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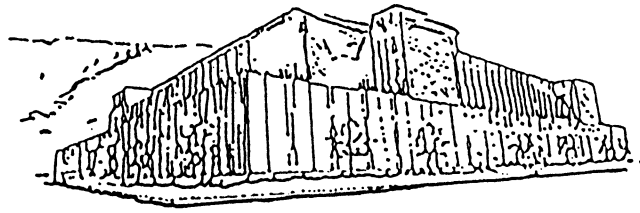
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BARRIERS TO HIV COUNSELING AND TESTING  
FOR THREE OF MONTANA'S HIGH-RISK POPULATIONS

by

Robin Mochi

B.S. New Hampshire College, 1984

presented in partial fulfillment of the requirements

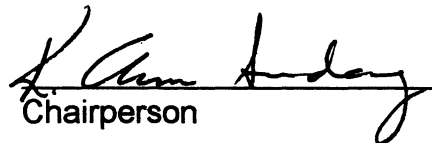
for the degree of


Master of Science

The University of Montana

1997

Approved by:

  
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## Barriers to HIV Counseling and Testing For Three of Montana's High-Risk Populations.

Committee Chair: K. Ann Sondag<sup>KAS</sup>

The purpose of this project was to identify the barriers to HIV testing for three high-risk populations in Montana. The three populations included Men Having Sex With Men (MSM), Intravenous Drug Users (IVDUs) and Native Americans on Reservations (NA). In addition, the study also explored barrier differences among the three groups and relationships among demographic data and the barriers. Representative members of the three groups distributed 1150 Health Information Surveys to high-risk individuals residing in Montana. Of the 242 respondents, 168 were classified as high risk. Sixty-four respondents (38 percent) were MSM; 39 respondents (23 percent) were IVDUs; and 82 respondents (49 percent) were NA. (Some respondents were members of more than one high-risk group). Using the participants' demographic data, profiles of HIV tested and untested individuals emerged: A typical tested Montanan was a white male, 25 to 44- years old, earning over \$25,000; while a typical untested Montanan was a Native American woman, 45 to 65-years old, earning \$15,001 to \$25,000.

The most frequent barrier for all high-risk groups and demographic subgroups was perceived low or no risk (49 percent). Other frequent overall barriers included usually practiced safe sex (27 percent); too scared (22 percent); always practiced safe sex and feared others finding out (20 percent); and lacked trust in the health department (19 percent).

The five most frequent barriers of the three groups were compared using the Kruskal-Wallis One-Way Anova. A significant difference was found regarding the frequency of times members of MSM and IVDUs identified always had safe sex as a barrier. The two most important implications of the study were related. First, there was difficulty in accessing members of Montana's high-risk groups. Second, the accessed members perceived themselves at low or no risk for contracting HIV. Unfortunately this perception is incorrect; members of MSM, IVDUs and NA population are high-risk individuals. To access more high-risk individuals who perceive themselves as low or no risk, this study concludes by recommending a social marketing campaign targeting high-risk behaviors instead of high-risk groups.

I wish to express my sincere gratitude to Annie Sondag. In two short years, Annie became my committee chair, advisor, mentor, professor, supervisor and friend. Her expertise, positive attitude and good humor made graduate school and this thesis a great experience.

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## CHAPTER 1

In the future, "as a society, we will increasingly come to see [counseling and testing] as a 'normal' part of our efforts to prevent communicable diseases that are spread by intimate personal contact - albeit with continuing intensive safeguards of confidentiality and civil liberties, because [many people] at the highest risk for HIV [Human Immunodeficiency Virus] infection in our society are also among the most stigmatized" (Cates & Handsfield, 1988, p.1534).

When Acquired Immune Deficiency Syndrome (AIDS) was identified in 1981, the belief was that it affected only homosexual men living in the larger cities (Donatelle & Davis, 1996). "As additional and more accurate information regarding transmission" became available, researchers identified other high risk populations; the virus causing AIDS was not so select (Becker & Joseph, 1988, p.394). The Human Immunodeficiency Virus (HIV) does not discriminate against sexual orientation, nor against age, gender, race, culture, or demographics. HIV affects homosexuals and heterosexuals, young and old, men and women, black and white, native and nonnative, as well as city dwellers and country folk. No category of people or their location is exempt (Rathus & Boughn, 1993). Even

the most rural states, such as Montana, have infected individuals (Centers for Disease Control, 1995). Between 1988 and 1990, the top U.S. counties with the largest increases of HIV were rural, having average populations of 73,000 (Lam & Lui, 1994). In fact, the AIDS rate in rural U.S. increased 80 percent between 1991 and 1995. Whereas in metropolitan and small metropolitan areas, the rate increased by 47 and 64 percent respectively (MT Gay Men's Task Force on HIV, 1996).

To identify Montana's high-risk groups, the Department of Health and Human Services (DPHHS) used the Montana Epidemiological Profile. This profile revealed that AIDS is 10 times more prevalent in men than women. The populations most affected are Men Having Sex With Men (MSM) and Intravenous Drug Users (IVDUs). The former accounts for 59 percent of the AIDS cases, while 11 percent are the latter. The age group most affected is 30 to 39- year-olds. Besides MSM and IVDUs, the DPHHS identified six other high risk populations for contracting the virus and its sequelae. The populations include: Women With High Risk Partners; Adolescents At High Risk; Native Americans on Reservations (NA); Incarcerated Men; and Urban Native Americans (DPHHS, 1995). DPHHS wants to target all eight high-risk groups for counseling and testing (CT) because HIV antibody screening and counseling have the potential to decrease the spread of the disease (Cates & Handsfield, 1988). To date, very few of Montana's high-risk individuals have received CT.

A national, random telephone survey of individuals 18 to 65-years-old

showed 23.2 percent of the Montana respondents reported taking an HIV test. The data were used to estimate that 113,000 Montanans have been tested (CDC, 1995). Unfortunately, while one national survey revealed that persons with increased risk of HIV infection have been tested and counseled at a much higher rate than the general public, most people in high-risk groups have not been tested (Anderson et al., 1992). Many HIV-infected individuals remain unaware of their infection (CDC, 1990). In another national-random survey, more than 60 percent of those at highest risk claimed to be untested for the HIV antibody (Berrios et al., 1993).

Mainus et al. (1995) found rural residents less confident and accurate than their urban counterparts about their HIV/AIDS knowledge. The researchers also found that rural respondents were less likely than urban respondents (6.6 percent vs. 10.4 percent) to be tested for HIV. In addition, rural respondents did not intend to get tested in the next 12 months. This study concluded that rural respondents' primary reason for test abstinence was their perceived low risk. More than 92 percent of the rural residents cited low risk as a barrier to counseling and testing.

However, the respondents' underestimation of risk does not reflect the reality of the situation. According to the most current epidemiological profile for Montana (Communicative Disease Bureau, 1996), the HIV virus continues to cause numerous deaths. The cumulative death toll for the state is 202. Although Montana is still a comparatively low-incidence state, public health

officials reported 305 AIDS cases since July 31, 1996 (see Appendix A). Thirty-six of the 56 counties (see Appendix B) reported at least one individual infected with AIDS. In addition, the 1996 Montana Epidemiological Profile estimates 500 people are infected with HIV (Communicable Disease Bureau, 1996).

To combat further spread of this deadly virus, health officials must identify the barriers to HIV CT. Identification of the barriers would enable health officials to reduce them. Fewer barriers may prompt more high risk individuals to seek HIV/AIDS counseling and testing.

The purpose of this study, therefore, was to identify the barriers to HIV testing and counseling of three high-risk populations in Montana. The three populations were Men Having Sex With Men, Intravenous Drug Users, and Native Americans on Reservations.

### **RESEARCH QUESTIONS**

1. What are the barriers to counseling and testing among three of Montana's high-risk populations (Men Having Sex With Men, IVDUs and Native Americans on Reservations)?
2. Do the barriers to counseling and testing differ among the three groups?
3. What are the barriers in relationship to HIV-testing status, age, race, income level and gender?

## **SIGNIFICANCE OF THE STUDY**

Identifying HIV/AIDS counseling and testing barriers is essential for three reasons. First, identification of barriers will provide insight into establishing services to meet the needs of high-risk individuals. Testing high-risk individuals would reveal HIV serostatus early in the HIV sequence and provide the opportunity for more effective intervention (Stein et al., 1991).

Second, early testing coupled with appropriate counseling may discourage participation in high-risk behaviors. Health care visits to obtain HIV tests provide an important opportunity to counsel individuals about behaviors regarding HIV risk and methods to reduce high-risk behaviors (Otten et al., 1993).

Finally, barrier identification will enable health officials to reduce them. Fewer barriers will make it easier to promote CT and allow more individuals to benefit from these vital services. In addition, health officials could use incidence rates from HIV tests to plan effective prevention and education programs (Weiss & Thier, 1988).



## **DELIMITATIONS**

The following were delimitations of this study:

1. The study was delimited to three population groups: Men Having Sex With Men, Intravenous Drug Users, and Native Americans on Reservations.
2. The study was restricted to those individuals who are defined as at risk for contracting HIV/AIDS.
3. Data were only collected via survey.
4. Data were restricted to self report of respondents.

## **LIMITATIONS**

The following limitations existed in the study:

1. Due to the sensitive nature of the questions and potential stigmatism, responses may be inaccurate.
2. Survey distribution was limited to contacts' affiliations.
3. Only respondents who could read and comprehend the survey questions could reply.

## DEFINITION OF TERMS

**Acquired Immunodeficiency Syndrome (AIDS):** A “set of serious clinical ailments (including numerous opportunistic infections and neoplasms) resulting from severe immune dysfunction due to infection with the Human Immunodeficiency Virus (HIV)” (Schochetman & George, 1994, p.391).

**Antibody:** “Complex set of proteins (immunoglobulins) found in the blood produced by B cells in response to exposure to specific foreign molecules” (Schochetman & George, 1994, p.391).

**Counseling and Testing (CT):** “Refers to the voluntary process of client-centered, interactive information sharing in which an individual is made aware of the basic information about HIV/AIDS, testing procedures, how to prevent the transmission and acquisition of HIV infection, and given tailored support on how to adapt this information to their life” (Academy for Educational Development [AED], 1995, p.3).

**Epidemic:** “Circumstance where a disease spreads rapidly through a community in which that disease is normally not present or is present at low prevalence” (Schochetman & George, 1994, p.393).

**Human Immunodeficiency Virus (HIV):** A retrovirus and the etiologic agent of Acquired Immunodeficiency Syndrome (AIDS) (Schochetman & George, 1994).

**High-Risk Behaviors:** Behaviors that allow persons to come into contact with blood, semen, and vaginal fluids of HIV-infected individuals. These behaviors include vaginal and anal intercourse with persons infected with HIV/AIDS, and sharing hyperdermic needles (Rathus & Boughn, 1993).

**Incidence:** “The number of new cases of a disease that occur in a defined population within a specified time period (Schochetman & George, 1994, p.394).

**Prevalence:** “The total number of cases of a disease in existence at a specific time and within a well defined area; the percentage of a population affected by a particular disease at a given time (Schochetman & George, 1994, p.396).

**Retrovirus:** The resulting DNA is incorporated into the genetic structure of the cell (Schochetman & George, 1994, p.396).

**Rural:** For the purpose of this study, a rural county is one that has six or fewer

persons per square mile. Forty-eight percent of Montana is rural. By comparison, twenty-four percent of the United States is rural (Communicable Disease Bureau, 1996).

**Seronegative:** HIV antibodies are not found in the blood (Schochetman & George, 1994).

**Seropositive:** HIV antibodies are found in the blood (Schochetman & George, 1994).

**Serostatus:** For the purpose of this study, serostatus is a seropositive or seronegative HIV-test result.

**Unsafe Sex:** Sexual contact with HIV-positive individuals and/or with intravenous drug users who share needles; multiple sexual partners; and avoiding protection, such as latex condoms and spermicide (Rathus & Boughn, 1993).

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

In a homeostatic situation, the immune system is responsible for protecting the body from disease. Unfortunately, some diseases are able to counteract this function. Acquired Immune Deficiency Syndrome (AIDS), caused by the Human Immunodeficiency Virus (HIV), is one of these deadly diseases. In this situation, due to a compromised immune system, the body succumbs to opportunistic illnesses (Rathus & Boughn, 1993).

Since its identification in 1981, AIDS has killed 319,849 individuals in the United States (CDC, 1995). In addition, CDC reports 513,486 cumulative AIDS cases (CDC, 1995). As for HIV, seven years after its identification in 1984, the World Health Organization (WHO) estimated that 10 million people around the world were infected with the virus. WHO also estimated this number to exponentially increase to 40 million by the year 2000 (Rathus & Boughn, 1993).

With a cure remaining elusive, prevention is the only reduction method available to curb the rising death toll. Prevention includes two components. First, "prevention of HIV transmission requires either abstinence from or moderation of relevant [high-risk] behaviors" (Becker & Joseph, 1988, p. 394). Behaviors such as unsafe sex and sharing unclean intravenous needles account

for most of the viral transmissions. In 1989, "seropositive rates were highest for homosexual/bisexual IVDU, homosexual/bisexual males ... and heterosexual IVDU" (CDC, 1990, p. 138).

