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EVALUATION OF CALIFORNIA'S AIDS COMMUNITY EDUCATION PROGRAM

Prepared for the Office of AIDS
California Department of Health

by

Paul Harder, Project Director
Sandra Wexler
Toby Marotta
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August 1987

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CONTENTS

Executive Summary i

Chapter One — Introduction to the Evaluation of California's AIDS Community Education Program 1

Chapter Two — AIDS in California 9

Chapter Three — The State's Education and Prevention Response to AIDS 25

Chapter Four — AIDS Education Effectiveness 35

Chapter Five — Homosexually Active Men and HIV Infections: A View from the Field 97

Chapter Six — AIDS Knowledge Among IV Drug Users: The Social Economy of Needle-Sharing 137

Chapter Seven — Implications and Recommendations for AIDS Education 155

Appendix

EVALUATION OF CALIFORNIA'S AIDS COMMUNITY EDUCATION PROGRAM

EXECUTIVE SUMMARY

Within the past few years AIDS has emerged as the leading public health issue facing the state of California. Although there are no cures, or even effective long-term treatments for AIDS, it can be prevented if certain behaviors are avoided. Education regarding infection-spreading practices as well as safe behaviors, therefore, provides our most powerful means to fight the spread of AIDS.

Recognizing this, the state legislature enacted SB 1251 in 1985. This legislation provided funds for educational services to be delivered by a statewide system of information and education (I&E) contractors and also mandated an evaluation of the program. The URSA Institute was selected in April 1986 by the Office of AIDS, California Department of Health Services, to carry out the evaluation.

As defined in the scope of work for this project, the study had five broad objectives, including:

- to describe the range of activities pursued and target groups served by the Department's I&E contractors;
- to assess the effectiveness of AIDS education in changing knowledge levels, attitudes, and behavioral intentions of the general public, health care and social service workers, and gay or bisexual men and intravenous drug users;
- to identify the populations at risk of contracting AIDS who are not being reached by current AIDS education programs and to assess their knowledge and behavioral patterns related to AIDS; and
- to make recommendations to the Department on ways in which California's AIDS Community Education Program might be improved.

The URSA Institute study team employed a variety of research techniques to address each of the objectives described above. These were: implementation of quarterly reporting systems for monitoring contractor costs and activities; administration of pre/post questionnaires with a sample of participants in selected I&E programs; and open-ended interviews and participant observation among various subcultures in gay communities state-wide and interviews with intravenous drug users (IVDUs) in Los

Angeles and San Francisco. What follows summarizes the activities of this study and highlights the major findings regarding California's AIDS Community Education Program.

An Overview of AIDS in California

Analysis of the AIDS Reporting System (ARS), the diagnostic-based surveillance system used by the California Department of Health Services, revealed 7,074 AIDS cases and 3,586 deaths (or 50.7% of the state's total cases) for the period 1981 through December 31, 1986. The vast majority of these cases have involved males (98.3%) who have engaged in same-sex sexual contact (81.7% homosexuals and 10.6% bisexuals). Almost a fifth of those diagnosed have been members of minority groups. Thirteen percent have acknowledge using a needle for self-injection.

Several important trends emerged from our analysis of ARS data. Although the absolute numbers of remain small, women with AIDS appear to represent a somewhat greater proportion of the total AIDS caseloads of counties other than San Francisco. With respect to racial/ethnic differences, among medium-sized (100,000-500,000 population) and small counties (less than 100,000 population) it appears that as the disease moves from the white to minority populations, Latinos are reported as having AIDS at least one year earlier than Blacks. And in Los Angeles County, almost 30 percent of the reported cases involve Blacks or Latinos. Finally, men who have sex with men continue to represent a group at very high risk. Intravenous drug use is clearly a co-factor in this group, as well as a risk behavior in its own right.

As these statistics suggest, the AIDS epidemic is a reality which has confronted the people of California. In 1985, AIDS was already the number one medical problem Californian's believed they faced, according to the Field Institute's California Opinion Index. Those surveyed in 1987 by the Field Institute felt even more strongly about the issue: 80 percent called AIDS the most serious disease facing California today. It appears that many people in 1985 relied on rumor for information on how the virus which causes AIDS is spread. By 1987, however, 81% of those polled knew that AIDS was not contracted through "casual contact." Along with this change in transmission and risk behavior knowledge, attitudes about the basic rights of people with AIDS also seems to have become more tolerant over time. Approximately a fourth (27%) of those polled in 1987 reported having taken some unspecified precaution to reduce their risk of contracting AIDS.

California's Education and Prevention Response

Against this backdrop of epidemiological and public opinion data, the state's AIDS information and education response has developed. Under the leadership of the Office of AIDS, California Department of Health Services, 29 public and nonprofit organizations across the state were awarded contracts in FY 1986-87 to provide AIDS information and education. Total funding available for these efforts in FY 1986-1987 was $4.8 million. While some of these contracts called for a state-wide focus, most were directed toward local activities.

An analysis of 24 of these 29 contracts shows that the I&E contractors identified three major audiences: gay or bisexual men; providers for health and social service agencies; and the general, non-high-risk public. Seven contractors specifically referred to minority target groups, with Blacks, Latinos, or both. Six agencies described activities geared directly or indirectly at IVDUs or at the staff of drug programs. Regardless of target audience, didactic presentations appear to have been the most commonly used educational method. Through such educational activities contractors projected reaching over two million individuals, of whom 91 percent were members of the general public, 7 percent were gay or bisexual men, 1 percent were health or social service providers, and .08 percent were IVDUs.

AIDS Education Effectiveness

To investigate the effectiveness of formal AIDS education, brief questionnaires were constructed for use immediately prior to and following the educational sessions. Separate instruments were developed for the four primary audience groups: IV drug users, gay or bisexual men, health care and social service providers, and the general public. These instruments differed in terms of language complexity and emphasis; they all, however, tapped the same basic areas of information.

The assessment of the effects of formal AIDS education involved three dimensions: knowledge, attitudes, and behavior. While the most important indicator of the effectiveness of health education is the degree to which individuals educated actually demonstrate changes in behavior, measurement of such behavior change was outside of the scope of this study. Instead indicators of behavioral intentions were used. Each

questionnaire thus assessed a number of issues from cognitive, affective, and, to a more limited extent, behavioral perspectives.

Not all of the 29 I&E contractors administered the questionnaires. Eleven "intensive" sites which had large educational components and sufficient staff to administer and collect the instruments were selected. January 1987 was chosen as the testing period, and all individuals who attended educational presentations given by these 11 programs during that month were included. A total of 1,048 completed and usable instruments were returned. Of these, 429 (or 41% of the total) were filled out by members of the general public, 289 (28%) by gay/bisexual men, 309 (29%) by health care or social service providers, and 21 (2%) IVDUs.

Twenty-two educational sessions were conducted for member of the general public during the study period. Slightly over half (52%) of these general public audiences were female, and almost three-quarters (74%) identified themselves as white. Slightly more than two-thirds (70%) were 39 years or younger, with a mean age of 31.5. Almost a third (32%) had attended/graduated from college and an additional 14 percent reported graduate education. Among these general public attendees, 54 percent showed an increase in basic AIDS knowledge subsequent to the educational presentation. Moreover, 70 percent exhibited an increase in appropriate attitudes and 77 percent indicated a positive change in intended behaviors. Fully 98 percent reported that they would recommend the presentation they had attended to others.

Over 80 percent of the gay or bisexual men who attended the 23 educational sessions held during the study period identified themselves as white. The mean age of these men was 33.4 years. These men tended to be relatively well educated, with 49 percent reporting college attendance/graduation and 22 percent indicating graduate education. Only 15 percent of these gay or bisexual male participants showed a post-test knowledge increase. This low proportion of positive increase, however, reflects their high knowledge levels prior to the session; there was little room for score improvements. In terms of attitudes and intended behaviors, the gay or bisexual male participants showed more substantial gains: 56 percent had an increase in appropriate attitudes and 70 percent showed intentions to change their behaviors in positive ways. Fully 99 percent of the attendees indicated that they would recommend the educational presentation to others.

Seventeen educational presentations were made to health care and social service providers during the study period. These participants were overwhelmingly female (82%),

and more than two-thirds (71%) identified themselves as white. Their mean age was 38 years. More than half (53%) reported being college graduates and an additional 34 percent indicated graduate education. As with the members of the general public and the gay or bisexual men, these attendees also exhibited positive educational benefits. Among these providers, 35 percent showed an increase in their post-test knowledge scores, 80 percent had an increase in appropriate attitudes, and 77 percent indicated positive change in intended behaviors. Fully 99 percent reported that they would recommend the educational session they attended to others.

Evaluation forms were received from one I&E session conducted during the study period for individuals identified as IVDUs. All of these attendees were male, and their average age was 35 years. Just over three-quarter (76%) identified themselves as white, with the remainder describing themselves as Black. The majority (43%) reported being high school graduates. In contrast to the other audience groups, this group exhibited the least positive change in all three dimensions of interest. Less than a third (29%) showed an increase in knowledge, and, in fact, 43 percent exhibited a decrease in post-test knowledge scores. Changes in attitudes and intended behaviors fared somewhat better: 33 percent showed an improvement in appropriate attitudes and 50 percent indicated positive intended behaviors after the educational session.

Based on these results, the California AIDS Community Education Program overall was very successful during FY 1986-87 in producing the intended effects on its target audiences, at least those reached by face-to-face interventions. Educating IVDUs with traditional methods resulted in the least success. In light of the general difficulties in reaching IVDUs, educational efforts directed to them may need specifically to tailor materials to their educational abilities, cultural backgrounds, and life experiences if we are to be successful in controlling the spread of AIDS.

In addition to assessing general changes in participants' knowledge, attitudes, and intended behaviors, we also explored which educational interventions were most closely associated with producing these positive effects. It appears that aspects of the educational strategies used, such as group size, number of methods, and session length, have differing effects on the three dimensions of interest. Knowledge change appears to benefit from shorter sessions (e.g., two hours or less). Larger groups and didactic, often single, methods also seem effective in producing positive knowledge gains. In contrast, small groups involving multiple interactive methods appear to be most effective in

producing attitude and behavioral intentions change. Longer sessions (e.g., three hours or more) were more effective than shorter presentations.

Educating Those At Risk of AIDS

To ensure that I&E activities are able to respond to the needs of those at high risk for infection requires not just documentation of present activities, but also suggestions for future directions. In particular, it is important to assess these three dimensions among risk group member who may for a variety of reasons be unlikely to attend a formal AIDS education presentation.

Qualitative data gathering techniques, including open-ended interviews and ethnographic observational methods, were used to address these issues. Using a market segmentation approach, separate studies were carried out among members of the gay communities in five disparate California counties and among IVDUs in San Francisco and Los Angeles. Three primary questions guided these explorations: what do people know about AIDS, especially infection-spreading and health-promoting behaviors; how and when did they get this information; and how have they changed their behavior, if at all, as a consequence of this knowledge.

The gay community is not a homogeneous social grouping. Rather, it is made up of various circles, networks, and subcultures which circumscribes a complex social organization. Three overarching subcultures of men who have sex with men can be delineated: an exclusively sexual subculture, wherein anonymous sexual exchanges predominate; a socio-sexual subculture, wherein social institutions, such as bars, provide the setting for interpersonal negotiations of intimate exchanges; and a community-oriented subculture, wherein self-identified gay men navigate personal relationships without either highly social or heavily erotic agendas. While a more recent historical development, this latter subculture tends to be highly visible through its promotion of civic improvements, businesses, political activities, and cultural endeavors.

High levels of AIDS-related knowledge and positive behavioral changes were found among community-oriented gay men, and to a somewhat lesser extent among men who participated in a socio-sexual subculture. Personal experience, such as knowing someone with AIDS, often motivated these individuals to acquire information about AIDS and to

change their sexual behaviors. The experience of having, and often witnessing, friends die from AIDS has propelled many to make significant life changes.

People frequently turned to their friends and their community institutions and publications to find out about the disease and how to prevent infection. Given the leadership role which many community-oriented gay men have assumed both individually and in the creation of AIDS agencies, it is not surprising to find that these men are the best informed and the most likely to have initiated "safer" sexual practices. Knowledge and behavioral modifications seemed to be greater among men in the San Francisco Bay Area than among those in parts of Southern California. The population concentration in San Francisco, particularly when compared to the dispersion over a geographic area such as Los Angeles, may create a greater opportunity for the types of personal experiences which foster knowledge acquisition and behavior change.

Men who have sex with men but are not gay-identified had the lowest levels of AIDS-related knowledge and were the least likely to modify the behaviors. These men, who typically relate to the exclusively sexual subculture, may keep their homosexual contacts hidden from other parts of their lives. Because they often do not think of themselves as being gay, they tend to avoid the settings in which community-oriented men obtain AIDS-related information. Although their sexual repertoires often do not include the most risky of infection-spreading sexual practices, they represent a group which is not effectively reached through AIDS education of gay or bisexual men.

Recommendations for enhancing AIDS educational activities for homosexually active men include refinement of content and strategies of informational delivery. First, the messages that need to be communicated involve: the dangers of reinfection--that is, fluid exchanging behaviors in the context of monogamous or sustained sexual relations are more dangerous than non-fluid-sharing activities with multiple partners; the role of health promotion activities to build and sustain immune system strength; and the meaning and implications of anti-body test results. Second, the role of indigenous community institutions in the delivery of AIDS-related information should be promoted. These community institutions, such as bars or businesses, provide comfortable and familiar settings for broad reaching circles of gay men. Moreover since not all gay men will attend formal educational presentations, it is important to have information available to them in the locales that they inhabit. Third, more attention needs to be paid to educating homosexually active men who are not gay-identified. Educational messages must stress

the behaviors that put people at risk for AIDS and not simply subsume those behaviors within labels such as "gay" or "bisexual."

Knowledge about AIDS was much less common among the IVDUs interviewed. Most reported television, especially special programs about AIDS and IV drug use, as their primary information source. Among needle users in San Francisco, most knew AIDS could be spread by sharing "works," that bleach can be used to clean needles and syringes (although only three reported doing so), and where they could go for an anti-body test. A much lower level of knowledge was found among those in Los Angeles. Although these individuals also were aware that sharing needles can spread AIDS, none knew how to clean needles nor where they could go to get an anti-body test. This latter was particularly disturbing since all of those interviewed were in or had just completed treatment at the time of the interview.

While all had some understanding of how shared works can spread AIDS, there was less clarity around possible sexual transmission. Many, especially the men interviewed, associated homosexual practices with sexual transmission; heterosexual intercourse without a condom was not often viewed as a potential infection spreading practice. Only six respondents claimed to use condoms regularly, and three of these individuals engaged in prostitution. Even if heterosexual intercourse came to be recognized as potentially "dangerous," a number of factors within the IVDU world would still make it difficult for women to demand that their partners use condoms.

Among these IV drug users, information does not necessarily lead to behavioral change. Needle sharing was universal in that it occurs regardless of the type of drug administered or the frequency of its use. All reported that they, and their friends, shared needles. Fully 95 percent had shared within the month before the interview, and in the year prior to the interview, they reported sharing between three and 100 times. Moreover, IVDU couples may under-report their amount of needle sharing since the use of a single works may be viewed as part of the couple's intimate relationship and consequently may not be defined as "sharing." Ending needle sharing given the present culture of drug use was seen as unrealistic.

The IVDUs interviewed offered five recommendation for promoting AIDS education. First, most believed that making needles available to seasoned users seemed the most logical, albeit, unlikely intervention technique. Second, treatment programs need to be expanded. Programs in both Los Angeles and San Francisco have waiting lists;

IVDUs who want to enter treatment are left on the street to continue to use drugs and share needles. Treatment also must be kept affordable--costs of $200 a month may be prohibitive for many IVDUs. Third, community outreach health worker (peer counseling) programs need to be expanded. The communicator is as important as the message when trying to help IVDUs to change risky behaviors. AIDS education programs that use "natural helpers" or leaders in various drug-using communities are more likely to successfully educate their peers. Fourth, women's groups, especially in treatment programs, are needed to help empower women. Presently, few residential programs accept mothers and their children, thus excluding many women from their facilities. In addition IV drug-using women often feel like second class citizens; treatment programs that empower and activate women, that encourage them to take control of their own lives, are essential for effective interventions, especially in regard to changing sexual behaviors. Fifth, information campaigns, particularly those on television, should use persons with AIDS who contracted it via IV drug use. The uneven literacy rate among drug abusers may make reliance on printed materials ineffective. Many IVDUs, however, watch a great deal of television. Many have noted that a primary motive for behavior change among gay men was the presence of others dying from AIDS in their communities. California's drug-using communities have not yet confronted this "reality" of AIDS. Those interviewed felt that seeing an IVDU like themselves who had AIDS might have the necessary dramatic effect necessary to affect behavioral change.

Implications and Recommendations

Gay or Bisexual Men

- For gay-identified men who already exhibit a high level of basic AIDS knowledge, educational strategies should emphasize behavioral change, maintenance of such change, and health promotion.

- Indigenous community institutions, such as bars or other small, local businesses, should be encouraged to act as AIDS educators, promoting factual knowledge and risk avoidance strategies.

- For non-gay-identified homosexually active men (e.g., exclusively sexual), basic information and risk reduction knowledge are still needed. Interventions should

be used which do not require these men to publicly identify with the gay community.

Intravenous Drug Users (IVDUs)

- Basic information, as well as needle use and sexual risk reduction strategies, are critical needs.
- Treatment programs need to be strengthened and expanded. They can be one of the most efficient methods for providing AIDS education.
- For those IVDUs not in treatment, programs should be developed which rely on indigenous institutions which have credibility in the community. Peer counseling, particularly using street worker approaches, appears to be an effective way to educate IVDUs.
- Media messages for this population should feature infected IVDUs who can convince others like themselves that the threat of AIDS/ARC is real, compelling, and fatal.

Partners of High-Risk Individuals

- Methods need to be found to identify and reach the partners of those at high risk.
- Information must be provided to help these individuals to understand the level of risk faced by their partners as well as their own risks of infection.
- Interventions need to be developed which promote the abilities of these individuals to discuss issues of risk and behavioral change with their partners.

Heterosexuals At High Risk

- Basic information is needed to allow sexually active heterosexuals to assess their own risks of AIDS. Of particular concern is the need to foster an understanding of the need for and use of HIV testing.

- Men as well as women need to be provided with the information and skills which will allow them to take responsibility for initiating and maintaining safer sexual practices.

Health Care and Social Service Providers

- Increased attention needs to be devoted to educating providers in the social service and mental health arenas. In addition to basic information, educational efforts must address attitudes and behaviors which affect the care of infected individuals.

- While many health care providers in the state already know the basics, educational activities should aim at keeping them up-to-date on the changing medical data in this area. Health care providers also need to be made familiar with the existing guidelines and appropriate methods for minimizing their own risks of infection. As with social service and mental health providers, educational activities for health care providers must promote attitudes and behaviors which will facilitate their care of those infected with HIV.

- Provider education, in general, should strive to prepare these individuals to be able to sensitively and comfortably discuss issues of sexuality and drug use with their patients/clients.

General Population

- Although the general public is not a priority group for AIDS education under the Office of AIDS 1987-88 plan, the state's young people still merit special attention. Current efforts to educate adolescents (high school and college age) should be continued and new methods to inform youth about the risks of AIDS and ways to avoid infection should be supported.

Minority Communities

- It is crucial that AIDS education be provided to minority audiences. As with other groups, the message may be best transmitted by those with whom the audience identifies and who have access to and credibility with key members of

the community. Only then will minorities accept the idea of AIDS as a concern to them.

- AIDS education, like many issues in minority communities, must include the family, which can play an important role as mediator and reinforcer of educational messages and behavior change. The involvement and use of indigenous institutions, such as churches or voluntary or fraternal organizations, are also central to educational effectiveness.

- Educational efforts should strive to eliminate stereotypes by offering facts. Of particular importance is the meed to promote the understanding that minorities exist in all transmission categories, not simply as IVDUs. Minority group members must be informed about all transmission methods and, concomitantly, effective ways to minimize risk. Conversely, the general public needs to be made aware of the reality of AIDS within minority communities.

Chapter One

INTRODUCTION TO THE EVALUATION OF CALIFORNIA'S AIDS COMMUNITY EDUCATION PROGRAM

Within the past few years AIDS has emerged as the leading public health issue facing the state of California. According to a recent poll conducted by the Field Institute, AIDS has surpassed cancer and heart disease as the concern identified by Californians as the most pressing health problem in the state. As a rapidly spreading disease for which there is no known cure, some have called AIDS the most serious health threat ever faced by the state or even the nation. Although there are no cures, or even effective long-term treatments for AIDS, it can be prevented if certain behaviors are avoided. The California Department of Health Services, Office of AIDS manages a statewide program to provide information about the disease and how it can be prevented. This report summarizes the the URSA Institute's evaluation of the Department of Health Services' efforts in FY 1986-87 to prevent the spread of the disease through a program of information and education activities. Drawing from many data sources, the report presents a wide-ranging examination of AIDS knowledge and education in the state. The final section of the report draws conclusions from the evaluation results and makes recommendations for improving the provision of information about AIDS to the people of California.

PURPOSE AND SCOPE OF THE STUDY

The legislation which authorized the creation of California's AIDS Community Education Program also mandated an evaluation of that program. Enacted in 1985, SB 1251 provided funds for educational services to be delivered by a statewide system of information and education (I&E) contractors chosen through a competitive bid process and required the Department of Health Services to "issue contracts to evaluate the effectiveness of the AIDS information and education program conducted by the state department" (Section 199.71(2)). A Request for Proposals was issued in early 1986 and the URSA Institute was selected to be the contractor in April of that year.

As defined in the scope of work for this project, the study had five broad objectives. Those were:

- to describe the range of activities pursued and target groups served by the Department's I&E contracts;

- to identify the costs associated with the provision of community AIDS education by the Department's I&E contractors;

- to assess the effectiveness of AIDS education in changing the knowledge levels, attitudes and behavioral intentions of the general public, health care and social service workers and selected groups engaging in activities which put them at risk of contracting AIDS;

- to identify the populations at risk of contracting AIDS who are not being reached by current AIDS education programs and to assess their knowledge and behavioral patterns related to AIDS; and

- to make recommendations to the Department on ways in which California's AIDS Community Education Program might be improved.

The URSA Institute's approach to these objectives combined several perspectives. Foremost, our intention was to provide analysis and knowledge which could assist the Office of AIDS in preventing the spread of this disease. This important rationale for the project can be described as contributing to the development of the state's AIDS education policies by providing an objective assessment of the efficacy of various educational interventions. A secondary, but still important, concern was strengthening program management within the Office of AIDS. Through the creation of cost and activity reporting formats, the evaluation aimed to improve the quality of program-related information flowing to the Office of AIDS. As a relatively new program of state government, there were few administrative reporting systems in place. This evaluation created and tested data collection techniques which can now be used by the Department as part of its regular reporting requirements.

California has been a national leader in the fight to prevent the spread of AIDS through public education. The results of the state's efforts, as reported here, can benefit other states which may be just beginning to suffer the consequences of a growing rate of HIV infection or which may wish to preempt the spread of the infection through an aggressive health education campaign. In either case, the California experience in AIDS education can provide some guidance on which of the many possible strategies seem most

worth pursuing. We hope that the benefits of this work extend beyond the borders of the state.

Very little other evaluation research on AIDS education programs has been conducted. One of the few formal studies extant was conducted by the Gay Men's Health Crisis in New York City and reported in preliminary form in The Advocate of May 12, 1987. Referred to as "The 800 Men Study" the project assessed the effectiveness of a combination of educational methods. According to the researchers (M. Quadland, W. Shattls, R. Jacobs and J. Eramo), the most effective AIDS prevention education strategy for gay men is a combination of a factual medical presentation with the use of erotic visuals "presented in a spirit of positive affirmation." The medical information reduced risky sexual behaviors and the use of an erotic video was most effective in stimulating participants to increase safe sex practices. Using a controlled design, The 800 Men Study also revealed that men who participated in a weekend of risk-reduction programs were more motivated to practice safe sex than were those who received information at home individually. Since no erotic materials are used in California's AIDS education programs, the 800 Men Study cannot be replicated using state funds. However, the URSA Institute evaluation does address in Chapter Four the type of educational intervention associated with the most positive outcomes.

STUDY METHODS

This section provides a brief overview of the methods used to assess California's AIDS Community Education Program. A more detailed description of the specific research techniques applied to this study can be found at the beginning of each chapter.

To meet the first two objectives of the evaluation (i.e., to describe the activities and costs of the state's I&E contractors), the URSA Institute conducted a detailed analysis of the I&E contracts for 1986-87. Data on the target groups, educational activities and budgets specified by each of the contractors were collected and aggregated. In addition, the study used a quarterly system for reporting the educational costs and activities of the contractors. The URSA Institute developed forms for quarterly reporting on the specific activities and target groups of each provider. In addition, cost reporting forms, which disaggregated program expenditures into detailed categories, were also created and used for a period of two quarters during the evaluation.

The third objective assesses the impact of the AIDS Community Education Program in changing the way the people of the state understand critical facts about the disease. A common way in which these facts are transmitted by the contractors is formal training sessions involving a wide variety of instructional methods. The third objective also addresses changes in attitudes and behavior to avoid contracting or transmitting AIDS. A questionnaire administered immediately before and after the training was used for this purpose. Separate instruments were constructed for each of the four major target groups: the general public, gay or bisexual men, health and social service providers, and intravenous drug users.

A formal evaluation of behavioral change would require monitoring the activities of some or all of the participants in state-sponsored educational activities for a period of time after each formal educational intervention. Such a method was not feasible under the scope of work conducted for this project. Instead, we constructed a questionnaire that asked training participants about their intended behaviors, i.e., what they would do in the future. There is no way of knowing from these data whether those self-reported intentions were actually carried out. In addition, a controlled experimental design would have been required to rule out the possibility that any measured change might have resulted from some other event, such as a television documentary or a story in a major magazine. The ultimate effect of the AIDS training therefore has not been measured. A more complex and rigorous design, requiring significantly greater resources than the present effort, must still be carried out to answer this question of ultimate impact.

The other source of data used to address this objective is the California Poll, conducted by the Field Institute. This poll uses a random sample of California residents to analyze public opinion on significant issues in the state. The Field Poll conducted two major surveys relating to AIDS, the first in December 1985 and second in April 1987. Summaries of the findings are available to the public. The URSA Institute used the Field data to provide a measure of change in Californians' knowledge and attitudes about AIDS. These data are not presented as a measure of change necessarily resulting from the Department's AIDS education program. Once again, the lack of a formal controlled experiment makes it impossible to disaggregate the effect of the state's campaign from those of other events occurring simultaneously. However, the Field data do suggest whether there were changes in the public's mind that were consistent with AIDS education messages. This information can help to inform decisions about future AIDS educational strategies.

The fourth objective was addressed by ethnographic field work in sub-populations engaging in risky behavior, specifically gay men and intravenous drug users (IVDUs). This focus responds to the concern that many of those who stand at greatest risk of infection are not reached by conventional health education messages. Our intent was to use participant observation and open-ended interviews conducted in community settings to document the educational needs and AIDS-related attitudes and behaviors of these hard-to-reach sub-populations. Ethnographic methods do not provide easily quantified data as do the other evaluation techniques used in the study. However, the field work, conducted throughout the state, provides a rich and compelling perspective on styles of knowing and living with AIDS in segments of the general population where HIV infection is widespread.

LIMITATIONS OF THE STUDY

Every program evaluation project involves some compromise between rigorous scientific methods and the reality of conducting research in a community setting. This project is no exception. This evaluation of the state's AIDS information and education program was conducted during a time when the public perception of the disease was shifting quickly and dramatically in response to the alarming speed with which the disease spread through certain sectors of California's population. At the same time, there were major developments in medicine's ability to understand and diagnose AIDS. These circumstances forced the state's AIDS education program to respond quickly to new information. In more conventional health education efforts, the scientific information base is solidly established. In the case of AIDS, much of that knowledge is as new as the education programs themselves. This created special problems in assessing the effectiveness of the state's AIDS contractors in transmitting accurate information through the AIDS Community Education Program. Some of the items on the participant questionnaire developed in September 1986 were outdated by the time the questionnaires were analyzed in April 1987. It is difficult to score questions of "fact" when "facts" change.

A major component of this analysis is the pre-post questionnaire on AIDS related knowledge, attitudes and behavioral intentions. Four slightly different questionnaires were developed, one for each of the target groups. Due to limitations of time and budget, the URSA Institute was not able to establish empirically the validity or reliability of the instrument. Although the URSA Institute followed standard procedures to assure face

validity in circulating two drafts of the instrument to the I&E contractors for review and in pre-testing a third draft in several sites around the state, more rigorous item analyses could not be undertaken. In addition, the questionnaire is of limited value in assessing change in participants with limited literacy. Those with good test-taking skills have a greater chance of scoring better than those without, even though they may have both learned equal amounts from the AIDS educational intervention.

There are always some natural limitations in the use of ethnography for evaluation, especially in this case where the groups studied (gay men and IV drug users) are stigmatized by much of society. Ethnographic methods do not "measure" change as do most evaluation indicators. Traditional evaluation approaches require traditional data sources--a client list, a sampling frame, case records. The "clients" of interest here are not participants in health education or other programs. They are of interest, in fact, because they do not participate in formal programs. To understand what they know about AIDS, where they get their information and how that information has affected their behavior requires qualitative rather than quantitative methods. These methods rely on the skillful selection of informants and asking of questions in a natural setting. There are no assurances that the informants are "representative" in a statistical sense. While we cannot say with certainty that they are representative, the informants do belong to important sub-populations who stand a much greater risk than the public at-large for becoming infected with AIDS, ARC or other HIV infections. Ethnography offers insight into these groups that would otherwise not be available.

Despite these limitations, this report offers new data to inform the decisions of policy-makers seeking effective ways to disseminate information on how to prevent the spread of HIV infection. The analyses and recommendations presented here are based on an array of data sources. Only through a combination of research and evaluation methods is it possible to develop a comprehensive understanding of the complex psychological, social and instructional issues involved in AIDS education.

STRUCTURE OF THE REPORT

The body of this report begins with a brief description of the current status of AIDS in California. This description includes our analysis of the prevalence of the disease across the state and differences in prevalence by county size. It also summarizes the shift in public opinion about AIDS as measured through a series of public opinion

polls conducted by the Field Institute. This analysis is followed by an assessment in Chapter Three of the educational response of the Department of Health Services' Office of AIDS to the spread of the deadly virus. An overview of the state's AIDS education strategy is presented here. Chapter Four presents the results of the AIDS education effectiveness evaluation conducted by the URSA Institute. It describes the demographic characteristics of the participants in AIDS education and the changes observed in their knowledge, attitudes and behavioral intentions regarding AIDS. The effects of various educational strategies on these outcomes are assessed as well.

The next two sections of the report (Chapters Five and Six) discuss issues concerning hard-to-reach populations who engage in risky behavior--men who have sex with men and IV drug users. Our focus here is on the acquisition of knowledge in these populations and the relation between knowledge and behavior. After this discussion, the report reaches across the evaluation methods used to draw conclusions about the activities and impacts of the Office of AIDS' Community Education Program. The final section presents recommendations for improving the ways in which AIDS information is transmitted to California's citizens. These recommendations are organized around the populations for whom the Office of AIDS has targeted its AIDS education strategy for FY 1987-88.

Although this report is the result of the efforts of the full URSA Institute research team, certain team members had lead responsibility for some chapters. All of the field work and analysis of gay subcultures in Chapter Five resulted from the efforts of Toby Marotta. Sheigla Murphy conducted the research on which the material on IVDUs is based (Chapter Six). The analysis of the pre-post questionnaires on AIDS knowledge, attitudes and behavioral intentions was managed by Sandra Wexler. Amanda Houston-Hamilton developed the materials upon which the discussion of the state's AIDS education strategy in Chapter Three is based.

Chapter Two

AIDS IN CALIFORNIA

INTRODUCTION

Before describing California's AIDS Community Education Program, it is beneficial to briefly examine the prevalence of the disease in the state and changes in public opinion about AIDS. In this chapter we present and discuss data from the Department of Health Service's AIDS Reporting System (ARS). In this discussion we concentrate on variations in prevalence by risk factor and county size. Both of these variables have implications for AIDS education planning. This analysis is followed by a review of two AIDS public opinion surveys conducted by the Field Institute. Even though this public opinion data was not collected specifically for this evaluation, it does offer insight into the shifts that have occurred in public thinking about the disease.

MORBIDITY AND MORTALITY

Statistical information regarding confirmed AIDS diagnoses provides one vantage point from which to view the impact of this epidemic in California. As a reportable disease, data on new cases as well as updates on previously reported cases are obtained by the California Department of Health Services on a monthly basis from medical care providers across the state. This informational set (the AIDS Reporting System), however, does not include people who have AIDS-Related Conditions (ARC) or those who are HIV-positive but are asymptomatic. It seems to be generally accepted that for every diagnosed AIDS case there are ten-fold more individuals with ARC and ten-fold more yet who are infected with HIV but are asymptomatic.

As of December, 31, 1986, 7,074 AIDS cases and 3,586 deaths (or 50.7% of the state's total cases) were reported in California. Delays in reporting may cause these figures to under-represent the actual number of diagnoses and deaths, and this may be particularly true for latter part of the the 1986 reporting period. In addition, Kizer, Rodriguez and McHolland (1987) estimate that these reported cases represent only 80 percent of those actually affected by AIDS in the state. Accordingly, as many as 8,843 Californians may have developed clinical AIDS by the end of 1986. The annual distribution of reported new AIDS cases and deaths are displayed in the first two columns of Table 2.1; the third column shows a cumulative death rate which is a ratio of the number of reported deaths in a given period to the number of cases alive in that period. The cumulative death rate has remained relatively stable since the first cases were reported in 1981. This is due to the influx of new cases which offset the deaths which have occurred in each year.

Table 2.1

DISTRIBUTION OF AIDS DIAGNOSES AND DEATHS
FOR 1981 THROUGH 1986

	DIAGNOSED (N=7,074) (%)	DIED (N=3,586) (%)	CUMULATIVE DEATH RATE (%)	(#DEAD/#LIVE)
1981 or Earlier	0.9	0.6	32	(21/65)
1982	2.9	1.8	26	(64/250)
1983	9.2	7.2	31	(257/837)
1984	17.6	17.5	34	(629/1827)
1985	30.3	32.2	35	(1156/3338)
1986	36.9	39.9	30	(1430/4794)
Unknown/Missing	2.2	0.8		

The epidemiology of AIDS in California differs from that found in major East Coast cities such as New York or Newark. In those areas AIDS has increasingly become a disease of ethnic minorities and IV drug users. People affected by AIDS within California most often have been white males in their early to mid thirties, with a mean age of 38.8 years and an age range extending from below 18 to 83 years. A majority (92%) were reported as having had either homosexual or bisexual contact, and such sexual contacts appear to be the predominant method of HIV transmission in the state. Table 2.2 presents demographic characteristics of California's reported AIDS cases.

