

Feasibility of HIV Behavioral Surveillance for Young MSM

Generic Information Collection request under 0920-0840

December 2, 2013

**Supporting Statement
Part B**

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B. Collection of Information Employing Statistical Methods

B.1 Respondent Universe and Sampling Method

The size of the respondent universe for NHBS-YMSM is unknown. Men who have sex with men (MSM) are estimated to be 4% of the U.S. adult male population (Purcell et al., 2010). However, we do not have reliable estimates for the number of MSM between 13 and 17 years of age. It is not possible to create a sampling frame for this population. There is no established sampling frame to determine external validity.

Eligibility for the NHBS-YMSM pilot was limited to the 20 state or local health departments currently funded for NHBS (OMB No: 0920-0770). Among these 20 NHBS sites, three (Chicago, IL; New York City, NY; and Philadelphia, PA) were selected based on their high AIDS prevalence.

Respondent eligibility criteria

Participant inclusion criteria

Participants will be eligible if they:

1. Are 13-17 years of age,
2. Live in the participating MSA or Division,
3. Are male,
4. Have ever had any sexual contact with another male, OR self-identify as gay or bisexual, OR report same-gender sexual attraction
5. Are able to complete the behavioral assessment interview in English
6. Have the capacity to provide informed assent for participation

Participant exclusion criteria

Participants will be ineligible for participation if they have previously participated in the NHBS-YMSM pilot.

The sampling methods to be tested in the proposed NHBS-YMSM pilot project are not intended to yield representative data about any group except those who meet the above inclusion criteria and who are able to be recruited by the specific sampling method (described below).

Selection of respondents

The sampling methods to be tested in the proposed NHBS-YMSM pilot were chosen based on experience with NHBS-MSM and other studies that have demonstrated the ability to recruit MSM using these methods (Fernandez et al., 2004; Grov et al., 2013; MacKellar et al., 1996; Mustanski et al., 2013; Raymond et al., 2010; Stueve et al., 2001) as well as consultations with sampling methodologists, those with expertise conducting research or behavioral surveillance with the population of interest, and public health practitioners who provide services to this population.

The selection of appropriate methods to recruit a representative sample of participants is complicated by the fact that population-based samples of this group-which is often marginalized, hidden, or otherwise stigmatized-is not feasible as they cannot be easily identified as members of this population or enumerated for sampling purposes. Several guiding principles determined the selection of sampling methods to test for possible future implementation of behavioral surveillance among young MSM. These principles include the selection of methods that would 1) result in a sample that is as representative of the population as possible, 2) be feasible for implementation in the areas to be included in NHBS-YMSM, and 3) allow for standardized recruitment of the targeted number of respondents.

NHBS-YMSM will test three sampling methods: venue-based, time-space sampling (VBS); respondent-driven sampling (RDS); and Facebook sampling (FBS). RDS is used in the injection drug user (NHBS-IDU) and heterosexual (NHBS-HET) cycles of NHBS; VBS is currently used in the adult MSM (NHBS-MSM) cycle. FBS has not been used for NHBS.

Venue-based, time-space sampling (VBS)

VBS activities can be grouped into three components. Each component is described in more detail below. Briefly, activities in the first component include identifying venues (or "spaces") and times to recruit young MSM. Venues are assessed by local project staff for the number of young MSM in attendance at different times, logistics and feasibility of recruiting and conducting the data collection activities, and safety. Activities in the second component include constructing monthly sampling frames of eligible venues and specific day/time periods during which each venue has a sufficient number of young MSM in

attendance. From the monthly sampling frames, project investigators select a set of venues and day-time periods in two stages and schedule data collection at those venues, on those days, and at those times on monthly calendars. Activities in the third component are described fully in section 2 below entitled, "Procedures for the Collection of Information."

A venue is an area, location, or building where young men can be approached and recruited to participate in NHBS-YMSM. Eligible venues may include dance clubs, retail businesses, cafes and restaurants, health clubs, social and religious organizations, school group meetings, high-traffic street locations, parks, beaches, and special events such as gay pride festivals, raves, and circuit parties. Support groups for HIV-infected persons and clinical or other settings which are exclusively for providing medical care, mental healthcare, social services, or HIV/STD diagnostic services are ineligible for consideration as venues. The number of venues accessed for NHBS-YMSM will be dependent on the number needed for the sample size to be reached.

