HIV Antibody Testing for Women: Potential Outcome of Current Policy Proposals

By

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THESIS

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MAY 20, 1988
HIV Antibody Testing for Women: Potential Outcome of Current Policy Proposals; Sandra S. Meacham; Abstract.

**ABSTRACT**

Screening women for antibodies to the human immunodeficiency virus (HIV) may prevent perinatal and sexual transmission of AIDS. Suggested public health measures for HIV testing include reporting of seropositive individuals to public health officials and mandatory testing. To determine how women targeted for HIV screening might respond to such measures, we administered anonymous questionnaires to 377 consecutive women seeking care at a university based Obstetrics-Gynecology Practice.

Almost all women would agree to confidential HIV testing if medically recommended. However, if seropositive persons were reported to public health officials, only 55% would agree to testing at a prenatal visit and 56% at an STD visit. Women at high-risk for HIV were significantly more likely to refuse testing with reporting than women at minimal risk.

If HIV testing were mandatory but confidential, 10% would forego prenatal care and 12% would forego STD testing to avoid being tested for HIV. If HIV testing were mandatory and seropositive individuals were reported to public health officials, 19% would forego prenatal care and 27% would forego STD testing. Women at high-risk for HIV were significantly more likely to forego STD care if testing were mandatory than women at minimal risk.

Our findings suggest well-intentioned public health measures for HIV testing may be counterproductive, discouraging women from seeking needed medical care.
ACKNOWLEDGMENTS

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A most special acknowledgement goes to Bernard Lo, whose patience, medical pearls of wisdom (both clinical and political), travel funding, sharing of office space, guidance in medical writing, and humor, made for a most rewarding experience.

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CHAPTER 1. INTRODUCTION

1.1 The Epidemic

Acquired Immunodeficiency Syndrome (AIDS) is a communicable disease which poses a public health threat unprecedented in contemporary times (1). The disease is caused by infection with the Human Immunodeficiency Virus (HIV), which made its appearance in the United States in 1978, with the first confirmed AIDS cases in 1981 (2, 3). Currently, a diagnosis of AIDS must meet specific clinical Centers for Disease Control criteria. Infected persons (carriers) are not said to have the disease AIDS until they meet these defined criteria.

By the end of 1987 there were 49,793 confirmed cases of AIDS in the United States, and 27,909 (56%), had already died at that time (4). The HIV infection to AIDS ratio is estimated to be between 50:1 and 100:1 (5). It is estimated that up to 1.5 million persons are currently infected in the United States, and that 121,000 to 270,000 Americans will be dead or dying of AIDS by 1991 (5, 6, 7). The average incubation period (from time of infection to development of AIDS) is about 6 years (4).

The epidemiologic pattern for HIV transmission is very similar to that of Hepatitis B; it is transmitted by the exchange of body fluids, namely blood and semen. Therefore, behavioral practices which especially predispose to HIV transmission include unprotected sexual intercourse with a large number of sexual partners, and the sharing of hypodermic needles. These facts are reflected in the current epidemiology of AIDS cases, shown in Table 1 (9). Blood products
(whole blood, platelets and clotting factors) previously served as another route for HIV transmission. However, screening of donated blood products for HIV antibodies was begun in 1985, and has essentially eliminated this risk.

Women comprised 7% of AIDS cases as of 1987, and are expected to comprise 9% of cases by 1991 (9, 10). These women are primarily infected by intravenous (IV) drug use, or by having male sex partners who are IV drug users or bisexual (11). Approximately 50% of infected pregnant women will transmit the virus to their offspring transplacentally (12). Perinatal transmission is the principal route of infection in pediatric AIDS cases since the initiation of blood product screening. In over 70% of perinatally transmitted cases, the mother or her sex partner were IV drug users (4).

Of those infected, Blacks and Hispanics are disproportionately represented as compared to the general population. In adult cases, 24% are Black, and 14% Hispanic, whereas their percentage in the general population is 12% and 7%, respectively. In pediatric cases 57% are Black and 21% Hispanic (13). Black women's risk of HIV
infection is 13.2 times higher than that of white women, and Hispanic women's risk is 8.6 times higher than that of whites' (4). This disproportionate representation reflects the greater amount of high-risk behavior practiced by these populations.

The confirmation that AIDS is an infectious disease came when the causal viral agent was identified in 1983. This established that AIDS belonged to a class of diseases traditionally regulated by public health measures. As would be expected, a wide variety of legislation has been proposed to curb the spread of this lethal epidemic.

1.2 Proposed Legislation

The contagious nature, geometric growth, and currently fatal prognosis of HIV infection has inspired a flurry of legislative proposals. More than 450 AIDS bills were introduced across the country in 1987 alone (14). HIV antibody testing may help prevent transmission of HIV infection if those found to be seropositive reduce high risk behaviors, prevent or terminate pregnancies, and notify sexual partners of their serostatus. Currently, HIV testing is usually voluntary and confidential. Stronger public health measures have been suggested in order to help curb the epidemic, including reporting of seropositive individuals to public health officials, mandatory HIV testing, and contact tracing of seropositive individuals' sexual partners.

Public Health Reporting AIDS cases are currently reported to public health officials in all 50 states. Reporting of seropositive individuals to public health officials is considered by some to be the first step in effective infection control programs. Those who have not yet developed AIDS are in better health and are therefore more able to
engage in behavior which could transmit the virus than those who have already progressed to AIDS. Infected parties are ideal candidates for education and counselling services. Reporting would allow them to be more readily reached. Reporting would also allow for contact tracing. Proponents for reporting argue that it would improve epidemiologic surveillance, allowing for early detection of shifts in sub-populations and geographic areas. They also argue that better evaluation of existing program effectiveness and better design of future programs would result. Further, some contend that infected persons would be more readily informed of treatment therapies as they develop.

**Mandatory Testing** Mandatory testing has been suggested to identify more persons than would be identified with voluntary testing. Screening has been recommended for high or relatively high-risk groups such as: those receiving drug dependency treatment, those receiving sexually transmitted disease (STD) treatment, and those incarcerated in federal and state prisons. Prisoners have been considered at relatively high-risk due to the incidence of IV drug use and anal intercourse within prisons. Also, supporters of such testing have argued that these prisoners are wards of the state or national government, and prevention of HIV transmission within prisons is the duty of the government. Segregating infected prisoners from noninfected prisoners has been suggested. Screening has also been recommended for low-risk groups such as: military recruits, marriage license applicants, and women receiving prenatal care.

Advocates for mandatory testing argue that mass screening will increase awareness in the general population. They contend that this enlightenment will enhance behavior modification, potentially
decreasing HIV transmission. They also argue that the stigma associated with infection will decrease as more people are tested and more carriers identified.

Prenatal HIV screening has been proposed to help prevent perinatal transmission of HIV. Premarital HIV screening has been proposed to help prevent perinatal and sexual HIV transmission. In inner cities, as many as 2% of parturients may be seropositive as of 1988 (15, 16); perhaps 50% of their children will be infected with HIV (12). In addition, HIV testing has been suggested for those seeking STD care. Up to 3% of such women in an inner-city population may be seropositive, 1.8% without identified HIV risk factors (17). The Centers for Disease Control currently recommend all women receiving prenatal and premarital care, or treatment for STDs be tested for HIV. Therefore, women seeking care from obstetrician-gynecologists (Ob-Gyns) may be targeted for HIV screening.

**Contact Tracing** Public health reporting would provide a register of infected persons which would allow for contact tracing. This would require the index case disclose the names of persons with whom they had shared intimate sexual and needle sharing behaviors. These contacts would then be contacted by public health officials. In addition to the rationale above discussed for public health reporting, supporters argue that contact tracing would help prevent transmission of HIV to unsuspecting third parties.

It is necessary to weigh the rights of the individual to autonomy and privacy against the public's right to health, in determining the legality and ethics of such proposed measures for HIV.
1.3 Legal Precedents

Measures similar to those proposed for HIV have been deemed legal and necessary in cases of other transmissible diseases. Promoting the public health, even at the risk of decreased personal freedom, has been repeatedly upheld. For example, compulsory vaccination, surveillance, compulsory exam and treatment, and contact tracing have all been used extensively (18). Even quarantine has been used to respond to a number of infectious diseases such as tuberculosis, smallpox, scarlet fever, leprosy, venereal diseases, and cholera (19).

It should be noted that these precedents were set prior to the civil rights movement of the 1960's. Persons currently infected with infectious diseases would probably be protected against many of the above measures under section 504 of the Federal Rehabilitations Act of 1973 (19). Moreover, such coercive measures as compulsory exam and treatment have been judged to be discriminatory and illegal for venereal disease control as recently as 1978 (20).