The second component of prevention is counseling and testing (CT). Since 1985, when the HIV antibody test was licensed, health officials have used it as part of the effort to control the further spread of HIV/AIDS (Wenger et al., 1991). CT protects the blood supply from HIV contamination, informs infected persons so they may avoid infecting others, ensures proper medical treatment to infected individuals, and encourages behavior change that will prevent HIV transmission (Anderson et al., 1992). In addition, CT "can enhance and prolong the years of productive life for HIV-positive persons" (CDC, 1992, p.616).

## **HIV/AIDS OCCURRENCE IN POPULATIONS**

### **Men Having Sex With Men**

The first cases of AIDS were discovered in homosexual men in 1981. MSM were the primary population affected by the disease, usually transmitting it through sexual contact. From 1981 to 1988, homosexual individuals accounted for 62 percent of all cases and deaths (Winkelstein et al., 1989).

However, as the epidemic continued, reported cases for this population declined. In 1995, CDC reported 259,672 MSM infected with AIDS; 50.5 percent of the total cumulative cases, an 11.5 percent decrease since 1988. Currently, MSM account for 25 percent of annual new infections (Center for AIDS

Prevention Studies, 1996).

### **Intravenous Drug Users**

Intravenous drug users are the second largest group-at-risk. They represent 25 percent of the HIV/AIDS cases (CDC, 1995); a slight decline from 27 percent in 1990 (Guydish et al., 1990). Although the number of IVDU AIDS cases is declining, incidence is increasing among IVDU's sexual partners. Thirty-three percent of AIDS cases are associated with injecting drug use. These cases include IVDU's, their sexual partners and children whose mothers inject drugs or engage in sexual activity with an IVDU (National Alliance of State & Territorial AIDS Directors, 1996).

Most IVDU cases are from heterosexual contact (Holmes, 1990); "over half of all heterosexually transmitted cases and pediatric cases are among sexual partners and children of IVDU's" (Guydish et al., 1990, p.995). In 1991, four percent of AIDS cases were adults whose only risk factor was having an IVDU sexual partner. Also in 1991, 54 percent, or 369, of the pediatric AIDS cases were from mothers who were IVDU's or sexual partners of IVDU's (Watters & Guydish, 1994).

IVDU-HIV transmission occurs through unsafe sexual practices and inadequate safety precautions regarding needle use, that is, needle sharing and nonexistent needle sterilization (Becker & Joseph, 1988). The estimated number of IVDU's in the United States is between 1.1 and 1.3 million; five percent of whom would test HIV positive (Selwyn et al., 1989). The only

exception is New York City IVDUs; they have a 50 to 60 percent HIV-positive rate (Curtis et al., 1989).

### **Native Americans on Reservations**

Among Native Americans, there is “an increase in the prevalence of diseases and conditions with a strong behavioral component as [the] leading [cause] of mortality and morbidity” (LeMaster & Connell, 1994, p.523). Despite this fact and knowledge of increasing AIDS cases, virtually no published data were found for this population.

In 1985, CDC reported 13 AIDS cases among the United States’ two million Native Americans. Ten years later, Native American AIDS cases soared to 1,202; a 9,000 percent increase and a growth rate that more than doubles all other ethnic groups (Sowers, 1995). In addition, CDC (1995) reported 200 AIDS deaths in the Native American population. With increasing intravenous drug use on reservations, AIDS cases continue to multiply. One study cited that 19.6 percent of the AIDS cases associated with heterosexual IVU between the years 1981 and 1988 were “American Indians, Eskimos, and Aleuts” (Selik et al., 1988).

Some reservation health educators compare AIDS with previous killing epidemics, such as cholera, small pox, and tuberculosis (Sowers, 1995). They believe the CDC numbers do not accurately reflect the actual AIDS epidemic in the Native American population. Under reporting is one cause of these inaccuracies. For some tribes, AIDS is taboo and infected members are



ostracized. Thus, fearing isolation, infected members may not identify themselves (Reeves, 1996).

The CDC data regarding Native Americans were collectively tallied among all U.S. indigenous populations. In addition, the CDC data composite represents all Native Americans; no reference was found regarding those living on reservation verses those living in urban areas.

### **TEST SEEKER BIOGRAPHIES**

Researchers surveyed men and women aged 21 to 34 in four U.S. cities and reported HIV testing was more common among men than women. Of the men, homosexuals and bisexuals tested more frequently than heterosexuals, and less than one-third of IVDUs voluntarily sought HIV testing (Berrios et al., 1992). In a national-telephone survey, Berrios et al. (1993) elicited HIV-testing information from over 10,000 randomly-selected participants. The researchers reported more men than women tested, more unmarried than married, and more African-Americans and Hispanics than Caucasians, Asians, or others. Testing was most frequently reported by 25 to 31-year-olds. Testing was slightly higher for those living in high- prevalence areas (23 percent tested vs. 21 percent tested in low-prevalence areas). Almost 75 percent of female IVDUs tested, while less than 50 percent of male IVDUs tested. Testing was more common among gay and bisexual men than those without any identifiable risk factors. Still, according to these results plus those of another study, about 40 percent of

**MSM have not been HIV tested.**

In a Canadian study, Myers et al. (1993) reported that no relationship existed among certain demographic data (age, income, and education) and test seekers. Though they found cultural differences between the groups, their information was insufficient to develop conclusions. The study found: men living in metropolitan areas were tested more than those outside these areas; gay men tested more than bisexual; and those not in monogamous relationships were more likely to get tested than those in monogamous relationships or in no relationship. Of those who had not been tested, younger individuals (no specific ages were given) indicated an intention to be tested.

### **THE BARRIERS**

McCusker et al. (1988) reported the following barriers: confidentiality issues surrounding test results, possible discrimination if seropositive, and concern with the reliability and validity of the test and its results. Cates and Handsfield (1988) reported similar findings, such as confidentiality and discrimination, plus problems with false negatives and adverse effects of testing. Other reasons for not being tested include self-perceived health, no benefit, afraid of losing job and family, lack of trust in the medical profession, not knowing where to be tested, no effective treatment available, lack of access, belief that they could not handle knowledge of a positive test, and distant location of testing center (Gorman, et al., 1990; Kanouse et al., 1991; Mainous

et al., 1995; Myers et al., 1993). Finally, according to a study of gay men in the Los Angeles area, the most common reason for not being tested was their belief that they would test negative (Kanouse et al., 1991).

It is "well known that people in general overestimate the probability of dangerous and particularly dreaded outside threats, such as a nuclear bomb, but underestimate the probability of dangers posed by personal behavior such as cigarette smoking or alcohol consumption. Thus, it is common for many individuals and groups to regard themselves as being not at risk or at very low risk of HIV infection, denying its personal relevance against the objective evidence" (Aggleton et al., 1994, p.343).

### **BEHAVIORAL CHANGES ASSOCIATED WITH CT**

Although behavior change can stop the HIV/AIDS epidemic from spreading, it is extremely difficult to accomplish and sustain (Coates et al., 1988; Kanouse et al., 1991). Literature documents advocates and proponents of CT's ability to promote change. Literature also documents that most behavioral research on HIV/AIDS was conducted in major epicenters of the epidemic, and limited to MSM and IVDUs who considered themselves at risk (Cates & Handsfield, 1988; Coates et al., 1988; Kelly, 1994). Conclusions and evaluations regarding the behavioral impact of CT are virtually nonexistent because most research studies lacked control groups. Plus, behavior change over time must be interpreted with caution because recall errors and response

biases influence results (Kanouse et al., 1991). In addition, evaluation is difficult because of the underlying trend toward decreasing high-risk activities (Wenger et al., 1991).

CT literature regarding behavior change is inconsistent and contradictory; some studies indicated reductions in high-risk behaviors, some reported increases in high-risk behaviors, still others noted no change in behavior. Yet, despite the uncertainties of its efficacy, CT remains a key weapon against transmission of the virus. The assumption is that CT motivates those tested to initiate safer practices or reduce their high-risk behaviors (Doll et al., 1990).

### **Men Having Sex With Men**

Numerous studies reported reductions in high-risk behaviors connected with CT. Fifteen of the 19 cohort cross-sectional and longitudinal studies reviewed by Higgins et al (1991) reported at least one reduction in risk behavior. Two of the studies reviewed suggested that seropositive individuals in San Francisco and Amsterdam demonstrated greater reductions in risky behavior than seronegative or those untested (Higgins). Separate studies by Fox, McCusker, Schechter, and VanGruensven (as cited by Kanouse et al., 1991) reported that CT had a moderate influence on behavior, thereby reducing HIV risk. Fox, Ostrow, Valdiserri, VanRanden, and Polk (as cited by Coates et al., 1988) reported aware seropositive gay individuals in Baltimore and Washington decreased unprotected anal receptive intercourse. Higgins and colleagues (1991) uncovered six longitudinal studies reporting a decrease in risk behaviors

associated with CT. Cates and Handsfield (1988) reported favorable behavior changes in a Vancouver and an Amsterdam study. More seropositive than seronegative individuals changed to less risky sexual practices. Farthing and colleagues (as cited by Stimmel, 1988) reported an overwhelming majority of their study's 324 MSM wanted to know their serostatus and that testing discouraged their high-risk behaviors. In another study, HIV-positive individuals at a sexually-transmitted disease (STD) clinic had less gonorrhea after learning their serostatus. Their gonorrhea rates were higher before CT (Otten et al., 1993).

Unfortunately, learning one's HIV test results does not always facilitate positive behaviors. Seropositive individuals can have severe emotional reactions. Additionally, though not very common, seronegative individuals can exhibit "'disinhibition' syndrome; upon learning that they were not infected, they increased their risky sexual behavior, perhaps interpreting seronegativity as immunity to HIV" (Cates & Handsfield, 1988, p. 1533).

In addition, some researchers reported "significant declines in risky sexual behavior. . . [yet], there was no association between risk reduction and either knowledge of serostatus or actual serostatus" (Higgins et al., 1991, p.2420). In a longitudinal study of gay and bisexual men in San Francisco, Doll et al. (1990) reported knowing serostatus "may not necessarily be a prerequisite to decreasing one's high-risk behavior. [Fortunately, our study] does not support data suggesting that learning one is seropositive may increase high-risk

behavior" (p.263). Similar studies in Baltimore, New York City, San Francisco, and Chicago found decreases in risk behaviors were not always attributable to CT (Cates & Handsfield, 1988). In a study comparing four longitudinal homosexual cohorts in U.S. and Demark (from 1982-1987), researchers reported that decreases in risky behavior occurred before 1985, prior to the HIV test (Higgins et al., 1991).

In studies of gay men it is difficult to attribute behavior change to CT because many researchers conducted studies around the time of community-behavior changes and had limited ability to adjust for confounding variables (Otten et al., 1993). Plus, discrepancies and contradictory data exist. For example: Kanouse and colleagues (1991) believed behavior change varied geographically; MSM living in areas with high-AIDS incidence might produce greater behavior changes than those individuals living in low-incidence areas. While Higgins and colleagues (1991) reported "even in a low AIDS incidence area where risk reduction might be expected to proceed more slowly, substantial behavior changes have occurred" (p.2424).

### **Intravenous Drug User**

Few studies exist examining IVDU behavioral patterns associated with CT. One reason for the limited studies is that accessing IVDUs is difficult; fewer than 15 percent are in treatment at any given time (Center for AIDS Prevention Studies, 1996). Therefore, IVDU CT is virtually impossible to evaluate because most studies focused on individuals in methadone treatment facilities and very

few had comparison groups of IVDUs not in treatment. Thus, this lack of evaluation created inconsistent literature; some researchers believed that IVDUs were decreasing risk behaviors primarily due to their knowledge about AIDS, while others concluded IVDUs were decreasing risks due to HIV CT (Calsyn et al., 1992).

Magura et al. (1990) reported increased condom use and decreased intravenous drug use following results of the HIV test in a Manhattan methadone clinic. Another study reported IVDUs "who [were] educated by outreach workers and offered the opportunity for antibody testing decreased behaviors that put them and their sexual partners at risk" (Neaigus et al., 1990, p. 267).

In an IVDU literature review, Higgins and colleagues (1991) found two studies reporting improved needle hygiene following knowledge of HIV status. Skidmore, Robertson, and Roberts (as cited by Higgins, 1991) reported needle hygiene improvements and decreases in sexual partners and needle sharing among seropositive and seronegative individuals who received CT. Yet, the researchers had no unaware or untested comparison groups.

Unfortunately, not all IVDUs alter their high-risk behaviors upon knowledge of HIV status. Higgins et al. (1991) reported no difference in needle hygiene for individuals aware of HIV test results with those untested or unaware. In another study, there was no difference in high-risk behaviors between those assigned to CT and a control group (Otten et al., 1993).