For each eligible venue, specific day-time periods are identified as being well-attended by young MSM. Venue-specific-day-time periods may occur once or twice per month (e.g., a social organization that meets only per month) or daily (e.g., a busy street corner in a gay neighborhood). As a general principle, in order to reach sample size goals, venues included on the sampling frame are expected to yield a minimum of 8 young MSM in attendance during an average 4-hour sampling event. The approval of venue owners or managers will be necessary to proceed with data collection in many entertainment and commercial venues that are included in sampling frames. Some venues are excluded from sampling frames due to low attendance, lack of safety, or disapproval by owners or managers.

Whereas the majority of the venues on sampling frames will be identified before the start of data collection, local staff members are expected to identify new venues that open during the data collection period and likewise to keep track of those that have been closed or no longer serve young MSM. New venues must be considered for inclusion in the monthly sampling frames and venues that have closed must be dropped from the sampling frames. An updated sampling frame will be created each month, which includes all eligible venues identified by the staff to be currently operating within the selected MSA. This ensures the sampling frame is accurate as possible.

After the initial universe of venues and associated day-time

periods are identified, sampling frames will be constructed. The project area will construct 2 sampling frames. The first frame is the venue frame. The second sampling frame is the list of venue-day-time periods (or "VDTs") for each venue listed in the venue frame; this frame is called the "VDT frame." On a monthly basis, venues and day-time periods will be randomly selected from their respective frames and scheduled for sampling on a calendar for the upcoming month. The sampling plan is designed to optimize representation of young MSM from different venues and to minimize burden on venue owners and patrons. Thus, venues will be given an equal probability of selection each month and sampling will be conducted without replacement, using a VDT software program described in Part A.

Recruitment of young men for the study will occur at the randomly selected venues during the randomly selected day-time periods according to the monthly sampling calendar. During these events, field staff perform three main duties - counting venue attendees, recruiting participants, and conducting interviews. During recruitment, the field supervisor counts all young men who appear to be between 13 and 17 years of age who cross a defined area of the venue. Individuals are approached consecutively when project staff are available. Counting will last for the duration of the recruitment event, beginning when the team is ready to start conducting interviews and ending when the last person has been approached for recruitment. Those individuals who have crossed the defined area of the venue and have been counted, form the pool of persons eligible for recruitment into NHBS-YMSM.

During recruitment, the field supervisor directs an interviewer to approach sampled young men. The interviewer intercepts the men to recruit them for participation in NHBS-YMSM; they will use a script similar to the following: "HI, my name is (name) and I work for (organization). We are conducting an important health survey and would like to ask you just a few quick questions." If the young man accepts the approach, interviewers will then let him know that he must complete a screener to determine if he is eligible to participate, and that not all selected young men will be eligible. If the prospective participant agrees, the interviewer will assess his eligibility for participation using the screener described in section 2 "Procedures for the Collection of Information" below (see **Attachment 5** for the eligibility screener). Young men will normally be approached for recruitment in public, but eligibility screening will occur in a private area of the venue.

Respondent-Driven Sampling (RDS)

RDS is a chain-referral sampling strategy similar to snowball sampling. It starts with a limited number (5-10) of "seeds" who serve as the starting point for chain-referral sampling. Seeds must meet all the eligibility criteria for NHBS-YMSM. In addition, the following criteria will be considered when assessing whether an individual might be a good candidate for a seed:

- Seeds should be diverse with respect to factors such as race/ethnicity, age, or other characteristics that would create more insular networks.
- Seed selection should take into account network characteristics.
- As a group, seeds should reflect geographic diversity.
- Seed selection need not take place only at the beginning of NHBS-YMSM.

Seeds are chosen by referrals from people who know the local young MSM population well, or through outreach to areas where young MSM are found. Seeds complete the study activities (eligibility screener, behavioral assessment, optional HIV testing) and then are asked to recruit a specified number of persons (usually between 3 and 5) who they know are young MSM. Seeds who agree to recruit their peers are given between 3 and 5 non-replicable coupons. The code on each coupon is linked to 1) Study ID of the participant the coupon is issued to (i.e., the recruiter) and 2) the Study ID of the participant returning the coupon (i.e., the recruit). The coupon information is entered and stored in the Respondent Driven Sampling Coupon Manager (RDSCM). These persons, in turn, come to the study field office with a valid coupon, complete the behavioral assessment, receive an HIV test if they assent, and are asked to recruit others. This recruitment process continues until the sample size has been reached. Participants receive tokens of appreciation for participating, as well as for recruiting others. Starting with a small number of seeds, limiting the number of individuals each participant can recruit, and allowing a significant number of recruitment "waves" to occur (a "wave" refers to each additional generation of recruits stemming from a seed), is expected to lead to the distribution of a final sample that resembles the underlying eligible population living in the project area and that is unbiased by the characteristics of the seeds (Heckathorn, 1997; Heckathorn et al., 2002).