1.4 Enacted Legislation

Public Health Reporting of Positive Test Results  By April, 1988, 13 states required the reporting of positive HIV antibody test results, see Table 2. Eight of the 13 require identifiers (name, address and telephone number) be reported with a positive serostatus. Three do not require identifiers be reported, but 2 of these 3 recommend them. The remaining 2 states collect data both ways (21).
<table>
<thead>
<tr>
<th>With Identifiers</th>
<th>Without Identifiers</th>
<th>Both Ways</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Idaho</td>
<td>• South Carolina</td>
<td>• Oregon*</td>
</tr>
<tr>
<td>• Arizona</td>
<td>• Colorado</td>
<td>• Montana</td>
</tr>
<tr>
<td>• Missouri</td>
<td>• Minnesota</td>
<td>• Texas*</td>
</tr>
<tr>
<td>• Alabama</td>
<td>• Wyoming</td>
<td></td>
</tr>
</tbody>
</table>

*Recommended

Eighteen states, including California, have enacted legislation or regulations to help protect the confidentiality of test results (14). These regulations were adopted to enhance risk groups' cooperation in voluntary testing. More people at risk for HIV will comply with suggestions for HIV testing if they trust their privacy will be maintained if they test positively. However, in Tarasoff vs. The Regents of California, precedent was set that a health care professional has the duty to disclose confidential patient information to those "in foreseeable danger of serious harm" from his/her patient. Thus, the legal requirements and ethical duty of physicians caring for HIV patients is unclear. For example, what exactly is the duty of the physician caring for a seropositive bisexual male and his uninformed and unsuspecting wife? At present in most states, physicians face potential liability whether they decide to maintain or break confidentiality in such situations. In California, physicians breaking confidentiality in order to inform a spouse have been granted immunity from liability, however generalizability of this law to unmarried sexual partners has not been established.

**Mandatory Testing** All donated human tissue (blood and blood products, semen, and organs for transplantation) is routinely screened
for HIV antibodies. In addition, mandatory screening has been initiated for certain select populations (22). All military recruits must submit to HIV testing. Persons suspected by a public health official of being infected and a danger to the public health may be forced to take an antibody test by court order in Indiana and Colorado. Infants suspected of infection may be tested in Rhode Island. Those convicted of sex or drug related crimes may be tested in Oregon. Prisoners in South Dakota, Nevada, Idaho and Colorado are tested, and those prisoners found to be exchanging body fluids may be tested in Iowa. Those being released from prison are tested in Nevada.

Premarital screening has been enacted in Louisiana and Illinois, though Illinois is considering revoking this new (January 1, 1988) law (23). Texas has specified that mandatory premarital screening will begin when the prevalence of statewide infection reaches .83% (21). Additionally, 29 states were considering premarital screening as of April 1988 (23). Those testing positive in Utah are prohibited from marrying, though this has not yet been contested in court. The trend for future legislation will most likely follow California and Hawaii's education-emphasis model. In these states, full information on HIV risk groups, antibody testing and safe behaviors is available to all marriage applicants.

1.5 Concerns About Proposed Legislation

HIV infection differs from other infectious diseases which have prompted traditional public health measures. Standard policies may not be appropriate or effective, as HIV infection is socially and medically distinct from other infectious diseases. Infection is not
caused by a casual contagion; intimate contact is required for transmission. Groups with the highest prevalence of infection (male homosexuals and IV drug users) have generally been alienated from mainstream society. For this reason, HIV infection may carry more stigma than other STD's.

Benefits to the individual of knowing his/her serostatus are minimal. For some, testing may allow for better informed decisions about changing life plans. For those found to be seronegative, no vaccine is available to prevent infection. For those found to be seropositive, no treatment has yet been proven to cure infection or decrease infectivity. The percent of those infected who will develop AIDS is currently unknown, but it is probably greater than 50%, and some contend that 100% of those infected will progress to AIDS (8, 21). The disease is fatal.

Persons infected with HIV face social stigma, discrimination in employment, housing, and education, and may lose health insurance and access to health care. For these reasons, traditional public health measures may not be suitable or useful for HIV infection.

Concern has been raised that strict public health measures might deter those who may be infected from seeking HIV testing and medical care. Voluntary testing is a self-selecting process. In general, those currently seeking testing are at greater risk for HIV than those not seeking testing. Reporting of positive test results may cause some to refuse recommended voluntary testing.

Mandatory HIV screening at medical services may deter some women from seeking health care. Those who fear they are infected may forego health care rather than be identified as seropositive. Fears
of breaches in confidentiality of test results, and possible subsequent discrimination, serve as strong disincentives for being tested.

The expense of broad screening would be extensive. One analysis of premarital testing estimated that in one year, universal premarital screening in the United States currently would detect fewer than 1/10 of 1% of HIV infected individuals at a cost of greater than $100 million (24). This analysis was based on a single HIV antibody test. It can be argued that this population differs substantially from those receiving STD care and those in drug abuse treatment programs. Screening in the latter populations may be considerably more beneficial. However, women receiving prenatal care are likely to be quite similar to those seeking marriage licenses; HIV screening with prenatal care is likely to yield results similar to this premarital testing analysis.

Additionally, a window period exists between infection and the production of detectable amounts of antibody. If infected persons are tested during this period, a false negative test may result. Thus, repeated HIV antibody testing at intervals would be required to preclude the possibility of infection.

Further, opponents of such broad testing for women, such as with prenatal care, argue that the incidence of HIV infection in women is currently very low, and restricted to well defined groups with specific high-risk behaviors and exposures. Despite the high specificity and sensitivity of HIV antibody testing by biological testing standards, a number of false positive tests will result when screening a large population with a low prevalence of infection. This topic, which
will be discussed in Section 4.5, is yet another reason broad
mandatory screening for HIV infection may be inappropriate.

Contact tracing requires keeping a register of infected peoples' names, a situation which may inspire fears about breeches in confidentiality. It also requires the cooperation of the index case to identify intimate partners. Anal intercourse is currently illegal in half the states. The sharing of IV needles is illegal in all states. As the behaviors most likely to transmit HIV are largely regarded as criminal offenses, the index case may be unwilling to incriminate close contacts. Of all proposed policies, contact tracing may be the most ineffective for HIV.

Proposals for public health reporting, mandatory testing, and contact tracing for HIV may actually prove to be counterproductive. Those at high risk for HIV may be less informed about infection, transmission and testing than the general public. They may be especially alienated by proposed HIV testing policies. Clearly, public health policies need to take into account compliance with HIV testing recommendations, particularly among persons at high risk for HIV.

Presently there is no information available on these issues. States which have enacted such legislation have not released data addressing these concerns to date. This project was designed to help evaluate the possible consequences to women's health care of enacting such policies. Responses were elicited from women who were already receiving health care, projecting how they thought they would respond to proposed testing policies.
CHAPTER 2. METHODS

2.1 Study Site and Subjects

The study site was the clinic of the Obstetrics-Gynecology Group Faculty Practice at the University of California at San Francisco Medical Center. The study was conducted during the period August 3-20, 1987. In this general obstetric-gynecology practice, 5 physicians, 4 nurse-midwives, and 3 nurse-practitioners provide 9,300 patient visits annually. At the time of the study, there were no HIV education programs at the clinic. Under California law, written patient consent was required for HIV testing, and HIV test results were confidential.

Subjects were consecutive women seeking medical care from this practice. We excluded all patients who were not fluent in English and those under 18 and over 50. Minors under 18 were excluded due to difficulty in obtaining parental consent. Women over 50 were excluded because they are outside the reproductive age group targeted for testing. Qualification was determined at the study site by the researcher as described below. Patients undergoing surgical procedures such as abortion and dilatation/curettage were invited to participate at preoperative or postoperative visits, not on the day of surgery.

2.2 Data Collection

The study was conducted in the clinic reception area, and was staffed by one researcher during the entirety of the project. Receptionists at the clinic referred patients as they checked in for appointments to the researcher, who spoke to all prospective
participants. The researcher determined qualification at this time by evaluating prospective participants' understanding of English, and by inquiring if patients were between 18 and 50 years of age. Study introduction and invitation methods were consistent for the three week period.

Participation consisted of completing an anonymous questionnaire. Patients were told no records would be kept of who did and didn't participate, and that their acceptance or declination would not affect their health care at the clinic. Please see Appendix 1 for a complete script of this interaction.

Informed consent was obtained verbally from each subject; written consent was waived to preserve patient anonymity. Participants concurrently received the University of California Subject's Bill of Rights and a written invitation/informed consent letter, Appendix 2. Approval was granted from the University of California at Berkeley Committee for the Protection of Human Subjects summer sub-committee (Approved August 3, 1987), and the University of California at San Francisco Committee on Human Research, (Approved July 30, 1987).

The questionnaires were distributed in a sealable envelope, and returned to a closed drop box. Subjects completed the questionnaire before and/or after their appointment, and were given the option of returning the questionnaire by mail.

San Francisco AIDS Foundation pamphlets, "AIDS is a Women's Health Issue" and, "AIDS Antibody Testing at Alternative Test Sites" were available to all women invited to join the study, Appendix 3.
They were distributed after subjects returned the questionnaire or after women declined to participate.

2.3 Questionnaire

The 8-page questionnaire took 10-15 minutes to complete. Subjects were asked to predict how they would respond to different HIV testing circumstances if they were seeking care from a health practitioner for each of the following: birth control, pregnancy, venereal diseases, and routine care. "Health practitioner" was defined as a physician, nurse-practitioner or nurse-midwife. Therefore, each subject, regardless of why she actually presented at the clinic, predicted how she would respond at each hypothetical medical visit. Please see Figure 1 for an outline of question design.

Testing Circumstances

Voluntary HIV Testing. We asked subjects if they would (1) approve of their health practitioner talking with them about AIDS antibody testing; (2) take a confidential AIDS antibody test recommended by their health practitioner; and (3) take an AIDS antibody test recommended by their health practitioner if positive test results were reported to public health officials.

