

**National HIV Behavioral Surveillance
Secondary Data Report:
Men Who Have Sex With Men, Cycle 3
(MSM3)**

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For more information about HIV/AIDS in Georgia, visit

<http://www.health.state.ga.us/epi/hiv aids/>

Secondary Data Report

Part 1: Summary of Structural and Contextual Factors in the MSA Relevant to NHBS Implementation

Geographic Region

The Atlanta Metropolitan Statistical Area (MSA) is located in the northern third of the state spanning a geographical area of 8,376 square miles with an estimated population of 5,420,913 in 2009 [1]. Atlanta, the capitol city of Georgia, is the largest city in the state with an estimated population over 540,000 [2]. The Atlanta Metropolitan Statistical Area (MSA) is officially designated by the United States (US) Census Bureau as the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area which as of 2005 includes 140 cities within its 28 counties (Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, Walton) and is considered the eighth largest metropolitan area in the US. It is also the largest metropolitan area in the emerging megalopolis known as the Piedmont-Atlantic Mega-Region along the Interstate 85 corridor [2, 3]. Many of Georgia's residents live under a decentralized collection of local governments dispersed among numerous towns, cities, and counties. And the 2000 census indicates that less than one in ten of the region's residents live within the city of Atlanta [4].

The Atlanta MSA is racially and ethnically diverse. The population is 58.0% White (52.8% non-Hispanic White), 31.2% African-American (non-Hispanic Black), 10% Hispanic/Latino (of any race), 4.4% Asian, and 0.2% Native American. 4.2% of the population identify themselves as other races; 1.8% of the population identify themselves as two or more races. Atlanta has been one of the fastest growing metropolitan areas since 2000 [5]. Much of the city's growth can be attributed to a growing population of different races and ethnicities in particular African-Americans. Atlanta has attracted many African-American professionals and has recently surpassed Chicago as having the second largest African-American population after New York. In addition to a sharp rise in the Latino population in the last decade, the Korean population has also rapidly increased (from 42,000 in 2000 to 80,000 in 2006) and Atlanta now has the fastest growing Korean population in the country [5].

The population of Atlanta's Combined Statistical Area (CSA) is also racially and ethnically diverse with a foreign born population arriving from Latin America (52.4%), Asia (25.4%), Africa (10.1%) and Europe (10%) [6]. The estimated population in the CSA which includes cities such as Gainesville, LaGrange, Cedartown, and Thomaston, Georgia, and Valley, Alabama is 5,729,305, only slightly higher than the Atlanta MSA (5,376,285) [7]. The U.S. Census includes these areas in the CSA due to their strong economic and social ties to Atlanta's core region.

MSM Specific:

Methamphetamine use has greatly affected the Atlanta men who have sex with men (MSM) population. Research conducted by Dr. Brian Dew of Georgia State University found from one online sample of 507 MSM participants, 62% of respondents reported lifetime use of the drug

[69]. The high prevalence of use and network use of the drug should be researched further in the National HIV Behavioral Surveillance (NHBS) survey, this could be done by including questions in the local section. Furthermore, the author finds that between 20% and 35% of current new HIV infections among Atlanta's MSM were linked to methamphetamine use [69]. The research team will need to explore further during formative research to find the pattern of use in the geographic area.

IDU Specific:

Finding geographic areas where the drug trade exists and injection drug users (IDU) live will be important for the NHBS research team. The Drug Enforcement Administration (DEA) reports that cocaine, methamphetamine, marijuana, and heroin are the major drugs trafficked in the MSA [49]. Atlanta Harm Reduction Coalition (AHRC) data sources from 2009 found that the neighborhoods most affected by this trend include zip code areas, 30303, 30308, 30310, 30314, 30315, and 30318 [50]. The routes of distribution are often street corners, alleys ways, and open air drug markets. Powdered cocaine can readily be obtained at private parties, local bars, nightclubs, and other night entertainment venues [51, 52].

HET Specific:

The heterosexuals at increased risk of HIV infection (HET) population reside in different geographic areas of the city. Due to the numerous counties within the MSA and limited public transportation, the research team will need to find venues that are convenient for participants. During previous cycles the Atlanta team set up multiple storefront locations around the city (Southside, Eastside, and/or Westside) which proved successful in reaching many geographic areas.

Overall, the Atlanta MSA is diverse in terms of race, ethnicity, nationality, social class and sexual orientation. This diversity will lead to recruiting and testing a wide range of participants for the NHBS survey. This diversity in populations within the MSA will result in ample and relevant data collection for all three populations at risk for HIV: MSM, IDU, and HET.

Weather

The Atlanta MSA is located at the foothills of the Appalachian Mountains at an elevation of 1,010 feet. It has a humid subtropical climate, and it has four distinct seasons. The average annual temperature is 61 degrees. The coldest month is January when the average overnight temperature is 33.5 degrees. In July, the warmest month, the average daytime temperature rises to 89.4 degrees. March is the wettest month, with 5.38 inches of rain. October is the driest month, with 3.11 inches of rain [8].

Inclement weather in fall, winter and summer could affect outdoor recruitment strategies for the MSM cycle; we aim to receive permission to recruit and conduct activities inside of the venues, so the weather will not greatly affect data collection. When weather is an obstacle for outdoor venues, then we will conduct recruitment events at alternative indoor venues scheduled on the monthly recruitment calendars.

During HET and IDU cycles store fronts will be utilized and weather should not be an obstacle to recruitment. Store-fronts should be centrally located within the MSA so that distance traveled during inclement weather can be minimized for participants.

Housing

Like many large US cities, people from a wide range of socio-economic classes, races, and ethnicities live in Atlanta's MSA. In the central urban areas known as "Downtown," "Midtown" and "Buckhead," medium-to-high priced condominiums, apartments and single family homes make up the bulk of housing options. Single-family dwellings dominate the MSA in the distinct neighborhoods that fan out from the central areas.

Almost half (46.3%) of the housing units in the City of Atlanta are single-family residential housing units while the balance of the residential units in the City are multi-family housing units with 5 or more units. According to the 2009 American Community Survey, the number of housing units between 2000 and 2008 increased by 33,732 units or 18.0%. Although there has been a large increase in the number of multi-family dwellings built in the City since 2000, the Atlanta Housing Authority has demolished a majority of their substandard housing in preparation for new mixed-income development [9].

The city of Atlanta does not go without controversy in its path to be bigger. The effects of gentrification and income gap can be seen in the demolition of public housing, to the decline of the African-American population [10]. Atlanta was 61% African American in 2000, dropping down to 54% by 2004 [11]. The change can be attributed to the influx of white residents to the city of Atlanta and changing housing prices, forcing many of the older residents to retreat to the suburbs. The influx of newer residents in the past decade have seen many of them (including a majority of the African Americans) moving to the suburbs. This shift should not affect reaching the majority of the MSM population who reside or socialize in the Midtown area. However, research staff will need to locate store-fronts in areas that are easily accessible by public transportation (bus and rail) for the IDU and HET cycles.

We will be able to locate, survey, and test MSM from a wide range of locations within the MSA. Moreover, with the growth in the city of Atlanta residential population, housing units will likely be in close proximity to venues (in Midtown, for example), so this should increase the enrollment numbers when employing venue based sampling (VBS). For IDU and HET numbers, staff should again locate store-fronts in central, easily accessible areas of the city to increase participation rate. However, to ensure the sustainability and crossover of recruitment chains, seeds recruited for respondent driven sampling (RDS) in the HET and IDU cycles may need to be carefully monitored and increased given the changing demographics and housing distribution of the MSA

Laws that may Impact HIV Transmission or Prevention

In Georgia, there is a law [*Ga. Code Ann. 16-5-60(d)(c)*] aimed specifically at persons with HIV. According to this law, a person is guilty of a felony if he or she, without first disclosing his or her HIV status "(1) knowingly has sexual intercourse or performs or submits to any sexual act

involving the sex organs of one person and the mouth or anus of another person; (2) knowingly shares a hypodermic needle or syringe with another person; (3) offers or consents to perform an act of sexual intercourse for money; (4) solicits another to perform or submit to an act of sodomy for money; or (5) donates blood, blood products, other body fluids, or any body organ or body part” [12]. Further, the law also states that a person is guilty of a felony when that person commits an “assault with the intent to transmit HIV,” when he or she uses his or her body fluids such as blood, semen, vaginal secretions, saliva, urine, or feces against a peace or correctional officer while the officer is engaged in the performance of his or her official duties [13]. Overall, this law should not dissuade participants from taking part in the study due to fear or incrimination.

Stigma and Discrimination toward High-Risk Groups

Introduction: General Stigma Towards At Risk Groups:

Since the early days of the epidemic, people living with HIV/AIDS and those suspected of being infected with the virus have been subjected to social isolation, discrimination, and even violence [53]. These reactions are based not only in fears of HIV transmission but also in the use of HIV/AIDS as a means of placing stigma on and expressing discrimination of the communities it disproportionately affects, especially MSM and IDU [54, 55]. In December 2003, Georgia became one of the last states to implement HIV name-based reporting [56]. The resistance to implementing confidential HIV testing was attributed to the perceived stigma that high-risk individuals of all backgrounds may face when having to provide a name vs. a unique identifier during testing [57, 58]. Each group though, may experience stigma that is based solely on their attributes. We shall go into further detail about specific stigma for MSM, IDU, and HET.

