African Americans, Health Disparities and HIV/AIDS

Recommendations for Confronting the Epidemic in Black America



A REPORT FROM THE NATIONAL MINORITY AIDS COUNCIL BY ROBERT E. FULLILOVE, ED.D. COLUMBIA UNIVERSITY his report was written on behalf of the National Minority AIDS Council (NMAC), the premier national organization dedicated to developing leadership within communities of color to address the challenges of HIV/AIDS. It was reviewed by the panel of leading experts from a cross-section of disciplines — public health, medicine, HIV/AIDS advocacy, prisons and national African-American leadership organizations — listed on this page.

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AIDS Project Los Angeles, Los Angeles, CA

AIDSNET, Bethlehem, PA

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Community Enrichment Organization, Tarboro, NC

Florida Department of Health, Bureau of HIV/AIDS, Tallahassee, Florida

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The National Minority AIDS Council

Since 1987, the **National Minority AIDS Council (NMAC)** has been dedicated to building the capacity of minority faith- and community-based organizations, AIDS service organizations and health departments addressing the challenges of HIV/AIDS in communities of color. To accomplish this mission, the agency provides conferences, capacity-building and technical assistance services, publications and online resources.

NMAC's advocacy arm represents these organizations on Capitol Hill, promoting sound national HIV/AIDS, health and social policies that ensure greater access to health care and services to those living with and/or at risk for HIV/AIDS, particularly in communities of color.

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EXECUTIVE SUMMARY

Over the past 25 years, AIDS has had a devastating impact on the African-American community. Today, African Americans become infected with, and die from, HIV/AIDS far more than any other racial or ethnic group.

In 2004, the most recent year for which national surveillance data were available at the time of writing this report, African Americans comprised only 13% of the U.S. population but accounted for half of all new HIV/AIDS diagnoses. African-American adults and adolescents are 10 times more likely to have AIDS than whites. The disease strikes subgroups of African Americans, especially young women and gay/bisexual, or same-gender loving, men (hereafter referred to as men who have sex with men, or MSM).

In an era when antiretroviral therapy can help HIV-infected individuals lead healthier lives, African Americans with HIV/AIDS are more likely than other racial groups to postpone medical care and become hospitalized, with the result that they are more likely to die from HIV-related causes. In fact, more than half of all people who died from AIDS-related causes in the U.S. in 2002 were African American. And while advances in medicine have resulted in AIDS deaths among whites falling by 19% from 2000 to 2004, they declined only 7% among African Americans (Kaiser Family Foundation, 2006).

HIV's racial divide is not new. Each year when national surveillance data are released, we see the everincreasing toll the AIDS epidemic is taking on the African-American community. Each year, we ask the same question: Why is AIDS hitting black Americans hardest? While much of the existing literature focuses on quality of care, health care access or individual risk behaviors, we believe that the HIV/AIDS epidemic in African-American communities results from a complex set of social, individual and environmental factors. By examining these underlying causes of African Americans' vulnerability to the HIV/AIDS epidemic, this report attempts to provide an answer – and a way forward in the fight against AIDS.

One factor that plays a particularly significant role in fuelling the African-American HIV epidemic is unstable housing. When families need to spend too much of their income on rent and food, medical care and other basic necessities may be sacrificed (Freeman, 2002). Family

residential instability is associated with school failure for children, a lack of access to preventive health care and the aggravation of a host of chronic health conditions ranging from cardiovascular disease to HIV/AIDS (Anderson, St. Charles and Fullilove, 2003).

Another important factor is the high rate of incarceration among African-American males. Incarceration is one of the most important drivers of HIV infection among African Americans. In addition to in-prison HIV risk behavior, such as unprotected sex and injection drug use, there are important questions about the role that formerly incarcerated persons play in transmitting HIV to others following their release from prison or in between periods of incarceration. There are also major concerns about the level of HIV education and treatment they may receive while in prison.

The population with the most disproportionate HIV burden is black MSM, who have HIV prevalence rates that are twice those of white MSM (MMWR, vol. 54 no. 24, 2005). There are a number of reasons for this disparity. Evidence suggests that black MSM are tested for HIV less frequently and at later stages of their HIV infection, and are also less likely to have been previously aware that they were HIV positive, than MSM of other racial/ethnic groups. In addition, black MSM have higher rates of sexually transmitted diseases, which are known to facilitate the transmission and acquisition of HIV (Millett et al., 2006).

In addition, black MSM are less likely to identify as gay or disclose their sexual behavior to others. Research suggests that the homophobia and related stigma that many men feel for being both African American and MSM carries into their experiences with the healthcare system, and can interfere with accessing HIV testing and other medical services (Malebranche, Peterson, Fullilove and Stackhouse, 2004).

This report also focuses on traditional public health approaches to confronting HIV, such as testing and treatment efforts. In September 2006, the U.S. Centers for Disease Control and Prevention (CDC) issued new guidelines urging that HIV testing become a routine part of medical care for U.S. adolescents and adults (ages 13–64). The CDC's emphasis on testing is based on evidence that HIV-positive persons who know their HIV status are significantly less likely to engage in HIV risk behaviors than those who are HIV-positive but unaware of their status, and that finding HIV-infected persons who are unaware of their status will facilitate their entry into treatment. While identifying undiagnosed infections is an important goal, we must look beyond medical interventions as the sole solution to our nation's problem with HIV/AIDS. By itself, a national testing strategy will not prevent or eliminate HIV/AIDS, particularly if it results in large numbers of individuals who have no access to care. Simply put, the epidemic is rapidly outpacing our efforts to control it using standard public health, infection-control procedures.

What is needed? Given the social and economic characteristics of poor African-American communities, a more systemic approach must be taken to help build stable communities. Public policies that address the root causes of the health disparities that devastate the African-American community are urgently needed. These policies must effectively deal not only with unstable housing and incarceration, but also with the poverty and social disadvantages of poor African-American neighborhoods. Policies that address the role that homophobia plays in driving new HIV infections among black MSM must also be adopted so that programs mitigating that impact can be implemented.

Policy Recommendations

Homelessness, housing conditions, risk of incarceration and the concentration of poverty in communities of color are more than just "complicating factors" for people being treated for HIV/AIDS. They are the forces that produce marginalized communities and marginalized people. By addressing the underlying factors that create and maintain poor African-American communities, we can positively change the environment that fuels the black AIDS epidemic.

The following policy recommendations would enable us to alleviate the root causes of the African American HIV/AIDS epidemic, and improve the chances of survival for those living with HIV/AIDS:

- Support the strengthening of stable African-American communities by addressing the need for more affordable housing.
 - Stabilizing housing is one of the most effective methods for reducing HIV-related morbidity and mortality. Scarcity of affordable housing is often at the root of residential segregation, school failure for children and a lack of access to health care.
 - Expanding federal programs such as Housing Opportunities for Persons With AIDS (HOPWA). These programs are critical in helping those with AIDS avoid homelessness, which in turn creates access to medical care and support services.
- 2. Reduce the impact of incarceration as a driver of new HIV infections within the African-American community by:
 - **Providing voluntary, routine HIV testing to prisoners on entry and release.**Policy reforms that establish voluntary, routine HIV testing upon prison entry and release will help connect those who are infected to treatment and also reduce risk behaviors that could put others in prison and in the community at risk.
 - Making HIV prevention education and condoms available in prison facilities.

 AIDS cases among the U.S. prison population are more than three times that
 of the general population (51 per 10,000 compared to 15 per 10,000 in 2003).

 Nonprofit organizations, government and public health agencies must be allowed
 to distribute condoms in prison facilities. Ensuring access to condoms in prisons
 would not only protect prisoners, but also the health and lives of the people in the
 communities to which they will return.
 - Expanding re-entry programs to help formerly incarcerated persons successfully transition back into society.

Prisons increasingly hold members of poor communities who are both under-educated and unemployable. Expanded access to employment training and educational programs is necessary to improve their ability to function in society, and to address prisoners' HIV prevention, substance abuse, mental health and housing needs prior to their release.

- 3. Eliminate the marginalization of, and reduce stigma and discrimination against, black gay and other men who have sex with men.
 - There is only one randomly controlled HIV
 prevention program, "Many Men, Many Voices",
 specifically designed for black MSM. Investing in
 research to produce interventions that will work
 for a diverse population of black MSM is essential
 to a national prevention effort that will reverse
 the course of the epidemic in this population. The
 CDC and the National Institutes of Health must
 aggressively establish a robust research portfolio to
 achieve this goal.
 - The empowerment of community leaders and organizations has been a critical element in our nation's effort to combat the HIV epidemic. More support must be leveraged to develop, promote and sustain leadership among black MSM and in organizations serving them. Additionally, sustained investment must be made to build the capacity of organizations developed to serve black MSM in order to effectively change social networks, behavior and conditions contributing to HIV infections in this population.
 - Efforts should be supported to address homophobia evidenced through stigma, discrimination and violence that creates vulnerability to behaviors and conditions associated with risk for HIV infection among black MSM.
- 4. Expand HIV prevention education programs, promote the early identification of HIV through voluntary, routine testing, and connect those in need to treatment and care as early as possible.
 - Far too many African Americans do not have accurate information about how HIV is transmitted or can be prevented. Culturally relevant HIV prevention education programs are needed to help African Americans protect themselves and their partners.