Mandatory HIV Testing. We asked whether respondents would forego health care if HIV testing were required. The questionnaire asked if subjects would forego health care (1) if a confidential AIDS antibody test were required at their visit; (2) if an AIDS antibody test were required and positive results were reported to public health officials; and (3) if an AIDS antibody test were required and their sexual partners would be contacted if the subjects tested positively.
We asked separately about contact tracing done by subjects' health practitioners and public health officials. Please see Figure 2 for an outline of principal questions to subjects.

Subjects responded on a 4-point Likert-like scale: "Definitely Would Not" (Approve, Take Test, Visit), " Probably Would Not", "Probably Would", or "Definitely Would".

The questionnaire also asked about HIV risk factors, including history of (1) IV drug use; (2) male sex partners who were IV drug users or bisexual; (3) blood transfusion between 1978 and 1985; (4) number of male sex partners during the past 6 months and 31/2 years; and (5) condom use during the past 6 months and 31/2 years. Subjects could answer "Yes", "No", or "I don't know" to questions regarding the IV drug use and bisexuality of their male sex partners. We also asked the reason for their medical visit, sexual partner status, and demographic data (age, ethnicity, education, income, and medical insurance status). We invited participants' written comments at the conclusion of the questionnaire. Please see Appendix 4 for a complete copy of the questionnaire.
Figure 1. Question Design

How would you respond to the following HIV testing circumstances if you were receiving care for each of the following?

<table>
<thead>
<tr>
<th>HIV Testing Circumstance</th>
<th>Birth Control</th>
<th>Pregnancy</th>
<th>STDs</th>
<th>Routine Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. X</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>2. Y</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>3. Z</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

Figure 2. Principal Questions To Subjects

Voluntary

• Would you approve of your health practitioner talking with you about AIDS antibody testing at your visit?
• Would you take a voluntary AIDS antibody test at your visit if medically recommended?
  • Confidential
  • Reported

Mandatory

• Would you forego health care if an AIDS antibody test were required at your visit?
  • Confidential
  • Reported
• Would you forego health care if an AIDS antibody test were required at your visit and your sexual partners would be contacted if you tested positively?
  • Health practitioner would do contact tracing
  • Public health official would do contact tracing
2.4 Categorizing Subjects' HIV Risk Status

Women who reported using IV drugs in the past 5 years, or who had male sexual partners who were IV drug users or bisexual in the past 5 years, were categorized as high-risk for HIV. Women with the following characteristics were categorized as minimal-risk for HIV: no IV drug use in the past 5 years, no male sexual partners who had used IV drugs or were bisexual in the past 5 years, no blood transfusions between 1978-1985, 0 or 1 male sex partners in the past 6 months, and 5 or less male sex partners in the past 31/2 years. Subjects who did not complete the risk status/demographics questions were categorized as undetermined-risk. All other subjects, including those who answered "I don't know" to questions regarding male sexual partners' IV drug use and bisexuality, were categorized as intermediate-risk.

2.5 Analysis

Definitely/Probably "Would Not" and Definitely/Probably "Would" responses were collapsed to create dichotomous variables for chi-square and multiple regression analyses. Chi-square with Yate's correction factor was used to compare responses by different subject groups on a question. McNemar's test with Yate's correction factor was used to compare responses on different questions within a group of subjects.

HIV Risk Group Analysis Women categorized as undetermined-risk were excluded from risk group analyses. Risk group analyses compared the high-risk and minimal-risk groups, as these populations were defined with most certainty. When high-risk subjects were
compared to both intermediate-risk and minimal-risk groups, tests of
significance did not differ with results reported here.

**Multiple Regression** Simultaneous model multiple regression
analyses were performed on the Macintosh program Statview, using
the following independent variables: high-risk for HIV, age, race,
income, education, pregnancy status (for the prenatal questions), and
partner status (for the STD questions). Pregnancy and partner status
demonstrated sufficient collinearity to be excluded from the same
multiple regression analysis model. Because Black and Hispanic
women are at higher risk for HIV than other ethnic groups, we coded
race as "Black/Hispanic" or "other".
CHAPTER 3. RESULTS

Responses were elicited under the various HIV testing conditions for four hypothetical medical care visits: birth control, pregnancy, sexually transmitted diseases, and routine gynecologic care. The findings for prenatal and sexually transmitted disease care are most relevant to evaluating current proposed legislation. Thus, presentation and discussion of findings will be limited to this material.

3.1 Participation

Of the patients that received care at the clinic during the study, 482 (approximately 75%) were referred to the research assistant. Of the 482 referred for invitation, 446 (94.6%) were eligible; 23 (4.7%) were excluded due to language, and 3 (< 1%) were excluded due to age. Of the 446 eligible participants invited, 433 (97.1%) agreed to participate, and 377 (84.5%) returned a completed questionnaire. 29 (7.6%) opted to return the questionnaire by mail, and 20 (68% of those) returned them.

3.2 Subjects

Table 3 gives characteristics of the subjects. In general, they were young, well educated, and involved in primary relationships.

Table 4 gives the results of our HIV risk status categorization. Almost all subjects completed risk factor questions. Most subjects were at minimal risk for HIV.

Table 5 describes the risk factors within the high-risk group. Most high-risk subjects' potential exposure was from male sex partners. Only 18% of those categorized as high-risk were IV drug users.
<table>
<thead>
<tr>
<th>Table 3. Characteristics of subjects (N=377)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean age ± standard deviation, yr (range)</strong></td>
</tr>
<tr>
<td><strong>Ethnic Background</strong></td>
</tr>
<tr>
<td>Caucasian</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>Attended some college</td>
</tr>
<tr>
<td><strong>Annual Family Income</strong></td>
</tr>
<tr>
<td>under $10,000</td>
</tr>
<tr>
<td>$10,000-40,000</td>
</tr>
<tr>
<td>over $40,000</td>
</tr>
<tr>
<td><strong>Health Insurance Status</strong></td>
</tr>
<tr>
<td>Private health insurance</td>
</tr>
<tr>
<td>Medicaid</td>
</tr>
<tr>
<td>No medical insurance</td>
</tr>
<tr>
<td><strong>Partner Status</strong></td>
</tr>
<tr>
<td>Married or living with male partner</td>
</tr>
<tr>
<td><strong>Reason for Medical Visit</strong></td>
</tr>
<tr>
<td>Pregnancy</td>
</tr>
<tr>
<td>Routine care or annual exam</td>
</tr>
<tr>
<td>Possible infection</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Table 4. Risk Categorization of Subjects (N=377)

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>10%</td>
<td>38</td>
</tr>
<tr>
<td>Intermediate</td>
<td>28%</td>
<td>104</td>
</tr>
<tr>
<td>Minimal</td>
<td>58%</td>
<td>216</td>
</tr>
<tr>
<td>Undetermined</td>
<td>4%</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 5. Risk Factors of Women in the High-Risk Group (N=38)

<table>
<thead>
<tr>
<th>HIV high-risk factors*</th>
<th>% of total sample (N=377)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV drug user</td>
<td>2%</td>
<td>7</td>
</tr>
<tr>
<td>IV drug using male sex partner</td>
<td>6%</td>
<td>23</td>
</tr>
<tr>
<td>Bisexual male sex partner</td>
<td>5%</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total at high risk</strong></td>
<td><strong>10%</strong></td>
<td>38</td>
</tr>
</tbody>
</table>

*More than one risk factor may apply to any individual
3.3 DISCUSSING HIV ANTIBODY TESTING

Almost all women approved of discussing HIV testing with their health practitioner at prenatal and STD care visits, Table 6. Women at minimal-risk for HIV were as likely to approve of such discussion as women at high-risk for HIV. Subjects felt HIV discussion was equally appropriate at prenatal and STD visits.

Table 6. Women Approving of HIV Testing Discussion At A Medical Visit

<table>
<thead>
<tr>
<th>Type of Medical Visit</th>
<th>Prenatal Care</th>
<th>STD Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no. of approving patients / total no. of patients (percent)</td>
<td></td>
</tr>
<tr>
<td>All subjects</td>
<td>316/367 (86%)</td>
<td>334/366 (91%)</td>
</tr>
<tr>
<td>High HIV risk group</td>
<td>32/37 (86%)</td>
<td>34/38 (89%)</td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
<td>183/213 (86%)</td>
<td>196/212 (92%)</td>
</tr>
</tbody>
</table>
3.4 Voluntary HIV Testing

3.4A Confidential Testing. Almost all women would agree to voluntary confidential testing when recommended by their health care providers, Table 7.

Women at high-risk for HIV infection were as likely to agree to confidential testing as women at minimal-risk.

3.4B Reported Testing. Significantly fewer women would agree to voluntary recommended testing if positive results were reported to public health officials than if results were confidential, Table 7. These drop-offs of 31% for prenatal visits, and 35% for STD visits, were significant at the p<.001 level.

High-risk women were significantly less likely to agree to recommended reported HIV testing than women at minimal-risk, for both prenatal visits (25% less) and STD visits (23% less).

On multiple regression, high-risk status and pregnancy were significantly associated with refusing reported HIV testing at a prenatal visit (F=7.1, p=.008 and F=4.8, p=.03, respectively). High risk status and increasing age were significantly associated with refusing reported HIV testing at STD visits (F=8.0, p=.005 and F=4.0, p=.05, respectively).