Researchers report that discrimination toward sexual minorities is “a form of social marginalization that is rooted in homophobia and is reflected in laws, policies and interpersonal interactions that affect the physical and mental health of MSM, including whether MSM seek and are able to obtain health care, and the quality of the health care services they receive” [14].

In the Southeastern United States in general, and in Georgia in particular, conservative political and religious ideals have created a climate resistant to and suspicion of sexual minorities and HIV/AIDS related research and/or testing. This could be especially true with programs targeted toward high risk individuals such as MSM and the IDU community [15, 16]. As stigma continues, high risk groups’ access to health care and preventions services may decrease [59].

Georgia does not sanction or recognize marriage between partners of the same sex, even though the couple may have been legally married in another state or country. The law specifically states, “[t]his state shall recognize as marriage only the union of man and woman. Marriages between persons of the same sex are prohibited in this state.” [17] Because of this law, domestic partners of the same sex face difficulty when handling matters such as reciprocal wills, custody and visitation of children, adoption of children, separation of assets, living wills, general power of attorney, and powers of attorney for health care [18].

The city of Atlanta has one of the largest number of same-sex couples and number of gay, lesbian, and bisexual individuals in the country. Atlanta ranks third behind San Francisco and Seattle; and is ranked 9th within the fifty largest metropolitan areas in the United States [19]. Even though the state legal climate is generally averse to homosexuals, same-sex partners may legally enter into a Domestic Partnership Agreement, which is similar to a premarital agreement. Additionally, the city of Atlanta, the Fulton County government, and many prominent corporate employers recognize the rights of domestic partners to share in benefits programs [18].

Federal laws since 1988 prohibiting syringe exchange was one of the more prominent forms of stigma that existed for IDU's, however the ban was overturned in 2009 [60]. Yet many states, Georgia included (*Code - Crimes and Offenses - Title 16, Section 16-13-32*) have still upheld the bans on syringe exchange without a prescription from a medical provider. These bans limit the amount of outreach and education agencies like the Atlanta Harm Reduction Coalition (AHRC) can perform. Furthermore, commercial sex workers, many of which are also female IDUs, can face marginalization and stigma based on the work they carry out and for the purpose they do it [61]. During IDU1 & IDU2, research staff found micro levels of marginalization even within the IDU community based on the drug of choice that is injected, as well as stigma from non-injectors onto injectors. We saw that groups based on drug of choice and method of use would stigmatize other groups and discriminate based on these characteristics and behaviors. Other research has found that the stigma associated with injection drug use would hinder open and honest relationships and social support networks [62].

. When working with the heterosexual at high risk for HIV infection population, the research staff did not observe overt encounters of discrimination and stigma based on socio economic status (SES). Stigma based on income and poverty level can have an intensifying effect on discrimination, which could be compounded when coupled with an HIV⁺ status [63, 64]. Females in the HET community face similar marginalization as females in the IDU community [65]. To reduce stigma by association with NHBS, research staff worked to alleviate fears and create welcoming environment. Locating storefronts that were accessible to participants and within their neighborhood helped to relieve any stigma that NHBS might experience within the population.

Despite a general climate of stigmatization and discrimination toward high risk groups in Atlanta's MSA, the NHBS has show previous success with obtaining participation in HIV surveillance and testing in the NHBS communities; the same success is anticipated for this current round During previous cycle/rounds of NHBS, no major complication arose and all researched stigma and discrimination had no bearing on data collection. The increase in various other studies by local organizations (Emory Hope Clinic, The Rollins School of Public Health, and AIDS Research Consortium of Atlanta) and the staff's success rate are indicators of a likely success rate without any difficulties. With NHBS being conducted anonymously and at a community level by well trained staff, relieved participant fears of feeling stigmatized or discriminated against. Though research staff in Atlanta found no resistance to participation based on stigma it should not be counted out. A Kaiser Family Foundation Survey found that over 81% surveyed thought there was some or a lot of prejudice and discrimination against people living with HIV/AIDS (Kaiser 2006). Staff should continue to address this issue and look for ways to lessen the potential burden of stigma and discrimination.

Stigma and Discrimination toward Individuals Diagnosed with HIV

With a general climate of stigma experienced by people who are HIV⁺, the Federal Government has instituted legal protections to insure that people are not discriminated against. Even though HIV⁺ people may encounter various legal issues associated with their health status, they are protected from discrimination in employment, housing, and medical care.

According to Americans with Disabilities Act (ADA), if an HIV⁺ person is qualified to do a particular job and can perform essential functions of that job, an employer cannot reject, terminate, demote, or deny promotions due to a person's HIV status. Additionally, it is illegal for an employer to harass or mistreat an HIV⁺ employee because of prejudice or fear of the employer, supervisor, co-workers, or customers. The ADA contains additional protections, such as not asking a job applicant his or her HIV status, the inability for an employer to refuse to hire a job candidate based on HIV status, and the requirement for employers to keep employees' medical records confidential [20].

The ADA also protects people from health care discrimination. Under these laws, doctors and dentists cannot refuse to treat HIV⁺ patients. Moreover, it is not required that HIV⁺ people disclose their HIV status to their doctor or dentist. HIV⁺ people face discrimination when seeking health insurance in the private market. Currently, because of the preexisting condition rules in most health insurance plans, it is nearly impossible for HIV⁺ people to purchase a policy. The 2010 Patient Protection and Affordable Care Act (PPACA) will remove preexisting condition stipulations, but not until 2014, when it will be illegal for private insurers to deny coverage based on a preexisting condition. In the meantime, every state is required to have a temporary high risk pool insurance policy set up and running for high risk people, such as those who are HIV⁺. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) also provides protections for people living with HIV and AIDS. This law requires that health care providers ensure strict confidentiality of people's health information, such as HIV status. The law also limits the coverage exclusion period that group health plans can impose because a person has HIV, or any other preexisting condition [20].

The Fair Housing Act, in addition to state and local laws, protects HIV⁺ people from housing discrimination. These laws state that landlords cannot: 1) refuse to rent to a person because of HIV⁺ status; 2) try to evict a tenant because he or she is HIV⁺; 3) harass or mistreat a tenant because he or she is HIV⁺. Additionally, nonpayment of, breaking the terms of the lease, and other legitimate causes are the only reasons landlords may evict an HIV⁺ person [20].

These federal protections indicate that HIV⁺ people have historically experienced stigma and discrimination. With these laws in place, people who are HIV⁺ can negotiate society more confidently. Researchers should be prepared to impart knowledge about these legal protections so that study participants will feel secure about taking part in the study.

Stigma and discrimination towards persons living with HIV in the Atlanta MSA and for NHBS participants is a topic that can be investigated further through key informant interviews and local questions. By speaking to Key Informants who have direct knowledge of the populations,

utilizing the information from focus groups of individuals within the community as well as researching the topic with additional questions in the local section, the NHBS team can better understand the local stigma facing HIV⁺ individuals in the Atlanta MSA.

Neighborhood Violence/Gangs/Drug Presence as it Relates to Data Collection

With 105 victims per 1000 residents, Atlanta has one of the highest crime rates in the United States. The chance of a person becoming a victim of crime or having property vandalized is one in 10. According to a 2009 Neighborhood Scout Analysis Report, in the city of Atlanta a person has a one in 52 chance of becoming a victim of a violent crime. Violent crimes are defined as forcible rape, murder and non-negligent manslaughter, armed robbery, aggravated assault, and assault with a deadly weapon. Atlanta also has one of the highest murder rates in the nation when compared to cities of comparable size, population, and demographics. From 2008-2009, there was an increase in rape and auto theft, but a decrease in murder, robbery, aggravated assault, burglary, and larceny [21].

From 2009 to 2010 homicide increased, but robbery, aggravated assault, burglary, and auto theft decreased [22]. Based on MSM2 data, it is likely that staff will conduct fieldwork in Midtown and Downtown, and these areas experience significant crime. In Midtown in 2009, there were 3 homicides, 4 rape incidents, 73 robberies, 93 burglaries, 131 auto thefts, and 684 larceny incidents. In Downtown, there were 4 rape incidents, 58 aggravated assaults, 73 robberies, 88 burglaries, and 1,024 larceny incidents [23]. During the MSM cycle, the NHBS team will use VBS and will be able to scout out locations before data collection to insure for safety and take action to set up within the venue in the safest and most visible areas for both the staff and participants. During IDU and HET cycles, RDS method will be used. Store-fronts will be chosen in well known areas with clear police presence close by. Also, contacting the local police agencies to inform of staff whereabouts during data collection is effective for minimizing crime opportunity. During previous cycles, research staff located store-fronts within existing community centers or churches so that community knowledge was easily assessable and safety within the existing building was at a maximum.

Because IDU and low SES HET populations are found within higher crime areas of Atlanta (zip codes: 30310, 30312, 30313, 30314, 30303, several of these are also listed as neighborhoods with high IDU use) staff should be apprised of recent crime statistics before entering the field during any cycle and special precautions should be taken when collecting data so researchers and participants remain out of harms way [66]. It is important for staff to know that property crimes far outweigh violent incidents in the Atlanta area where most data collection will occur for all three cycles [23].

