided a private space for trained members of the evaluation team to conduct the interviews. In-depth interviews were conducted in English and lasted 60–90 minutes and covered similar domains to the questionnaire, with more in-depth discussion of experiences at school, including questions about the young men's preferences for school-based sexual health services and education. Interviewed youth were not asked about their age, race, ethnicity, or sexual orientation during interviews, but the youth had already been asked these questions during the screening process to ensure they met our eligibility criteria.

In this article, we specifically focus on measures related to HIV and STD testing including demographics, sexual orientation, HIV/STD testing in the past year, testing venues, reasons

youth would likely get tested, willingness to use school-based sexual health services, and youth preferences for how sexual health services should be provided in schools. Other aspects of the data collection are reported in elsewhere.[18,19]

Data Analysis

Quantitative data from questionnaires were analyzed using SPSS Version 22.0 for descriptive statistics including means and frequencies. For 2 key variables—having been tested for HIV in the last year and having been tested at school—Pearson chi-square tests were conducted to test for differences in youth characteristics such as race/ethnicity, age group, and city. Cross-tabulations comparing age groups did not include the 13- to 15-year-old age group and the city comparisons did not include San Francisco because of small sample sizes for both these groups of participants. Significant findings were based on an alpha = 0.05.

To understand the needs of youth at greatest need for testing, post hoc analyses were conducted among youth who reported they had any kind of sex (oral, vaginal, or anal) and had not been tested in the past year. For this subgroup, we calculated the percent who reported they would get tested for HIV and STD if offered at school.

Qualitative data from interviews were recorded and transcribed, and deductive coding procedures were used to analyze the data.[20] The evaluation team went through a process of iterative code development,[21] and ATLAS.ti 7 software was used to apply codes to segments of interview data. To establish intercoder reliability,[22] 2 transcripts were selected at random, and divided into a total of 51 text segments for which 3 coders each applied primary codes. The 2 transcripts represented approximately 6.5% of the overall text. A Fleiss κ[23] 0.90 intercoder reliability was achieved. Qualitative data were analyzed to identify common themes about interest in and desired qualities of school-based sexual health services. Qualitative analyses for this manuscript were limited a priori to themes related to participants' experience with school-based sexual health services as well as characteristics youth desired to see in such services.

RESULTS

Nearly half (48.9%) of questionnaire participants were 18–19 years old, 41.7% were 16–17 years old, and 8.9% were 13–15 years old; the mean age was 17.4 years. More than half (58.6%) of participants reported they would be in the 10th–12th grade in the next school year, and 33.5% had earned a GED or high school diploma (Table 1). The majority identified as black (64.1%), and 39.8% identified as Hispanic (Table 1). Nearly all participants (99.0%) met our definition of YMSM (Table 2).

Youth History Accessing HIV/STD Testing

Among all participants, 72.0% were tested for HIV and 65.8% were tested for STD in the last year (Table 3). Questionnaire participants aged 18–19 years were significantly more likely to have been tested for HIV in the past year than youth aged 16–17 years ($\chi^2 = 30.69$, $p < .001$, Table 4). There were no significant differences for HIV testing in the past year by race/ethnicity or by city.

Questionnaire participants were most commonly tested for HIV at a community center (47.9%) or clinic or doctor's office (43.1%). Schools or a clinic at school (13.5%) were the least common venues where questionnaire participants reported being tested for HIV. Participants were most often tested for an STD at a clinic or doctor's office (52.1%) or a community center (40.8%). Schools or clinics at schools (18.9 %) were the least reported venue for STD testing (Table 3). Pearson's chi-square tests revealed no significant differences in youth having had been tested at school by either age group or race/ethnicity. Chi-square cell sizes were not sufficient to report reliable estimates for any difference by city (Table 4).