## CONCLUSION

Inconsistent results emerged in the literature review regarding CT's ability to change high-risk behaviors. However, the number of studies confirming the important role of CT in preventing HIV outweighed the opposing studies.

Despite the continued debate about CT's efficacy, the most common theme was that CT can increase self-perception of risk.

CT remains a critical component of the HIV/AIDS prevention effort. As a diagnostic tool, CT provides knowledge of serostatus and referral to medical care (Ickovics et al., 1994). "As a health intervention, CT provides an opportunity for personal-risk assessment, education about HIV/AIDS, and the prospect of reducing high-risk behavior" (Ickovics, 1994, p.443).

The literature also indicates the difficulty in accessing representative members of the high-risk groups; most researchers collected data from self-identified, gay men living in urban areas with high incidence of HIV/AIDS. Fewer studies researched rural areas or areas with a low incidence of HIV/AIDS. Accessing representative high-risk individuals is complex for two reasons. First, individuals must identify with the high-risk groups. For example, "perhaps the focus on high-risk groups instead of on high-risk behavior has given a false sense of security to men who do not identify as gay or bisexual" (Earl, 1990, p.251). By targeting only certain high-risk groups, a married man who identifies himself as heterosexual yet has sex with other men may believe he is not at risk for contracting HIV. Second, identified members of the high-risk populations



may not want to participate in any studies.

Finally, the literature review revealed a paucity of Native American research. Despite the alarming rate of new HIV/AIDS cases in this population, virtually no data were found. Therefore, future research in culturally diverse, rural areas is essential for it may prevent the spread of HIV/AIDS into low-incidence areas.

## **CHAPTER III**

### **METHODOLOGY**

The purpose of this study was to identify barriers to HIV/AIDS testing and counseling for three of Montana's high risk populations. The three populations were Men Having Sex With Men (MSM), Intravenous Drug Users (IVDUs) and Native Americans on reservations (NA). The study also explored barrier differences among the three groups and relationships among demographic data and the barriers.

#### **DESCRIPTION OF TARGET POPULATIONS**

The three populations investigated were Native Americans on Reservations, Intravenous Drug Users, and Men Having Sex With Men. Although the groups appear diverse, they have one important similarity. According to the Montana Department of Public Health and Human Services, all three are considered high-risk populations for contracting HIV/AIDS (DPHHS, 1995).

#### **Men Having Sex With Men**

Sex researchers currently estimate that five percent of the total adult male population in the U.S. is homosexual. Plus, an additional 25% of adult males have sex with other men (Doran, n.d.) Unfortunately, the exact number of men

representing MSM in Montana are unknown. Contacts distributed the Health Information Survey to volunteer men over the age of 18 who identified with this sexual preference.

### **Intravenous Drug Users**

Currently, according to Montana's Addictive and Mental Disorder Division of the DPHHS (1995), 1,517 IVDUs use state drug and alcohol treatment facilities. The Division classifies the participants into this IVDU category only if they use or have used intravenous apparatus for drug purposes. This number does not include reservation IVDUs, those in private facilities, or those not in treatment. Contacts distributed the Health Information Survey to volunteer male and female IVDUs over the age of 18.

### **Native Americans**

Montana has seven Native American reservations representing 11 tribes. According to the 1990 U.S. Census, the reservations' total population equals approximately 56,000 (six percent of Montana's total population). The largest proportion of this population live in Regions I and II (see Appendix C & Appendix D). Reservation contacts distributed the Health Information Survey to volunteer men and women, over the age of 18, at four of these reservations: Browning, Flathead, Fort Peck, and Northern Cheyenne.

The Browning Reservation consists of Blackfeet Native Americans (Travel Montana, 1994). Of its 8,500 members, 5,500 are 18-years-old and older (U.S. Census, 1990). The Flathead Reservation includes Native Americans of the

Salish, Kootenai, and Pend d' Oreilles tribes. Approximately 15,000 of the reservation's 21,100 members are over 18 years-of-age. Fort Peck has approximately 10,700 residents. Seven thousand are over 18 years of age (U.S. Census, 1990). Those living on this reservation are members of the Sioux and Assiniboine (Travel Montana, 1994). The Northern Cheyenne Reservation is home to only one tribe, the Northern Cheyenne (Travel Montana, 1994). This reservation has 6,330 members, approximately 3,900 over the age of 18 (U.S. Census, 1990).

## **PROCEDURES**

### **Selection of Samples**

The reputational approach was used to access all three populations. Reputational approach involves identifying individuals reputed to have influence in the targeted population (Nix et al., 1977). Individuals with influence were identified from their participation and/or involvement in high-risk group activities, or their occupation working with high-risk individuals. Individuals, identified through the reputational approach, provided access to the target populations through the snowball technique. The snowball technique involves asking contacts in the targeted groups to identify other members. These group members then solicit other members who, in turn, do the same. This process continues until all potential contacts are exhausted. The snowball sampling technique "is used when a population listing is unavailable and cannot be

compiled" (Fink, 1995, pg. 19). Mirroring that situation, this study benefitted from using the snowball strategy.

### **Instrumentation**

The instrument for data collection was a three-page survey (see Appendix E) designed to pinpoint the barriers of counseling and testing. A review of the counseling and testing literature was integral to its development. The initial survey was reviewed by experts representative of each of the high-risk groups. Revisions were made based on this expert review and the final survey was developed. The survey contained four sections: The first section was high-risk behavior questions; the second section included a check list of 25 possible barriers; the third section was demographic information; and the last section contained two optional questions that solicited suggestions to improve CT. Finally, the survey was pilot-tested using a test/retest strategy among a small, heterogenous group of volunteers; the survey had 89.2 percent agreement over time.

### **Data Collection**

Due to the inaccessibility of the three populations, a variety of techniques were used to disperse the survey. Survey distribution began following The University of Montana's Human Subjects Review Board's approval in October 1996. From October-December 1996, snowball sampling by reputational leaders of the target groups was used to distribute 1,018 surveys around the state (see Appendix F). In addition to the snowball technique, I distributed

approximately 132 surveys in February (1997) at three Region VS locations.

Each contact person was trained by me to administer the survey. In most cases, the training occurred by telephone and included specific directions regarding the survey process. I informed the contacts about the purpose of the study, the desired sample, and the snowball technique for accessing it. To provide confidentiality and anonymity to the respondents, I instructed the contacts to provide a self-addressed return envelope with each survey; envelopes containing completed surveys were mailed to me at The University of Montana's Health and Human Performance Department. In addition, each contact received a survey packet in the beginning of October (1996) that included written directions for administration (see Appendix G), surveys, envelopes, and a restatement of the survey's purpose. The packet also contained my telephone number and address in case there were questions or comments regarding the process. One month following the initial distribution, I corresponded with several contacts of each population to investigate their distribution progress. Following is a description of the data collection procedures for each of the three groups:

#### **Men Having Sex With Men.**

Numerous contacts were used for gathering data on this population. Contacts included members of Montana's Gay Mens Task Force, members of MSM focus and advocacy groups, and members of the State Planning Group for HIV/AIDS education and prevention. Contacts were located in Billings,

Bozeman, Butte, Glendive, Great Falls, Havre, Helena, Kalispell, Missoula, and Whitefish. These contacts distributed surveys from October through December 1996.

In this population, the snowball technique worked in a similar manner as the other two groups. Initial contact persons distributed the survey to individuals known to be MSM, who in turn distributed to other MSM. All the initial contacts had numerous affiliations with MSM and were willing to assist.

In addition to the snowballing technique, I distributed approximately 50 surveys at a Region VS gay bar on Saturday February 8, 1997 from 9:30 p.m. - 12:00 a.m. Each volunteer completed the survey at his or her table and deposited it into a sealed cardboard box located at my table.

### **Intravenous Drug Users.**

Montana has 29 state approved drug treatment facilities. Several of these centers were the settings for IVDU survey takers: Billings, Bozeman, Great Falls, Havre, and Missoula. I chose these centers because they represent each of the HIV Prevention Planning Regions in the State (see Appendix C). Counselors at these sites distributed surveys from October through December (1996) to IVDU and started the snowball technique. The counselors distributed to men and women over the age of 18 using the facilities, who in turn distributed to other IVDU individuals.

In addition, two other contacts were former IVDU in Missoula and Kalispell. These two contacts distributed the surveys from October through

December (1996) to individuals not in treatment facilities.

### **Native Americans.**

From October through December (1996), four of the seven reservations were surveyed: Browning, Flathead, Fort Peck, and Northern Cheyenne. I chose these reservations because each lies in a different region of the state (see Appendix D). The Browning Reservation is located in the Northwest part of the state in Region VN. The Flathead Reservation is located in Western Montana and lies in two Regions, V north and south. Fort Peck is the most eastern reservation and in Region I. Northern Cheyenne is in the Southern portion of the state and of the four reservations is closest to Billings, the largest city in Montana. This reservation is in Region III.

Each of the four reservations had at least one contact person. All contacts were tribal members and reported extensive connections with reservation members. The health educators were an integral part of this distribution process. They distributed surveys to men and women over the age of 18 living on the reservations. At the Browning Reservation, the health educator and social workers assisted in survey distribution. As for the Flathead Reservation, the health educator distributed the surveys. At Fort Peck, the public health educator and her staff distributed the surveys. On the Northern Cheyenne Reservation, the health educator assisted in distribution.

Each contact person used the snowball technique to access the members of the reservations. The process included having the initial contacts distribute to



other members, who in turn, distributed to other reservation members.

### **Additional Data Collection.**

In hopes of accessing more of the target populations, I distributed surveys in February (1997) at two Region VS locations, a homeless shelter and a bar. On February seventh during lunch (everyday from 12-2 p.m.) at the shelter, 40 men and women volunteered to take the survey. For anonymity, each volunteer completed the survey in a private location and deposited it into a sealed cardboard box located at my table in the center's lounge room. On February 13, from 7:30-10:30 p.m. in a bar, with the invaluable help of an employee, I gave one dollar compensation to 45 men and women volunteers for completion of the survey. Each volunteer returned the completed survey to a sealed cardboard box located on the bar.

### **DATA ANALYSIS**

Data Analysis of the survey responses was done with the SPSS computer program and included descriptive statistics and a one-way ANOVA. The descriptive statistics uncovered the frequencies of barriers to counseling and testing, while the Kruskal-Wallis One-Way ANOVA determined the differences among the barriers for the three populations.

## CHAPTER IV

### RESULTS

The purpose of this study was to identify the barriers to HIV CT of three high-risk populations in Montana. The three populations were Men Having Sex With Men, Intravenous Drug Users, and Native Americans on Reservations. Representative members of the three groups distributed 1150 Health Information Surveys (see Appendix F) to high-risk individuals residing in the state's six regions (see Appendix C).

#### TESTED VERSES UNTESTED

Two hundred and forty-two participants returned the Health Information Survey; 168 were members of the three high-risk groups. Of these, 47 percent (n=79) had tested, 13.1 percent (n=22) were unsure, and 39.9 percent (n=67) had never been tested. The participants included 38 percent (n=64) MSM, 23.2 percent (n=39) IVDUs and 48.8 percent (n=82) NAs. Table 1 depicts those tested, those unsure of testing and those never tested for each high-risk group.

**Table 1:** HIV-Testing Status By High-Risk Groups.

	<b>TESTED percent (#)</b>	<b>NOT SURE percent(#)</b>	<b>UNTESTED percent(#)</b>	<b>TOTAL percent(#)</b>
<b>MSM</b>	61 (39)	11 (7)	28 (18)	100 (64)
<b>IVDU</b>	53.8 (21)	7.7 (3)	38.5 (15)	100 (39)
<b>NA</b>	36.6 (30)	13.4 (11)	50 (41)	100 (82)

## DEMOGRAPHIC INFORMATION

The survey's demographic section consisted of age, race/ethnicity, annual income, and gender.

### Age

The survey question divided age into five groups: under 18, 18-24, 25-44, 45-65, and over 65. Two participants (1.2 percent) were under 18. (Thus, their information was only used for the demographic calculations). Fifty-five participants (32.7 percent) were 18-24, 87 (51.2 percent) were 25-44, and 19 (11.3 percent) were 45-65. One participant (.6 percent) was over 65. Also, four participants (2.4 percent) chose not to answer the question.

In the 18-24 category 38.2 percent (n=21) had been tested, while 45.4 percent (n=25) were untested and 16.4 percent (n=9) were unsure of their testing status. Of those participants in the 25-44 age group, 59.8 percent (n=52) had been tested, 27.6 percent (n=24) were untested and 12.6 percent (n=11) were unsure. In the 45-65 age category, 21.1 percent (n=4) had been tested, 73.7 percent (n=14) were untested and 5.3 percent (n=1) were unsure. Only one participant was over 65; therefore, 100 percent were untested.