Prevention and Support Efforts for HIV/AIDS

In the greater metro Atlanta region, there are numerous resources that can be accessed by those who are infected with HIV and AIDS. Each region of Georgia has a Public Health Agency that is dedicated to addressing the medical and social needs of people living with HIV/AIDS. However, most of those living with HIV are densely housed within the perimeter, primarily in

four counties of the MSA (Fulton, DeKalb, Clayton, and Gwinnett) [24]. Some agencies have established programs that address the needs of the individual NHBS populations.

Services are provided from local and national sources as well as from government, health related, social, mental health and substance abuse programs, housing and non-profit agencies. Some services offer access to those who are in need of care because they are infected with HIV or AIDS; other services assist with prevention efforts based upon behavior that a person may be exhibiting that places them in substantial risk for infection.

Part 2: Demographic Makeup of the MSA

According to the 2009 American Community Survey, among the 5,420,913 estimated total population of the MSA, there is a nearly equal distribution of men and women. Men are 49.1% of the population with 2,661,422 residents; women are 50.9% of the population with 2,759,491 residents. (See Table 1)

The Survey does not have a tool to classify variables according to gender, but overall estimates for both genders indicate that the majority of the population is White (58.0%; 3,143,395). Blacks comprise the bulk of the remaining racial groups with 1,697,978 residents, which is 31.3% of the population. The next most populous racial group is Hispanics: with 542,524 residents, they are 10% of the population. Asians are 4.4 % of the population (236,705). Other racial groups are 4.2% of the population: American Indian/Alaska Natives are 0.2% of the population with 12,674 residents; Native Hawaiian/Pacific Islanders could not be determined and a relatively large percentage of residents (4.2%; 226,889) claimed they are of “other” racial status. (See Table 1)

Table 1. Selected characteristics in the metropolitan statistical area—Atlanta, 2009¹

Metropolitan population	Estimate	Percent
TOTAL POPULATION	5,420,913	
(non-institutionalized population)		
Male	2,661,422	49.1
Female	2,759,491	50.9
CHARACTERISTIC		
Race/Ethnicity		
American Indian/Alaska Native	12,674	0.2
Asian	236,705	4.4
Native Hawaiian/Pacific Islander	N	N
Black	1,697,978	31.3
Hispanic/Latino	542,524	10.0
White	3,143,395	58.0
Other	226,889	4.2
Age group (yrs)		
Under 18 years	1,472,737	27.1
18 to 64 years	3,492,799	64.4
65 years and older	455,377	16.1
Highest level of education completed (Population 25 years and older) Total Population: 3,460,124		
< High school	441,396	12.8
High school diploma or equivalent	873,464	25.2
Some college, no degree	955,189	27.6
Bachelor's degree or higher	1,190,075	34.4
Annual household income Total Population 5,390,523		
Under\$ 25, 000	896,370	16.6
\$25,000 to \$49,999	1,215,382	22.9
\$50,000 to \$74, 999	1,083,273	20.9
\$75,000 to \$99,999	779,476	14.5
\$100,000 and over	1,416,022	26.3
Civilian non-institutionalized population for whom poverty is determined Total Population: 5,377,081		
Under 1.00 of poverty threshold	723,049	40.8
1.00 to 1.99 of poverty threshold	944,105	33.2
2.00 of poverty threshold and over	3,709,927	11.5
Health Insurance Coverage (Percent Imputed)		
Private health insurance coverage		7.7
Employer-provided health insurance		5.2
Direct purchase health insurance		6.0
Tricare/military health coverage		6.9
Public health coverage		7.6
Medicare coverage		5.0
Medicaid coverage		6.9
VA health coverage		6.9

In the Atlanta MSA, over half of the population (64.4%) is between 18-64 years old. Overall, the population is educated, with roughly one-third (34%) holding either a bachelor's, graduate, or

¹ Data source: 2005-2009 American Community Survey.

post-graduate degree. Furthermore, 27% of residents attended college but did not earn a degree. In terms of household income, 61.7% of households had an income more than \$50,000. Household earnings in the middle income range of \$25,000 to \$49, 999 was 22.9% . In the lower income range, 16.6% brought home between under \$25,000 (see Table 1).

According to the U.S. Census report, in 2009 the city of Atlanta reported over 540,000 people residing in the city limits. Of that number 236,220 (56%) identified as African-American (Black). Recent data suggest that 9% of all Atlanta families live below the federal poverty line. 18% of Black families live below the federal poverty, and a majority of those households are headed by single women. Black female heads of households with children have the highest poverty rates (36%) of all groups, and a high proportion of those family units are concentrated in Atlanta MSA census tracts [25, 26].

Part 3: Demographic Characteristics of Persons Diagnosed with HIV and AIDS

In the Atlanta MSA, at 69% prevalence, HIV/AIDS⁺ infection is inordinately high among Black men and women (13462 and 4939 respectively). After Blacks, there is a sharp decline in prevalence for the next highest racial group, Whites, who have a 24% infection rate (5927 men and 575 women). Hispanics have the third highest rate of infection at 5% (1071 men; 255 women). HIV/AIDS⁺ prevalence is highest among the 40-49 years age group, with an infection rate of 38%. HIV/AIDS⁺ is distributed mostly in the young population, in particularly between the ages of 30-49, which has 62% prevalence. Among males, 59% is transmitted through MSM. The next highest mode of transmission for males is No Identified Risk/No Reported Risk Factor (NIR/NRR) (26%). Women also state that most HIV/AIDS⁺ cases have non-identified risk factors (59%). Nearly one quarter (24%) of the female population indicate transmission through high risk heterosexual contact (HRH). At 12%, IDU is the next highest mode of transmission for women. (See Table 2)

Table 2. Number and Percentage of HIV/AIDS⁺ cases by selected characteristics in Atlanta-MSA region as of December 31, 2009.

	Female		Male		Total	
	N	%	N	%	N	%
Race/Ethnicity						
White	575	10	5927	28	6502	24
Black	4939	84	13462	64	18401	69
Hispanic	255	4	1071	5	1326	5
Multi/Unk/Other	119	2	489	2	608	2
Age group						
0-12	58	1	54	<1	112	<1
13-19	125	2	178	1	303	1
20-24	245	4	882	4	1127	4
25-29	453	8	1574	8	2027	8
30-39	1492	25	4712	22	6204	23
40-49	1997	34	8086	39	10083	38
50-59	1130	19	4208	20	5338	20
60+	387	7	1253	6	1640	6
Mode of Transmission:						
A.MSM	0	0	12270	59	12270	49
B.IDU	691	12	1286	6	1977	7
C.MSM/IDU	0	0	1207	6	1207	4
D.Blood recipient	24	<1	39	<1	63	<1
E1.HRH	1565	27	695	3	2260	8
F.Perinatal	132	2	106	1	238	1
NIR/NRR	3476	59	5346	26	8822	33

TOTAL

% females: No. of females in the particular category /Total number of females*100

%males: No. of males in the particular category/Total number of males*100

%Total: No. of males + No. of females in that particular category/Total No. of HIV cases*100

2.3 Population-Specific (MSM) Information

Part 1: Overview of HIV-NA Diagnoses among MSM by Key Demographics

The Georgia Department of Community Health's (DCH) electronic HIV/AIDS⁺ Reporting System (eHARS) data indicate that at 59%, Blacks comprise the largest proportion of MSM HIV-NA diagnosis in the Atlanta MSA. Whites are the second largest racial group with 33%; Hispanics are a distant third with 5%. People who claim multiple racial categories comprise

2.16% of the HIV-NA population. Asian, Hawaiian, Pacific Islander, American Indian and Alaska Native racial groups combine to form less than 2% of HIV-NA prevalence. HIV-NA cases are distributed predominantly among younger ages (20-39 years old); the 30-39 age range has the most cases at 34%. (See Table 3)

Among MSM participants in the NHBS-MSM2 cycle, roughly 24 out of 376 participants tested “positive” for HIV. Twelve of these men were White, 10 were Black, and 2 were Hispanic. Nine of these participants were 35-44 years old, which had largest number of participants at 38%. Six of these men were in the 25-34 years old (25%); five were 45-54 years old (21%). Participants were generally well-educated, with roughly one-half of them having a bachelor’s degree; one-quarter of them had a high school education or its equivalent. The income levels among the participants varied considerably. Five of the men earned \$3,334-\$4,167 per month (roughly \$45,000-\$50,000 per year), and they were the most predominate at 21%. Only two of the participants earned more than \$6251 per month (8%), which is more than \$92,000 per year. 12.5% of the population (3 participants) earned \$4,168-\$6,250 per month (roughly \$70,000 per year). 12.5% of the population (3 participants) earned \$1,251-\$1,667 per month (roughly \$30,000 per year). 12.5% of the population (3 participants) earned less than \$417 per month (roughly \$5,000 per year). (See Table 4)

Overall, in the Atlanta MSA Blacks comprise the largest percentage of HIV diagnoses, so they should be given high priority for NHBS-MSM3. In terms of income, HIV diagnoses ranged across many income levels, but researchers should be aware that national trends indicate that lower income MSM are generally in a higher risk category for HIV infection. Researchers should also consider age when entering the field. According to the CDC, among MSM, HIV/AIDS cases increased the most among young men ages 13-24 [67]. Because significance of this, effort should be made to include venues where young MSM can be recruited during MSM3 data collection.