Motivations for Getting Tested

Thinking they could have HIV (59.8%) or STD (63.8%) was the most frequently selected reason questionnaire participants would likely get tested, followed by being able to get tested for free (50.6% for HIV and 46.1% for STD). About one third (34.4%) selected being able to get tested close to or at school as a reason they would likely get HIV testing; 21.5% of questionnaire participants reported this as a reason for STD testing. Having money for, or access to, transportation was selected as a reason 25.6% of questionnaire participants would likely get tested for HIV and 24.8% for STD. For both HIV and STD testing, 22.3% of questionnaire participants said making sure their parents did not find out would be a reason they would likely get tested. Being able to get tested at a place where mostly guys who are attracted to guys go was a factor for 22.3% of questionnaire participants for HIV testing and 19.0% for STD testing (Table 3).

Interest in School-Based HIV/STD Testing

Questionnaire participants were asked about their willingness to use a variety of school-based services if they were available. About two thirds reported they would use HIV testing (64.4%) and STD testing (66.6%) if offered at school (Table 5). Among questionnaire participants, 73 (17.6%) had ever had oral, anal, or vaginal sex but had not been tested for HIV in the last year; among those participants 75.3% said they would use HIV testing if offered at school. In addition, 97 (23.4%) questionnaire participants had ever had oral, anal, or vaginal sex but had not been tested for STD in the last year; 58.8% of these participants reported they would use STD testing if offered at school (Table 5).

Desirable Qualities of School-Based Sexual Health Services

Most of the interviewed youth supported sexual health services (including HIV and other STD testing) being provided at school, but they specified that services needed certain characteristics in order for youth to use them regularly. Privacy and confidentiality were commonly cited as key factors in whether or not youth would use sexual health services at school.

> … But I think knowing that it may not be confidential, in itself, may stop me from going-would have stopped me from going, for sure.—San Francisco youth

> … it could be anywhere in the building, as long as it's confidential, like it's nobody there. I prefer like a private room.—New York City youth

One youth interviewed described the need for privacy because of the stigma associated with HIV testing.

> So if you don't want to go in there and everyone else looking at you like, why would you need an HIV test? They're probably thinking negative things, 'cause the first thing that normally come to people mind is the negative. So it's like why would you need an HIV test? What are you doing that you need an HIV test? When you could just like want to get one. You could have had once—like probably only had sex one time, but you probably just want to do it. So I think it would need to be private.—New York City youth

Many interview participants stressed the importance of providing services in a way that is nonjudgmental, comfortable, and safe. Most of the youth also expressed a preference for services to be provided by someone from outside the school. These youth felt that staff members from external organizations have more experience working with the YMSM population than school staff, are more attuned to the needs of YMSM, and are better at maintaining students' confidentiality as reasons for their preference.

> Because teachers treat students different, but if it's somebody outside of school and you don't know them, you don't see them all the time, then it's better. 'Cause like teachers will mix it with education, like in the class and they'll ask you questions right in front of the students and you're just like, 'I can't believe you just said that. It's supposed to be private.'—San Francisco youth

> Having sort of like a safe space feeling, having someone who's very affirming of, you know, of me … —Philadelphia youth

Interviewed youth were divided about whether they would prefer that school-based sexual health services be directed specifically to YMSM. Some youth expressed a preference for services specific to YMSM or receiving services in places where they know that other YMSM are receiving services.

> It would have to be a lot of them [gay guys] in here, like a handful of them, because I don't want to feel like I'm the only person in here … it looks like 5 gay guys in here … like more participation from other guys that are like me, so I would feel more comfortable about coming in on a regular basis.—New York City youth

Other youth felt that services specifically targeting YMSM would limit the use of services. One youth stated that services should not be specific for gay youth saying,

> I don't think they should be like a rainbow door, I feel like it should just be like a door, as any other door, so that people wouldn't be attracted to it, or that people wouldn't know if you were going into this door for any type of reason … I feel like health is health, I feel like they, the person working there should know about straight health ed, as well as lesbian health, as well as gay men. Like they should know all of it, but I just don't feel like it should be designated for gay men. And I think that's taking away from the quality, and it's what we pay for.—Philadelphia youth