Table 2.2

DEMOGRAPHIC CHARACTERISTICS OF CALIFORNIA AIDS CASES REPORTED AS OF 12/31/86

	PERCENT OF TOTAL
GENDER	
Male	98.3
Female	1.7
RACE/ETHNICITY	
White	79.4
Black	9.0
Latino	9.7
Asian	1.1
Indian	0.1
Unknown/Missing	0.7
BORN IN UNITED STATES	
No	7.4
Yes	81.3
Other	4.1
Unknown/Missing	7.2
SEXUAL ORIENTATION	
Heterosexual	7.0
Homosexual	81.7
Bisexual	10.6
None/Unknown/Missing	0.6
USE NEEDLE FOR SELF-INJECTION	
No	69.3
Yes	13.1
Unknown/Missing	17.6
DELIVERED INFANT SINCE 1978	
No	0.4
Yes	0.2
Unknown/Missing	99.4

Among the AIDS cases reported, one or more opportunistic infections and/or cancers typically were diagnosed. Almost two-thirds (62%) of the cases are said to involve pneumocystis carinii pneumonia and just under a third (30%) have Kaposi's Sarcoma. Table 2.3 displays the range of diagnoses reported. It should be noted that the percentages in the table sum to more than 100 percent because the categories are not mutually exclusive.

Table 2.3

DISTRIBUTION OF REPORTED
OPPORTUNISTIC INFECTIONS/CANCERS
1981-1986

	PERCENT YES
Kaposi's Sarcoma	29.6
Pneumocystis	62.2
Toxoplasmosis	2.0
Cryptosporidiosis	3.4
Cytomegalovirus	5.3
Primary Lymploma	0.7
Multifocal Leukemia	0.7
Candida Esophagitis	7.6
Mycobacterial Infection	4.0
Cryptococcal Infection	4.8
Herpes Simplex	2.6

To explore possible changes over time, selected demographic characteristics were assessed in relation to the year of diagnosis. For example, the proportion of women with AIDS shows an increase and then appears level off between 1985 and 1986 at 2 percent of the total, as Table 2.4 illustrates. The racial/ethnic distribution of reported AIDS cases, which is also presented in Table 2.4, suggests that the proportions of whites, Blacks, and Latinos have fluctuated within relatively narrow ranges during the reporting period. AIDS cases involving Asians, however, show an increase and leveling off at 1.4 percent of the total in 1985 and 1986. Finally, the table displays the distribution of a created "risk factor" variable over this period. The risk factor measure is based on the sexual orientation and intravenous drug use variables; the category "other," therefore, includes risk factors which cannot be distinguished within the current data set such as hemophilia, or use of blood products.

Table 2.4

SELECTED DEMOGRAPHIC CHARACTERISTICS OF AIDS
BY YEAR OF DIAGNOSIS

	1981 (%)	1982 (%)	1983 (%)	1984 (%)	1985 (%)	1986 (%)
GENDER						
Male	98.5	99.0	99.1	98.6	98.0	98.0
Female	1.5	1.0	0.9	1.4	2.0	2.0
RACE/ETHNICITY						
White	76.9	84.7	81.7	82.7	78.5	79.1
Black	10.8	9.4	9.6	8.0	9.0	9.5
Latino	12.3	5.4	8.3	8.7	10.9	9.7
Asian	--	0.5	0.5	0.6	1.4	1.4
Indian	--	--	--	--	0.1	0.2
RISK FACTOR						
Homosexual Contact, No IVDU	81.8	61.9	64.8	63.8	66.1	67.4
Homosexual Contact, IVDU Unknown	4.5	24.4	16.3	15.7	16.3	14.8
Homosexual Contact & IVDU	2.3	10.2	14.1	15.4	9.6	9.7
IVDU, No Homosexual Contact	4.5	2.0	1.3	1.6	2.4	2.4
Other	6.8	1.5	3.5	3.5	5.6	5.7

The distribution of AIDS cases varies greatly across the state. San Francisco and Los Angeles counties alone account for more than two-thirds of the cases reported as of year-end 1986 (36.7% SF and 35.6% LA). Table 2.5 presents the distribution of reported cases in relation to county size, which is defined as "Other Large Counties," those with populations over 500,000 excluding San Francisco and Los Angeles, "Medium-Sized Counties," those with populations between 100,000-500,000, and "Small Counties," those with populations under 100,000.

Table 2.5

DISTRIBUTION OF REPORTED AIDS CASES
BY COUNTY TYPE, 1981-1986

	PERCENT
Los Angeles (N=2,518)	35.6
San Francisco (N=2,594)	36.7
Other Large Counties (N=1,500)	21.2
Medium-Sized Counties (N=344)	4.9
Small Counties (N=96)	1.4

Table 2.6

AIDS REPORTS BY COUNTY TYPE BY YEAR
(% of Total Diagnoses as of 12/31/86)

	1981	1982	1983	1984	1985	1986
Los Angeles	0.9	2.9	10.1	17.6	32.9	35.5
San Francisco	1.1	3.7	10.4	20.2	28.1	36.5
Other Large Counties	0.7	1.8	7.2	14.6	32.1	43.6
Medium Counties	1.2	3.2	6.2	18.9	32.4	38.1
Small Counties	--	2.2	5.4	19.4	34.4	38.7

The number of AIDS diagnoses and deaths for each year were assessed in relation to county size, as Tables 2.6 and 2.7 show. These tables show the proportion of all cases reported in each county type for each year. For example, 35.5% of Los Angeles County's cases were reported in 1986. AIDS cases for the years 1981 or earlier were reported by all but the small counties in the state. With the exception of San Francisco, which exhibits a steady increase in case reports over time, the other county groupings show nearly a doubling of their caseloads between 1984 and 1985. Interestingly, other large counties (e.g., those with populations greater than 500,000) continued to exhibit a sizable increase in new cases between 1985 and 1986. As the number of cases rises over time there is, not

surprisingly, an increase in the proportion of deaths reported each year regardless of the county type, as Table 2.7 presents. Even with this assumption, however, it appears that other large counties experienced a substantial increase in the number of deaths reported between 1985 and 1986, particularly in comparison to the trends found for Los Angeles and San Francisco.

Table 2.7

AIDS DEATHS BY COUNTY TYPE BY YEAR
(% of Total Deaths as of 12/31/86)

	1981	1982	1983	1984	1985	1986
Los Angeles	0.6	1.8	8.8	18.5	34.0	36.2
San Francisco	0.7	1.9	7.4	18.1	32.1	39.8
Other Large Counties	0.3	1.8	3.9	15.5	30.9	47.6
Medium Counties	0.6	1.2	5.8	16.4	32.2	43.9
Small Counties	--	--	6.0	22.0	32.0	40.0

A cumulative death rate was computed for each county grouping on the basis of the number of reported deaths in a given year as a percentage of all possible live cases during that year. These rates are presented in Table 2.8. It is interesting to note that the cumulative death rates found for the other large counties show somewhat greater variation over time than do the trends for Los Angeles and San Francisco. Additionally, the death rates for the small counties decline from exceedingly high proportions in 1983 and 1984 to rates that are comparable to those found in the other county types.

Table 2.8

CUMULATIVE AIDS DEATH RATES BY COUNTY TYPE BY YEAR

	1981 (%)	1982 (%)	1983 (%)	1984 (%)	1985 (%)	1986 (%)
Los Angeles	36	27	35	36	35	36
San Francisco	34	24	30	34	37	33
Other Large Counties	20	34	20	32	30	28
Medium Counties	25	14	30	32	33	31
Small Counties	--	--	43	50	37	31

Lastly, selected demographic characteristics were assessed in relation to the county types and year of diagnosis, as is seen in Tables 2.9, 2.10, 2.11. As Table 2.9 shows, only medium-sized counties appear to have encountered AIDS cases involving women prior to 1983. Moreover, although the absolute numbers remain small, women with AIDS appear to represent a somewhat greater proportion of the total caseloads of counties outside of San Francisco.

Table 2.9

AIDS DIAGNOSES: GENDER BY COUNTY TYPE BY YEAR

	1981 (%)	1982 (%)	1983 (%)	1984 (%)	1985 (%)	1986 (%)
LOS ANGELES						
Male	100.0	100.0	98.8	98.2	97.4	97.7
Female	--	--	1.2	1.8	2.6	2.3
SAN FRANCISCO						
Male	100.0	100.0	99.6	99.4	99.0	98.9
Female	--	--	0.4	0.6	1.0	1.1
OTHER LARGE COUNTIES						
Male	100.0	100.0	98.1	98.1	97.2	97.3
Female	--	--	1.9	1.9	2.8	2.7
MEDIUM-SIZED COUNTIES						
Male	75.0	81.8	100	96.9	98.2	97.7
Female	25.0	18.2	--	3.1	1.8	2.3
SMALL COUNTIES						
Male	--	100	100	94.4	100	97.2
Female	--	--	--	5.6	--	2.8

With respect to racial/ethnic differences, Los Angeles appears to have the highest rate of reported AIDS cases involving Blacks or Latinos, with almost 30 percent of the county's reported cases coming from these groups, as Table 2.10 illustrates. Moreover, while less than the rates observed for Los Angeles, other large counties show a consistently higher proportion of minorities with AIDS than does San Francisco. Among medium-sized and small counties, the table suggests that as the disease moves from the white to minority populations, Latinos are reported as having AIDS at least one year earlier than Blacks.

Table 2.10

AIDS DIAGNOSES: RACE/ETHNICITY BY COUNTY TYPE BY YEAR

	1981 (%)	1982 (%)	1983 (%)	1984 (%)	1985 (%)	1986 (%)
LOS ANGELES						
White	68.2	73.6	72.1	75.0	70.0	69.9
Black	18.2	16.7	15.0	13.4	13.0	14.2
Latino	13.6	9.7	12.4	11.1	15.7	14.4
Other	--	--	0.4	0.5	1.4	1.4
SAN FRANCISCO						
White	93.1	92.3	90.0	88.6	86.3	84.9
Black	3.4	4.4	5.7	4.5	5.8	6.3
Latino	3.4	3.3	3.8	6.3	6.3	6.9
Other	--	--	0.4	0.6	1.7	1.9
OTHER LARGE COUNTIES						
White	40.0	85.2	80.2	84.7	79.1	80.9
Black	20.0	11.1	8.9	6.7	7.9	8.8
Latino	40.0	--	10.9	7.7	11.1	8.9
Other	--	3.7	--	1.0	1.9	1.4
MEDIUM-SIZED COUNTIES						
White	100.0	90.9	95.2	82.8	87.3	90.7
Black	--	--	--	3.1	5.5	5.4
Latino	--	9.1	4.8	14.1	6.4	3.1
Other	--	--	--	--	0.9	0.8
SMALL COUNTIES						
White	--	100.0	80.0	88.9	84.4	86.1
Black	--	--	--	5.6	9.4	8.3
Latino	--	--	20.0	5.6	6.3	5.6
Other	--	--	--	--	--	--

The distribution of risk factors by county type and year are presented in Table 2.11. Medium-sized counties exhibit a slightly greater proportion of cases involving intravenous drug use only than do the other county groupings. San Francisco, medium-sized and small counties, however, show slightly higher rates of cases involving both intravenous drug use and homosexual contact than do either Los Angeles or the other large counties in the state.

Table 2.11

AIDS DIAGNOSES: RISK FACTORS BY COUNTY TYPE BY YEAR

	1981 (%)	1982 (%)	1983 (%)	1984 (%)	1985 (%)	1986 (%)
LOS ANGELES						
Homosexual Contact, No IVDU	61.5	66.7	63.1	53.1	54.9	53.6
Homosexual Contact, IVDU Unknown	15.4	15.9	19.1	26.6	29.3	31.5
Homosexual Contact & IVDU	7.7	13.0	12.9	14.0	7.1	6.0
IVDU, No Homosexual Contact	7.7	4.3	1.2	1.4	2.5	2.3
Other	7.7	--	3.7	4.9	6.2	6.6
SAN FRANCISCO						
Homosexual Contact, No IVDU	100.0	60.0	65.5	73.2	72.8	79.1
Homosexual Contact, IVDU Unknown	--	31.1	18.0	7.9	10.9	4.3
Homosexual Contact & IVDU	--	8.9	15.3	17.8	13.0	12.8
IVDU, No Homosexual Contact	--	--	0.8	0.4	0.8	1.8
Other	--	--	0.4	0.8	2.4	1.9
OTHER LARGE COUNTIES						
Homosexual Contact, No IVDU	75.0	61.5	68.0	65.7	76.9	70.5
Homosexual Contact, IVDU Unknown	--	15.4	7.2	12.6	4.6	8.4
Homosexual Contact & IVDU	--	11.5	13.4	11.6	7.9	9.5
IVDU, No Homosexual Contact	12.5	3.8	1.0	3.5	3.3	2.5
Other	12.5	7.7	10.3	6.6	7.4	9.0
MEDIUM-SIZED COUNTIES						
Homosexual Contact, No IVDU	75.0	50.0	61.9	56.5	60.7	63.5
Homosexual Contact, IVDU Unknown	--	40.0	4.8	19.4	6.5	9.5
Homosexual Contact & IVDU	--	--	23.8	14.5	12.1	13.5
IVDU, No Homosexual Contact	--	--	4.8	6.5	7.5	6.3
Other	25.0	10.0	4.8	3.2	13.1	7.1
SMALL COUNTIES						
Homosexual Contact, No IVDU	--	50.0	60.0	52.9	59.4	60.0
Homosexual Contact, IVDU Unknown	--	50.0	20.0	--	9.4	5.7
Homosexual Contact & IVDU	--	--	--	29.4	15.6	14.3
IVDU, No Homosexual Contact	--	--	--	5.9	6.3	2.9
Other	--	--	20.0	11.8	9.4	17.1

The data described here have several important implications for AIDS education strategies in California. The first concerns risk factors. Based on the morbidity data reviewed here, men who have sex with men continue to represent a group at very high risk of contracting AIDS. Reaching this group with AIDS prevention messages should continue to be a priority of the Office of AIDS' education program. Intravenous drug use is clearly a co-factor in this group. Gay or bisexual men who use needles to inject drugs are probably the most likely subpopulation in the state to develop the disease, assuming that they do not practice specific risk reduction behaviors. IV drug users, even those who do not engage in risky sex practices (the unprotected exchange of bodily fluids), are also at high risk of infection. IV drug users must be educated about the disease and how to avoid spreading the virus through shared needles as well as through sexual behaviors. This group must also continue to be a priority for the Office of AIDS.

The second set of education and prevention implications are based on demographic factors. Ethnic minority populations represent a significant portion of those diagnosed with AIDS. Statewide, just over 20% of the cases reported in 1986 were minorities. In that same year, three out of every ten cases diagnosed in Los Angeles County were Latino, Black or Asian. Although the minority share of AIDS cases has remained relatively stable since 1985, questions have been raised about the likelihood of under-reporting of minority AIDS cases. The need for education and prevention activities which deal sensitively with differences in language, culture and social organization is critical. Programs directed at minority communities around the state should continue to be supported and encouraged. Some of the current I&E contractors have developed special efforts to reach minority group members engaging in risky behavior. This emphasis must be continued. Furthermore, special educational efforts are needed for women, especially those whose sexual partners are likely to be in the high-risk categories involving bisexuality or IV drug use.

PUBLIC OPINION ABOUT AIDS IN CALIFORNIA

When the first California Opinion Index relating to the AIDS epidemic was conducted by the Field Institute in December 1985, almost 2000 people had died of AIDS in the state and the so-called "LaRouche Initiative" had just been defeated. Los Angeles, West Hollywood, San Francisco, and Hayward had just become the first communities in the country to forbid discrimination against people with AIDS; and a recent state law had prohibited the use of antibody testing for insurance or employment screening. The Field Institute's randomized, population-based, phone survey of 1000 people across California was inspired not only by these events, but by the questions of backlash against gay people in the face of AIDS hysteria. Therefore, this survey, in addition to gathering data on public understanding and attitudes regarding AIDS, was a follow-up to previous measures of attitudes toward homosexuals.

In May 1987 the Field Institute focused a second survey on public views about AIDS throughout California. By that time major public education campaigns had been well underway, 4000 persons had died of AIDS, and considerable controversy had again been raised by public officials about the need for mandatory testing. This poll used the same sampling methods as that conducted eighteen months earlier. However, the items included were not identical. Political concerns had shifted, and these changes were reflected in the poll design. While some movement in public views can be tracked over this period, in many instances new issues are raised. Nevertheless, these two surveys provide a background of the general level of AIDS awareness and attitudes in the midst of massive educational efforts and media attention to the disease.

According to Field, AIDS was, in 1985, already the number one medical problem Californians believed they faced. Six out of ten (61%) respondents placed it before cancer (22%) and heart disease (7%) which are, in fact, the state's two major causes of death. California residents (especially those between the ages of eighteen and twenty-nine, Black and Latino, or single) were much more concerned about AIDS than were members of the American public polled in September 1985 by CBS News and The New York Times.

Those surveyed in May 1987 felt even more strongly about the problem: eight out of ten (80%) called AIDS the most serious disease facing California today. Concern about cancer had dropped to 10% and only 2% volunteered heart disease as the state's primary medical problem. A comparison of ranking of AIDS relative to other medical problems is shown in Table 2.12.

Table 2.12

MOST SERIOUS DISEASES OR MEDICAL PROBLEMS FACING CALIFORNIA TODAY

	FIRST MENTION		TOTAL MENTIONS	
MEDICAL PROBLEM	1987 (%)	1985 (%)	1987 (%)	1985 (%)
AIDS	80	61	91	85
Cancer	10	22	53	68
Heart Disease	2	7	26	39
Drug Addiction/Alcoholism	2	3	16	8

Source: California Opinion Index, The Field Institute, San Francisco, May 1987.

During the period between the surveys the general perception of personal risk of contracting AIDS remained substantially unchanged, with 15% at each time "very worried" that they or someone close to them might get AIDS. Table 2.13 shows that there was a modest increase between 1985 and 1987 in the proportion of survey respondents who report themselves "not all worried" about getting AIDS.

Table 2.13

PERCEIVED RISK OF GETTING AIDS

HOW WORRIED ARE YOU THAT YOU OR SOMEONE CLOSE TO YOU WILL GET AIDS?	1985 (%)	1987 (%)
Very worried	15	15
Somewhat worried	27	24
Not too worried	31	27
Not at all worried	27	34

Source: California Opinion Index, The Field Institute, San Francisco, May 1987.

It appears that many people in 1985 relied on rumor for information on how the virus is spread. At that time, 37% believed exposure to the saliva of infected people transmitted AIDS, and 26% identified kissing a person with AIDS as risky behavior. Twenty percent thought giving blood, 14% sharing a drinking glass with a person with AIDS, and 11% using unclean public toilets were sources of infection. On the other hand, upwards of 90% of respondents were aware of the three medically recognized transmission routes: blood transfusion from a donor with AIDS, sex with a person with AIDS, and sharing needles used by a person with AIDS. Clearly, information on modes of transmission had already reached the general public eighteen months before; however, many uncertainties remained.

By 1987, 81% of the public knew AIDS was not contracted through "casual contact." Level of education correlated with understanding. Of those with a high school diploma or less, 74% disagreed that AIDS is casually transmitted. Unfortunately the item on transmission changed from the previous survey and no longer identified beliefs regarding specific routes of transmission. Only the issue of concern for the blood supply was probed, and responses demonstrated substantial doubt, with 75% expressing concern about the safety of a blood transfusion and 26% indicating they were still concerned about giving blood.

The original poll (1985) was interested in discovering if the public could identify those groups most likely to be affected by AIDS, and determined that their knowledge did closely match the "facts" about transmission categories with 78% indicating that gay or bisexual men were most likely to contract AIDS. Only two mentions were made in the open-ended question of "sexually-active promiscuous people" as a group most likely to be affected. Since that time, however, the notion of high-risk groups has been replaced by a sense that AIDS is a potential threat to anyone who engages in high-risk behaviors. Therefore, the issue was rephrased in 1987 to incorporate two measures to assess the belief in heterosexual risk. Sixty-seven percent of California residents surveyed disagreed with the statement: "People who are not homosexuals or intravenous drug users are essentially not at risk to get AIDS." Almost all (92%) agreed with a second statement in the survey that heterosexuals who have multiple partners are more likely to be infected than those with one sexual partner.

Attitudes about the basic rights of people with AIDS seem to have become more tolerant over time. In 1985, 55% of the Californians surveyed felt that children with

AIDS should be allowed to remain in school, 60% disagreed that an employer had a right to fire a worker simply because he had AIDS, and 78% did not believe that a landlord had a right to evict a renter with AIDS. Eighteen months later the prevalence of these views grew had grown to 79%, 72% and 81% respectively. Interestingly, the latter item on the rights of landlords also had a 2 percent increase among those who felt landlords should be able to evict a person with AIDS.

A statement on whether restaurant workers should be required to be tested for antibodies produced agreement by 67% of respondents in 1985. The 1987 version of an item on testing found that about four in ten (39%) respondents believed the public health implications of AIDS was so great that testing should be mandatory for all persons. Furthermore, 22% of the 1987 respondents would quarantine all persons with AIDS.

Finally, approximately one-fourth (27%) of the Californians surveyed in 1987 have taken some unspecified precaution to reduce their risk of contracting AIDS. Slightly more men than women (29% vs. 24%) reported a behavior change and considerably more (41%) young adults (age 18-29) indicated such change. The survey did not identify the precautions taken by the respondents so the appropriateness of those actions cannot be assessed.

SUMMARY

Analysis of the AIDS Reporting System (ARS), the diagnostic-based surveillance system used by the California Department of Health Services, revealed 7,074 AIDS cases and 3,586 deaths (or 50.7% of the state's total cases) for the period 1981 through December 31, 1986. The vast majority of these cases have involved males (98.3%) who have engaged in same-sex sexual contact (81.7% homosexuals and 10.6% bisexuals). Almost a fifth of those diagnosed have been members of minority groups. Thirteen percent have acknowledge using a needle for self-injection.

Several important trends emerged from our analysis of ARS data. Although the absolute numbers of remain small, women with AIDS appear to represent a somewhat greater proportion of the total AIDS caseloads of counties other than San Francisco. With respect to racial/ethnic differences, among medium-sized (100,000-500,000 population) and small counties (less than 100,000 population) it appears that as the disease moves from the white to minority populations, Latinos are reported as having AIDS at least one year

earlier than Blacks. And in Los Angeles County, almost 30 percent of the reported cases involve Blacks or Latinos. Finally, men who have sex with men continue to represent a group at very high risk. Intravenous drug use is clearly a co-factor in this group, as well as a risk behavior in its own right.

As these statistics suggest, the AIDS epidemic is a reality which has confronted the people of California. In 1985, AIDS was already the number one medical problem Californian's believed they faced, according to the Field Institute's California Opinion Index. Those surveyed in 1987 by the Field Institute felt even more strongly about the issue: 80 percent called AIDS the most serious disease facing California today. It appears that many people in 1985 relied on rumor for information on how the virus which causes AIDS is spread. By 1987, however, 81% of those polled knew that AIDS was not contracted through "casual contact." Along with this change in transmission and risk behavior knowledge, attitudes about the basic rights of people with AIDS also seems to have become more tolerant over time. Approximately a fourth (27%) of those polled in 1987 reported having taken some unspecified precaution to reduce their risk of contracting AIDS.

Chapter Three

THE STATE'S EDUCATION AND PREVENTION RESPONSE TO AIDS

The previous chapter presented a brief overview of AIDS in California--prevalence assessed by county size, the demographic characteristics of the AIDS cases reported through the end of 1986, and the public knowledge about and perceptions of this disease. In this chapter, the Office of AIDS educational response to these conditions is discussed. First we present an overview of the educational strategies and target groups of the I&E contractors based on an analysis of their contracts. This is followed by review of cost and activity information collected directly from the contractors for two quarters during FY 1986-87.

OVERVIEW

In FY 1986-87, the Office of AIDS contracted with 29 public and nonprofit organizations around California to provide AIDS education and information. While some of these contracts had a statewide focus, most were directed toward local education and prevention campaigns. Total funding available for these efforts in FY 1986-87 was $4.7 million. These contracts define the scope and scale of AIDS education in the state. The following analysis is based on the contracts of 24 of the 29 I&E providers.

Target Groups

The I&E contractors identified three major audiences: gay or bisexual men, also referred to by some as "men who have sex with men"; providers from the health and social services agencies; and the general, non-high risk public. Almost all contractors directed program components toward these groups. Table 3.1 presents the total number of individuals targeted for AIDS education in FY 1986-87. (The table includes only those individuals who were to receive education directly; those reached by media campaigns are not represented here.)

Table 3.1

INDIVIDUALS TARGETED FOR AIDS EDUCATION
FY 1986-87
(N=24 Contractors)

TARGET GROUP		TOTAL
Gay or Bisexual Men		140,424
Service Providers:		
Health Care Workers	20,266	
Social Service Workers	5,137	
Public Safety Workers	660	
Teachers	125	
Other	228	
Subtotal, Service Providers		26,416
General Public:		
High School Students	3,300	
College Students	3,890	
Public at Large	1,842,869	
Subtotal, General Public		1,850,059
IV Drug Users		1,750
Hemophiliacs		935
Media Representatives		150
Inmates		1,500
GRAND TOTAL		2,021,234

Of the twenty-four contractors, seven specifically referred to minority target groups, either Blacks, Latinos, or both. Six agencies described activities geared directly or indirectly at intravenous drug users (IVDUs) or the staff of drug programs; one of these programs aimed at IVDUs not in treatment, who comprise the vast majority of drug users. Other specific audience groups mentioned were youth (five programs), employees in the business workplace (three programs), and the hemophilia community (including gay men, youth and families) (three programs). Education for persons with AIDS or other HIV infections; women; male, female or adolescent prostitutes; or prisoners were each mentioned twice. Law enforcement, members of the armed services, janitorial staff, the disabled, and partners of IVDUs were each the subject of one educational effort conducted by an I&E contractor.

Within the targeted gay/bisexual communities were sub-groups receiving special attention. These groups include gay college students, men of color, suburban and "closeted" men, gay media, and patrons of exclusively sexual (see the analysis in Chapter Five for a definition) meeting places. One program identified activities directed toward gay IVDUs.

Many programs identified what might be called ancillary targets: AIDS program staff, volunteers, or others who are trained by the contractors. These individuals then provide education to others or form the core faculty of another education or training effort. This group is distinct from service providers.

Presentations

Regardless of target audience, didactic presentations were the overwhelming majority of activities conducted. Every program, even those who target hard-to-reach groups and perform outreach to bars, adult stores, or other non-traditional educational sites, engaged in educational presentations as the main intervention mode.

Professional in-service trainings, with or without CEU credits, or community forums were also common forms of education dissemination for AIDS prevention. Most programs relied completely or in part upon a volunteer Speakers Bureau which must first be trained on AIDS information. Some contractor agencies made staff available for training of trainers for other agencies, fewer for technical assistance or consultation to providers, and only one or two for outreach or condom distribution. This suggests that a major sub-

activity of state-funded AIDS education involved increasing the number of AIDS experts/professionals in California. Presentations were either by request or on an "as needed" basis to the audiences targeted. Some included audiovisual or other instructional aids, but there was not general consistency in format.

Creation, Adaptation and Dissemination of Educational Materials

In addition to presentations, some form of literature distribution was another universal educational activity, regardless of audience targeted. Most contractors relied upon materials developed by the large AIDS education programs in the state. A few others developed materials to suit their local needs and used a focus group/needs assessment activity to develop items for their own use. Regardless of source, all programs relied upon written materials to convey the AIDS message to some if not all target audiences. Sometimes these materials were used in conjunction with presentations, but more often they were the primary intervention for large groups of people. Several I&E agencies had plans for distributing up to 20,000 brochures, with the San Francisco Foundation alone responsible for disseminating almost 100,000 pieces of literature. Many supplementary written materials, however, were the responsibility of individual contractors, such as informational packets translated to Spanish, a resource manual or newsletter, display easels, pocket cards, flyers, or posters.

Media-Directed Education

The single activity reaching the largest audience was the mass media campaign. One agency estimated that its media efforts would reach at least 7.5 million individuals in a densely populated region of California. Even relatively small programs indicated a sizable audience of well over a million people via mass media. Therefore, newspaper, television and radio were widely used educational tools among AIDS I&E contractors. A few programs identified target media, such as gay or minority press or the professional journals of provider groups. However, most media activities were designed with the general public in mind.

Telephone Information and Education

An activity more popular with larger contractors, but also offered by a few medium and one small-sized contractor, was a hotline or some organized information and referral telephone service. This activity accounted for the third largest audience after mass media efforts and the dissemination of written materials. A source of consultation as well as basic AIDS education, it was available to all target groups in the service area, usually during normal business hours.

Intensive Behavioral Education

The final category of education and prevention activities conducted by the contractors were more personal and more interactive than the previous strategies. These activities were supportive in nature or focused on a single, special theme. These workshops, in-home discussion, or "rap," sessions or one-to-one counseling sessions were generally aimed at high-risk individuals through audiovisuals and risk-reduction instruction. However, they were less often mentioned than other activities, perhaps because they are extremely labor-intensive and require not only AIDS information and communication skills, but abilities in facilitation or group/individual therapy.

Outcomes and Effectiveness Measures

Each of the 24 contracts contains some indicators of how the providers would assess the outcomes of their activities. The most noteworthy aspect of the outcomes described was the broad variation in their measurement. Not only was there no consistent standard of achievement measurement among programs, but broad differences in expectations existed within the same project for different target groups. Nor were there clear patterns to performance outcomes for particular activities statewide. The impact of a hotline or presentation for instance, may be a 75% increase in knowledge in one program and 30% in another. Furthermore, some contractors identified no measurable outcomes for assessing such activities.

On the other hand, I&E contract goals also varied, from the reduction of anxiety or the reduction of fear to more concrete behavioral change. These goals, in turn, may or may not be described as measurable. Many programs relied upon self-reports by target groups or some mode of oral feedback as the determinate of success of an activity. Most

activities, however, had some kind of pre/post test with some expectation of change in knowledge in response to educational intervention. Generally, providers are given the highest standard (expectation of the greatest level of change), those being trained for Speakers Bureau or as trainers are second, with gay/bisexual men and general public next and finally IVDUs and adolescents with the lowest anticipated performance increase.

In summary, the contractors had little common direction in determining the appropriate outcomes or measurement of AIDS education and prevention activity, or the need for different levels of competence or knowledge change for each target group.

PROGRAM EXPENDITURES

A limited amount of information is available from this study on the costs incurred by the state's I&E contractors in the provision of AIDS education and prevention services. (For purposes of this discussion, costs are assumed to be the same as expenditures. The data provided relate only to expenditures.) The URSA Institute developed a cost reporting form which we distributed to the contractors with instructions to submit cost information for the second and third quarters of FY 1986-87. The form was developed and tested during the first quarter of the fiscal year while the fourth quarter was reserved for analysis of the data. Due to high staff turnover in many of the agencies, the staff trained in the use of the instrument in the early stages of the project often were not the individuals actually responsible for completing it. UI devoted considerable effort to answering contractor questions about the form and in encouraging them to submit the completed instruments. Ultimately, 24 of the 28 contractors provided some information about their costs.

Our intention in using this form was to relate program costs to program activities as a way of assessing the costs of conducting particular educational interventions. Unfortunately, this was not possible. While the contractors provided some information on their costs by budget line item, there was no way to identify what proportion of those line item expenditures was associated with such activities as conducting workshops, developing materials, etc. Therefore, the analysis presented in this section is restricted to a description of contractor expenditures within broad budget categories for the middle two quarters of FY 1986-87.

Table 3.2 displays cost data in three broad categories: personnel (including salaries and fringe), operating costs and total costs. The contractors also reported whether their funding came for the Office of AIDS or from other sources. The figures presented in the table are medians for each of the categories. In addition, the table shows the number of agencies who reported expenditures in each category from each source. There was great variation within these categories, with the largest I&E contractors reporting expenditures in amounts up to ten times greater than the smallest contractors. This precluded the use of means to summarize this data, since the mean was not a valid measure of average costs across all contractors. The median was chosen as a more informative statistic. Since the data shown in the table is the median for each category, the categories do not total by column or row. For example, adding the total personnel cost to the total operating costs does not produce the grand total shown in table. The grand total is the median for all grand totals reported rather than the arithmetic sum of personnel and operating costs.

Table 3.2

MEDIAN COSTS BY BUDGET CATEGORIES--TWO QUARTERS

	STATE		OTHER		TOTAL	
COST CATEGORY	COST	N	COST	N	COST	N
Total Personnel	$26,496	23	$19,046	11	$43,174	23
Total Operating	24,778	24	17,477	14	30,446	14
GRAND TOTAL	46,149	24	31,274	14	77,298	24

The table reveals that the median total expenditures for the state's I&E contractors reporting were $77,298 for two quarters or an annualized total of $154,596. Total expenditures ranged from $13,517 to $1,554,634 for the two quarter period ($27,034 to $3,109,268 annually). The majority of those expenditures was for personnel, at an annualized median level of $86,348, representing approximately 60% of all expenditures. The median expenditure for operating costs was $30,446 ($60,892 annually). Funding from the Office of AIDS comprised the majority of the funds expended by the contractors. The median two-quarter expenditure of state monies was $46,149, with a range of $13, 517 to $379,867. Almost 60% of all funds reported spent by the contractors came from the Office of AIDS. The majority of the remainder came from county governments. However, only 14 of 24 (58%) contractors reported receiving funds from a source other than the Office of AIDS.

Table 3.3 provides more detailed information on operating expenses. There are enormous variations within each category, as was the case with the previous table. Under the rent category, for example, the total median expenditure for the two quarter period was $7,434. The range for that category was from $40,114 to $510. Other categories where the range of expenditures varies greatly are advertising ($1071 to $175,379), telephone ($50 to $40,176) and outside printing ($602 to $72,564). Rent was the most noteworthy administrative expense. All the other large operating expenses were related to program activities (printing, advertising and consultants).