- Approximately 250,000 Americans are unaware
 that they have HIV and may unknowingly transmit
 the virus to others. While proper safeguards must
 be in place to ensure that HIV testing is always
 voluntary, expanded HIV testing efforts will help
 more people learn their HIV status, and allow
 those who test positive to seek early treatment and
 reduce their risk of transmitting HIV.
- One of the main factors contributing to disparate treatment outcomes for African Americans is that many are diagnosed at late stages of disease, when it is often too late for medications to be effective.
- Community health workers (e.g., lay health advisors, peer counselors, health aides) are critical bridges between physicians and patients in communities where mistrust of the health care system exists. Community health workers can serve as "interpreters" who can effectively communicate with patients about the care that is being provided. Such interventions have repeatedly been found to be effective in clinical settings in which a multicultural, multiethnic patient population is being served.
- 5. Reduce the number of HIV infections in the African-American community caused by injection drug use through the expansion of substance abuse prevention programs, drug treatment and recovery services, and clean needle exchange programs. For active injection drug users, in particular, clean needle exchange programs are needed to minimize the risk of infection through needle sharing.
 - Because one in five (19%) new HIV infections among African Americans is from injection drug use, education programs are needed to prevent people from using drugs in the first place, and substance abuse treatment programs are needed to help those currently using drugs to quit. For injection drug users who currently are addicted, clean needle exchange programs are needed to minimize the risk of infection from sharing unclean needles.

INTRODUCTION

Since the beginning of the HIV/AIDS epidemic, African Americans have been overrepresented among those living with and dying from AIDS. Today, the disease continues to affect African Americans more than any other racial/ethnic group in the United States. While African Americans represented 13% of the U.S. population, they accounted for half of all Americans living with HIV/AIDS and made up half of new HIV/AIDS diagnoses in 2004. The disease also continues to have a disproportionate impact on subgroups of African Americans, especially young women and men who have sex with men (CDC, 2005; Kaiser Family Foundation, 2006). The number of African Americans infected with HIV increased from 2001 to 2004, a trend consistent with every surveillance report generated since efforts to track the AIDS epidemic began in 1981 (CDC, 2006; Kaiser Family Foundation, 2006).

Why does AIDS strike America's black community hardest? HIV/AIDS is one of a host of other health conditions that disproportionately impacts African Americans. Access to treatment only partially explains this disparity. African Americans living with HIV/AIDS are more likely than whites to have no medical coverage (22% for Africans Americans compared to 17% for whites), and those who do have coverage are much less likely to be privately insured than whites (14% compared to 44%) (Kaiser Family Foundation, 2006). But other factors are at work as well: homelessness, drug use, distrust of the medical establishment and high rates of incarceration, to name some of the most significant. Investigating how HIV/AIDS intersects with these other disparities can help us understand why the disease is so prevalent – and so deadly – for African Americans.

In examining the causes of excess HIV-related morbidity and mortality among African Americans, this report reviews the current literature on HIV/AIDS. The available body of research illuminates the relationship between structural forces in American society—notably, the incarceration of African-American men and disparate health outcomes for African Americans with HIV/AIDS.

The 16th volume of the *HIV/AIDS Surveillance Report*, published by the CDC in 2005, provided a significant portion of the data used in this report. The surveillance data were based on estimates of HIV infections from 35 areas – comprising 33 states, Guam and the U.S.Virgin Islands – that were, at the time of this writing, engaged in reporting both cases of HIV infection as well as cases of AIDS¹. These data provide the best available estimate of the current scope of the epidemic in the United States (CDC, 2005).

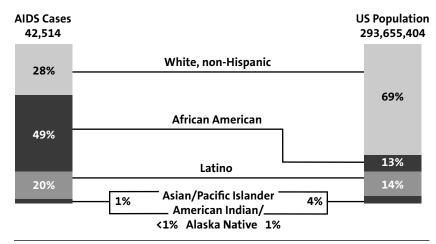
HIV AND AFRICAN AMERICANS: A CLOSE LOOK

The CDC estimates that 488,000–557,000 African Americans were living with HIV/AIDS in the United States in 2003. African Americans account for a growing share of AIDS diagnoses over time, increasing from 25% of cases diagnosed in 1985 to 49% in 2004. This translated into a 2004 AIDS case rate among African–American adults and adolescents that was more than 10 times that of whites (CDC, 2005; Kaiser Family Foundation, 2006).

¹ The 35 areas are Alabama, Alaska, Arizona, Arkansas, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming, Guam and the U.S.Virgin Islands.

Figure 1

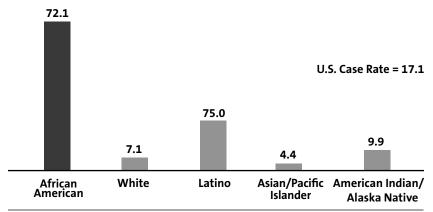
Estimated AIDS Diagnoses & US Population by Race/Ethnicity, 2004



Source: Kaiser Family Foundation

Figure 2

AIDS Case Rate per 100,000 Population by Race/Ethnicity for Adults/Adolescents, 2004



Source: Kaiser Family Foundation

Table 1
Racial Disparities and HIV/AIDS:
Estimated New Cases of HIV/AIDS among
Whites, Blacks, Hispanics, 2001-2004

	White	Black	Hispanic	Total*
	N (%)	N (%)	N (%)	N (%)
Males	38,218	49,704	22,062	112,106
	(34)	(44)	(20)	(100)
Females	7,262	30,483	6,610	45,146
	(16)	(68)	(15)	(100)
Total	45,479	80,187	28,673	157,252
	(29)	(51)	(18)	(100)

* Cases from the states that have used name-based HIV reporting systems for at least four years. Total includes estimates for Asian/Pacific Islanders and American Indians/Alaska Natives, which are not shown here.

Source: CDC, MMWR, February 10, 2006

In its February 10, 2006 Morbidity and Mortality Weekly Report (MMWR), which examined racial/ethnic disparities in diagnoses of HIV/AIDS, the CDC reported:

Although blacks accounted for approximately 13% of the population of the 33 states during 2001-2004, they accounted for the majority (80,187 [51%]) of HIV/ AIDS diagnoses. Blacks accounted for the greatest percentage of cases diagnosed among males (44%) and the majority of cases among females (68%). Among males, 36% of MSM cases, 54% of IDU cases, 39% of MSM/IDU cases, and 66% of highrisk heterosexual contact cases were in blacks. Among females, 70% of high-risk heterosexual contact cases and 60% of the IDU cases were in blacks. Moreover, 69% of cases of perinatal transmission were among blacks (MMWR, vol. 55 no. 5, 2006).

Significantly, African Americans were also dramatically overrepresented in every age group of diagnosed cases. African Americans comprised 55% of individuals ages 15–24 diagnosed during this time period (*MMWR*, vol. 55 no. 5, 2006).

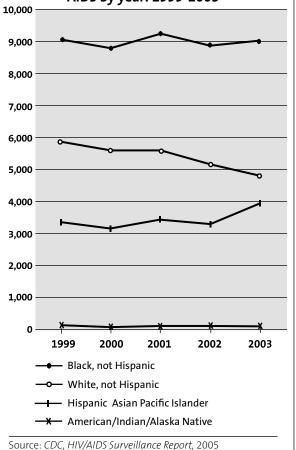
African-American women were also overrepresented. In every category of transmission they constituted the majority of cases among all women. The high rates of HIV/AIDS among African-American

women constitute one of the most alarming trends in the epidemic in recent years. This trend continues to be particularly visible in the South, where African-American women constituted 72% of all reported cases.

African-American MSM were also disproportionately more likely to be HIV-positive than white MSM (Millet, et al., 2006). Although the majority of men who were living with AIDS as a result of male-to-male sex in 2004 were white (52%), preliminary data from the National HIV Behavioral Surveillance survey of MSM in five cities showed an HIV prevalence that was significantly higher among African-American men (46%) as compared with whites (21%) or Hispanics (17%). More significantly, in this study 67% of African-American respondents were not aware of their infection, compared to 48% of Hispanic respondents and 18% of white respondents (MMWR, vol. 54 no. 24, 2005).

Finally, African Americans were overrepresented among the estimated deaths among persons living with AIDS during 1999-2003 (Figure 3), a period in which they outnumbered those in every racial/ethnic category each year.

