RACE AND HIV-TESTING ATTITUDES

IN

AMERICA'S FORGOTTEN AIDS EPIDEMIC

A thesis submitted to the
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By

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ABSTRACT

The proportion of Americans who consider HIV/AIDS to be the most urgent health problem facing the United States today has decreased in the past five years, while the importance of addressing the global AIDS threat has become the number one international health issue. At the individual level, a disconnect exists between knowing about AIDS and being aware of one’s personal HIV status – notably: Knowing whether or not one is HIV positive. Why is it that Americans have a demonstrated knowledge of a deadly epidemic with significant global and future implications, but have an increased ignorance of their own personal HIV status? What compels a person to get tested for HIV?

Whereas this question was once rooted in stigma and misperception – two things that are still certainly of influence in testing habits – we contend it is now predominately rooted in the complexities of race and ethnicity. Recent studies have shown that the domestic AIDS epidemic has disproportionately fallen on the shoulders of minority demographics within the United States. This thesis analyzes the reality of the domestic AIDS burden on minority populations and considers the circumstances of public perception and individual behavior in regards to HIV-testing habits.
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INTRODUCTION

From the end of 1999 through the end of 2003, the number of people in the United States living with AIDS rose from 311,205 to 405,926—an increase of 30% -- and in the past three years alone, the number of AIDS diagnoses has been consistently over 40,000 every single year.\(^1\) Since the epidemic was recognized in 1981, it has killed more than half a million Americans, a total exceeding all American combat-related deaths in all wars fought in the 20th century.\(^2\) To think that AIDS is anything but an epidemic is purely wrong. It is as much a global epidemic that affects developing regions - increasing poverty levels and atrophying the most basic of social services – as it is a domestic epidemic that threatens local communities and strains our public health systems. Whether it is in the United States or abroad, HIV transmission and the spreading of the AIDS epidemic is, entirely, preventable.

The Human Immunodeficiency Virus (HIV), the virus that causes Acquired Immune Deficiency Syndrome (AIDS), is an inherently behavioral virus. That is to say, HIV is most often transmitted in the United States through uninformed or misinformed individual behaviors and perceptions that are most directly related to unprotected sex and exchange of infected intravenous drug needles. Blood transfusions and perinatal transmission\(^3\) (also known as mother to child transmission, or MTCT) are not at all


\(^3\) According to the Centers for Disease Control’s (CDC), “Compendium of HIV prevention interventions with evidence of effectiveness” (Atlanta, Georgia: US Department of Health and Human Services, CDC, March 1999): Nearly all transmission of HIV through transfusion of blood or blood products occurred
common transmission methods in the United States, though are certainly relevant to prevalence levels in other countries which are not in our thesis’ purview. Crucial to individual behavior in the face of the HIV virus is personal knowledge about one’s health status in regards to HIV— notably, knowing of one’s HIV status. The only way for a person to know of their HIV status is to get tested for it. There is no cure for HIV or AIDS.

Even though more than one-third (36%) of Americans believe AIDS is the “most urgent health problem facing the world today,” ranking second behind cancer (41%) concern about HIV/AIDS in the United States has been falling. In fact, the proportion of Americans who consider HIV/AIDS to be the "most urgent health problem facing this nation today" has decreased from 38% in 1997 to 17% in 2002.  

At the individual level, a disconnect exists between knowing about AIDS and being aware of one’s personal HIV status – notably: Knowing whether or not one is HIV positive. The impetus for our central question is based on just these facts. Why is it that Americans have a demonstrated knowledge of a deadly epidemic with significant global and future implications, but have an increased ignorance of their own personal HIV status? Why aren’t more American’s getting testing for HIV? It is not enough to ask this question in such general terms, especially considering that recent data demonstrably

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before screening of the blood supply for HIV antibody was initiated in 1985. The number of persons reported with AIDS who were exposed through blood transfusions was 284 in 2000, down from a peak of 1098 in 1993. The number of perinatally acquired AIDS cases peaked in 1992 (901 cases), followed by a sharp decline through December 1999. In 1999, 144 cases of perinatally acquired AIDS were diagnosed.  

shows that certain demographic groups based on ethnicity and race are baring the burden of the domestic AIDS epidemic in terms of HIV transmission rates and percentage of people living with AIDS.

With recent and reliable statistical information, we are able to consider a more specific, but no less disturbing, query: With minority populations – those of black and Hispanic descent -- being disproportionately affected by HIV transmission in terms of vulnerability and increased risk of exposure to the virus (consider that 61% of the national HIV/AIDS caseload is within the black and Hispanic populations alone), are they being tested for HIV more?

*What is the relationship between race, ethnicity and HIV-testing?*
BACKGROUND

Contextual Framing

The linkage of social perception and HIV-testing is a crucial element in understanding the foundation in how we pursue our central question of research. The question centers on attitudes, perceptions, individual decisions, fears, and misinformation that have surrounded the issue of AIDS and continues to plague national awareness levels. To understand today’s attitudes on HIV-testing and personal awareness of HIV-status, we considered the evolution of AIDS perceptions since the discovery of AIDS in 1981 – and the nature of the literature and media since then. As such, we framed our review in scholarly research from the last two decades that addresses HIV-testing attitudes in the context of social perceptions and stigmas about AIDS at the time the studies were done. We note that, where there has been much work on analyzing the statistical reality of those living with HIV and AIDS (which we will review shortly), only a few studies have focused on HIV-testing attitudes.

1980s: Genesis of a Domestic Epidemic

By the mid-1980s, large swaths of society -- including the Reagan White House -- began referring to AIDS as a ‘gay plague’ \(^5\) – which in and of itself proved to be a significant influence on attitudes and perceptions about the virus which led to strong opposition to HIV-testing for two primary reasons of note:

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1. *Stigma*: Literature from the late 1980s defined the symbolic basis of AIDS attitudes as involving “concern about what AIDS symbolizes,” namely “homosexual promiscuity and moral decadence.” The symbolic nature of the AIDS virus in the early years of the American epidemic is furthered by other authors’ opinions that note how “citizens often organize their political opinions in terms of highly visible social groups.”\(^7\) Because “public perceptions of the epidemic were shaped by the disproportionate impact of AIDS on gay and bisexual men in the U.S…AIDS attitudes can reasonably be operationalized in terms of heterosexuals’ attitudes toward homosexuality.”\(^8\) The thought that the virus only affected homosexual men had obvious consequences for the potential impact of the virus on the heterosexual community – particularly HIV-testing rates\(^9\);

2. *Misinformation*: One thing to note about the early days of the virus’ spread in the US that much of the literature alludes to, is that beyond the ‘gay plague’ stigma, there were also perceptions that the actual HIV-test was inaccurate and the

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\(^6\) Please see *Terms* section for our definition and notes on the term “Stigma.”


\(^8\) Jaffe,2004.

confidentiality of results could not be maintained. This also had an impact on HIV-testing rates.  