Table 3. Number and Percentage of HIV-NA cases among MSM by selected characteristics in Atlanta-MSA region as of December 31, 2009.

	Number	%
Race/Ethnicity		
White	1623	33.46
Black	2849	58.74
Hispanic	242	5
Asian/HI/PI	27	<1
Am IN/AK	4	<1
Multiple	105	2.16
Age Group		
13-19	234	5
20-24	850	18
25-29	997	21
30-39	1692	34
40-49	820	17
50-59	214	4
60+	35	<1

* Information regarding the Education and Income groups among the MSM population of the Atlanta MSA could not be obtained through eHARS data.

Table 4. Number and Percentage of HIV-NA cases among MSM2 participating in NHBS by selected characteristics in Atlanta-MSA region as of December 31, 2009.

	NHBS-MSM2	
	N	%
Race/Ethnicity		
White	12	50
Black	10	42
Hispanic	2	8
Multiple races	0	0
Others	0	0
Age group		
18-24	3	13
25-34	6	25
35-44	9	38
45-54	5	21
>55	1	4
Education Level:		
1st to 8th grade	0	0
9th -11th grade	1	4
12th grade-GED	6	25
Some college	4	17
Bachelor's degree	12	50
Any post graduate	1	4

Income (Monthly)		
\$0-417	3	12.5
\$418-833	-	-
\$834-1250	2	8
\$1251-1667	3	12.5
\$1668-2500	2	8
\$2501-3333	4	17
\$3334-4167	5	21
\$4168-6250	3	12.5
>6251	2	8

Part 2a: Summary of Demographic Characteristics of MSM Recruited in NHBS-MSM1 and NHBS-MSM2

The participation rate for MSM1 and MSM2 in the Atlanta MSA indicate that Whites participated at the highest rate with 55% and 50% respectively. Blacks were the racial group with the second highest participation rate at just over 30%. Hispanics had the third highest rate at roughly 10%. During these cycles men from 25-44 years old had the highest participation rates. Men over 45 had the lowest participation rates. During MSM1 and MSM2, men with a bachelor's degree or some college participated at the highest rates with 64% and 63% respectively, whereas men with less than a 11th grade education had the lowest participation rate (<2, <6). (See Table 5) Many participants were employed full-time (74%) and had some form of health insurance (60%). Both cycles of MSM show a skewed participation rate for higher educated individuals, staff should increase outreach to better capture all education levels. The MSM1 and MSM2 venue universe were similar, so the frame for MSM3 needs to be expanded to capture public venues (parks, etc.) or others areas of the cities to increase participant rates of lower income individuals. This can be achieved through formative research from community interviews and focus groups, and by including free access venues such as parks and street venues.

Table 5. Number and Percentage of MSM participating in NHBS and other relevant local studies by selected characteristics in Atlanta-MSA region as of December 31, 2009.

	NHBS-MSM1 N=725		NHBS-MSM2 N=596	
	N	%	N	%
Race/Ethnicity				
White	395	55	188	50
Black	221	31	129	34
Hispanic	53	7	44	12
Multiple races	23	3	13	3.4
Others	8	2	<5	<1
American Indians	2	<1	-	-
Age group				
18-24	143	20	44	8.5
25-34	236	33	125	24
35-44	241	33	168	33
45-54	71	10	37	7
>55	34	5	2	<1
Education Level:				
1st to 8th grade	129	18	3	<1
9th -11th grade	230	33	18	5
12th grade-GED	225	31	81	22
Some college	139	18	91	24
Bachelor's degree	9	1	150	40
Any post graduate	2	<1	30	8
Income				
\$0-417	*	*	37	10
\$418-833			<5	<1
\$834-1250			19	5
\$1251-1667			22	6
\$1668-2500			64	18
\$2501-3333			115	32
\$3334-4167			48	13
\$4168-6250			31	9
>6251			26	7
*Employment Status	*	*		
Full-time			277	74
Part-time			45	12
Unemployed			36	10
Student			9	2.4
Retired			<5	<1

Disabled Other			<5 3	<1 <1
Type of Health Insurance				
Private only	525	73	218	59
Public only	25	3	5	1
**Other/Multiple	8	1	3	<1
None	154	22	147	39

*Income and employment status was not collected during MSM1.

**Other represents self paid insurance

Part 2b: Summary of Demographic Characteristics of MSM HIV/AIDS⁺ Participants Recruited in NHBS-MSM2

When looking at the Atlanta MSA MSM2 HIV-NA data (Tables 3, 4, and 5), Blacks have the second largest proportion of HIV-NA diagnoses in the Atlanta MSA (42%), even though their participation rate in NHBS MSM1 and MSM2 was lower than Whites. Blacks participated at just over 30% while Whites participated at just over 50% during both cycles. In the MSM3 cycle, researchers should attempt to remedy this by monitoring recruitment rates of Black MSM throughout the MSM cycle and make adjustments when possible by using non-random venue recruitment. Also, by adding additional Black MSM, as well as racially mixed, venues to the recruitment calendar, the NHBS project will receive additional advertisement and allow for greater participation by Black MSM. Another population of interest, Atlanta's Hispanic population has steadily increased over the last few decades ranking third highest in participation in both cycles and in MSM2 they show a significant amount of HIV cases at 8%. Researchers should pay close attention to this racial/ethnic group and perhaps consider ways to increase their participation rate in MSM3. Factors such as having Spanish speaking interviewers available to interview as well as community key informants to assist with outreach and advertising NHBS, may assist with recruitment of this population. As an emerging minority population with an already significant rate of HIV-NA diagnoses, behavioral data could be used to prevent spikes in HIV transmission for this group.

In the Atlanta MSA, MSM2 HIV-NA cases are distributed amongst age ranges. The 35-44 age range has the most HIV-NA cases at 38%, followed by 25-34 at 25% and 45-54 at 21%, but according to CDC research, younger MSM are at the most risk of acquiring HIV [67]. (Table 4) Men from 35-44 years old had the highest participation rates, so there is close alignment between the high incidence group and participation rates. MSM3 researchers should review strategies used in MSM1 and MSM2 to recruit a high percentage of younger men in the 25-34 age range, as well as employ strategies to increase the participation rate of men in the 18-24 age range.

In both MSM1 and MSM2 the majority of participants (77% and 60% respectively) have some form of health insurance. For MSM2, there was a significant percentage of participation of

MSM in the middle income range (\$2501 - \$3333 per month); however, among the higher income range of \$3334 - \$4167, there was a high incidence of HIV-NA. Because there seems to be a trend in the relationship between income level and HIV-NA diagnosis in the Atlanta MSM2 population (the incidence rate is concentrated among higher income earners). This trend, higher income, could be attributed to the selection of venues. Research staff should continue to identify venues that cater to all income level categories so that behavioral data can be collected to better understand relationships between income and transmission. Staff should work to diversify the venue universe so that all income ranges are represented.

Part 3: Research Studies on MSM in the MSA

Relevant Research among MSM in the MSA (National, Regional, and Local)

MSM Research: National

A summary of findings from the combined data of the 21 MSA's participating in NHBS-MSM2 (2008) revealed that HIV prevalence among MSM remains high and that many HIV-infected MSM are unaware that they are infected with HIV. Additionally, MSM represent the only group with increasing HIV incidence and they comprise the largest proportion of new infections. These data indicate that among the 8,153 MSM interviewed and tested, HIV prevalence was 19%. Non-Hispanic Blacks had the highest prevalence (28%), followed by Hispanics (18%), non-Hispanic whites (16%), and persons who were multiracial or of other race (17%). Of those who were infected, 44% were unaware of their infection [27]. Findings also show that as a result of social and individual determinants of risk, MSM are more likely to experience multiple health problems at higher rates compared to other men [27].

Even though the CDC currently recommends that sexually active MSM get tested for HIV at least once per year, NHBS-MSM2 data demonstrate that 55% of MSM who were unaware of their HIV infection had not had an HIV test during the preceding twelve months. Because these MSM account for the majority of estimated new HIV transmissions in the United States, the high proportion of MSM unaware of their HIV infection continues to be a serious public health threat. People aware of their HIV infection often take substantial steps to reduce their risk behaviors, which could reduce HIV transmission [27].

Analysis of the data for NHBS-MSM2 show racial and economic disparities affect HIV prevalence, HIV testing and lack of access to health care. These are significant barriers to HIV prevention services particularly for MSM. Racial disparities were observed in the youngest age group (18–19 years) and increased with age. Economic disparities are consistent with those reported among heterosexuals participating in NHBS. This reinforces the need for targeting prevention efforts to low-income populations, which might reduce HIV infection rates among MSM. A recent CDC study found a strong link between socioeconomic status and HIV among MSM. The prevalence increased as education and income decreased, and awareness of HIV status was higher among MSM with greater education and income [28].

A 2009 MSM study showed that 68% of HIV transmissions were from main sex partners. Three factors contributed to this: 1) a higher number of sex acts with main partners, 2) more frequent

receptive roles in anal sex with main partners, and 3) lower condom use during anal sex with main partners. By sex type, 69% of infections were from receptive anal intercourse, 28% were from insertive anal intercourse, and 2% were from oral sex [28, 29].