DISCUSSION

Findings

Although a high percentage of questionnaire participants had been tested for both HIV and STD, schools were the least common place for them to be tested. However, among questionnaire participants who had had sex and not been tested for HIV in the past year, three fourths said they would use HIV testing offered at school, and more than half of those who had had sex and not been tested for STDs in the past year said that they would use STD testing offered at school. Youth cited issues related to access, such as getting tested for free, services being close to home or school, and having access to transportation, as important motivating factors for getting tested. Our findings are similar to those of a study of youth that found getting an HIV test for free and being able to take the test in a convenient location were motivators for getting tested.[24]

Ensuring that parents do not find out they were getting tested was a motivating factor for nearly one fourth of questionnaire participants, and privacy and confidentiality were emphasized as important to interview participants. Maintaining privacy and confidentiality is a critical part of providing sexual health services to all adolescents, not just YMSM.[25] However, among YMSM, the desire for privacy and confidentiality may be magnified by the substantial stigma that often surrounds conversations about both HIV and sexual orientation. Stigma, homophobia, and discrimination have been linked to negative outcomes among MSM, and can be manifested in rejection by friends or family, mistreatment, and violence.[26] Stigma related to sexual orientation can affect access to quality health care, income and employment, mental health, and risk behaviors[26,27] and has been linked to negative health outcomes among YMSM.[28]

Some interview participants specifically expressed a desire for services provided at school to be delivered by people with experience serving YMSM, and in a nonjudgmental and welcoming atmosphere. Youth indicated greater comfort with services provided by non-school personnel because they felt these individuals know how to meet their needs. In the context of substantial stigma and discrimination—which may be based on sexual orientation, HIV, or even race—the desire of youth to receive services from providers with experience specifically serving YMSM may reflect an attempt to mitigate that some of that stigma. This is particularly important given that literature has suggested school personnel are not always comfortable or motivated to handle issues related to sexuality in sensitive, supportive ways.[29,30] Our findings suggest that professional development for school health personnel on how to serve YMSM and create a nonjudgmental and welcoming environment for YMSM may be needed in order to increase the use of school-based sexual health services among YMSM students.

Youths' responses were mixed about whether sexual health services needed to be offered specifically for YMSM. Only about one fifth of questionnaire participants selected getting tested in places where mostly guys who are attracted to other guys go as a reason they would likely get tested. Some interviewed youth indicated this would be a motivating factor for accessing sexual health services, while others thought it could be a deterrent. These findings

highlight an important point—just like non-YMSM students, youths' personal experiences and preferences are diverse.

Limitations

There are several limitations to these findings. One set of limitations is related to the sample. First, this was a convenience sample of youth recruited through YMSM-serving CBOs, so findings are not generalizable beyond the youth in this evaluation. In addition, the questionnaire sample was unbalanced in terms of age and geographic distribution. The sample was skewed toward the older age groups with 18- to 19-year-olds representing nearly half of participants and 13- to 15-year-olds representing less than 9%, and the questionnaire sample was not equally distributed among the 3 cities. Only 27 of the 415 youth who completed the questionnaire were from San Francisco.

There are also a few limitations related to the recruitment, screening, and data collection processes. First, it is also important to highlight that many YMSM-serving CBOs (from which participants were recruited) provide HIV testing, likely contributing to the relatively high percentage of the youth in this evaluation who had been tested for HIV in the past year. In addition, our data collection process did not include tracking which youth participated in both the questionnaire and interview or in which order they may have participated in these data collection, so we cannot account for any possible ordering-effect bias. Also, as with any self-reported data collection, participant responses can be susceptible to recall and social desirability biases. Finally, there is a possible limitation related to eligibility screening; 4 youth, all from the same CBO, screened as eligible for the study, but recorded questionnaire responses which indicated they did not meet the study definition of YMSM. Although the study team included these youth in the analytic sample because they had screened in as YMSM and it is known that development of sexual orientation can be fluid for some adolescents,[31] the fact that all 4 of these youth were from 1 CBO could indicate a weakness in the screening process at that site.