At the individual level, the first study that truly focused on attitudes towards an individual wanting, or not wanting, to know their HIV-status comes from a 1985 Department of Medicine study at the University of Pittsburgh. Beginning in the latter part of 1985, 2,047 gay and bisexual men who were enrolled in the “Pitt Men's Study,” were invited by mail to learn the results of their HIV test. Participants were asked to complete and return a questionnaire designed to assess the factors influencing their decision about learning the results, recent sexual behavior, knowledge about AIDS, and attitudes toward AIDS risk reduction. Of those men, fifty-four (54%) percent of respondents learned their results. The most frequently cited reason (at ninety percent) why men wanted their test results was to determine if they had been infected with HIV. Of those who declined, thirty percent cited concerns about the psychological impact of learning about a positive result as being the most important factor for their decision. The two most frequently selected reasons for declining were:

1. The belief that the test is not predictive of the development of AIDS;

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11 We emphasize ‘HIV-status’ because it is important to note that there is a substantial body of literature that focuses on attitudes toward other sexually transmitted diseases and infections that, though sharing some findings with HIV-related studies, fall short in controlling for HIV-specific attitudes.


13 At the time of the study, linkages between HIV and AIDS were neither as well-known nor scientifically justified to any significant degree.
2. Concern about the worry that a positive result would produce (48 percent).\textsuperscript{14}

Thus, at a personal level, there were significant psychological deterrents that impeded individuals’ (in the case of the early Pitt study, gay and bisexual men) wanting to know their HIV-status. Harold Jaffe, former director of AIDS initiatives at the Centers for Disease Control, adds to the context of 1980s attitudes towards HIV-testing by suggesting that at scientific and perhaps even bureaucratic levels, because treatment was not available by health-care providers, there was little incentive to learn one's infection status.

So, in the early days of the virus, with no treatment options in a highly stigmatized society that readily embraced the ‘gay plague’ terminology and marginalized the future epidemic to a minority group of homosexual men, the question became: What incentive do I have in learning my HIV-status? For a growing number of men, the answer disturbingly became: Very little.\textsuperscript{15} More disturbing was that at the same time most Americans perceived AIDS as a ‘gay plague,’ the epidemic was about to besiege the heterosexual community as well.

\textsuperscript{14} Lyter, et.al.

\textsuperscript{15} The literature of the time suggests, heterosexual men and women alike, had almost no incentive to get tested at all because of the stigma associated with the virus – this is, at best, a qualified speculation however. There is a notable hole in data reports to support such a conclusion: Most nationally representative studies of HIV-testing of the entire US population (i.e. heterosexual and homosexual groups) were not adopted until the mid-1990s (when the CDC’s National Health Interview Survey – which is where our thesis data comes from – incorporated HIV-testing questions into its surveys beginning in 1995). In our opinion, at the research-level, the 1980s saw the focus of its scientific inquiry shaped by the stigma of the time.
Mid-1990s: The End of the Gay Plague

Where ignorance, misinformation, and stigmatization defined AIDS attitudes and perceptions in the 1980s, the 1990s saw an explosion of knowledge, messages, and increased awareness of the AIDS epidemic. This explosion, in terms of literature on HIV-testing attitudes however, does not offer very much for our topic. Admittedly, there is a dearth of information in the literature toward HIV-testing attitudes from roughly 1991 to 2000 – with exception to the National Health Interview Surveys (NHIS) which, among a host of other health-related issues, began to statistically monitor the changing nature of AIDS perceptions in 1996 when it incorporated questions related to HIV-status and AIDS awareness into its surveys (Note: Fifteen years after the discovery of AIDS in the United States). It is with these surveys, however, that we find a growing body of literature, media messages, and research that aims at the ‘globalization’ of the AIDS virus (i.e. campaigns and studies aimed to educate Americans about the reality of HIV/AIDS in the developing world). To varying degrees – with only a handful of studies on the topic – there was an interesting shift in attitudes toward HIV-testing.

The 1990s American public began to change its perceptions about AIDS being a ‘gay disease’ and, in fact, began to see it as a behavioral, preventable, disease that threatened sexually active individuals – regardless of their sexual orientation. There is some very interesting work done in the mid-1990s regarding the influence of celebrity-involvement and the ‘Hollywoodizing’ of the virus (i.e. Magic Johnson’s revelation of his HIV-status, the death of Arthur Ashe, movies such as Philadelphia, and plays such as...
‘Rent,’ etc.) that had positive impacts on decreasing the stigma of AIDS and increasing the need for personal awareness of HIV-status.\textsuperscript{16} Studies done by Gregory Herek (a professor of psychology at the University of California at Berkeley and a respected researcher in epidemic psychology) offer insights – notably, some of the only during the time-- on HIV-testing attitudes taken from surveys done between 1990 and 1997: They contend that during this period, attitudes towards \textit{wanting} an HIV-test were generally motivated by concern of personal HIV-contagion (which was marked progress from years prior and certainly a victory toward de-stigmatizing the virus); and that motivation to \textit{not have} an HIV-test was based primarily on respondents not wanting association with, what Herek refers to as, ‘social outgroups’ such as homosexual and bisexual populations\textsuperscript{17}. Their statistical analysis found individual perception shifting in a positive way in terms of personal HIV-awareness in some groups – which they credit to increased “safe sex” messaging of the early nineties.

The ‘gay’ stigma of the virus, for a brief period of time in the mid-1990s seemed to have been tamed to some degree and this impact on HIV-testing attitudes is most strongly linked to literature in the field of psychology that focuses on the shifting of AIDS away from being a ‘gay plague.’ Better quantitative studies about HIV-testing attitudes at the time come from research on the impact of anti-retroviral drugs.


\textsuperscript{17} Herek in G. Maio & J. Olson (Eds.), \textit{Why we evaluate: Functions of attitudes} Mahwah, NJ, Erlbaum Press, pp. 325-364, 2000.
Late 1990s: Anti-Retroviral Drugs

The development and availability of Anti-Retroviral Drugs (ARVs) in the United States in 1996 led to a beginning of a marked decrease in AIDS deaths per year as well as a decrease in diagnosed AIDS cases. Both of these are important elements to note as they both directly relate to HIV-testing attitudes in various ways. The effect of ARVs on HIV-testing is complex – and there is a host of literature that analyzes the physiological and molecular considerations to this end (the science of which we are not qualified to constructively comment on, however we note various papers in the annotated bibliography) – because the therapies produce both a beneficial and a detrimental effect at the epidemic and individual levels.