Figure 3
Estimated Deaths of Persons Living with
AIDS by year: 1999-2003



AFRICAN AMERICANS, HEALTH DISPARITIES AND HIV/AIDS

Understanding the significance of the health disparities of minority communities is essential for assessing the impact of the HIV/AIDS epidemic on African Americans.

In its 2002 report, *Unequal Treatment*, the Institute of Medicine (IOM) traced the dimensions of racial health disparities in the United States. In addition to having higher rates of morbidity and mortality for conditions such as diabetes, cardiovascular disease, some forms of cancer and HIV/AIDS (*MMWR*, 2005), health care received by African Americans and Hispanics was of lower quality and more difficult to access than that received by whites (IOM, 2002).

Turning back the U.S.AIDS epidemic, the IOM maintained, will require significantly reducing the number of new infections through HIV prevention efforts and, for those who are infected, ensuring access to combination antiretroviral drug treatment (often referred to as highly active antiretroviral therapy or "HAART") and necessary social services.

Researchers using mathematical modeling have suggested that, with HAART, the HIV/AIDS epidemic might be contained. In a 2002 study modeling the impact of AIDS drugs on the spread of the HIV/AIDS epidemic, Velasco-Hernandez and colleagues concluded that antiretroviral medications "can function as an effective HIV-prevention tool, even with high levels of drug resistance and risky sex...even a high-prevalence HIV epidemic could be eradicated using current ARVs" (Velasco-Hernandez, Gershengorn and Blower, 2002).

But the converse also appears to be true. Failure to make appropriate treatment and service resources available will likely contribute to the continued expansion of the epidemic. The CDC reported that in 2003 only about half (55%) of 15– to 49-year olds who should be on antiretroviral therapy – approximately 268,000 individuals – were actually receiving it because of late diagnosis or other factors (CDC, 2005).

Still, between 1995 (when the use of combination antiretroviral treatment became common for HIV disease) and 2004, the overall U.S. AIDS death rate declined by 70% (51,297 deaths in 1995 to 15,798 in 2004) (Kaiser Family Foundation, 2006). With reduced mortality, and an estimated 40,000 new infections each year, the number of individuals living with HIV has increased. Currently, the CDC estimates that there are more than 1.1 million people living with HIV – more than at any time in the epidemic (CDC, 2005). As this pool of infected people increases, the odds will also increase that the epidemic will maintain itself and expand in scope and significance (Wilson, Gore, Greenblatt, Cohen, et al., 2004; R. Wallace, D. Wallace and Andrews, 1995; Wallace, Fisher and Fullilove, 1997). Simply put, as more people become infected, the chances increase that some infected individuals – particularly those unaware that they have HIV— will transmit the virus to others. Thus, an already significant epidemic among African Americans will, in all likelihood, increase in scope.

The burden that an ever-growing HIV epidemic will place on the health care resources of African-American communities is difficult to calculate, particularly because that system is already reeling under the weight of the excess morbidity and mortality from other conditions such as cardiovascular disease and diabetes. The HIV/AIDS epidemic is

part of a group of health conditions that, together, create significant disparities between the well-being of African Americans and that of the general public in the United States (MMWR, vol. 54 no. 1, 2005; MMWR, vol. 55 no. 5, 2006).

Marginalized Social Status and Stigma Contribute to Disease

Medical diagnosis and care are essential for reducing morbidity and mortality in any community. When access to care is difficult, the management of any health condition becomes more challenging. If the management of a health condition is further complicated because the patient is a member of a marginalized group, then there is greater likelihood that his or her illness will be poorly controlled and lead to a greater risk of death. What marks poor communities of color more than any other set of characteristics is the degree to which the poverty of their residents creates and enforces marginalized social status (Wilson, 1987; Wilson, 1996).

Scientific evidence supports the assertion that the overrepresentation of African Americans among those infected with and affected by HIV is linked to marginalized social status. Hence, in communities of already marginalized residents, it is the marginalized among the marginalized – gay men, drug users, prisoners and formerly incarcerated persons, the homeless, those living in extreme poverty and those who suffer from a variety of mental health disabilities – who are most likely to experience high rates of HIV-related mortality.

Stigma is also a part of the pattern of marginalization that affects and influences patterns of morbidity and mortality among African Americans. The Kaiser Family Foundation conducts surveys of HIV/AIDS awareness among the general public every two years. The results consistently show significant levels of ignorance about AIDS and how the disease is transmitted. For example, while many African Americans know that HIV can be transmitted through unprotected intercourse (99%) and that increasing condom use is very important to HIV prevention efforts (89%), far too many still believe that HIV can be transmitted by kissing (38% of African Americans, compared to 33% of Hispanics and 26% of whites), sharing a drinking glass with someone who has HIV (25% of African Americans, compared to 17% of Hispanics and 15% of whites) or touching a toilet seat (13% of African Americans, compared to 14% of Latinos and 8% of whites). Kaiser concludes that such ignorance may well be at the core of much HIV-related stigma, inasmuch as a failure to fully understand HIV contributes to both myths and misconceptions about the epidemic (Kaiser Family Foundation, 2006).

In rural areas, as noted poignantly by Levenson in his landmark work *The Secret Epidemic* (2004), the generalized stigma associated with HIV infection, irrespective of the sex or sexual orientation of the patient, is also a major barrier to providing effective treatment of HIV. Nonetheless, MSM – both those whose sexual orientation and behaviors are hidden from others (including men on the "Down Low") and those who are open about their sexual orientation – face particular challenges in their efforts to live and function with HIV (Herek, 1999; Malebranche, Peterson, Fullilove and Stackhouse, 2004; Malebranche, 2005).

Homophobia and Transmission of HIV

African-American men have the highest overall rates of HIV diagnosis of any population. In 2004, the HIV rate among black men was more than seven times higher than white men and almost twice as high as black women. From 2001–2004, black MSM accounted for roughly half (49%) of HIV diagnoses among African-American men (CDC, 2005).

Homophobia and stigma are important contributing factors to this disparity. Until recently, homosexual intercourse was defined as a crime in the penal code of many states before being struck down by the U.S. Supreme Court (Lawrence v. Texas). However, it still remains legal to discriminate against gay, lesbian, bisexual and transgender people in housing, employment and public accommodations across much of the United States. Against this legal framework, community and religious beliefs often stigmatize homosexuality as both immoral but also as anti-black. Due to these factors and those of racism, black men in the broader community face multiple societal interactions that can affect their health.

Black MSM are less likely to identify as gay or disclose their sexual behavior to others, which can negatively affect their experiences with the healthcare system. Malebranche and colleagues took a close look at the role that race and sexual identity have on the healthcare experiences of HIV-positive and HIV-negative African Americans. Researchers convened focus groups with 81 black MSM in New York and Atlanta. The group was evenly divided between those who self-reported as being HIV-negative or HIV-positive. The study found that the social stigma the men felt in their daily lives for being both African American and MSM carried into their experiences in the healthcare system, affecting healthcare utilization, HIV testing, communication and adherence behaviors (Malebranche, Peterson, Fullilove and Stackhouse, 2004).

The study concluded that, "Issues around distrust, racial and sexual orientation stigma, and fear of medical facilities, can serve as barriers to accessing services and open communication...This internalized displacement makes healthcare access difficult because BMSM [black MSM] do not feel comfortable within medical facilities themselves,

not simply because of geographical, transportation, financial or insurance barriers" (Malebranche, Peterson, Fullilove and Stackhouse, 2004). These findings have important implications for containing the HIV epidemic.

The considerable stigma and homophobia experienced by many black MSM can also have an impact on their self-esteem and behaviors. One study found a reduction in self-esteem among black MSM who attended churches that fostered homophobia. For some black MSM, this loss of self-esteem "undermined the individual's ability to practice safe sex, seek medical care in a timely fashion, or follow other health practices essential to well-being" (Fullilove and Fullilove, 1999). One of the study's conclusions was that "Rebuilding self-esteem is an important task for those involved with AIDS treatment and prevention" (Fullilove and Fullilove, 1999).

Additionally, younger black MSM who do identify as gay are often subject to homelessness resulting from rejection in the family and violence which can contribute to sexual risk-taking, survival sex, excessive alcohol or drug use and behavior associated with depression.

There is reason to believe that difference in HIV rates for MSM of different races/ethnicities may involve more than risk behavior alone. In a 2006 review of the literature over the past two decades, Millett et al. found that black MSM were as, or less, likely than other MSM to engage in unprotected anal intercourse, the single most important risk factor. They also have the same number or a smaller number of male sexual partners than other MSM (Millett et al., 2006). So why are black MSM so much more susceptible to HIV and its repercussions than their white or Latino counterparts?