Table 3.3

MEDIAN COSTS BY OPERATING EXPENSE ITEMS--TWO QUARTERS

	STATE		OTHER		TOTAL	
COST CATEGORY	COST	N	COST	N	COST	N
Rent	$3,952	8	$ 4,381	5	$7,434	9
Accounting	1,643	3	14,761	2	6,228	3
Telephone	871	13	14,819	4	985	14
Communications	1,345	9	0	0	1,345	9
Postage	290	13	2,646	4	295	14
Supplies	482	17	1,247	6	482	19
In-House Copying	480	9	3,527	2	519	10
Outside Printing	2,922	6	20,385	3	4,738	8
Print Other	307	1	0	0	307	8
Travel	755	20	5,165	4	812	21
Subscriptions	242	1	582	2	468	3
Books	1,596	7	2,184	3	1,762	9
Other Educational Material	827	6	1068	1	915	8
Advertising	3,947	6	93,955	2	5,341	7
Equipment	470	5	4,500	3	1,945	7
Insurance	0	0	3,564	2	3,564	2
Consultants	3,030	8	10,014	7	9,878	11
Staff Development	552	3	2,686	3	841	5
Other Expense	558	8	2,993	4	958	11
Indirect Expense	3,162	13	10,973	7	5,384	14

Table 3.4 presents the final set of cost data. It shows the components of personnel expenditures--salaries and fringe benefits. As in the other categories, the use of the median to summarize expenditures conceals a wide range. Although the two-quarter median salary expense was $36,505, it represents a distribution ranging from $8,537 to $220,921. The amount of funding from the state and other sources was roughly comparable over this period.

Table 3.4

MEDIAN COSTS BY PERSONNEL ITEMS--TWO QUARTERS

	STATE		OTHER		TOTAL	
COST CATEGORY	COST	N	COST	N	COST	N
Salary	$22,454	23	$28,611	10	$36,505	23
Fringe	4,188	22	4,858	9	6,717	22

As the data in Tables 3.2-3.4 indicate, there is still much work to do in understanding the cost of providing AIDS education in California. Given the wide variation in cost collection and reporting methods used by the contractors, we are not certain that the numbers presented in the tables accurately reflect a true picture. Although the contractors tried to fit their expenditures into the standard format developed by UI, we believe that there is overlap among categories and under-reporting of true costs. A more refined cost reporting system is needed, one which does not place the entire reporting burden on the contractor agencies. In addition, a method for relating program costs to program activities is needed for conducting cost-benefit analysis.

SUMMARY

Against this backdrop of epidemiological and public opinion data, the state's AIDS information and education response has developed. Under the leadership of the Office of AIDS, California Department of Health Services, 29 public and nonprofit organizations across the state were awarded contracts in FY 1986-87 to provide AIDS information and education. Total funding available for these efforts in FY 1986-1987 was $4.8 million. While some of these contracts called for a state-wide focus, most were directed toward local activities.

An analysis of 24 of these 29 contracts shows that the I&E contractors identified three major audiences: gay or bisexual men; providers for health and social service agencies; and the general, non-high-risk public. Seven contractors specifically referred to minority target groups, with Blacks, Latinos, or both. Six agencies described activities geared directly or indirectly at IVDUs or at the staff of drug programs. Regardless of target audience, didactic presentations appear to have been the most commonly used educational method. Through such educational activities contractors projected reaching over two million individuals, of whom 91 percent were members of the general public, 7 percent were gay or bisexual men, 1 percent were health or social service providers, and .08 percent were IVDUs.

Chapter Four

AIDS EDUCATION EFFECTIVENESS

INTRODUCTION

Our assessment of the impact of formal AIDS education involves three dimensions: knowledge, attitudes and behavior. The most important indicator of the effectiveness of health education is the degree to which the individuals educated actually demonstrate changes in behavior. This indicator is particularly relevant to AIDS education where an objective is to prevent the spread of the disease through various risk reduction techniques. The measurement of such behavior modification, however, was outside the scope of this project, given methodological and budgetary limitations. Instead, a method was chosen which measures the intentions of participants to change their behavior based on what they have learned. With the understanding that behavior is determined, in part, by the knowledge and attitudes of the individual, we also tested for changes along those dimensions.

The method used for this purpose was a brief questionnaire which was administered immediately before the formal session to measure knowledge, attitudes and retrospective behavior. Following the session(s), the second half of the instrument was administered to test changes in knowledge, attitudes and intended behavior. Also included on the questionnaire were items dealing with the demographic characteristics of the trainees, their reasons for attending and usual sources of information about AIDS. A separate instrument was developed for each of the four major target groups: general public, gay or bisexual men, health care and social service providers, and IV drug users. Copies of each of these instruments can be found in Appendix A of this report.

The questionnaires were constructed to address a series of broad AIDS-related topics: the definition of AIDS and ARC, transmission, risk reduction activities related to sex, risk reduction activities related to drug use, diagnosis/treatment of AIDS (including HIV testing), and affected populations. Each questionnaire contained items addressing these issues from cognitive, affective, and, to a more limited extent, behavioral perspectives. The specific wording of items varied according to target population. The questionnaires were printed on papers of different colors to allow contractors to distinguish among the intended target groups.

Prior to developing questionnaire drafts, meetings were held with the participating Northern and Southern Californian I&E contractors to discuss the general evaluation approach and to elicit suggestions about issue areas to be addressed. Once the questionnaires had been drafted, they were circulated to the I&E contractors for review. Their comments were incorporated into a second draft which was then re-circulated to the contractors for additional comments. This review cycle allowed contractors to contribute their ideas on the items. Following this review, the third draft was pre-tested in selected sites around the state. Training participants commented on the clarity and appropriateness of the questions. After this final round of review, the final versions of the questionnaires were prepared.

Not all of the I&E contractors administered the questionnaires. We selected 11 "intensive" sites which had large training programs and sufficient staff to administer and collect the instruments. These sites are listed below:

- AIDS Project of the East Bay, Oakland
- AIDS Project Los Angeles (APLA)
- Shanti Foundation, West Hollywood
- Gay and Lesbian Community Resources Center, Hollywood
- Gay and Lesbian Community Services Center, Garden Grove
- Sacramento AIDS Foundation
- San Diego AIDS Project
- San Francisco AIDS Foundation
- Sonoma County Health Department
- Aid for AIDS CORE Program, West Hollywood
- City of Long Beach

January 1987 was selected as the testing period. We asked each of the "intensive" site contractors to estimate the number of individuals to be trained in each of the four target populations. No efforts were made to draw a sample from these groups. The contractors in each of the sites informed us that the groups they intended to train in January were typical of the populations served. The January training participants became the study population for this phase of the project. We then sent the contractors the

appropriate number of questionnaires, instructions for administration and mailing labels for return to the URSA Institute. A total of 1,048 completed and usable forms were returned and entered for data analysis.

All returned forms were edited and entered into SPSS-X computer files on the basis of survey "types" (e.g., general public, gay or bisexual men, providers, IVDUs). Frequency counts and bivariate analyses were then undertaken to determine the distributions of items as well as the relationships among them. Simple additive scales were constructed for pre- and post-test questions within each dimension of interest (i.e, knowledge, attitudes, and intended behaviors) by summing the number of "correct" responses. Measures of central tendencies and dispersion were then obtained for each additive scale. An indicator of score change was computed by comparing pre- to post-test scores for each dimension. Since it is difficult to interpret the meaning of differences in terms of absolute point values, the change measures were constructed to indicate score increases, decreases, or stability. Stable scores, that is those which did not change from pre- to post-testing, were differentiated as to whether they reflected perfect scores at both time points or simple score total which did not change.

GENERAL PUBLIC

Characteristics

A total of 429 forms were completed by members of the general public who attended AIDS information and education sessions conducted by the participating I&E contractors during the survey period. Slightly over half (52%) of these general public audiences were female, and almost three-quarters (74%) identified themselves as white. Ages ranged from 13 to 82 years, with a mean of 31.5 and a mode of 18 years. Overall, almost a third (32%) had attended/graduated from college and an additional 14 percent reported graduate education. Table 4.1 displays the demographic characteristics of participants.

Table 4.1

DEMOGRAPHIC CHARACTERISTICS OF GENERAL PUBLIC ATTENDEES

	PERCENT OF TOTAL
GENDER	
Male	48
Female	52
AGE	
Under 18 Years	23
18 to 29 Years	27
30 to 39 Years	21
40 to 49 Years	18
50 Years or Older	12
RACE/ETHNICITY	
White	74
Black	8
Latino	8
Asian	8
Other	3
EDUCATION	
9th Grade or Less	10
Some High School	25
High School Graduate	18
College	32
Post-College	14

Since almost a quarter of those completing the general public evaluation instruments were under 18 years of age, a much higher proportion than was found for any of the other three audience types, an analysis of demographic characteristics by age was conducted. A review of the forms indicated that seven of these 22 general public presentations were delivered to adolescents in schools, thus accounting for the high proportion of adolescent respondents. As Table 4.2 presents, those under 18 differed most from those 18 or older in terms race/ethnicity. While fully 84 percent of the adolescent respondents identified themselves as white, this was reported by less than three-quarters (71%) of the adults. Adult attendees, on the other hand, were more likely to identify themselves as being members of racial/ethnic minority groups, particularly Black (11% adult vs. 2% adolescent).

Table 4.2

DEMOGRAPHICS BY AGE GROUPS
GENERAL PUBLIC

	UNDER 18 (%)	18 OR OLDER (%)
GENDER		
Male	47	49
Female	53	51
RACE/ETHNICITY		
White	84	71
Black	2	11
Latino	6	8
Asian	8	8
Other	1	3
EDUCATION		
9th Grade or Less	39	2
Some High School	57	15
High School Graduate	3	23
College	--	42
Post-College	--	18

In addition to demographic information, attendees were asked to indicate where they obtain most of their information about AIDS. The four sources of AIDS-related information most frequently reported by these members of the general public were television (52%), newspapers (49%), the I&E contractor (40%), and popular magazines (26%). Friends were cited by less than a fifth (15%) of the attendees. Only six percent reported having received AIDS-related information at previous workshops. Medical care

providers were infrequently identified as being AIDS informational resources, with six percent reporting obtaining information from a health center and five percent indicating that a private doctor was such a source.

Adolescent and adult audience members differed in terms of how they acquired information about AIDS. For those under 18 years, the I&E contractor providing the training was the most commonly cited informational source, reported by almost two-thirds (63%) of the adolescents. In contrast, about a third (34%) of the adult participants identified the I&E contractor. Adolescents also more frequently cited popular magazines than did adults (28% vs. 25%). Interestingly, they less frequently cited television or newspapers than did the adults (50% vs. 53% for television and 32% vs. 54% for newspapers).

Overall, 40 percent of those who attended these presentations indicated that they were required to participate. More than a quarter (28%) identified curiosity as their reason for attending. Fourteen percent reported that they attended in order to be able to "do their work better." In terms of more personal motivations, 14 percent of these members of the general public reported being worried about getting AIDS and three percent indicated that a friend or lover had AIDS.

As with informational sources, adolescent and adult participants differed regarding their reasons for attendance. Teens most frequently indicated that they were required to attend (63%), a not unexpected rationale given that the presentations appear to have been associated with classroom activities. Adults, in contrast, more often reported attending out of curiosity (28%) or out of a desire to "do their work better" (17%). Importantly, however, adolescents and adults did not vary as much as one might expect in terms of more personal motivations for participation. Thus, four percent of the adults and two percent of the adolescents reported having a friend or lover with AIDS, and 17 percent of the adults and 10 percent of the teens cited being worried about their own risks for AIDS. The fact that even 10 percent of adolescent attendees were willing to make such an anonymous report on a questionnaire completed in a school setting underscores the importance of providing information and education to young people.

Pre-Test Status

Table 4.3 displays the average pre-test scores in relation to various demographic characteristics. As the table illustrates, mean knowledge pre-test scores ranged from 4.29 to 5.00 out of a possible total score of six. Males obtained slightly higher mean knowledge pre-test scores, as did white attendees and those who reported graduate-level education. Mean knowledge scores showed an increase with age categories until the oldest category (50 years or older) at which point a decrease in the mean value is noted.

Table 4.3

MEAN PRE-TEST SCORES BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	KNOWLEDGE	ATTITUDES	INTENDED BEHAVIOR
GENDER			
Male	4.79	2.79	1.31
Female	4.65	2.73	1.31
RACE/ETHNICITY			
White	4.81	2.82	1.35
Minority	4.43	2.55	1.18
AGE			
Under 18 Years	4.46	2.35	0.96
18 to 29 Years	4.57	2.49	1.23
30 to 39 Years	4.95	3.05	1.25
40 to 49 Years	4.94	2.93	2.00
50 Years or Older	4.76	3.04	1.62
EDUCATION			
9th Grade or Less	4.65	2.60	1.13
Some High School	4.29	2.18	0.90
High School Graduate	4.67	2.49	1.35
College	4.92	3.00	1.46
Post-College	5.00	3.47	2.03

Out of a possible total score of five, mean attitude pre-test scores for these general public audiences ranged from 2.18 to 3.47. In contrast to mean knowledge scores, male and female respondents achieved similar average attitude scores. Those between the ages of 30 and 39 years as well as those 50 years or older had higher mean attitude scores than did the other age groups. In fact, adolescent participants under 18 years of age had the lowest mean attitude scores of any of the age groups. White attendees as well as those with at least college educations also exhibited higher mean pre-test attitude scores.

Average behavior pre-test scores ranged from .90 to 2.03 out of a possible total score of four. Mean behavior scores did not differ on the basis of gender. Adolescent respondents had a much lower mean behavior score than did adults, who showed mean score increases until the oldest age category. White respondents again exhibited a somewhat higher mean score than did minority participants. Those with graduate educations achieved higher mean pre-test behavioral scores than did those in the other educational categories.

The distribution of actual pre-test knowledge, attitude and behavior scores according to demographic characteristics are displayed in Tables 4.4 to 4.6. Regardless of demographic indicator, the majority of attendees correctly answered at least four of the pre-test knowledge items, as Table 4.4 shows. One-quarter of the males and almost a quarter (23%) of the white attendees achieved perfect scores. Fully a third of those 30 to 39 years and more than a third of those reporting graduate educations also obtained perfect pre-test knowledge scores.

Table 4.4

PRE-TEST KNOWLEDGE BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	NUMBER OF ITEMS CORRECT						
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)
GENDER							
Male	--	--	1	9	25	39	25
Female	--	--	2	6	32	43	16
RACE/ETHNICITY							
White	--	--	--	6	27	44	23
Minority	--	--	6	10	36	32	16
AGE							
Under 18 Years	--	--	2	10	35	44	8
18 to 29 Years	--	--	2	10	34	37	17
30 to 39 Years	--	--	2	5	21	38	33
40 to 49 Years	--	--	1	4	19	49	26
50 Years or Older	--	2	--	6	29	39	25
EDUCATION							
9th Grade or Less	--	--	2	7	26	53	12
Some High School	--	1	3	14	39	35	9
High School Graduate	--	--	3	7	30	42	18
College	--	--	--	5	25	43	27
Post-College	--	--	2	5	20	37	36

Given the somewhat lower mean attitude scores described in Table 4.3, it is not surprising to find a much greater range in actual pre-test attitude scores, as Table 4.5 displays. Less than a fifth of all attendees appropriately answered all five attitude pre-test questions.

Table 4.5

PRE-TEST ATTITUDES BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	NUMBER OF ITEMS CORRECT					
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
GENDER						
Male	4	9	28	33	19	8
Female	5	7	30	34	17	7
RACE/ETHNICITY						
White	3	9	29	33	20	8
Minority	8	8	30	34	13	7
AGE						
Under 18 Years	5	15	39	25	15	2
18 to 29 Years	7	11	32	32	14	5
30 to 39 Years	2	2	23	45	16	12
40 to 49 Years	4	4	26	33	23	9
50 Years or Older	4	6	22	29	27	12
EDUCATION						
9th Grade or Less	2	14	33	28	19	5
Some High School	8	16	41	21	12	2
High School Graduate	9	5	32	40	11	4
College	2	5	23	41	20	10
Post-College	2	3	12	31	34	19

The largest variation is found with the behavioral scores. Whereas respondents typically correctly answered at least half of the knowledge and attitude items, Table 4.6 shows that much smaller proportions achieved scores of two or more (out of a possible total of four) for the behavioral items. Several factors may have acted to influence these pre-test behavior scores. First, respondents may have experienced difficulties answering behavioral items if they did not perceive the action under consideration as a part of their typical behavioral repertoire. Second, perceived ambiguity in item wording may have led to inaccurate responses. Finally, as has been suggested by other studies, the integration of "appropriate behaviors" may lag behind the acquisition of knowledge and attitude modifications. Thus while people may "know more," they may continue to experience difficulties in putting their new knowledge and beliefs into practice.

Table 4.6

PRE-TEST BEHAVIORS BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	NUMBER OF ITEMS CORRECT				
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)
GENDER					
Male	26	38	18	15	3
Female	26	35	26	11	3
RACE/ETHNICITY					
White	25	34	23	15	3
Minority	27	41	21	8	2
AGE					
Under 18 Years	36	39	18	8	--
18 to 29 Years	31	33	20	16	--
30 to 39 Years	26	41	20	8	5
40 to 49 Years	11	22	31	27	9
50 Years or Older	7	45	31	14	3
EDUCATION					
9th Grade or Less	32	39	16	10	3
Some High School	41	38	15	6	1
High School Graduate	27	31	23	19	--
College	16	40	26	16	1
Post-College	9	27	30	18	15

Educational Methods

Of the 22 educational sessions conducted for the general public, seven were held for adolescents and 15 for adults. Six of these sessions can be characterized as "small groups," involving less than 15 individuals; 11 were "medium-sized groups" of 15 to 29 people; and five were "large groups" consisting of 30 or more participants.

Table 4.7 presents the various educational methods employed in these general public sessions as a percentage of attendees reached, while Table 4.8 shows their distribution across audience age groups. Fully a quarter of these general public audiences received an educational lecture and an additional 19 percent attended a lecture in conjunction with questions and answers. Media, including films or slide presentations, were commonly used as an adjunct to other educational techniques, most often lectures. Less didactic methods, such as group interaction or role playing, were infrequently used with these general public audiences.

Table 4.7

DISTRIBUTION OF EDUCATIONAL METHODS
GENERAL PUBLIC

	PERCENT
Lecture	25
Group Interaction	3
Question and Answer (Q&A)	4
Lecture and Film	5
Lecture and Q&A	19
Lecture and Group	3
Film and Q&A	10
Lecture, Film and Q&A	18
Lecture, Group and Q&A	7
Lecture, Film, Role Play, Group, and Q&A	7

The educational styles used differed substantially by audience ages, as Table 4.8 shows. Fully three-quarters of those who received a lecture and film and two-thirds of those whose sessions included a lecture, film, and questions and answers were adolescents. In contrast, over 90 percent of those who experienced a lecture only were adults. In addition, there appears to have been a tendency to employ the more interactional techniques, when they were used, with adult audiences.

Table 4.8

DISTRIBUTION OF EDUCATIONAL METHODS BY AGE GROUPS
GENERAL PUBLIC

	UNDER 18 (%)	18 OR OLDER (%)
Lecture	9	91
Group Interaction	--	100
Question and Answer (Q&A)	--	100
Lecture and Film	75	25
Lecture and Q&A	20	80
Lecture and Group	--	100
Film and Q&A	--	100
Lecture, Film and Q&A	68	32
Lecture, Group and Q&A	28	72
Lecture, Film, Role Play, Group, and Q&A	--	100

Changes in Knowledge, Attitudes and Intended Behavior

Overall, more than half of the general public attendees showed an increase in their knowledge change scores, as Table 4.9 displays. Only 11 percent achieved perfect pre- and post-test scores on these basic AIDS-related knowledge items. Fully 70 percent showed an increase in their attitude scores and over three-quarters (77%) exhibited a positive change in their behavioral intention scores.

Table 4.9

DISTRIBUTION OF CHANGE SCORES
GENERAL PUBLIC

	KNOWLEDGE (%)	ATTITUDE (%)	INTENDED BEHAVIOR (%)
DECREASE	16	10	6
NO CHANGE	31	20	16
(PERFECT)	(11)	(5)	(2)
INCREASE	54	70	77

As Table 4.10 presents, adult participants were more likely than were the adolescents to have achieved perfect pre- and post-test knowledge scores (14% vs. 4%). Among those with knowledge score changes, a higher proportion of adolescents than adults exhibited an increase, and conversely a smaller proportion of adolescents showed a decrease, in scores. Change in attitude scores did not vary substantially in relation to age, with 69 percent of the adolescents and 70 percent of the adults showing positive change. Similarly, 76 percent of the adolescents and 78 percent of the adults exhibited positive changes with respect to behavioral intention scores. The relatively greater magnitude of positive change associated with attitude and behavior dimensions may be largely a reflection of the greater variability found in the pre-test scores.

Table 4.10

DISTRIBUTION OF CHANGE SCORES BY AGE GROUPS
GENERAL PUBLIC

	UNDER 18			18 OR OLDER		
	KNOWLEDGE (%)	ATTITUDE (%)	INTENDED BEHAVIOR (%)	KNOWLEDGE (%)	ATTITUDE (%)	INTENDED BEHAVIOR (%)
DECREASE	12	11	8	18	11	6
NO CHANGE	28	20	16	32	19	17
(PERFECT)	(4)	(1)	(--)	(14)	(6)	(3)
INCREASE	60	69	76	51	70	78

Tables 4.11 to 4.13 present these change scores in relation to audience demographics. As Table 4.11 shows, over half (53%) of the male and female participants showed an increase in knowledge scores, although a greater proportion of males than females achieved perfect pre- and post-test knowledge scores (17% vs. 7%). Moreover, while a similar proportion of white and minority respondents exhibited no change in scores (although whites were somewhat more likely to have had perfect scores), a slightly greater proportion of minority attendees showed score gains. Adolescent participants also showed substantial knowledge score gains, while those 40 years or older evidenced the largest decline in scores. Finally, while it is recognized that educational attainment for this group is confounded by age, it is noteworthy that those who had completed high school exhibited less gain than did those with more education.

Table 4.11

KNOWLEDGE CHANGE SCORES BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GENDER				
Male	16	31	(17)	53
Female	17	31	(7)	53
RACE/ETHNICITY				
White	17	31	(12)	53
Minority	13	30	(9)	57
AGE				
Under 18 Years	12	28	(4)	60
18 to 29 Years	9	32	(13)	59
30 to 39 Years	18	43	(19)	39
40 to 49 Years	26	22	(7)	52
50 Years or Older	25	25	(14)	51
EDUCATION				
9th Grade or Less	9	35	(5)	56
Some High School	14	27	(5)	59
High School Graduate	20	28	(8)	52
College	17	31	(15)	52
Post-College	17	37	(24)	46

Attendees, irrespective of their demographic characteristics, generally showed strong increases in attitude change scores, as Table 4.12 shows. Interestingly, those 50 years of age or older evidenced both the least gain and most decline in their attitude change scores. It should not be surprising, however, that relatively brief educational interventions such as these may have a more limited effect in influencing attitudes and beliefs which may be more deeply ingrained among these older attendees.

Table 4.12

ATTITUDE CHANGE SCORES BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GENDER				
Male	10	21	(6)	69
Female	11	18	(4)	70
RACE/ETHNICITY				
White	9	19	(6)	72
Minority	13	20	(4)	67
AGE				
Under 18 Years	10	20	(1)	70
18 to 29 Years	9	23	(4)	69
30 to 39 Years	8	16	(4)	76
40 to 49 Years	9	19	(9)	73
50 Years or Older	22	18	(10)	59
EDUCATION				
9th Grade or Less	14	23	(5)	63
Some High School	11	23	(--)	66
High School Graduate	12	16	(3)	72
College	8	15	(7)	77
Post-College	9	24	(14)	68

A greater proportion of females than males showed an increase in behavioral intention scores, as Table 4.13 presents. White attendees also were somewhat more likely than minority participants to evidence score gains. Those 50 years or older exhibited the greatest proportion of decreased behavioral intentions change scores. Among those 30 to 39 years, in contrast, none showed a decrease and fully 86 percent exhibited score increases.

Table 4.13

INTENDED BEHAVIOR CHANGE SCORES BY SELECTED DEMOGRAPHICS
GENERAL PUBLIC

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GENDER				
Male	10	18	(2)	72
Female	2	16	(2)	82
RACE/ETHNICITY				
White	5	16	(3)	80
Minority	11	18	(1)	71
AGE				
Under 18 Years	8	16	(--)	77
18 to 29 Years	7	21	(--)	72
30 to 39 Years	--	14	(5)	86
40 to 49 Years	8	18	(8)	74
50 Years or Older	13	8	(--)	79
EDUCATION				
9th Grade or Less	7	11	(--)	82
Some High School	10	21	(1)	69
High School Graduate	7	20	(--)	73
College	2	12	(1)	86
Post-College	7	14	(14)	79

Tables 4.14 to 4.16 present the change scores in terms of various aspects of the educational strategies used. Small groups and those which were shorter in length appear to be associated with greatest knowledge gains, as Table 4.14 shows. There does not appear to be a clear relationship between the number of educational methods used and knowledge change. There is some suggestion that educational strategies which allowed for some degree of audience participation, if only through questions and answers, were more often associated with knowledge score gains. Methods such as lectures only or lectures and films, which present information to but do not necessarily permit clarifications from audience members, were associated with the smallest proportions of knowledge gains.

Table 4.14

KNOWLEDGE CHANGE SCORES BY EDUCATIONAL STRATEGY
GENERAL PUBLIC

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	9	26	(15)	65
Medium	15	29	(8)	56
Large	21	35	(14)	44
LENGTH				
1 Hour	15	31	(7)	54
2 Hours	16	30	(18)	54
3 Hours	38	31	(13)	31
NUMBER OF METHODS				
One	20	29	(9)	52
Two	16	30	(12)	54
Three	14	33	(10)	53
Four	--	--	(--)	--
Five	8	32	(24)	60
METHODS				
Lecture	24	28	(7)	48
Group Interaction	--	29	(21)	71
Question and Answer	7	33	(13)	60
Lecture and Film	14	38	(5)	48
Lecture and Q&A	15	26	(5)	59
Lecture and Group	8	17	(17)	75
Film and Q&A	20	39	(29)	42
Lecture, Film, Q&A	14	32	(11)	54
Lecture, Group, Q&A	17	33	(7)	50
Lecture, Film, Role Play Group, Q&A	8	32	(24)	60

Interestingly, positive changes in attitude scores were slightly more often observed in participants in medium-sized or large groups than small groups. Greater proportions of attitude increases also were found among attendees of longer sessions. As with knowledge change, however, there does not appear to be a clear relationship between the number of methods used and attitude change. In contrast to knowledge change, the greatest proportion of attitude gain was associated with the combination of five methods--lecture, film, role playing, group interaction, and questions and answers, followed by the employment of lecture and film (80% increase).

Table 4.15
ATTITUDE CHANGE SCORES BY EDUCATIONAL STRATEGY
GENERAL PUBLIC

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	9	22	(9)	68
Medium	12	18	(2)	71
Large	9	21	(7)	70
LENGTH				
1 Hour	11	21	(3)	68
2 Hours	9	19	(9)	72
3 Hours	6	13	(7)	81
NUMBER OF METHODS				
One	8	18	(6)	74
Two	10	19	(5)	72
Three	15	25	(4)	60
Four	--	--	(--)	--
Five	4	12	(8)	84
METHODS				
Lecture	10	18	(5)	72
Group Interaction	--	21	(21)	77
Question and Answer	7	13	(--)	80
Lecture and Film	--	19	(--)	81
Lecture and Q&A	11	16	(1)	73
Lecture and Group	17	8	(--)	75
Film and Q&A	10	27	(15)	63
Lecture, Film, Q&A	18	19	(5)	64
Lecture, Group, Q&A	10	40	(--)	50
Lecture, Film, Role Play, Group, Q&A	4	12	(8)	84

Gains in behavioral intention scores were associated with small groups as well as longer sessions, as Table 4.16 shows. Participants in sessions in which five educational techniques were used as well as those in groups using only one method exhibited score increases by over 80 percent of audience members. All of those who attended an educational presentation which employed lecture and group interaction showed score increases. Fully 92 percent of those who participated in a group interaction only session exhibited positive change. The combination of lecture, film, and questions and answers, however, showed the greatest decrease in behavioral intention scores.

Table 4.16

INTENDED BEHAVIOR CHANGE SCORES BY EDUCATIONAL STRATEGY
GENERAL PUBLIC

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	2	11	(4)	87
Medium	10	19	(1)	71
Large	3	15	(3)	82
LENGTH				
1 Hour	7	20	(1)	73
2 Hours	5	12	(4)	83
3 Hours	--	10	(--)	90
NUMBER OF METHODS				
One	4	15	(--)	81
Two	6	16	(6)	78
Three	11	18	(--)	71
Four	--	--	(--)	--
Five	--	13	(--)	88
METHODS				
Lecture	5	11	(--)	84
Group Interaction	--	8	(--)	92
Question and Answer	--	50	(--)	50
Lecture and Film	8	8	(8)	85
Lecture and Q&A	8	19	(4)	73
Lecture and Group	--	--	(--)	100
Film and Q&A	4	18	(11)	79
Lecture, Film, Q&A	11	17	(--)	72
Lecture, Group, Q&A	9	23	(--)	68
Lecture, Film, Role Play, Group, Q&A	--	13	(--)	88

Participant Assessments of the Trainings

At the end of each session participants were asked to indicate if they would recommend the presentation to others. Fully 98 percent of these members of the general public indicated that they would recommend the presentation they had attended to others. Numerous participants also wrote comments and suggestions on the evaluation surveys. The following offers a sense of the content of these remarks.

Most respondent comments were positive, with participants wanting longer sessions, and many expressing a desire for more frequent and even mandatory educational events. The opportunity to ask questions was mentioned as a significant advantage. A great many specifically mentioned videotapes as a desired feature with comments such as, "Finally, something I could relate to. We need more films like this . . . updated." Other comments expressed desires for more information regarding the blood supply, more advice on "sexual practices for the future," and further discussion of safe sex with partners, more counseling examples for teens and more information overall.

Several participants expressed problems with what they perceived as libertine attitudes toward sexuality or the prevention of AIDS transmission. One person liked the basic medical information and film but not the expression of personal feelings about sex. "We're in this mess because of freedoms," he/she stated, "and the tone of the presentation is not pro-abstinence." A second person called the lecturer's perceived devaluing of abstinence as a means of avoiding HIV infection "stupidity . . . It is one thing to attempt to be morally neutral, but to suggest that the way to avoid the consequences of immorality is to be 'more creative' is . . . unprofessional at the very least."

GAY OR BISEXUAL MEN

Characteristics

Two hundred eighty-nine survey forms were received from gay or bisexual men who attended educational sessions conducted by the participating state I&E contractors during the evaluation period. Over 80 percent of participants identified themselves as white; 7 percent described themselves as Latino and 5 percent reported being Black. Attendees tended to be relatively young, with three-quarters reporting their ages as under 40 years. The mean age of attendees was 33.4 years, with modes of 24 and 34 years, and a range of 16 to 71 years. These audiences also were relatively well educated with just under half (49%) reporting college attendance and fully 22 percent indicating graduate education. Table 4.17. presents the demographic characteristics of these attendees.

Table 4.17

DEMOGRAPHIC CHARACTERISTICS OF GAY/BISEXUAL MALE ATTENDEES

	PERCENT OF TOTAL
RACE/ETHNICITY	
White	82
Black	5
Latino	7
Asian	4
Other	4
AGE	
Under 18 Years	--
18 to 29 Years	40
30 to 39 Years	35
40 to 49 Years	19
50 Years or Older	7
EDUCATION	
Some High School	4
High School Graduate	25
College	49
Post-College	22

Participants cited a variety of sources used for obtaining information about AIDS. Over half (57%) said that they acquired AIDS-related information from newspapers. Magazines (30%), television (25%), and professional journals (17%) also were commonly used. Fully 28 percent reported that the I&E contractor providing the training was an informational source for them. More than a quarter (27%) also identified their friends--suggesting the importance of such informal networks as key information resources. In contrast, formal sources of medical care, such as health clinics or private doctors, were cited as AIDS information sources by less than 10 percent of the respondents.

Reasons for given for attending highlight the greater personal stake that AIDS issues hold for gay or bisexual men in California. While curiosity was the most frequently mentioned reason for attendance (43%), fully 36 percent reported that they came to the educational session because they were worried about getting AIDS. Fourteen percent also reported that they were motivated to attend because a friend or lover had AIDS. In contrast, only 11 percent said they attended the educational session in order to do their work better.

Pre-Test Status

Table 4.18 presents the mean test scores achieved by participants prior to the educational presentations. There was a high level of basic AIDS knowledge among these attendees, as the table shows. Out of a possible total score of six, mean knowledge pre-test scores were above 5 points regardless of demographic category. Similarly, mean attitude pre-test scores, which ranged from 4.27 to 4.90, indicate that participants, irrespective of their demographic characteristics, answered more than two-thirds of the items appropriately. Average pre-test scores obtained for behavioral items, however, were not quite as high. Out of a possible total score of five, mean scores ranged from 2.22 to 2.89.

Table 4.18

MEAN PRE-TEST SCORES BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	KNOWLEDGE	ATTITUDES	INTENDED BEHAVIOR
RACE/ETHNICITY			
White	5.66	4.76	2.30
Black	5.33	4.27	2.22
AGE			
Under 30 Years	5.51	4.38	2.30
30 to 39 Years	5.61	4.83	2.54
40 to 49 Years	5.71	4.90	2.37
50 Years or Older	5.58	4.95	2.89
EDUCATION			
High School Graduate or Less	5.61	4.41	2.33
College	5.61	4.72	2.42
Post-College	5.56	4.90	2.74

The actual distributions of pre-test knowledge, attitude and behavior scores in relation to demographic characteristics are displayed in Tables 4.19 to 4.21. As Table 4.19 shows, responses to pre-test knowledge items tended to cluster at the high end of the scale, with almost two-thirds or more of attendees achieving perfect scores. Somewhat greater variation in response patterns are found in Tables 4.20 and 4.21. Although no clear pattern can be distinguished in terms of attitude scores and demographic characteristics, as can be seen in Table 4.18, attendees were less likely to achieve perfect scores on these items than they were with the knowledge questions. As Table 4.21 illustrates, behavioral pre-test scores exhibited the greatest response variations. These items were the least likely of the pre-test questions to be correctly answered by attendees. In fact, less than 10 percent achieved perfect scores. In contrast, relatively small, but important, proportions of participants answered none of the five items correctly.