For over twenty years, the HIV/AIDS epidemic has impacted Black MSM in the United States. This group accounts for an increasingly large proportion of AIDS cases, and they have the highest rates of AIDS mortality among MSM [16]. They also account for a disproportionate number of new cases of HIV and AIDS. From 2001 to 2006, the number of HIV/AIDS cases among Black MSM aged 13-24 years in 33 states increased 93% [30]. HIV prevalence and incidence rates are disproportionately high among Black MSM compared to other racial/ethnic groups of MSM. These rates are high in both younger (aged 15-22 years) and older (aged 23-49 years) Black MSM [31]. Additionally, rates of unrecognized HIV infection and sexually transmitted infections are higher among Black MSM than among other MSM. About one-third of HIV infections among MSM occur in Black men; however, Black men only account for 13% of the male population [31]. Black MSM are experiencing rates of HIV infection that rival those among the general population in the developing world [16].

Perceived behavioral factors affecting HIV transmission for Black MSM include high-risk environments, concurrent partnerships, the mixing of high- and low-risk individuals, substance abuse and mental illness. Of particular concern is that when compared to HIV negative White MSM, HIV negative Black MSM are more likely to report having unprotected anal intercourse with partners whose HIV status is unknown [31]. However, research published in 2007 found that Black MSM reported less overall substance abuse and fewer sex partners, with no statistical significant difference between white and black MSM when it came to reported unprotected anal intercourse. The report goes on to dispel any real significance in behavioral factors that might show infection difference between black and white MSM [68].

In a 2010 study in Atlanta, researchers noted the potential for serosorting to reduce overall HIV rates, limitations of this practice, including infrequent HIV testing, lack of open communication about HIV status, and acute HIV infection, place MSM who serosort at risk for HIV transmission [32]. Environmental factors affecting HIV transmission for Black MSM include poverty, poor access to care, low health literacy, incarceration, high prevalence of sexually transmitted infections, and misunderstandings about how HIV infection and who is at risk [31].

Barriers to access and use of health care constitute structural disadvantages that pose overwhelming problems for Black MSM. Among HIV-positive MSM, Blacks are less likely than others to have access to private clinics, to express HIV-related health concerns to their medical providers, to use outpatient health services, to report satisfaction with medical personnel in outpatient settings, to report an absence of nondiscriminatory practices among medical staff, to trust the quality and competence of outpatient medical services, and to trust physicians. Research suggests that Black MSM are less likely than White MSM to receive recommended levels of antiretroviral care. In addition, HIV-positive Black MSM were found to be less likely than White HIV-positive MSM to be on highly active antiretroviral therapy or to perceive that they had access to medications [16].

MSM Research: Regional

In 2006, more new AIDS cases among Black MSM were diagnosed in the South than in all other U.S. census regions combined. At particular risk of HIV infection is young Black MSM aged 13-24 years. In November 2007, the Mississippi State Department of Health reported an increase in the number of young Black MSM who received diagnoses of HIV infection at a sexually transmitted disease (STD) clinic in Jackson, Mississippi [30]. From 2001 to 2006, the number of HIV/AIDS cases among this age group in 33 states increased 93%. Understanding HIV transmission among young Black MSM is challenging because of many factors, including sexual network patterns, sexual partnering with older men, high prevalence of STDs, lack of awareness of one's HIV status, homophobia, HIV-related stigma and discrimination, and socioeconomic issues [30].

It has been demonstrated that having sex with partners who are older than themselves increases the risk for HIV infection, especially among young Black MSM. In a 2009 study of young Black MSM in Jackson, Mississippi, 16 (55%) of the young Black MSM reported having male sex partners aged ≥ 26 years. Also, in a large study of MSM (all races) in North Carolina in 2010, roughly half of participants cited age of a potential partner as a specific draw, alongside other physical features [30].

The Mississippi study researchers found that during the twelve months before receiving their HIV infection diagnosis, 20 (69%) of the 29 participants had unprotected anal intercourse, but only three (10%) of the 29 thought they were likely or very likely to acquire HIV infection in their lifetimes. Among those participants in the North Carolina study who reported unprotected receptive anal sex, the seroprevalence was zero if all sex partners were less than 25 years old, and 44% among those with at least one sex partner over 25 years. For unprotected sex with an insertive partner, the prevalence leapt from zero when no partners were over 25 years old to 15% when at least one sex partner was older than 25 years [33]. The results demonstrated that young MSM in North Carolina who select older sex partners have significantly greater odds of acquiring HIV infection, even after controlling for specific high-risk behaviors. The researchers concluded that among a sample of young MSM, the odds of HIV infection increased significantly as the age of sexual partners increased [33]. In sum, there is evidence to suggest that the age of sex partners increases the likelihood of young MSM being exposed to HIV, especially the young Black MSM populations and that age mixing should be factored into future behavioral surveillance.

Stigma toward homosexuality in the United States has pervasive effects on Black MSM especially Black MSM in the South. In a 2010 study in Atlanta, Black MSM were observed to have had higher levels of internalized homophobia and rarer disclosure of homosexual orientation than MSM of other racial groups, despite evidence that Black and White American heterosexuals report similar levels of homophobic attitudes. Black MSM were also more likely than White MSM to perceive that their friends and neighbors disapprove of homosexuality and report that they have sex with women, and self-identify as heterosexual [32]. The authors suggest that for Black MSM in the South, internalized homophobia may reflect the enduring influence of organized religion in their lives. They suggest that Black churches like White religious institutions, tend to discourage homosexuality through psychologically distressing

homophobic messages leading towards feelings of internalized homophobia. And since Black MSM tend to be more involved with religious communities than White MSM, this leads to greater secrecy of same-sex behavior among them.

A particular problem is that greater internalized homophobia is associated with lower awareness of HIV-prevention services and with fewer changes in the perception of one's ability to use condoms. Moreover, higher levels of psychosocial distress and gay identity are also associated with higher levels of sexual risk-taking among Black gay and bisexual men [15]. On the other hand, evidence suggests that racial and sexual identity are important factors in the emotional health of Black gay and bisexual men. Black gay and bisexual men who had both a positive racial identity and a positive sexual identity reported “higher self-esteem, higher HIV-prevention self-efficacy, stronger social support networks, greater life satisfaction, and lower male-gender role stress and psychosocial distress” than Black gay and bisexual men with less favorable racial and sexual identity [32].

To address the gap in HIV prevention for Black MSM, it is important to understand how social contextual influences such as age, income and education, homophobia, religion, stigma, and discrimination affect HIV risks in this population [16]. Also, it has been noted that community-level interventions have stronger effects on normative and structural influences on HIV-risk behavior than do individual-level interventions, so this should be considered in future Black MSM research [32].

MSM Research: Local

In a 2006 study in Atlanta with 549 self-reported HIV negative men surveyed at the Gay Pride Festival and the Black Gay Pride Festival, researchers found that a similar number of White MSM and Black MSM reported having unprotected anal sex partners. They found that there were significant differences between these groups in terms of partner selection. Black MSM reported that they were more likely to have had unprotected anal intercourse with a partner of unknown HIV status. They were also more likely not to have known the HIV status of their last sexual partner. Demographic information in this survey also revealed that Black MSM were significantly younger in age, had lower income and less education, and were less likely to be in a committed relationship than White MSM [32]. This study indicates that in addition to finding out more about why MSM continue to engage in unprotected anal sex, researchers should investigate why Black MSM engage in unprotected anal sex with partners of unknown HIV status at a higher rate than White MSM. Additionally, researchers should attempt to determine if age, income, education, and committed relationship status affect partner selection that could lead to high-risk behavior.

In a 2010 study focusing on non-addicted MSM methamphetamine users in Atlanta, the results indicated that there is a clear link between methamphetamine use and HIV sexual risk behavior [15]. Users of the drug identified the fear of being infected by HIV as a factor in regulating their methamphetamine use of the drug, and they acknowledged that methamphetamine addiction could lead to out-of-control sexual behavior that could significantly increase the likelihood of becoming HIV-positive. Participants cited several features of the drug that led them to engage in high-risk sexual behaviors. They claimed that methamphetamine increased their sexual arousal,

their ability to achieve an erection, and their stamina. They also said that these characteristics were often combined with memory suppression that helped diminish negative responses such as guilt and shame during male-to-male sex.

Enhanced physiological response and minimized negative mood led to lowered sexual inhibitions and amplified self-confidence during sex. Researchers believe that the drug's ability to subdue internalized homophobic beliefs is especially relevant to MSM participants raised in the Southern U.S. or conservatively religious homes outside the region. Cost of methamphetamines, compared to other substances, was another reason participants used the drug. Finally, both users and mental health professionals indicated that escapism from financial worries, relationship difficulties, physical health issues, and depression motivated MSM to use the drug. The author suggests that even though the small sample size of this study may not reflect the entire population of non-addicted methamphetamine users in Atlanta, integrating a methamphetamine intervention with a MSM's HIV test could be timely, efficient, and beneficial in producing sexual and other at-risk behavioral changes [15]. Based on the results of this study and the author's recommendation, MSM3 staff should carefully attend to the NHBS' drug-use component in the MSM3 survey.

AIDS in Georgia

According to the Centers for Disease Control and Prevention (CDC), Georgia had the sixth highest number of AIDS cases in the United States and the ninth highest rate of AIDS cases per 100,000 populations in 2009 [47].² AIDS was sixth leading cause of death for men and women of all ages in Georgia in 2008 [48]. The CDC estimated that 28,670 (range from 20,008 to 37,332) living adults and adolescents in Georgia were aware that they were infected with HIV (but did not have AIDS) in that same year.