The data indicate that black MSM are tested less frequently and at later stages of their HIV infection, and are also less likely to have been previously aware that they were HIV positive than MSM of other racial/ethnic groups (Millett et al., 2006). This means many HIV-positive black MSM may not be accessing antiretroviral treatment, which can help them to remain healthy. Additionally, they may unknowingly transmit HIV to sexual and drug-using partners.

Black MSM – both HIV-positive and HIV-negative also have higher rates of sexually transmitted diseases such as syphilis, gonorrhea and chlamydia, which can also facilitate the transmission and acquisition of HIV (CDC, STD Surveillance, 2005). Syphilis, like many other STDs, facilitates infection with HIV, increasing transmission of the virus at least two-to-five fold (CDC, Syphilis & MSM, 2004).

Over the past several years, increases in syphilis have been reported in several major U.S. cities with large populations of MSM. In these recent outbreaks, high rates of HIV co-infection were documented, ranging from 20% to 70% (CDC, Syphilis & MSM, 2004).

Nationally, the rate of primary and secondary (P&S) syphilis among males increased 81% between 2000 and 2004. Increasing cases of P&S syphilis among MSM are believed to be largely responsible for the overall increase. The CDC estimates that MSM comprised 64% of P&S syphilis cases in 2004, up from just 5% in 1999. Among black men, the syphilis rate increased 23% between 2003 and 2004, while the rate among black women rose only 2.4%, suggesting higher overall increases among black MSM (CDC, *STD Surveillance*, 2005).

HIV TESTING AND THE AFRICAN-AMERICAN COMMUNITY

With the 2003 launch of CDC's "Advancing HIV Prevention" initiative, the federal government's focus on HIV prevention has placed an increased emphasis on testing. More recently, in September 2006, the CDC issued guidelines recommending that all American adolescents and adults (ages 13-64) be tested for HIV as part of their routine medical care.

There are several reasons for the recent increased focus on testing. The first is that one-quarter of the estimated 1.1 million people living with HIV in the United States—180,000 to 280,000 individuals—are unaware of their HIV status and may transmit HIV without knowing that they are putting partners at risk. The CDC has found that once people learn they are infected with HIV, most will take steps to reduce transmission to sex or drug-using partners. Another reason is the evidence that finding HIV-infected persons who are unaware of their status will facilitate their entry into treatment. To help implement this guidance, the CDC is funding the availability of new rapid HIV tests to ensure that those who are tested know their results as soon as possible.

Compared to other racial groups, more African Americans believe that HIV testing should be treated just like routine screening for other diseases and should be included as part of regular exams (71% of African Americans vs. 63% of Hispanics and 65% of whites) (Kaiser Family Foundation, 2006). Nonetheless, data suggest that one-third of African Americans have never been tested for HIV, with many believing that they are not at risk (Kaiser Family Foundation, 2004). A recent CDC study also found that more than two-thirds of HIV-positive African-American MSM were unaware of their infection (MMWR, 2006).

The perception among some African Americans that they are not at risk has been cited as a major factor in the failure to be tested for HIV infection or seek treatment. For example, in a survey of 5,750 MSM who were recruited from venues in seven major urban centers in the United States and then tested for HIV infection, 91% of the African-American men in the sample who were HIV-positive were not aware that they

were infected, compared to 60% of the white, HIV-infected respondents in the survey (XIV International AIDS Conference, 2002). The fact that 39% of African Americans infected with HIV are diagnosed approximately one year before they develop AIDS suggests that timely awareness of infection status may save lives (CDC, 2005).

Challenges to Implementing Large-Scale HIV Testing

A national strategy to increase the number of individuals who are tested for HIV infection and admitted to treatment is an important component of a national plan to prevent and ultimately eliminate HIV/AIDS. But testing alone clearly will not be enough and large-scale testing efforts are likely to face a number of challenges.

First, as noted in an IOM report on the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act – the comprehensive federal AIDS treatment program – if testing initiatives are successful in increasing the numbers of individuals who are diagnosed and in need of treatment, there is no certainty that funding for new treatment slots or for medications for low-income patients will be available (IOM, 2005; National ADAP Monitoring Project, 2005). Thus, wide-scale HIV testing efforts to make Americans aware of their HIV status could create an ethical dilemma: a large number of people who find out they have HIV may have nowhere to turn for the medical care that can improve chances for survival.

In addition, there is the question of sufficient resources to undertake wide-scale HIV testing. According to Cohen and colleagues (2005):

The new CDC strategy calls for increasing the percentage of people who know they are infected from 75% to 95%. Achieving this goal would require that an additional 160,000 HIV-positive people learn of their status. If the prevalence in the tested population were 1–3%, then 5.3–16 million people would need to be screened – more than could be screened by shifting the entire CDC HIV prevention budget to the four new prevention strategies (Cohen, Wu and Farley, 2005).

FACTORS THAT CAUSE POOR OUTCOMES FOR AFRICAN AMERICANS WITH HIV

The efficacy of antiretroviral medications in treating HIV disease and in reducing HIV-related mortality has been established since 1996 (Palella, Delaney, Moorman, et al., 1998; Palella, Chmiel, Moorman, et al., 2002). Conventional medical wisdom asserts that when appropriate treatment guidelines are followed and patients adhere to the regimens that have been prescribed, HIV/AIDS can be managed much like any other serious, chronic disease. Why then, in the era of HAART, are African Americans at such elevated risk for HIV-related mortality? Some of the key factors are discussed below.

Diagnosis at Advanced Disease Stages

In general, the studies confirm the assertion that African Americans are more likely to enter treatment with advanced HIV disease (CDC, 2005; Fleishman, Gebo, Reilly, et al., 2005; Gebo, Kelly & Diener-West, 2001; Welch & Morse, 2001; Shapiro, Morton, McCaffrey, et al.,

1999) and are often unaware of the fact that they are HIV infected (CDC, 2005; Smith, Brutus & Cathcart, 2003). The CDC's HIV/AIDS Surveillance Report for 2005 reports that 39% of HIV-infected African Americans were tested within one year of being diagnosed with AIDS. The prognosis for survival for patients who initiate treatment at this stage is much less optimistic than for those who are diagnosed and treated early (McNaghten, Hanson, Dworkin, et al., 1999).

Social and Environmental Factors That Diminish Treatment Success

Because the management of HIV disease is so complex, it is easy to understand why HIV care and research has devoted considerable attention to identifying individual-level risk factors that explain who is at risk, who becomes infected, who is best served by HIV clinical care and who is most likely to experience treatment failure. The focus on individual patients is understandable, since it is the individual who is treated in the clinical setting. But the trends in the literature on HIV care have made it clear that because treating HIV disease is a complex enterprise for physicians, it is easy to overlook factors that arise from the patient's social environment that limit the effectiveness of HIV clinical care. The following excerpt, taken from an article published by Metsch and colleagues (2004), eloquently describes this challenge:

> Several real and perceived barriers exist that contribute to suboptimal provision of transmission reduction counseling to HIV-positive patients. For example, current antiretroviral therapy requires near perfect adherence, and thus providers may be spending a significant amount of time counseling patients about the need to take their medications, leaving little time for discussion of risk reduction. In addition, physicians place different levels of emphasis on provision of this information to newly diagnosed and established patients. In the case of newly diagnosed patients, our findings indicated that perceived time constraints, patient load, and physicians' perception that patients had psychosocial problems were barriers to the delivery of transmission reduction counseling. Consequently, physicians with larger patient loads and those with a higher proportion of patients

with mental health or substance abuse problems may have less time to address prevention issues. However, these patients are particularly in need of HIV prevention counseling, in that mental health and substance use problems can have negative effects in terms of medication adherence, viral load suppression, and HIV drug resistance (Metsch, Pereyra, del Rio, et al., 2004).

The challenge of treating HIV is further complicated when the patient is impoverished and living in socially marginal circumstances (Smith, Brutus, Cathcart, et al., 2003; Moss, Hahn, Perry, et al., 2004). Working to change the factors that create marginalization must be part of the solution.

Competing Financial Needs

The HIV Cost and Services Utilization Study reported that failure to have transportation or the means of meeting a variety of competing needs strongly predicted access to and use of medical care (Cunningham, Anderson, Katz, et al., 1999). As Cunningham and colleagues observed:

In this nationally representative sample of persons receiving care for HIV infection, we found that competing subsistence needs and other barriers were commonly reported: greater than one third of the sample (representing >83,000 persons nationally) went without or postponed care at least once in a 6-month period as a result of at least one of the four reasons we assessed. In addition, an estimated 17,000 persons in the United States who were receiving regular care went without food, clothing, or housing because they needed the money for medical care. In general, non-whites, drug users, and persons in lower socioeconomic groups were more likely to report these problems than those in other groups.

The lack of money and access to a variety of daily necessities has been consistently shown to influence HIV risk behavior as well as use of HIV-related services (Messeri, Abramson, Aidala, Lee, et al., 2002).