ARVs reduce the HIV-viral load in patients who are on therapy – and lower viral loads have been wrongly associated with decreased rates of transmission\(^{18}\) because they allow HIV-positive individuals to live longer. When fewer people are dying of AIDS and, most importantly, do not exhibit symptoms of illness nor changes in quality of life that have long been associated with the virus, overall social perceptions on individual risk of HIV-infection are significantly decreased.\(^{19}\) Thus, as some studies have shown, an increase in ARV use can lead to an increase in risky behavior by HIV-positive individuals (who may not know of their HIV-status) and individuals who are vulnerable


to contact with HIV-positive individuals; as well as a decrease in wanting to know of one’s individual HIV-status.\textsuperscript{20}

The fact remains that there are more people living with AIDS in the United States now than ever before. But with wide use of ARVs, particularly by people who are HIV-positive and in positions of celebrity, for example, it does not appear that the epidemic is a true health threat; and if people do not see something as a threat to their personal health, what reason do they have to be tested for it?\textsuperscript{21} This question seems to have dominated HIV-testing attitudes in the late 1990s.

2000 and Beyond

Recent research on domestic HIV/AIDS issues has focused on the demographic impact(s) the virus is creating in the United States. Take, for example, the fact that African-Americans and Hispanics have been disproportionately affected by HIV/AIDS in the past ten years – with 1996 being the first time that blacks overtook whites in new HIV diagnoses, this demographic disparity has only increased in these past ten years.\textsuperscript{22}

As an introduction to our own data analysis in the upcoming sections, we contend that the academic and media focuses on the supposed demographic burden of the virus (i.e. the disproportionate increase in HIV-diagnoses in African-American and Hispanic populations) could create another stigma associated with AIDS in the United States that

\textsuperscript{21} Jaffe, 2004.
could have a negative impact on HIV-testing patterns of the population as a whole. History would merely be repeating itself, just with a different perception: Speaking in generalities, the thought in the 1980s was that only gay men got AIDS, in the 1990s AIDS could only happen abroad, could it be that AIDS is now becoming a ‘black’ epidemic in the eyes of the un-tested (but equally vulnerable)? It very possibly could, and the literature of the past twenty years has suggested just that. Our own analysis will now consider it in more detail.
TODAY’S DOMESTIC EPIDEMIC

In the early days of HIV’s discovery and existence in the United States, the virus disproportionately affected white men (and as numerous studies have shown, homosexual men more specifically). In fact, in the 1981-1987 period men accounted for nearly 92 percent of all diagnosed AIDS cases in the US and, overall, whites accounted for nearly 60 percent (59.7%) of the overall AIDS caseload. Following the 1981-1987 period, however, the ‘typical’ patient description of being a white, gay, male, soon began to change just as the overall scale of the virus began to expand to disturbing levels (note, for example, that in 1981 there were about 50,000 AIDS cases in the US and by December 31, 2000, 774,467 persons had been reported with AIDS…448,060 of these had died). The prevalence of the virus began to permeate into other demographics which, even to this day bear the brunt of the virus just as they began to increasingly succumb to its transmission in the past 25 years of its discovered existence. Consider the following demographic shifts:

- Women: In the first six years of the virus’ discovery in the US, women only accounted for eight percent (8%) of the overall case load, by 2000 women represented 22.6 percent (22.6%) of the overall caseload: Juxtapose this against the fact that the demographic burden of the virus decreased in men from a high of 92% in 1986 to a low of 77.4% in 2000;

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• **Black (non-hispanic):** Black, non-hispanic, people represented 25.5% of the first measured caseload of the virus (1981-1986), by 2000, this same demographic represented nearly 45% (44.9%): During this same time period, white (non-hispanic) people saw their percentages decrease from 59.7% in the 1981-1986 time period, to a low of 34% by 2000. It should be noted that blacks statistically overcame whites in HIV transmission rates in 1996 when the black demographic had more cases of HIV than any other race/population in the United States\(^24\);

• **Hispanic:** Hispanics saw their numbers take a disproportionate increase from the earlier 1981-1987 time period, when their demographic represented 14% of the overall AIDS caseload to nearly 20% by the year 2000.

The importance of understanding HIV-testing attitudes has never been more important. The AIDS epidemic in the United States is real, and it is affecting all demographics.

METHODOLOGY

Data Source

The data set considered here was produced and maintained by the National Center for Health Statistics (NCHS), a bureau of the Centers for Disease Control. NCHS is responsible for, as its mission statement states, providing statistical information that guides “actions and policies to improve the health of the American people.” NCHS is the principle health statistics agency of the United States.

Data Set

- History: The data set for this thesis comes from the 2003 National Health Interview Survey (NHIS). NHIS is a multi-purpose health survey conducted annually by NHCS. NHIS is considered the principle source of statistical information for monitoring the health of the civilian, noninstitutionalized, population of the United States. NHIS was formulated through the passing of the National Health Survey Act of 1956. The Act provided for a “continuing survey and special studies to secure accurate and current statistical information on the amount, distribution, and effects of illness and disability in the United States and services rendered for or because of such conditions.”25 The actual survey – called the National Health Interview Survey – was initiated in July 1957.

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• **Design**: NHIS is a cross-sectional household interview survey. Sampling and interviewing are continuous throughout each year. The sampling plan follows a multistage area probability design that permits the representative sampling of households. The first stage consists of a sample of 358 primary sampling units (PSUs) drawn from approximately 1,900 geographically defined PSU's that cover the 50 States and the District of Columbia. A PSU consists of a county, a small group of contiguous counties, or a metropolitan statistical area. The households selected for interview each week in the NHIS are a probability sample representative of the target population. NHIS data are collected annually from approximately 43,000 households including about 106,000 persons. Survey participation is voluntary. The annual response rate of NHIS is greater than 90 percent of the eligible households in the sample.26

• **Questionnaire**: The overall NHIS consists of two parts: (1) a set of basic health and demographic items (known as the Core questionnaire), and (2) one or more sets of questions on current health topics. The Core questionnaire has remained the same for nearly thirty years while the current health topics change from time to time depending on data needs. For our purposes, we note again that the first series of ‘current health topic’ questions related to HIV testing and knowledge

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26 Ibid.
about the AIDS virus began to appear in the 1996, and subsequent, NHIS surveys.27

- **Collection:** Data are collected through a personal household interview conducted by interviewers employed and trained by the U.S. Bureau of the Census according to procedures specified by NCHS28;

- **Sample (N) Overview:** The 2003 NHIS consists of 35,921 households, which yielded 92,148 persons in 36,573 families.

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27Examples of both Core and Current Health Topics questions are located in Appendix A.
28NCHS, a detailed overview of the questionnaire process is available at, Internet reference: http://www.cdc.gov/nchs/nhis.htm#Methods
VARIABLE DESCRIPTIONS

Dependent Variable

HIVTST

The dependent variable used is labeled, HIVTST, in the 2003 NHIS. The HIVTST variable answers the question: Have you ever been tested for HIV? Possible responses are: ‘Yes,’ ‘No,’ ‘Refuse to answer’ and ‘don’t know.’

- 23,578 people answered ‘yes’ or ‘no’ to this question;
- Of those who answered this question, 46.02 percent of the sample have been tested for HIV; 53.98 have not

The relationship of this variable with other elements of the data acts as the center of our question of analysis.