Table 4.19

PRE-TEST KNOWLEDGE BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	NUMBER OF ITEMS CORRECT						
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)
RACE/ETHNICITY							
White	1	--	--	--	3	20	75
Minority	4	--	--	2	6	26	63
AGE							
Under 30 Years	3	--	--	1	5	20	72
30 to 39 Years	2	--	--	--	1	24	73
40 to 49 Years	--	--	--	--	4	22	75
50 Years or Older	--	--	--	--	11	21	68
EDUCATION							
HS Grad. or Less	1	--	--	--	4	24	71
College	2	--	--	--	4	22	72
Post-College	3	--	--	2	2	16	77

Table 4.20

PRE-TEST ATTITUDES BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	NUMBER OF ITEMS CORRECT						
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)
RACE/ETHNICITY							
White	1	1	1	8	20	42	26
Minority	2	2	2	16	33	29	16
AGE							
Under 30 Years	3	2	3	15	21	39	17
30 to 39 Years	1	--	1	5	26	38	28
40 to 49 Years	--	--	--	8	29	28	35
50 Years or Older	--	5	--	--	5	68	21
EDUCATION							
HS Graduate or Less	--	2	4	12	32	32	18
College	2	--	1	10	20	45	22
Post-College	3	2	--	3	18	36	38

Table 4.21

PRE-TEST BEHAVIORS BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	NUMBER OF ITEMS CORRECT					
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
RACE/ETHNICITY						
White	9	11	28	30	19	4
Minority	14	12	31	28	14	2
AGE						
Under 30 Years	12	10	30	31	16	1
30 to 39 Years	8	12	30	26	17	7
40 to 49 Years	10	14	28	29	18	2
50 Years or Older	5	11	16	32	32	5
EDUCATION						
HS Graduate or Less	9	16	23	40	11	1
College	9	14	32	20	22	3
Post-College	12	--	28	33	20	8

Educational Methods

Of the 23 informational/educational groups conducted for gay or bisexual men during the study period, 17 were classified as "small groups," consisting of less than 15 individuals, four were "medium-sized groups," containing 15 to 29 attendees, and two were "large groups," with 30 or more people in attendance. The variety of educational methods used in these groups is shown in Table 4.22. As the table shows, the informational/ educational strategies employed by the state I&E contractors to reach gay or bisexual men differ greatly in emphasis from those used with other audiences. Rather than didactic techniques, such as lecturing, groups conducted for gay or bisexual men appear to focus more on interactional methods. Thus, for example, two-thirds of the gay or bisexual male attendees participated in sessions which used group interaction techniques to convey informational/educational content, while only 16 percent attended sessions employing lectures and questions and answers.

Table 4.22

DISTRIBUTION OF EDUCATIONAL METHODS
GAY/BISEXUAL

	PERCENT
Group Interaction	67
Role Play	4
Lecture and Question and Answer	16
Group and Question and Answer	11

Changes in Knowledge, Attitudes and Intended Behavior

The distribution of change scores for each of the dimensions of interest are presented in Table 4.23. Perfect pre- and post-test knowledge scores were obtained by fully 54 percent of the attendees. In an additional 10 percent of the cases the number of items correctly answered did not vary between the pre-and post-tests. About a fifth (21%) showed a decrease in pre- to post-test knowledge scores, which could have been caused by a one item difference. An examination of post-test items, in fact, suggests that this finding may be driven by the substantial proportion of incorrect responses to an antibody testing item on the questionnaire. Finally, given that more than two-thirds achieved perfect knowledge pre-test scores, it is not surprising the knowledge dimension exhibited the smallest proportion of increase of the three areas investigated.

Table 4.23

DISTRIBUTION OF CHANGE SCORES
GAY/BISEXUAL

	KNOWLEDGE (%)	ATTITUDE (%)	INTENDED BEHAVIOR (%)
DECREASE	21	12	10
NO CHANGE	64	31	20
(PERFECT)	(54)	(17)	(3)
INCREASE	15	56	70

Over half (56%) of the attendees exhibited score gains on the attitude items and fully 70% did so on the behavioral intention items. Conversely, relatively small proportions showed score decreases for these dimensions (12% for attitude items and 10% for behavioral intention items). Since these were the dimensions which showed greatest variability in the pre-test, and therefore had the greatest potential to be affected by the educational intervention, it is encouraging to note that the score changes observed did in fact largely occur in the positive direction.

Knowledge, attitude, and behavioral change scores in relation to demographic characteristics of these gay or bisexual participants are presented in Tables 4.24 to 4.26.

Table 4.24

KNOWLEDGE CHANGE SCORES BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
RACE/ETHNICITY				
White	20	68	(58)	13
Minority	26	50	(40)	24
AGE				
Under 30 Years	23	68	(55)	9
30 to 39 Years	16	65	(56)	19
40 to 49 Years	22	58	(52)	20
50 Years or Older	16	74	(53)	11
EDUCATION				
High School Graduate or Less	22	63	(51)	15
College	21	64	(53)	15
Post-College	19	68	(59)	14

Changes in attitude scores according to demographic characteristics are displayed in Table 4.25. Minority attendees, who were somewhat less likely than were white participants to have achieved perfect pre- and post-test attitude scores, showed both a higher proportion of increased scores and a smaller proportion of decreased attitude scores than did whites. Assessment of attitude score change in terms of age suggests a positive and then decreasing relationship between the proportion achieving perfect scores and age. Younger attendees exhibited the greatest proportion of score increases and the smallest proportion score decreases, particularly when contrasted with those in the oldest age category. Finally, increased educational attainment was positively associated with obtaining perfect pre-and post-test attitude scores, with almost a third (31%) of those with graduate educations achieving perfect scores. Among these gay or bisexual male participants, more than two-thirds (68%) of those with the lowest educational attainments showed an increase in post-test attitude scores.

Table 4.25

ATTITUDE CHANGE SCORES BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
RACE/ETHNICITY				
White	13	33	(19)	55
Minority	10	26	(10)	64
AGE				
Under 30 Years	8	31	(14)	61
30 to 39 Years	14	30	(18)	56
40 to 49 Years	16	36	(24)	48
50 Years or Older	21	32	(11)	47
EDUCATION				
High School Graduate or Less	13	18	(9)	68
College	11	36	(16)	53
Post-College	10	41	(31)	49

Approximately two-thirds or more of the attendees exhibited an increase in scores on the behavioral intentions dimension, as Table 4.26 displays. Whites were slightly more likely than minority participants to show a decrease in behavioral intention scores. Younger attendees as well as those whose formal educations ended with high school also tended to exhibit a somewhat greater proportion of score decreases.

Table 4.26

INTENDED BEHAVIOR CHANGE SCORES BY SELECTED DEMOGRAPHICS
GAY/BISEXUAL

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
RACE/ETHNICITY				
White	11	21	(3)	68
Minority	7	16	(--)	78
AGE				
Under 30 Years	12	18	(1)	70
30 to 39 Years	10	19	(4)	71
40 to 49 Years	8	28	(3)	65
50 Years or Older	7	20	(7)	73
EDUCATION				
High School Graduate or Less	16	23	(1)	62
College	8	17	(1)	76
Post-College	8	25	(8)	67

Tables 4.27 to 4.29 display the change scores for each of these dimensions in relation to various aspects of the educational strategies employed. Those who attended large groups (e.g., 30 or more people) showed the greatest positive change in attitude scores, and conversely the smallest decrease, as Table 4.28 presents. It is important to note, however, that over half of those attending small or medium-sized groups also showed gains in attitude scores. The proportions exhibiting positive attitude change did not vary greatly in terms of the length of the session. The use of two educational methods appears to be related to greater positive change than does the use of a single method. Almost two-thirds (65%) of those in sessions using two methods showed an increase in attitude change scores while 8 percent showed a decrease. In contrast, 54 percent of those attending single method sessions showed an increase and 14 percent had score decreases. Perhaps most interestingly, those who attended a lecture with questions and answers exhibited a greater proportion of score increases, particularly when compared to those who participated in group interactions or group interaction combined with questions and answers.

Table 4.27

KNOWLEDGE CHANGE SCORES BY EDUCATIONAL STRATEGY
GAY/BISEXUAL

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	18	65	(55)	17
Medium	21	68	(57)	11
Large	34	55	(43)	11
LENGTH				
1 Hour	--	--	(--)	--
2 Hours	28	60	(48)	12
3 Hours	19	69	(54)	13
4 Hours	19	65	(57)	17
NUMBER OF METHODS				
One	18	67	(57)	14
Two	33	52	(42)	15
METHODS				
Group Interaction	19	66	(55)	15
Role Play	17	83	(75)	--
Lecture and Q&A	34	55	(43)	11
Group and Q&A	19	61	(52)	19

Table 4.28

ATTITUDE CHANGE SCORES BY EDUCATIONAL STRATEGY
GAY/BISEXUAL

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	13	32	(18)	55
Medium	15	31	(15)	54
Large	7	30	(14)	64
LENGTH				
1 Hour	--	--	(--)	--
2 Hours	10	31	(13)	58
3 Hours	14	31	(14)	54
4 Hours	12	31	(20)	57
NUMBER OF METHODS				
One	14	32	(18)	54
Two	8	27	(14)	65
METHODS				
Group Interaction	14	31	(17)	55
Role Play	--	42	(33)	58
Lecture and Q&A	7	30	(14)	63
Group and Q&A	16	29	(13)	55

Table 4.29 suggests that a different array of educational methods may be appropriate to effect changes in behavioral intentions. Strategies that appear to be associated with positive change in cognitive and narrowly defined affective dimensions do not seem as effective in terms of influencing behavioral intentions. Thus, the greatest degree of behavioral score increases were observed among attendees in smaller groups, those that met for longer periods of time, used a single educational method, and employed interactional techniques such as role playing or group interaction.

Table 4.29

INTENDED BEHAVIOR CHANGE SCORES BY EDUCATIONAL STRATEGY
GAY/BISEXUAL

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	6	13	(2)	81
Medium	9	32	(5)	56
Large	26	21	(--)	51
LENGTH				
1 Hour	--	--	(--)	--
2 Hours	20	31	(2)	49
3 Hours	7	22	(3)	72
4 Hours	7	14	(3)	79
NUMBER OF METHODS				
One	7	20	(3)	72
Two	22	20	(--)	59
METHOD				
Group Interaction	7	18	(3)	75
Role Play	--	10	(--)	90
Lecture and Q&A	26	23	(--)	51
Group and Q&A	7	33	(4)	59

Participant Assessments of the Trainings

Subsequent to the educational session, the gay or bisexual male participants were asked to indicate whether they would recommend the presentation to others. The gay or bisexual male audiences were highly positive about the sessions. Almost all, fully 99 percent, reported that they would recommend the session to others.

The consistent theme of the remarks written on the evaluation forms was of community: a desire for support, networking, sharing, a social outlet, a chance to see how others are coping, and hear other gay men's views. A majority of comments, therefore, identified perceived obstacles to that process: groups should be smaller and more time should be allowed for sharing feelings. One person requested "please screen straight men from group," and another affirmed the group participation focus of the session which made him feel more involved. Within these comments about the sense of community are both existential questions (i.e., the need to explain why AIDS has happened) and a sense of pride, the belief that these sessions represent examples of strength within the gay community.

Other comments were critical of the factual presentation, which a number of participants felt needed more facts, handouts and updates. Some participants were bored by what they felt to be limited information and redundancy. One member felt such educational efforts should now focus on heterosexuals more since gay men are, he believed, well-educated at this point and prevention is important for "swinging singles."

Over two dozen respondents noted in the margins they did not know any intravenous drug users (though it must also be said most of these men also said in pre-test they do not ask friends about drug use). Several also expressed dissatisfaction with the evaluation instrument itself. In fact the gay/bisexual respondents were the primary critics of the survey.

PROVIDERS

Characteristics

During the survey period, 309 health and social service providers completed evaluation forms as part of the information and education sessions provided by the participating I&E contractors. The provider attendees were overwhelmingly female (82%), and more than two-thirds (71%) identified themselves as white. More than half (53%) reported being college graduates and an additional 34% indicated post-graduate education. The participants ranged in age from 19 to 72 years, with a mean of 38 years and a mode of 32 years. Table 4.30 displays the demographic characteristics of these attendees.

Table 4.30

DEMOGRAPHIC CHARACTERISTICS OF PROVIDER ATTENDEES

	PERCENT OF TOTAL
GENDER	
Male	18
Female	82
RACE/ETHNICITY	
White	71
Black	9
Latino	5
Asian	12
Other	4
AGE	
19 to 29 Years	19
30 to 39 Years	43
40 to 49 Years	24
50 Years or Older	15
EDUCATION	
Not High School Graduate	2
High School Graduate	11
College	53
Post-College	34

Attendees most commonly reported newspapers (40%) as their source of AIDS-related information. Fully 38 percent cited the AIDS I&E contractor as an informational resource. Other frequently mentioned informational sources included professional journals (35%), television (34%), and popular magazines (32%). A quarter of the providers also reported receiving AIDS information at prior workshops.

Many of the participants reported attending the I&E workshop in order to be able to do their work better (62%). Almost a quarter (23%) indicated that they were required to attend the educational session. Less than a fifth (18%) said that they were attending out of curiosity. Few of these providers cited more personal motivations for attending--only 6 percent reported being worried about getting AIDS and 2 percent indicated that a friend or lover had AIDS.

Pre-Test Status

Prior to the educational presentations, audience members completed pre-test knowledge, attitude and behavioral questions. The mean scores for each of these dimensions in relation to demographic characteristics are presented in Table 4.31. These providers evidenced a relatively high level of basic AIDS knowledge, as reflected by mean scores clustering around five where six was the maximum possible score. Minority attendees, those who were younger, and those who had less formal education exhibited slightly lower mean knowledge pre-test scores. Mean attitude pre-test scores ranged from 3.15 to 3.67 out of a possible total of six. As with knowledge pre-test scores, minority participants, younger attendees, and those with lower educational attainment showed slightly lower average attitude scores. In addition, mean attitude scores for males were slightly lower than those for females. Finally, mean behavioral pre-test scores ranged from 1.60 to 2.04 out of a possible total of four. Interestingly, those with the lowest level of formal educational attainment exhibited the highest mean behavioral pre-test scores (2.04).

Table 4.31

MEAN PRE-TEST SCORES BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	KNOWLEDGE	ATTITUDES	INTENDED BEHAVIOR
GENDER			
Male	5.04	3.49	1.84
Female	5.01	3.52	1.70
RACE/ETHNICITY			
White	5.07	3.65	1.78
Minority	4.89	3.22	1.60
AGE			
Under 30 Years	4.98	3.35	1.66
30 to 39 Years	5.07	3.52	1.62
40 to 49 Years	5.01	3.67	1.80
50 Years or Older	5.05	3.51	1.96
EDUCATION			
High School Graduate or Less	4.71	3.15	2.04
College	5.09	3.53	1.65
Post-College	5.05	3.61	1.76

The distributions of actual pre-test scores for each dimension in relation to audience characteristics are presented in Tables 4.32 to 4.34. Table 4.32 shows that regardless of demographic characteristics, the majority of respondents correctly answered at least four of the six basic AIDS knowledge items. In fact, with the exception of those who were high school graduates or less, approximately a third of those in all other categories achieved perfect knowledge pre-test scores.

Table 4.32

PRE-TEST KNOWLEDGE BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	NUMBER OF ITEMS CORRECT						
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)
GENDER							
Male	--	--	--	4	26	35	36
Female	--	1	--	5	14	44	34
RACE/ETHNICITY							
White	1	1	1	4	14	45	35
Minority	--	2	--	7	22	36	33
AGE							
Under 30 Years	--	--	--	11	11	46	32
30 to 39 Years	1	1	1	1	19	40	38
40 to 49 Years	--	1	--	7	12	46	33
50 Years or Older	--	2	--	2	19	40	37
EDUCATION							
HS Graduate or Less	--	5	--	8	18	44	26
College	--	--	--	4	20	41	36
Post-College	1	1	1	5	11	45	37

Pre-test attitude scores showed much greater variability, and a much smaller proportion of perfect scores. As Table 4.33 shows, between 10 and 27 percent of the attendees answered only two of the six attitude items in the appropriate directions.

Table 4.33

PRE-TEST ATTITUDES BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	NUMBER OF ITEMS CORRECT						
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)
GENDER							
Male	--	2	16	31	36	11	4
Female	2	3	16	30	28	16	6
RACE/ETHNICITY							
White	1	1	12	31	31	18	6
Minority	1	3	27	28	25	10	5
AGE							
Under 30 Years	--	6	20	35	19	13	7
30 to 39 Years	3	2	13	32	30	15	7
40 to 49 Years	--	1	15	25	38	19	3
50 Years or Older	--	--	23	26	33	14	5
EDUCATION							
HS Grad. or Less	3	3	23	33	26	13	--
College	--	2	19	30	27	17	5
Post-College	3	3	10	28	35	14	8

About a fifth of the attendees in each demographic category achieved behavior pre-test scores of three or four, as Table 4.34 shows. Interestingly, those 50 years or older and those with the least formal education exhibited the highest proportion of perfect scores. Respondents in general, however, most frequently answered only two of the behavioral pre-test items in the appropriate directions.

Table 4.34

PRE-TEST BEHAVIORS BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	NUMBER OF ITEMS CORRECT				
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)
GENDER					
Male	9	23	49	12	7
Female	7	33	48	6	6
RACE/ETHNICITY					
White	8	30	46	9	7
Minority	8	33	52	3	3
AGE					
Under 30 Years	9	28	53	6	3
30 to 39 Years	9	37	44	5	5
40 to 49 Years	7	26	53	10	5
50 Years or Older	7	25	46	7	14
EDUCATION					
HS Graduate or Less	4	21	54	8	13
College	8	35	45	8	4
Post-College	9	28	49	7	7

Educational Methods

Of the 17 groups conducted for providers, six were "small groups" of less than 15 persons, nine were "medium-sized groups," consisting of 15 to 29 individuals, and two were "large groups," with 30 or more participants. Providers most often attended sessions consisting of lecture, film, and questions and answers (29%) or lecture only (24%). Table 4.35 displays the distribution of educational techniques used in the sessions with these providers.

Table 4.35

DISTRIBUTION OF EDUCATIONAL METHODS
SERVICE PROVIDERS

	PERCENT
Lecture	24
Group Interaction	15
Group and Q&A	4
Lecture and Q&A	13
Lecture, Group and Q&A	10
Lecture, Film and Q&A	29
Lecture, Film, Group and Q&A	5

Changes in Knowledge, Attitudes and Intended Behavior

Table 4.36 displays the distribution of provider change scores for each of the three dimensions. Fully 15 percent of these attendees achieved perfect pre- and post-test knowledge scores. Slightly more than a third (35%) evidenced a gain in knowledge scores. About a quarter (27%), however, showed a decrease in knowledge scores. It should be kept in mind that a one item difference would be sufficient to result in a finding of change score decline. With respect to attitude and intended behavior change scores, substantial positive change was evidenced (80% for attitude scores and 77% for intended behavior scores). Less than 10 percent of the attendees showed score decreases for either of these dimensions.

Table 4.36

DISTRIBUTION OF CHANGE SCORES
SERVICE PROVIDERS

	KNOWLEDGE (%)	ATTITUDE (%)	INTENDED BEHAVIOR (%)
DECREASE	27	5	6
NO CHANGE	37	15	17
(PERFECT)	(15)	(4)	(5)
INCREASE	35	80	77

The distribution of knowledge, attitude, and behavioral intention change scores in relation to demographic characteristics are shown in Tables 4.37 to 4.39. As Table 4.37 indicates, provider attendees who were female, from minority groups, below the age of 40 years, and with the least educational attainment showed the greatest proportion of knowledge increase in their change scores.

Table 4.37

KNOWLEDGE CHANGE SCORES BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GENDER				
Male	33	45	(15)	22
Female	26	35	(14)	38
RACE/ETHNICITY				
White	27	38	(16)	35
Minority	26	36	(12)	38
AGE				
Under 30 Years	30	30	(13)	40
30 to 39 Years	27	38	(14)	36
40 to 49 Years	23	42	(22)	33
50 Years or Older	35	33	(12)	33
EDUCATION				
High School Graduate or Less	21	33	(13)	46
College	27	37	(15)	36
Post-College	30	40	(16)	30

In contrast to what was observed regarding knowledge change, males, those identifying as white, and those between the ages of 40 and 49 years were more likely to show gains in their attitude scores. Those under 30 years exhibited positive attitude change scores as well. Providers with the least formal education also evidenced increased attitude scores, as was found with knowledge change.

Table 4.38

ATTITUDE CHANGE SCORES BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GENDER				
Male	4	13	(4)	84
Female	5	15	(4)	79
RACE/ETHNICITY				
White	5	13	(3)	82
Minority	6	18	(5)	76
AGE				
Under 30 Years	6	14	(4)	81
30 to 39 Years	6	15	(5)	79
40 to 49 Years	3	15	(3)	83
50 Years or Older	7	16	(2)	77
EDUCATION				
High School Graduate or Less	--	10	(--)	90
College	4	14	(3)	82
Post-College	8	18	(6)	74

Most providers, regardless of their demographic characteristics, showed overall gains in their behavioral intention scores, as Table 4.39 displays. Between 61 percent and 89 percent evidenced increases in their behavioral intention scores. Interestingly, minority providers, those with less formal education, and those 50 years or older showed the largest proportion of score decreases, although those 50 and older also exhibited the greatest proportion of perfect pre- and post-test scores.

Table 4.39

INTENDED BEHAVIOR CHANGE SCORES BY SELECTED DEMOGRAPHICS
SERVICE PROVIDERS

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GENDER				
Male	7	21	(5)	72
Female	6	16	(5)	78
RACE/ETHNICITY				
White	3	19	(6)	79
Minority	14	13	(2)	73
AGE				
Under 30 Years	9	25	(3)	66
30 to 39 Years	4	15	(4)	81
40 to 49 Years	--	12	(5)	89
50 Years or Older	14	25	(11)	61
EDUCATION				
High School Graduate or Less	13	21	(8)	66
College	3	14	(4)	83
Post-College	9	21	(6)	70

Knowledge, attitude, and behavioral intention change scores also were assessed in relation to aspects of the educational strategies employed, as Tables 4.40 to 4.42 illustrate. As Table 4.40 shows, group size appears to have little relationship to knowledge change scores among these providers. Shorter sessions (i.e., those one or two hours in length) as well as those extending beyond one working day appear to be associated with knowledge increase. Similarly, sessions using only one educational method or four methods were related to knowledge score gains. Participants showed the greatest knowledge gains when they received a combination of lecture, film, group, and questions and answers. Positive knowledge change is also evidenced among those who participated either in group interaction alone (49%) or in group interaction and questions and answers (42%).

Table 4.40

KNOWLEDGE CHANGE SCORES BY EDUCATIONAL STRATEGY
SERVICE PROVIDERS

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	25	42	(17)	32
Medium	28	34	(12)	38
Large	26	42	(19)	32
LENGTH				
1 Hour	23	42	(13)	34
2 Hours	24	41	(17)	35
3 to 8 Hours	33	35	(17)	33
Over 8 Hours	26	26	(9)	49
NUMBER OF METHODS				
One	24	38	(12)	38
Two	25	42	(17)	33
Three	33	35	(16)	32
Four	14	29	(21)	57
METHODS				
Lecture	23	47	(14)	30
Group Interaction	26	26	(9)	49
Group and Q&A	8	50	(25)	42
Lecture and Q&A	30	40	(15)	30
Lecture, Group, Q&A	36	36	(13)	29
Lecture, Film, Q&A	32	35	(17)	33
Lecture, Film, Group and Q&A	14	29	(21)	57

Group size does not appear to be directly related to attitude change, as Table 4.41 presents. Attendees at somewhat longer sessions (i.e., those lasting at least three hours but not more than a day), however, showed the greatest positive changes in their attitude scores. The use of two educational methods also appears to be related to gains in attitude scores. All of those who participated in group interaction coupled with questions and answers exhibited score gains. Attendees at sessions using combinations of lecture and questions and answers; lecture, film and questions and answers; or lectures only also showed high proportions of positive attitude change.

Table 4.41

ATTITUDE CHANGE SCORES BY EDUCATIONAL STRATEGIES
SERVICE PROVIDERS

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	5	10	(--)	85
Medium	5	17	(3)	78
Large	4	14	(8)	82
LENGTH				
1 Hour	7	14	(4)	79
2 Hours	6	12	(2)	82
3 to 8 Hours	1	15	(5)	84
Over 8 Hours	6	17	(4)	77
NUMBER OF METHODS				
One	8	13	(4)	78
Two	--	12	(2)	89
Three	4	17	(4)	78
Four	--	21	(--)	79
METHOD				
Lecture	10	11	(4)	80
Group	6	17	(4)	77
Group and Q&A	--	--	(--)	100
Lecture and Q&A	--	15	(3)	85
Lecture, Group, Q&A	7	23	(--)	71
Lecture, Film, Q&A	4	15	(6)	81
Lecture, Film, Group and Q&A	--	21	(--)	79

As Table 4.42 suggests, those in large groups exhibited the greatest proportion of score increases on behavioral intention measures. Longer sessions, either three to eight hours or more than a day, as well as the use of four educational techniques were also related to score gains. The method combinations which showed the greatest proportions of score gains all allowed some form of audience participation. These techniques included: group interaction (87% gain); lecture, film, group interaction, and questions and answers (83% gain); group interaction and questions and answers (80% gain); and lecture, film and questions and answers (80% gain).

Table 4.42

INTENDED BEHAVIOR CHANGE SCORES BY EDUCATIONAL STRATEGIES SERVICE PROVIDERS

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
GROUP SIZE				
Small	5	23	(5)	73
Medium	6	17	(7)	76
Large	8	12	(--)	81
LENGTH				
1 Hour	14	20	(4)	65
2 Hours	--	22	(12)	78
3 to 8 Hours	6	12	(--)	82
Over 8 Hours	2	11	(7)	87
NUMBER OF METHODS				
One	5	15	(7)	81
Two	11	19	(3)	70
Three	6	20	(5)	74
Four	8	8	(--)	83
METHODS				
Lecture	7	29	(7)	74
Group Interaction	2	11	(7)	87
Group and Q&A	--	20	(10)	80
Lecture and Q&A	15	19	(--)	67
Lecture, Group, Q&A	12	27	(4)	62
Lecture, Film, Q&A	3	17	(5)	80
Lecture, Film, Group and Q&A	8	8	(--)	83

Participant Assessments of the Trainings

Fully 99 percent of the providers who attended these presentations indicated that they would recommend the educational training to others. These providers, however, made relatively few additional comments about the sessions. The speakers received consistently high marks, with many positive statements about the care and concern demonstrated by the speaker. They seemed to be moved by the compassion of a particular speaker who counsels persons with AIDS.

The only other comments were from a few participants who especially liked the written materials and a few who felt the video used was "too simplistic," "misleading," or "not realistic." By far the most common complaint concerned the brevity of the session. Many felt the time allocated was too short; more time was needed, these providers felt, to process and clarify feelings and allow for more questions and answers.

Two final comments are of interest. One person felt the negative attitudes of nursing staff towards working with AIDS was not limited to AIDS patients. The suggestion was that AIDS education for nurses should examine attitudes within a broader context of beliefs regarding patient care and illness management. Another attitude revealed in margin notes was that a desire to isolate persons with AIDS within the workplace must be moderated by concern for the vulnerability of the immune-deficient person.

INTRAVENOUS DRUG USERS

Characteristics

Evaluation forms were received from one I&E session conducted during the study period for individuals identified as intravenous drug users (IVDUs). A total of 21 people, all of whom were male, attended the educational session. Because of the small number of participants from whom evaluation forms were completed, and the fact such data were available from only a single session, assessment of the effects of AIDS-related information and knowledge promotion among potential audiences of IVDUs is limited.

Just over three-quarters (76%) of the attendees identified themselves as white, with the remainder identifying themselves as Black. None of the attendees described themselves as belonging to any other racial/ethnic group. The majority (43%) reported being high school graduates. The average age of attendees was 35 years, with modes at 28 and 38 years and a range of 21 to 62 years. Table 4.43 presents the demographic characteristics of the participants.

Table 4.43

DEMOGRAPHIC CHARACTERISTICS OF IVDU ATTENDEES

	PERCENT OF TOTAL
RACE/ETHNICITY	
White	76
Black	24
AGE	
Under 30 Years	29
30 to 39 Years	52
40 Years or Older	19
EDUCATION	
9th Grade or Less	5
Some High School	19
High School Graduate	43
College	33

More than half (57%) reported newspapers as a usual source of AIDS-related information. Two other frequently mentioned information sources were television and the AIDS I&E contractor which was providing the workshop (43% each). A final informational resource cited by participants was health centers (19%).

The vast majority of participants (81%) reported that they were required to attend the educational session. Almost a fifth (19%) cited curiosity as their reason for attending. Only 10 percent reported that their own concerns about contracting AIDS motivated them to attend. None indicated attending because a friend or lover had AIDS.

Pre-Test Status

Tables 4.44 to 4.47 display the distribution of knowledge, attitude, and behavior pre-test scores in relation to certain demographic features. Table 4.44 summarizes the mean pre-test scores achieved in relation to demographic characteristics. Out of a possible six points, mean knowledge pre-test scores ranged from 4.80 to 5.25, suggesting a fairly high knowledge of basic AIDS-related information. These mean scores, however, were lower than those of the gay or bisexual men, the other group of individuals most directly at risk who were studied. In contrast to what was found in the analysis of the gay or bisexual men, the mean knowledge pre-test scores of these IVDUs do vary somewhat in relation to demographic characteristics. Attendees who were Black, younger, or with less educational attainment tended to obtain lower mean knowledge pre-test scores.

Mean attitude pre-test scores ranged from 3.00 to 4.00 out of a possible five point total. Black participants achieved slightly lower mean scores than did whites. Interestingly, particularly when contrasted to the variation observed in mean knowledge scores, those who were older and those with the greatest educational attainment exhibited lower mean attitude pre-test scores. Behavioral indicators received the lowest overall mean scores, ranging from .50 to 2.00 out of a possible score of five. In contrast to knowledge and attitude means, white attendees achieved lower mean behavioral pre-test scores than did Blacks. Older respondents and those who did not complete high school also obtained lower mean behavioral scores.

Table 4.44

MEAN PRE-TEST SCORES BY SELECTED DEMOGRAPHICS
IVDUs

	KNOWLEDGE	ATTITUDES	INTENDED BEHAVIOR
RACE/ETHNICITY			
White	5.25	3.81	1.38
Black	4.80	3.20	1.50
AGE			
Under 30 Years	4.83	3.83	1.83
30 to 39 Years	5.27	3.82	1.25
40 Years or Older	5.25	3.00	1.00
EDUCATION			
Not High School Graduate	4.80	3.80	.50
High School Graduate	5.44	4.00	2.00
College	5.00	3.14	1.20

As Table 4.45 shows, half of the white and 60 percent of the Black attendees achieved perfect scores on the knowledge pre-test items. Those IVDUs under 30 years of age were less likely to have achieved perfect pre-test knowledge scores than were respondents in the two older age categories (33% vs. 64% vs. 50%). However, half of those under thirty did correctly answer five of the six pre-test knowledge items. Fully 40 percent of those who did not complete high school, 57 percent of the high school graduates, and 57 percent of those who attended or completed college correctly answered all of the pre-test knowledge items.

Table 4.45

PRE-TEST KNOWLEDGE BY SELECTED DEMOGRAPHICS
IVDUs

	NUMBER OF ITEMS CORRECT						
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)
RACE/ETHNICITY							
White	--	--	--	6	13	31	50
Black	--	--	20	--	20	--	60
AGE							
Under 30 Years	--	--	17	--	--	50	33
30 to 39 Years	--	--	--	9	18	9	64
40 Years or Older	--	--	--	--	25	25	50
EDUCATION							
Not HS Graduate	--	--	--	20	20	20	40
HS Graduate	--	--	--	--	11	33	57
College	--	--	14	--	14	14	57

Respondents' attitudes about AIDS-related issues also were explored prior to the educational session. Responses to these attitudinal items were then assessed in relation to participant characteristics. As Table 4.46 shows, much greater variation was found with the attitude items than was observed with the knowledge measures. Appropriate AIDS attitudes appear to be unrelated to these particular demographic characteristics, at least among these attendees.

Table 4.46

PRE-TEST ATTITUDES BY SELECTED DEMOGRAPHICS
IVDUs

	NUMBER OF ITEMS CORRECT					
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
RACE/ETHNICITY						
White	--	6	6	6	63	19
Black	20	--	20	--	20	40
AGE						
Under 30 Years	--	--	17	--	67	17
30 to 39 Years	9	--	--	9	55	27
40 Years or Older	--	25	25	--	25	25
EDUCATION						
Not HS Graduate	--	--	--	20	80	--
HS Graduate	--	11	--	--	57	33
College	14	--	29	--	29	29

As with the attitudinal pre-test items, responses to five items concerning self-reported behaviors varied across the different demographic indicators. Perhaps the most interesting differences are observed with respect to educational attainment, as is seen in Table 4.47. While none of the attendees who either reported not completing high school or attending/graduating from college achieved perfect scores, 13 percent of those who were high school graduates answered all five of the behavioral items in the correct direction. Conversely, those who did not complete high school were much more likely than those with more education to answer all of the behavioral items incorrectly (80% vs. 13% vs. 40%).

Table 4.47

PRE-TEST BEHAVIORS BY SELECTED DEMOGRAPHICS
IVDUs

	NUMBER OF ITEMS CORRECT					
	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
RACE/ETHNICITY						
White	39	15	31	8	--	8
Black	25	25	25	25	--	--
AGE						
Under 30 Years	33	17	17	17	--	17
30 to 39 Years	38	13	38	13	--	--
40 Years or Older	33	33	33	--	--	--
EDUCATION						
Not HS Graduate	80	--	20	--	--	--
HS Graduate	13	25	38	13	--	13
College	40	20	20	20	--	--

Changes in Knowledge, Attitudes and Intended Behavior

The educational session for these IVDUs took place at a medical/social service agency. Lasting for one hour, the educational presentation included a lecture, the use of film or slides, and questions and answers. Fully 90% of the participants indicated that they would recommend the I&E presentation to others.

Participants were asked to complete a series of knowledge, attitude, and behavioral intention questions after the educational session. Change scores were computed for each dimension and collapsed to indicate score "decreases," "no change," and "increases." Again, it should be noted that a one item loss between pre- and post-tests would result in an assessment of "decrease." Table 4.48 shows the distribution of change scores for each of the dimensions.

Table 4.48

DISTRIBUTION OF CHANGE SCORES
IVDUs

	KNOWLEDGE (%)	ATTITUDE (%)	INTENDED BEHAVIOR (%)
DECREASE	43	24	18
NO CHANGE	29	43	31
(PERFECT)	(19)	(10)	(--)
INCREASE	29	33	50

Change scores were then assessed in relation to selected demographic indicators, as Tables 4.49 to 4.51 show. Among these IVDUs, Blacks were more likely than whites to show a decrease in knowledge change scores, as Table 4.49 presents. Conversely, they also exhibited a higher proportion of increased knowledge change scores than did whites. A decreased knowledge change score appears to be inversely associated with age, with younger attendees, especially those under 30 years, showing the least score losses. Educational attainment, however, does not appear to be directly associated with either decreases or increases in knowledge change scores.