The final type of limitation is related to the information collected about participants' schools. Although youth were asked what school they currently or recently attended, the response option was open-ended and therefore could not be categorized to analyze differences by school type. Furthermore, policies and practices related to school-based provision of sexual health services and STD and HIV testing varied across the 3 cities in which we recruited youth. This would have influenced whether youth could have received services at school, thereby shaping their possible responses to questions about school-based services. With more than 150 different schools represented by the participating youth, we were unable to identify the specific policies and practices for each school, but from our work with the major public school districts in each city, we know that the availability of school-based services such as STD and HIV testing varied from having no services available at school to having services accessible on school property through school-based health centers or other community-providers brought onsite.[32–34]

IMPLICATIONS FOR SCHOOL HEALTH

This evaluation illustrates that many YMSM are interested and willing to access sexual health services at schools. Despite relatively low percentages (13.5–18.9%) of questionnaire participants reporting they had been tested for HIV or STD in school or in a clinic at a school, approximately two thirds of the participants reported they would use HIV or STD testing in schools if it was offered. For the youth who are most critical to reach, those who have ever had any kind of sex but have not been tested for HIV or STD in the past year, three quarters said they would likely use HIV testing and over half said they would likely use STD testing if offered at school. Furthermore, school-based services often align with many of the top factors youth reported would make them more likely to get tested; not only are these services provided at school, eliminating youths' need for money for or access to transportation, the services are often provided at no cost to the students.

In addition, youth expressed differing views on whether sexual health services should be targeted and provided in settings specifically for YMSM. Though some youth preferred accessing services in places that are specifically for YMSM, there were also a number of youth who preferred to access services that, though they would meet the specific needs of YMSM, were more broadly targeted to a wider adolescent population. The latter type of service is well suited for provision in a school setting. Schools have opportunities to provide services that can meet the needs of YMSM even though they are offered to all youth.

These findings also illustrate that school-based services must meet the needs of YMSM. Privacy and confidentiality were critical needs voiced by interview participants. In addition, youth expressed a preference that services be provided by professionals who had experience working with YMSM, because they felt these providers could better meet their needs.

To improve services provided at schools, school staff can consider partnering with YMSM-serving CBOs who can provide onsite services in schools. Alternatively, schools may be able to work with YMSM-serving CBOs to train existing school personnel to provide services in ways that are more sensitive to and better meet the needs of YMSM. Regardless of who provides the services, the providers should be trained and committed to maintaining students' privacy and confidentiality.

Collectively, these findings suggest that health professionals working to increase HIV and STD testing among black and Hispanic teen YMSM, a group of particular interest because of their disproportionately high risk for HIV and other STD, may find schools to be valuable partners. Given that YMSM report interest in accessing testing in schools, and school-based services can incorporate many factors that youth report as desirable, future research can further explore specific strategies schools can use to provide testing onsite.

The findings from this formative evaluation suggest that there is a role for schools in direct provision of HIV/STD testing. However, school-based testing should be carefully designed to ensure maximal comfort, confidentiality, and sensitivity to the needs and concerns of YMSM students in order to effectively reach this vulnerable population.