Independent Variables

CHNSADSP, RACE, SEX

CHNSADS: Chances of getting HIV – This variable is, perhaps, the most important one in our analysis on perception. It asks: “What are your chances of getting HIV, (the virus that causes AIDS)?” And gives the options of ‘high,’ ‘medium,’ ‘low,’ or ‘none:’
• 74.6 percent of the entire 2003 NHIS sample felt that their chances for getting HIV were ‘none;’

• 22.16 percent of the sample, felt their chances were ‘low;’

• 1.37 percent felt their chances were ‘medium;’

• Only .56 percent felt their chances were ‘high.’

This is one of the few questions of the 2003 NHIS survey that allows for such subjective answers from sample respondents but certainly provides for a unique perspective in understanding individual perception and responsibility in the face of such a significant health threat as HIV/AIDS. This variable provides for some very interesting results when considered with the dependent variable during our upcoming regressions.

**RACE:** *What racial/ethnic group do you most associate yourself with?* – This variable is used both as a descriptive variable as well as, during our regression, an independent variable.

• 82.18 percent (19,376) of sample respondents are white (Hispanic included);

• 13.98 (3,296) percent are black;

On closer analysis using another race variable (HISPANIC) which provides for separation of ‘white’ into ‘of hispanic’ and ‘of no hispanic’ origins: 16.78 (3,957) of
respondents answered that they consider themselves to be of Hispanic origin (country of origin not specified).

One of the central aims of our thesis is to understand the relationship between the demographic and racial burden of the HIV virus in the United States (in terms of HIV/AIDS caseload) and the individual HIV perceptions and testing decisions of individuals as part of racial and ethnic groups. This variable will prove most useful in better understanding this relationship during our regressions.

SEX: What is the gender of the respondent? On its own, this variable only provides further description of the data:

- Males accounted for 42.25 percent of the sample data;
- Women accounted for 57.75 percent.

In combination with the aforementioned independent variables and the dependent variable, we will be able to test whether, for example, black women – whose HIV transmission rates represent the highest of any other demographic group in the country – get tested or, equally important, whether they perceive their chances of getting HIV/AIDS to be higher than other groups.
Descriptive Variables

WHYTST, REATST_C

**WHYTST**: *Reasons for not testing* – This variable offers ten different options from those associated with perceptions (‘it’s unlikely that I’ve ever been exposed to HIV’) to one related to a phobia (‘I don’t like needles’). During our regression (as will be reviewed shortly) we found that because of small response sizes and statistical insignificance of many of the responses, this variable does very little in supporting, or not supporting, our thesis. As such, it is only included here to further describe the data and is most relevantly able to do so after most all of the ten options for response are omitted.

If a person in the sample already had an HIV test, they would not answer this question – so 46.02 percent (the number of people had ever been tested for HIV) did not answer. We thought there would be at least some diversity in responses from the remaining 53.98 percent of the respondents, however, even with ten possible reasons for *not* getting tested, 53.47 percent of the respondents replied that ‘They are Unlikely to have been exposed to HIV.’ The second most populated response, ‘Afraid to find out if HIV positive’ received just 75 replies total, representing just .32 percent of the sample.

We hypothesize here that the overwhelming majority of people who do not get tested for HIV think that they have never truly been exposed to it. If that is truly the case, or not, can not be deduced from any of the data provided by the NHIS at this point and, after some degree of review, little data is out there to further analyze such a query.
**REATST_C: Reasons for Testing**—The REATST_C affords us an opportunity to analyze, for those who answered ‘YES’ to the Dependent variable, why they decided to get tested for HIV. There are ten options, five of which we found most interesting and useful for further describing our sample. The top five reasons given by 2003 NHIS sample respondents (followed by percentage for that question) for being tested for HIV are:

1. Part of a routine medical check-up, 29.39%;
2. Pregnant/delivered a baby, 17.30%;
3. Wanted to find out if infected, 11.71%;
4. For health or life insurance coverage, 7.01%;
5. Possible exposure through sex/drug use, 4.51%.

We note that only 21 people, representing .20 percent of this question’s respondents felt ‘concern for giving HIV to someone’ was the reason for their HIV test.
WORKING THE DATA\textsuperscript{29}

Questions

The following general questions formulate the core of our statistical data analysis and will be reviewed in more detail in the coming sections:

\begin{itemize}
  \item What is the relationship between HIV-testing and individual perceptions of risk in contracting HIV?
  \item How do the individually defined racial groups (whites, blacks, Hispanic) perceive their chances of getting HIV compared to other racial groups?
  \item What is the relationship between testing patterns and race?
  \item Have whites/blacks/Hispanic been tested more for HIV than other racial groups?
  \item Does race, ethnicity, or gender influence HIV-testing decisions?
\end{itemize}

\textsuperscript{29} Statistical Analysis Software (SAS) was used for all variable regressions.
Chances

**Question:** Is there a statistically significant association between whether or not an individual in the sample has ever had an HIV test and whether or not they perceive they have any chance of contracting HIV?

*Dependent Variable:* HIVTST

*Independent Variable:* CHNSADSP

*NOTE:* Due to smaller frequencies that we felt could unduly bias the results, the top three options associated with subjective likelihood of the CHNSADSP variable (high, medium, low) were consolidated and recoded as a binary to be defined as ‘any perceived chance of contracting HIV.’

*Test:* Chi-Square

*Results:*

**Table 1A: Chi-Square: Association**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>470.9216</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 1A we reject the null hypothesis and conclude:

- There is a statistically significant relationship between HIV-testing and perceived risk of getting HIV.

**Table 1B: Probability Measurement**

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
</tr>
</thead>
</table>

24
Table 1B allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of 1.944 we are able to conclude:

- Those in the sample who feel they have a perceived chance of getting HIV are 94% more likely to get tested than those who feel they do not have a perceived chance.
**Question:** How do the individually defined racial groups (whites, blacks, Hispanic) perceive their chances of getting HIV compared to other racial groups?

**Recoding:**

- For ease of use purposes, the ‘RACE’ variable was separated into two parts, isolating ‘white’ (non-hispanic) and ‘black’ from the rest of the race options available on the survey. The reason for this adjustment is to pursue clarity of our central question related to minority perceptions and HIV testing;

- The ‘Hispanic’ (country not specified) variable (ORIGIN_I) is a separate question from the ‘RACE’ question and is a binary variable.
White

**Question:** Do individuals in the whites demographic perceive their chances of getting HIV higher than other racial/ethnic groups?

*Dependent Variable:* WHITE

*Independent Variable:* CHNSADSP

*Test:* Chi-Square

*Results:*

**Table 2A: Chi-Square: Perception**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>84.3037</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 2A we reject the null hypothesis and conclude:

- There is a statistically significant relationship between ‘white’ and the perceived risk of getting HIV.

**Table 2B: Probability Measurement: Perception**

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>.7070</td>
<td>.6564</td>
<td>.7615</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 2B allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of .7070 we are able to conclude:
‘Whites’ perceive that their perceived risk of getting HIV is 30% lower than other racial/ethnic groups.