Facebook Sampling (FBS)

The FBS method will employ Facebook banner ads advertising a health survey. The ads will only be visible to young men 13-17 who indicate in their Facebook profile that they are interested in other men and live within one of the three NHBS-YMSM project site boundaries. Facebook regulations do not allow the use of the word "sex" in advertisements for this age group, so the ad will reference only a general health survey. Clicking on the ad will take the respondent to a landing page (**Attachment 10**) external to Facebook that displays additional information about NHBS-YMSM describing that participation in the health survey includes completing a behavioral assessment, HIV testing and tokens of appreciation for participation. Those interested in participating will enter their contact information on a portal (name, email address, and phone number). Project staff will contact interested potential participants to conduct an initial eligibility screener, and if eligible, will schedule an in-person appointment at one of the local field sites to complete the behavioral assessment and optional HIV testing. As with the other recruitment methods, study activities will take place in-person.

Sample size

The target sample size for each project site is 600 eligible respondents (300 per sampling method). Across the 3 participating project sites, this would result in a combined sample size of 1800 eligible young MSM participants. All 3 sites will conduct RDS. In addition, 2 sites will conduct FBS while the other site will conduct VBS.

Although NHBS-YMSM methods do not use probability sampling, sample size goals are based on an assumption that every element has a known nonzero probability of being sampled. If we assume that NHBS-YMSM is a probability sample, then the sample size of 600 participants per site allows local areas to estimate a proportion of 50% with precision roughly $\pm 5\%$ for outcomes of interest - for example, the proportion of eligible participants who have engaged in unprotected sex or have never been tested for HIV.

If the sample size and characteristics allow, data collected using RDS will be analyzed using the RDS Analysis Tool or other newly developed methods that result in weighted population estimates and standard errors and allow inference to the larger population from which the sample arose. Data collected using VBS

and FBS may also be weighted, if appropriate, to make inferences to the young MSM population. SAS and/or SAS-callable Sudaan will be used for the VBS and FBS analyses. Weights will be developed to account for the probabilities of selection for each sampling strategy. Weighted analysis for RDS will be conducted with the RDS Analysis tool. Weights for VBS will be constructed based on the MSM Weighting plan developed with the CDC's Data Coordinating Center, which takes into account the three stages of selection (venues, day time periods and individuals). Weights for Facebook recruitment will be estimated as the inverse of the sampling fraction based on the number of young MSM interviewed over the number of youth aged 13 to 17 years who reside in the participating MSA and indicate in their Facebook profile they are attracted to other men.

Expected response rates

Limited data from similar studies among young MSM are available from which to estimate expected response rates for this pilot. However, studies of other populations can be used as a basis for response rate estimates.

Response rates for VBS are largely dependent on how young MSM will accept being approached for recruitment and meet the eligibility criteria; among those who do accept and are found eligible, participation rates are in the range of 70% to 80% for previous studies of MSM (Diaz, 2001; Muhib, 2001; Valleroy, 2000). The response rate for VBS during NHBS-YMSM is therefore expected to be approximately 80%.

A benefit of the peer-driven sampling conducted in RDS is that recruiters are told, generally speaking, what the eligibility criteria are in order that they can recruit eligible participants. For this reason, for RDS during NHBS-YMSM, we expect that the proportions who accept participation from those that visit the study site will be higher than for VBS, approximately 90% (Heckathorn et al., 2002; Johnston et al., 2006; Ramirez-Valles, et al., 2005; Stormer et al., 2006; Wang et al., 2004; Yeka et al., 2006).

Previous internet-based research with YMSM suggests that approximately 6% of potential participants who click the Facebook advertisement will go on to enroll in the study and complete all-study related activities. Thus, 10,000 clicks of the ad will be needed to achieve the desired sample size goal for the FBS recruitment.