Distrust of the Medical Establishment

Bogart and Thorburn (2005) conducted one of the largest surveys of African Americans concerning their belief in conspiracy theories about the origins of HIV/AIDS and the manner in which the African-American community's AIDS epidemic is being addressed. They found strong endorsement of many of these beliefs and reported a significant correlation between endorsing conspiracy beliefs and negative attitudes towards, and reported inconsistent use of, condoms among men in their survey. Fullilove (2001), in an analytic essay about belief in conspiracy theories among African Americans, suggested that attitudes toward HIV testing and treatment may be affected by a perception that AIDS is a plot to destroy the African-American community. Other authors have similarly observed a strong relationship between mistrust of institutions and participation in AIDS research (Sengupta, Strauss, DeVellis, et al., 2000). And in a widely cited paper, Thomas and Quinn (1991) suggested that the lingering memory of the Tuskegee Syphilis Study and other negative impressions held by African Americans of the U.S. health care system may have significant impact on the effectiveness of HIV prevention programs.

Nessel and Primm (2004) conducted opinion surveys on AIDS' origins among men and women who work in the field of HIV treatment and prevention at a variety of national and international medical conferences. The questions included items on the role of the U.S. government in causing the HIV pandemic or in being responsible for withholding the cure for AIDS. In their analysis of 1,440 completed surveys, the authors found high levels of distrust in conventional explanations for the origins of AIDS. The authors concluded that such levels of distrust could have an impact on the general willingness of African Americans to be tested for HIV or listen to a physician's advice about adhering to HIV-related treatments.

Although it is possible that mistrust of institutions and the health care system account for much of the failure of at-risk African Americans to be tested or treated, these beliefs often stem from the general lack of access that African Americans have to medical care, as well as to the poor outcomes that they experience in many of their encounters with clinicians (IOM, 2002). In fact, it is possible that the mistrust described in studies of HIV conspiracy theories simply reflect African–American patients' reactions to the manner in which they are treated by clinicians, many of whom are biased with regard to their expectations of their African–American patients:

In a study based on actual clinical encounters, researchers found that doctors rated black patients as less intelligent, less educated, more likely to abuse drugs and alcohol, more likely to fail to comply with medical advice, more likely to lack social support, and less likely to participate in cardiac rehabilitation than white patients, even after patients' income, education, and personality characteristics were taken into account (IOM, 2002).

The Role of Injection Drug Use in HIV's Spread

As noted earlier in this report, African-American patients who are most likely to experience higher rates of mortality are also more likely to be members of highly marginalized groups. In all too many cases, being a member of any one marginalized group is a risk factor for becoming a member of one or more marginalized groups. This chain of marginalization often begins with drug use.

Drug use is a particularly important risk factor for HIV infection among African Americans and Hispanics. Injection drug use (IDU) accounts for more than 19% of new African-American HIV infections in this country (CDC, 2006). HIV infection associated with injection drug use was 2.4 times and 2.6 times more prevalent among African Americans and Hispanics, respectively, than whites living with HIV/AIDS in the United States in 2004.

IDU is associated with high rates of hospitalization for HIV disease as well as poor treatment outcomes (Betz, Gebo and Barber, 2005: Fleishman, Gebo, Reilly, et al., 2005; Welch and Morse, 2001). The HIV Research Network, a federally funded network of HIV providers, has yielded a number of important studies of those seeking inpatient and out-patient care for HIV disease. In a study of more than 8,000 patients in six cities, Betz and colleagues found that African-American women accounted for a disproportionately high percentage of AIDS-defining illness hospitalizations among women. Moreover, African Americans were more likely to be hospitalized with comorbid mental health conditions than whites. They conclude: "These results emphasize the significant burden of co-morbid disease resulting from drug and alcohol use by adults infected with HIV, and support previous findings of an increased prevalence of substance abuse and psychiatric disorders among individuals with HIV" (Betz, Gabo and Barber, 2005).

Increased access to quality drug prevention and treatment programs is needed to reduce the number of African Americans who put themselves at risk of acquiring HIV by sharing contaminated needles. For those currently addicted, needle exchange programs have been shown to be an effective HIV prevention method. However, a federal ban in place since 1989 prohibits the use of federal funds to support such programs. Opponents of needle exchange programs argue that such efforts endorse or could encourage injection drug use. Yet seven federally funded reports agree that access to sterile syringes does not encourage people to increase or initiate drug use (Harm Reduction Coalition, 2001).

A study of HIV cases in Baltimore, a city with a large African-American and IDU population, found that the percentage of HIV cases attributed to IDU decreased from 60% of all cases in 1994 to 41% in 2003 after the city instituted a needle-exchange program. Nationally, a study by the National Institutes of Health and the Institute of Medicine demonstrated that needle exchange programs contribute to 80% reductions in risk behaviors among IDUs and at least a 30% reduction in HIV transmission (AIDS Action, 2001).

Despite the ban on federal funds, all states except New Jersey currently allow legal access to syringes. The percentage of New Jersey's AIDS cases attributed to IDU is almost double the national average (44% compared to 24% nationally). As of October 2006, a bill was pending in the New Jersey legislature that would sanction state funding for needle exchange programs (Kaiser Family Foundation, State Health Facts, 2005).

Inadequate Government Funding for HIV/AIDS Services

While lack of health insurance is certainly a major barrier in African Americans' access to HIV services (IOM, 2002), lack of government funding to provide services through legislation such as the Ryan White CARE Act remains an obstacle. The CARE Act is the comprehensive federal funding program designed to promote access to treatment, appropriate medications through the AIDS Drug Assistance Program (ADAP) and ancillary social services, such as housing through the Housing Opportunities for Persons With AIDS (HOPWA) program.

While essential, the CARE Act has not proven to be a panacea for meeting the needs of those living with HIV disease. A 2005 IOM study, "Public Financing and Delivery of HIV/AIDS Care: Securing the Legacy of Ryan White," concluded that current public funding of HIV/AIDS care under the CARE Act was, at best, a patchwork of services and access to necessary medications:

Current public financing strategies for HIV care have provided care and extended the lives of many low-income individuals. Significant disparities remain, however, in assuring access to the standard of care for HIV across geographic and demographic populations. The current federal-state partnership for financing HIV care has been unresponsive to the fact that HIV/AIDS is a national epidemic with consequences that spill across state borders. State Medicaid programs that provide a significant proportion of coverage for HIV care have been widely varying resources and priorities, which in turn produce an uneven and therefore ineffective approach to managing the epidemic (IOM, 2005).

EPIDEMIOLOGICAL IMPACT OF POVERTY AND SEGREGATION

Even today, the United States remains in many ways a racially and economically segregated country in which poverty is disproportionately concentrated in AfricanAmerican and Hispanic neighborhoods (U.S. Census, 2005). In a 2003 study by Anderson, et al., the authors describe this phenomenon:

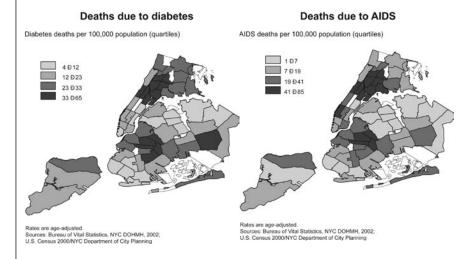
Social, political, and economic forces have historically concentrated large numbers of lower-income African Americans in central cities, and continued racial discrimination in housing markets impedes their movement out of these areas. Despite a reduction in racial segregation over recent decades, African Americans remain highly over-represented within the populations of impoverished neighborhoods. In 1990, 17.4% of all African American residents of the country's metropolitan areas lived in extreme poverty neighborhoods, compared with only 1.4% of all white residents. At the same time, within the 100 largest central cities, 24.2% of all African Americans, but only 3.2% of whites, lived in extreme poverty neighborhoods, with African Americans representing more than 50% of the population in these areas. (Anderson, et al., 2003)

Although health and disease are characteristics of individuals, health disparities are seen in those areas, both urban and rural, where many African Americans live. This can be seen when patterns of health disparities are aggregated by race/ethnic group and by community.

Cancers, cardiovascular disease, sexually transmitted diseases, homicides and violent victimizations are more prevalent in poor neighborhoods of color than they are in more affluent communities (Task Force, 2003; New York City Department of Health [NYC DOH], 2004).

New York City, the epicenter of the U.S. HIV epidemic and the nation's largest city, is a prime example. New York has more cases of persons living with HIV/AIDS and more AIDS-related mortality than any other urban area in the United States (CDC, 2006; NYC DOH, 2006). Figure 4 contains two maps illustrating deaths from AIDS and diabetes, both common causes of death among the poor. These maps show that the city's poorest neighborhoods, which are heavily populated by African Americans, have the highest rates of AIDS- and diabetes-related deaths (NYC DOH, 2004).