**Question:** Since ‘whites’ perceive their risk of getting HIV as lower than other racial/ethnic groups, - are ‘whites’ more likely to get tested than other racial/ethnic groups?

**Dependent Variable:** WHITE

**Independent Variable:** HIVTEST

**Results:**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>499.1435</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 2C we reject the null hypothesis and conclude:

- **There is a statistically significant relationship between ‘white’ and HIV-Testing.**

**Table 2D: Probability Measurement: HIV-Testing**

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>.4636</td>
<td>.4330</td>
<td>.4964</td>
<td>23,578</td>
</tr>
</tbody>
</table>
Table 2D allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of .4636 we are able to conclude:

- Compared to other race/ethnic groups, ‘Whites’ are 46% less likely to be tested for HIV.
Black

*Question:* Do individuals in the ‘blacks’ demographic perceive their chances of getting HIV higher than other racial/ethnic groups?

*Dependent Variable:* BLACK

*Independent Variable:* CHNSADSP

*Test:* Chi-Square

*Results:*

**Table 3A: Chi-Square: Perception**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>110.1570</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 3A we reject the null hypothesis and conclude:

- *There is a statistically significant relationship between ‘black’ and their perceived risk of getting HIV.*

**Table 3B: Probability Measurement: Perception**

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td><strong>1.5358</strong></td>
<td>1.417</td>
<td>1.6647</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 3B allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of 1.5358 we are able to conclude:

---

30 Per a previous note, ‘black’ and ‘white’ respondents were separated from other racial/ethnic identifications.
• ‘Blacks’ perceive that their perceived risk of getting HIV is 53% higher than other racial/ethnic groups.
**Question:** Since black people perceive their risk of getting HIV as higher than other racial/ethnic groups, are they more likely to get tested than other race/ethnic groups?

**Dependent Variable:** BLACK

**Independent Variable:** HIVTEST

**Results:**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>551.5402</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 3C we reject the null hypothesis and conclude:

- There is a statistically significant relationship between ‘black’ and HIV-Testing.

**Table 3D: Probability Measurement: HIV-Testing**

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>2.4495</td>
<td>2.2778</td>
<td>2.6557</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 3D allows for a closer analysis using the Odd-Ratio values. With a comparatively high Odds-Ratio value of 2.4495 we are able to conclude:

- Compared to other race/ethnic groups, black Americans are nearly one and a half times (144%) more likely to be tested for HIV.
Hispanic

**Question:** Do ‘Hispanics’ perceive their chances of getting HIV higher than other racial/ethnic groups?

*Dependent Variable:* HISPANIC

*Independent Variable:* CHNSADSP

*Test:* Chi-Square

**Results:**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>60.7421</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 4A we reject the null hypothesis and conclude:

- There is a statistically significant relationship between ‘Hispanic’ and the perceived risk of getting HIV.

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>.7130</td>
<td>.6547</td>
<td>.7766</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 4B allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of .7070 we are able to conclude:
• ‘Hispanics’ perceive that their perceived risk of getting HIV is nearly 30% (29.7) lower than other racial/ethnic groups.
**Question:** Since ‘Hispanics’ perceive their risk of getting HIV as lower than other racial/ethnic groups - are ‘Hispanics’ more likely to get tested than other race/ethnic groups?

*Dependent Variable:* HISPANIC

*Independent Variable:* HIVTEST

**Results:**

Table 4C: Chi-Square: HIV-Testing

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>161.1643</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 4C we reject the null hypothesis and conclude:

- There is a statistically significant relationship between ‘Hispanic’ and HIV-Testing.

Table 4D: Probability Measurement: HIV-Testing

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>1.5572</td>
<td>1.4538</td>
<td>1.6679</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 4D allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of 1.5572 we are able to conclude:
• Compared to other non-hispanics, ‘Hispanics’ are nearly 56% (55.73%) more likely to be tested for HIV.
Gender

**Question:** Do ‘Men’ perceive their chances of getting HIV higher than women?

*Dependent Variable:* SEX

*Independent Variable:* CHNSADSP

*Test:* Chi-Square

*Results:*

**Table 5A: Chi-Square: Perception**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>82.9308</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 5A we reject the null hypothesis and conclude:

- *There is a statistically significant relationship between males and their perceived risk of getting HIV compared to females.*

**Table 5B: Probability Measurement: Perception**

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>1.3211</td>
<td>1.2441</td>
<td>1.4028</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 5B allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of 1.3211 we are able to conclude:
• Males perceive that their perceived risk of getting HIV is nearly 33% higher than females.
Question: Since males perceive their risk of getting HIV as higher than females - are males more or less likely to get tested than females?

Dependent Variable: MALE

Independent Variable: HIVTEST

Results:

Table 5C: Chi-Square: HIV-Testing

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Probability</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>1</td>
<td>46.5066</td>
<td>&lt;.0001</td>
<td>23,578</td>
</tr>
</tbody>
</table>

With the results computed and presented in Table 5C we reject the null hypothesis and conclude:

- There is a statistically significant relationship between male and HIV-Testing.

Table 5D: Probability Measurement: HIV-Testing

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Value</th>
<th>95% Confidence</th>
<th>Limits</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case-Control (Odds-Ratio)</td>
<td>.8347</td>
<td>.7924</td>
<td>.8792</td>
<td>23,578</td>
</tr>
</tbody>
</table>

Table 5D allows for a closer analysis using the Odd-Ratio values. With an Odds-Ratio value of .8347 we are able to conclude:

- Compared to females, males are almost 17% less likely to be tested for HIV.
Chi Square Summary/Analysis

As suggested by the data results of our ‘Perception Tables’ (1B, 2B, 3B, 4B, and 5B respectively) we are able to summarize:

1. Those in the sample who feel they have a perceived chance of getting HIV are 94% more likely to get tested than those who feel they do not have a perceived chance;

2. ‘Whites’ perceive that their perceived risk of getting HIV is 30% lower than other racial/ethnic groups – ‘Hispanics’ share a similar perceived risk percentage with 29.7%;

3. ‘Blacks’ perceive that their perceived risk of getting HIV is 53% higher than other racial/ethnic groups;

4. ‘Males’ perceive that their perceived risk of getting HIV is nearly 33% higher than ‘Females.’