B.2. Procedures for the Collection of Information

The proposed formative research is being conducted to assess the feasibility of a national HIV behavior surveillance system for young MSM and to identify the most appropriate method(s) for sampling MSM 13 to 17 years of age. The CDC Behavioral Surveillance Team, which manages NHBS, has requested that NHBS-YMSM be granted a "research, non-engaged" status because CDC is not directly engaged with human subjects in connection with this project. Therefore, the protocol will not be reviewed by CDC's IRB. Each participating health department will be required to obtain IRB approval prior to data collection.

Key informant and focus group interviews will be conducted before recruitment through any of the sampling methods, to guide implementation. Participation in key informant or focus group interviews and in the screening, behavioral assessment interview, and HIV testing is voluntary. Respondents may refuse to participate at all or in part. Respondents may refuse to answer questions or stop participation at any time without penalty. To protect the anonymity of key informants and focus group participants, assent/consent to participate will be provided verbally by participants and interviews will not be video- or audio-taped. The interviewer or moderator will take handwritten notes on responses and will not record any personally identifying information in the written record. The notes will be stored without identifiers in a locked filing cabinet inside a locked office in the project area. Only authorized persons will have access to the notes, and they will not be transmitted to CDC.

Regardless of the sampling method, for each person recruited, a short computer-based eligibility screener will be administered in person by the interviewer to assess eligibility and collect limited demographic information (**Attachment 5**). For those young men who are eligible, the informed assent process will be initiated. During the assent process, each component of the project will be described and the individual must indicate which component(s), if any, he agrees to participate in. These include: 1) participation in the NHBS-YMSM behavioral assessment; 2) HIV testing and 3) Storage of blood specimens for future testing (i.e. incidence testing). Informed assent will be obtained by having the interviewer read the assent script and indicating on the handheld or portable computer whether the person being recruited provided verbal assent.

Young men who assent to participate in the study will be administered a behavioral assessment (**Attachment 6**). Data will be

collected by trained health department personnel through face-to-face interaction with participants. Interviewers will collect the data using a software application loaded onto handheld or laptop computers. Response data will be encrypted and computers used for data collection will be for use solely for the pilot and will be password protected so that unauthorized users will be unable to view, export, or modify collected data. Electronic data collected for NHBS-YMSM will be maintained indefinitely at CDC. The study is anonymous; no names or phone numbers are collected by CDC as part of the eligibility screening, behavioral assessment, or HIV testing.

Young men who agree to participate in the optional testing component of NHBS-YMSM will be provided with information about HIV testing. In accordance with local procedures and practices, project sites may offer rapid or laboratory-based HIV testing to participants. NHBS-YMSM project sites that utilize a rapid HIV test will need to obtain additional specimens from participants with a preliminary positive (or reactive) result for confirmatory testing. HIV test results will be returned to participants by a trained counselor during a scheduled counseling visit or shortly after the time of testing if a rapid test is used. All participants who test positive for HIV will be actively linked to appropriate medical care and HIV case management services at the time they receive their test results.

All sites will also collect dried blood spot (DBS) specimens by finger prick from all individuals who assent to HIV testing. These specimens will be sent to CDC for additional tests. Additional testing on HIV positive specimens will include testing to distinguish between recent and older HIV infections, identifying transmitted HIV drug resistance, and quantifying HIV viral load. This additional testing on HIV positive specimens can be used to estimate HIV incidence among young MSM and characterize patterns of transmission, monitor the prevalence and transmission of HIV containing drug resistance mutations, and assess age-specific community HIV viral load. HIV-negative specimens will be tested with a more sensitive RNA assay to ensure that acute HIV infections are not missed.

Quality control

Quality control measures include the use of computer-assisted interviewing, interviewer training and monitoring, site visits, and data editing. Computer-assisted interviewing improves data quality in several ways:

- Interviewer errors are reduced because interviewers do not have to follow complex routing instructions; the computer does the routing for them.
- Respondent errors are also reduced. Consistency checks are programmed into the behavioral assessment so that inconsistent answers or out-of-range values can be corrected or explained while the behavioral assessment is in progress.
- Use of computer-assisted interviewing also reduces coding and coding errors, which make it possible to prepare the data for analysis faster and with fewer errors.