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Table 1

Demographic Characteristics of Questionnaire Participants (N = 415)

	N (%)
Age (years)	
13	2 (0.48)
14	9 (2.17)
15	26 (6.27)
16	66 (15.90)
17	107 (25.78
18	105 (25.30)
19	98 (23.61)
I don't want to say	2 (0.48)
Grade youth will be in when school starts again	
Don't go to school	8 (1.93)
Graduate or got a GED/high school diploma already	139 (33.49)
6th	0 (0.00)
7th	1 (0.24)
8th	1 (0.24)
9th	13 (3.13)
10th	48 (11.57)
11th	78 (18.80)
12th	117 (28.19)
I don't want to say	10 (2.41)
Race *	
Black	266 (64.10)
White	9 (2.17)
Asian	3 (0.72)
Native American	13 (3.13)
Pacific Islander	2 (0.48)
Other	56 (13.49)
Multiracial	55 (13.25)
I don't want to say	11 (2.65)
Hispanic/Latino ethnicity *	
Hispanic	165 (39.76)
Non-Hispanic	246 (59.28)
I don't want to say	4 (0.96)

* Race and Hispanic ethnicity were collected as separate question.

Table 2

Characteristics of Sexual Orientation Among Questionnaire Participants (N = 415)

	N (%)*
Who would you say you are attracted to?	
Guys	314 (75.66)
Girls	8 (1.93)
Both guys and girls	89 (21.45)
I don't know	3 (0.72)
I don't want to say	1 (0.24)
Which of these words would you use when you are talking about yourself and your sexual orientation or sexual identity?	
Gay	286 (68.92)
Straight	18 (4.34)
Bisexual	82 (19.76)
I don't know	15 (3.61)
I don't want to say	3 (0.72)
Other	11 (2.65)
Who would you like to have sex† with the most?	
Other guys	326 (78.55)
Girls	16 (3.86)
Both guys and girls	60 (14.46)
Transguys (female to male transgender men)	1 (0.24)
Transgirls (male to female transgender women)	2 (0.48)
I don't know	8 (1.93)
I don't want to say	2 (0.48)
Who have you ever had any kind of sex with?‡	
Never had sex	40 (9.64)
Other guys	353 (85.06)
Girls	89 (21.45)
Transguys	4 (0.96)
Transgirls	15 (3.61)
I don't want to say	10 (2.41)
Identified as YMSM§	
Yes	411 (99.04)
No	4 (0.96)

YMSM, young men who have sex with men.

*Percentages are based on valid cases; missing data has been excluded from calculated variables.

†Sex was defined as oral sex, vaginal sex, or anal sex.

‡Questions were multiple responses; therefore, total percentages will not add up to 100%. One participant selected both "Never had sex" and sex with "Other guys". Both these responses are included in the table.

[§]Calculated YMSM = Participants indicating “attraction to guys or both guys and girls”; OR orientation as gay or bisexual; OR that they would most like to have sex with guys, guys and girls, transguys, or transgirls; OR have had sex with guys, transguys, or transgirls. Percentages are based on valid responses; missing data have been excluded from calculated variables.

Table 3

Testing for HIV and STD in the Past Year, Places Where Participants Were Tested, and Reasons Participants Would Likely Get Tested

	N (%)*
Have you been tested for HIV in the last year? (N= 404)	
Yes	291 (72.03)
No	106 (26.24)
I don't want to say	7 (1.73)
Where were you tested for HIV?† (N= 290)	
School or clinic at school	39 (13.45)
Clinic or doctor's office	125 (43.10)
Community center	139 (47.93)
Mobile testing van/bus	69 (23.79)
Took a home test	1 (0.34)
I don't want to say	6 (2.07)
Other	13 (4.48)
What would make you likely to get tested for HIV?† (N= 395)	
Thinking I could have HIV	236 (59.75)
Having money for or access to transportation (bus, subway, train)	101 (25.57)
Being able to get tested close to or at my school	136 (34.43)
Being able to get tested close to where I live	84 (21.27)
Being able to get tested far away fromwhere I live	39 (9.87)
Making sure my parents don't find out	88 (22.28)
Being able to get tested for free	200 (50.63)
Being able to get tested at a place where mostly guys who are attracted to guys go	88 (22.28)
Nothing would make me more likely to do this	19 (4.81)
I don't want to say	16 (4.05)
Other	19 (4.81)
Have you been tested for STDs in the last year? (N= 403)	
Yes	265 (65.76)
No	131 (32.51)
I don't want to say	7 (1.74)
Where were you tested for STDs?† (N= 265)	
School or clinic at school	50 (18.87)
Clinic or doctor's office	138 (52.08)
Community center	108 (40.75)
Mobile testing van/bus	47 (17.74)
Took a home test	2 (0.75)
I don't want to say	8 (3.02)
Other	7 (2.64)
What would make you likely to get tested for STDs?† (N=395)	