**Table 2: HIV-Testing Status By Age.**

	<b>TESTED</b> percent (#)	<b>UNTESTED</b> percent (#)	<b>UNSURE</b> percent (#)	<b>TOTAL</b> percent (#)
<b>18-24</b>	38.2 (21)	45.5 (25)	16.4 (9)	100 (55)
<b>25-44</b>	59.8 (52)	27.6 (24)	12.6 (11)	100 (87)
<b>45-65</b>	21.0 (4)	73.7 (14)	5.3 (1)	100 (19)

**Race/Ethnicity**

Race/ethnicity included five populations: Native American/Alaskan Native, African-American, Asian/Pacific Islander, Hispanic Latino, and Caucasian. Of the 168 participants only 3.6 percent (n=6) did not answer. The following was the breakdown for the remaining 162 participants: 48.8 percent (n=82) were Native American/Alaskan Native; 1.2 percent (n=2) were African-American; 1.2 percent (n=2) were Asian/Pacific Islander; 3 percent (n=5) were Hispanic Latino; and 42.3 percent (n=71) were Caucasian.

Due to the limited participants in the African-American, Asian/Pacific Islander, and Hispanic Latino populations, the study compared only Native American/Alaskan Native with Caucasian. The HIV-testing status of the two groups is illustrated in Table 3. Of the 82 Native Americans, 36.6 percent (n=30) were HIV tested; 13.4 percent (n=11) were unsure; and 50 percent (41) were untested. The Caucasian participants tested more frequently. Of these 71 participants, 57.7 percent (n=41) had tested; 14.1 percent (n=10) were unsure; and 28.2 percent (n=20) were untested.

**Table 3: HIV-Testing Status By Race.**

	<b>TESTED</b> percent (#)	<b>UNTESTED</b> percent (#)	<b>UNSURE</b> percent (#)	<b>TOTAL</b> percent (#)
<b>NA</b>	36.6 (30)	50 (41)	13.4 (11)	100 (82)
<b>CAUCASIAN</b>	57.7 (41)	28.2 (20)	14.1 (10)	100 (71)

**Income**

The survey's income question had four categories: below \$10,000; \$10,000-15,000; \$15,001-25,000; and over \$25,000. This question was optional; 13.1 percent (22 participants) did not answer. The remaining 149 participants were the following incomes: 38.1 percent (n=64) earned below \$10,000; 13.1 percent (n=22) earned \$10,000-15,000; 24.4 percent (n=41) made \$15,001-\$25,000; and 11.3 percent (n=19) earned over \$25,000.

Table 4 is income and HIV-testing status, while the barriers for each income are illustrated in Figure 3. For those participants earning below \$10,000, 43.8 percent (n=28) had tested; 15.6 percent (n=10) were unsure; and 40.6 percent (n=26) were untested. Of those earning \$10,000-15,000, half (n=11) tested; 18.2 percent (n=4) were unsure; and 31.8 percent (n=7) were untested. Participants earning \$15,000-25,000 tested less frequently; 36.6 percent (n=15) tested, 12.2 percent (n=5) were unsure, and 51.2 percent (n=21) were untested. Finally, participants earning over \$25,000 tested more frequently than participants in the other three income categories; 63.2 percent (n=12) tested, none were unsure, and 36.8 percent (n=7) were untested.

**Table 4: HIV-Testing Status By Income.**

	<b>TESTED</b> percent (#)	<b>UNTESTED</b> percent (#)	<b>UNSURE</b> percent (#)	<b>TOTAL</b> percent (#)
<b>&lt; \$10,000</b>	43.8 (28)	40.6 (26)	15.6 (10)	100 (64)
<b>\$10,000- 15,000</b>	50 (11)	31.8 (7)	18.2 (4)	100 (22)
<b>\$15,001- 25,000</b>	36.6 (15)	51.2 (21)	12.2 (5)	100 (41)
<b>&gt; \$25,000</b>	63.2 (12)	36.8 (7)		100 (19)

**Gender**

In addition to eight participants of unknown gender, the survey respondents included 93 males (58.1 percent) and 67 females (41.9 percent). Seventeen males and 15 females were IVDUs; 30 males and 48 females were NA; and 64 males were MSM. (Some participants were members of more than one group, thus the breakdown was numerically larger than 168.) Over 49 percent (n=46) of the males tested; 11.8 percent (n=11) were unsure; 31.2 percent (n=29) were untested; and 7.5 percent (n=7) did not respond to the question. Fewer women tested, 32.8 percent (n=22); plus, 13.4 percent (n=9) were unsure, 44.8 percent (n=30) were untested and nine percent (n=6) did not respond to the question.

**Table 5: HIV-Testing Status By Gender.**

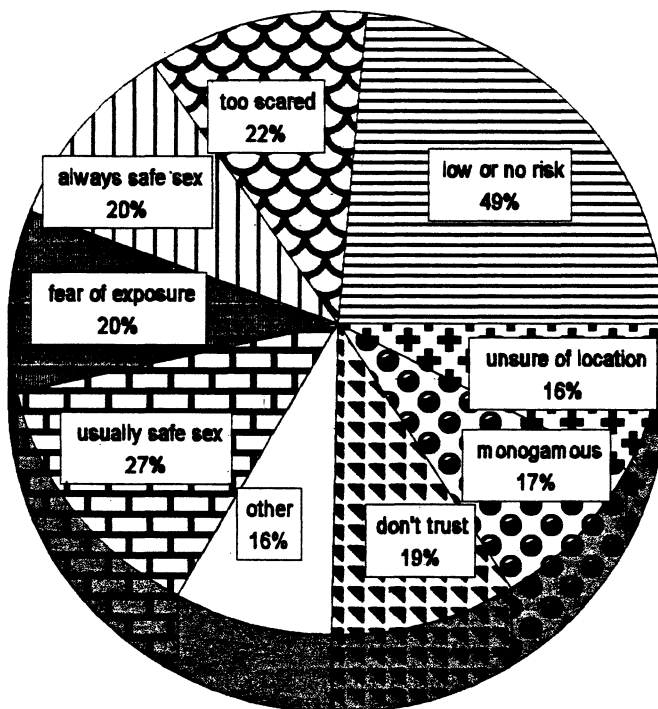
	<b>TESTED</b> percent (#)	<b>UNTESTED</b> percent (#)	<b>UNSURE</b> percent (#)	<b>NO REPLY</b> percent (#)	<b>TOTAL</b> percent (#)
<b>MALE</b>	49 (46)	31.2 (29)	11.8 (11)	7.5 (7)	100 (93)
<b>FEMALE</b>	32.8 (22)	44.8 (30)	13.4 (9)	9 (6)	100 (67)

### **THE BARRIERS**

The nine, most frequent barriers (see Figure 1) among the 116 individuals who answered the question were: perceived low or no risk (49.1 percent, n=57), usually practiced safe sex (26.7 percent, n=31), too scared (22.3 percent, n=26), always practiced safe sex and feared people finding out (19.8 percent, n=23), did not trust the health department ( 19 percent, n=22), was in a monogamous relationship (17.2 percent, n=20), had other reasons (16.4 percent, n=19), and was unsure of testing locations (15.5 percent, n=18). Less than 10 percent of the respondents had the following barriers: too long to get the results and fear of losing my partner (8.6 percent, n=10); fear of needles and too expensive (6 percent, n=7); plus fear of alienation from my family and inconvenient location (5.2 percent, n=6). Less than five percent of the respondents were in the window period (3 percent, n=5); did not care or want to bother (2.6 percent, n=3); or had legal and insurance reasons (1.7 percent, n=2). Finally, less than one percent (.9 percent, n=1) considered AIDS was only a gay disease, feared losing their job, had no knowledge of HIV and practiced only oral sex.

**Figure 1: Nine Most Frequent HIV Testing Barriers**

Percent of Participants Who Identified These Barriers

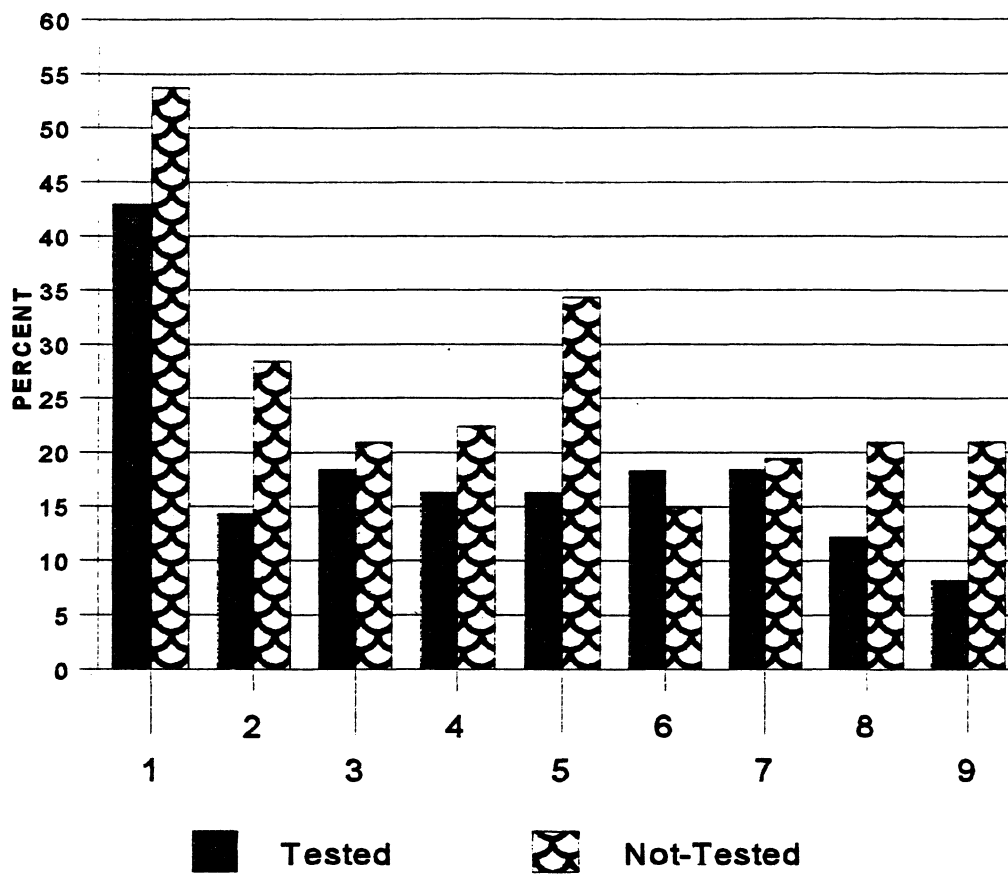




### **Tested and Untested**

Figure 2 is the 49 HIV tested and 67 untested participants' barrier responses. In the tested group, over 42 percent (n=21) had no or low risk; 18.4 percent (n=9) always practiced safe sex, did not trust the health department, and had other reasons; 16.3 percent (n=8) feared people finding out and usually practiced safe sex; and 14.3 percent (n=7) were too scared. For the untested individuals (all untested participants responded to the barrier question), over 53 percent (n=36) had low or no risk; 34.3 percent (n=23) usually practiced safe sex; 28.4 percent (n=19) were too scared; 22.4 percent (n=15) feared people finding out; and 20.9 percent (n=14) were unsure of testing location, were in monogamous relationships, and always practiced safe sex.

**Figure 2: HIV-Testing Barriers By Testing Status**



**THE BARRIERS**

- |   |                             |   |                         |
|---|-----------------------------|---|-------------------------|
| 1 | I am at low or no risk      | 6 | Other                   |
| 2 | Too scared                  | 7 | Too long to get results |
| 3 | I always practice safe sex  | 8 | Don't trust Health Dept |
| 4 | Fear of people finding out  | 9 | I am monogamous         |
| 5 | I usually practice safe sex |   |                         |

### **High-Risk Groups**

Refer to Figure 3.

#### **MSM.**

Fifty-eight percent HIV tested and untested MSM (n=64) responded to the barrier question. Of these, 43.3 percent (n= 16) had no or low risk; 29.7 percent (n=11) were too scared; 18.9 percent (n=7) always practiced safe sex, feared people finding out, usually practiced safe sex, and had other reasons; 16.2 percent (n=6) believed the results took too long, did not trust the health department, and were in a monogamous relationship.