A multi-session interviewer web-based training will occur before the start of data collection. This training will cover general interviewing skills, sampling and recruitment protocols, and a question-by-question review of the behavioral assessment to ensure interviewers understand the purpose of each question and how it should be read and coded in the computer. Interviewers will have opportunities to practice administering the behavioral assessment during the training. The training will address interviewer integrity, underscoring the importance of collecting quality data and the consequences of inappropriate behaviors, including falsification of data. Project staff will also be trained on how to conduct recruitment procedures, such as approaching young men in venues and training participants to recruit their peers into the study.

During the data collection period, interviewers will be monitored by the field supervisors or other management staff. Approximately 10% of each interviewer's interviews will be monitored. Feedback will be provided on areas of improvement and in cases of incorrect implementation of the protocol. Supervisors will also monitor VBS and RDS recruitment procedures and provide feedback to help improve response rates. Automatically generated reports from Facebook will assist project staff with monitoring Facebook recruitment efforts.

CDC will conduct at least one site visit to each grantee during data collection. The purpose of the site visit is to monitor adherence to the NHBS-YMSM protocol, observe recruitment, interviews and HIV testing, and obtain feedback on study procedures.

In addition to the automated checks provided through the computer-assisted interview program, editing of the data will be performed by CDC following extensive checking of the quality of the data files. Monthly processing will allow for identification

of errors in the dataset (such as incorrect identification codes or incorrect coding of other critical data elements) or incorrect local data management procedures. CDC will regularly convene conference calls with the project areas and the CDC contractor to address any issues with the data collection application and discuss administration of the behavioral assessment specifically and the project in general.

The NHBS-YMSM behavioral assessment will not collect specific identifiers beyond date of birth (e.g., name, address, social security number). Data will be collected electronically for all forms except for the key informant and focus group interviews. Notes on key informant and focus group interviews will be documented through the interviewer's or moderator's handwritten notes, and will not be sent to CDC.

B.3. Methods to Maximize Response Rates and Minimize Nonresponse

Response rates

VBS

Response rates for VBS are dependent on how many young men accept the approach. Among those who do accept and are found eligible, participation rates are expected to be between 70% and 80% (Diaz et al., 2001; Muhib et al., 2001; Valleroy et al., 2000). Based on previous studies using VBS, we expect approximately 20% of young men to refuse the approach. Therefore approximately 470 individuals will be approached to participate in the study and 376 will accept the approach. Among those who accept the approach, 10% of those screened are expected to be ineligible and 10%, after learning what participation in the project entails, will refuse to participate, yielding a total of 300 eligible respondents.

RDS

Previous studies using RDS find that one-half to two-thirds of persons recruited by their peers will present for eligibility screening (Heckathorn et al., 2002; Johnston et al., 2006; Ramirez-Valles et al., 2005; Stormer et al., 2006; Wang et al., 2004; Yeka et al., 2006). Therefore, for RDS, we estimate that approximately 330 individuals per site (990 total) will present themselves at a field location for eligibility screening. Because recruiters are instructed to invite their peers who meet the general eligibility criteria of the study, it is expected that only 9% of respondents will not be interested in completing the behavioral assessment or will be ineligible after completing the screener, yielding 300 eligible respondents per site (900 total).

FBS

We anticipate that approximately 5000 individuals (10,000, total) will click on the Facebook ad. Of those who click on the Facebook ad, approximately 8% (410 per site, 820, total) will complete the landing page form, and of these, approximately 85% (350 per site; 700 total) will present themselves at a field location for eligibility screening. We anticipate that approximately 14% of these individuals will be either ineligible or not interested in completing the behavioral assessment after completing the screener, yielding approximately 300 eligible respondents per site (600, total).

Methods to maximize response rates

Each sampling method utilized in NHBS-YMSM offers ways to maximize response rates, as described below. Monitoring response rates will be done through conference calls on a weekly basis with each grantee and monthly with all grantees together, offering the opportunity to share strategies for improving response rates. Recruitment statistics and sample demographics will be reported to CDC on a weekly and monthly basis, respectively.

Research indicates that providing remuneration to respondents helps raise response rates for long, sensitive, in-person surveys (Kulka, 1995). In addition, persons at risk for HIV infection have frequently been the focus of health-related data collections in which remuneration is the norm (MacKellar et al., 2005; Thiede et al., 2009). Research has shown that tokens of appreciation are effective at increasing response rates among female residents in minority zip codes (Whiteman et al., 2003) and African American participants in a community-based health promotion program (Halbert et al., 2010). A meta-analysis of 95 studies published between January 1999 and April 2005 describing methods of increasing minority enrollment and retention in research studies found that tokens of appreciation enhanced retention among this group (Yancey, Ortega, and Kumanyika, 2006). Providing remuneration to NHBS-YMSM respondents is critical to achieve acceptable response rates.