Table 4.49

KNOWLEDGE CHANGE SCORES BY SELECTED DEMOGRAPHICS
IVDUs

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
RACE/ETHNICITY				
White	38	38	(25)	25
Black	60	--	(--)	40
AGE				
Under 30 Years	33	34	(17)	33
30 to 39 Years	45	27	(27)	27
40 Years or Older	50	25	(--)	25
EDUCATION				
Not High School Graduate	60	20	(--)	20
High School Graduate	33	33	(33)	33
College	43	29	(14)	29

In contrast to knowledge change, attitude change scores were more likely to show an increase as age increased. Similarly, positive changes in attitude scores were associated with rising levels of educational attainment. With respect to race/ethnicity, Blacks were more likely than whites to exhibit both a greater increase and decrease in their attitude change scores. Table 4.50 presents these results.

Table 4.50

ATTITUDE CHANGE SCORES BY SELECTED DEMOGRAPHICS
IVDUs

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
RACE/ETHNICITY				
White	19	50	(13)	31
Black	40	20	(--)	40
AGE				
Under 30 Years	33	50	(--)	17
30 to 39 Years	18	46	(18)	(36)
40 Years or Older	25	25	(--)	50
EDUCATION				
Not High School Graduate	--	80	(--)	20
High School Graduate	44	22	(11)	33
College	14	43	(14)	43

Finally, as Table 4.51 displays, whites were more likely to attain the same or an increased behavioral intention change score than were Blacks. This finding, which is similar to that observed for knowledge and attitude changes, may be related to several factors. First, there may be unintended bias in the instrumentation which resulted in these scores discrepancies. Second, these differences may reflect content or stylistic problems in delivering AIDS information and education programs to "non-mainstream" audiences, particularly when there are significant racial/ethnic differences, age ranges, or educational variation in the intended audience. It may be that heterogeneous audiences, even when members share a common trait such as intravenous drug use, are more difficult to reach uniformly during one educational session.

Table 4.51

INTENDED BEHAVIOR CHANGE SCORES BY SELECTED DEMOGRAPHICS
IVDUs

	DECREASE (%)	NO CHANGE (%)	(PERFECT) (%)	INCREASE (%)
RACE/ETHNICITY				
White	8	33	(--)	58
Black	50	25	(--)	25
AGE				
Under 30 Years	40	--	(--)	60
30 to 39 Years	--	37	(--)	63
40 Years or Older	33	67	(--)	--
EDUCATION				
Not High School Graduate	--	25	(--)	75
High School Graduate	29	14	(--)	57
College	20	60	(--)	20

SUMMARY

To investigate the effectiveness of formal AIDS education, brief questionnaires were constructed for use immediately prior to and following the educational sessions. Separate instruments were developed for the four primary audience groups: IV drug users, gay or bisexual men, health care and social service providers, and the general public. These instruments differed in terms of language complexity and emphasis; they all, however, tapped the same basic areas of information.

The assessment of the effects of formal AIDS education involved three dimensions: knowledge, attitudes, and behavior. While the most important indicator of the effectiveness of health education is the degree to which individuals educated actually demonstrate changes in behavior, measurement of such behavior change was outside of the scope of this study. Instead indicators of behavioral intentions were used. Each questionnaire thus assessed a number of issues from cognitive, affective, and, to a more limited extent, behavioral perspectives.

Not all of the 29 I&E contractors administered the questionnaires. Eleven "intensive" sites which had large educational components and sufficient staff to administer and collect the instruments were selected. January 1987 was chosen as the testing period, and all individuals who attended educational presentations given by these 11 programs during that month were included. A total of 1,048 completed and usable instruments were returned. Of these, 429 (or 41% of the total) were filled out by members of the general public, 289 (28%) by gay/bisexual men, 309 (29%) by health care or social service providers, and 21 (2%) IVDUs.

Twenty-two educational sessions were conducted for member of the general public during the study period. Slightly over half (52%) of these general public audiences were female, and almost three-quarters (74%) identified themselves as white. Slightly more than two-thirds (70%) were 39 years or younger, with a mean age of 31.5. Almost a third (32%) had attended/graduated from college and an additional 14 percent reported graduate education. Among these general public attendees, 54 percent showed an increase in basic AIDS knowledge subsequent to the educational presentation. Moreover, 70 percent exhibited an increase in appropriate attitudes and 77 percent indicated a positive change in intended behaviors. Fully 98 percent reported that they would recommend the presentation they had attended to others.

Over 80 percent of the gay or bisexual men who attended the 23 educational sessions held during the study period identified themselves as white. The mean age of these men was 33.4 years. These men tended to be relatively well educated, with 49 percent reporting college attendance/graduation and 22 percent indicating graduate education. Only 15 percent of these gay or bisexual male participants showed a post-test knowledge increase. This low proportion of positive increase, however, reflects their high knowledge levels prior to the session; there was little room for score improvements. In terms of attitudes and intended behaviors, the gay or bisexual male participants showed more substantial gains: 56 percent had an increase in appropriate attitudes and 70 percent showed intentions to change their behaviors in positive ways. Fully 99 percent of the attendees indicated that they would recommend the educational presentation to others.

Seventeen educational presentations were made to health care and social service providers during the study period. These participants were overwhelmingly female (82%), and more than two-thirds (71%) identified themselves as white. Their mean age was 38 years. More than half (53%) reported being college graduates and an additional 34 percent indicated graduate education. As with the members of the general public and the gay or bisexual men, these attendees also exhibited positive educational benefits. Among these providers, 35 percent showed an increase in their post-test knowledge scores, 80 percent had an increase in appropriate attitudes, and 77 percent indicated positive change in intended behaviors. Fully 99 percent reported that they would recommend the educational session they attended to others.

Evaluation forms were received from one I&E session conducted during the study period for individuals identified as IVDUs. All of these attendees were male, and their average age was 35 years. Just over three-quarter (76%) identified themselves as white, with the remainder describing themselves as Black. The majority (43%) reported being high school graduates. In contrast to the other audience groups, this group exhibited the least positive change in all three dimensions of interest. Less than a third (29%) showed an increase in knowledge, and, in fact, 43 percent exhibited a decrease in post-test knowledge scores. Changes in attitudes and intended behaviors fared somewhat better: 33 percent showed an improvement in appropriate attitudes and 50 percent indicated positive intended behaviors after the educational session.

Based on these results, the California AIDS Community Education Program overall was very successful during FY 1986-87 in producing the intended effects on its target audiences, at least those reached by face-to-face interventions. Educating IVDUs with traditional methods resulted in the least success. In light of the general difficulties in reaching IVDUs, educational efforts directed to them may need specifically to tailor materials to their educational abilities, cultural backgrounds, and life experiences if we are to be successful in controlling the spread of AIDS.

In addition to assessing general changes in participants' knowledge, attitudes, and intended behaviors, we also explored which educational interventions were most closely associated with producing these positive effects. It appears that aspects of the educational strategies used, such as group size, number of methods, and session length, have differing effects on the three dimensions of interest. Knowledge change appears to benefit from shorter sessions (e.g., two hours or less). Larger groups and didactic, often single, methods also seem effective in producing positive knowledge gains. In contrast, small groups involving multiple interactive methods appear to be most effective in producing attitude and behavioral intentions change. Longer sessions (e.g., three hours or more) were more effective than shorter presentations.

Chapter Five

HOMOSEXUALLY ACTIVE MEN AND HIV INFECTIONS: A VIEW FROM THE FIELD

INTRODUCTION

Human Immunodeficiency Virus (HIV) infections are spread by particular behaviors and exacerbated by elements of the lifestyles associated with them. Sexual activities that allow viruses to enter bloodstreams (most notably, unprotected anal and vaginal intercourse with infected partners) are the chief routes of infection.[1] The sharing of needles by intravenous drug-users is a second practice producing HIV infection, AIDS-Related Conditions (ARC), and Acquired Immune Deficiency Syndrome (AIDS).[2]

The lifestyles associated with these infection-spreading practices are given meaning by particular experiences, relationships, circles, networks, institutions, and subcultures. To understand how and why this epidemic has progressed to date, and the role of public health educational activities in affecting its course, it is necessary to assess patterns of sexual behavior and drug use on some very distinctive turfs.

Since at least the middle of the nineteenth century, homosexual men have had meeting places in which to translate their feelings into behaviors, and different settings have been associated with distinctive sensibilities.[3] During the 1960s, choosing one of several in-group terms used to refer to these sensibilities, politically minded homosexuals began to characterize their ways and worlds as "gay."[4] Gay world views, values, and customs have shaped the experiences, relationships, networks, and institutions of self-identified homosexual men. Gay life has flourished particularly in cosmopolitan cities and in resort areas, but it is also found in medium-sized cities, suburbs, and small towns.[5]

In cosmopolitan areas, gay men have had the easiest time finding women willing to permit them a taste of bisexuality.[6] In every locale, they have mixed with other men for whom sexual intimacy with males is an occasional experience, not precluding heterosexual relationships.[7] Hence "sexually active," "bisexual" men and women have developed HIV infections and have sometimes passed these infections on to their completely heterosexual partners.[8]

There is some overlap between the turfs of men and women whose sexual histories may have left them infected and the worlds of men and women at risk because of their drug-using practices. The two sets of practices which are most responsible for this epidemic overlap to the extent that people who use infected needles while administering intravenous drugs may also participate in unsafe sexual activities. Yet the turfs inhabited by gay needle-sharers are likely to be sub-sets of basic gay male subcultures, while the turfs of drug-users who are hiding their homosexual behavior, or their bisexuality, are likely to be based less on sexual orientation than class, minority subculture, and neighborhood.

To affect the behavior of individuals involved in such lifestyles and subcultures, we must understand **who these people are, where they can be found, and why they engage in risky practices.** Behavior is governed not only by information and understanding, but by values, attitudes, psyches, and emotions, as well as pulls and pressures experienced within relationships, peer groups, institutions, and subcultures. Lifestyles are a product not only of personal experiences, but of participation in networks which provide partners for such experiences and in subcultures that shape the activities of such peer groups.

In the case of homosexually active men who identify and operate as "gays," three levels of influence operate: these can be called **micro turfs** (experiences and relationships), **middle-level turfs** (circles, networks, and subcultures), and **macro turfs** (institutions, neighborhoods, and ecologies). Each turf has a distinctive nature and is characterized by specific patterns. The first section of this analysis introduces the origins and natures of these basic gay male turfs. Part two analyzes the changes in these turfs that have resulted from the AIDS epidemic. A final section makes recommendations based on these observations.

Nature of the Field Study

Present data about the effects of this epidemic and preventive education on male homosexual behavior, and about sources and levels of knowledge regarding HIV infections, comes largely from telephone polls and mail surveys.[9] There are limits to what can be learned from these traditional research tools. For example, respondents must be willing to talk explicitly about personal questions to strangers who telephone them, or to complete and return complex questionnaires sent through the mail.

Like all such polls and surveys about homosexuality, AIDS-related surveys have tended to sample among the most educated, psychologically well-adjusted, and civic-minded segments of the population. Willingness to divulge gay identity is correlated not only with degree of politicization about homosexual orientation, but also with social class. Therefore, the use of conventional sampling techniques tends to underrepresent men who are concealing their homosexuality as well as those men, who for reasons of culture or socioeconomic status, are not as readily accessible.[10]

First-hand involvement and long-term observation are the research techniques used by anthropologists. The use of anthropological methods in the study of American minority groups is an established academic tradition that has been applied to the turfs of homosexuals, drug-users, and others involved in activities considered deviant and illicit.[11] The anthropologist in the field encounters turfs that are generally private and personal. The quality of the information obtained and the conclusions drawn depend on affective and interactive capabilities as well as cognitive and analytical skills.

The method of selection preferred by investigators of illicit drug-using subcultures is called "snow-ball sampling."[12] Since both the identification of respondents and the acquisition of authentic information requires personal trust, this method, also known as chain-referral sampling, calls for the use of field interviewers who can bridge the professional subcultures of the researcher and the special interest or distinctive subcultures of respondents. Early in the research, interviewees are asked to legitimize the interviewer within his circles and networks, to make introductions and to facilitate arrangements that will permit interviewers to establish trusting personal relationships with subsequent interviewees.

Alfred C. Kinsey developed the methodology in the late 1940s and early 1950s for his pioneering studies of sexual behavior.[13] In the late 1960s and early 1970s, this methodology was adapted to the study of homosexual behavior by the researchers who inherited his Institute for Sex Research.

The analysis in this chapter is based upon fifteen years of one social scientist's anthropological research on sexual behavior. Since 1982, the focus of this research has been the effects of the AIDS epidemic on gay male turfs in the San Francisco Bay Area. During the last twelve months, this on-going ethnography has focused on assessing the impact of the state-sponsored AIDS health education undertaken to date.

Constraints of time, budget, and methodology have dictated not only that the bulk of this state-sponsored research be undertaken in San Francisco, but also that it be conducted on sites and within peer groups known to the field researcher through previous research. Supplementary information gathered during site visits and interviews in Sacramento, Los Angeles, San Diego, and Sonoma counties were even even more dependent on the past work and personal contacts.

Formal, unstructured interviews of up to two hours were conducted with twenty-five respondents selected by the interviewer through snow-ball sampling in the four urban sites of study. The observations, opinions, and personal accounts of these interviewees were authenticated and extended at all of the sites by informal conversations conducted with people who participate in what is called **exclusively sexual, socio-sexual,** and **community subcultures.** Hundreds of hours of observation were conducted in sites representative of generic gay male subcultures. Relevant written data, ranging from gay publications of every sort to general interest books, magazines, and newspapers, were gathered and reviewed. In sum, hundreds of homosexually active men were observed, talked with, and read about in the course of this field study.

Ethnographic methods gather information as broadly and authentically as possible. This evidence is then analyzed in a way that illuminates patterns and suggests directions. The results of such field research are, by definition, impressionistic and interpretative. The findings are inevitably suggestive and subjective. The conclusions necessarily reflect the character, competence, and constraints of the analyst. The major limitation of this analysis is that the field researcher was unable to observe, interview, and assess the full array of gay male institutions, particularly those with distinctive patterns associated with age, class, race, ethnicity, neighborhood, and region.

MALE HOMOSEXUAL TURFS

Experiences, Relationships, and Lifestyles

In the late 1960s, researchers from the Institute of Sex Research at the University of Indiana, commonly referred to as the Kinsey Institute, were employed by the National Institute of Mental Health to conduct the most sophisticated social scientific research on homosexual behavior ever undertaken.[14] First, ethnographic research was undertaken to identify and analyze gay male subcultures and their locales. Then, to test hypotheses and

to broaden quantitative analyses, credible former and active subcultural participants were hired to obtain comprehensive sexual histories from a sample of 682 homosexually active men recruited at representative gay male locales in the San Francisco Bay Area.

When these data were analyzed, the following was revealed about homosexual practices in San Francisco during the late 1960s and early 1970s:

- Almost all of the homosexual men had used a considerable variety of sexual techniques during the year prior to the interview. Almost none of them had exclusively engaged in one particular form of conduct. Fellatio was the sexual technique most frequently employed by members of both races. While some form of hand-genital contact was the technique next most frequently employed by white men, the Blacks were next most likely to have engaged in performing anal intercourse. About half of the white men most preferred either having fellatio performed on them or performing anal intercourse on their partners, while more of the Blacks preferred performing anal intercourse.

- The fact that homosexual men and women are apt to engage in a number of different forms of sexual contact does not mean that they have no favorite. When asked to state their preferred sexual technique, virtually all of our respondents did so. Men and women of both races specified receiving oral-genital sex. The males also mentioned performing anal intercourse, and the Black females, body-rubbing.[15]

Anal intercourse involving reciprocated, androgynous role-playing (with both performing the insertive and receptive roles) became popular in gay male turfs populated by homosexual men whose attitudes and values were shaped by the sexual liberation movements of the 1970s.[16] Here is the origin of that particular population of homosexually active men who have been at the mercy of HIV infections and their consequences.

In the late 1970s, gay men were invited to participate in two extensive surveys of their attitudes and behavior conducted by self-identified gay liberationists. After analyzing the answers to questionnaires filled out by 1,038 self-selected gay male respondents from around the country, James Spada reported that 76 percent engaged in anal intercourse "in the course of their lives." He found that 51 percent "alternate freely between between the two (insertive and receptive roles in anal intercourse) at the present time." He wrote that 23 percent checked the category "usually bottom man."[17] Spada concluded:

- Among the men in this survey, anal intercourse is neither as popular nor as prevalent as fellatio. But more than three-quarters of the respondents (76 percent) enjoy it, and only 12 percent indicated that they do not. Anal intercourse was frequently mentioned as the most intimate act between men, the sexual activity holding the most emotional impact. Quite a few men indicated that they do not engage in anal intercourse unless their feelings for the partner are particularly strong. A majority of those who do not enjoy this activity experience too much discomfort for it to be pleasurable . . .[18]

A more ambitious survey from the same time period is even more precise about documenting the range of practices engaged in during the late 1970s by American men who identified themselves as gay and were community-oriented enough to respond to what were publicized as liberation-serving projects. Production of The Gay Report was overseen by Karla Jay and Allen Young, prominent movement-identified journalists. After analyzing questionnaires from 4,400 self-selected gay men from across the country, Jay and Young reported that 42 percent played the receptive role in anal intercourse "always," "very frequently," or "somewhat frequently."[19]

In homosexual love-making, as in its heterosexual counterpart, there is a definite progression in the development of intimacy. Individuals proceed to practices requiring greater levels of vulnerability and sensitivity as they reach greater levels of trust and comfort with a lover. Inhibitions about playing the receptive role in anal intercourse stem as much from psychology as from hygiene. A man is likely to feel that to be the receptive partner in intercourse is to undertake the sexual role traditionally assigned to none but women. A high level of comfort and intimacy are thus often needed to mitigate possible fears about being considered weak and womanly. For most homosexual men, playing the receptive role in anal intercourse is the most intimate sexual experience of all.[20]

Few American men are raised in environments in which they are permitted to develop with other men sustained, loving relationships in which physical intimacy, erotic stimulation, and sexual release play a part. Furthermore, with the stigmatizing of their gender-role departures, homosexual men are neither taught the relationship skills, exposed to the models, nor presented with the rewards and sanctions that promote intimacy and deep commitment.

Even when homosexual men learn how to manage sustained, rounded relationships with other men, male couples adopt distinctive arrangements and experience special problems because both partners are of the same sex.[21] They have violated conventional

sex roles by pairing with a member of their own sex, and must face themselves and the world as homosexuals. Much of their time and energy must be spent "coming out," i.e., developing and revealing gay identity; thus, the capacity to learn sexually, emotionally, and socially becomes much of the basis for selecting partners and sustaining relationships. Barring the development of shared projects and meaningful outside involvements (such as doing business or raising children), and in the absence of legal and social support and broader common interests, such partnerships may lack the glue that holds many heterosexual couples together.

To the extent that men with homosexual feelings are born, as we all are, with pressing sex drives, but are impelled to pursue their desires for involvement with other men, they must find intimacy in unconventional ways.[22] Some of these experiences take place in relationships that are limited to the homoerotic and are short in duration; others occur within relationships that are fuller, longer, and more complex.

Gay men have homosexual experiences to develop the self-awareness and the self-confidence they need to identify as gay. The learning process resulting in sexual identity involves social information. Yet with homosexuality, as with heterosexuality, learning is also affective, a matter of psyche and emotion, as well as cognition or intellect. Rarely do facts, descriptions, and instructions substitute for experience.

What a homosexual male learns in the process of "coming out" is determined by the nature of the lifestyle, or lifestyles, he embraces during this process.[23] The lifestyles of some gay men remain fixed for long periods of time, and even life-times. Other gay men enjoy different lifestyles for varying lengths of time at different ages and stages. Among homosexually active men whose lifestyles involve "multiple partners," the most significant differentiating factor is the particular subculture, or subcultures, in which they find their sexual partners.

Since circumstances and society make it so difficult for them to identify as gay and to sustain multifaceted life-long relationships, many homosexual men must rely on transient partners for emotional and physical intimacy. Drawing on skills and sensibilities they develop in the process of coming to grips with their homosexuality, even members of sustained gay male partnerships may opt for, or are forced to endure, relationships that are "open" rather than "monogamous."

The most dramatic evidence of both the learned ability to compartmentalize sex and love, and the circumstances responsible for it, are the circles, networks, subcultures, and institutions existing primarily to provide consenting homosexual partners with intimate experiences which are sex-focused, transient, and secret. These subcultures are also enjoyed by homosexually active men who present, or have chosen to present, themselves elsewhere as heterosexuals. Such bisexual men are thought to be particularly numerous in Black, Latino, and Asian cultures.[24]

Circles, Networks, and Subcultures

For as long as there have been cities, there have been locales affording men intimate partners who can be left behind, or at least kept separate from daily life. For heterosexual men, these partners have traditionally been female prostitutes and mistresses, and, more recently popularized, "one-night" singles scenes. Men impelled to seek out homosexual experiences, have long had not only male prostitutes and "kept boys," but also subcultures filled with other men willing to limit both the scope and the duration of their consensual dealings. These subcultures can be characterized by the modes of pursuit and consummation, referred to in gay argot as "cruising" and "connecting."

In some of these homosexual subcultures, such as those institutionalized in bars, verbal negotiation is required, some interpersonal and social dimensions are integral to the sexual goings-on. In others, such as the illicit subcultures found in public men's rooms, the search for sexual partners must be done non-verbally, or with none but language and gesture related to sexual intent. In this later world, both the "cruising" and the "connecting" are carried out secretly with little or no opportunity for fuller relationship development.[25]

Over time, the non-verbal navigation of intimacy has become associated with one set of gay male subcultures, here called exclusively sexual, while the interpersonal negotiation of intimate exchanges has become the hallmark of another set, here called socio-sexual. Both exclusively sexual and socio-sexual subcultures are now associated with distinctive locales and particular sets of customs and practices.[26]

Wordless "cruising" and quick "connecting" are the norm in subcultures that crop up in certain public men's rooms and in certain sections of open parkland. What makes these exclusively sexual turfs unique is that engagements are consummated, in violation of the

law, in public. Silence is the key to secrecy, while the flow of men, and the isolation of facilities, maximizes anonymity. Therefore, there is less frequently the relationship development, the protected privacy, and the quarters that facilitate anal intercourse. Instead, the sexual activities that predominate in such exclusively sexual subcultures are characterized in gay male argot as "stand-up sex." They include voyeurism, poseurism (exhibitionism), fantasizing, masturbation, reciprocated masturbation, and oral-genital contact, sometimes but not always resulting in orgasm.

Socio-sexual gay male pursuits generally take place along selected sidewalks in particular neighborhoods, and also in nearby hotel lobbies, bars, restaurants, parks, and amusement areas. Men "cruise" in public, but "connect" in private. Since in socio-sexual relationships, some degree of personality and duration must be established before sexual connection, the trust and vulnerability required for practices such as receptive anal intercourse are more likely to develop here than in exclusively sexual situations.

Over time, experiences enjoyed in socio-sexual gay male subcultures have resulted in the development of verbal relationship skills and an expansion of turfs. Arrangements between male prostitutes and their customers, and between "kept boys" and their male benefactors, are now greatly outnumbered by relationships among homosexual men interested in intimacies, albeit transient, that are egalitarian and consensual, longer-term affairs, well-rounded partnerships, and male-male bonds of more traditional kinds.

During the 1950s and 1960s, a movement surfaced of politicized homosexuals eager to improve existing gay ways by installing them in safer, more attractive, and more supportive environments and by infusing them with more enlightened mores. Self-styled gay liberationists banded together to promote and institutionalize their beliefs in "community." For the first time, the exclusively sexual and socio-sexual turfs were joined by gay-identified enterprises oriented around politics, civic improvement, business, and culture. These community endeavors have permitted homosexual men new ways of relating. They have encouraged gay men to treat each other as friends, colleagues, neighbors, and citizens and they allow them to navigate personal relationships without either highly social or heavily erotic agendas.

With the emergence of "consciousness-raising" and "community-building," exclusively sexual and socio-sexual turfs became more "civilized." Participants in exclusively sexual subcultures were encouraged to abandon illicit public places, such as parks and men's rooms, for privately run accommodations open to fraternal memberships, such as bath

houses and sex clubs. Prostitution was professionalized. Businesses oriented around socio-sexual enterprise, like bars, developed civic, cultural, and political agendas. Gay neighborhoods became known for their concentrations of responsible citizens as well as for their "cruising."

Yet these movement-inspired developments also affected the repertoires of intimate homosexual practice. In gay-owned and run bath houses and sex clubs, men in search of transient, sex-focused experiences were afforded time, privacy, bathing facilities, and like-minded partners. The exclusively sexual subcultures they housed came to include patrons willing to engage in anal intercourse with passing strangers.

In exclusively sexual subcultures (such as those found in public men's rooms and their outdoor equivalents; erotica-focused theaters, arcades, and bookstores; and traditional bath houses and sex clubs), the circles of approving observers and engagers are small, silent, and shifting. The patrons of institutions harboring exclusively sexual subcultures are men who periodically congregate for homoerotic experiences in the midst of ever-changing circles drawn from vast networks of like-minded, like-behaving men.

Part of what keeps such places safe and exciting is the elusiveness and anonymity of their participants. Individuals never know who they will encounter at any time in any spot, but they have learned that almost anyone who shows up, looks around, and loiters in such places is, if only by virtue of his acquiescence to prevailing signals and sensibilities, likely to abide by existing customs and to behave according to well-established rules and roles.

Socio-sexual subcultures permit their patrons to develop personal relationships, to establish and enjoy friendship groups, and to endow even sporadic visitors with identities, personalities, and biographies. This development of a social face has resulted in more relationships with the depth and the intimacy to allow anal intercourse to be practiced. Socio-sexual turfs also came to be filled with men for whom enjoying unbridled intimacy and the escape from every sex role limitation were emotional and political missions.

A result of this early "consciousness-raising," therefore, was an unprecedented degree of sexual, sensual, and psychological experimentation, with drugs used to permit relaxation, to heighten senses, and to "expand consciousness." Consequently, there was more role-reversing, reciprocated anal intercourse among men than ever before.

Before the arrival of liberation-minded homosexuals, even very social gay circles and networks contained vast numbers of men interested mainly in finding sexual partners. As these enlightened, community-oriented homosexuals began to settle particular neighborhoods and to develop public-spirited agencies and businesses, exclusively sexual and socio-sexual activities were deemed inappropriate. The arrival of homosexual institutions in which "cruising" and "connecting" were discouraged, or at least pursued in contexts that forced attention to broader endeavors, has, in turn, hastened the establishment of gay-identified circles and networks oriented around business, politics, service, relationships, and culture. By 1981, this community infrastructure was in place. The epidemic has hastened its maturation and extended its influence on exclusively sexual and socio-sexual turfs.

Gay newspapers permitting individuals to advertise for consenting sexual partners, or to solicit paying clients, are now self-policed by circles of gay-identified professionals and their clienteles. The "cruising" done in eating and drinking establishments, and the "connections" that subsequently take place in private quarters, are presided over by staffs of experienced gay professionals and by circles of regular patrons of self-identified gay men.

Institutions, Neighborhoods, and Ecologies

If the individuals and the peer groups are to be reached to curtail infection-spreading homosexual practices, one must know where to find gay men. Some male homosexuals, particularly if they are celibate, or involved in secret affairs, have no contact with other homosexuals apart from conventional contexts, which are filled with heterosexuals. Because of their immersion in mainstream culture, men of this kind can be called "integrated." Integrated homosexual men tend to be in upper class or lower class institutions and neighborhoods rather than middle or working class. These upper and lower class circles are typically in distinctive "downtown" neighborhoods within large and medium-sized cities.[27]

Other homosexual men limit their gay involvements to private socializing. Their private social circles thrive in contexts sophisticated about human differences and tolerant of lifestyle diversity, such as cosmopolitan cities and resorts, liberal universities, the worlds of art and entertainment, and certain helping, service, and commercial sectors.

City downtown areas, with their offices, cultural centers, single-room occupancy hotels, and busy depots are known not only for density and transiency, but also for extremes in income and world views. Thus the first institutions to harbor gay male subcultures appeared in downtown areas. Dense clusters of institutions harboring exclusively sexual and socio-sexual subcultures, most notably, "active" public men's rooms, outdoor strips for consensual or commercial "cruising," bath houses, singles bars, and theaters, arcades, and book stores featuring erotica, continue to be found in such central city neighborhoods.

As a city's homosexual subcultures develop social and civic faces, they spread to more outlying neighborhoods distinguished by openly gay citizens and clusters of socio-sexual businesses (most notably, bars and restaurants) and community enterprises (newspaper offices, book stores and news depots, non-profit associations, offices of community-identified professionals, and the like). The larger and more cosmopolitan the city, the greater the likelihood that it will develop a variety of gay neighborhoods with distinctive histories and ambiences.[28]

The smaller a locality, and the more recent its development of organized homosexual life, the more traditional its homosexual subcultures are likely to be, and the more limited their institutionalization. All throughout California there are small towns and suburbs with none but locales (public men's rooms, stretches of public parkland) harboring exclusively sexual subcultures. Where gay life is able and allowed to develop a social face, it appears first in the surfacing of bars and restaurants with reputations for attracting homosexuals.

As cities grow older, larger, and better developed, and their populations more class-stratified and more pluralistic, their gay male subcultures also become more variegated. The primitive downtown public men's room and parkland "scenes" are supplemented with public bath houses and erotica centers that institutionalize exclusively sexual subcultures. Bars and restaurants become more distinctly upper or lower class in ambience, and prostitution of both classes flourishes in their respective vicinities.

The long-term patronage patterns of different turfs vary considerably. Particularly in towns and cities with unchanging populations and few visitors, the patrons of gay male subcultures tend to be regular, stable, and loyal to particular institutions. The best known gay neighborhoods and institutions, in the biggest and most popular Californian cities

(San Francisco and Los Angeles), attract ever-changing flows of patrons from everywhere in the nation.

As social and civic consciousness develops, the fabric of exclusively sexual and socio-sexual life becomes even more complex. "Cruising" locales begin to be known not only for the class backgrounds of their patrons, but also for other specialized characteristics: gender (e.g., lesbian vs. gay, predominantly male, bars); functional and fetishistic specialty (e.g., "show," "dance," "transvestite," "leather," "western," "back-room sex," and "video" bars); race and ethnicity (e.g., Black, racially mixed, and Latino bars); neighborhood affiliation (e.g., West Hollywood vs. Silverlake bars; Tenderloin, Polk Street, Castro, South of Market, Haight Street, and Pacific Heights bars); and regional ecology (e.g., East Bay and South Bay vs. San Francisco gay and lesbian turfs; Bay Area vs. Russian River turfs; Los Angeles vs. Palm Springs and Laguna Beach turfs).[29]

By encouraging homosexuals to think of their ways and watering holes as belonging to an all-embracing unit--the gay and lesbian community--liberationist philosophy endowed every strata of organized homosexual life with greater consciousness, more coherence, and legitimacy. Inspired by this philosophy of inclusiveness, community-minded gay men have been more inclined than others to expose themselves to the full array of exclusively sexual and socio-sexual subcultures as well as to community institutions and events. Yet, many patrons of one sub-subculture want nothing to do with the activities and orbits of other homosexual milieus. Indeed, gay men are often as judgmental as non-gay people about homosexual lifestyles.

AIDS-RELATED CHANGES

Because the AIDS Task Force of the U.S. Centers for Disease Control did not provide precise data and an informed consensus about disease-spreading practices,[30] the acquisition and the dissemination of information about risky activities have been piecemeal. As a result of this early lack of clarity about the etiology of the disease, people vary in their understanding of the nature of this epidemic, its implications, and, as a result, in the behavioral adaptations to be made.

Research on people who have altered addictive patterns of smoking, drinking, eating, and using narcotics shows that many do so without seeking or receiving treatment.[31] They do not visit counselors nor seek organized therapy and support groups.

Their so-called "natural" processes of lifestyle alteration, referred to also as "spontaneous remission," reveal other common patterns. Dramatic emotional developments prompt them to swear off "addictions." They sustain their vows of modification, or abstinence with the help of supportive people in their normal peer groups and daily environments.

This field research has revealed that the same patterns characterize the lives of many homosexually active men who have wrestled with the challenges posed by AIDS. While many have turned to counselors and groups for inspiration and support, others have simply vowed to forego risky sexual practices and adopt immunity-bolstering lifestyles in the wake of powerful personal experiences, as a result of gradually dawning understanding, and through exposure to altered values and pressures within peer groups. Understanding how male homosexual behavior has changed as a result of this epidemic requires consideration not only of knowledge levels and psychological states in the individuals and groups most affected, but also of the social circumstances that have prompted them to alter practices, and of the situations that have permitted them to sustain significant lifestyle alterations.

This research finds that male homosexual turfs consist of individual experiences, relationships, and lifestyles linked through circles, networks, and institutions to subcultures, neighborhoods, and broadly based social ecologies. AIDS-related changes in these turfs are, therefore, both individual and interpersonal matters. The circles and networks responsible for inducing vast numbers of individual changes are conventional mediating structures (family systems, friendship groups, work units, voluntary associations, etc.) as these have been adapted to accommodate gay and lesbian needs, wants, and lifestyles.

Knowledge Levels

In 1981, AIDS was recognized as a disease, possibly of epidemic proportions. Since that time a flood of information about AIDS-related diseases has appeared in the popular press, the gay press, and scientific journals. Brochures, posters, and articles linking **pneumocystis carinii** pneumonia and Kaposi's Sarcoma to homosexual activity began to blanket the gay and popular press and to be available in community-based and public health institutions in 1983, with a second major news blitz in 1985. Both of these barrages of publicity emphasized the dangers facing homosexually active men and needle-

sharing intravenous drug-users. News stories about AIDS, in the fall of 1986 and the spring of 1987, have emphasized the risks and dangers to heterosexuals.

One of the most unusual aspects of AIDS-related educational activity to date is that a great deal of it has been conducted by the mass media. While special interest settings, such as community agencies, STD clinics, and other public health facilities, have played important roles in delivering health education messages, the mass media has served to focus massive public attention on the epidemic. Yet topics publicized and information imparted are only two of the factors leading to a spread of knowledge.

It appears that information becomes knowledge to the degree that it has individual meaning. Certainly the more intellectual members of the gay community have been helped by summaries and overviews, books, and long, analytical articles in major magazines and newspapers. However, individuals interviewed have become knowledgeable about AIDS not simply from posters, brochures, news stories, and scientific reports, but by dealing with illness and disease firsthand. For others, visual and oral media have been helpful.