AIDS in Atlanta

The Atlanta region contains the majority of AIDS cases in Georgia. Therefore, the city has been disproportionately impacted by HIV. Nearly 70% of the cumulative AIDS cases in Georgia are within the twenty-county Atlanta eligible metropolitan area (EMA), primarily in Fulton and DeKalb counties, but the number of new cases in counties outside of this large metropolitan area is increasing annually. According to Georgia's new HIV reporting system, in the Atlanta EMA between January 1, 2008 and December 31, 2008, there were 823 new cases (AIDS incidence), and as of December 31, 2008, there was a cumulative total of 23,763 reported AIDS cases. In addition, there were an estimated 11,472 people living with HIV infection (but not AIDS) as of December 31, 2008 in the Atlanta metropolitan area.

The African-American population continues to exhibit the greatest impact from the HIV/AIDS epidemic in the Atlanta metropolitan area. Although they account for only 28% of the Atlanta

² Estimated numbers resulted from statistical adjustment that accounted for reporting delays, but not for incomplete reporting.

EMA population, 74% of all new AIDS cases diagnosed from January 1, 2008 to December 31, 2008 were reported among Blacks (Atlanta EMA Comprehensive HIV Services Plan, November 2005). Blacks also account for the largest number of people living with AIDS (11,082 persons or 68% of metropolitan Atlanta AIDS prevalence) and the largest number of people living with HIV/non-AIDS (estimated 7,977 persons or 70% of metropolitan Atlanta HIV prevalence) within the Atlanta EMA.

Geographic Concentrations of HIV in Atlanta

Atlanta is home to well known universities with an extensive background in public health research. In one study, which was funded by the Emory University Center for AIDS Research (CFAR), investigators found that the HIV epidemic in metropolitan Atlanta is concentrated primarily in an area consisting of 157 census tracts centralized in the downtown area [34]. In this study, research indicated that this centralized HIV cluster consisted of 105 census tracts from Fulton County and 52 census tracts from DeKalb County. This cluster did not contain census tracts from either Clayton or Gwinnett counties. The area of the cluster was 466 square kilometers (approximately 180 square miles), which includes many of the areas identified in the High-Risk Area (HRA) that might be explored for MSM3 data collection. The cluster contained 60% of prevalent HIV cases in the metro area. The prevalence ratio of HIV for the cluster was 4.19 (1.34% prevalence in the cluster compared to 0.32% outside the cluster). The prevalence rate in this area at 1.34% is compatible with the World Health Organization's description of an epidemic status, which is assigned to any area with a rate that exceeds one percent. Forty-two percent (42%, N=11) of HIV service providers (i.e., ASO/CBO's) in Atlanta were also located in the cluster. Tracts in the cluster were associated with higher levels of poverty (OR=5.5), higher density of African-Americans in the population (OR=1.5), and high prevalence of behaviors that increased the risk of HIV exposure. These risk factors included injection drug use (OR=2.7), men having sex with men (OR=2.5), and men having sex with men and IV drug use (OR=1.8) [35].

Geographic Concentrations of MSM

The majority of the identified MSM population resides within Fulton County and the area identified as "Midtown." In this area of the city, all subpopulations reside or visit frequently. Many Internet websites geographically feature the Atlanta area as a major locale for MSM activity, e.g. southernboyz.com, gay.com, squirt.org, cruisingforsex.com, collegeclub.com, m4m4sex.com, men4now.com, and bareback.com. In addition, significant numbers of those tested and/or treated for STD/HIV within the Midtown area self-identify as MSM. For those MSM who do not reside in the core area, staff will work with formative research to find all MSM venues that may be located outside of the Midtown area. Tools such as craigslist.org will be useful in finding participants from the suburbs to participate in the focus groups. This will allow the team to probe for any information that can be provided about MSM outside of the core area.

Venues that MSM Visit

In the Atlanta MSA, the MSM population frequently visits venues such as bars, cafes/restaurants, dance clubs, fitness clubs/gyms, or similar events, LGBT social organizations, parks, retail businesses, street locations, raves/circuit parties, and sex establishments/environments. They

visit these locations seven days a week and 365 days a year, with special events occurring throughout the year, such as Gay Pride (October) and Black Gay Pride (September).

Part 4: Primary Data Plan

Summary of Major Findings of Secondary Data Review Process

The Atlanta MSA is an appropriate area to conduct behavioral research and to administer HIV testing in the MSM population. The following factors contribute to the geographic region being conducive to behavioral research and testing: 1) A multiracial population with large numbers of participants from multiple age groups and income levels; 2) Abundant and easily accessible venues; 3) Pleasant weather that will allow for several months of fieldwork; 4) A socially connected MSM population; 5) An ample amount of relevant agencies and programs that can provide participants for key informant interviews and to garner community support.

Summary of Topics and Populations NHBS Staff Need to Learn More About During Primary Data Collection

Local and national statistics indicate that Blacks experience an alarming rate of HIV infection. MSM who are young and Black are particularly vulnerable. Preliminary research indicates that several factors may be influencing the high rate of HIV in the Black MSM community, this highlights the need for further research during MSM3 [36, 37]. Areas of interest include: 1) young Black MSM networks and socialization 2) cultural influences that encourage feelings of shame and stigma about homosexuality which discourages men from coming out and subsequently discourages them from accessing helpful social networks and current HIV/AIDS literature prevention guidelines [39], 3) the prevalence of the down-low population that may be confusing the outreach and participation rates of individuals who may not see themselves as at risk [40, 41, 42, 43] 4) as well as the prevalence of barebacking [44]. These questions can be proposed in the formative research in order to guide local questions. Because there is much more to learn about the behaviors of young Black MSM and the various cultural differences, staff should devise ways to include this population in the formative research so that appropriate venues where they congregate can be included in the final sample.

Staff should also consider examining more closely the Hispanic MSM population. It would be useful to collect demographic and behavioral data on this group. They have a significant rate of HIV, and yet little is known about their behavioral patterns.

Overall, the staff could learn more about why men in MSM communities are not following the CDC recommended guidelines for an annual HIV test. Additionally, studies indicate that some young men may be engaging in risky behaviors because they did not witness the ravages of HIV/AIDS in earlier generations of MSM. Research also demonstrates that they may falsely believe that they are invulnerable to HIV or that HIV infection is not as devastating as it once was [45]. Research indicates that drug use (such as methamphetamine) continues to lead to high risk sexual behavior, so this realm of behavior should also be examined [46]. In sum, it would be useful to understand participants' beliefs about these topics.

Challenges Researchers May Encounter

Accessing MSM in Atlanta is a challenge and making sure the data sample is representative of the MSM population is important. The MSM community is diverse and divided into several subpopulations. Based on past fieldwork in MSM cycles, some challenges for the Atlanta NHBS recruitment are listed below.

- All racial/ethnic groups are found in the Atlanta MSM community. Some groups segregate themselves from one another with some venues offering “Latino” or “Black” nights. Also, many venues in Atlanta are identified as being predominantly Black, Hispanic or White. Nevertheless, there are exceptions in which a venue may attract a racially mixed and diverse crowd.
- Black and Hispanic MSM in Atlanta have a larger non-gay identified population. Religion and masculinity/machismo play a large role in this group being more “closeted” and/or “down low.”
- A large number of Hispanic MSM in Atlanta is transient and migrant. This high risk group of men is a challenge to access due to socioeconomic conditions, language barriers and deportation fears.
- MSM in the rural parts of Georgia and neighboring states see Atlanta as a major gay metropolis; therefore, the city has a large influx of MSM via “gay flight.” These rural men may go through a period of rapid sexual exploration when they first move to Atlanta — much of this sexual activity may be very high risk.
- Older MSM in Atlanta who have lived through the early years of the HIV/AIDS epidemic may be more complacent about HIV and the efficacy of HIV prevention efforts. Eliciting their participation in HIV research will be a challenge.
- Atlanta has a large, young MSM population. MSM 18 to 20 years of age are restricted from many of the bars and dance clubs in Atlanta, so it will be a challenge discovering and gaining access to this group’s social networks.
- There is a sizable public/anonymous sex community in Atlanta. There are a number of bathhouses, sex clubs, sex parties, and MSM identified public sex environments. Many non-gay identified MSM attend these locations and events.

Goals and Objectives for the Qualitative Research Process

The first goal for the NHBS MSM3 cycle is to garner community support. The objective is to educate key leaders in the community about the project and to elicit their support for and assistance with the NHBS research project’s goals.

The second goal of the NHBS MSM3 cycle is to identify MSM venues to recruit MSM. The objective is to find a variety of public and private venues where MSM congregate. These venues will be the places and events where the NHBS team will recruit the MSM.

The third goal of the NHBS MSM3 cycle is to gain knowledge of MSM issues in the Atlanta MSA. The objective is to better understand Black and Hispanic MSM and their HIV risk factors, condom use across all races of MSM, and drug use in the MSM community and its relationship to high risk sexual behavior. Through contacting Key Informants and Community Key

Informants in the MSM community, the research team will learn much about the current issues facing the Atlanta MSM community.