Figure 4



Source: New York City Department of Health and Mental Hygiene, *Health Disparities in New York City*, 2004.

The same concentration of poverty and HIV can be seen in neighborhoods in other parts of the country. The District of Columbia, which has the nation's highest AIDS case rate — 162.4 per 100,000 in 2002, compared to 14.8 per 100,000 nationwide, and 60% of whose residents are African American — is another example. The District is heavily segregated, with 57% of its black residents living in just three of its eight wards, Wards 5, 7 and 8 — the city's poorest. In Wards 7 and 8, more than 90% of the population is African American (District of Columbia DOH, 2004). The AIDS case rate among black women in Ward 8 is 83 per 10,000, compared to 63 per 10,000 for District women overall.

Other cities with large, geographically and economically segregated African-American populations are similarly hard hit by HIV/AIDS. Los Angeles County has more residents living in poverty than any other large metropolitan area in the United States, and is also home to the nation's largest county jail (LAC Department of Health Services and Public Health, 2004). In Los Angeles County, HIV infection rates are also highest for African Americans (81 cases per 100,000 for blacks compared to 36, 33 and 11 per 100,000, respectively, for Hispanics, whites and Asians). Baltimore, whose population is 64% African American, follows Washington, DC in terms of AIDS death rate (117 and 162.4 per 100,000, respectively). And in Chicago, where African Americans accounted for 60% of new AIDS diagnoses in 2004, the AIDS diagnosis rate was more than three times that of whites and twice that of Hispanics (Chicago Department of Health, 2005).

The Rural HIV Epidemic

Poverty, segregation and disease burden aren't confined to urban areas, of course, and HIV disproportionately strikes African Americans in rural areas, particularly in the Southeast.

In 1999, 22% of new AIDS cases in the Deep South (Alabama, Georgia, Louisiana, Mississippi, North Carolina and South Carolina) were in non-metropolitan areasnearly three times the percentage in other Southern states and the North Central

region, more than five times the percentage in the West and more than seven times that in the Northeast. In these Southern states, where the percentage of African Americans in the population is the highest in the country, half of African Americans live below 200% of the poverty line and they have significantly less access to healthcare than people of other races and ethnicities (Reif, Geonnotti, Whetten, 2006).

In a landmark study of rural, HIV-positive African Americans ages 18-59 in North Carolina with heterosexually acquired HIV infection, study participants were substantially more likely than control groups to be poor, undereducated, have been homeless in the past 10 years, report concerns about having enough food for themselves and their families in the past month and have been incarcerated. They also reported more lifetime sex partners, higher rates of exchanged sex, higher rates of STD diagnosis, more drug use, more partners who were injection drug users and more concurrent sexual relationships in the past five years (Adimora, Schoenbach, Martinson, Coyne-Beasley, et al., 2006).

THE EPIDEMIOLOGICAL CONSEQUENCES OF UNSTABLE HOUSING

Homelessness is the most extreme form of a growing national problem: the increasingly inadequate supply of affordable housing. Increasing the availability of affordable housing, reducing residential segregation and decreasing the number of households living in extreme poverty are key goals of the Department of Housing and Urban Development's (HUD) 2000–2006 Strategic Plan (HUD, 2000).

When families need to spend too much of their income on rent and food, medical care and other basic necessities may be sacrificed (Freeman, 2002). Family residential instability is associated with school failure for children, a lack of access to preventive health care and the aggravation of a host of chronic health conditions ranging from cardiovascular disease to HIV/AIDS (Anderson, St. Charles and Fullilove, 2003).

Unstable housing and extreme poverty exert enormous pressures on the social functioning of neighborhoods. Crime tends to flourish, particularly drug-related offenses. These trends are particularly evident among young men (Fagan, 2004). The prevalence of violent crime has an enormous effect on the perceptions of residents that it is safe to walk, shop and interact with their neighbors (Klinenberg, 2004). Moreover, the prospect of traveling long distances through unsafe neighborhoods to seek clinical services is a factor in the failure to seek medical care for a variety of health conditions (Fullilove, Fullilove, Stevens and Green, 2001). Hence, increasing the confidence of residents of poor neighborhoods that they can move about freely and can interact freely with their neighbors will increase the social cohesion of the community (Fullilove, 1998).

One obvious impact of increased social cohesion will be increased "social capital" available to children and their families (Fullilove, Green and Fullilove, 2000). In this context, social capital refers to benefits that result from membership in social networks that are often intangible (e.g., advice about how to get a job, providing a referral to a person or a service, etc.). As the quality of neighborhood life improves, many of the risks associated with adolescent drug use and sexual risk behaviors are also reduced (Leventhal and Brooks-Gunn, 2000).

Perhaps most important of all, with a reduction in drug use and criminal activity, the risks of incarceration for community residents would also decrease. As will be described, incarceration is a driving force in maintaining the HIV/AIDS epidemic in these communities; therefore, stabilizing housing and stabilizing neighborhoods so that they have less crime becomes one of the most effective methods for reducing HIV-related morbidity and mortality.

Impact of Affordable Housing on Community Desegregation

The disproportionate impact of HIV/AIDS in urban African-American communities is, as has been suggested in this report, a function of the same set of forces that create residential segregation, the concentration of poverty in segregated communities and the geographical concentration of health disparities. New York City, one of the nation's most racially segregated urban centers, also has one of the most segregated HIV epidemics. As noted in Table 2, rates of persons living with HIV/AIDS in selected, largely African-American/Latino neighborhoods of New York City can be represented as a percent of the community's total population.

Table 2 HIV/AIDS Prevalence in Select New York City Neighborhoods, 2004

Population Diagnosed with HIV (%)		
Bronx	1.2	
Crotona-Tremont	2.1	
Morrisania	2.4	
Mott Haven	2.3	
Brooklyn	1.0	
Bedford-Stuyvesant	1.8	
East New York	1.4	
Manhattan	2.0	
Central Harlem	2.6	
East Harlem	2.6	

Source: New York City Department of Health and Mental Hygiene, 2006

It is impossible to conceive of effective HIV prevention and treatment interventions that do not also target the environmental forces that drive the epidemic and that comprise efforts to treat it effectively. Thus, a focus on reducing neighborhood segregation, increasing the pool of affordable housing, and intervening to assist residents to make their communities safer will significantly improve the health of community residents:

> The importance of housing policy that attempts to deconcentrate neighborhood poverty while providing affordable housing to low-income families can be seen in the strong emphasis placed on income mixing within the HOPEVI Urban Revitalization Demonstration Program (Salama, 1999), the federal government's program for the physical and social revitalization of distressed public housing. Such an emphasis is in sharp contrast to the public housing program's record of concentrating poverty by routinely constructing developments in impoverished areas and reserving units for the poorest of households, practices which are believed to be largely responsible for many of public housing's most recognized failures: environments of violence, substance abuse, welfare dependency, teen pregnancy, unemployment, and lowered educational achievement among youth (Anderson, et al., 2003).

An examination of HIV treatment outcomes for the homeless, conducted by the National Housing and HIV/AIDS Research Summit, highlights the linkage between marginal social status and health (Gelberg, Gallager and Anderson, 1997):

Indeed, research shows that housing is a matter of life and death for persons living with HIV/AIDS. The all-cause death rate among homeless HIV-positive persons is five times the rate of death among housed persons with HIV/AIDS: 5.3 to 8 deaths per 100 person years for HIV-positive homeless persons, compared to 1 to 2 deaths per 100 person years for HIV-positive persons who are housed (National AIDS Housing Coalition, 2005).

More recently, a study presented at the XVI International AIDS Conference found that homeless individuals suffering from HIV/AIDS were in urgent need of additional social support and better care in order to achieve improved treatment outcomes (Kidder, et al, 2006). African Americans comprised 70% of study subjects.

There have also been studies that specifically address race and treatment outcomes and adherence to HIV treatment regimens, which is crucial to the effectiveness of antiretroviral treatment. Moss and colleagues (2004) examined adherence to HAART in a 12-month prospective study of 148 homeless or unstably housed individuals in San Francisco. They found that "African-American ethnicity predicted both discontinuation of therapy and low adherence in those who continued to receive therapy. Adherence in African-American subjects was 60%, compared with 81% in all other subjects" (Moss, Hahn, Perry, et al., 2004).

Given the social and environmental forces that drive the HIV/AIDS epidemic as well as a host of other health disparities, working to improve housing and neighborhood quality of life will have obvious benefits for improving both community and overall public health. As the National AIDS Housing Coalition states, "Stable, affordable housing offers the best opportunity for persons living with HIV/AIDS to access drug therapies and treatments and supportive services that will enhance the quality of life for themselves and their families. When people are housed, they can access and adhere to drug treatments and therapies and require fewer hospitalizations and less emergency room care" (National AIDS Housing Coalition, 2006). Stable housing is, therefore, a cornerstone of HIV prevention and care. Policies that improve the ability of individuals to acquire stable housing will, in turn, stabilize the communities in which they live.