As suggested by our ‘HIV-Testing’ Tables (2D, 3D, 4D, and 5D, respectively) we are able to summarize:

1. Compared to other race/ethnic groups, ‘Whites’ are 46% less likely to be tested for HIV;

2. Compared to other race/ethnic groups, ‘Blacks’ are nearly one and a half times (144%) more likely to be tested for HIV;
3. Compared to other non-Hispanics, ‘Hispanics’ are nearly 56% (55.73%) more likely to be tested for HIV;

4. Compared to ‘Females,’ ‘Males’ are almost 17% less likely to be tested for HIV.

Chi-Square Perception and HIV-Testing Analysis

- It appears that within the black population of the United States, there is a generally shared demographic perception that the chances of HIV-contraction is higher and, most encouragingly, this perception is met with higher HIV-testing rates. Knowledge of one’s individual HIV-status is critical for addressing the national epidemic;

- Hispanics and whites appear to have similarly low rates of perceived risk of HIV-infection compared to other groups. However, unlike whites in their comparison with them, the Hispanic demographic maintains higher HIV-testing rates. Similar to the black demographic, the Hispanic population’s increased testing rates is most encouraging considering that the supposed burden of the AIDS epidemic falls on the shoulders of these two minority groups in the United States;

- Whites appear to have lower perceived risks of contracting HIV and are, in fact, less likely to be tested for it. There is a hauntingly disturbing problem with white perceptions and white testing habits – that is rooted in the very fact that the AIDS epidemic, if anything, has the ability to impact every single person. Where our words fail to bring this troubling thought to bear here due to the descriptive
statistics we are informing the reader with, we will revisit it shortly in our more in-depth regression analyses;

Comparing individual characteristics of one particular demographic against those of another provides some cross-racial/ethnic contexts in which to view the question of HIV-testing attitudes. What is more illuminating and more striking, however, is how the individual characteristics of race and ethnicity play into individual testing habits. It is one thing to compare groups to other groups, which is what our chi-square analysis provides for, but it is an entirely different analysis to compare individuals within their group, by virtue of their group’s characteristics.
REGRESSION ANALYSIS

Probit Model

The probit model regression is best to incorporate when the dependent variable takes on only two values. In the case of our analysis, the dependent variable of focus, HIVTEST, is binary in nature and, indeed, only offers two values of response (yes and no).

Table 6: Probit Regression

| Row # | Variable | DF | Parameter Estimate | Standard Error | t - Value | Pr > |t| |
|-------|----------|----|-------------------|----------------|-----------|-------|---|
|       | Intercept| 1  | .46129            | .01644         | 28.05     | <.0001|
| 1     | Chances  | 1  | .16197            | .00741         | 21.85     | <.0001|
| 2     | White    | 1  | -.08174           | .01648         | -4.96     | <.0001|
| 3     | Black    | 1  | .14881            | .01820         | 8.18      | <.0001|
| 4     | Hispanic | 1  | .15215            | .00855         | 17.80     | <.0001|
| 5     | Male     | 1  | -.04569           | .00641         | -7.13     | <.0001|

N = 23,578

Based on results derived from the probit regression and presented in Table 6, we offer the following analysis with an introductory note: Without exception, all independent variables that were included in the regression and have been central to our thesis question (CHANCES, WHITE, BLACK, MALE), created results that were highly statistically
significant -- with Pr > |t| values of <.0001: It is clear that these variables are very closely associated with the dependent variable.

How they are associated is quite illuminating and offers strongly suggestive evidence that certain characteristics of individuals either through the subjective vagaries of their perceptions or the complexities of those immeasurable things associated with their race or ethnicity determine whether or not a person will, or will not, get tested for HIV.
Chances

- **Table 6, Row 1**: A person who has any perceived chance (note *SELF*-perceived chance) of getting HIV is 16% more likely to be tested for HIV.

For our purposes, we must admit that this challenges our own, admittedly cynical, perceptions about people who felt they might be at risk of getting HIV prior to successfully running this regression. However, our own cynicism aside, we must approach this statistical conclusion with careful and critical scrutiny.

In as much as it is an encouraging sign that people who have a perceived chance of getting HIV have a 16% higher chance of getting tested (or are .1619 more likely to get tested), we must also keep in mind that with over 40,000 new cases of HIV in the United States in 2004 alone, 16% is simply not good enough. Another way to consider this is that the output generated from this analysis strongly suggests that there is a linkage between perceived risk and HIV-testing that is 16% strong. This number (16%) should not be this low. In light of a very real domestic AIDS epidemic, public policy should focus on insuring that anyone who has a perceived risk of getting HIV should be tested. This is as much about proper public information dissemination as it is about physical testing opportunities and availability.
White

- **Number of new HIV cases (2004):** 11,806\(^{31}\) the white demographic.

- **Table 6, Row 2:** If a person is white, they are 8% less likely to get tested for HIV.

When sorted by race, which is what this variable (along with the HISPANIC and BLACK variables) does, we find that being white – perhaps through perception of the AIDS virus by virtue of race – has a negative influence on their testing habits. At the micro level, it does not bode well for the greater AIDS reality in the United States that the majority of the population of sexually active people who make up the largest racial profile of the country are not getting tested.

We must bring into this portion of our analysis one of the conclusions we offered in the earlier literature review section, which speaks to the greater thesis question of testing habits. In our analysis of the literature, taken from the evolving contexts in which HIV spread in terms of transmission and AIDS was received in terms of social perception, we presented the possibility that these social perceptions – based on studies, media bias and presentation, and the work of the HIV/AIDS advocacy community. We contended that the mixture of these forces promoted one specific demographic over another as to who was the most vulnerable to HIV and AIDS, constantly changing the ‘face of AIDS.’ In the 1980s, AIDS was a ‘gay plague;’ in the 1990s, it was an ‘African plague,’ in 2000 and beyond, we contend that it is being promoted as a ‘black and latino

(i.e. minority) plague.’ Such institutional promotion (from the non-profit, advocacy, and public health communities) and reception to these possibilities (by individual Americans) comes with a very disturbing high cost and negative detriment to other groups that are also vulnerable to the epidemic. The fact that whites are being tested 8% less by virtue of their race may, in fact, be because they do not think they are vulnerable to HIV infection because of their race. More specifically, they might not want to get tested because now HIV, as it has been presented through countless media outlets over the past four years, is perceived more with minority communities than with whites.

11,806 new infections of HIV were reported from the white, non-hispanic, demographic in 2004 – while over 19,000 new infections were reported in the black demographic. Is it because there are fewer white people becoming HIV-positive? Or is it because, due to smaller testing percentages, fewer HIV-positive people are being reported? This very well might be the case and will be more thoroughly presented in the following section.

Table 6B: NEW HIV CASES in WHITES (2001-2004)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11,242</td>
<td>11,352</td>
<td>11,097</td>
<td><strong>11,806</strong></td>
</tr>
</tbody>
</table>

Comparing the black and white demographic in the context of number of new infections has the ability to suggest that black people, quite literally, are being reported to have more HIV cases than their white counterparts. However, even the most cursory glance and consideration of the data associated with white HIV rates (as presented here in
Table 6B) over the past four years of testing data shows that, within the white demographic, the 11,806 new infections in 2004 represents the highest number of new white HIV cases in the past four years!^32^  AIDS is not, by any means, a ‘black’ or ‘Hispanic’ plague. The same way it has never been a ‘gay’ or ‘African’ plague.

---

^32^ Table excerpt taken from CDC report cited in note 31.
Black

- **Number of new HIV cases (2004):** 19,206\(^{33}\) new HIV cases in the black demographic;

- **Table 6, Row 4:** If a person is black, they are 14.8% more likely to get tested for HIV.