The primary means of achieving these goals will be interviews with key informants, community key informants, and conducting focus groups with members of the MSM population. Key Informants will include people such as Georgia DCH HIV Epidemiologists, AID Atlanta Outreach workers, and HIV testing/counseling workers. Community Key Informants will include venue owners/managers, drag show performers, and MSM event leaders. Focus groups will consist of MSM, both general and sub-populations of the MSM population. This information the team receives will assist in tailoring the NHBS-MSM3 research protocol to fit within the Atlanta MSA setting.

Qualitative research will provide critical information about the socio-cultural context of HIV risk behavior among the MSM population in Atlanta's MSA. Formative research will assist researchers in identifying venues, managing logistics such as recruitment and scheduling, locating key informants, garnering community support, and understanding existing HIV prevention services targeted at the MSM community.

Explanation of Data Collection Methods

Interviews will be used to garner community support and learn about the MSM population. Data will be collected through speaking with community leaders, MSM researchers, venue owners, and members of the MSM population. Brief street interviews will also be utilized to gain insight into the MSM population. The research team will use focus groups and key informant interviews as needed to gain information from specific groups. Here is an example of this process: 1) focus groups with African American MSM and groups that are racially diverse so that all races in the Atlanta MSA are included 2) focus groups with race specific participants (i.e. an African American only group; or a young Black MSM only group) 2) individual interviews with key informants who are MSM community leaders; 3) individual interviews with key informants familiar with the MSM population in Atlanta's MSA; 4) brief street interviews with local MSM regarding MSM venues and relevant MSM recruitment issues.

Designation of Responsibility for Research Activity

The staff for project activities will be based in the State of Georgia's DCH. The Division of Public Health will complete the research activities. Dr. Jianglan White, Chief, Georgia HIV/AIDS Epidemiology Section, will provide oversight. The NHBS Team Leader is Mr. Jeffery Todd. Mr. Jhetari Carney will be a program consultant and interviewer. Ms. Nicole Pitts will be an operations analyst and interviewer. The staff will hire an ethnographer to guide the formative research. Additional temporary field staff will be hired for some aspects of the formative research, particularly in administering the survey.

Timeline for Activities

The DCH research team will adhere to the CDC's timeline for formative research activities. The Primary Data Report will be completed no later than six weeks after local IRB approval. The

Venue Universe will be due no later than two weeks after the submission of the final Primary Data Report. The Final Report will be completed no later than two weeks after receipt of the Project Officer's comments.

Interview Guides

MSM3: KEY INFORMANT QUESTIONS – General

Garner Community Support/References:

- 1) Who else would be a key person or group to advocate for the Department of Community Health (DCH) Health Survey (NHBS-MSM3) activities?
- 2) Who are the community advocates or leaders for MSM in Atlanta? Bar owners? Drag show performers? Event operators? Do you know anyone who is the voice of the MSM community?
- 3) What is the best way to obtain support from these advocates/leaders you mentioned?
- 4) What are the challenges/major issues facing men who have sex with men (MSM) in Atlanta?
- 5) Is there a way we could market ourselves to the overall MSM population?
- 6) What's the best way to gain acceptance of residents or business owners near (potential storefront/van location)?
- 7) *(For those with research background)* What challenges did you encounter with the research studies you've conducted among MSM in Atlanta? (i.e. community support, trust, participation rates, testing, African American or Hispanic population)

Learn about population:

- 8) What are the barriers to survey participation for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 9) Some potential participants may be suspicious of people they don't know well. What should researchers for the DCH Health Survey do to foster trust among MSM they wish to interview? How should we approach MSM in the streets, parks, bars, etc to overcome resistance and gain an opportunity to explain our project to them?
- 10) Do men perceive researchers, or other community outsiders, differently? If so, how should we foster trust in both groups?
- 11) How do we access Black MSM when out at venues? How do we access Hispanic MSM when out at venues?
- 12) Are there any reasons people may not want to participate across populations within the MSM community that we should be aware of? If so, any suggest for how to overcome these potential barriers?
- 13) What are the type and usage of drugs in the Atlanta MSM community? What names do these drugs go by? What drugs are used before or during sexual activity?

- 14) How and where can we go about recruiting non-MSM identified men? These men could be wary of us, or just may not frequent the social gathering places that we are located.
- 15) Do these different groups interact with one another? If so where (any specific venues) and how? If not, why not?

Operations: Venues and Locations

- 16) Are you familiar with places MSM meet that would be appropriate to conduct a survey and perform an HIV test? These include all bars, clubs, underground venues, balls, social organizations, MSM owned/operated or supportive establishment, parks, retail, etc.
- 17) We're thinking of approaching guys at (List Known Venues). Would men feel comfortable being approached to do an interview there? If not, why not?
- 18) Of these sites I'm about to list, are any unsafe for participants and study staff? (List Venues)
- 19) What kinds of barriers could keep potential participants from participating in the survey? What could we do to make it easier for people to participate?
- 20) What venues/locations in Atlanta would be unfriendly to researchers wanting to perform a survey with MSM?
- 21) What is the best way to reach AA MSM when out in venues in the Atlanta area and obtain their support for the DCH Health Survey (NHBS- MSM3)?
- 22) Where do men go to look for sex (i.e. Flex, Piedmont Park, and Gloryholes)? Does Atlanta have sex clubs? Sex parties? Do MSM go to the swingers club (i.e. 2Risque, Trapeze)? What online sites are used for sex and dating (i.e. manhunt, craigslist)?
- 23) Where do non-drinkers or those men who just don't like bars go? Where do the under 21 crowd go to hang-out and socialize?
- 24) Are there any events that happen sporadically or on an annual or monthly basis [i.e. Pride(s)]?

HIV Issues and Concerns:

- 25) What are the perceptions about HIV infection held by MSM in Atlanta? How do perceptions vary among MSM? Are there differences by race?
- 26) What are the barriers to HIV testing for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 27) What are the perceptions about HIV testing held by MSM? Are there differences by race? Are MSM open to being tested in connection to a research survey?
- 28) For HIV testing, what would make a MSM want to get his results?
- 29) What days of the week/time of the day would be best for our office hours for returning HIV results? Any barriers to coming to DCH?
- 30) What vocabulary is used by people in the community to think and talk about HIV, sex behaviors, condoms, and other key concepts related to the local culture?

- 31) What are the preferred brands of condoms and lube that we could distribute as an added incentive to participate?

Incentives:

- 32) If we use gift cards as an incentive, what problems might we encounter?

Network Services:

- 33) What services/programs/networks do MSM access in the community?
34) What do you perceive are the service needs of the MSM community?

MSM3: KEY INFORMANT QUESTIONS – (Focus: African American)

Garner Community Support/References:

- 1) Who else would be a key person or group to advocate for the Department of Community Health (DCH) Health Survey (NHBS-MSM3) activities?
- 2) What are the challenges/major issues facing African American (AA) men who have sex with men (MSM) in Atlanta?
- 3) Who are the community advocates or leaders for MSM in Atlanta? Bar owners? Drag show performers? Event operators? Ball organizers? Anyone you know who has a voice for the MSM community.
- 4) What is the best way to obtain support from these advocates/leaders you mentioned?
- 5) Is there a way we could market ourselves to the overall AA MSM population?
- 6) What's the best way to gain acceptance of residents or business owners near (potential storefront/van location)?
- 7) Are there any AA MSM pastors we should speak with?
- 8) *(For those with research background)* What challenges did you encounter with the research studies you've conducted among MSM in Atlanta? (i.e. community support, trust, participation rates, testing, African American or Hispanic population)

Learn about population:

- 9) What are the barriers to survey participation for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 10) Some potential participants may be suspicious of people they don't know well. What should researchers for the DCH Health Survey do to foster trust among AA MSM they wish to interview? How should we approach MSM in the streets, parks, bars, etc to overcome resistance and gain an opportunity to explain our project to them?
- 11) Do men perceive researchers, or other community outsiders, differently? If so, how should we foster trust in both groups?

- 12) How do we access Black MSM when out at venues? How do we access Hispanic MSM when out at venues?
- 13) Are there any reasons people may not want to participate across populations within the MSM community that we should be aware of? If so, any suggest for how to overcome these potential barriers?
- 14) What are the type and usage of drugs in the AA MSM community? What names do these drugs go by? What drugs are used before or during sexual activity?
- 15) How and where can we go about recruiting non-MSM identified men? These men could be wary of us, or just may not frequent the social gathering places that we are located.
- 16) Do you see a generational gap in the dating scene for AA men (younger men hooking up with older men)?
- 17) Do these different groups interact with one another? If so where (any specific venues) and how? If not, why not?
- 18) What do you know about the down-low population and how we can reach those individuals that may not associate themselves with our survey? Do you know any venues that are specific to this group?