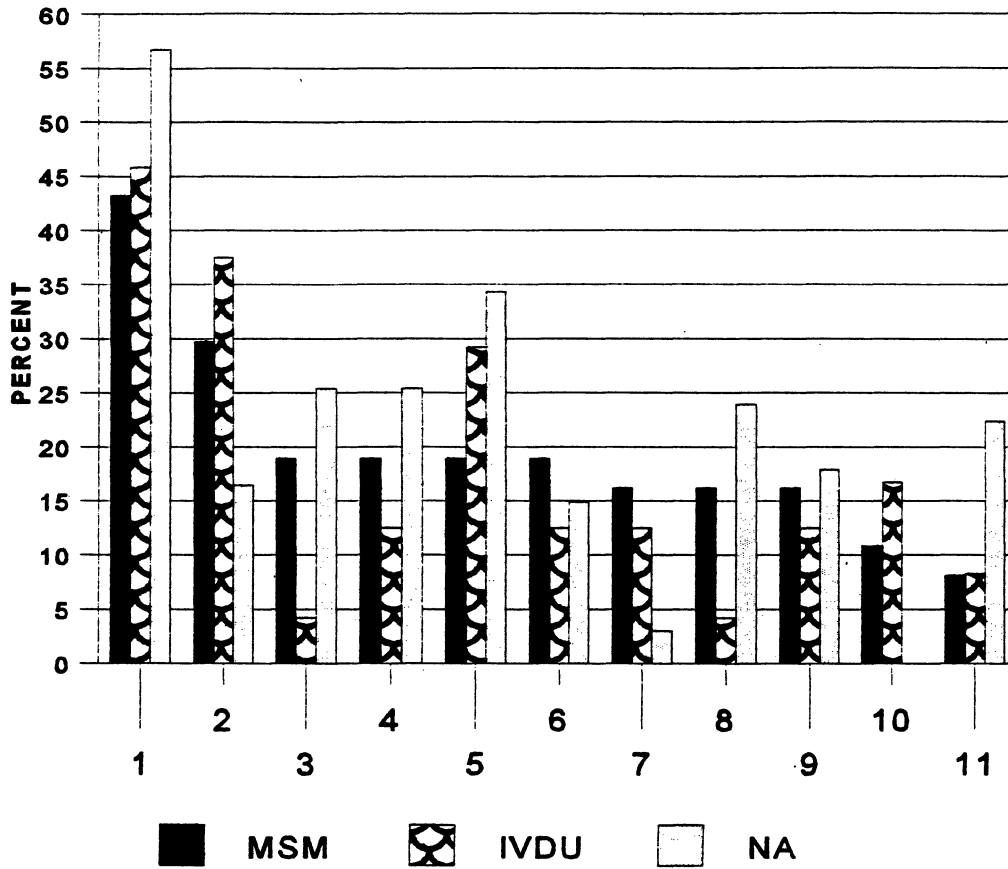
#### **IVDUs.**

Over 61 percent (n=24) HIV tested and untested IVDUs responded to the barrier question. Of these, 45.8 percent (n=11) had low or no risk; 37.5 percent (n=9) were too scared; 29.9 percent (n=7) usually practiced safe sex; and 16.7 percent (n=4) believed the test costs too much.

#### **NA.**

Over 81 percent (n=67) HIV tested and untested NA responded to the barrier question. Of these, 56 percent (n=38) had low or no risk; 34.3 percent (n=23) usually practiced safe sex; 25.4 percent (n=17) always practiced safe sex; 23.9 percent (n=16) lacked trust in the health department; and 22.4 percent (n=15) were unsure of testing location.

**Figure 3: HIV-Testing Barriers By High-Risk Group**



**THE BARRIERS**

- |   |                             |    |                              |
|---|-----------------------------|----|------------------------------|
| 1 | I am at low or no risk      | 7  | Too long to get results      |
| 2 | Too scared                  | 8  | Don't trust Health Dept.     |
| 3 | I always practice safe sex  | 9  | I am monogamous              |
| 4 | Fear of people finding out  | 10 | Too expensive                |
| 5 | I usually practice safe sex | 11 | Not sure where to get tested |
| 6 | Other                       | -  |                              |

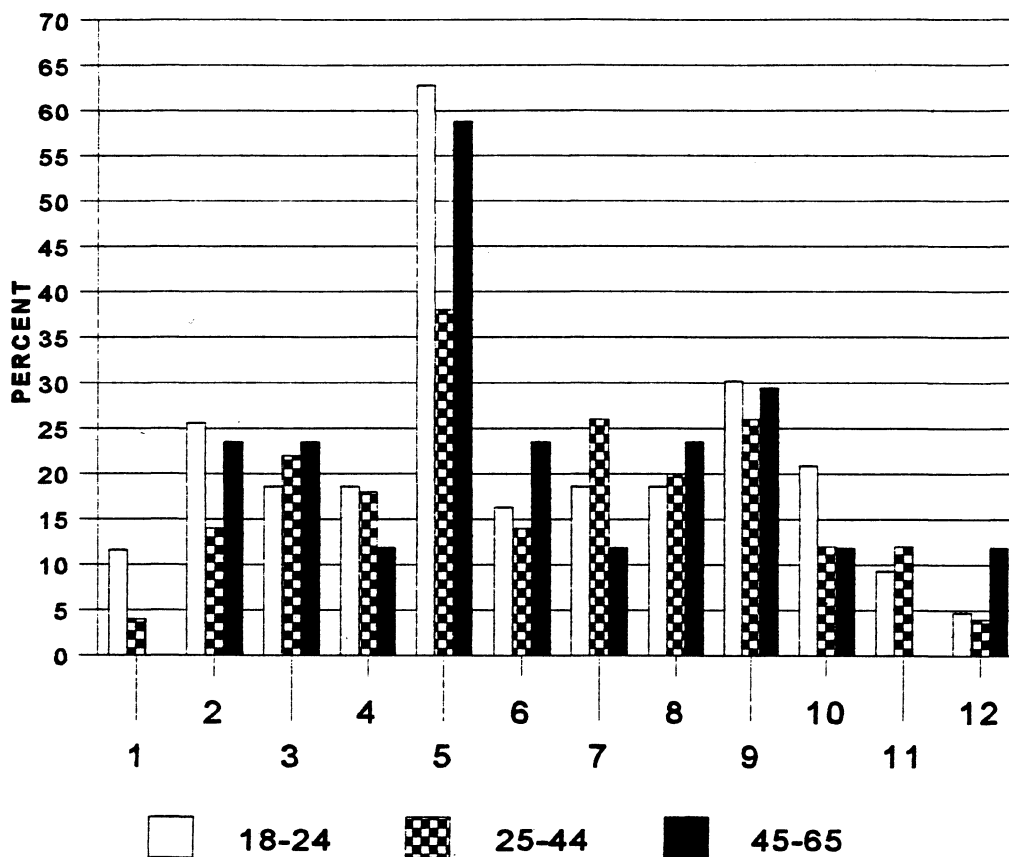
## **Demographics**

Refer to Figures 4, 5, 6, and 7.

### **Age.**

As shown in Figure 4, the three most frequent barriers for those 43 participants aged 18-24 who responded to the question were perceived low or no risk, usually practiced safe sex, and always practiced safe sex. Over 62 percent (n=27) identified at low or no risk; 30.2 percent (n=13) usually practiced safe sex; and 25.6 percent (n=11) always practiced safe sex. Of the 50 respondents aged 25-44, 38 percent (n=19) were low or no risk; 26 percent (n=13) were too scared and usually practiced safe sex; and 22 percent (n=11) feared exposure. The most frequent barriers for the 17 respondents aged 45-65 were low or no risk (58.8 percent, n=10); usual practice of safe sex (29.4 percent, n=5); and lack of trust in health department percent, fear of people finding out, and other reasons (23.5 percent, n=4). Their other reasons included fear of alienation, "don't have sex too often", and "never thought about it".

**Figure 4: HIV -Testing Barriers By Age**



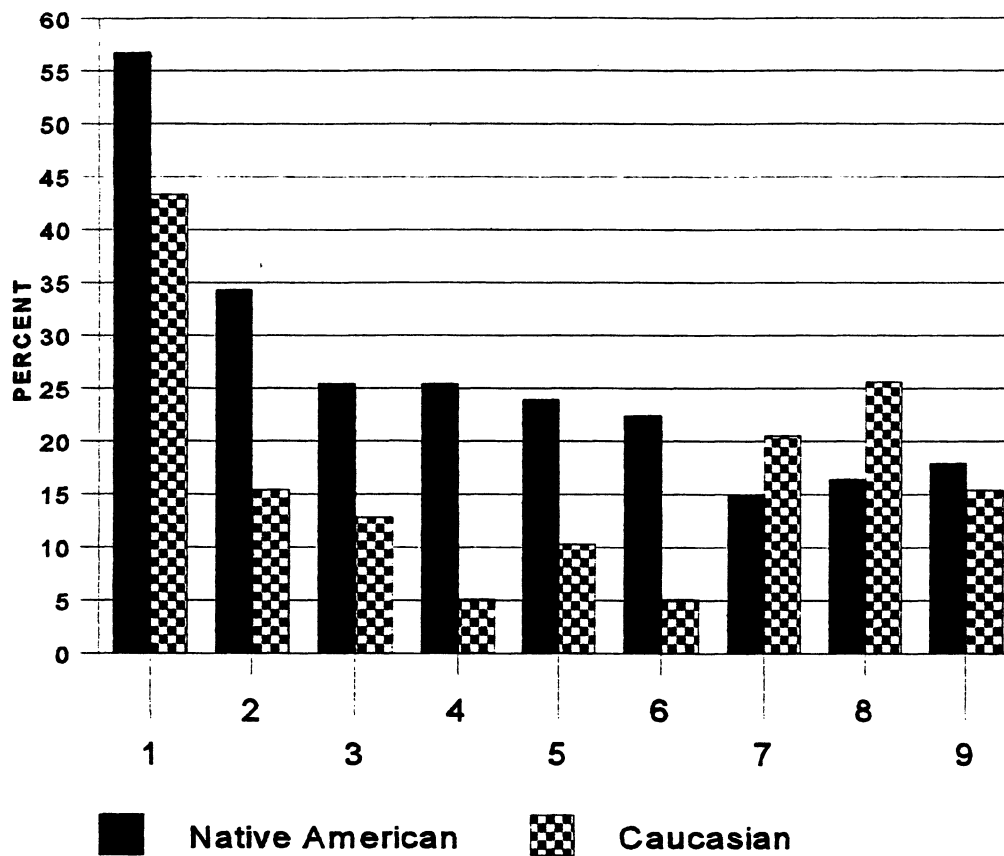
**THE BARRIERS**

- |   |                                   |    |                              |
|---|-----------------------------------|----|------------------------------|
| 1 | Too expensive                     | 7  | Too scared                   |
| 2 | I always practice safe sex        | 8  | Don't trust Health Dept.     |
| 3 | Fear of people finding out        | 9  | I usually practice safe sex  |
| 4 | I am in a monogamous relationship | 10 | Not sure where to get tested |
| 5 | I am at low or no risk            | 11 | Too long to get the results  |
| 6 | Other reasons                     | 12 | Inconvenient location        |

**Race/Ethnicity.**

The HIV testing barriers by race/ethnicity are illustrated in Figure 5. The most frequent barriers for the 67 NA who responded to the question were I am at low or no risk; I usually practice safe sex; I always practice safe sex; Fear of people finding out; Don't trust Health Department; and Not sure where to get tested. Over 56 percent (n=38) believed they had little or no risk; 34.3 percent (n=23) usually had safe sex; 25.4 percent (n=17) always had safe sex and feared others finding out; 23.9 percent (n=16) lacked trust for the health department; and 22.4 percent (n=15) were unsure of testing locations. For the 39 Caucasian individuals who responded to the barrier question, 43.6 percent (n=17) believed they had low or no risk, 25.6 percent (n=10) were too scared to get tested, and 20.5 percent (n=8) had other reasons. These reasons included believing the HIV test was not anonymous and dislike of needles.