3.4C Pregnancy Status Women who were actually pregnant at the time of the study were less likely to agree to confidential HIV testing with prenatal care than non-pregnant women, Table 7. They were more likely to agree to HIV testing if positive results were reported. However, these differences were not statistically significant.
<table>
<thead>
<tr>
<th>Testing Conditions</th>
<th>Type of Medical Visit</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prenatal Care</td>
<td>STD Testing</td>
<td></td>
</tr>
<tr>
<td>Voluntary, confidential testing</td>
<td></td>
<td>no. of patients willing to take test/total no. of patients (percent)</td>
<td></td>
</tr>
<tr>
<td>All subjects</td>
<td>316/367 (86%)(^1)</td>
<td>334/366 (91%)(^2)</td>
<td></td>
</tr>
<tr>
<td>High HIV risk group</td>
<td>32/37 (86%)</td>
<td>34/38 (89%)</td>
<td></td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
<td>183/213 (86%)</td>
<td>196/212 (92%)</td>
<td></td>
</tr>
<tr>
<td>Pregnant subjects</td>
<td>128/152 (84%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Pregnant subjects</td>
<td>185/210 (88%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voluntary, reported testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All subjects</td>
<td>202/367 (55%)(^1)</td>
<td>202/359 (56%)(^2)</td>
<td></td>
</tr>
<tr>
<td>High HIV risk group</td>
<td>13/37 (35%)(^3)</td>
<td>14/38 (37%)(^4)</td>
<td></td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
<td>129/214 (60%)(^3)</td>
<td>124/208 (60%)(^4)</td>
<td></td>
</tr>
<tr>
<td>Pregnant subjects</td>
<td>91/152 (60%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Pregnant subjects</td>
<td>105/210 (50%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) McNemar=153, p<.001
\(^2\) McNemar=179, p<.001
\(^3\) Chi-square=7.1, p=.008
\(^4\) Chi-square=5.9, p=.02
3.5 Mandatory HIV Testing

3.5A Confidential Testing. Some women would forego health care if confidential HIV testing were mandatory, Table 8. For prenatal visits, 10% would forego care rather than be tested. For STD care, 12% would forego care.

Women at high-risk for HIV were 6% more likely to forego prenatal care, and 17% more likely to forego STD care, than women at minimal-risk. This difference was significant only for STD care.

On multiple regression, high-risk for HIV infection was significantly associated with refusing care at STD visits (F=8.4, p=.004).

3.5B Reported Testing. Compared to mandatory confidential HIV testing, significantly more women would forego health care with mandatory testing if results were reported to public health officials, Table 8. This difference between confidential testing and public health reporting was significant for both prenatal visits (9% more), and STD visits (15% more), at the p<.001 level.

Women at high-risk for HIV were 8% more likely to forego prenatal care, and 15% more likely to forego STD care, than women at minimal-risk. This finding was significant only for STD care.

On multiple regression, high-risk for HIV infection and not living with male sexual partners were significantly associated with refusing care at STD visits (F=5.0, p=.03 and F=6.1, p=.01, respectively). Only, income was significantly associated with refusing prenatal care (F=4.1, p=.04).
3.5C Pregnancy Status. Women who were pregnant were less likely to report they would forego prenatal care than non-pregnant women, with both confidential and reported results, Table 8. However, these differences were not statistically significant.

<table>
<thead>
<tr>
<th>Testing Conditions</th>
<th>Type of Medical Visit</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prenatal Care</td>
<td>STD Testing</td>
<td></td>
</tr>
<tr>
<td>Mandatory, confidential testing</td>
<td>no. of patients who would forego care/total no. of patients (percent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All subjects</td>
<td>35/362 (10%)²</td>
<td>42/359 (12%)³</td>
<td></td>
</tr>
<tr>
<td>High HIV risk group</td>
<td>5/38 (13%)</td>
<td>10/38 (26%)¹</td>
<td></td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
<td>15/210 (7%)¹</td>
<td>19/209 (9%)¹</td>
<td></td>
</tr>
<tr>
<td>Pregnant subjects</td>
<td>9/152 (6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Pregnant subjects</td>
<td>25/210 (12%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory, reported testing</td>
<td>69/360 (19%)²</td>
<td>95/356 (27%)³</td>
<td></td>
</tr>
<tr>
<td>All subjects</td>
<td>9/38 (24%)</td>
<td>16/38 (42%)⁴</td>
<td></td>
</tr>
<tr>
<td>High HIV risk group</td>
<td>34/209 (16%)</td>
<td>48/207 (23%)⁴</td>
<td></td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
<td>21/152 (14%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant subjects</td>
<td>48/210 (23%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Chi-square=7.6, p=.006
² McNemar=56, P<.001
³ McNemar=67, P<.001
⁴ Chi-square=5.0, p=.03
3.6 Reported Testing With Contact Tracing

More women would forego health care if contact tracing were done by public health officials than if done by their health practitioners, after mandatory testing, Table 9. These differences were significant for both prenatal visits (8% more) and STD visits (11% more).

Women at high-risk for HIV infection were more likely to forego prenatal and STD care than women at minimal-risk, independent of who did the tracing. These differences were significant only for the STD care visits, however.

<table>
<thead>
<tr>
<th>Table 9. Women Who Would Forego Health Care With Mandatory Reported HIV Testing and Contact Tracing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Medical Visit</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Prenatal Care</strong></td>
</tr>
<tr>
<td><strong>STD Testing</strong></td>
</tr>
<tr>
<td><strong>Testing Conditions</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Contact tracing done</strong></td>
</tr>
<tr>
<td><strong>by health practitioners</strong></td>
</tr>
<tr>
<td>All subjects</td>
</tr>
<tr>
<td>43/363 (12%)</td>
</tr>
<tr>
<td>47/365 (13%)</td>
</tr>
<tr>
<td>High HIV risk group</td>
</tr>
<tr>
<td>7/36 (19%)</td>
</tr>
<tr>
<td>9/38 (24%)</td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
</tr>
<tr>
<td>24/212 (11%)</td>
</tr>
<tr>
<td>22/213 (10%)</td>
</tr>
<tr>
<td><strong>Contact tracing done</strong></td>
</tr>
<tr>
<td><strong>by public health officials</strong></td>
</tr>
<tr>
<td>All subjects</td>
</tr>
<tr>
<td>73/361 (20%)</td>
</tr>
<tr>
<td>86/364 (24%)</td>
</tr>
<tr>
<td>High HIV risk group</td>
</tr>
<tr>
<td>11/36 (31%)</td>
</tr>
<tr>
<td>16/38 (42%)</td>
</tr>
<tr>
<td>Minimal HIV risk group</td>
</tr>
<tr>
<td>36/211 (17%)</td>
</tr>
<tr>
<td>42/212 (20%)</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td>1 McNemar=42, P&lt;.001</td>
</tr>
<tr>
<td>2 McNemar=61, P&lt;.001</td>
</tr>
<tr>
<td>3 Chi-square=4.2, p=.04</td>
</tr>
<tr>
<td>4 Chi-square=7.8, p=.005</td>
</tr>
</tbody>
</table>
CHAPTER 4. DISCUSSION

4.1 Discussing HIV Testing

Discussion about HIV transmission, prevention and testing is currently appropriate at many Ob-Gyn visits. Ascertaining and assessing patients' HIV risk factors is becoming a routine component of the Ob-Gyn medical history (25). When those at high-risk for HIV are receiving prenatal or STD care, recommendations for HIV testing are indicated in order to help prevent perinatal and sexual HIV transmission. Also, an increasing number of Ob-Gyn practices prefer all their patients be tested for HIV, as a substantial percentage of women without HIV risk factors have been shown to be seropositive (16, 17).

Our findings suggest most women, regardless of their risk for HIV, would be receptive to discussing HIV antibody testing with their health practitioner at Ob-Gyn visits, Table 6. One woman wrote, "I would like to see a discussion of AIDS become a part of my medical counselling."

4.2 Voluntary Testing

4.2A Confidential Voluntary Testing

Under current California laws of confidential, voluntary HIV testing most women would comply with their health practitioner's recommendation for testing. However, a minority would refuse such testing. Some felt the test is simply too unreliable. One woman wrote, "Knowing what I know about the uncertainty of AIDS test results I would not submit myself to testing." Others who would refuse
confidential voluntary testing believe a positive test result is of little use to the infected person or to society. One subject wrote, "I don't want to be tested because they couldn't do anything for me anyway if I had it." Another wrote, "How would that information help stop the AIDS virus?"

Another reason to decline recommended, voluntary and confidential testing, is fear of breaches in confidentially regarding positive test results. One woman wrote, "I believe there is not and will not ever be any such thing as 'confidentiality' regarding the results of AIDS testing. I will never trust any public or private organization to keep such records completely confidential." Despite the expressed concerns of some, the vast majority of women would comply with recommended voluntary testing, if positive test results were maintained confidentially.

4.2B Reported Voluntary Testing

While almost all women would comply with voluntary confidential HIV testing when medically recommended, reporting of positive HIV test results would significantly deter women from testing. Table 7. This deterrence is understandable considering HIV infection carries far more social stigma than other sexually transmitted diseases. To date, discrimination in education, housing and employment are all too common for those known to be infected with HIV. Potential loss of medical insurance after documentation of HIV infection serves as another impetus to avoid reported HIV testing.