IMPACT OF INCARCERATION ON HIV/AIDS IN BLACK AMERICA

America's prison population – 2.13 million in 2004 – is larger today than ever before, and incarceration rates among ethnic minorities continue to be disproportionately high. Nationwide, 41% of prisoners are African American (Golembeski and Fullilove, 2005). For these reasons, America's prisons play a central role in the social, economic and health disparities experienced by the African–American community, and the HIV/AIDS epidemic is merely one consequence of the close connection between prisons and poor communities of color (Lemmelle, 2003).

Some 90% of prisoners are male. In 2004, African-American males were seven times more likely than white males and three times more likely than Hispanic males to be imprisoned (4,919 prisoners per 100,000 black males compared to 1,717 prisoners per 100,000 Hispanic males and 717 prisoners per 100,000 white males, respectively) (U.S. Dept. of Justice, Bureau of Statistics, 2005). In addition, African Americans are significantly more likely to go to prison if arrested than whites (Bureau of Justice Statistics, 2004; Mauer, 1999; The Sentencing Project, 2005). The federal government's "War on Drugs," which led to dramatic increases in the U.S. prison and jail population, also contributed to higher rates of imprisonment of African Americans (Mauer, 1999).

Hammett and colleagues examined data on infectious diseases among prisoners in 1997 and estimated that between 150,000 and 200,000 people living with HIV infection passed through a U.S. correctional facility – approximately one–quarter of all people living with HIV in the country (Hammett, Harmon and Rhodes, 2002). They also estimated that other infectious diseases such as tuberculosis (TB) and hepatitis C, which are often co-morbid with HIV, were overrepresented within correctional institution populations. Some 29–43% of

people in the United States living with hepatitis C and 40% of the persons living with TB disease passed through correctional facilities in 1997 (Hammett, Harmon and Rhodes, 2002). Hammet et al. further note:

Prevalence statistics for prisoners by race and ethnicity are generally lacking, so it was not possible to develop estimates of disease burden by racial and ethnic group. However, the disproportionate incarceration rates experienced by African Americans and Latinos and the already disproportionate burden of diseases under study among the same groups combine to produce a situation in which the vast majority of prisoners and releasees with these infectious diseases are African American or Latino. In New York State correctional facilities, 48% of prisoners diagnosed with AIDS in 1997 were Black and 45% were Hispanic, compared with the proportions of these groups in the total population of the state of 18% and 14% respectively.

The Connection Between Incarceration, Poverty and Homelessness

If HIV-related morbidity and mortality are especially problematic among vulnerable populations, it is reasonable to assume that a history of incarceration – and all of the personal and social chaos that it entails – contributes to increased vulnerability to HIV infection, disease progression and mortality.

Prisons are a major factor in the continuing rates of poverty and social disadvantage in the African-American community. Convicted felons in most states in the United States cannot vote and are often ineligible for federal housing or housing subsidies, federally financed student loans and many forms of employment (Iguchi, Bell, Ramchand and Fain, 2005). Formerly incarcerated persons are typically from poor, disadvantaged communities, and when they are discharged from prison they return to their old neighborhoods. As second-class citizens in need of a great many social, economic and health services, their presence inevitably adds to already high levels of social and economic disadvantage in the communities that house them (Golembeski and Fullilove, 2005). Formerly incarcerated persons are at higher risk for becoming homeless, and this risk is especially acute for those who have a mental health disability and/or a history of mental illness (Kushel, Hahn, Evans, et al., 2005).

HIV Transmission in Prisons

The U.S. Department of Justice found that in 2003 the AIDS rate among U.S. prisoners was three times that of the general population. That year, 2% of state prisoners and 1.1% of Federal prisoners were known to be infected with HIV (U.S. Dept. of Justice, Bureau of Statistics, 2005). Given these facts, there has been and continues to be speculation that prisons are independent risk factors for HIV infection because prisoners engage in unsafe sex and drug injection practices while "on the inside."

In 2005, the Georgia Department of Corrections and the Georgia Division of Public Health, with assistance from the CDC, conducted a study to examine HIV risk behaviors and patterns of HIV transmission within Georgia's correctional system. This study was possible because in 1988 the Georgia Department of Corrections instituted mandatory HIV testing of prisoners upon entry to a prison

facility. Over a 16-year period (July 1988 through February 2006), a total of 88 male prisoners who were known to have negative HIV tests upon entry into prison subsequently tested HIV positive. While the 88 men who seroconverted during the time they were incarcerated accounted for only 10% of all HIVpositive prisoners in Georgia prisons during the same 1988-2005 time frame, the study was significant in that it confirmed that HIV risk behaviors do indeed occur in at least one of the nation's largest state prison systems, providing empirical evidence that some prisoners engage in high-risk behaviors and become HIV positive while incarcerated. Nonetheless, the study showed that the majority of new HIV infections among incarcerated individuals (90%) occurred outside of prison (MMWR, vol. 55 no. 15, 2006).

Several caveats about the study should be noted. Only one prison system and a small study sample that did not include HIV-positive prisoners who did not volunteer to be tested were involved. Moreover, as *MMWR* authors note, "prisoners might have inaccurately reported HIV risk behaviors because sex between prisoners, sex with correctional staff, injection drug use, and tattooing are illegal or forbidden by policy in this prison system" (*MMWR*, vol. 55 no. 15, 2006, p. 425). But even interpreting these data conservatively, it is unlikely that Georgia is the only state prison system in which risky sex, injection drug use and seroconversions occur.

Nonetheless, HIV risk reduction interventions such as access to condoms, needle exchange and bleach for IV drug users are not available to the vast majority of prisoners. Policies on HIV testing and education vary widely between states and facilities. Condoms are banned or unavailable in 95% of the country's prisons; only the state prison systems of Mississippi and Vermont make them available, as do the county jails systems of Philadelphia, New York City, Washington, DC, San Francisco and Los Angeles. There are no needle exchange programs in U.S. prisons or jails, and only jails in Houston and San Francisco are reported to provide bleach to prisoners to clean their needles (AIDS Policy and Law, 1997). In addition, prominent media coverage over the past few years suggests that provision of medical care is, at best, inconsistent in America's prisons and jails. In Alabama, prisoners with HIV are quarantined.

Despite evidence showing that the proper and consistent use of condoms greatly reduces HIV risk, the issue continues to be highly politicized – particularly in the correctional context. In September 2006, California Gov. Arnold Schwarzenegger vetoed legislation that would have allowed nonprofits and public health agencies to distribute condoms to prisoners. With some 160,000 prisoners, California has the nation's largest incarcerated population.

Incarceration, HIV Infection and the African-American Community

There are other reasons to believe that prisons make a significant contribution to the level of HIV/AIDS in poor, African-American communities. Two investigators at the Goldman School of Public Policy at the University of California, Berkeley, modeled the impact of incarceration on HIV/AIDS rates in the United States (Johnson and Raphael, 2005). They note: "Our results reveal that the higher incarceration rates among black males over this period explain a substantial share of the racial disparity in AIDS infection between black women and women of other racial and ethnic groups" (Johnson and Raphael, 2005).

Such transmission would be affected, the authors assert, from tattooing, drug use and high-risk sexual activity. In the Georgia prison study (MMWR, vol. 55 no. 15, 2006), all of these behaviors were reported by cases as well as controls, with the self-reported rates of having "received a tattoo in prison" emerging as a particularly significant risk factor for seroconversion in prison. The Johnson/Raphael model, however, is only partially dependent on the assumption that the disparity between African-American and white HIV infection rates is a function of in-prison HIV risk behavior. The authors' major focus was to test the degree to which "sexual relationship markets" - that is, the manner in which members of sexually active groups form and break up sexual relationships – are influenced by rates of incarceration:

Of particular importance are the effects of incarceration on the total lifetime number of sex partners and the likelihood of concurrent sexual relationships. The rates at which new relationships form and dissolve impacts the

lifetime number of sexual partners at any given age, which affects the risk of sexual contact with an infected person....The dynamics of prison entry and exit, coupled with a large increase in incarceration rates for men, are likely to impact the rate at which existing sexual relationships dissolve and form (Johnson and Raphael, 2005, p. 11).

In addition to affecting the rate at which concurrent sexual relationships form and break up, there is evidence that the loss of a significant number of men to prisons also affects the degree to which women will insist on condom use and other safe sexual behaviors on the part of their sexual partners (Sampson, 1995). Finally, the impact of missing fathers on families in general and on the delinquent behavior of their children is also considerable. Some data suggest one predictor for being imprisoned is having a family member who has been incarcerated.