Tokens of appreciation are also provided to persons who participate in CDC's HIV-related data collections among other populations, such as the NHBS (OMB 0920-0770, exp. 3/31/2014) and the Medical Monitoring Project (MMP) (OMB 0920-0740, exp. 05/31/2015). Participants in NHBS and MMP are offered \$25. A

similar token of appreciation amount was also used in the Transgender HIV Behavioral Survey (OMB NO. 0920-0794, exp. 12/31/2010) and was used in the Supplement to HIV/AIDS Surveillance (SHAS project (OMB 0920-0262, exp. 06/30/2004).

VBS

To maximize response rates for VBS, the initial approach is critical. Training for interviewers will focus on effective communication (enthusiasm, rapport building in a short period of time) and ability to communicate the value of NHBS-YMSM (persuasion); demonstrated motivation, persistence, and high energy are critical for successful recruiting. The training will focus on methods for averting refusals and methods to seek participation of sampled persons who are initially reluctant, including role-playing of different scenarios in which the respondent may be difficult to recruit. The basic recruitment philosophy is "respectful persistence;" interviewers are trained to know when to stop. The use of staff other than interviewers for refusal conversations will not be done for NHBS-YMSM.

VBS offers the benefit of access to large numbers of the target population in a single location; however, a disadvantage is that the rate of refusal of the approach and of participation (among those who accept the approach) can be high because people attend venues for reasons other than participation in data collection. In limited cases, respondents who are interested in participation but are not willing or able to complete the study at the time they are approached will be offered an appointment to participate on another day. Offering of these "other-day appointments" will be limited, as it is expected that "no show" rates for the appointments will be high.

RDS

Because RDS is a peer-referral mechanism, the field staff has little control over sampling methods and sample accrual, other than through the recruitment of seeds. One advantage of RDS, however, is that peer referral, which implies endorsement or at least acceptance of the project by a peer, is likely to have a positive impact on response rates. To maximize the effectiveness of peer recruiting, training will be provided to recruiters (**Attachment 3**). Peer recruiters are not constrained to making a single contact with persons they approach about the study, because they are recruiting persons known to them and are able to follow up to provide reminders to participate. The "dual-incentive" structure (i.e., providing a reward to recruiters who successfully recruit an eligible participant) is expected to help to maximize response rates. Convenient location of field sites

and hours of operation may also maximize response rates; field sites will be located in areas that are easy to access by public transportation and hours of operation will be set to meet the needs and schedules of young MSM.

FBS

While FBS recruitment requires that potential participants make initial contact with NHBS-YMSM staff, there are a few things that staff can do to increase sample accrual through this method. One potential strategy is to modify the presentation of Facebook advertisements in response to the demographic composition of the sample. For example, if young MSM of color appear to be underrepresented in the sample, the Facebook ads could be modified to present more images of youth of color.

Assessing non-response bias

The information collected using the eligibility screener will allow comparison of demographic and eligibility-related behavioral data among those who are eligible and ineligible.

VBS is not conducive to collecting information from those who refuse to be approached. However, information on those who accept being approached but do not assent to participate may be obtained and can be used to compare those who refuse with those who agree to participate.

To assess non-response bias from RDS, each peer recruiter returning to the field site will be asked, using the recruitment debriefing instrument (**Attachment 4**) whether anyone refused a coupon (invitation to participate), why they refused, and the age and race/ethnicity of those who refused. This information will be collected using a laptop computer. Following up with recruiters has improved rates of participation in other studies implementing RDS (Draus et al., 2005; Ramirez-Valles et al., 2005). However, due to the anonymous nature of NHBS-YMSM, participants cannot be re-contacted by field staff. Nor can field staff initiate contact to encourage peer recruiters to distribute coupons or to ask recruiters to report on refusals. However, when an NHBS-YMSM peer recruiter initiates contact with project staff, such as when a peer recruiter returns to the field site for rewards, the field staff will remind recruiters to encourage any recruits who have not yet presented for eligibility screening to do so.

