The Elevated Burden of HIV/AIDS in the Southern United States
A guest article from the work of Susan Reif, Elena Wilson, & Kathryn Whetten

Our recent report, compiled by Duke University Center for Health Policy and Inequalities Research, explores the elevated burden of HIV/AIDS in the South, focusing on a number of targeted southern states: Alabama, Florida, Georgia, North Carolina, South Carolina, Tennessee and East Texas. Data from the CDC expose a greater impact in Southern states in terms of the proportion of the population affected in the region as well as a disproportionate share of the overall number of individuals with HIV in the US.1

There exists both a disproportionate burden in the South of new HIV infections, new AIDS diagnoses and HIV prevalence, the known number of individuals living with HIV. The rate of new HIV infections per 100,000 population was the highest in the Southern US, indicating that this region had the greatest proportion of residents testing positive for HIV in 2009.2 Additionally, 8 of the 10 US states with the highest rates of new HIV infections were located in the South.3

The same proportions are true for new AIDS cases, as the South accounted for nearly half (46%) of new AIDS diagnoses in 2009, and 8 of the 10 US states with the highest rates of new AIDS diagnoses were in the South.1 HIV prevalence was also disproportionately represented in the South, as the region accounted for 43% of people living with HIV in 2008, while only containing 37% of the population in the US.4

The targeted states in particular have been affected by the HIV epidemic in recent years and share common characteristics such as overall poorer health, high poverty rates, and a cultural climate that likely contributes to the spread of HIV and poor health outcomes for those infected. The CDC HIV surveillance statistics for the targeted states are particularly striking.5 The targeted states have the highest rates of new HIV infections compared to other regions of the country and to the rest of the Southern US.2 Additionally, 35% of new HIV infections were in the targeted states, which contain only 22% of the US population.1 The targeted Southern states also lead the nation in new AIDS diagnosis rates as compared to other regions of the country.1

Data gathered by the CDC and other data sources indicate that the Southern US has the highest HIV-related death rates and the highest level of HIV morbidity. The Southern states account for 8 of the 10 states with the highest HIV death rates (deaths per 100,000 population) out of states that provide relevant data.6 When HIV case fatality rates were examined (defined as the number of HIV-related deaths among those who are HIV-positive), results indicate that 8 of the 10 states with the highest case fatality rates were targeted Southern states.4 In addition, a study of morbidity among HIV-positive individuals found that individuals with HIV residing in the Southern US were significantly more likely to experience greater than one HIV-related medical event during the study period and were significantly less likely to have started antiretroviral therapy in comparison to individuals with HIV living in other geographic regions.7

There are a number of factors that may contribute to the impact of HIV in the South, including worse general health status, poverty, race and gender issues and cultural climate. In terms of general health status, the Southern US has some of the worst overall health rankings in the US, as 9 of the 10 states with the worst health ratings are in the South.8 In particular, the Southern region is also disproportionately affected by sexually transmitted diseases (STDs), which increase the likelihood of HIV transmission.9

Nine of the 10 states with the lowest median incomes are located in the South10 and 6 of the 10 states with the highest poverty levels are located in the South11, which has been associated with lower levels of education and poor health. In the South, lower income communities have been associated with higher HIV case fatality.12 High levels of poverty and disease also result in greater difficulty for Southern states to adequately respond to the health care and resource needs of their citizens. Examination of Medicaid spending for HIV care revealed that Southern states cover fewer individuals with HIV and pay less per individual with HIV than the national average, in addition to having the most restrictive Medicaid eligibility criteria and providing fewer Medicaid benefits than other regions in the country.13

New HIV Diagnosis Rate in 2009
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African Americans are disproportionately affected by HIV in the US in general and particularly in the South, where the majority of African Americans reside. A number of potential explanations for this phenomenon among African Americans have been identified, including a large proportion of African Americans with unstable housing and higher rates of incarceration among African Americans, HIV-related stigma issues, lack of trust in the government and health care systems and perceived racial discrimination in health care. The proportion of new HIV infections occurring among women is highest in the South and Northeast and African-American women are particularly affected in the South, as the majority of new HIV diagnoses (71%) among women in this region were among African-American women.

The cultural conservatism in the South, particularly among the targeted states likely plays a role in perceptions and experiences of stigma among people living with HIV in this region. Stigma has been shown to have negative effects on preventive behaviors and health outcomes. HIV-related stigma has been found to be greater in rural areas, which also have additional challenges in addressing HIV due to prolonged travel to access care, lack of financial resources and insufficient supply of HIV care providers. The South has the highest number of individuals with HIV living in rural areas so these issues are particularly salient in this region.

HIV epidemiological and outcomes data clearly demonstrate a disproportionate effect of HIV disease in the Southern US. These effects are particularly acute among the targeted states, which also have disproportionate rates of other diseases and poverty. Characteristics such as high poverty levels, lack of adequate insurance, HIV-related stigma and the culture of conservatism in the South provide some explanation for the greater impact of HIV in this region.

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All three researchers have degrees from UNC-CH and have worked closely with the UNC and Duke Centers for AIDS Research. We are so grateful to have our alumni producing such important and relevant work!

HIV Death Rate in 2009 (© Winston Gong)


The organization that sponsored the study is the Ford Foundation for the Southern HIV/AIDS Strategy Initiative. Their website is: http://southernaidstrategy.org/

HIV death rate per 100,000 person-year

7 Whetten K, Reif S, Whetten K, Murphy Racial/Ethnic Populations for Effective Care.