Operations: Venues and Locations

- 19) Are you familiar with places AA MSM meet that would be appropriate to conduct a survey and perform an HIV test? These include all churches, bars, clubs, underground venues, balls, social organizations, MSM owned/operated or supportive establishment, parks, retail, etc.
- 20) We're thinking of approaching guys at (List Known Venues). Would men feel comfortable being approached to do an interview there? If not, why not?
- 21) Of these sites I'm about to list, are any unsafe for participants and study staff? (List Venues)
- 22) What kinds of barriers could keep potential participants from participating in the survey? What could we do to make it easier for people to participate?
- 23) What venues/locations in Atlanta would be unfriendly to researchers wanting to perform a survey with AA MSM?
- 24) What is the best way to reach AA MSM when out in venues in the Atlanta area and obtain their support for the DCH Health Survey (NHBS- MSM3)?
- 25) Where do men go to look for sex (i.e. Flex, Piedmont Park, and Gloryholes)? Does Atlanta have sex clubs? Sex parties? Do AA MSM go to the swingers club (i.e. 2Risque, Trapeze)?
- 26) Where do non-drinkers or those men who just don't like bars go? Where do the under 21 crowd go to hang-out and socialize?
- 27) Are there any events that happen sporadically or on an annual or monthly basis [i.e. Pride(s)]?

HIV Issues and Concerns:

- 28) What are the perceptions about HIV infection held by AA MSM in Atlanta? How do perceptions vary among AA MSM?
- 29) Do you perceive an increase/decrease or about the same in condom use among AA MSM?
- 30) What are the barriers to HIV testing for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 31) What are the perceptions about HIV testing held by MSM? Are AA MSM open to being tested in connection to a research survey?
- 32) For HIV testing, what would make an AA MSM want to get his results?
- 33) What days of the week/time of the day would be best for our office hours for returning HIV results? Any barriers to coming to DCH?
- 34) What vocabulary is used by people in the community to think and talk about HIV, sex behaviors, condoms, and other key concepts related to the local culture?
- 35) What are the preferred brands of condoms and lube that we could distribute as an added incentive to participate?

Incentives:

- 36) If we use gift cards as an incentive, what problems might we encounter?

Network Services:

- 37) What services/programs/networks do MSM access in the community?
- 38) What do you perceive are the service needs of the MSM community?

MSM3: FOCUS GROUP QUESTIONS – General

Garner Community Support:

- 1) What are the challenges/major issues facing men who have sex with men (MSM) in Atlanta?
- 2) What is the best way to reach MSM in the Atlanta area and obtain their support for the Department of Community Health (DCH) Health Survey (NHBS-MSM3)?
- 3) Is there a way we could market ourselves to the overall MSM population?

References:

- 4) Who are the community advocates or leaders for MSM in Atlanta? Bar owners? Drag show performers? Event operators? Anyone you know who has a voice for the MSM community.

Learn about population:

- 5) What are the barriers to survey participation for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 6) Some potential participants may be suspicious of people they don't know well. What should researchers for the DCH Health Survey do to foster trust among MSM they wish to interview? How should we approach MSM in the streets, parks, bars, etc to overcome resistance and gain an opportunity to explain our project to them?
- 7) Do men perceive researchers, or other community outsiders, differently? If so, how should we foster trust in both groups?
- 8) How do we access Black MSM? How do we access Hispanic MSM?
- 9) Are there any barriers across populations within the MSM community that we should be aware of? If so, any suggest for how to overcome these potential barriers?
- 10) What are the type and usage of drugs in the Atlanta MSM community? What names do these drugs go by? What drugs are used before or during sexual activity?
- 11) How can we go about recruiting non-MSM identified men? These men could be wary of us, or just may not frequent the social gathering places that we are located.

Venues and Locations:

- 12) Are you familiar with places MSM meet that would be appropriate to conduct a survey and perform an HIV test? These include all bars, clubs, underground venues, balls, social organizations, MSM owned/operated or supportive establishment, parks, retail, etc.
- 13) We're thinking of approaching guys at (List Known Venues). Would men feel comfortable being approached to do an interview there? If not, why not?
- 14) Of these sites I'm about to list, are any unsafe for participants and study staff? (List Venues)
- 15) What kinds of barriers could keep potential participants from participating in the survey?
What could we do to make it easier for people to participate?
- 16) What venues/locations in Atlanta would be unfriendly to researchers wanting to perform a survey with MSM?
- 17) Where do men go to look for sex (i.e. Flex, Piedmont Park, Glory holes)? Does Atlanta have sex clubs? Sex parties? Do MSM go to the swingers club (i.e. 2Risque, Trapeze)? What online sites are used for sex and dating (i.e. manhunt, craigslist)?
- 18) Where do non-drinkers or those men who just don't like bars go? Where do the under 21 crowd go to hang-out and socialize?
- 19) Are there any events that happen sporadically or on an annual or monthly basis [i.e. Pride(s)]?

HIV Issues and Concerns:

- 20) What are the perceptions about HIV infection held by MSM in Atlanta? How do perceptions vary among MSM? Are there differences by race?
- 21) What are the barriers to HIV testing for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 22) What are the perceptions about HIV testing held by MSM? Are there differences by race? Are MSM open to being tested in connection to a research survey?
- 23) For HIV testing, what would make a MSM want to get his results?
- 24) What days of the week/time of the day would be best for our office hours for returning HIV results?
- 25) What vocabulary is used by people in the community to think and talk about HIV, sex behaviors, condoms, and other key concepts related to the local culture?
- 26) What are the preferred brands of condoms and lube that we could distribute as an added incentive to participate?

Incentives:

- 27) If we use gift cards as an incentive, what problems might we encounter?

Network Services:

- 28) What services/programs/networks do MSM access in the MSM community?
- 29) What do you perceive are the service needs of the MSM community?
- 30) Are there any abbreviations or “street names” for these programs?
- 31) Are you aware of the services offered at the (insert organization here, i.e. VA)?

MSM3: FOCUS GROUP QUESTIONS – (Focus: African American)

Garner Community Support:

- 1) What are the challenges/major issues facing African American (AA) men who have sex with men (MSM) in Atlanta?
- 2) What is the best way to reach AA MSM in the Atlanta area and obtain their support for the Department of Community Health (DCH) Health Survey (NHBS-MSM3)?
- 3) Is there a way we could market ourselves to the overall AA MSM population?

References:

- 4) Who are the community advocates or leaders for MSM in Atlanta? Bar owners? Drag show performers? Event operators? Ball organizers? Anyone you know who has a voice for the MSM community.
- 5) Are there any AA MSM pastors we should speak with?

Learn about population:

- 6) What are the barriers to survey participation for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 7) Some potential participants may be suspicious of people they don't know well. What should researchers for the DCH Health Survey do to foster trust among AA MSM they wish to interview? How should we approach MSM in the streets, parks, bars, etc to overcome resistance and gain an opportunity to explain our project to them?
- 8) Do AA men perceive researchers, or other community outsiders, differently? If so, how should we foster trust in both groups?
- 9) What are the type and usage of drugs in the Atlanta AA MSM community that you know of? What names do these drugs go by? What drugs are used before or during sexual activity?
- 10) How can we go about recruiting non-MSM identified men? Do you see Atlanta as having a down-low population of men, and if so how can we best reach them?
- 11) Where can we reach AA men if they do not hang out at known MSM venues (i.e. bars, clubs, and social groups)?
- 12) Do you see a generational gap in the dating scene for AA men (younger men hooking up with older men)?

Venues and Locations:

- 13) Are you familiar with places AA MSM meet that would be appropriate to conduct a survey and perform an HIV test? These include all churches, bars, clubs, underground venues, balls, social organizations, MSM owned/operated or supportive establishment, parks, retail, etc.
- 14) We're thinking of approaching guys at (List Known Venues). Would men feel comfortable being approached to do an interview there? If not, why not?
- 15) Of these sites I'm about to list, are any unsafe for participants and study staff? (List Venues)
- 16) What kinds of barriers could keep potential participants from participating in the survey?
What could we do to make it easier for people to participate?
- 17) What venues/locations in Atlanta would be unfriendly to researchers wanting to perform a survey with AA MSM?
- 18) Where do men go to look for sex (i.e. Flex, Piedmont Park, Glory holes)? Does Atlanta have sex clubs? Sex parties? Do AA MSM go to the swingers club (i.e. 2Risque, Trapeze)?
- 19) Where do non-drinkers or those men who just don't like bars go? Where do the under 21 crowd go to hang-out and socialize?
- 20) Are there any events that happen sporadically or on an annual or monthly basis [i.e. Pride(s)]? Do you know of any upcoming balls?

HIV Issues and Concerns:

- 21) What are the perceptions about HIV infection held by AA MSM in Atlanta? How do perceptions vary among AA MSM?
- 22) Do you perceive an increase/decrease or about the same in condom use among AA MSM?
- 23) What are the barriers to HIV testing for potential participants (or specific groups of potential participants)? How do we overcome these barriers?
- 24) What are the perceptions about HIV testing held by MSM? Are AA MSM open to being tested in connection to a research survey?
- 25) For HIV testing, what would make an AA MSM want to get his results?
- 26) What days of the week/time of the day would be best for our office hours for returning HIV results?
- 27) What vocabulary is used by people in the community to think and talk about HIV, sex behaviors, condoms, and other key concepts related to the local culture?
- 28) What are the preferred brands of condoms and lube that we could distribute as an added incentive to participate?

Incentives:

- 29) If we use gift cards as an incentive, what problems might we encounter?

Network Services:

- 30) What services/programs/networks do MSM access in the MSM community?
- 31) What do you perceive are the service needs of the MSM community?
- 32) Are there any abbreviations or “street names” for these programs?
- 33) Are you aware of the services offered at the (insert organization here, i.e. VA)?

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