	N (%)*
Thinking I could have an STD	252 (63.80)
Having money for or access to transportation (bus, subway, train)	98 (24.81)
Being able to get tested close to where I live	117 (29.62)
Being able to get tested close to or at my school	85 (21.52)
Being able to get tested far away fromwhere I live	43 (10.89)
Making sure my parents don't find out	88 (22.28)
Being able to get tested for free	182 (46.08)
Being able to get tested at a place where mostly guys who are attracted to other guys go	75 (18.99)
Nothing would make me more likely to do this	20 (5.06)
I don't want to say	15 (3.80)
Other	17 (4.30)

HIV, human immunodeficiency virus; STD, sexually transmitted disease.

*Percentages are based on valid cases; missing data has been excluded from calculated variables.

†Questions were multiple responses; therefore, total percentages will not add up to 100%.

Table 4

Chi-Square Tests for Differences in HIV Testing in the Past Year and Testing at School, by Age, Race/Ethnicity, and City

	Age		Race/Ethnicity		City	
	16–17 years N (%)	**18–19 years N (%)**	**Black Non-Hispanic N (%)**	**Hispanic/Latino N (%)**	**New York City N (%)**	**Philadelphia N (%)**
Have you been tested for HIV in the past year?						
Yes	105 (63.64)	173 (88.27)	162 (71.68)	121 (75.63)	148 (74.37)	124 (72.09)
No	60 (36.36)	23 (11.74)	64 (28.32)	39 (24.38)	51 (25.63)	48 (27.91)
Total N	165 (100.00)	196 (100.00)	226 (100.00)	160 (100.00)	199 (100.00)	172 (100.00)
χ^2 (p)	30.691 (<.001) *		.745 (.388)		.245(.621)	
Where were you tested for HIV?—School						
Yes	11 (10.89)	18 (10.47)	15 (9.43)	15 (12.82)	21 (14.79)	9 (7.26)
No	90 (89.11)	154 (89.53)	144 (90.57)	102 (87.18)	121 (85.21)	115 (92.74)
Total N	101 (100.00)	172 (100.00)	159 (100.00)	117 (100.00)	142 (100.00)	124 (100.00)
χ^2 (p)	.012 (.912)		.798 (.372)		3.752 (.053)	

HIV, human immunodeficiency virus.

* $p < .05$.

Table 5

Questionnaire Participants' Interest in School-based HIV and STD Testing Among All Participants and Among Participants Who Had Ever Had Sex and Had Not Been Test in the Past Year

If It Was Offered at Your School, Would You Like to Use That Service?	Among All Participants*	Among Participants Who Had Ever Had Sex† and Had Not Been Tested in the Past Year
HIV testing		
Yes	260 (64.36%)	55 (75.34%)
No	96 (23.76%)	11 (15.07%)
I don't know	45 (11.14%)	7 (9.59%)
I don't want to say	3 (0.74%)	0 (0.00%)
Total N	404	73
STD testing		
Yes	269 (66.58%)	57 (58.76%)
No	96 (23.76%)	24 (24.74%)
I don't know	36 (8.91%)	15 (15.46%)
I don't want to say	3 (0.74%)	1 (1.03%)
Total N	404	97

HIV, human immunodeficiency virus; STD, sexually transmitted disease.

*Percentages are based on valid cases; missing data has been excluded from calculated variables.

†Sex was defined as oral sex, vaginal sex, or anal sex.