Many women expressed fear and suspicion regarding what public health officials would actually do with positive test results. One woman wrote, "People are much more likely to be tested for any STD
if they know their names won't go into a file that the government or creditors, insurers or employers might eventually get access to."

4.2C Age of Subjects

Age was a significant predictor on multivariate analysis for refusing a recommended reported HIV test when receiving care for STD. It is possible the younger women in our sample felt less confidence in the public health establishment, and were therefore more suspicious of reporting. It is also possible younger subjects considered themselves more likely to be at risk for HIV than older subjects.

4.2D Women at High-Risk for HIV

The women at high-risk for HIV responded equivalently to the minimal-risk women for voluntary confidential testing. This finding suggests that this group trusts their medical practitioner's recommendations and ability to maintain confidentiality as much as women at minimal-risk.

However, high-risk women would be significantly more likely to refuse voluntary reported testing. This suggests either high-risk women are less trusting of public health officials for the reasons discussed above, or it may reflect the fact that women in this group have a greater chance of being seropositive than the others. High-risk women may feel they have more to lose with reported testing than other women.
4.3 Mandatory Testing

4.3A Confidential Mandatory Testing

A number of women would forego needed medical care with mandatory HIV antibody testing, despite confidential test results. Table 8. In addition to some subjects' above described concerns regarding the quality and value of the test, and fears about potential breaches in confidentiality, some women felt an aversion to any directive regulating their health care. One woman wrote, "No required AIDS test will ever be taken by me." Another wrote, "I think I speak for many women in expressing a fear and mistrust toward any kind of establishment handling of my health, my private life."

4.3B Reported Mandatory Testing

Significantly more women would relinquish medical care with mandatory testing if seropositive persons were reported to public health officials, Table 8. In this situation, resistance to mandatory testing and suspicion of reporting to public health officials discussed above combine to potentially repel more women from health care than under any other discussed conditions. Pregnancy care was considered less expendable than VD testing, with both confidential and reported mandatory HIV testing.

4.3C Pregnancy Status

Pregnant participants were less likely to report they would forego prenatal care with mandatory testing than non-pregnant participants, Table 8. It is likely that these women were more acutely aware of the importance of prenatal care at the time of the study, and therefore concluded they would be less willing to forego such care. However, even in the pregnant group, 6% reported they would forego
prenatal care with confidential mandatory testing, and 14% would forego prenatal care with reported mandatory testing.

4.3D Women at High-Risk for HIV

Women at high-risk for HIV were more likely to forego prenatal care with mandatory testing than women at minimal HIV risk, though not at a level which was statistically significant. This does not preclude clinical significance however. In the high-risk group, 13% reported they would forego prenatal care with confidential mandatory testing, and 24% would forego prenatal care with reported mandatory testing.

Women at high-risk for HIV were significantly more likely to forego STD care than women at minimal risk, under conditions of both confidential and reported mandatory testing. Reporting of results with mandatory testing further increases the number of women who would forego care. Almost half the women (42%) known to be at high-risk for HIV reported they would forego STD care with reported mandatory HIV testing.

As discussed under voluntary testing, women at high-risk for HIV are more likely to be seropositive than those at minimal risk. The previously noted decreased willingness to be tested with reported test results is further amplified by mandatory testing conditions. Thus, these policies may particularly alienate women at high-risk for HIV.

4.3E Women Without Live-in Sex Partners

A substantial proportion of the women surveyed, 27%, were willing to abstain from STD care with mandatory reported HIV testing. Women without live-in sexual partners were significantly more likely to abstain from care under these conditions. Perhaps most women in
less committed or stable relationships had an increased number of sexual partners. Thus, these women may have felt they were at more risk of being or becoming seropositive for HIV, and were less willing to comply with mandatory reported HIV testing.

4.4 Contact Tracing

Contact tracing of sexual partners after mandatory HIV testing would deter some women from seeking health care, Table 9. Women preferred that their health care practitioners carry out contact tracing rather than public health officials. This practice may be impractical however, particularly if the infected party has had multiple sexual partners. Furthermore, if physicians notified sexual partners, the privacy of the index case would be harder to maintain.

While we did not ask specifically why women preferred their physicians do the tracing, spontaneous comments suggest that women may distrust government officials and fear that names of seropositive women would be used for other reasons. Such fears may not be warranted, given the exemplary record of modern public health officials in protecting confidentiality (18). However, this finding suggests how attitudes towards HIV differ from those regarding other STDs.

Many comments reflected subjects' general hesitancy to treat this epidemic like that of other diseases, "If I believed the government could be trusted to treat this disease like a serious epidemic afflicting rich white people, I would be in favor of traditional mandatory public health measures."
While contact tracing may be ethically and legally justified, and is effective for other STDs, it may be ineffective for HIV. For such a measure to be effective, HIV infection will need to be destigmatized by society.

4.5 Appropriate HIV Testing

Current recommendations for HIV antibody testing include an initial enzyme-linked immunoabsorbant assay (ELISA) on serum. Positive samples are retested with ELISA, and those again testing positive are confirmed with more specific tests, either immunofluorescent assay, or Western Blot. Each of these tests have graded results, and definitions of what is a positive or negative result vary. For example, most rigorous standards are used for blood bank screening. Results which might be considered undeterminable by some standards would be considered infected or "positive" by blood bank standards, and such blood would not be entered into the blood bank pool. Controversy exists regarding appropriate end-points for other testing purposes, such as broad screening. Maintaining blood bank standards for such testing would result in an increased number of false positive tests.

Laboratories vary in their proficiency in performing the tests; minimal reproducibility between labs has confirmed a substantial quality control problem exists. The U.S. Army has established testing protocols while running large numbers of tests on military recruit applicants, with excellent results. Under such optimal conditions, specificity of ELISA and Western Blot tests have been 99.6% and 97.0%, respectively. However, in one trial 15 serum samples from
healthy adults at low risk were sent to five large commercial firms offering Western Blot testing, and 6 of the 15 were classified positive. The Walter Reed Army laboratories had repeatedly tested all 15 as negative (26). Screening programs would require large numbers of samples be tested, and currently there are insufficient reference laboratories to process this volume of samples.

An additional factor to consider when questioning when testing is appropriate is the prevalence of infection in the population targeted for testing. In populations with a low prevalence of HIV infection, the positive predictive value of HIV testing may be unacceptably low. This may be particularly true when testing is not performed in reference laboratories. In short, populations with a high prevalence of infection will have few false positives, whereas population with a low prevalence of infection will have far more false positives.

It is estimated that 50% of homosexual men in San Francisco, and perhaps as many inner city IV drug users, may be infected. Military recruit screening has shown infection rates of .16% and .06% in men and women, respectively (27). Whereas blood bank screening in 1985 showed female donor infection rates of .01% (28). Critically ill emergency room patients in an indigent urban area, between the ages of 25 and 34, had a 3% prevalence of infection in a 1986 study (29). A 1987 survey of persons attending Baltimore inner city STD clinics found infection rates for men and women of 6.3% and 3%, respectively (17). Babies born in the Boston area in 1987 had infection rates from .75% in inner city hospitals, to .06% in urban-suburban hospitals (30). Another 1987 study determined that childbearing women in Massachusetts had infection rates ranging from
.8% in inner city hospitals, to .09% in suburban and rural hospitals. With such massive variations in infection rates, it is crucial that policy makers consider the prevalence of infection in the populations they target for testing.

Meyer and Pauker very clearly outlined the dilemma with the following illustration (31): "Imagine testing 100,000 people, among whom the prevalence of disease is .01%. Of the 100,000, 10 are infected; 99,990 are not. A combination of tests that is 100% sensitive will identify all 10 who are infected. If the joint false positive rate is .005%, the tests will yield false positive results in 5 of the 99,990 people who are not infected. Thus, of the 15 positive results, 10 will come from people who are infected and 5 from people who are not infected, and the probability that infection is present in a patient with positive tests will be 67%." Accordingly, analyses of screening for low-prevalence populations, such as premarital and preoperative testing, have concluded that few seropositive cases would be identified at tremendous cost (24). Due to the high costs, tremendous difficulties for those in the false-positive category, and questionable benefits to those in the true-positive category, such investigators have determined that screening in low prevalence populations is inappropriate.

Suggestions for mandatory HIV screening for all women receiving prenatal care assume this policy will do more good than harm. In addition to the monetary costs of screening and the psychosocial burdens of false-positive results, this study suggests that mandatory testing may do additional harm by averting some women from prenatal care. Even if far fewer women than indicated in our
survey would actually forego prenatal care with mandatory testing, they would far outnumber those who would be identified as truly infected with HIV. As a society we must ask how much infant morbidity and mortality which might have been prevented by better prenatal care are we willing to accept for each case of perinatal HIV infection prevented by mandatory HIV screening.

Much of the current controversy over HIV screening stems from generalizing risk-benefit analyses for screening of high-risk populations to low-risk populations. Populations with a high incidence of infection are better candidates for mandatory screening than populations with a low incidence of infection; neither premarital nor prenatal screening policies are desirable or clearly defensible at this time. Mandatory testing at STD clinics and drug rehabilitation programs is currently more reasonable, but even in these settings, such a measure may do more harm than good. Money directed towards this epidemic would be better spent on education and counseling services for the population. HIV antibody testing should be recommended to, not required of, those with risk factors for HIV.