For the past couple of years, as reviewed in earlier sections, it has been constantly reported from recent studies (exhaustively reviewed in earlier sections of our own analysis here) that the black demographic has a higher HIV infection rates than its white counterpart.

In the case of the black population, this very well might be the case, in terms of shear number of *reported* cases – as the 19,206 new HIV cases that were reported in 2004 is the highest of any demographic. Our analysis, however, suggests a potential flaw in the certainty behind these numbers in terms of what the high HIV-rates actually represent. We have already put forth our conclusion that whites, by virtue of being tested less, are being under reported. We put forth now, that blacks, by virtue of their increased testing habits, are perhaps being over reported.

Consider the classic quantitative model of reporting that involves crime and number of police: With more police to patrol the streets, more criminals will be caught and, thus, more crimes reported. The same logical reasoning can be extrapolated here. Our data shows that blacks are more likely to be tested for HIV- which in and of itself is

\[^{33}\text{IBID}\]

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a great accomplishment for that demographic in confronting the epidemic – but by virtue of being tested more, they are also more likely to be reported as having HIV: That is the nature of the beast – in order to know if you have HIV, you need to be tested for it; if you are tested more, the better the chances of HIV being discovered within whatever subgroup or demographic you represent. The black population in the United States has been the main focus for much of the current HIV-testing campaigns that are being pursued domestically. Could it be that it is wrongly perceived as having higher infection rates than their white counterpart by virtue of their increased testing habits?

Consider that the 19,206 new HIV cases reported in 2004 in the black demographic, *entirely in contrast to the white statistics taken from the exact same CDC study*, represents the *lowest* number of new HIV-infections in the past four years for the black community:

**Table 6C: NEW HIV CASES in BLACKS (2001-2004)**

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>21,556</td>
<td>20,237</td>
<td>19,310</td>
<td>19,206</td>
</tr>
</tbody>
</table>

AIDS is *not* a black plague. If anything, as seen in Table 6C, the black community is championing the most positive demographic attack against the AIDS epidemic: It has higher testing rates and decreasing transmission rates, while the white demographic has lower testing rates and *increasing* transmission rates
Hispanic

- **Number of new HIV cases (2004):** 6,970\(^{34}\) new cases of HIV in the Hispanic community;

- **Table 6, Row 4:** If a person who is Hispanic is 15.2% more likely to be tested.

Of the three racial and ethnic groups we are considering, the Hispanic population represents both the smallest in terms of sample size (indeed, even population), and HIV rate. Nonetheless, similar statements and conclusions we have made regarding the higher testing rates among the black demographic can be said about the Hispanic population. Hispanics are 15.2 percent more likely to be tested for HIV by virtue of their race/ethnicity. It is here that we must limit our analysis, however, as we cannot scrutinize the reality of reporting, perception and behavior of the Hispanic population (as we did with the black and white demographic). The majority of most all minority-focused HIV/AIDS awareness activities since 2000 has focused on the black population of the United States, and we have been able to glean much information on why, from a statistical standpoint, that has been the case. It was only in the past few years that a more concerted effort has been made toward addressing and understanding the AIDS reality in the Hispanic population – with numerous organizations, for example, only recently beginning to translate their materials into Spanish: These have had some very interesting and positive impacts we are sure –as, at the very least, can be shown by our own statistical illustration of increased testing rates the Hispanic population.

\(^{34}\) Ibid.
Though the relationship of immigration, culture, religion, and HIV-testing behavior is fascinating to us, our central thesis question relies on understanding what makes a person want to, or not want to, get tested for HIV and we are able to conclude that, by virtue of their Hispanic ethnicity, it increases their chances of getting tested.
POLICY CONSIDERATIONS

As a nation we have failed in stopping the scourge of AIDS. Any number of things can be blamed for such a reality. We contend that stigma has inculcated misperceptions that have negatively influenced HIV-testing attitudes, decisions, and behaviors. Of the many questions that we asked thus far, and the many answers that the data has illustrated for us, we come to the same question that the policy world has come to over and over again since the discovery of AIDS over two decades ago; a question that has challenged practitioners and politicians, doctors and patients alike: What can be done? We offer two suggested courses of action.

Mandatory HIV testing

So far, HIV testing is only mandatory in the U.S. in certain circumstances including: blood and organ donors, all military applicants and active duty personnel, federal and state prison inmates, newborns in at least two states, and legal immigrants. Why not make it required for university admissions, driver’s license issuing and/or renewal? As repeated ad nauseum thus far, knowledge of one’s personal HIV status is the only way to stop the epidemic’s spread. This is exactly what policy – and only policy - can do.

In pursuit of current and future public health security, mandatory HIV testing should be pursued. We contend that any controversy surrounding this very simple, but no less bold, idea is rooted in the stigma of the virus (which we have thoroughly reviewed) and the thoughts surrounding an individual’s rights in light of a nation’s needs. An HIV-test is not a sacrifice of any inalienable right. It is, in fact, a testament to our individual right to a brighter, more productive, and more healthy future. There are other mandatory health requirements that are, in fact, even more invasive of the human body than an HIV test (which can be done in any number of ways – see ‘Notes’ section for an overview of available testing methods): Immunizations for measles, mumps, rubella, tetanus, whooping cough, diphtheria, chickenpox, and hepatitis B…All of these, required. Policies created and mandated these health practices to stave off epidemic, the loss of life, and the loss of productivity for Americans. Why has AIDS, for over two decades been treated as such a pariah to these same potential policy practices?

Independent AIDS Agency

As much as stigma has shaped public perception about AIDS, the politics of the epidemic (and more generally sex and sexuality), has shaped public policy. Quite literally, the ideologies of Left versus Right, Conservative versus Liberal, has either encouraged or discouraged even the most basic understanding of the tools available to ward off HIV transmission. Consider, for example, that under the Clinton Administration(s) – an inherently liberal period of the American political experience – an
Office of National AIDS Policy (ONAP) was created and supervised by Sandra Thurmon. The centerpiece of the Clinton AIDS policy in the United States was promotion of prevention mechanisms which, generally, was considered to mean education and promotion of safe sex methods (i.e. use of condoms). Thurmon, under Clinton’s authority, began to orient the federal government’s resources to aide in this process most notably through the simple availability of information related to the efficacy and importance of condom use on the CDC, NIH, and other federal websites and portals. Under the current President Bush’s administration(s) – grossly conservative in the context of modern American politics – ONAP was disbanded, and all information related to condoms’ effectiveness in STD/I (sexually transmitted diseases and infections, including HIV) prevention were removed entirely. The central tenants of modern Conservatism aim to promote abstinence-only education – and with the federal government controlled by the Right, this is exactly what is being pursued domestically.