Before the fall of 1986, the slants and facts in reports and publicity made it clear that AIDS was a problem for homosexual men. To the extent that such men have been gay-identified, well-educated, and community-oriented, they have been inclined to follow the news, digest periodic updates, to take stock of the tolls firsthand. They arrive at their own understandings with the help of friends, relatives, and service-providers who are learning simultaneously.

For homosexually active men unwilling to think of themselves or their behavior as "gay," there has been a very natural tendency to tune out information about AIDS, and a propensity to avoid the turfs in which most the teaching and learning about HIV infections has taken place. There have been benefits as well as costs to this behavior. Men who deny being gay tend to turn for excitement and release to exclusively sexual subcultures, and here, apart from bath houses, they find turfs in which "stand-up" sexual activities predomoinate. Even in bath houses, where cheap row-rooms as well as lockers and facilities are available for as long as eight hours or more for about ten dollars, many of the patrons interested in eroticism limit themselves to "stand-up sex."

Awareness about and understanding of this epidemic is highest in the ranks of gay-identified men who immerse themselves in community enterprises and involve themselves

in socio-sexual gay male turfs. To a lesser extent, the same is true of men who favor the more social of exclusively sexual locales (prostitution, bath house, and fetishistic sex club subcultures as opposed to erotica, public men's room, and public parkland ones), since the more social of these turfs require, or at least encourage, their participants to engage in conversation. It is during "bed-talk" that the most intimate topics are discussed. Whether the topic of sex enters into such discussions, and whether HIV infections and their transmission become a topic, depends on the motives and dynamics governing their relationships, which are in turn shaped by the insights, values, interests, and behavior of individuals in surrounding circles and networks. When such "mediating institutions" are community-oriented, peer group pressures to ignore danger and to risk illness are minimized, while peer group pulls to assess risk and to minimize dangerous activity are maximized.

The educational levels and psychological capacities of homosexually active men vary. Since information is both disseminated unevenly and absorbed differentially, there are great variations in the understanding of this epidemic. Without systematic, cross-subcultural research, it is impossible to specify exact gaps in knowledge, and the reasons for their persistence. Still, this ethnography reveals some common patterns.

In the absence of risk-assessment research, medical researchers, public health officials, and subsequently journalists, and members of the public have associated with risk and disease not only semen-exchanging anal intercourse and fellatio, but every sexual technique, from voyeurism to kissing to mutual masturbation to non-orgasmic oral/genital sex and anal intercourse. There has been a tendency to warn against "promiscuity," "multiple partners," and bath houses rather than against specific infection-passing practices, most notably unprotected, receptive anal and vaginal intercourse.

Confusion has resulted from the failure to explain exactly which dimensions of gay male lifestyles are responsible for spreading infections and producing illness. The hue and cry about promiscuity and the endorsements of sustained, monogamous relationships propelled many gay men to couple. The emphasis on multiple partners and particular institutions as sources of danger led them to believe that they were safe so long as they avoided bath houses and limited their sexual activities, including unprotected anal intercourse, to a single partner, or a small number of intimates. But when they shifted their patronage to socio-sexual subcultures and limited themselves to personalized flings, long-term affairs, and sustained couplings, they were likely to develop the trust, love, and

experience that encouraged them to move beyond the less intimate and in, most cases, safer, practices that novice partners and participants in exclusively sexual subcultures tend to prefer, and instead to engage in anal intercourse. To the extent that HIV infections and their progress are correlated with repeated exposure to infected semen, the failure to be precise about the dangers of unprotected anal intercourse in every relationship has contributed greatly to this epidemic's toll.

Some gay men, with varying degrees of clarity and detail, have developed understandings that particular viruses are responsible for infecting and disarming particular elements of immune systems, thereby allowing the onset of particular types of pneumonia and cancer, and that these viruses are contained in semen and produce infection when that semen comes into contact with blood. Slowly but surely, it has become clearer that the risk lies not in homosexual behavior per se, nor in multiple partners per se, nor in participation in particular institutions and subcultures per se, but in virus-spreading sexual practices, most notably receptive anal and vaginal intercourse.

It has taken equally long to develop an understanding that the lethal cancer and pneumonia, long used as official markers of AIDS, are but the final stages in a deterioration of the immune system brought about by worsening infection. Those interviewed are aware that swollen lymph nodes are a symptom of exposure to infecting viruses; that this exposure results in the production of antibodies that can often be detected through particular types of blood tests; that many "antibody positive" men show no symptoms whatsoever, but are probably infectious; and that no one really knows exactly how many homosexually active men have been infected, or what the long-term consequences of their "antibody status" are, other than that there is permanent infection of the immune system that will result in distinctive illnesses as it worsens. There is growing awareness that certain mental problems, such as memory loss, irritability, and depression, and certain physiological symptoms, such as dramatic weight loss, thrush, and shingles, are such AIDS-Related Conditions.

Other important details are less clear. Few of these interviewed seem to realize that "sero-conversion," i.e., the experience of having the blood produce antibodies in response to exposure to HIV, is itself often associated with a bout of characteristic symptoms (fever, rashes, aching muscles and joints, diarrhea, and weight loss).[32] There is little sense that the degree to which any individual has become sick might be traced to the frequency

with which he has participated in infecting sexual practices or in immunity-debilitating activities.[33,34]

One respondent, a middle-aged homosexual man from the Russian River area, had just learned that he was antibody positive. His lover had found out that he was "positive" six months earlier but had not dared to confide in his partner. Both men, who had gotten all of their information about AIDS from television, magazines, and newspapers before receiving counseling at the test site, were so frightened about getting sick that they were unable to watch or to read anything more about AIDS.

This respondent lacked any sense that his sexual and social history might be factors determining the degree to which he had been exposed to infecting microbes, and hence the course that his infection might take. Upon inquiry, he revealed that he had linked up with his lover after being celibate for ten years, and that he had played the receptive role in anal intercourse no more than two or three times, and that he had lived "a monk's life" otherwise, and since. What he needed was information about how the status of his infection correlated with the various elements of his lifestyle, and how those elements compared with gay men who had been very much more sexually active and socially avant garde.

Stories such as this one suggest that there is still only a vague understanding that antibody positive men can maximize their chances of remaining symptomless and of avoiding ARC or AIDS by foregoing reinfecting sexual practices and by taking steps to keep their immune systems strong. There has not yet developed widespread understanding of why immune system strength is vital to virus-control and disease prevention, or of why health-promoting lifestyles and activities increase immune system strength.

Learning about HIV infections and their consequences is most facilitated by involvement in community-oriented gay turfs. Variations in the rate at which such education is taking place can be correlated with differences in the size, density, cohesion, and legitimacy of gay communities. Just as the pace of life has always been slower and more moderate outside the big, Californian metropolitan and international centers, the pace of gay living and loving has been also. Slower rates of infection, and slower perceived rates of deterioration into illness, seem to be one result of these differences in situation, culture, and lifestyle. Less alarm and anxiety about infection, disease, and death are concomitants.

Although there are community-oriented homosexuals as well as participants in exclusively sexual and socio-sexual subcultures in rural areas and small towns, especially in resort areas known for their sizable gay populations, such as the Russian River area, Laguna Beach, and Palm Springs, the development of community institutions requires large populations of lesbians and gay men who are willing both to make themselves known publicly, and to invest their assets in unpopular civic endeavors. Recognition and support from non-gay citizens and within larger systems is also necessary.

Each element of the extensive, multifaceted gay and lesbian worlds in the San Francisco Bay Area can be found also in the other large and medium-sized metropolitan areas in the state of California, such as Sacramento, Los Angeles, and San Diego. The suburban and small town homosexual scenes in Northern California have their counterparts in Central and in Southern California. Yet in each area, the homosexual turfs reflect the underlying cultures and conditions of the particular areas in which they are situated.

Los Angeles County is so immense and culturally diffuse that its homosexual world is also more stratified and segregated than its counterpart in the Bay Area. Most of the gay and lesbian businesses in Los Angeles have developed community consciousness. The 1987 edition of their Community Yellow Pages, which, because of AIDS, is smaller than the year before, for the first time in its six year history, lists almost 2,000 advertisers and contains about 200 pages. But there are large enterprises and whole swathes of gay male subculture that operate with little or none of the gay civic consciousness. Many individuals interviewed have little to do with any but the partners and cliques they engage with personally, or sexually. There is none of the urban village atmosphere characteristic of the gay and lesbian communities found in San Francisco.

In this circumstance, the fact that there are well over 2,500 men with AIDS means something very different. People in Los Angeles, gay men in particular, are far less likely to come into day-to-day contact with news about AIDS, and sights that are reflective of the existence of people with AIDS, or even people with AIDS and their families and friends themselves. They are far less likely to know these affected people personally. As a result, there is something of a distance in perceptions that gay men are in the midst of a siege, and the fact that AIDS is a very real possibility for homosexually active men in the next few years, and that there are many more deaths and horrible tales to come as a result.

As Los Angeles is a center of show business, so many of its homosexually active citizens are in the entertainment industry. Career-oriented concerns about privacy and achievement keep many "closeted," and fear of revelation deters them from publicly contributing to community endeavors. It is easier for self-disclosing homosexuals to get and to keep mainstream jobs in San Francisco, and the infrastructure of the gay and lesbian community locally is extensive enough to sustain growing numbers of openly homosexual professionals who have adapted their fields of expertise to gay and lesbian clienteles and their particular concerns. As San Francisco is smaller, denser, and more tightly knit than Los Angeles, so gay and lesbian San Francisco is too.

Differing subcultural densities and degrees of social integration of gay people are perhaps most responsible for variations in the extent to which the epidemic is affecting values, attitudes, and lifestyles in Northern and Southern California. Since gay men in San Francisco are both more crowded together and more visible than their brethren in Los Angeles, many people up north, straight as well as gay, know personally, or have heard about, read about, or seen, men who are antibody positive, sick, or have died. The toll of the epidemic as of the end of 1986 has been similar in San Francisco and Los Angeles Counties (2,594 cases in San Francisco, 2,518 cases in Los Angeles). But in San Francisco, this number constitutes a much higher percentage of the population.

The Advocate is the largest and most sophisticated gay news magazine in the country. Between 1974 and 1984, it was based in the Bay Area. In 1984, its headquarters was moved to Los Angeles. In an interview, a veteran staff member commented on the differences in the response to AIDS in the two gay communities:

> I don't think that the impact on that actual depth level has hit this community as it has hit San Francisco, and perhaps to some degree New York City. I think we're all very aware of AIDS. We have big bill-board campaigns, and lots of flashy, celebrity media events. The use of celebrities in the AIDS campaign, and the rise of the big, glitzy AIDS Foundations have been more of an Los Angeles phenomenon. What I've seen happen more in San Francisco is what I call a more interpersonal phenomenon . . . In terms of differences in the two areas . . . geography has a great role to play in how communities and subcommunities organize themselves, and how people relate.

Similar to Los Angeles, in some regards, are Sacramento and San Diego. Both of these cities contain exclusively sexual and socio-sexual subcultures of the basic varieties and sub-varieties. However, their community institutions are newer, and hence less well-established, than those in San Francisco and Los Angeles; and having developed in a more

current environment in which homophobia, or at least overt discrimination against homosexuals, has been disavowed, these institutions boast sets of very professional lesbians and gay men. Most of the exclusively sexual and socio-sexual subcultures are integrated into the local gay community. They advertise in gay guidebooks and community newspapers. Furthermore, they carry literature and raise money for agencies working to disseminate information about AIDS.

In San Diego County, as of the end of 1986, the case-load numbered 382, less than a fifth what it was in San Francisco and Los Angeles Ninety cases have been reported by Sonoma County. And the caseload at the end of 1986 was even smaller in Sacramento, amounting to 65 cases.

Psychological States

The progress of this epidemic to date is a product not only of the unconventional practices of people who have engaged in infection-spreading activities and of the efforts that have been made to educate about dangers and precautions, but also of how experiences of living through this epidemic have affected people psychologically and emotionally. Current psychological states among homosexually active men represent a stage in a continuing evolution that has accompanied the progress of this epidemic and increasing knowledge about it. These states vary from individual to individual, circle to circle, and subculture to subculture.

In San Francisco and Los Angeles, where levels of gay community-consciousness are relatively high and both exclusively sexual and socio-sexual subcultures have been well-developed, the epidemic is more salient in the lives of homosexually active men than in Sacramento, San Diego, and other cities. Indeed, in the gay capitals of Northern and Southern California, there have been discernible stages in the way gay men have felt and behaved as the epidemic has progressed which are also affected by the way AIDS has been dealt with by the established non-gay powers in these big cities.

Led to believe that AIDS was an unpredictable, lethal assault resulting from any exposure to infected semen, most gay men in 1983 who had been at all sexually active assumed that their days were numbered and responded as their hearts and psyches propelled them. The prospect of experiencing whatever love they could find before the sudden arrival of doomsday encouraged many to persist with the particular sexual

practices that exposed them to reinfection by AIDS-related microbes, and by other sex-related infections as well. In some cases, these activities were enjoyed with transient partners. In other instances, they took place within love affairs developed in response to publicity about the dangers of promiscuity.

Men interviewed knew a great many men who simply accepted the diagnosis of AIDS as a death knell, and so they kept on drinking and doing drugs and having sex because they figured there was nothing left until death. They said they also knew gay men whose diagnoses led them to give up drugs and to begin exercising and to use holistic methods and homeopathic doctors. Among people who set out to control the virus, there was success seen, and yet many acknowledged that some people continued to use excuses to continue in high-risk activities.

One subject noted, when asked whether people he knew used condoms, that they were used, but that they sometimes broke. He explained that not using condoms and risking death were considered "hot." He said that some of his gay neighbors, who engaged in orgies, were convinced that the people who died of AIDS were the ones who felt guilty about their various sexual and drug-using practices. They felt that if they simply indulged in whatever practices they desired, but did not feel guilty about doing so, they would not be struck down by AIDS.

Debates over public health policy, such as bath house closings, dominated the news during 1984 and added to fears, resentments, confusions, and depressions. The resulting alienation undercut resolves to refrain from dangerous practices. Steps taken without the inclusion of community-oriented representatives from exclusively sexual and socio-sexual subcultures produced tension and divided gay masses from gay elites. Public health remarks about gay male patterns, their origins, and their variations gave credence to rebellious gay spokesmen who argued that efforts to publicize the epidemic and change behavior were, in fact disguises, for homophobia, sex negativity, and traditional morality.

In San Francisco, where the bath house issue was given much publicity, efforts to regulate these institutions led to drops in business and closings. As a result, opportunities were lost for reaching homosexually active men who relied on the most social and community-oriented of the gay male institutions harboring exclusively sexual subcultures. Since the options for engagement elsewhere were abundant, men inclined to connect in risky ways with transient partners were simply inconvenienced. While all but a few of the bath houses in San Francisco were eliminated, bath houses in nearby Berkeley,

Oakland, and San Jose flourished. Men interviewed in 1984 in an East Oakland bath house, whose clientele contained equal proportions of whites, Blacks, and Latinos, responded to warnings about the dangers of unprotected anal intercourse by saying they never went to bath houses in San Francisco, and indeed, for extra measures of safety, avoided engaging in sex with men from San Francisco.

To the extent that gay men were deluded into thinking themselves safe so long as they avoided San Franciscans and their bath houses, or restricted fluid-exchanging activities to single partners, or to small circles of intimates from socio-sexual or community settings, they increased their risk of repeated exposure to infected semen. This confusion might have been avoided if everyone had been told that unprotected anal intercourse engaged in with any person and in any quarter brought risk of infection. Indeed, they needed to understand that sustained, loving interpersonal relationships alone did not protect them from repeated unsafe intimacies.

In this period, efforts to deal with the epidemic were generally biomedical rather than educational aimed at minimizing risk or preserving health. Little attention was paid to the role of the immune system strength in delaying the progress of infection, or to arguments that emotional states were important components of immunity, and that exercise, nutrition, and moderated drug use also play a role in controlling infection, preventing disease, and sustaining health. Instead the public health message was that AIDS meant death.

In the wake of the AIDS publicity precipitated by the death of Rock Hudson in 1985, the zeitgeist had been transformed once again. There was a particularly dramatic reemergence of strength and morale among community-oriented gay men. Lesbians showed their support by lending hands in organized and informal ways, producing an unprecedented degree of integration in the turfs of male and female homosexuals. More and more heterosexuals revealed that they were informed, compassionate, and available to help.

Community doctors and their associates led the way in distinguishing among sexual activities based on the degree to which they involved blood/semen exchanges and exposures. Despite evidence exonerating orally ingested semen as a vehicle of infection,[35] they defined as risky any practice that might bring virus-bearing semen in contact with blood (orgasmic oral sex was included because mouths might have cuts), as well as anal fetishism that might produce ruptures making the rectum vulnerable to virus-carrying

semen during subsequent intercourse. At the same time, associations of community doctors made it clear that the cupboard of erotic practices included sexual activities that were "safe," such as necking, frottage, voyeurism, and masturbation, self-administered or reciprocated, and "safer," such as anal intercourse conducted with condoms, and oral-genital activity without orgasm. The recommendations of the doctors were publicized in brochures, advertisements, and news features about "safe sex."

The gay press, then the straight media, spotlighted long-term survivors of AIDS, equally sick but surviving men with ARC, and healthy, functioning antibody positive men. Expanded coverage highlighted how competently and courageously leaders, volunteers, and institutions were educating and helping those men at risk, infected, ill, and grieving. At this point, "education" became affective as well as informational. Community agencies began to deal with their own in settings small and supportive enough to entice frightened gay individuals to discuss personal questions and delicate concerns. They began to sponsor counseling and organize support groups around the powerful psychological and emotional issues raised by the epidemic.

The gay press, then the straight media, also began to carry stories on the utility of wholistic health care approaches. It was stressed that outlooks, feelings, and fitness were related to the control of infection, the prevention of disease, and the maintenance of well-being. "Immune system strength" became a key phrase in gay argot. Health food stores and exercise studios flourished in gay neighborhoods. More and more gay men tried consciously to think positively, to keep healthy, and to relate to one another supportively.

Both in San Francisco, led by its civic-minded social, political, and economic sectors, and in Los Angeles, where leaders of the entertainment industry took the initiative, the AIDS epidemic was embraced as a full-fledged tragedy warranting preventive education as well as biomedical interventions by public health officials at all levels, and also by the citizenry at large. The gay and lesbian community was for the first time treated as a long-standing, legitimate minority by the most celebrated, established, and conservative of cultural and political leaders. Community-identified homosexuals responded by taking ever more responsibility for the care and behavior of themselves and their own.

Many gay men modified their practices in a variety of ways. Some began to use condoms and infection-killing lubricants when engaging in anal intercourse. Others greatly reduced or completely abandoned anal and oral sex involving the sharing of semen, and mouth-to-mouth kissing. Some decided to forswear intimate same-sex

relationships of every kind for fantasy and masturbation. Still others opted for mutual masturbation with transient partners who could be counted upon to remain anonymous, to be no more than "sex buddies."

The same range of adaptations, which can be conceptualized as refining, reducing, replacing, and relinquishing past practices, were made with drug use, alcohol, nicotine, stressful relationships, and other elements of lifestyle said to affect immune system strength. Indeed, the resolves to abandon risky sexual practices and to adopt immunity-strengthening regimes involved the same individual and collective processes as the decisions and resolves made to modify undesirable pattterns involving food, alcohol, nicotine, psychoactive drugs, relationship stresses, and pursuit obsessions.

By 1985, recognition that dramatic changes were taking place under the aegis of community leaders who were working with and supported by public officials and established non-gay leaders became widespread. One consequence of this alliance was the official, professional, and public support given gay community resistance to the idea of mandatory, recorded testing for antibodies to HIV. Resulting from this was the state-sponsored initiative was called the Alternate Test Site Program. By 1986, gays and their allies in the medical, public health, and civic establishments united to oppose the prospect of registering and quarantining people with illness and infection. One result was the two to one defeat of a referendum to mandate these steps.

Both the outspoken support of influential non-gay civic, political, and cultural advocates, and the cooperation of California-based medical researchers and public health officials, led to an unprecedented coordination of epidemic-control efforts. There was a clearly a concomitant relaxation of fear, anxiety, and paranoia in the ranks of gay men; one hopes the alleviations of stress and depression were accompanied by increases in individual and collective immune system strength.

Subcultural Patterns

Without social scientific research that combines quantitative and qualitative methodologies, one can only note general trends and specific cases suggesting that gay male lifestyles are safer, healthier, and more community-oriented as a result of this epidemic and its education. There is ample evidence that all of the basic gay male turfs persist. The most dramatic documentation comes from the listings of annually updated

gay guidebooks. Once limited to exclusively sexual and socio-sexual locales, with city by city run-downs of cruising areas, bath houses, erotica outlets, sex clubs, and bars, these guidebooks now list selected community institutions as well.

Comparing the listings in the 1981 and 1987 editions of Bob Damron's Address Book, the oldest of the national gay guidebooks now published, is a way to trace some of the institutional and subcultural changes that have taken place during the years of the AIDS epidemic. At the front of the 1987 edition is a copy of the Safe Sex Guidelines issued by the Bay Area Physicians for Human Rights and circulated by the San Francisco AIDS Foundation, indicative of developed community consciousness.

Limited as they are, statistics assembled from editions of the Address Book attest to the survival of patterns that have always characterized gay male life as well as new trends discovered in the course of the field research. In San Francisco and Los Angeles counties, the two areas hardest hit by the epidemic, there have been small but significant drops in the total number of listings. In Sacramento, there has been a small increase in the total number of listings, and there has been a far more sizable increase in San Diego. But with the exception of more community listings, both the categories and the relative proportions of generic male subcultures have remained relatively constant in all these cities.

Figure 1 summarizes the distribution of various listings found in the Address Book for 1981 and 1987.

Figure 1

NUMBER OF EXCLUSIVELY SEXUAL, SOCIO-SEXUAL, AND COMMUNITY-ORIENTED LISTINGS IN A GAY DIRECTORY, CALIFORNIA, 1981 AND 1987

	EXCLUSIVELY SEXUAL		SOCIO-SEXUAL		COMMUNITY		TOTALS	
	1981	1987	1981	1987	1981	1987	1981	1987
San Francisco	51	35	196	152	21	29	268	216
Los Angeles	49	38	130	120	29	28	208	186
Sacramento	12	11	17	16	3	7	32	34
San Diego	14	20	48	51	4	9	66	80
California	259	218	599	557	68	114	926	989

For San Francisco, the 1981 Address Book lists 51 locales harboring exclusively sexual subcultures, 196 housing socio-sexual subcultures, and 21 that can be characterized as community institutions for a the total of 268. By 1987, there are 35 exclusively sexual (gone are most of the bath houses and sex clubs), 152 socio-sexual institutions, and 29 community enterprises, or 216 total.

In Los Angeles County, the 1981 edition of the Address Book lists 49 centers of exclusively sexual subculture, 130 institutionalized socio-sexual subcultures, and 29 businesses and agencies that can be characterized as community-oriented. By 1987, there are 38 of the first, 120 of the second, and 28 of the third. In 1981, the total number of Los Angeles listings was 208; by 1987, it has been reduced to 186.

In contrast to the small but discernible reductions in gay-identified meeting places listed for San Francisco and Los Angeles, there are small but significant increases in the number of subcultures identified in Sacramento and San Diego. For Sacramento, the 1981 Address Book lists, following the order of categorization used above, 12, 17, and 3 locales, for a total of 32. The 1987 edition lists 11, 16, and 7, amounting to 34. For San Diego, the 1981 guidebook lists 14, 48, and 4, adding up to 66. The 1987 edition reports 20, 51, and 9, for a sum of 80.

These editions of the Address Book contain more evidence that the progress of this epidemic has been accompanied by small reductions in the size of the organized homosexual infrastructures in the gay capitals, along with small increases in the number of gay male subcultures everywhere else. The 1981 Address Book carries entries under headings for 86 different cities and towns in California. The 1987 edition reports that there are gay male subcultures in 118 different localities. In 1981, 926 gay spots were found in the state. In 1987, there are 989 different listings.

In 1981, within the state, there were 259 locales harboring exclusively sexual subcultures, 599 housing socio-sexual subcultures, and 68 that can be called community-oriented. In 1987, there are 318 spots that can be characterized as exclusively sexual, 557 that are socio-sexual, and 114 that qualify as community institutions.

Here, as in other guidebooks devoted mainly to entertainment, only a few of the existing community institutions are listed. For fuller documentation of how numerous such enterprises have become, it is necessary to examine the advertisements in the gay newspapers published in San Francisco, Los Angeles, Sacramento, San Diego, and Sonoma

counties. The number of ads for businesses and services other than those related to sex or socializing can be taken as indices of community institutions.

In the January 22, 1987 issue of the Bay Area Reporter, one of a half dozen gay newspapers published in the San Francisco area, there are 143 such ads. In a late January issue of Frontiers, one of a half dozen such papers available in Los Angeles County, there are 121. In a comparable issue of Update, one of the three or four such papers available in San Diego, there are 37. In a late 1986 issue of Mom...Guess What?, the leading gay paper in Sacramento, there are 29 such ads. In the January 22, 1987 issue of This Month...On The River, which describes itself as "highlighting entertainment on the Russian River, Lake Tahoe...San Francisco, Santa Rosa," there are 37 ads in addition to those for bars, restaurants, and public accommodations (resorts, hotels, motels).

Observations, interviews, and statistics suggest that the major effect of the AIDS epidemic has been to accelerate the development of full-fledged community, an effort begun by liberation-minded homosexuals and their supporters in the 1950s. Exclusively sexual and socio-sexual subcultures still predominate, for sex-role stereotyping and homophobia keep sex-focused experiences and transient sexual partners a staple in the lives of homosexually active men. Yet, in the big and medium-sized cities studied for this analysis, socio-sexual subcultures outnumber exclusively sexual ones, and community enterprises have become as institutionalized and important as their sexual and social predecessors.

Where remaining exclusively sexual subcultures have been institutionalized by community-identified entrepreneurs, bath houses, sex clubs, and erotica outlets, more often than not, distribute information about AIDS, and explicitly promote safe sexuality, healthy living, responsibility, and community involvement. Bars have also developed civic faces and political agendas. These subcultures have passed information about HIV infections and their prevention, via relationships, circles, and networks, to the masses of less gay-identified and less civic-minded homosexual men.

As a result of this epidemic, bars and sex clubs catering to sado-masochistic fetishists are also fewer, smaller, and less popular. In 1981, according to the Address Book, there were 15 San Franciscan bars coded "SM--Some Motorcycle and Leather," or tagged "Wild Back Room." Most of them were in the South of Market area. In the 1987 edition, there were 5 such listings, During the year of this evaluation research, 3 of these 5 went out of business.

First the bath houses known for attracting men interested in "fast lane" sexual and sensual experimentation activities went out of business, then other bath houses followed suit. The 1981 edition of the Address Book credited San Francisco with 11 bath houses. In the 1987 edition, 3 were listed, and in May of 1987, the sole remaining bath house in San Francisco closed. Aside from erotica-oriented theaters, arcades, and bookstores, there remained only 2 fetishistic sex clubs, known as "jack off" clubs because they both forbade anal and oral/genital sex.

During this field study, the last surviving bath house in San Francisco seemed to have returned to its original function, serving homosexual men who rely on secured homoerotic environments for transient partners. Traditional rates and modes of bath house "cruising" and "connecting" had reappeared. The most prominent and pervasive practices in the bath house were varieties of "stand-up sex": poseurism, voyeurism, frottage, masturbation, reciprocated masturbation, and oral-genital activity. Condoms, once the preserve of heterosexual intimacy, were advertised, offered, and, often, though not always, used in anal intercourse. Orgasms were reportedly rarer, and people stated they were more careful to avoid ingesting semen and saliva. Mouth to mouth kissing was rare. There had been both an etherealization of eroticism and an institutionalization of sexual hygiene.

Infecting sexual practices occasionally took place in this bath house according to informants; they occurred at those times of the night and week in which patronage was substantial enough to produce a small pool of willing or seducible partners. Since the fetishistic stage sets and public performance areas so popular in the era of "fast-lane" lifestyles had been dismantled, the doors of cubicles removed, and the lights turned up, and more importantly, since disapproval of infecting activity was expressed through body language and words by large numbers of community-minded patrons, the risky acts that did take place occurred behind closed doors or in dark corners.

By reducing the numbers of men willing to risk sex-focused connections with strangers, and by depressing the drive for sexual satisfaction, this epidemic has slowed the pace of "cruising" and reduced the amount of "connecting." At the same time, since the demand for homoerotic involvement continues to be greater than the supply, homosexual intimacy has had its value translated into monetary terms as never before.

Industries specializing in the production of erotica continue to flourish. Gay male erotica, ranging from printed and pictoral offerings to video and movie fare, is more

prevalent, more sophisticated, and more professional. Some enterpreneurs, believing that fantasy stimulation is something distinct from fleshly pursuit, and that gay male afficionadoes of erotica know the difference, persist in making and marketing materials that portray sexual practices, such as anal intercourse. But the cutting-edge producers and performers of erotica explicitly tout "safe sex" and participate in AIDS-related benefits. Recently the Gay Erotica Producers Association voted to endorse such responsible practices.

By the end of the 1970s, there was so much consensual, reciprocated love-making available to one and all that the market for prostitutes had been greatly reduced. Where prostitution persisted, both in street hustling scenes and in organized call-boy and escort services, it was entrepreneurial rather than organized, for the free market among male partners made it impossible for either pimps or brothels to survive.

The progress of this epidemic has been accompanied by a dramatic increase in professionalized sexual services of every kind, and has resulted in a resurgence of prostitution. In 1965, male prostitution was so illicit that Damron's Address Book used an allusive symbol in its key code--"RT = Rugged, often Commercial"--to indicate that it might be found in and around particular bars. By 1981, there were four advertiser-supported gay newspapers in circulation in San Francisco, and their sizable sections of classified ads included listings for "massage" and "models and escorts." Most of the latter and some of the former advertise themselves as sensual and social artists whose repertoires include the provision of sexual pleasure. In the last week of January in 1980, the Bay Area Reporter (BAR), the largest of the gay newspapers published in Northern California, carried 13 ads for what can be characterized as the "call boy" variety of male prostitution. The last weekly issue of January 1987 carried 135, plus 5 for services making call boys available.

Indeed, the world of sexual performances for a fee now contains with a fuller range of commercial options. In addition to its ads for call boys, this telltale issue of BAR carries six ads for sex clubs oriented around masturbation, or stage shows featuring performers who strip and masturbate in the presence of patrons who can join in at their seats; and 13 ads for telephone services permitting any caller to engage in a fantasized intimate "scene" with a pretend partner, allowing the caller to be aroused to the point of masturbation by vocal intimacy weaving an erotic fantasy.

As the epidemic has put a premium on selectiveness, discretion, and control in "cruising" and "connecting," it has led not only to greater specialization, professionalism, and stratification in the world of sexual services, but also to clearer differentiation among types of intimate relationships, and to greater attention to relationship responsibilities. Patrons of exclusively sexual subcultures now know that credible community forces want them to avoid infection-spreading practices. Growing numbers of participants in socio-sexual subcultures and community institutions are self-consciously forswearing exclusively sexual ways and actively actively seeking and sustaining varieties of interpersonal relationships. It appears that affairs that reserve sexuality, if not eroticism, for romance; full-fledged, multifaceted partnerships; platonic love affairs; friendships; teamships; colleagueships; institution-focused and neighborhood-based circles and networks.

In short, there is now greater understanding of how relationships can vary in nature, meaning, and value. Clearer evaluations, more considered negotiations, and more careful and honest exchanges, continue the trend that has permitted and accompanied the growth of gay community. Indeed, gay neighborhoods are no longer distinguished simply by their densities of sex-oriented and social enterprises, or by the opportunities they provide for in the process of "coming out," but by their capacity for attending to the full panoply of human needs. As the landscape of homosexual relationships changes, gay communities are becoming fully rounded, completely institutionalized, and more effective.

RECOMMENDED INTERVENTIONS

This epidemic of HIV infection is a constantly changing battle-ground warranting continual adaptations in social policy. Strategies for controlling the spread of disease must be grounded in realism about sexuality, drug use, and behavior. The recommendations for "intervention" that follow arise from long-term ethnographic and sociological study of homosexual activity. They are based both on long-developed understanding of the histories, lifestyles, and subcultures of homosexually active men, and on interviews and observations on the progress of this epidemic and its effect on gay life at the grassroots.

Needed Knowledge

There are two initial messages to be communicated. One concerns the dangers of reinfection. Here the important theme should be that reinfecting acts in the context of monogamous relationships or sustained sexual intimacies with a limited number of partners are every bit as dangerous as infecting activities with transient partners, and much more dangerous than non-fluid-sharing activities with multiple partners, whether in private or in institutions, such as bath houses, harboring exclusively sexual subcultures.

The second message concerns the nature and correlates of immune system strength. Information on the effect of HIV infection on the immune system must be coupled with explanation of the role of rest, nutrition, exercise, reduced drug use, and psychological health in resistance to infection, battles against disease, and the maintenance of well-being. In addition, further information is needed about the meaning of antibody test results and the implications of such results in terms of health promotion and health maintenance strategies.

Psychological Boosts

Knowledge about the nature, transmission, and results of HIV infections should help alleviate the stress and the depression experienced by so many gay men today, if the message is placed in perspective, credible, persuasive, and precise forms. It is particularly important to correct confusions created by medical researchers, public health officials, and journalists suggesting that all, or most, of antibody positive men will, over time, develop ARC or AIDS, or such statements might well become self-fulfilling prophesies by encouraging fatalism and discouraging safer behaviors. In the absence of data from life style histories, psychologically supportive clarification can come from sensible analysis of existing figures. For example, statistics produced by public health officials presently support the conclusion that the majority seropositive men will not develop AIDS, and that reinfection, especially by sexual partners carrying multiple strains of HIV, is what leads seropositive men to become ill.

Knowledge about rates of longevity and correlates of health for men diagnosed with the mortal diseases now classified as AIDS, as well as information about successful biomedical and "holistic" treatments, are crucial to prognosis.[36] Morale of affected men is raised not only by basic, accurate information, but by statements, and actions of empathy

by celebrated public figures. Recognition of the uncertainty and confusion of gay men, and acknowledgement of their extraordinary courage and responsibility in the face of crisis, enhances the sense of community among gay men, and thus contributes to the individual self-esteem and collective solidarity needed to promote safe sex, sustained relationships, and civic responsibility.

Mediating Structures

Homosexual individuals are most effectively influenced through mediating circles and networks found in the institutions and subcultures that make up the infrastructure of modern homosexual life. This field research suggests that educational campaigns based on the assumption that information directly affects behavior are naive. Altering behavior is a matter of breaking habits strong and persistent enough to be called addictions.