4.6 Study Limitations

The study findings must be interpreted cautiously because of several limitations in the study design. First, women were asked to predict how they would respond in hypothetical situations. Responses may not accurately predict their actual behavior in such situations. Their responses may change over time, especially after educational programs.
Second, the study was carried out in a university based clinic. Third, subjects resided in the San Francisco Bay Area where there is a high prevalence of HIV infection, HIV infection is widely discussed in the media, and community support for those infected has been strong. It is therefore possible that participants were better informed about HIV infection and testing than the average American in a major urban center. Therefore, participants may have been more inclined to agree to recommended HIV testing, and less inclined to predict they would forego health care. Thus, these findings may not apply to other populations of women, especially those in other parts of the country or those not currently receiving medical care.

Fourth, not all women in the sample population participated. It is possible these findings do not characterize these women's opinions.

Fifth, since this sample included relatively few women at high-risk for HIV, findings about high-risk women may not be generalizable to other women considered to be at high-risk. In particular, few intravenous drug users were studied. Also, the high-risk group surveyed was already receiving medical care. It is possible that high-risk women not currently receiving care or integrated into a health care system may respond even more adversely to reporting, mandatory testing and contact tracing than those sampled here.

Sixth, tests of statistical significance need to be interpreted cautiously. Power to detect associations was limited by the sample size. Conversely, because of multiple comparisons, some associations may appear statistically significant when in fact they are based only on chance.
CHAPTER 5. CONCLUSION

5.1 Consequences of Decreased Voluntary Testing

Women who decline recommended voluntary HIV testing would be less able to make informed decisions regarding their pregnancy and sexual behavior. The potential impact of such impaired decision-making could be enormous, particularly to women at high-risk for HIV. As already shown, this group is most likely to benefit from voluntary testing, most likely to spread HIV infection by perinatal and sexual HIV transmission, and is also most likely to be deterred from voluntary testing by reporting of positive test results to public health officials.

Policy makers must carefully decide whether the benefits of improved epidemiologic surveillance from public health reporting are greater than the risks of deterring some women, in particular those at high-risk for HIV, from medically recommended HIV testing.

5.2 Consequences of Foregoing Health Care

HIV Education  Mandatory HIV testing at medical visits will cause some women to forego prenatal care and some to forego STD care. Many opportunities to educate and counsel women about HIV infection, transmission, prevention and testing would thus be lost.

Prenatal Care  If pregnant women were to forego prenatal care, increased maternal and perinatal morbidity and mortality would result. Sub-standard prenatal care has been associated with intrauterine growth retardation and prematurity (32). Studies have shown that babies born to mothers without prenatal care have a four-fold lesser
chance of living than babies whose mothers received adequate prenatal care (33).

In addition to the hardship faced by mother and infant with such increased morbidity, society faces economic hardship in responding to the costs. The estimated average cost of providing preventative prenatal care to pregnant women is $1,200, whereas the average cost of treating an infant in an intensive care unit is $19,000 (33).

This country already has a problem with poor women receiving inadequate prenatal care. At least 36,000 women in California alone did not receive prenatal care in 1984 (33). In 1983, one of every 18 live births was associated with late or no prenatal care (21). Of particular concern, women with the highest incidence of HIV share many features with women already at risk of receiving inadequate prenatal care, such as IV drug use, low socioeconomic status, and Black and Hispanic races (9). Black women are twice as likely to have late or absent prenatal care as White women, and Hispanic women are almost three times as likely (21).

These findings indicate that some women who are currently receiving prenatal care, would forego this care with mandatory HIV testing; women at high-risk are more likely to forego care than others. Thus, mandatory testing may have especially deleterious effects on this population and their children. Therefore, policies of mandatory HIV testing that attempt to benefit unborn children by preventing perinatal HIV infection might harm them, and society at large, in other ways.

**Sexually Transmitted Disease Care** If women forego STD care to avoid mandatory HIV testing, a resultant increase in STD morbidity and transmission will follow. The current increase in STD infection
would undoubtedly be compounded if this proposed HIV legislation were enacted. The group most likely to contribute to sexual transmission of HIV, those at high-risk, is also the group most likely deterred from STD care by mandatory HIV testing. In this group, the decreased care for STDs may be accompanied by decreased HIV infection detection, and increased HIV transmission.

Again, mandatory testing may especially alienate women at high risk for HIV infection. This finding is of particular concern: the women we would most like to be tested for HIV, and to receive prenatal and STD care, are those most likely to forego health care with mandatory HIV testing at their medical visit.

5.3 Conclusion

In conclusion, public health reporting of positive antibody results, mandatory HIV screening, and contact tracing may deter some women from being voluntarily tested for HIV, and from seeking health care. These policies may particularly compromise the trust and cooperation of women at high-risk for HIV. Policy proposals for HIV testing need to consider whether those targeted are willing to be tested. Otherwise, well-meaning proposals to protect the public health may be ineffective, or even counterproductive, in preventing further HIV transmission.

Before such policies will be effective, women must trust that test results will be maintained confidentially. Enacting stronger measures to prevent discrimination, and guaranteeing seropositive individuals medical insurance and access to health care may encourage cooperation in high risk groups. The prevalence of HIV infection in
populations encouraged to be tested must be high enough that a disproportionate number of uninfected women will not be forced to submit to testing, or be falsely identified as positive. Also, this will lower costs and increase the positive predictive value of testing. In all cases, it must be unquestionably established that protection of the public health is urgently needed and definitely attainable prior to enacting legislation which may impinge on the individual's right to autonomy, privacy, and personal freedom.
Appendix 1: Initial Interaction Script

I. IDENTIFICATION

Hi, are you just checking in? Great. My name's Sandra Meacham and I'm a medical student at San Francisco and a graduate student at Berkeley.

II. EXPLANATION

For my research at Berkeley, I'm doing a study here in Ob Gyn asking all women between the ages of 18 and 50 and fluent in English if they'd like to fill out a questionnaire. Are you between 18 and 50 and fluent in English?

What we're trying to do is understand how women feel about AIDS antibody testing. Not what you know about AIDS antibody testing, but what you feel. We also want to know how you would respond in different situations if laws regarding AIDS antibody testing were changed. These laws would effect all women in the state of California, not necessarily women who were at risk for AIDS. So what the questionnaire asks you to do is to read about a situation with different combinations of laws, imagine you were in that situation, and predict how you would feel or behave in that situation.

If you choose to fill one out, it takes about 10 minutes. You can work on it before, during or after your appointment. "During" meaning if you're in the room alone, waiting for your doctor, nurse practitioner or midwife to come back in the room! Some of the questions are personal, but it's completely anonymous. Once you're done it goes in this box, we don't know who checked what, or who participated in the study and who didn't. This study is totally unrelated to your medical care or records here in any way. You are free to participate or not. So, would you be interested in filling out a questionnaire?
Responses:

1) **"SURE"**

   Great! There is a questionnaire and pencil in this envelope. When you're done please put the questionnaire in this box and return the pencil here. They tend to walk away! These are for you to read (invitation letter and copy of the SF Bill of Rights), they tell you more about the study. Thank you very much for your help. We'd like to know how you feel about these issues. When you're done, please feel free to help yourself to the three informational handouts here. The questions are complicated. Please just read them carefully and answer as thoughtfully as you can.

2) **ATTENTIVE SILENCE or 'I DON'T KNOW'**

   It's not asking what you know about AIDS, it asks what you'd feel or do in different situations. We're asking all women, not necessarily women who have been exposed to AIDS. It's totally up to you, participation is voluntary. Can I answer any questions for you about the study?

   If YES, after discussion, go to 1 above.
   If NO, go to 4 below.

3) **"NO. I DON'T THINK SO"**

   No? Do you understand the purpose of the study and how it works? Can I answer any questions for you?

   If YES, after discussion, go to 1 above.
   If NO, go to 4 below.

4) **"NO. I'M NOT INTERESTED"**

   OK, thank you anyway. You're welcome to read the information available here if you'd like to learn more about these issues.
Appendix 2: Materials distributed with the questionnaire
2.1 University of California Subjects' Bill of Rights

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

The rights below are the rights of every person who is asked to be in a research study. As an experimental subject I have the following rights:

1) To be told what the study is trying to find out,

2) To be told what will happen to me and whether any of the procedures, drugs, or devices is different from what would be used in standard practice,

3) To be told about the frequent and/or important risks, side effects or discomforts of the things that will happen to me for research purposes,

4) To be told if I can expect any benefit from participating, and, if so, what the benefit might be,

5) To be told the other choices I have and how they may be better or worse than being in the study,

6) To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study,

7) To be told what sort of medical treatment is available if any complications arise,

8) To refuse to participate at all or to change my mind about participation after the study is started. This decision will not affect my right to receive the care I would receive if I were not in the study,

9) To receive a copy of the signed and dated consent form,

10) To be free of pressure when considering whether I wish to agree to be in the study.