That abstinence is an effective method of preventing HIV is of no argument here; but whether it is a realistic method that should be, or could be to any practical degree, pursued by federal policies is nothing short of nauseatingly absurd. Ideologies are not based on science, just as science has never been shaped by ideologies. The American political system has been defined by its absolute adherence to ideologies. Ideologies should not be a part of the scientific inquiry, approaches, and mechanisms that protect our system of public health—but it has become just that in our political system. An independent agency should be solely created to address the AIDS epidemic in the United
States: This agency should maintain a guaranteed budget (unlike the CDC which is under the control of Congressional appropriations and, thus, subject to ideological and political whims of that governing body); be able to implement actions through the pre-existing health care network; whose leaders are immune to political posturing, scape-goating, and witch-hunting by detractors with political motives; and make un-biased recommendations to the US Congress related to HIV/AIDS epidemiology. Pressure should be made on Congress to make the right decisions regarding our public health, not by ideology, but by scientific inquiry.
CONCLUSIONS

Much is working against an individual American’s decision to learn about their HIV-status. The literature suggests a history of changing perceptions that were initially rooted in a conflux of social stigma associated with homosexuality and ignorance of the science of HIV. With more knowledge came a greater awareness of the epidemic as it affected more and more people globally which, through carefully calculated and successfully executed messaging by a host of institutions in the public and private sectors, projected the severity and supposed reality of the virus on other countries.

Fostering a growing urge in Americans to do right in the world was a great success for global AIDS campaigns, to be sure. However, coupled with the advent of ARVs and misinformation about AIDS incidence levels in the United States, individual perceptions about their risk and vulnerability of becoming HIV-positive decreased by the late 1990s.

Today, the perceived ‘victim’ of AIDS has gradually shifted from white middle-class gay men in the 1980s and early 1990s, to poor African-American residents of the inner city and rural South in 2000 and beyond. With blacks and Hispanics being the center piece of media, policy, and non-profit HIV activities, it appears that white Americans appear to find the epidemic less alarming when, in fact, there is more reason to be alarmed now than ever before.

The United States must stop finding sub-groups of our national demographic – pandemic scapegoats, really - to pin the brunt of the AIDS epidemic on. This practice is as old as the virus’ scientific discovery. If any headway is ever to be made, and any
genuine interest from the policy world is ever to be illustrated, Americans – from all races and ethnicities – must be mobilized.

It is clear that race and ethnicity play a role in HIV-testing habits, but not necessarily in the ways that the public may perceive them: If the media is showing studies that blacks are disproportionately being affected by HIV, after all, it must mean that they are generally irresponsible about their testing habits and practices. This is not the case at all. Our research has concluded that the minority groups that bear the burden of the AIDS epidemic are doing the most to effectively address it – most basically and prominently in their increased testing habits – which are as encouraging as their white counterparts’ decreased testing rates are disturbing. We say again, with the black community having more new HIV cases, in aggregate, does not mean it is a ‘black plague’ – especially considering their case load has been lowering every year for the past four years, while their white counterparts have seen their case load increase.

Good work is being done in the domestic AIDS fight, and by no means do either of the aforementioned policy recommendations mean to suggest otherwise. Indeed, the non-profit and advocacy sectors have mobilized to an unprecedented degree in confronting the domestic AIDS threat. Much work remains to be done, however, to get anywhere close to stopping the epidemic in it tracks and there is much room for boldness in the policy world. Knowledge of HIV-status is crucial to know if you are at risk of getting, or transmitting, HIV – the only way to know is to get tested. For a sexually active individual in a non-monogamous relationship to assume they are not at risk, irrelevant of
race or ethnicity, is to assume an immoral, unethical, irresponsible, and ignorant ethos in the face of a true public health threat. Policy practitioners can control for such ignorance by mandating an easily administered, non-intrusive, and potentially epidemic-changing test. Such a policy can only exist outside the shadow of politics and ideology – the two things that are as much shaped by public perception as they are fueled by it—this speaks to the importance of an independent federal AIDS agency.
TERMS & DEFINITIONS

**HIV/AIDS in the United States:** The term ‘Acquired Immune Deficiency Syndrome’ (AIDS) was first coined in 1982 to describe the mysterious, previously unknown and unseen, disease that the Centers for Disease Control (CDC) began monitoring in a small number of gay men who were dying of what was being misdiagnosed as cases of Kaposi Sarcoma (a form of cancer). It was not until the Institut Pasteur of France discovered the human immunodeficiency virus (HIV) in 1983 that the linkage of HIV and AIDS would be made and, most importantly, the HIV method of transmission – through blood-to-blood contact – be realized.

**AIDS stigma:** “Prejudice, discounting, discrediting and discrimination directed at people perceived to have AIDS or HIV, their loved ones, associates, and the groups and communities with which they are affiliated.” (Herek, 1990; and Herek and Glunt, 1988). Early literature – particularly work done in the field of the psychology of AIDS - adopted the term ‘AIDS stigma’ and, interestingly, attested to the importance of utilizing a working definition because it has a variety of negative consequences for people who are HIV-positive. (see: Gerbert, Bleecker, Coates and McPhee, 1991; Herek, 1990). We have since learned, however, that the AIDS stigma also had a significant impact on perceptions and attitudes towards personal sexual behaviors and practices of people who are not HIV positive. It seems the stigma of the virus in the US shaped much of the early research of understanding the attitudes and perceptions of the virus.

**Antiretroviral Drugs (ARVs):** ARVs inhibit the replication of the HIV virus and come in many different forms that, when used in combination with one another (often referred to as ‘cocktails’) in a strict medical regimen, allow HIV-infected individuals to maintain continued levels of health – similar, if not equal, to HIV-negative individuals. According to the Food and Drug Administration, there are currently twenty approved ARVs available for purchase and use by HIV-infected individuals.
HIV-Testing Methods (Summarized from Centers for Disease Control): The standard HIV screening test is known as the enzyme immunoassay (EIA), which is performed on blood drawn from a vein, and used to detect the presence of antibodies to HIV. A reactive EIA must be used with a follow-up confirmatory test such as the Western blot to make a positive diagnosis. There are EIA tests that use other body fluids to screen for antibodies to HIV. These include:

- Oral Fluid Tests – use oral fluid (not saliva) that is collected from the mouth using a special collection device. This is an EIA antibody test similar to the standard blood EIA test and requires a follow-up confirmatory Western Blot using the same oral fluid sample.
- Urine Tests – use urine instead of blood. The sensitivity and specificity (accuracy) are somewhat less than that of the blood and oral fluid tests. This is also an EIA antibody test similar to blood EIA tests and requires a follow-up confirmatory Western Blot using the same urine sample.
THESIS DATA SOURCES

Centers for Disease Control
www.cdc.gov

National Center for Health Statistics
http://www.cdc.gov/nchs/
3311 Toledo Road
Hyattsville, MD 20782
(301) 458-4000

National Health Interview Survey Department
http://www.cdc.gov/nchs/nhis.htm

National Health Interview Surveys
http://www.cdc.gov/nchs/about/major/nhis/quest_data_related_doc.htm

2003 National Health Interview Survey: Data Set

2003 National Health Interview Survey: Survey Description
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