Research on "dependency" and "co-dependency" confirms that people can be as addicted to particular types of human relationships and life missions (such as gambling, or work) every bit as strongly as they are to substances.[37] Study of the behavioral processes through which people modify habitual patterns provides insight to altering unhealthy "addictions" of people and pastimes.[38]

Modification is only occasionally a matter suddenly undertaken or a complete and final forswearance. More often, abstinence is the end result of an initially limited decision to make a particular "indulgence" less risky or costly. In the end, decisions to make changes are less important than abilities to keep resolves.

Forswearing or at least limiting activities that are deeply satisfying involves ego strength, self-esteem, and self-mastery, qualities sometimes summed by community-oriented leaders as "empowerment." Socially, such traits correlate with involvement in individual and peer group relationships that are supportive of reformist resolves and by sources of love, regard, and concern that buttress personal capacities to abide by new modes of behavior.

Sometimes, finding relationships and peer groups that are supportive of lifestyle alterations has required abandoning old haunts and discovering people with different habits, values, and interests. Other times, whole groups of people in the same orbits, in uncoordinated but mutually reinforcing individual decisions have altered their views and

values along the same lines, literally fashioning a new peer group consensus about appropriate mores and desirable modes.

For all these reasons, social policy should be premised on understanding that it is necessary to use indigenous mediating structures as vehicles for promoting individual decisions and sustaining personal resolves that will help reduce the toll of this epidemic by reducing infection-spreading practices and by institutionalizing health-promoting lifestyles. Since the most careful, caring, and credible advocates of such changes have been community-oriented gay citizens, indigenous community leaders, selected for age, class, race, ethnicity, style, neighborhood, and region, should be enlisted to reach their less civic and socially conscious brethren in exclusively sexual and socio-sexual subcultures.

The illicit sexual subcultures that exist in public men's rooms and stretches of public parklands are the places where community-oriented education will be least effective. However, our data on sexual behaviors indicate that such education may also be least critical here because the riskiest fluid-exchanging behaviors are uncommon in these settings. This does not imply, however, that attention should not be devoted to reaching these individuals; rather, an awareness of the particular difficulties in reaching these men of the various subcultures of the gay community suggest that they may be as easily and as effectively reached through general public education.

Where exclusively sexual subcultures are institutionalized, as in bath houses, sex clubs, and enterprises specializing in the production of erotica, there are staff and facilities that can be used as repositories of information and centers of education. Yet realistically, non-interferences with non-verbal, private activity is the ethos prevailing in such subcultures. Therefore, the education that can be conducted here will necessarily be limited and voluntary. The patrons of such institutions cannot be corralled and conversed with without the threat that they will be driven elsewhere.

Where exclusively sexual enterprises allow a modicum of talking, they make it more feasible to conduct training and to promote education. Producers of gay male erotica, including magazine and book publishers, writers, actors, production employees, and managers of bookstores, arcades, theaters, and live strips shows, can be reached, visited, educated, and perhaps persuaded to pass on knowledge about risk, infection, disease, and health.

Being more down-and-out, the members of the generally younger and less well-established street and bar hustling populations are harder to reach, and, being both emotionally and materially insecure, these homosexually active males will be even more difficult to educate and to influence in a permanent way. They are best dealt with through the agencies with outreach programs that have been established to deal with teenagers in trouble. Gay youth involved in prostitution and drug use should be a special target of such efforts.

Gay-identified patrons of exclusively sexual subcultures often socialize in bars, and it is here that they are most easily reached and most effectively influenced. Sustained relationships developed between health educators and the owners, managers, and staffs of gay bars are an effective way of conveying important understandings and precipitating individual and social changes that will hasten the transformation of bars into community outposts and de facto health promotion organizations.

Most well-established gay bars boast relatively stable networks of owners, managers, and bar-tenders who operate as extended families. The members of these "alternative families" are usually involved personally, socially, and professionally with broader circles of like-minded gay men. Bartenders tend to sustain familiar, yet professional, relationships with regular clients; and even with less accessible patrons and passing strangers, they can play the roles of confidante, adviser, and therapist. Understanding and advice passed on through on-going trainings and contact with gay bar staff will radiate out to their circles of regular patrons, and the results of such education will reach passing strangers as well. Particular leaders in bar staffs can be hired as ombudsmen--call them ombarsmen--both to refer scared and sick men to community-oriented health care agencies and professionals and to legitimize and disperse the advice of such agencies and professionals to the homosexually active masses.

Reaching integrated homosexual men, i.e., those who avoid sexual subcultures of every kind as well as community involvement, is a task requiring an adaptation of snow ball sampling methods. Individuals involved in particular social circles, professional networks, and neighborhoods can be identified by their community-minded compatriots and persuaded to put them in contact with other integrated homosexuals, individually, or via house parties. In this case, the method is used to convey understanding, instead of eliciting information.

Community agencies established to deal with AIDS must take the lead in persuading gay businesses and voluntary associations of every kind to expand the definition of gay identity and the ethos of gay community to include criteria for healthy living. They must be aware that the key to drawing less civic-minded participants into safer practices and healthier lifestyles lies not in criticizing, ostracizing, or avoiding patrons of exclusively sexual and socio-sexual subcultures, but in making them feel welcome and worthwhile in gay worlds other than those revolving around sexuality and entertainment. Citizenship must include sensitivity to personal and subcultural differences among gay men associated with age, class, race, ethnicity, and locale if it is to be truly effective to the task at hand.

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Chapter Six

AIDS KNOWLEDGE AMONG IV DRUG USERS: THE SOCIAL ECONOMY OF NEEDLE-SHARING

INTRODUCTION

Intravenous (IV) drug users have been known to inject anything that can be melted down or dissolved in liquid, including pills and alcohol. The most commonly injected drugs, however, are heroin, cocaine and methedrine.[1] These drugs are used alone, combined, or with other drugs (most notably alcohol and marijuana) to titrate or potentiate the drug effects. Intravenous drug users have differing use patterns as well. Not all users of addictive drugs, even heroin users, become addicted.[2] In addition to daily users, there are occasional users and bingers, a term describing people who use a lot of drugs over a short period of time. Cocaine and methedrine users are more likely to display occasional or binge use patterns.

Intravenous drug users are economically and ethnically diverse. An occasional cocaine "shooter" may live in a middle-class neighborhood, with close friends and family members never suspecting his/her needle use. A weekly heroin user may be a construction worker who lives in a stable community and is known as a good father and neighbor. These last examples are not hypothetical. These people are real. Their "private" drug use, more precisely the administration of their drugs, has become a public concern because of the existence of Acquired Immune Deficiency Syndrome (AIDS).

Transmission of AIDS by intravenous drug users became apparent early in the epidemic when increasing numbers of heterosexual addicts in New York and New Jersey were diagnosed with opportunistic infections. All subjects reported histories of intravenous drug use and lacked the sexual risk factors present in male homosexuals.[3] Currently, IV drug users comprise the second largest risk group among AIDS patients reported to the Centers for Disease Control.

It is now apparent that large numbers of IV drug users throughout the United States and Europe are infected with the AIDS virus. It is also apparent that when the virus is introduced into a community of IV drug users, it spreads rapidly to infect a large proportion of individuals who are regular IV drug users.[4] Furthermore, many investigators see IV drug users as the bridge to other, previously not-at-risk groups.[5] The

AIDS virus is most commonly transmitted among IV drug users by small amounts of blood in shared needles, syringes or by blood remaining in "cookers," receptacles used to heat or cook water and drug solutions.[6]

Among IV drug users the virus has been shown to be sexually transmitted from males to females who are not IV drug users.[7] Secondary spread of AIDS from IV drug users to others may also occur by perinatal transmission to infants.[8] The specific mode of transmission is unclear, although it is thought to occur during pregnancy or at the time of delivery. However, the disease is transmissible from mother to baby, and most of the mothers or their partners are IV drug users.9

For all populations engaging in risky behavior, prevention is, at this time, our only weapon against the continuing spread of this deadly virus. Health care educators and health care providers face the challenge of creating prevention strategies that target the intravenous drug-using populations. John Kaplan, in a 1986 Wall Street Journal article, "AIDS and the Heroin Connection," sums up the problems confronting policy-makers and health care providers who hope to reduce needle-sharing among intravenous drug users (hereafter IVDUs):

> Addicts are typically much less middle class, forward looking and respectful of authority than homosexuals and hence, far more resistant to health education. After all, they already risk hepatitis and many serious infections through needle-sharing and risk death by overdose simply by shooting heroin . . . What we really must do, and do very soon, is increase the percentage of addicts in treatment.

FIELD METHODS

What motivates addicts to take these risks? What do they know about AIDS? What strategies and interventions will help prevent the spread of this virus among IVDUs and into the general population? In order to answer these questions, 40 interviews were conducted with key informants in various drug-using networks in the San Francisco and Los Angeles areas. The respondents were roughly half male (19) and half female (21). The oldest was 55 years of age, and the youngest 19 years of age, with a mean of 32.7. Sixteen respondents were white, 14 were Latino, and ten were Black.

In the past, drug researchers have had success in using ethnographic or field research methods to conduct descriptive studies of hard-to-reach populations of heroin, cocaine, and methedrine users. Traditionally, drug ethnographers have relied on in-depth

interviewing as well as participant observation techniques to gather their data.[10] These data gathering methods seemed appropriate to the goals of this evaluation. The perspectives of IVDUs rather than professionals in the field are central to this analysis of AIDS education.

The interviewer/ethnographer began the research by calling contacts made on previous research projects with drug users, particularly those who were known as key informants. These users are particularly articulate and are well-known and well-liked by their peers. They have good reputations on the "street" and, perhaps most importantly, they know a number of other drug users whom they are willing to persuade to be interviewed.

After phoning former contacts, the interviewer arranged to interview them. Most of these people had given some thought to the issues surrounding AIDS and IVDU prior to the interview. These first interviews were truly enlightening. Not only were the interviewees able to act as "natural sociologists," analyzing their drug scene most insightfully, but a few were also able to typologize their fellow drug users and summarize characteristics of each type vis-a-vis needle-sharing patterns.

These first key informants helped find other IVDUs who would round out the data gathered. When, for example, a respondent would report that methedrine users used needles very differently from heroin users, the interviewer would ask him/her to introduce her to a methedrine user who might agree to be interviewed. This method allowed access to respondents who would most likely not be contacted by other sampling procedures. By using a chain referral, or snowball sampling method,[11] the interviewer was also able to cross verify, since respondents invariably tell stories about the referring respondents, and to confirm and embellish the picture previously painted of the drug scene.

INTERVIEW TOPICS

The interviews lasted from one hour to two-and-a-half hours, with the average about one-and-a-half hours. The interview was conducted from a focused interview guide. It opened with a general discussion of AIDS and a detailed discussion of how and when the respondent first heard about AIDS. The source of information was also

discussed (e.g., TV, print media, etc.). Respondents were then asked to rank each by perceived importance and reliability of AIDS information sources.

The next order of business was discussion of needle use and sharing practices of both the interviewee and his/her lovers, friends, and associates, including sources for needles, both past and current. Each respondent was asked to estimate the number of times she or he had shared needles in the past year, six months, and the last 30 days. She/he was also asked to report an average of his/her friends' and lovers' needle-sharing episodes.

Each respondent was asked to list, in order of importance, his/her motivations for sharing needles, and to do the same for friends. Sexual activity was also discussed, including high-risk sexual behaviors, what the respondent thought safe sex meant, and whether she or he engaged in high-risk behaviors. The use of condoms was discussed as well. Needle-use patterns and sexual activities were discussed in terms of pre- and post-AIDS knowledge. The interviewee was asked, "Did your AIDS knowledge lead you to change your behavior in any way? If not, why not?" Open-ended, in-depth questions led to interesting discussions, and information germane to the topic was revealed that the interviewer had not previously considered. By asking, for example, "What do you know about AIDS?" rather than more specific kinds of questions, respondents were free to approach the topic in whatever way they saw fit, thereby introducing issues and information to which the interviewer might otherwise not have been privy.

One important fact, discovered accidentally, was that addicted couples under-reported the amount of their needle-sharing. While interviewing the first couple, the woman was asked how many times she had shared in the last 30 days. "Never," she replied. As the interview continued, she said that she really hated having to wait for her husband to fix, or inject, first. She was asked why she had to wait: why didn't she use her own outfit? She said then that they just used one between them and they kept another one for other folks to use. When she was asked why she hadn't mentioned that when first talking about how often she had shared needles, she replied that she really did not view that behavior as sharing, since they were married and did "everything" together. After she thought about it, she realized that she didn't really know with whom her husband might have shared besides herself. Fortunately, this exchange occurred early in the interviews, so the interviewer was able to probe the next 38 respondents for needle-

sharing among spouses or other intimates that might not be defined by the respondents as "sharing."

FINDINGS

One of the most important tasks of these interviews was to ascertain the level of AIDS knowledge among the IVDU communities these respondents represented and to evaluate the effectiveness of various information sources. Most respondents first remembered hearing about AIDS between 1981-1982. At that time, most believed AIDS to be a gay white male disease. The most frequently cited source of information was television, with newspapers and treatment clinics also being mentioned.

Interviews were conducted from December, 1986 through March, 1987. Most respondents reported that they had heard that AIDS could be contracted through IV drug use approximately a year prior to the interview. As stated, the major medium cited was television. When probed for type of programming, approximately one-third of the people interviewed (mostly from the San Francisco Bay Area) said they had watched one or several documentaries aired in the six months prior on local television stations. These respondents were extremely interested in detailed information regarding IVDU and AIDS, despite the popular notion that addicts would only watch spots or short informational pieces.

Knowledge of AIDS

There was substantial disparity between the level of AIDS information among respondents in Los Angeles and San Francisco. San Francisco interviewees, for the most part, were aware of their risk of AIDS and all of them knew where they could go to be tested. In Los Angeles, AIDS knowledge was sketchy at best. Roughly two-thirds of the Los Angeles interviewees were in treatment programs for their drug abuse problems at the time of the interview. Yet only two of the 20 Los Angeles respondents knew where they could get an HIV antibody test.

Respondents from both areas were not at all clear about the length of incubation of the virus. Some of the respondents in Los Angeles were of the opinion that AIDS could only be transmitted through anal intercourse. Users were divided in half, in both areas, in regard to whether they would take a confidential AIDS test. Those who did not want

to be tested mistrusted the procedures for the protection of anonymity, and they also felt that knowledge of seropositivity might in and of itself be injurious to their health. "The stress would kill me," or "I'd just rather not know," were common responses.

It is difficult for the so-called "straight" person to fathom why a person would continue any activity that is very likely to cause him or her to get a fatal disease. A 50-year-old Mexican male, who has been shooting drugs since he was 16, explains this as well as anyone could:

> And even up to this day, because to a lot of them it's still very abstract, and I think the reason for this is because it has not hit as strongly as it is hitting in the East Coast. In other words, not many street dope fiends know of another dope fiend that has died . . . of sharing a contaminated needle and contacting AIDS . . . whereas in the gay community people are dying right and left. You cannot deny it.

For some, the risk enhances the experience. Most of the "dope fiends" expressed real concerns. They just didn't know what kind of steps they could take short of stopping the use of drugs altogether. Most of the people interviewed had tried at one time or another to stop using drugs. All were unsuccessful.

Needle-Sharing

Sharing needles is situational. If an addict has the dope and doesn't have his/her own outfit, he/she will share:

> If they go cop (buy drugs) and they're sick (withdrawing) and the dope and the outfit is right there, they'll do it, fuck the AIDS thing, you know, they'll do it, and that's what it is really coming down to is a situational thing.

Every drug user interviewed said that they shared needles. Most (38 of 40) had shared within the last 30 days. None of the respondents, nor any of the people they knew, had stopped sharing needles altogether, regardless of the level of their AIDS knowledge. In the past year, the least number of times they had let someone use their needle or had used someone else's needle was three times; the most was over 100 times.

Why do addicts share needles? In part because needles are in scarce supply. They need to be hunted in much the same ways and in the same places as illegal drugs. Possession of hypodermic needles and syringes is illegal unless prescribed by a doctor. The most common recipients of such prescriptions are diabetics.[12]

Diabetics contribute greatly to the gray market that has sprung up to satisfy illegal drug users' demands for needles. These needles must be purchased at inflated prices. Users quoted a price of between one and five dollars for a new needle. Used needles are also offered for sale, sometimes being marketed as new to unsuspecting buyers. In Los Angeles, especially, users reported that up to six months prior to the interview, they could simply go to certain pharmacies, purchase needles, and sign the pharmacist's book, claiming to be buying them for their diabetic grandmothers. Users reported that they thought there must have been some sort of "crackdown" recently, because several of these drug stores no longer sold needles to them. Some addicts use needle sales as a "hustle," or way to make money with which to buy their drugs. The expense and the difficulty of finding a source accounts for the scarcity of needles available for users.

Once users have their equipment, they may be reluctant to carry their outfits (needle, syringe, cotton, and cooker or receptacle to mix and heat drugs) on the street. Possession of such drug paraphernalia is illegal, with or without drugs. Users said they were hesitant to carry their outfits with them when they went to "cop" (purchase drugs) because they would run the greatest risk at that time of being stopped and searched by the police. Users, when they are on the street, often carry their drugs wrapped in condoms or balloons or even cellophane in their mouths, so they can swallow the packages before they can be searched. Outfits are not as easily disposable.

Many conditions must be satisfied for each drug user to have his/her own outfit at the time of each drug use. Illegal markets suffer from chaotic elements beyond the buyer or seller's control. The market can be flooded, driving some needle sellers out of business. Regular IVDUs are always on the look out for sources of needles. If one of their associates makes a "score" (robs a drug store or a doctor's office), plenty of needles will be available for a time, perhaps even for free, thus driving other sellers from needle sales into other money-making activities. By the time the flood subsides, needle sellers in the area are otherwise employed. More often, sellers lose their sources due to arrest, or because their diabetic supplier moves or dies, or the pharmacy gets too much "heat" (police attention) and no longer sells to users. A source for new needles today may not be available tomorrow, and it may take days and/or weeks for users to find a new source. Needle distribution is subject to the exigencies of an illegal market creating scarcity and, ultimately, needle-sharing.

Scarcity means there are addicts and users who want (and physically need) to use needles and sufficient supplies are unobtainable. Addicts are more likely to share when they are sick, or in exchange for drugs. Addicts reported that they try not to share needles, but that sharing is situational. If the drugs are available and a clean needle is not, and they are sick from withdrawal, they will use someone else's needle or let someone use theirs for a portion of their drugs. They also believed that most users they knew would do the same.

Poorer addicts are more likely to share needles than addicts with jobs or good hustles. Addicts with money can afford to buy needles and drugs, so they are neither borrowers nor lenders. Drugs are very expensive and at times difficult to obtain. Most users felt that they and people they knew would not pass up an opportunity to use free drugs even if they didn't have their own needles with them. One woman said, "If someone is going to give me free dope and I don't have a needle, I'll use their needle. If I go get mine, when I get back that dope is gone." Free drugs are hard to come by and users seize the moment. Newmeyer[13] points out that the economic disadvantages that plague minorities may explain the higher seropositivity rate among Black and Latino IV drug users. The poorer the user, the more likely she/he is to share needles.

Neophyte users are more likely to share needles. In fact, every IVDU interviewed indicated that she/he had used someone else's needle the first time she/he shot drugs. Beginners went as long as a year before they acquired their own outfits. The average was 10 to 20 injections before they obtained their own needles. Typically, these users are not addicted or even habituated to their drugs of choice at this stage in their career.

Patterns of Needle Use

Addicts use needles because injecting is the most economical way to administer expensive drugs. Heroin purchased on the street is diluted; therefore, anything that potentiates the drug's effects is valued. Heroin injection also offers a "rush" (each drug has a different type) or sudden euphoric feeling, not replicated by any other route of administration. Therefore, for reasons of economy, the "rush," and perceived strength of drug effects, most opiate addicts and many users of speed (methedrine) and cocaine in the United States use needles.[14]

The most commonly injected drugs are cocaine, heroin, and methedrine. There are differences in injection patterns between IVDUs of each drug. Addicted heroin users use between one and five times a day, with most addicts fixing two to three times a day. Methedrine users follow the same injection pattern, but they are more likely to take a few days off every five to six days. Speed users typically use in "runs" (or use period) usually lasting two to five days. Since methedrine makes them wakeful, most users fall asleep after a day or two ending that run.

Cocaine shooters inject more times per use period than any other group of drug injectors. One woman interviewed described her arms after a two-day shooting spree: "My body looked like a sewing machine went wild. There were needle marks everywhere." Cocaine users report a fantastic, orgasmic rush that is followed by a coming-down period so uncomfortable the only thing they want to do is shoot more cocaine. Some cocaine shooters who are also heroin users use both drugs together, so that when the cocaine effect leaves, the heroin smooths out the "crash" from the cocaine. Cocaine shooters are typically bingers rather than daily users, using on weekends (the whole weekend) and then recuperating during the week.

There is a certain urgency about needle use fueled by its illicit nature, the desire to have the pleasurable experience injecting brings, and the sense they may not get their share of the drug. Users are often in a hurry. If using in a group setting with only one outfit, the other group members' anxiety speeds them up. If using alone, they are propelled by the need to feel good and/or get well.

Fixing does not always go smoothly. Often addicts have difficulty finding a vein for injection. Women complain of having deeper veins that are more difficult to "hit." Already in a highly anxious state, an addict who has trouble finding a vein can become truly desperate and totally focused on accomplishing the goal of getting the drugs into his/her body. The following powerfully describes what an addict goes through while trying to inject drugs:

> Holding the syringe perpendicular, Lenny watches raptly as the first drop glistens at the top. He looks down at his arm . . . This once-nice sinewy limb with that tattoo of the American eagle atop the bicep is now a ruined, festered crotch, a big black golf ball of infestation at the crack inside the elbow. The vein is ruined. Shooting six, eight, ten times a day inside the same vein has produced a hematoma, enormous, dangerous-looking. Lenny will have to shoot a smaller vein.

> Finally, he sees where it's possible to hit. The right hand is laid out flat on the table. He steadies his left arm, his shooting arm . . . He starts to slide the needle into a vein about an inch behind his knuckles. Lenny isn't very steady. The first time he jabs only skin. He pulls back, sucks the needle clean and goes in again. This time he lances the vein, but when he starts to push the plunger he feels this sharp burning pain: "Shit, I've gone through . . ."
>
> Lenny has pushed that needle clean through his vein. His hand oozes blood; pain nags at him. His head lolls down toward the table. his left hand trembles. "Terry, hit me!" He looks up. "Come on, man, please . . ." Terry gives Lenny the garter end. He takes up the syringe . . . There . . . ooooooh! A hit. A delicate column of blood starts to back up inside the plastic syringe.
>
> Lenny also sees the blood. He drops the garter and snatches the syringe from Terry. Squeezing down on the plunger hard, he empties the chamber, then starts to jack it full. The syringe is engorged with blood like a giant thermometer. He jacks at it another time when, suddenly, the Meth stuns him, and his head bobs down against the tabletop.[15]

Despite differing patterns of needle use, and variety of drugs being injected, respondents share needles if a clean new one is unavailable. Needle-sharing occurred among heroin, methedrine and cocaine users. It is generally agreed that frequency of sharing is highest among heroin addicts because of their need to use daily. But each respondent knew cocaine and methedrine shooters who shared needles. Needle-sharing is an institutionalized part of the addict culture. Thus while needle-sharing is situational, it is also universal.

Needle selling and shooting galleries are an integral part of the user economy. Shooting galleries are places where drug users can go and shoot, or inject, drugs for a fee. Often the proprietor of the establishment will also have outfits for rent for those addicts who need them. New York City is famous for its shooting galleries. They are less popular on the West Coast. Often, running a shooting gallery is the way a drug user makes money to buy drugs. Shooting galleries are more available in San Francisco than Los Angeles. A respondent explains:

> Q. Why do you think there are more shooting galleries, or more of those kinds of places [in New York] than there are on the West Coast? Why is that?
>
> A. Well, one thing is the makeup of the city itself. I mean, you used to have shooting galleries here 10 years ago when the Fillmore was in its heyday. I mean, you walk into the basement or whatever, back of a house, and you give a guy a dollar and he had outfits and water set up with, you know, everything you need, and he took care of the place and he would see that everything was clean and you know the whole thing. That's the way he made his living. I mean, there were actually shooting galleries, and it was

> the combination, you know, the makeup of the city. That's why I think New York is, because of--just a lot of people, a concentration of dope fiends. You know, and they can be running back and forth and so forth, and actually there is some money that could be made by running a shooting gallery if that's your household, see what I mean? What is happening here (San Francisco) is that hotel rooms are serving as shooting galleries. They don't call them shooting galleries but they serve the same function. Like people that--especially a lot speed use in the Tenderloin and the heroin is in the Mission, that you know they live in these cheap hotels, right? And all of a sudden a lot of people are coming up to their rooms to use their works or give them a dollar or whatever, right? And so once you walk in there you have three, four, five, six, whatever, guys you know doing up (injecting), so in a sense it's a shooting gallery, but it has not been defined as a shooting gallery, but it's serving the same function.

Needle-Cleaning

Needle-cleaning is an interesting proposition in the needle-using world. In the first place, most IVDUs use disposable needles manufactured to be used once and then thrown away. Older users talked about the old days when they would make their own hypodermics from eyedroppers and baby pacifiers. Heroin addicts reported that they used their needles until they broke. Most estimated they used a needle 30-60 times.

Today, the syringe is plastic. In the old days, injectors could boil their needles. Now, however, the plastic would melt. The most common cleaning agent used by the respondents interviewed was tap water. Basically, they would run water though the needle once or twice, drawing it up through the needle into the syringe and squirting it out. A few soaked their needles in alcohol between uses, but most felt this procedure would "wear the needle out."

Three of the 20 Bay Area respondents reported having used bleach to clean their needles. Three other respondents had heard of using bleach, but were not clear how to use the bleach properly and were worried about the possibility of injecting bleach. In the Los Angeles area, not one person interviewed had used anything other than water, and, rarely, alcohol, as needle-cleaning agents.

One of the women interviewed had used heroin intravenously for 12 years at the time of the interview. She said that when she first started using, she used to clean her arms at the site of injection (she had been trained as a LVN), and cleaned needles with alcohol. As she used drugs and the years went by, nothing really happened when she didn't take those precautions, and she stopped them altogether. She felt that other addicts

felt the same way. After going along for such a long time without suffering any dire consequences, it is hard to imagine that anything bad will happen.

In a sense, this belief parallels the addict's attitude toward official warnings in general, not just warnings against street IVDU. Addicts had been told so many scary drug stories as youngsters, some based totally on fiction, that information from conventional or authoritative sources learns to be ignored, or at least mistrusted. Street drug users' empirical experiences belied the exaggerated horror stories about the so-called "soft" drugs (e.g., marijuana. LSD), so they were more likely to rely on their peers, especially experienced needle users, for information on harder drugs (e.g., heroin, methedrine). They were alive and well and didn't seem to have any physical problems aside from withdrawals. Misinformation on street drugs has spawned peer information systems and dependence on empirical tests or real life experiences which are more reliable and available to users.

Sexuality

The sexual aspect of needle-sharing has been alluded to by IVDUs and reported in the drug abuse literature.[16] Addicts who have a lessened libido because of their use of drugs substitute needle-sharing for the feelings of sexual intimacy. Women talk about their partners' ability to hit them (find a vein) and inject the drug as one of the positive aspects of their relationship. Some women (even heroin-addicted women) never fix themselves but are dependent on their male partners to inject the drugs for them. Users of both heroin and cocaine often describe the initial rush in sexual terms, often comparing it to orgasm. Needle-sharing becomes an integral part of the couple's intimacy. Even if the couple does not describe it in sexual terms, it comes to represent an intimate part of their relationship.

One woman interviewed said, "You could bring your grandmother to a movie about my sex life." Most of the IVDUs didn't see sexual transmission of AIDS as a risk for them. Only six of the respondents claimed to use condoms regularly and three of them were active prostitutes. The men interviewed especially seemed to tie sexual transmission to homosexual activities. In other words, they believe that only gay men get AIDS through sex.

Women are in a special bind. Sexual activity is already limited in IV drug-using couples, and as one woman explained: "If I ask him to put on a condom it will blow the whole thing and who knows when he'll be able to do it again." IV drug-using women are often involved in extremely traditional types of relationships, where asserting oneself (i.e., insisting on condom use) becomes a very complicated issue. For some women, the situation is further exacerbated by the threat of physical violence if their partners feel threatened or offended by their requests.

For the occasional or binge IVDU, the situation becomes even more complicated. The interviewer asked respondents if they thought occasional or binge users would be more or less likely to share needles. Most responded that anyone who uses needles shares needles. But these binge IVDUs are active sexually in non-using periods and are also often secretive about their needle use. Thus, a population of partners unaware of their possible exposure is being created daily.

SUGGESTIONS FOR AIDS EDUCATION

Respondents were asked, "If you were in charge of creating an AIDS education or intervention program, what would you do? Their recommendations fall into five categories: 1) make needles more available; 2) make drug treatment more available; 3) expand community health outreach worker style programs (peer counseling); 4) create women-only groups, especially in treatment programs to help empower women; 5) use persons with AIDS who contracted it via IVDU in informational campaigns, particularly on television.

Most of the respondents believed that making needles available to seasoned users seemed the most logical, albeit unlikely, intervention technique. They were sensitive to the problem of inadvertently providing needle use opportunities to youngsters, but they felt that the threat of AIDS warranted such a controversial measure.

Interviewees, although often critical of drug treatment programs, were in agreement about the need for expansion of drug treatment facilities to help IVDUs discontinue sharing needles. Programs in both Los Angeles and San Francisco had waiting lists; IVDUs who wanted to enter treatment were left on the street to continue to use drugs and share needles. Women IVDUs experience special difficulties due to their child-rearing responsibilities. Very few residential treatment programs accept mothers and their

children, thereby excluding many women from their facilities.[17] In the Bay Area, publicly funded treatment slots for methadone maintenance programs are shrinking, causing clients to have to pay approximately $200 a month for their treatment--a prohibitive amount for many IVDUs.[18] The reduction of drug treatment services at this time seems counterproductive, to say the least, in light of the necessity of curtailing needle-sharing and the transmission of AIDS.

Counselors working in drug treatment programs may not be the best communicators for these important health education messages. The fact that very few of this study's respondents had had any previous conversation with their drug treatment counselors concerning AIDS is testimony to this fact. Counselors are often grappling with their own concerns regarding AIDS, due both to their own past histories of IVDU and the possibility of client transmission of AIDS in the clinic setting. Drug counselors with strong commitments to abstinence from all drug use would be understandably reticent to educate clients in needle-cleaning procedures, for an example. And finally, IVDUs feel that the clinic/client relationship is an adversarial rather than an advocacy relationship. The clinic counselor has disparate power in the therapeutic relationship if the "patient" does not get well (discontinue IVDU); in some cases the treater has the power to send him or her to jail or take away his/her substitute narcotic. This situation strains honest communication.

California researchers[19] seem to agree with the observations of these respondents that the communicator is as important as the message when trying to help IVDUs to change risky behaviors. AIDS educational programs that utilize "natural helpers"[20] or leaders in various drug-using communities are more likely to successfully educate their peers. Projects that hire, train, and oversee Community Health Outreach Workers (CHOWs), such as the Mid-City Consortium in San Francisco, have been most successful in reaching the hard-to-reach segments of the IVDU population. These natural helpers or CHOWs are able to communicate in the language of their peers in settings that are non-threatening. As an added benefit, these ex-users are doing meaningful work, thereby insuring continuing recovery from drug abuse.

John Watters, director of a federally funded AIDS--intravenous drug study in San Francisco, warns: "We've found people are more receptive when the hygiene message is not attached to a moral agenda like giving up prostitution or drug use".[21] Watters also reports

that his studies with IVDUs have shown that "68% of those interviewed are using bleach consistently (to clean needles and kill the virus) as opposed to 3% last year."

Watters's findings were upheld by reports from this study's interviewees. The interviewer took the opportunity during the interviews to describe needle-cleaning procedures to respondents. The respondents listened with rapt attention, asking questions and promising to pass the information along to their peers. In fact, in San Francisco (interviews were completed in too short a time to test the Los Angeles IVDU grapevine), the ethnographer was able to hear from interviewees, who had been referred by earlier study participants, detailed and accurate descriptions of how to clean needles with bleach.

Most drug treatment agencies in both Los Angeles and San Francisco currently rely on printed materials (posters, brochures) to educate their clients. The high school dropout rate is very high among drug abusers.[22] Indeed, by accident (respondents were not asked whether or not they could read, which, in retrospect, would have been an excellent question), it was discovered that two of the interviewees were in fact illiterate. Again, face-to-face counseling in a private or group setting seems to be the most effective educational device.

Helping women through role playing, offering support and assistance in a non-threatening, comfortable environment, is essential for effective interventions, especially in regard to changing sexual behaviors. Josette Mondanaro illustrates the importance of women's groups:

> Chemically dependent women often feel like second class citizens and are very sensitive to real or imagined messages that they are not worthy of help. It would be easy for such women to get the idea from AIDS prevention programs that they are being seen as unclean, potential spreaders of AIDS to more worthy members of society. It is important, therefore, to set any educational program about AIDS within the context of genuine concern for the well being of the chemically dependent woman herself . . .
>
> It is imperative that drug programs assist women in taking control of their own lives. A prevention strategy that empowers and activates women is also a good treatment strategy.[23]

Many observers have noted that a primary motive for the behavioral change among gay men was the presence of others dying from AIDS in homosexual communities. On the West Coast, thankfully, AIDS among IVDUs is still not widespread. None of our respondents knew anyone who had died of AIDS due to IV drug use, and only one woman in Los Angeles had herself received a positive test result (she was asymptomatic at the

time of interview). Many respondents suggested that persons with AIDS who had contracted it rhough IVDU be used in television spots. The interviewees themselves, and most of the other users they knew, watched considerable television, and respondents felt that real live IVDUs with AIDS might have the dramatic impact necessary to affect behavioral change. The use of television has the added benefit of reaching IVDUs who do not present themselves to traditional drug treatment facilities or come in contact with peer counselors in street settings.

If people were completely rational, if understanding were universally clear, informed and comprehensive, and if health and morality were matteris of providing simple do's and don'ts, levels of knowledge might be perfectly correlated with practice and lifestyle. In the real world, behavior is a product of psyche, emotion, circumstance, culture, and situation as it is of understanding of information and rationality. Attempts to create policy and structure interventions must be grounded in the reality of the IVDU's world or they will fail. If we are not mindful of this in our attempts to intervene into the lives of IVDUs, we are lost.