**Figure 5: HIV- Testing Barriers By Race**



**THE BARRIERS**

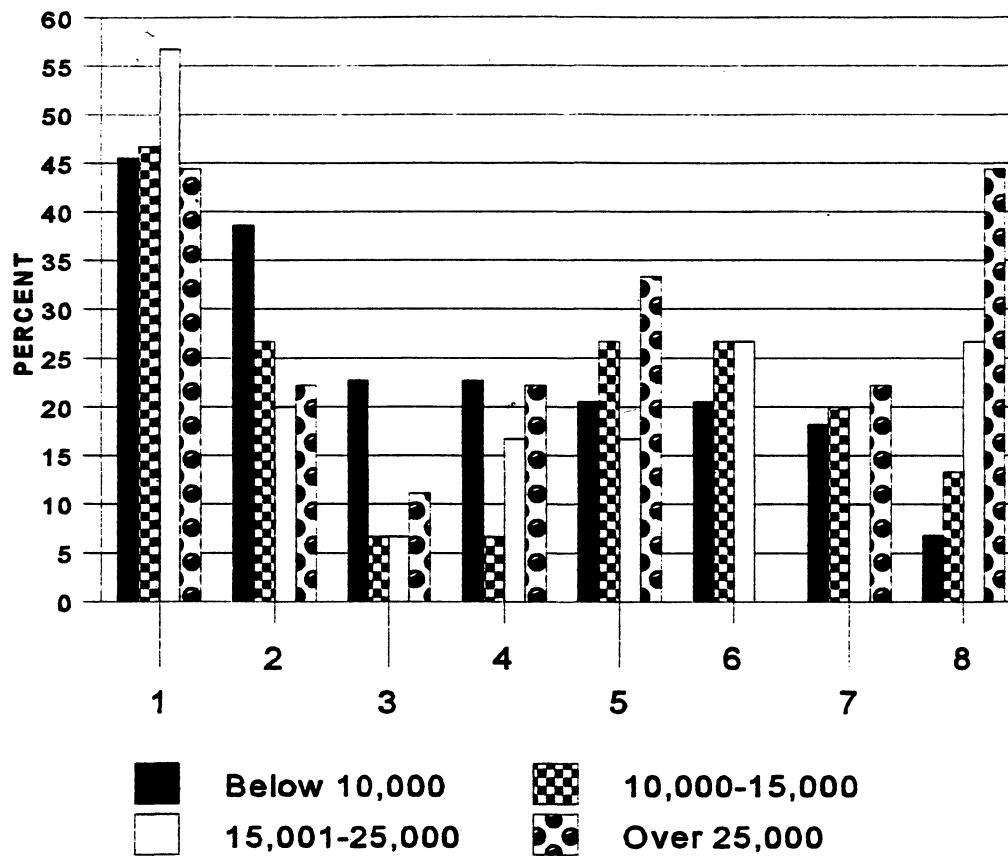
- |   |                             |   |                              |
|---|-----------------------------|---|------------------------------|
| 1 | I am at low or no risk      | 6 | Not sure where to get tested |
| 2 | I usually practice safe sex | 7 | Other                        |
| 3 | I always practice safe sex  | 8 | Too scared                   |
| 4 | Fear of people finding out  | 9 | I am monogamous              |
| 5 | Don't trust Health Dept.    |   |                              |



### Income.

The HIV testing barriers by income are illustrated in Figure 6. The most frequent barriers of the 44 participants earning under \$10,000 who responded to the question were perceived little or no risk, usually practiced safe sex, uniformed about testing locations and fear of exposure. Over 45 percent (n=20) believed they had little or no risk; 38.6 percent (n=17) usually practiced safe sex; and 22.7 percent (n=10) feared people finding out and were unsure of testing location. The most frequent barriers for those 15 in the \$10,000-15,000 income bracket who responded to the question were perceived little or no risk (46.7 percent, n=7)); always practiced safe sex, too scared, and usually practiced safe sex were equal frequencies (26.7 percent, n=4); and other reasons (20 percent, n=3). Other reasons included "just haven't really thought about it", and discrimination from IHS (Indian Health Service). The three most frequent barriers for the 30 individuals in the \$15,001-25,000 income bracket who answered the question were little or no risk (56.7 percent, n=17), lack of trust in the health department (30 percent, n=9) and too scared (26.7 percent, n=8). For those nine participants earning over \$25,000 who responded to the question, the most frequent barriers were I am in a monogamous relationship and I am at low or no risk (44.4 percent, n=4); always practice safe sex (33.3 percent, n=3); and fear of people finding out, usually practice safe sex, and other reasons (22.2 percent, n=2). Their other reasons included "FEAR" and "unnecessary due to monogamous relationship".

**Figure 6: HIV-Testing Barriers By Income**

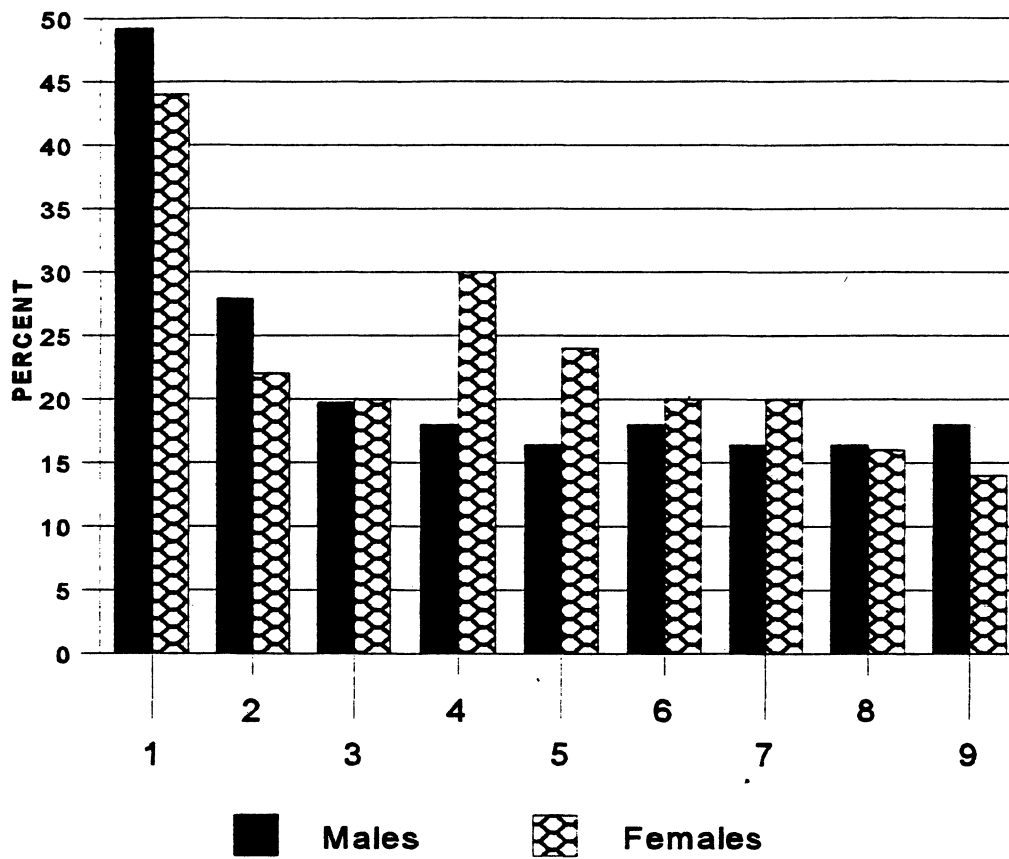


**THE BARRIERS**

- |   |                              |   |                            |
|---|------------------------------|---|----------------------------|
| 1 | I am at low or no risk       | 5 | I always practice safe sex |
| 2 | I usually practice safe sex  | 6 | Too scared                 |
| 3 | Not sure where to get tested | 7 | Other                      |
| 4 | Fear of people finding out   | 8 | I am monogamous            |

**Gender.**

The HIV testing barriers of the genders are illustrated in Figure 7. For the 61 men who answered the question, the three most frequent barriers were perceived low or no risk (49.2 percent, n=30), usually practiced safe sex (27.9 percent, n=17) and always practiced safe sex (19.7 percent, n=12). The three most frequent barriers for the 50 women who answered the question were: perceived low or no risk (44 percent, n=22); too scared (30 percent, n=15); and fear of people finding out (24 percent, n=12).

**Figure 7: HIV-Testing Barriers By Gender****THE BARRIERS**

- |   |                             |   |                              |
|---|-----------------------------|---|------------------------------|
| 1 | I am at low or no risk      | 6 | Don't trust Health Dept.     |
| 2 | I usually practice safe sex | 7 | I am monogamous              |
| 3 | I always practice safe sex  | 8 | Not sure where to get tested |
| 4 | Too scared                  | 9 | Other                        |
| 5 | Fear of people finding out  |   |                              |

### **Differences Among the Three Groups**

Using the Kruskal-Wallis One-Way Anova, the five most frequent barriers (see Figure 3, page 42) among the three groups were compared. Significant difference (significance level  $< .05$ ) was found with one barrier, always had safe sex. A post hoc test, the Mann-Whitney U- Wilcoxon Rank Sum W, was then used to determine the difference among the three groups. After adjusting the significance level ( $< .016$ ) to accommodate the three post hoc tests (Huck et al., 1974), significant differences existed between NA and IVDUs. Therefore, there was a significant difference between NA and IVDUs regarding the frequency of times members of each group identified always had safe as a barrier to HIV testing; NA identified always had safe sex more frequently than IVDUs.

### **Internal Verses External**

Internal or intrinsic barriers consisted of attitudes, beliefs, and knowledge. The following were internal barriers: perceived low or no risk, did not care, feared people finding out, uninformed about AIDS in Montana, lacked trust of health department, feared needles, uneducated about HIV and too scared. External barriers included the following behaviors: usual practice of safe sex, always practice safe sex, and practice only oral sex. In addition, external barriers were lack of cure, expense, insurance reasons, legal ramifications, time frame for results, window period, and inconvenient location. The Wilcoxon Matched-Pairs Signed-Ranks Test's Z score was  $-3.4638$  ( $p < .0005$ ). Therefore, the participants had significantly more internal barriers to HIV testing

than external barriers.

### **HIV/AIDS INFORMATION SOURCES**

Respondents received HIV information from various sources. Health care clinics provided information to 57.7 percent (n=98) of the participants, newspaper/TV to 35.1 percent (n=59), other sources to 23.2 percent (n=39) and friend/family members to 20.8 percent (n=35). Other HIV information sources included “when I tested positive”, Gay Men’s Task Force (Montana advocacy group for MSM), military, hospital, work, the gay community, literature, and Alcoholics Anonymous (AA). Few respondents received information while in high school (13.7 percent, n=23) and college (12.5 percent, n=21). Only 4.8 percent (n=8) had not received any HIV/AIDS information.

### **PARTICIPANTS’ RESPONSES**

The final portion of the Health Information Survey included two optional questions (Appendix E). The first question solicited responses regarding the testing barriers; the second requested suggestions to improve the health department’s HIV CT. Approximately one-quarter of the respondents answered the first question; while roughly one-half responded to the second question. Major themes regarding barriers and suggestions emerged in each population.

**MSM**

MSMs' most common responses to the first optional question included a long waiting period for the results, fear, and social stigma:

One MSM communicated, "[even though I have been tested] I know how scared I was because of the waiting period to get my results the first time. People should be able to get results not more than three days after testing."

Those untested shared the same frustration; "the two week wait is too long - do the health service people do this on purpose to make us sweat it out in fear, in order to make us agonize over past unsafe behavior so we won't do it again in the future?"

"Fear keeps me from retesting because I know that four years ago I was negative - and feel if I retest now and I am positive, it is my own fault", stated a tested MSM

An untested man wrote, "I do practice safe sex [sometimes]. Testing can be done anonymously at the family clinic in my home town or at the gay bar. I probably would, but I am ignorant, scared and feel I don't have anybody to support me in this action! I am a fool not to have one and I know it is a big risk!!!"

One tested man communicated, "End homophobia. Be Human." Another added, "homophobic personnel in the health departments is one of the biggest negatives in Havre and in Cascade County."

Many MSM had suggestions for HIV testing improvements (question two).

Reducing the time frame for HIV results was a common concern for almost all MSM respondents. In addition, some commented on the lack of services during the long waiting period. Other MSM were concerned with the lack of men, gay or heterosexual, working at the CT sites; judgmental and insensitive staff members at the testing sites; the lack of testing sites on the Flathead Indian Reservation; and the lack of information in the high schools.

A tested man believes, “two weeks is too long to wait if you’re waiting on results of whether you have a life-threatening disease - even though I think the idea behind it is to make you nervous and to think about having unsafe sex, it is not worth the mind game you go through waiting two weeks to find out. If the question is to have more people get tested more often, then there needs to be a quicker time frame on being tested.”

Another tested man wants, “[to] have gay/bisexual - even straight men- be in charge of or have power within my testing site. They are all women and make me uncomfortable.” (One individual could not trust or even relate to the all-women staff at his CT site.)

“Get the message out that being HIV+ is not an instant death sentence”, wrote a tested MSM.

One MSM commented that, “[to make testing] guilt free - people in health care should not impose their personal beliefs upon someone coming to the clinic for help. Health care personnel should always be supportive and understanding and never be judgmental.”

MSM also suggested testing drives and satellite testing sites. A

suggestion was made to have testing drives (similar to blood drives) at events, such as gay/bisexual/lesbian dances. Another man proposed satellite testing at the homes of trusted gay people. This same individual wrote, “also [have] a 24-hour hot-line. Most health departments close at 5:30 [p.m.] and are closed on holidays. People need to know they can talk with [knowledgeable health care professionals] during these [closed] times.” Finally, there was a confidentiality issue. HIV testing should be completely anonymous; anonymity is essential. A common belief was that testing was not anonymous and that people who tested positive had the potential to lose jobs, families, partners, health insurance, and respect.

One MSM wrote, “I believe most gay people are in the closet and married



or are in heterosexual relationships having gay sex on the side. So, anonymous testing is vital.”

Another individual shared, “[that in] small towns - people don’t live by the saying ‘loose lips sink ships’. I feel as if I am a resident of a small town and that I need to go to a big town for confidentiality.”

### **IVDUs**

The few IVDUs that responded to the optional questions had common concerns and suggestions. Only four participants responded to the first optional question, why a barrier(s) impedes testing. Their limited responses repeated those of MSM and included the stigma of HIV as a gay disease and the long time frame of testing results.

“I am mainly afraid of people finding out and being alienated”, said an untested IVDU.

A tested IVDU responded, “Billings gives free AIDS testing-\$10.00. May not seem like a lot [of money] but people are afraid of the test anyway-- charging them only makes it [HIV testing] more of a deterrent.”