If I have other questions I should ask the researcher or the research assistant. In addition, I may contact the Committee on Human Research, which is concerned with protection of volunteers in research projects. I may reach the committee office by calling: (415) 476-1814 from 8:00 AM to 5:00 PM, Monday to Friday, or by writing to the Committee on Human Research, University of California, San
We invite you to participate in a research study about how women receiving care from obstetrician-gynecologists feel about AIDS antibody (HIV antibody) testing. If you have already been invited to participate in this project, please tell the research assistant. If you are under 18 or over 50 years of age please tell the research assistant.

The AIDS virus can be transmitted by sexual intercourse and from mother to fetus. Because of this, AIDS antibody testing has been suggested for women of reproductive age. We would like to know what you think of possible testing procedures, since the opinions of women like you can influence policies about AIDS antibody testing.

If you wish to participate in the research project, we will ask you to fill out the enclosed questionnaire. It will take about ten minutes to complete. You are free to participate or not in the study. Your answers to these questions are completely anonymous—nobody will know whether you participated or not or how you answered. We are not asking you to sign an informed consent form because this would link you with the research project. Your decision to participate or not will not in any way affect your care at UCSF. Some of these questions are personal which you may find disturbing. You may choose to omit any questions or to stop filling out the questionnaire at any time.

We would be glad to answer any questions you might have about the study. Please feel free to ask the research assistant Sandra Meacham or to call Dr. Lo at 476-6937 if you have any questions. The research assistant will be using information collected for her graduate research. The attached copy of the UCSF Experimental Subject's Bill of Rights provides further information. Please return the questionnaire in a sealed envelope to the research assistant, or to the box provided at the check-in desk. If you do not have time to complete the questionnaire before or after your appointment, or if you would like more time to consider completing the questionnaire, we will provide you with a stamped addressed envelope.

Nancy Milliken, M.D.
Assistant Professor of Obstetrics-Gynecology

Bernard Lo, M.D.
Associate Professor of Medicine

Sandra Meacham
AIDS is a health issue.

When is a woman most at risk for AIDS?

1. Ever had sex with a man who has had sex with a woman who has had sex with a woman

The symptoms of AIDS can include:

- Fever
- Night sweats
- Weight loss
- Fatigue
- Coughing
- Diarrhea
- Cuts or sores on the skin
- Lesions on the skin
- Rash
- Headaches
- Nightmares
- Night sweats

When someone is infected with the AIDS virus, they may develop:

- Fever
- Night sweats
- Weight loss
- Fatigue
- Coughing
- Diarrhea
- Cuts or sores on the skin
- Lesions on the skin
- Rash
- Headaches
- Nightmares
- Night sweats

AIDS can stem from:

- Sexual contact
- Mother to child
- Needle sharing

How does someone get infected?

1. Sexual contact
2. Sharing needles
3. Mother to child

AIDS is a health issue.

How do people know they have AIDS?

- Fatigue
- Night sweats
- Weight loss
- Fever
- Coughing
- Diarrhea
- Cuts or sores on the skin
- Lesions on the skin
- Rash
- Headaches
- Nightmares
- Night sweats

When someone is infected with the AIDS virus, they may develop:

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- Lesions on the skin
- Rash
- Headaches
- Nightmares
- Night sweats

AIDS can stem from:

- Sexual contact
- Sharing needles
- Mother to child
How can I help?

- Get the facts and share them with your family, friends.
- Encourage other groups to get involved with the Women's AIDS Network.
- Volunteer your time and skills.
- Contact your local AIDS Network to learn more about how you can help.

What are the AIDS facts?

- AIDS is a disease that attacks the immune system, making it difficult for the body to fight off infections.
- AIDS can be transmitted through unprotected sexual contact, sharing needles, and from mother to child during pregnancy.

Where can I get more information about AIDS?

- Call the San Francisco AIDS Network Hotline: 1-800-4AIDS (1-800-424-3473)
- Visit the San Francisco AIDS Network website: www.aidsnetwork.org

What can I do to prevent getting or spreading AIDS?

- Use latex condoms and practice safe sex.
- Avoid sharing needles or other injecting equipment.
- Get vaccinated for hepatitis A and B.
- Practice healthy sexual behaviors, including safe sex and monogamy.

Or call the people with AIDS ARC switchboard at 900-900-900.
AIDS Foundation holds (415-999-2000) 
recruiting for physician knowledgeable about AIDS. Call the San Francisco 
Alinurex (415-967-3198) or the San Francisco Medical Society (415-666-6266) 
informative. Is it a decision you are prepared to make? It is you who must 
informative. If you have questions which are not answered here or if you 
decided for yourself. This publication provides information to help you make 
decide whether or not to take the test. This test is difficult one, you must 
Your decision whether or not to take the test is a difficult one. You must 
informative to help you make an informed 
Departnent of Public Health 
A Program of the San Francisco 
Alternative Test Sites 
at 
AIDS Antibody Test 
in San Francisco 
at Alternative Test Sites
should not continue to practice sex which can transmit AIDS.

For AIDS:
- People consider themselves are one of both partners may be at risk.
- People who are assigned to become infected with HIV/AIDS 

The following people should consider taking the test:

- People who want to take the test the least if you may be at risk for AIDS.1

For AIDS:
- People considering themselves are one of both partners may be at risk.
- People who want to know if they have been infected with the AIDS virus.
- People who want information that can influence their health behavior.
- People who want to know if they're infected.

The following people should consider taking the test:

- People who do not want to know the test results should not take the test.

Confidentiality and anonymity

When you call to make an appointment, your name, address, social security number or other official identification number is not recorded or kept to your test. When you go for your test, your test results are not recorded or kept. Your test results are not recorded or kept if you decide to take the test.

If you decide to take the test, the test results will be reported to your public health department for the TSC. The test results will be reported to your public health department for the TSC. The test results will be reported to your public health department for the TSC. The test results will be reported to your public health department for the TSC.

When you call to make an appointment, your name, address, social security number or other official identification number is not recorded or kept. Your test results are not recorded or kept if you decide to take the test.
To Be at Risk for AIDS?

What Groups Are Known to Be at Risk for AIDS?

How Is AIDS Transmitted?

Intercourse and Oral Intercourse

- Oral sex or anal sex
- Male-to-male contact

Drug Use

- Injection drug use
- Drug use in non-injection drug use

Healthcare Workers

- Contact with infected patients

AIDS is transmitted from person to person through:

- Sex (oral, anal, or vaginal)
- Needlestick injuries
- Blood transfusions
- Mother to baby during birth

Healthcare workers may be at risk of acquiring HIV through:[4]

- Unprotected sexual contact with infected patients
- Direct contact with infected blood
- Needlestick injuries
- Sharing needles

If you have had sex or drug use with an infected person, you may have been exposed to HIV. If you have been exposed, you should take the following steps:

1. Get tested for HIV.
2. See a healthcare provider immediately.
3. Discuss counseling and testing options.
4. Begin antiretroviral therapy (ART) as soon as possible.

A Positive Test Result

If the test is positive, you have HIV. You may be at risk for developing AIDS, which is a life-threatening condition.

If the test is negative, you do not have HIV. You may still be at risk for developing AIDS, but you are not infected with HIV.

For more information, please contact the National Institutes of Health at 1-800-448-0440.
infectious (65),
discusses the risks of AIDS and how to prevent its spread. The two most common
methods of transmission are: blood and sexual contact. By following these simple
precautions, anyone can reduce their risk of acquiring AIDS.

Recomendations for 
Recipients:

When you become infected with the AIDS virus,

* Avoid needle sharing, sexual contact, and drug abuse.
* Use condoms during sexual activity.
* Avoid contact with blood or body fluids.
* Wash your hands frequently.

If you test positive for HIV, you should:

* Follow all medical recommendations.
* Be aware of your options.
* Consider joining support groups.

For more information, contact the AIDS Hotline (1-800-AIDS-2437).
Appendix 3: Education materials available to participants
3.3 "AIDS Safe-Sex Guidelines" Card

AIDS Safe-Sex Guidelines
June 1985

SAFE SEX PRACTICES
- Massage
- Hugging
- Mutual Masturbation
- Social Kissing (Dry)
- Body-to-Body Rubbing (Frottage)
- Voyeurism, Exhibitionism, Fantasy

POSSIBLY SAFE SEX PRACTICES
- French Kissing (Wet)
- Anal Intercourse With Condom
- Vaginal Intercourse With Condom
- Sucking - Stop Before Climax
- Cunnilingus
- Watersports - External Only
  (Risk Increases With Multiple Partners)

UNSAFE SEX PRACTICES
- Rimming
- Fisting
- Blood Contact
- Sharing Sex Toys or Needles
- Semen or Urine in Mouth
- Anal Intercourse Without Condom
- Vaginal Intercourse Without Condom

© BAY AREA PHYSICIANS FOR HUMAN RIGHTS (1985) (415) 653-3199
Distributed by San Francisco AIDS Foundation
333 Valencia Street, Fourth Floor, San Francisco 94103
AIDS Hotline: (415) 865-AIDS Toll-Free in N. CALIF.: 800-POR-AIDS
Appendix 4: Questionnaire

PLEASE DO NOT WRITE YOUR NAME ON THIS FORM

It has recently been suggested that people receiving medical care for pregnancy, birth control, or venereal diseases (VD) like gonorrhea should be required to take the AIDS antibody test. Several different suggestions have been made about what to do with positive test results. We would like to know what you think of these suggestions. We would also like to know if your decision to seek treatment from a health practitioner (physicians, nurse practitioners or midwives) would be influenced if these suggestions were made into law. We believe the opinions of women like you can influence policies about AIDS antibody testing.