In addition, peer recruiters will be debriefed about their recruitment efforts when they return to the field site for their recruiter rewards as described above. This information will be

used to understand if certain racial/ethnic or age groups are not responding or if persons are not responding for a particular reason.

Automatically generated reports from Facebook, combined with local site-level data on enrollment from Facebook-recruited participants will provide local staff with a tool to monitor recruitment efforts and make adjustments as needed. As with the RDS and VBS recruitment methods, these data will help staff identify emerging differential responses by specific demographics (e.g., age, race/ethnicity) and will help refine ongoing Facebook recruitment efforts.

Recruitment for all data collection methods will be monitored through on-going data reports generated weekly and monthly from the data submitted to CDC. For VBS, these reports will be used to monitor approaches of young MSM by field staff, the number accepting and refusing the approach, the number screened, the number who completed the behavioral assessment, and the characteristics of the accruing sample. For RDS, reports will be used to monitor the seed recruitment, the characteristics of seeds, general recruitment (i.e., participation rate among seeds and non-seeds who present for screening and are eligible), the characteristics of the resulting sample, the number and length of the recruitment chains, the number of recruiters who returned for rewards, the number of coupons distributed to recruiters, and the number of persons who present with a coupon for eligibility screening.

Automatically generated reports from Facebook will assist with monitoring the FBS recruitment. The reports will include detailed information about the number of impressions (the number of times the ad appears) and the number of clicks on the ad as well as some basic demographic information about the profiles on which the ad appears. This information will help to assess the degree to which non-response bias may be operating in this recruitment method.

B.4. Tests of Procedures or Methods to be Undertaken

The purpose of the NHBS-YMSM pilot is to assess the feasibility of a national HIV behavior surveillance system for young MSM and to identify the most appropriate sampling methods for reaching MSM between 13 and 17 years of age. The feasibility of incorporating MSM between 13 and 17 years of age into ongoing HIV

behavioral surveillance will be evaluated using data from a number of project components. First, CDC staff will examine data on the ability of each sampling method to enroll 300 young men per site who meet the NHBS-YMSM eligibility criteria, including the time that it takes to reach the enrollment goal. Second, CDC will consider organizational, technical, and operational challenges associated with each method, implementation costs, and the acceptability of each method among the target population. Third, CDC will analyze data on the response rates during each step in the recruitment process as well as the rate of agreement to HIV testing.

CDC will monitor the demographic characteristics of participants recruited through each sampling method to determine which sub-populations of young MSM are reached through each. For example, one sampling strategy may be more appropriate to reach a sub-population with higher risk behaviors, low uptake of HIV testing and prevention services or higher HIV prevalence. These findings will be discussed with leaders within CDC's Division of HIV/AIDS Prevention as well as subject-matter experts to interpret results and compare sampling strategies.

The behavioral assessment instrument will be used by all participating NHBS-YMSM project sites and will provide data that will be used to evaluate sampling methods, and whether enough high-quality data are obtained for comparisons of young MSM risk behaviors and HIV testing behaviors between the MSAs.

The data collection instruments used in NHBS-YMSM were developed using questions primarily from NHBS (OMB No: 0920-0770). In addition, NHBS-YMSM includes questions designed particularly for MSM between 13 and 17 years of age. New questions added to the NHBS-YMSM behavioral assessment were reviewed internally and cognitively tested with fewer than 10 respondents. Prior to implementation in the field, CDC staff will test the skip patterns and responses of the data collection instruments. CDC staff will also conduct mock interviews of their CDC colleagues to test the electronic interview application loaded onto handheld computers. Because the proposed questions and methods have not been used to collect information from young MSM, the pilot will serve as a test of feasibility, acceptability, and effectiveness.

B.5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

Consultants on Statistical Aspects

The following individuals consulted on statistical aspects only. They are not involved in collecting or analyzing the data.

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Individuals Collecting and/or Analyzing Data

CDC is not directly engaged with human subjects during data collection. However, CDC project staff below will train health department staff and subcontractors in data collection methods, monitor the progress of recruitment by health department staff and subcontractors, and analyze the data.

CDC Project Staff

All CDC project staff can be reached at the following address and phone number:

Behavioral and Clinical Surveillance Branch
Division of HIV/AIDS Prevention
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The following contracted staff will analyze NHBS-YMSM data.

ICF International Data Coordinating Center Contract

All Data Coordinating Center contracted staff can be reached at the following address and phone number:

ICF International
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