The IVDUs’ responses regarding suggestions for the public health department (question two) also duplicated those of MSM: free testing, guaranteed confidentiality, appointments to suit work schedules (evening and weekend testing) and more advertising. In addition, several IVDUs suggested a free needle program.

### **NA**

Confidentiality was the most dominant issue for almost all NA respondents. In addition, many NA were fearful of HIV testing.

One untested female wrote, "I wouldn't want anyone to know if I did [test]. I'd rather worry for the rest of my life than to get tested. I also don't trust the people at the clinic. Some of them have big mouths."

An untested woman disclosed, "as a person who is familiar with the local health care system because of my profession, I know that the confidentiality of IHS [Indian Health Service] records is not taken seriously."

A tested women explained, "I got an AIDS test and it was negative. If it was positive I wouldn't want anyone to know. But with all the gossip at IHS everyone would probably know." She suggested, "stop GOSSIPING and be more confidential."

An untested woman expressed, "I don't know how safe the information is stored. Someone might let it out that I was tested where I go (clinic), the people who work there I don't trust."

Still another untested NA man lamented, "I don't have any confidence in the confidentiality at the Indian Health Service Hospital."

An untested NA female wrote, "just hearing the words HIV/AIDS makes me uncomfortable--[I'm] too scared to find out either way."

An untested woman who had an HIV positive family member explained, "because I am scared and I had a family member who had it and it scares me and I'm only with one person."

Suggestions for the health department mirrored those of MSM and IVDUs: free testing, home testing, more education, and available information. Other selected suggestions follow:

One untested woman wrote, "[have] home [tests] with anonymous drop-off spots--samples could be given code names or numbers."

An untested man requested, "have a private company do the testing and have a toll-free number to call in for your results."

Another untested NA female desires to, "have the results stored where just one person has access to, not everyone in the office staff. [HIV records] shouldn't be kept with our everyday medical records. Have a

special room.”

An untested woman wrote, “more [testing] locations on Salish and Kootnai reservation.”

## **CHAPTER V**

### **INTRODUCTION**

The purpose of this study was to identify the barriers to HIV counseling and testing (CT) of three high-risk populations in Montana. The three populations were Men Having Sex With Men (MSM), Intravenous Drug Users (IVDUs) and Native Americans on Reservations (NA). In addition, the study also explored barrier differences among the three groups, and described barriers in relationship to demographic data. Representative members of the three groups distributed 1150 Health Information Surveys (see Appendix E & Appendix F) to high-risk individuals residing in Montana's six regions (Appendix C). The survey identified 168 high-risk participants (from a total of 242 returned surveys), disclosed their demographic information and pinpointed their barriers to HIV testing. Secondly, the survey solicited suggestions for CT improvements.

### **DATA ANALYSIS SUMMARY**

#### **Tested and Untested**

More MSM tested (61 percent, n=39) than IVDUs (54 percent, n=21) or NA (37 percent, n=30). Using the demographic data, profiles of HIV tested and untested individuals emerged. A typical tested Montanan was a white male, 25 to 44-years old, earning over \$25,000; while a typical untested Montanan was a Native American woman, 45 to 65-years old, earning \$15,001 to \$25,000.

### **Overall Barriers**

Refer to Figure 1 (page 38).

The most frequently identified barriers were low or no risk (49 percent, n=57); usually practiced safe sex (27 percent, n=31); and too scared (22 percent, n=26). The most frequent barriers among tested individuals were low or no risk (42 percent, n=21); always practiced safe sex, did not trust the health department, and had other reasons (18 percent, n=9); and feared people finding out and usually practiced safe sex (16 percent, n=8). For those untested individuals (all untested individuals responded to the barrier question), the most frequent barriers were low or no risk (53 percent, n=36); usually practiced safe sex (34 percent, n=23); and too scared (28 percent, n=19).

### **Barriers of High-Risk Groups**

Refer to Figure 3 (page 42).

#### **MSM.**

The most frequent HIV-testing barriers were no or low risk (43 percent, n=16); too scared (30 percent, n=11); and always practiced safe sex, feared people finding out, usually practiced safe sex, and had other reasons (19 percent, n=7).

#### **IVDU.**

The most frequent HIV-testing barriers were no or low risk (46 percent, n=24); too scared (38 percent, n=9); and usually practiced safe sex (30 percent, n=7).

**NA.**

The most frequent HIV-testing barriers were low or no risk (56 percent, n=38); usually practiced safe sex (34 percent, n=23); and feared others finding out and always practiced safe sex (25 percent, n=17).

**DISCUSSION****Implications**

Several important implications for HIV researchers can be drawn from this project. First and foremost was the difficulty in accessing high-risk populations. This difficulty was common in other national HIV research. Most of the previous researchers conducted studies with self-identified, high-risk individuals. Few studies contained data from unidentified (closeted) high-risk group members. Perhaps the cause of limited access to the high-risk populations is that many members of the high-risk groups do not identify as such. Reasons for not identifying with these high-risk groups are twofold: Individuals could be undisclosed members of the groups and two of the groups (MSM and IVDUs) have social stigmas, thus individuals may not want to be associated with them. Lack of access into the high-risk groups may prevent researchers from obtaining representative samples and satisfactory survey return rates. In this study, despite the invaluable help from contacts within the targeted populations, the survey return rate was lower than expected.

The second implication was that few high-risk individuals identified themselves as high-risk; 44 percent of the high-risk respondents were untested and the most frequent barrier was no or low risk. This response corresponds to other rural studies found in the literature; 92 percent of the rural respondents in one national survey cited low risk as a HIV testing barrier (Mainus et al., 1995). Some individuals may perceive themselves as low risk because of an HIV/AIDS knowledge deficiency. Others may perceive themselves as low risk because of denial; they may not believe they are vulnerable to the disease.

Another implication of the study was the shortage of HIV research in rural areas; more research in these areas is vital. Even though cattle outnumber residents of Montana by almost 3:1, HIV/AIDS is still a health problem. One reason for the limited studies is that AIDS researchers may believe this sparsely populated state is located far away from the epidemic's epicenters (such as San Francisco and New York City) so it does not deserve ample investigation. Additionally, rural research must focus on NA populations. Currently, despite the rising numbers of NA-HIV infections, virtually no research examines this population. Due to NA reservations' isolation, without research and appropriate prevention programs, a possibility of extensive HIV incidence within this population exists.

The final implication was that the barriers appear similar among the three groups; these barriers, especially perceived low risk, confidentiality issues, and lack of trust in the health department, were similar to barriers found in the

literature review. Therefore, it would behoove governmental health agencies to reduce the three groups' most prevalent barriers. A reduction in barriers could seduce more high-risk individuals to HIV test.

### **Concerns**

A low rate of return existed; about 21 percent (n=242) of the 1150 distributed Health Information Surveys were returned. Of these, only 15 percent (n=168) were members of the targeted populations. In addition, there was concern as to whether the respondents were representative of all members of the target populations: The MSM contacts were either self-identified gay or affiliated with gay-advocacy groups and therefore their efforts to reach men who did not identify themselves as gay (heterosexual and bisexual men) may have been limited; and most IVDU contacts worked at state drug and alcohol treatment centers and probably distributed surveys to IVDUs in treatment. Finally, there was concern regarding the barrier section of the Health Information Survey (question 9). The survey question targeted only untested individuals. Therefore, few tested individuals responded to the question. In the future, researchers could identify barriers to HIV testing and retesting by targeting both tested and untested individuals.

### **Recommendations**

Many high-risk individuals in this study reported that they had no or low risk for contracting HIV. Unfortunately this perception is incorrect. The



epidemiological data support the DPHHS and accurately assessed MSM, IVDU, and NA as high-risk groups. Therefore, governmental health agencies and other interested parties must increase perceptions of HIV-risk behavior among these three groups. Additionally, many individuals were too scared to get HIV tested. Perhaps they perceived HIV/AIDS as an instant death sentence, another misconception. New HIV drugs (protease inhibitors) can possibly prolong and enhance the life of HIV-infected individuals.

Controlling HIV infection requires multi-faceted prevention strategies. One of these strategies should include social marketing. Social marketing focuses on non-tangible products like behaviors, attitudes, and perceptions, such as perceiving oneself as low or no risk for contracting HIV. The goal of social marketing is to make the non-tangible products appealing to the selected market, such as seducing high-risk individuals to modify their high-risk behaviors. To accomplish healthy behavior changes, social marketing creates a beneficial exchange association via media campaigns and community involvement; a high-risk individual exchanges his or her high-risk behavior for a perceived benefit.

A social marketing campaign would promote changing HIV high-risk behaviors and address the most frequent CT barriers. Additionally, it would relay the perceived benefits of changing high-risk behaviors and seeking HIV CT, such as early diagnosis, treatment successes and disease prevention. The campaign could target specific high-risk behaviors as well as rural populations

including Native American reservations. Using this strategy, targeting high-risk behaviors as opposed to high-risk groups, the campaign would reach individuals who are at risk but do not identify with the high-risk groups.

Further recommendations, which emerged from the participants' comments and suggestions, include introducing new satellite CT sites, promoting home and saliva testing, and increasing perception of anonymity. Governmental health agencies should offer more satellite CT sites. Satellite sites could be testing drives, similar to blood drives. This mobile HIV testing could be offered at bars, universities, chemical treatment centers (private and state-funded), and various functions around the state. Governmental health agencies also should promote home testing. Many respondents did not trust the health department and believed HIV testing was not anonymous. Fearing disclosure perhaps more individuals, including those of the identified high-risk groups, would home test.

An additional recommendation involves increasing anonymity and confidentiality among all health-care workers involved with HIV CT, especially those at Indian Health Services (IHS). Many of the NA respondents were concerned about the lack of anonymity and confidentiality at IHS. Individuals need to know their health records are not public knowledge.

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**APPENDIX A**  
**HIV EXPOSURE CHART**

**EXPOSURE CATEGORIES OF MONTANA'S ADULT POPULATION  
AIDS Cases as of July 31, 1996 (Communicable Disease Bureau, 1996)**

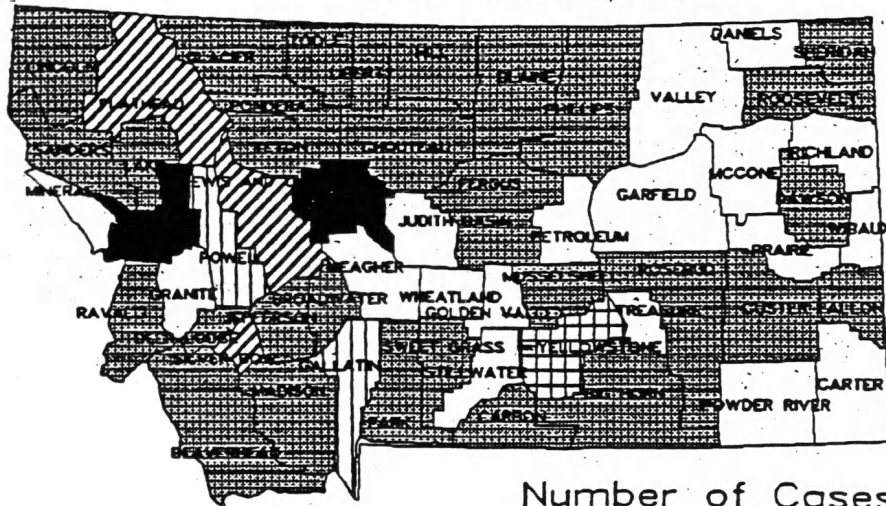
	<b>Region I % (#)</b>	<b>Region II % (#)</b>	<b>Region III % (#)</b>	<b>Region IV % (#)</b>	<b>Region V % (#)</b>	<b>Totals* % (#)</b>
<b>MSM</b>	27 (3)	47 (24)	57 (39)	59 (50)	71 (57)	58 (178)
<b>IVDU</b>	18 (2)	14 (7)	6 (4)	12 (10)	9 (7)	10 (32)
<b>MSM &amp; IVDU</b>	18 (2)	10 (%)	16 (11)	12 (10)	4 (3)	10 (32)
<b>Hemo- philia</b>	0 (0)	4 (2)	4 (3)	0 (0)	3 (2)	2 (7)
<b>Hetero- sexual</b>	18 (2)	14 (7)	7 (%)	9 (8)	5 (4)	9 (27)
<b>Blood Recipient</b>	9 (1)	2 (1)	3 (2)	4 (3)	1 (1)	3 (8)
<b>Not reported/ or other~</b>	9 (1)	10 (5)	6 (4)	5 (4)	8 (6)	7 (21)
<b>Totals</b>	100 (11)	100 (51)	100 (68)	100 (85)	100 (80)	100 (305)

\*Includes 10 cases not assignable to a Planning Region

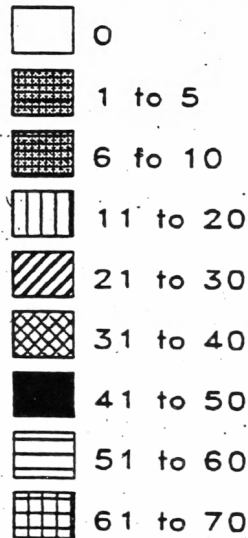
~Includes cases with unavailable risk information