Currently, results of AIDS antibody tests are confidential. A health practitioner may not tell the results to anyone without the patient's consent.

1. Imagine you were getting medical treatment for each of the following reasons: In each case would you approve of the health practitioner talking with you about AIDS antibody testing?

<table>
<thead>
<tr>
<th>PLEASE CHECK ONE BOX FOR EACH CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely Would Not Approve</td>
</tr>
<tr>
<td>Probably Would Not Approve</td>
</tr>
<tr>
<td>Probably Would Approve</td>
</tr>
<tr>
<td>Definitely Would Approve</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VISIT FOR:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Birth Control</td>
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<tr>
<td>Pregnancy Care</td>
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<tr>
<td>VD testing</td>
<td></td>
</tr>
<tr>
<td>Routine Care</td>
<td></td>
</tr>
</tbody>
</table>

2. If your health practitioner recommended that you take the AIDS antibody test when you were being treated for the following reasons, would you take the test?

<table>
<thead>
<tr>
<th>PLEASE CHECK ONE BOX FOR EACH CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely Would Not Take Test</td>
</tr>
<tr>
<td>Probably Would Not Take Test</td>
</tr>
<tr>
<td>Probably Would Take Test</td>
</tr>
<tr>
<td>Definitely Would Take Test</td>
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</tbody>
</table>

<table>
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<tr>
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<td></td>
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<tr>
<td>Pregnancy Care</td>
<td></td>
</tr>
<tr>
<td>VD testing</td>
<td></td>
</tr>
<tr>
<td>Routine Care</td>
<td></td>
</tr>
</tbody>
</table>
3. If your health practitioner *recommended* that you take the AIDS antibody when you were being treated for the following reasons, *and the names of people with positive tests were reported to public health officials*, would you take the test?

**PLEASE CHECK ONE BOX FOR EACH CASE**

<table>
<thead>
<tr>
<th>VISIT FOR:</th>
<th>Definitely Would Not Take Test</th>
<th>Probably Would Not Take Test</th>
<th>Probably Would Take Test</th>
<th>Definitely Would Take Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth Control</td>
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<td>Pregnancy Care</td>
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<tr>
<td>VD testing</td>
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<tr>
<td>Routine Care</td>
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</tbody>
</table>

4. If it were *required by law* that you get the AIDS antibody test at your med visit, would you still visit a health practitioner for the following reasons?

**PLEASE CHECK ONE BOX FOR EACH CASE**

<table>
<thead>
<tr>
<th>VISIT FOR:</th>
<th>Definitely Would Not Visit</th>
<th>Probably Would Not Visit</th>
<th>Probably Would Visit</th>
<th>Definitely Would Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth Control</td>
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<td>Pregnancy Care</td>
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<td>VD testing</td>
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<tr>
<td>Routine Care</td>
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</tbody>
</table>
5. If it were **required by law** that you get the AIDS antibody test at your medical visit, and the names of people with positive tests were reported to public health officials, would you still visit a health practitioner for the following reasons?

**PLEASE CHECK ONE BOX FOR EACH CASE**

<table>
<thead>
<tr>
<th>VISIT FOR:</th>
<th>Definitely Would Not Visit</th>
<th>Probably Would Not Visit</th>
<th>Probably Would Visit</th>
<th>Definitely Would Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth Control</td>
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<tr>
<td>VD testing</td>
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</tr>
<tr>
<td>Routine Care</td>
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</tbody>
</table>

6. Positive VD tests are reported to public health officials so that sexual partners of the infected person can be informed of their risk. This is done without revealing the name of the infected person. If you thought you had VD and you knew your sexual partners would be contacted, would you still have a **VD test**?

**PLEASE CIRCLE ONE ANSWER**

- Definitely would not
- Probably would not
- Probably would
- Definitely would

7. If you wanted **pregnancy care**, would you still visit a health practitioner in each of the following situations?

**PLEASE CHECK ONE BOX FOR EACH CASE**

You would be required to take the AIDS antibody test and if you tested positive your name would be reported to public health officials who would then contact your sexual partners.

You would be required to take the AIDS antibody test and if you tested positive your health practitioner would contact your sexual partners.
8. If you wanted **birth control**, would you still visit a health practitioner in each of the following situations?

<table>
<thead>
<tr>
<th>Definitely Would Not Visit</th>
<th>Probably Would Not Visit</th>
<th>Probably Would Visit</th>
<th>Definitely Would Visit</th>
</tr>
</thead>
</table>

You would be required to take the AIDS antibody test and if you tested positive your name would be reported to **public health officials** who would then contact your sexual partners.

|                       |                       |                       |                       |

You would be required to take the AIDS antibody test and if you tested positive your **health practitioner** would contact your sexual partners.

9. If you were concerned that you might have VD, would you still visit a health practitioner for **VD testing** in each of the following situations?

<table>
<thead>
<tr>
<th>Definitely Would Not Visit</th>
<th>Probably Would Not Visit</th>
<th>Probably Would Visit</th>
<th>Definitely Would Visit</th>
</tr>
</thead>
</table>

You would be required to take the AIDS antibody test and if you tested positive your name would be reported to **public health officials** who would then contact your sexual partners.

|                       |                       |                       |                       |

You would be required to take the AIDS antibody test and if you tested positive your **health practitioner** would contact your sexual partners.

---

**PLEASE CIRCLE ONE ANSWER FOR EACH QUESTION BELOW**

10. Would you be more or less likely to take the AIDS antibody test if laws protecting the confidentiality of test results were strengthened?

<table>
<thead>
<tr>
<th>Definitely</th>
<th>Probably</th>
<th>Probably</th>
<th>Definitely</th>
</tr>
</thead>
</table>

...
11. Did you receive a blood transfusion between 1978 and 1985?

Yes  No

12. Do you have a primary male sex partner (husband, live-in partner, boyfriend)?

Yes  No  (If you answered No, please skip to question)

13. If you have a primary male sex partner, does he only have sex with:

Yes  As Far As  Maybe Not  No

I Know

14. This question concerns how many male sex partners you have had during different periods of time. For each time period on the left, check a box on the right to show how many partners you had during that time period.

<table>
<thead>
<tr>
<th>TIME PERIODS</th>
<th>0</th>
<th>1</th>
<th>2-5</th>
<th>6-10</th>
<th>11-50</th>
<th>over 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 6 months</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Since January 1984</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

15. This question concerns how often you have used condoms (rubber during sexual intercourse. For each time period on the left check a box the right that shows what percent of the time you have used condoms during sexual intercourse.

<table>
<thead>
<tr>
<th>TIME PERIODS</th>
<th>NEVER</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 6 months</td>
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<tr>
<td>Since January 1984</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
PLEASE CIRCLE ONE ANSWER FOR EACH QUESTION BELOW

16. During the past 5 years, have you used needles to inject yourself with drugs not prescribed by a physician?
   Yes  No

17. During the past 5 years, have you ever had sex with a man who used needles to inject himself with drugs not prescribed by a physician?
   Yes  No  I Don't Know

18. Have any of your male sex partners in the last 5 years had sex with men?
   Yes  No  I Don't Know

19. Have you ever had sex with a man you now know is infected with the AIDS virus?
   Yes  No

20. If you could have the AIDS antibody test anonymously (nobody but you would know your name or your test result), would you?
   Yes  No  Undecided  Have Already Had It

21. How old are you? _________
PLEASE CHECK ONE ANSWER FOR EACH QUESTION BELOW

22. What is your reason for coming to clinic today?

_____ Pregnancy care
_____ Possible infection
_____ Infertility
_____ Birth Control
_____ Routine Care or Annual Exam
_____ Abortion Counsel or Follow-up

Other (please specify): _________________________________

23. What is your ethnic background?

_____ Caucasian (white)
_____ Black
_____ Hispanic, Latina, Chicana
_____ Asian
_____ Pacific islander
_____ Native American (American Indian)

Other (please specify): _________________________________

24. What is the highest grade you completed?

_____ Grade school (grades 1-6)
_____ Junior high school (grades 7-8)
_____ Senior high school (grades 9-12)
_____ Junior college or vocational school
_____ College
_____ Graduate or professional school

25. Which of the following applies to your relationship status? Please choose as many as apply.

_____ Never married
_____ Married
_____ Live-in male sexual partner
_____ Live-in female sexual partner
_____ Separated
_____ Divorced
_____ Widowed
26. What kind of health insurance do you have?

   ___ No insurance
   ___ Private insurance (such as Blue Cross or Prudential)
   ___ Medi Cal

27. What was your family income before taxes in 1986?

   ___ under $10,000
   ___ 10,001 to $20,000
   ___ 20,001 to $30,000
   ___ 30,001 to $40,000
   ___ over $40,000

28. Please use this space for any comments you would like to make concerning this questionnaire or the issues addressed here.

THANK YOU VERY MUCH FOR YOUR HELP

Informational pamphlets on AIDS and AIDS antibody testing are available from the research assistant if you would like to learn more about these issues.
REFERENCES


(23) Personal communication, Mona Rowe, Intergovernmental Health Policy Project at George Washington University.