For example, for children whose parents are imprisoned, feelings of shame, humiliation, and a loss of social status may result (Clear, 1996). Children begin to act out in school or distrust authority figures, who represent the people who removed the parent from the home. Lowered economic circumstances in families experiencing imprisonment also lead to greater housing relocation, resulting in less cohesive neighborhoods. In far too many cases, these children come to represent the next generation of offenders (Mauer, 1999).

Incarceration's Impact on the Community's Health

The health consequences of incarceration have significant impacts on prisoners and on the communities to which they will return. The intersection of drugs, HIV/AIDS, hepatitis C and TB is particularly alarming in this regard. As MacNeil and colleagues (2005) reported in a study of the national TB surveillance system from 1993 through 2003, TB case rates in federal and state prisons were significantly higher than in the general population (29.4 and 24.2 cases per 100,000, compared with 6.7 per 100,000 for the general population). HIV infection is a major risk factor in having an active TB infection (MacNeil, Lobato and Moore, 2005). The significance of this study cannot be overemphasized. Unlike HIV, TB can be controlled, particularly in a setting in which patients are extremely constrained in their freedom of movement. If treatment failures are significantly elevated for this population, which is disproportionately African American and Hispanic, it is reasonable to suppose that treatment failures for prisoners with a variety of health conditions are likely as well.

CONFRONTING THE EPIDEMIC IN BLACK AMERICA

Policy Recommendations

With an epidemic that continues to grow in size and scope, it is important to look beyond medical interventions as the sole solution to our nation's problem with HIV/AIDS. The United States may have already reached the outer limits of what can be done to prevent and treat HIV by investing in interventions that are targeted to individuals.

Given the social and economic characteristics of poor African-American communities, a more systemic approach is needed to help build stable communities. Without addressing the underlying factors that create and maintain poor African-American communities, the conditions that fuel a growing AIDS epidemic will always outpace the funding available to combat it.

Thus, managing homelessness, housing conditions, risk of incarceration and the concentration of poverty in poor communities of color must also be addressed (Golembeski and Fullilove, 2005; Lemelle, 2003). These are more than just "complicating factors" for people being treated for HIV/AIDS. They are the forces that produce marginalized communities and marginalized people. Creating public policies that can change the risk environment of poor African-American communities will not only impact HIV, it will also affect the conditions that generally contribute to health disparities there.

The following policy recommendations will enable us to alleviate the root causes of the African American HIV/AIDS epidemic, and improve the chances of survival for those living with HIV/AIDS:

1. Support the strengthening of stable African-American communities by addressing the need for more affordable housing.

- Stabilizing housing is one of the most effective methods for reducing HIV-related
 morbidity and mortality. As noted earlier in this report, scarcity of affordable housing is
 often at the root of residential segregation, school failure for children and a lack of access
 to health care because families spend too much of their income on rent and other
 housing needs.
- Expanding federal programs such as Housing Opportunities for Persons With AIDS (HOPWA) is critical in helping those with AIDS avoid homelessness, which in turn creates access to medical care and support services. In 2006, the program provided rent, mortgage and utility payments, as well as other housing and support services, to 71,500 households (National AIDS Housing Coalition, 2006).
- Reduce the impact of incarceration as a driver of new HIV infections within the African-American community by:
 - Providing voluntary, routine HIV testing of prisoners upon entry and release. While a recent CDC study established that HIV infection does occur in at least one major state prison system (i.e., Georgia), 90% of prisoners

were already infected before they entered the correctional facility (*MMWR*, vol. 55 no. 15, 2006). Policy reforms that establish voluntary, routine HIV testing upon entry and release will help connect those who are infected to treatment and also reduce risk behaviors that could put others at risk.

· Making HIV prevention education, substance abuse programs and condoms available in prison facilities. Every year since 1991, the rate of AIDS cases in prisons has been higher than that of the general population. At the end of 2003, the most recent year for which statistics are available, the rate of confirmed AIDS cases among the U.S. prison population was more than three times that of the general population (51 per 10,000 compared to 15 per 10,000) (U.S. Department of Justice, 2005). Nonprofit organizations, government and public health agencies must be allowed to discuss the relationship between substance abuse and HIV risk and to distribute condoms in prison facilities. Ensuring access to condoms in prisons would not only protect prisoners, but also the health and lives of the people in the communities to which they will return.

Expanding re-entry programs to help formerly incarcerated persons successfully transition back into society.

Prisons increasingly hold members of poor communities who are both under-educated and unemployable (Mauer, 1999; Golembeski and Fullilove, 2005). Expanded access to job training and educational programs, including college-level coursework, are necessary to improve their ability to function in society upon release. In addition, reentry programs are needed that address prisoners' HIV prevention, substance abuse, mental health and housing needs prior to their release.

3. Eliminate the marginalization of, and reduce stigma and discrimination against, black gay and other men who have sex with men.

 There is only one randomly controlled HIV prevention program, "Many Men, Many Voices", specifically designed for black MSM. Investing in research to produce interventions that will work for a diverse population of black MSM is essential to a national prevention effort that will reverse the course of the epidemic in this population. The CDC and the National Institutes of Health must aggressively establish a robust research portfolio to achieve this goal.

- The empowerment of community leaders and organizations has been a critical element in our nation's effort to combat the HIV epidemic. More support must be leveraged to develop, promote and sustain leadership among black MSM and in organizations serving them. Additionally, sustained investment must be made to build the capacity of organizations developed to serve black MSM in order to effectively change social networks, behavior and conditions contributing to HIV infections in this population.
- Efforts should be supported to address homophobia evidenced through stigma, discrimination and violence that creates vulnerability to behaviors and conditions associated with risk for HIV infection among black MSM.
- 4. Expand HIV prevention education programs, promote the early identification of HIV through voluntary, routine testing and connect those in need to treatment and care as early as possible.
 - Knowledge is a critical first step for stopping the spread of HIV, yet far too many African Americans do not have accurate information about how HIV is transmitted or can be prevented. Culturally relevant HIV prevention education programs are needed to help African Americans protect themselves and their partners.
 - Approximately one-quarter of the estimated 1.1 million Americans living with HIV/AIDS do not know that they are infected and may unknowingly transmit the virus to others. While proper safeguards must be in place to ensure that HIV testing is always voluntary, efforts to expand HIV testing will help greater numbers of people learn their HIV status, allow those who test positive to seek early treatment and reduce their risk of transmitting HIV.

- One of the main factors contributing to disparate treatment outcomes for African
 Americans is that many are diagnosed at late stages of disease, when it is often too late
 for medications to be effective.
- Community health workers (e.g., lay health advisors, peer counselors, health aides) are often critical bridges between physicians and patients in communities where mistrust of the health care system exists (IOM, 2002). They should be utilized as important resources for facilitating improved HIV/AIDS care. Many physicians lack the training and/or the life experience to understand the barriers that many HIV patients must overcome in order to maintain their health. Community health workers can serve as "interpreters" who can effectively communicate with patients about the care that is being provided. Such interventions have repeatedly been found to be effective in clinical settings in which a multicultural, multiethnic patient population is being served (IOM, 2002).
- 5. Reduce the number of HIV infections in the African-American community caused by injection drug use through the expansion of substance abuse prevention programs, drug treatment and recovery services, and clean needle exchange programs. For active injection drug users, in particular, clean needle exchange programs are needed to minimize the risk of infection through needle sharing.
 - About one in five (19%) new HIV infections among African Americans is from
 injection drug use (CDC, 2005). Education programs are needed to prevent people
 from using drugs in the first place, and substance abuse treatment programs are
 needed to help those currently using drugs to quit. For injection drug users who
 currently are addicted, clean needle exchange programs are needed to minimize
 the risk of infection from sharing unclean needles.

LOOKING FORWARD

This report was developed to examine the potential causes of excess HIV-related mortality in African Americans. In showing that HIV is one of a host of other health disparities that plague African Americans and by identifying social marginalization as a key cause of excess HIV-related mortality among African Americans, this report has made clear that policy and legislative reforms need to focus on structural interventions that will address the root causes of the overrepresentation of African Americans in the HIV/AIDS epidemic. Such reforms will not only improve efforts to prevent HIV, they will improve the chances of survival for those African Americans already living with HIV/AIDS.

The financing of HIV care in particular, and health care in African-American communities in general, was beyond the scope of this report. The problems of a continually growing HIV epidemic at a time when resources to combat it have been reduced were partially addressed, but need to be considered more fully moving forward.

In addition, the impact of stigma on HIV/AIDS among African Americans is an important area worthy of greater attention than was addressed herein. The development of interventions capable of creating tolerance, acceptance and compassion represents a significant and vital challenge for behavioral intervention specialists.

Finally, we feel that the recommendations in this report, if implemented, will further empower individuals to take personal responsibility for the prevention and spread of HIV/AIDS in the African-American community, even in difficult life situations.

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