**APPENDIX B**  
**DISTRIBUTION OF MONTANA'S AIDS CASES**

## Distribution of Montana AIDS Cases as of December 31, 1996



### Number of Cases



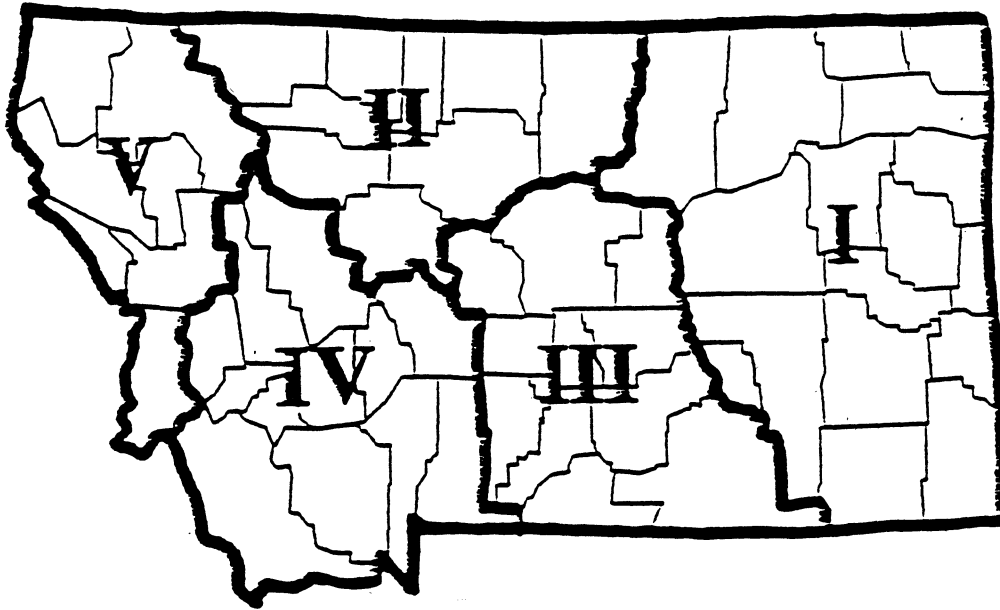
### Counties Reporting five or more AIDS cases:

Cascade	44	Missoula	45
Flathead	21	Powell	11
Gallatin	14	Roosevelt	5
Lake	10	Silver Bow	27
Lewis&Clark	29	Yellowstone	64

\*Thirty-seven of Montana's 56 counties reported at least one AIDS case.

**APPENDIX C**  
**MONTANA'S HEALTH CARE PLANNING REGIONS**

## MONTANA'S HEALTH CARE PLANNING REGIONS



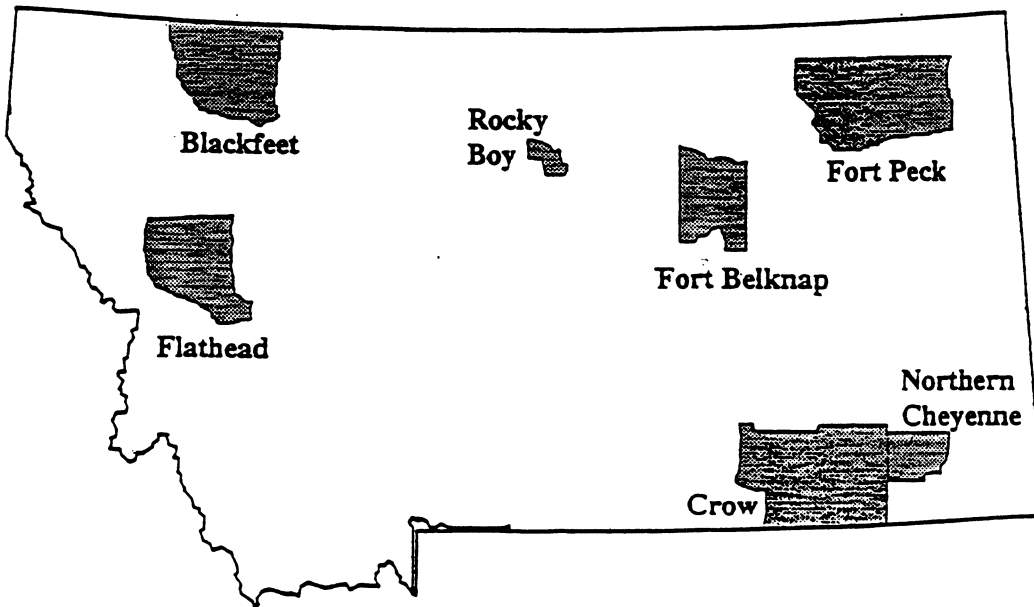
\*Region V divided into two separate regions, VS & VN. Region VN includes Kalispell, Polson and Libby. Region VS includes Missoula, Hamilton and Thompson Falls



**APPENDIX D**

**MONTANA'S NATIVE AMERICAN RESERVATIONS**

# LOCATION OF MONTANA INDIAN RESERVATIONS



**APPENDIX E**  
**HEALTH INFORMATION SURVEY**

## HEALTH INFORMATION SURVEY

This survey is a joint effort between the Department of Public Health and the University of Montana. The purpose of this survey is to identify barriers to HIV testing. Your responses will help the public health department make it easier for Montanans to get HIV tested. This survey is completely voluntary and anonymous. Please do not put your name anywhere on this form.

1. Have you ever had vaginal, oral and/or anal sex with someone else?
  - yes
  - no
  
2. Do you have sex with: (please check one)
  - men only
  - women only
  - both, mostly men
  - both, mostly women
  
3. How often do you use condoms when engaging in vaginal or anal sex? (please check one)
  - always
  - sometimes
  - never
  
4. How often do you use condoms when engaging in oral sex? (please check one)
  - always
  - sometimes
  - never
  
5. Have you ever had vaginal, oral and/or anal sex with someone you know is HIV+?
  - yes
  - no
  - not sure
  
6. When were you last tested for HIV/AIDS?
  - \_\_\_/\_\_\_/\_\_\_ date
  - not sure
  - never been tested
  
7. Where did you get your HIV/AIDS information?
 

<input type="checkbox"/> friend/family member	<input type="checkbox"/> newspaper/TV	<input type="checkbox"/> other (please list): _____
<input type="checkbox"/> high school	<input type="checkbox"/> health care clinic	
<input type="checkbox"/> college	<input type="checkbox"/> haven't received any information	

8. Have you shared needles in the past 15 years? (please check one)

- yes  
 no  
 don't know

9. If you have **never** been tested for HIV/AIDS what are some of the reasons?  
**(please check all that apply to you)**

- |  |   |
|--|---|
| <input type="checkbox"/> I am at low or no risk                | <input type="checkbox"/> Insurance reasons          |
| <input type="checkbox"/> I don't care                          | <input type="checkbox"/> Legal ramifications        |
| <input type="checkbox"/> No cure, why bother                   | <input type="checkbox"/> Fear of losing my partner  |
| <input type="checkbox"/> Fear of people finding out            | <input type="checkbox"/> Too long for the results   |
| <input type="checkbox"/> Too expensive                         | <input type="checkbox"/> I'm in the window period   |
| <input type="checkbox"/> Not sure where to get tested          | <input type="checkbox"/> Fear of needles            |
| <input type="checkbox"/> There isn't any AIDS in Montana       | <input type="checkbox"/> Inconvenient location      |
| <input type="checkbox"/> Don't trust Health Department         | <input type="checkbox"/> No knowledge of HIV        |
| <input type="checkbox"/> I usually practice safe sex           | <input type="checkbox"/> It's a gay disease         |
| <input type="checkbox"/> Fear of losing my job                 | <input type="checkbox"/> I always practice safe sex |
| <input type="checkbox"/> Fear of alienation from my family     | <input type="checkbox"/> I practice only oral sex   |
| <input type="checkbox"/> I am in a monogamous relationship     | <input type="checkbox"/> Too scared                 |
| <input type="checkbox"/> Other reasons: (please specify) _____ |   |

10. PLEASE CHECK ALL ANSWERS THAT MOST ACCURATELY DESCRIBE YOU:

- AGE:**  Under 18  
 18-24  
 25-44  
 45-65  
 Over 65

- RACE/ETHNICITY:**  Native American/  
 Alaskan Native  
 African-American  
 Asian/ Pacific Islander  
 Hispanic Latino  
 Caucasian

**SEXUAL ORIENTATION:**

- Heterosexual  
 Homosexual  
 Bisexual  
 Uncertain

**ANNUAL INCOME: (optional)**

- Below \$10,000  
 10,000-15,000  
 15,001-25,000  
 Over 25,000

**PLEASE CHECK ALL THAT APPLY TO YOU:**

- |  |  |
|--|--|
| <input type="checkbox"/> Spent time in prison (last 15 yrs.)       | <input type="checkbox"/> Sexual partner of bisexual  |
| <input type="checkbox"/> Former injecting drug user (last 15 yrs.) | <input type="checkbox"/> Injecting drug user         |
| <input type="checkbox"/> Sexual partner of injecting drug user     | <input type="checkbox"/> Sexual partner has HIV/AIDS |
| <input type="checkbox"/> Person who trades sex for drugs or money  | <input type="checkbox"/> Family member has HIV/AIDS  |

**GENDER:**     Male     Female

\*Original survey was double-sided with the optional questions on a second page.

### Optional Questions:

If you choose *not* to answer the questions on this page, please use the attached envelope and mail in your responses from the first sheet.

1. Please explain in your own words how the items you chose in question number 9 prevent you from being tested for HIV/AIDS? \_\_\_\_\_

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2. Can you suggest some ways in which the public health department could make it easier for people to get tested for HIV/AIDS? \_\_\_\_\_

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\*\* If you have any questions please call Robin Mochi or Annie Sondag at 406-243-5215.

**APPENDIX E**  
**SURVEY DISTRIBUTION**



### Number of Surveys Distributed By Region

	Region I	Region II	Region III	Region IV	Region VS	Region VN	Total
<b>MSM</b>	0	30	97	75	94	30	326
<b>IVDU</b>	10	22	20	37	40	10	139
<b>NA</b>	100	200	100	0	200*	*	600

**Total survey distribution: 326 MSM + 139 IVDU + 600 NA + 85\*\* = 1,150**

Surveys were distributed to the following communities located within the six regions:

- Region I      Glendive and Fort Peck Indian Reservation
- Region II.    Havre, Great Falls and the Blackfoot Indian Reservation
- Region III    Billings and the Northern Cheyenne Indian Reservation
- Region IV    Bozeman, Butte and Helena
- Region VS:   Missoula (including The University of Montana) and the Flathead Indian Reservation
- Region VN    Kalispell and the Flathead Indian Reservation

\*The Flathead Indian Reservation is in Region VS and VN

\*\*An additional 85 surveys were distributed at two Region VS locations.

**APPENDIX G**  
**LETTER TO CONTACTS**

Hi Colleen,

Thank you for assisting in this project. As I mentioned, the purpose of this study is to identify the barriers to HIV/AIDS counseling and testing for high-risk populations in Montana. The three populations are Men Having Sex With Men, Intravenous Drug Users, and Native Americans on Reservations. Identifying the barriers of HIV/AIDS counseling and testing is important for two reasons. First, recognizing these barriers would provide health officials with insight into establishing services to meet the needs of high-risk individuals. Second, early testing coupled with appropriate counseling may discourage participation in high-risk behaviors.

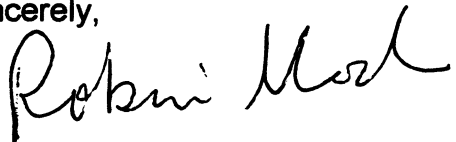
Our goal is to reach as many **untested** individuals **over 18 years of age** in each of the high-risk populations as possible. Therefore, please ask survey participants to distribute additional surveys to other known members of the targeted populations. When using these additional contacts, please stress to them the importance of keeping the identities of survey participants confidential. By using this approach, the survey will reach hard-to-access individuals.

**Please follow these instructions for distributing all surveys.**

1. Briefly explain the purpose of the study.
2. Let the participant know the survey is voluntary and anonymous.
3. Inform them not to put their name anywhere on the survey.
4. Allow participants to complete the survey at their convenience in a private location.
5. Let them know the second page is optional.
6. Inform them to use the self-addressed envelope to return their responses.
7. Please have the survey-takers keep the resource page.

I will be making periodic phone contact to address any questions or comments. In addition to this contact, please feel free to call me any time. I can be reached at Annie Sondag's phone (leave me a message and I will return the call). **Your contribution is vital in gaining access to the targeted populations. I appreciate your time and effort.**

Sincerely,



Robin Mochi  
**(406) 243-5215**