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Chapter Seven

IMPLICATIONS AND RECOMMENDATIONS FOR AIDS EDUCATION

This study has examined the effectiveness of AIDS education in California from four perspectives: changes in public opinion toward AIDS; formal tests of the impact of educational interventions on knowledge, attitude and behavioral intentions; ethnographic analysis of the subcultures of homosexual life; and interviews about AIDS knowledge and prevention with intravenous drug users. From each of these perspectives has come insight about the acquisition of knowledge about the disease and ways through which the spread of AIDS can be slowed. Recommendations for improving California's AIDS education efforts are presented in the last half of this chapter. Before outlining those recommendations, the implications of the findings presented in the previous chapters for educational policy related to AIDS are further elaborated.

IMPLICATIONS

The pre-post data reported in Chapter Four showed the under certain conditions, short-term gains in AIDS-related knowledge, attitudes and self-reported behavioral intentions were achieved. Although there was some variation by target group, all the groups tested moved in a positive direction on almost all the tested dimensions. The very small sample size of IVDUs available to this study does not permit us to assess with confidence the effectiveness of formal AIDS educational services for this population. Gains in knowledge were the strongest effect measured. Health education experience has taught us, however, that the connection between knowledge of a problem and taking action to prevent that problem is tenuous. Understanding the facts is not the same as action.

There was also a short-term change in attitudes toward AIDS, with the participants moving in the direction of more appropriate, factually-based attitudes toward transmission and prevention. The short-term nature of this change must be emphasized. Change was measured immediately following the educational intervention. We have no indication of whether those changes persist for an hour, a day or a month. The fact that the short-term effects were so strong is encouraging but it would be erroneous to infer anything about longer term consequences from these findings.

The same rationale applies to the expressed behavioral intentions of the AIDS education participants, regardless of whether they were members of the general public, gay or bisexual men, health care and social service providers or IV drug users. Because the URSA Institute was unable to conduct any follow-up of the participants, we do not have any information about the actual implementation of the intentions to behave in more appropriate ways. A longitudinal design is needed to follow-up a sample of participants to measure the retention of the material obtained through the interventions. The present study showed short-term gains were achieved. The AIDS epidemic can be stopped only through education and prevention which aim at lasting change. Additional research and evaluation are required to assess which interventions can produce that kind of change.

Within the context of the short-term change measured, the evidence on which methods are most effective is clear. For attitudinal and behavioral change, multiple interactive methods used intensively during a longer intervention, even lasting up to eight hours, seems most effective. This is a personal, almost intimate form of intervention, requiring a great deal of the time of trained personnel. Knowledge gain was most pronounced where the method used was a conventional presentation of one to two hours in length. The labor required for this kind of intervention, while it must be skilled, need not be as specialized as that used in intensive programs. These effects were observed across target groups.

These findings imply the use of different strategies for different target groups, as well as for different types of desired change. For individuals whose behavior places them at high risk of contracting AIDS, the intensive behavioral interventions are most likely to be of greatest priority. For these groups (gay or bisexual men, IVDUs, heterosexuals who have been highly active for a long period, and the sex partners of these individuals), the objective of the educational intervention is behavior change. Their behavior can put them in danger. Our findings show that among community-oriented gay men, the level of knowledge about the basic medical facts of AIDS is high. Yet many still require affective and behavioral reinforcements to encourage them to put their knowledge into practice. Specific recommendations about interventions are presented in the final section of this chapter.

The educational needs those not at immediate risk of infection are different. For these individuals, the most appropriate educational objectives are to obtain a basic

understanding of the disease and how it is spread. Particular attention should be paid to providing a clear explanation of the HIV test. This was one of the most difficult areas for the AIDS education participants we surveyed. One of the most common purposes of this education is to reassure anxious individuals that they are not at great risk of infection if they avoid certain relatively uncommon behaviors. This can be accomplished through less intensive interventions.

There are two groups within the general public category which warrant special attention. Youth and members of ethnic minority communities have needs for knowledge which differ from those of the general public. AIDS in minority communities has taken a different form than that found in white communities. Women and children with AIDS have come disproportionately from the Black and Latino communities around California. Their numbers continue to increase in large urban areas. The need for education about AIDS prevention in these communities goes beyond general information about the disease. Basic medical information must be complimented by skills and techniques that will promote appropriate and safe behaviors.

Young people (high school and college age) also require a different approach. Young people are more likely to be. In experimenting with the adult pastimes of sex and drugs, they may pursue behaviors which put them at risk of contracting AIDS. Therefore, youth-oriented education should focus on identifying which behaviors are risky and how to avoid those risks. What is needed is reliable information. During FY 1986-87, several of state's I&E contractors developed interventions specifically for young people. No systematic assessment of those educational strategies has been undertaken.

The field research conducted among homosexual and IV drug using populations in the state has its own implications for AIDS prevention and education. Many of those who are most at risk were not reached by Office of AIDS-funded programs during FY 1986-87. Homosexually active men who are not gay-identified (including bisexuals), IV drug users, and the sex partners of these individuals are still those most at risk of contracting the disease, according to our findings. Clearly, special educational interventions are needed to prevent the spread of HIV infection among these groups. An obvious solution would be to develop programs for these populations that respond to their social contexts. The social context becomes even more complex when the position of these groups in minority communities is considered. A discussion of special issues related to AIDS education in minority communities can be found in the next section.

As our ethnographic analysis of the IVDUs has shown, this population is not homogeneous. Needle use (as well as needle sharing) crosses boundaries of class and race easily. Needle use patterns also vary according to the drug being injected. Similarly, we must not assume that individuals at risk through homosexual activities comprise a homogeneous group. Very little is known about the social organization of non-gay identified homosexual or bisexual men. Additional primary analysis is needed in these subcultures to learn more about how AIDS knowledge is acquired and how that knowledge has influenced behavior. This kind of insight can provide a sound basis for the design of effective programs.

Unfortunately, there is no easy or efficient way reach these populations. One of the most salient distinguishing features of these groups is their lack of connection to mainstream social institutions. They typically do not identify with institutions which may provide education or counseling services. Prevention and education programs which are designed to offer the information and support individuals in these groups need should be delivered through organizations which have credibility with their constituents. There are few, if any, of these sorts of organizations available to contract with the Office of AIDS to provide the service.

Therefore, it may that the most effective way to reach these groups, at least initially, will be the least efficient. Since there are no established channels of communication to them, educational efforts directed to the general public might be the only way to reach them. These broadly targeted campaigns can be quite expensive, involving media time or costly materials. While non-gay identified homosexually active men may be reached through the mass distribution of literature, this strategy is not recommended as a way to reach IVDUs because of the educational deficiencies often found in this population.

An additional implication of the findings in this report is the need for more refined planning methods for AIDS education (and treatment). It is not sufficient to look at the characteristics of the diagnosed populations as a way of identifying educational needs. It is now widely understood that there can be a long incubation period between exposure to the virus and the development of diagnosable symptoms. Attention must be paid to seropositivity rates, related diagnoses (such as ARC) and community studies which identify the presence of risky behavior. The Office of AIDS should be anticipating the need for AIDS education rather than reacting to data on individuals who have been

diagnosed. The state's AIDS education strategy for FY 1987-88 is more proactive than was the case for the fiscal year covered by this study.

One final implication which should be addressed before turning to the specific recommendations is the need for a new, broader perspective on health education. Our experience in working with the I&E contractors is that they have assumed a role in their communities which goes beyond the transmission of reliable information about AIDS. They have come to play a wider role, that of the information and referral provider. Simple "informational" requests frequently can become involved conversations. They are expected to know about the care resources for persons with AIDS/ARC in their communities. There is often a strong counseling component in the kinds of questions to which they are asked to respond. A new understanding of health education should allow for the provision of such ancillary services. The Office of AIDS should consider supporting these critical activities under its contracting mechanisms.

The URSA Institute's recommendations for actions based on these implications are further detailed in the following section.

RECOMMENDATIONS

The evaluation of California AIDS Community Education Program has produced some lessons that can be productively applied to the design of current and future AIDS education programs. These lessons, while directed at the state level, can also inform educational policy-makers and strategists in local government and in the nonprofit sector. The specific recommendations are organized around the target populations identified by the Office of AIDS as being of highest priority. Under each target population, the recommendations assess the extent to which the state's AIDS education program has reached that group, which educational methods are most effective in producing change and what strategies should be pursued in reaching out to those at-risk individuals who are not receiving adequate information about AIDS and other HIV infections.

Gay or Bisexual Men

According to our analysis, the reach of formal AIDS education messages is determined to a large extent by subcultural affiliation. Community-oriented gay men are the most visible and best informed people in the state with regard to AIDS. These

individuals have taken a leadership role statewide in AIDS education, primarily through their involvement in community-based organizations. They are likely to continue to do so. Among community-oriented individuals, all indications are that knowledge, attitudes and behaviors have changed dramatically. AIDS education and prevention activities in this population have been successful to date and should be continued. Because this group has demonstrated a motivation to promote behavior change, they form the well-educated nucleus for on-going health promotion and support throughout the community.

The pre/post findings show that small groups are most effective in producing short-term changes in knowledge and behavioral intentions with this targeted audience. Interactive methods in longer sessions (4 hours or more) are particularly effective in stimulating positive behavior change, at least as measured by behavioral intentions. Educational activities which reinforce a sense of common welfare and support behavioral change strengthen these effects.

Adequate knowledge about AIDS is less certain in the exclusively sexual subculture. For psychological and cultural reasons, its members do not participate fully in the community institutions which have facilitated the dissemination of AIDS information among the community-oriented. Under these circumstances, the most effective (if not efficient) educational strategy might be to reach these men through a general public education effort which would also reach this small sub-segment of the population. Perhaps such a program could encourage them to seek more specialized support. Many homosexually active men have some knowledge about AIDS. However, their levels of sophistication and incorporation of that knowledge into attitudes and behavior differ. What is most critical is that key members of these subcultures have the basic facts about AIDS prevention. To reach those gay or bisexual men who are not community-oriented, the use of informal institutions holds the most promise. Institutions exist in gay communities which can act as educators in various subcultures. Business, professionals, and service workers should be encouraged to provide information and referrals and conduct informal counseling with at-risk people. In this context, bars are a particularly central institution. In these settings, personal credibility is important to effectiveness that the educators/educational counselors be known or introduced by those who are known. In the lexicon of our analysis, this strategy relies on existing turfs. The potential impact of tightly-knit networks on motivation and support for change among its members is great. These networks also help to transmit and update information about AIDS informally.

The pursuit of this strategy may not translate into specific or formal educational programs. Formal programs are not well accepted by homosexual men who have avoided a community-oriented setting for acquiring AIDS information. More likely, this approach would informally encourage greater understanding and support from existing networks. More than a simple transmission of basic facts about AIDS, this intervention also must involve the affective and cognitive aspects of the disease and its subcultural meaning.

Ethnically identified homosexual men do not appear to have been reached effectively by AIDS education efforts. Men from ethnic minority groups whose primary identification is with the gay subculture have received AIDS information from the same sources as other gay men. Homosexual minority men whose primary reference group is with their ethnic community are much less likely to have received information and prevention messages. For these difficult-to-reach individuals, AIDS education which is sensitive to the place of homosexuality in Black, Latino, and Asian communities is critical. These men may be found not in gay-identified areas but integrated into community institutions and would avoid any educational effort which labels their behavior as gay.

IV Drug Users

IV drug use exists at all socio-economic levels, not just among low-income people. Few of California's IV drug users are being reached by formal AIDS education and prevention programs. Those who are reached are likely to be in drug treatment programs. Even fewer are being reached outside of the treatment setting. Given the high rate of seropositivity among IVDUs, there is a great need to reach this population. To do so, indigenous structures and institutions must be used to transmit this information, just as in the gay community. Programs of community outreach for AIDS education involving street activities and workers appear promising but the scope of these efforts in California has been too small to produce measurable changes in AIDS incidence rates so far. Outreach efforts should be expanded on a demonstration basis. In pursuing this strategy, government contracting agencies, such as the Office of AIDS, should seek providers with credibility among the affected groups. Such programs will probably be more expensive than other educational approaches due to the labor-intensive nature of this work but conventional methods are not likely to produce the desired results.

Given that IV drug users in treatment are a "captive" population, this is a natural setting in which to provide education. Adding AIDS education to an existing treatment program would be less expensive than developing a new program de novo. Unfortunately, there are not enough treatment slots available in the state for all users desiring them. Treatment programs must be expanded to take advantage of the opportunity to prevent the spread of this deadly disease. Many drug treatment counselors are themselves ex-users. Special efforts are needed to address their personal anxiety and resistance to discussing AIDS with their clients. Counselors may also have difficulty in working with IVDUs who are also gay. Specific training protocols must be developed for this population. Providing AIDS education through drug treatment counseling must be an important component of the state's strategy to reach the group.

Among the specific education interventions supported by the evaluation findings is the need for AIDS messages which show the disease as a compelling and personal threat to those who use needles. This might be accomplished through an IVDU with AIDS or ARC who would be willing to serve as a spokesperson or focal point for a targeted media campaign. This campaign should rely heavily on television and should emphasize multi-language programming and late-night airing of the messages.

Heterosexuals at High Risk

This risk category includes heterosexuals who have multiple partners or whose partners are members of other risk groups, such as IVDUs or bisexual men. This is a particularly difficult population to identify and locate. At the most general level, any individual entering into a sexual relationship can never be completely certain about the past activities of the new partner. In minority communities, bisexuality is believed to be more common than in white communities. Moreover, it is reputed that the bisexual activities which occur are private and hidden. If this is true, women within these communities are particularly vulnerable, yet often unaware of the possible risks they face.

The message to be conveyed to heterosexuals at high risk is broad and simple. AIDS is not transmitted solely through homosexual activity--"regular" heterosexual intercourse can spread the virus. This implies that each of us has to take personal responsibility for the prevention of AIDS. This responsibility, in turn, entails discussing sensitive personal histories, knowing as much as possible about one's partner, and practicing safe sex. Casual sex, despite its appeal, can be deadly. It is possible that no sexual activity without full

knowledge of a partner's history can be completely "safe." The goal of this education should be to make sex safer.

The understanding that one can no longer afford to wait for one's partner to raise these personal issues must be reinforced. Men and women need to have available to them educational programs which allow them to develop and practice the skills necessary to discuss such topics. While in no way minimizing the responsibility that men must take in initiating and participating in these discussions, support groups for women may prove to be an effective method for empowering them to exert more control in sexual matters. There have been recent reports, however, from some battered women's shelters that women who attempted to persuade their partners to practice safe sex were subjected to violent male reactions. Such stories underscore the necessity to convey messages about responsibility for reducing virus-spreading behaviors to men as well as to women.

Health Care and Social Service Workers

The reach of the state's AIDS education program among health and social service workers has been uneven. There has been limited penetration into the social service and mental health arenas. Reach into the health care world has been much better. This is to be expected since AIDS treatment has been primarily in the realm of medical care and health care workers have been dealing directly with infected individuals. As caseloads grow and treatment methods improve, supportive services will come to play a more prominent role in the care of persons with AIDS. The need for professional education of social workers, eligibility workers and other human service workers will increase over the next few years. The Office of AIDS should begin to develop educational plans which include these groups, particularly in public departments of social service and mental health. This education must not stop with basic information about AIDS. It must also address attitudes and behaviors which affect the care of infected people.

The pre/post questionnaire findings indicate that the educational methods most effective in producing increases in knowledge among providers are long sessions (over 8 hours) involving multiple interactive methods. Group size does not appear to be relevant to knowledge gain. Attitude change is produced most often by small interactive groups meeting for 2 to 6 hours. Change in the behavioral intentions of providers is associated with larger groups, equally long time periods and multiple methods. An interesting factor which was noted in the discussion of the open-ended comments on the provider training

in Chapter Four is that providers enjoy the networking aspects of the training. That benefit should be stressed in publicizing future training sessions.

One final issue with regard to provider training is the need to overcome cultural barriers to discussing drugs and sexual activities. There was a high proportion of Asians among the provider trainees. This is likely to be a result of the increasing number of Filipino nurses practicing in California. Their professional training may not have prepared them for working with HIV-infected persons or those concerned about infection since the behavior of those patients may be stigmatized. A needs assessment should be conducted in this population and, if justified by the findings, training to assist Asians and others in overcoming these cultural barriers to caring for people with AIDS or ARC should be made available.

General Population

The general public is not a priority group for AIDS education under the Office of AIDS education plan for 1987-88. This decision is supported by the findings of this evaluation. Great effort has been devoted to educating the general public and the campaigns have had the intended effects. According to the Field Institute, the AIDS knowledge level among the generally public is high. Individuals who are at greater risk of contracting the disease are the most appropriate targets for education and prevention messages. There is one sub-group in the general population which still merits special attention. This is the state's young people.

Adolescents (high school and college-age) are likely to experiment with many behaviors and lifestyles in their developmental process. In doing so, they run the risk, even though it may be slight, of exposure to the HIV virus. This possibility provides sufficient grounds for the existence of a high school and college-oriented AIDS education and prevention effort. It is recommended that current efforts to reach this age group be continued and that new methods to inform adolescents about the risks of AIDS be supported.

Special Concerns about AIDS Education in Minority Communities

Minority education has been spotty with greater efforts in some areas of the state than in others. The effectiveness of general educational activities has been limited by the small number of staff from those ethnic communities targeted. As with other groups, the message is best transmitted by those with whom the audience identifies and who have access to key individuals in the important sub-groups within the culture. Only then will minorities accept the idea of AIDS as a concern to them.

All programs should include emphasis on special cultural and subcultural needs, whether migrant populations, refugees, or the homeless, to make their programs psychologically accessible to the entire community and to develop appropriate messages and activities. However, minority efforts should not be isolated to a single worker or unit alone. The challenge is to create a special commitment to serving minorities while understanding that they exist in every transmission category, not simply IVDUs. In fact, the majority of those with AIDS from minority communities have been from other at-risk groups, according to the state's epidemiological data.

In addition, minority groups whose numbers of diagnosed AIDS cases have not been as large as those found in the Black and Latino communities have needs for more education. Great concern is expressed for the growing Southeast Asian population and for the American Indian population, whose members often are counted among the White or Latino figures for AIDS cases. As yet, no messages have been created to address their special needs.

There is little available data on the minority gay population. Therefore, relevant turfs throughout California communities have neither been mapped nor targeted specifically. Those ethnically-identified homosexual men who live and receive services in minority communities are of the "integrated" group. Institutions which reach them (the Black churches, bars, barbershops, restaurants) will need to be targets of special educational efforts.

The most active and visible minorities in AIDS education, thus far, have been gay-identified minority men and women. In many cases, their strong affiliation with the gay community limited their effectiveness and contributed to denial in other groups. Many researchers have documented the higher levels of bisexuality in minority gay men than in white gay men. Thus, minority women of all classes are at higher risk of infection.

AIDS education, like many issues in minority communities, must include the family. Connections to family are stronger, and the family is an important mediator and reinforcer of educational messages and behavioral changes. As with other groups, indigenous institutions are central to effectiveness. The church social structure, for example, can validate educational activities, but this collaboration will only happen when they are not asked to give up their value system to participate in AIDS education and prevention. The message must be made congruent with the existing values of the institution and the community in which it is embedded.

Further Research Issues

One of the more important recommendations of this report is that the Department of Health Services continue to support AIDS education research and evaluation activities. Only through the vigorous pursuit of new understanding of the impact of AIDS education and prevention can we develop methods which effectively change behavior. The research described in this report has pointed out a number of promising directions for additional research. These are:

- a longitudinal assessment of the long-term behavior change resulting from a variety of educational interventions;
- a rigorous analysis of behavioral risk factors for HIV infection;
- a more thorough investigation into high risk heterosexuals and their sexual decision-making process;
- a demonstration of IVDU AIDS education program models;
- an analysis of the effectiveness of indigenous community institutions as providers of AIDS education and prevention messages; and
- the development of model protocols for health care and social service workers dealing with sensitive topics.

Through the vigorous pursuit of a focused research agenda, California's Office of AIDS has an opportunity to continue its national leadership in the development of knowledge that can save lives.

APPENDIX

PRE/POST TEST QUESTIONNAIRES

GENERAL PUBLIC

PRE-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please circle true or false for the following statements:

	True	False
1. AIDS is caused by a virus.	2	1
2. A person knows right away if he/she has become infected.	2	1
3. The AIDS Antibody Test can prove if a person has AIDS.	2	1
4. AIDS can be spread by sharing food, drink, or eating utensils.	2	1
5. AIDS only strikes homosexuals.	2	1
6. Changing sexual behavior and drug use are the only ways to stop AIDS.	2	1

Please circle how much you agree or disagree with the following statements:	**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7. Special precautions should be taken by all who come into contact with people with AIDS.	5	4	3	2	1
8. It is what people do, not who they are, that puts them at risk of getting AIDS.	5	4	3	2	1
9. Everyone with AIDS has the same symptoms.	5	4	3	2	1
10. There is no way to stop the spread of AIDS.	5	4	3	2	1
11. People with AIDS should be allowed to work in restaurants.	5	4	3	2	1

Please circle how often the following statements describe you:

	Always	Sometimes	Never
12. I avoid physical contact with people I think might have AIDS.	3	2	1
13. I discuss the use of condoms (rubbers) with my spouse.	3	2	1
14. I talk openly about AIDS with someone before I become intimate with him/her.	3	2	1
15. I encourage my friends to learn more about AIDS.	3	2	1

[01] STOP HERE

We have just a few questions about you to assist with the program evaluation. They will be used for statewide data comparison purposes only.

AGE _____ SEX: M [ ] F [ ] RACE: [ ] White [ ] Black [ ] Asian [ ] American Indian [ ] Other _____

LAST SCHOOL GRADE/DEGREE COMPLETED:

Grade				Degree	
1-6	7-9	10-12	High School	College	Graduate School

Where would you say you get most of your information about AIDS?

[ ] Newspaper [ ] Friends [ ] Health Center

[ ] TV [ ] Magazines [ ] Private doctor

[ ] This AIDS Project [ ] Other Workshops [ ] Other _____

[ ] Professional Journals [ ] People at Work

What reason did you have for attending today?

[ ] Curiosity

[ ] Friend/lover has AIDS

[ ] Worried about getting AIDS

[ ] To do my work better

[ ] Required to come

[ ] Other _____

Would you recommend this particular training or education presentation to others?

Yes [ ] No [ ]

Please comment if you wish about the presentation, materials, AIDS, or this survey.

POST-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please do not answer these questions until after the session.
Please do not refer to your previous answers.

Please circle true or false for the following statements:

	True	False
1. There is no single test that can prove if a person has AIDS.	2	1
2. AIDS is not spread by casual contact.	2	1
3. Women are also at risk for AIDS.	2	1
4. AIDS causes the body to lose its ability to fight off infections.	2	1
5. Sexual contact with condoms (rubbers) decreases the risk of getting AIDS.	2	1
6. It always takes two years to tell if a person has AIDS.	2	1

Please circle how much you agree or disagree with the following statements:	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
7. A person can control whether or not she/he gets AIDS.	5	4	3	2	1
8. Children with AIDS should not be allowed to attend public schools.	5	4	3	2	1
9. You can tell if a person has AIDS by knowing about his/her lifestyle.	5	4	3	2	1
10. It may not be safe to shake hands with someone who has AIDS.	5	4	3	2	1
11. If a person doesn't have symptoms, she/he cannot spread AIDS to others.	5	4	3	2	1

Please circle how often the following statements describe you:

	Always	Sometimes	Never
12. I would work in the same office with a person with AIDS.	3	2	1
13. I will discuss safe sex with my spouse.	3	2	1
14. I will think twice before I tell people that I went to a session on AIDS.	3	2	1
15. I will ask people about their use of drugs before I become intimate with them.	3	2	1

[01]

THANK YOU FOR YOUR HELP

DEVELOPED BY URSA INSTITUTE, SAN FRANCISCO

PROVIDERS

PRE-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please circle true or false for the following statements:

	True	False
1. Using condoms (rubbers) can prevent the spread of AIDS.	2	1
2. A positive result on the AIDS Antibody Test can prove that a person has AIDS.	2	1
3. AIDS can be spread by sharing needles or syringes.	2	1
4. The AIDS virus can be identified two months after exposure.	2	1
5. AIDS is caused by a virus.	2	1
6. There is very little AIDS among American Blacks and Latins.	2	1

Please circle how much you agree or disagree with the following statements:	**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7. Special precautions should be taken by all who come into contact with AIDS clients.	5	4	3	2	1
8. It is what people do, not who they are, that puts them at risk of getting AIDS.	5	4	3	2	1
9. Everyone with AIDS has the same symptoms.	5	4	3	2	1
10. There is no way to stop the spread of AIDS.	5	4	3	2	1
11. People with AIDS should be allowed to work in restaurants.	5	4	3	2	1
12. AIDS is so deadly, it will require extreme public health measures.	5	4	3	2	1

Please circle how often the following statements describe you:

	Always	Sometimes	Never
13. I discuss AIDS with my clients.	3	2	1
14. I change my usual way of relating to clients when I work with a person with AIDS.	3	2	1
15. I advise clients with AIDS to avoid having contact with others.	3	2	1
16. I ask my clients whether they engage in risk sexual activities.	3	2	1

[02] STOP HERE

We have just a few questions about you to assist with the program evaluation. They will be used for statewide data comparison purposes only.

AGE _____ SEX: M [ ] F [ ] RACE: [ ] White [ ] Black [ ] Asian [ ] American Indian [ ] Other _____

LAST SCHOOL GRADE/DEGREE COMPLETED:

Grade			Degree		
1-6	7-9	10-12	High School	College	Graduate School

Where would you say you get most of your information about AIDS?

[ ] Newspaper [ ] Friends [ ] Health Center

[ ] TV [ ] Magazines [ ] Private doctor

[ ] This AIDS Project [ ] Other Workshops [ ] Other _____

[ ] Professional Journals [ ] People at Work

What reason did you have for attending today?

[ ] Curiosity

[ ] Friend/lover has AIDS

[ ] Worried about getting AIDS

[ ] To do my work better

[ ] Required to come

[ ] Other _____

Would you recommend this particular training or education presentation to others?

Yes [ ] No [ ]

Please comment if you wish about the presentation, materials, AIDS, or this survey.

POST-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please do not answer these questions until after the session.
Please do not refer to your previous answers.

Please circle true or false for the following statements:

	True	False
1. Fewer than 10% of reported AIDS cases are IV drug users.	2	1
2. AIDS causes the body to lose its ability to fight off infections.	2	1
3. Intercourse without using condoms (rubbers) increases the risk of getting AIDS.	2	1
4. The incubation period for AIDS is always less than two years.	2	1
5. There is no single test that can be used to diagnose AIDS.	2	1
6. Cleaning a needle with warm water prevents the spread of AIDS.	2	1

Please circle how much you agree or disagree with the following statements:	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
7. A person can control whether or not she/he gets AIDS.	5	4	3	2	1
8. I feel like I am putting my family at risk whenever I work with an AIDS client.	5	4	3	2	1
9. Children with AIDS should not be allowed to attend public schools.	5	4	3	2	1
10. You can tell if a person has AIDS by knowing about his/her lifestyle.	5	4	3	2	1
11. If a person doesn't have symptoms, she/he cannot transmit AIDS to others.	5	4	3	2	1
12. I would consider quarantine appropriate for people with AIDS.	5	4	3	2	1

Please circle how often the following statements describe you:	Always	Sometimes	Never
13. I will counsel a mother with AIDS not to kiss or caress her children.	3	2	1
14. I will discuss both social and medical aspects of AIDS with clients.	3	2	1
15. If possible, I will try to avoid working with clients with AIDS.	3	2	1
16. I will share safe sex guidelines with my clients.	3	2	1

[02]

THANK YOU FOR YOUR HELP

DEVELOPED BY URSA INSTITUTE, SAN FRANCISCO

GAY OR BISEXUAL MEN

PRE-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please circle true or false for the following statements:

	True	False
1. You know right away if you have gotten AIDS.	2	1
2. AIDS is caused by a virus.	2	1
3. The AIDS Antibody Test can prove if you have AIDS.	2	1
4. Using condoms (rubbers) can prevent the spread of AIDS.	2	1
5. AIDS can be spread by sharing needles or syringes.	2	1
6. There is very little AIDS among Blacks and Latins.	2	1

Please circle how much you agree or disagree with the following statements:	**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7. Everyone with AIDS has the same symptoms.	5	4	3	2	1
8. Simply by being gay I am at risk for AIDS.	5	4	3	2	1
9. There is no way to stop the spread of AIDS.	5	4	3	2	1
10. Using condoms (rubbers) is not important if I have a steady partner.	5	4	3	2	1
11. Sharing needles even with friends can put me at risk of getting AIDS.	5	4	3	2	1
12. A person who is infected should not have sex.	5	4	3	2	1

Please circle how often the following statements describe you:

	Always	Sometimes	Never
13. I wait for a new sex partner to ask about using condoms (rubbers) before I say anything.	3	2	1
14. I'm not careful about what I do sexually if I have been drinking or using drugs.	3	2	1
15. I encourage my friends to carry condoms (rubbers).	3	2	1
16. I try to live in ways that keep me healthy.	3	2	1
17. I ask friends about their use of drugs.	3	2	1

[03] STOP HERE

We have just a few questions about you to assist with the program evaluation. They will be used for statewide data comparison purposes only.

AGE _____ SEX: M [ ] F [ ] RACE: [ ] White [ ] Black [ ] Asian [ ] American Indian [ ] Other _____

LAST SCHOOL GRADE/DEGREE COMPLETED:

Grade				Degree	
1-6	7-9	10-12	High School	College	Graduate School

Where would you say you get most of your information about AIDS?

[ ] Newspaper [ ] Friends [ ] Health Center

[ ] TV [ ] Magazines [ ] Private doctor

[ ] This AIDS Project [ ] Other Workshops [ ] Other _____

[ ] Professional Journals [ ] People at Work

What reason did you have for attending today?

[ ] Curiosity

[ ] Friend/lover has AIDS

[ ] Worried about getting AIDS

[ ] To do my work better

[ ] Required to come

[ ] Other _____

Would you recommend this particular training or education presentation to others?

Yes [ ] No [ ]

Please comment if you wish about the presentation, materials, AIDS, or this survey.

POST-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please do not answer these questions until after the session.
Please do not refer to your previous answers.

Please circle true or false for the following statements:

		True	False
1.	AIDS causes the body to lose its ability to fight off infections.	2	1
2.	Anal sex without using condoms (rubbers) increases the risk of getting AIDS.	2	1
3.	It always takes two years to tell if a person has AIDS.	2	1
4.	There is no single test that can prove if you have AIDS.	2	1
5.	Cleaning a needle with warm water prevents the spread of AIDS.	2	1
6.	AIDS is increasing outside the gay population.	2	1

Please circle how much you agree or disagree with the following statements:		**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7.	Using condoms (rubbers) is important with strangers but is not really needed with a steady partner.	5	4	3	2	1
8.	People who don't have symptoms can't spread AIDS.	5	4	3	2	1
9.	It's not who you are, but what you do that puts you at risk for AIDS.	5	4	3	2	1
10.	A person can control whether or not she/he get AIDS.	5	4	3	2	1
11.	It's OK to share a needle if you know who used it last.	5	4	3	2	1
12.	If you test negative on the AIDS Antibody Test you don't have to be concerned with safe sex.	5	4	3	2	1

Please circle how often the following statements describe you:

		Always	Sometimes	Never
13.	I'll watch my health and diet carefully.	3	2	1
14.	I will insist on using condoms (rubbers) during sex whether or not I am the insertive partner.	3	2	1
15.	If I'm too drunk or high to have safe sex, I won't have sex at all.	3	2	1
16.	I'll encourage my friends to practice safe sex.	3	2	1
17.	I will talk to friends who use needles about how to clean them.	3	2	1

[03]

THANK YOU FOR YOUR HELP

DEVELOPED BY URSA INSTITUTE, SAN FRANCISCO

IV DRUG USERS

PRE-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please circle true or false for the following statements:

	True	False
1. You know right away if you have gotten AIDS.	2	1
2. AIDS is caused by a virus.	2	1
3. The AIDS Antibody Test can prove if you have AIDS.	2	1
4. Using condoms (rubbers) can prevent the spread of AIDS.	2	1
5. AIDS can be spread by sharing works.	2	1
6. Only gays get AIDS.	2	1

Please circle how much you agree or disagree with the following statements:	**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7. Everyone with AIDS has the same symptoms.	5	4	3	2	1
8. It's not important to clean needles if I'm shooting up with a friend.	5	4	3	2	1
9. There is no way to stop the spread of AIDS.	5	4	3	2	1
10. Using condoms (rubbers) is not important if I have a steady partner.	5	4	3	2	1
11. Cleaning needles is a waste of time. I'll either get sick or I won't.	5	4	3	2	1

Please circle how often the following statements describe you:

	Always	Sometimes	Never
12. I'm not as careful about what I do if I have been drinking or getting high.	3	2	1
13. I share needles with people I know really well.	3	2	1
14. I try to live in ways that keep me healthy.	3	2	1
15. I am willing to take the time to clean a needle with bleach and water before I use it.	3	2	1
16. I tell my friends not to share needles.	3	2	1
17. I use condoms (rubbers).	3	2	1

[04] STOP HERE

We have just a few questions about you to assist with the program evaluation. They will be used for statewide data comparison purposes only.

AGE _____ SEX: M [ ] F [ ] RACE: [ ] White [ ] Black [ ] Asian [ ] American Indian [ ] Other _____

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Would you recommend this particular training or education presentation to others?

Yes [ ] No [ ]

Please comment if you wish about the presentation, materials, AIDS, or this survey.

POST-SESSION SURVEY FOR AIDS EDUCATION AND INFORMATION PROGRAMS

Please do not answer these questions until after the session.
Please do not refer to your previous answers.

Please circle true or false for the following statements:

	True	False
1. AIDS weakens the body so it can't fight off infections.	2	1
2. Using condoms (rubbers) is one way to avoid getting AIDS.	2	1
3. It always takes a long time to tell if a person has AIDS.	2	1
4. There is no single test that can prove if you have AIDS.	2	1
5. Cleaning a needle with warm water prevents the spread of AIDS.	2	1
6. Only women who use needles get AIDS.	2	1

Please circle how much you agree or disagree with the following statements:	**Strongly Disagree**	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7. Condoms (rubbers) are not really needed with a steady partner.	5	4	3	2	1
8. People who don't look sick or feel sick can't spread AIDS.	5	4	3	2	1
9. People don't need to clean a needle if they know the people they are sharing it with.	5	4	3	2	1
10. A person can control whether or not she/he will get AIDS.	5	4	3	2	1
11. Cleaning needles can save my life.	5	4	3	2	1

Please circle how often the following statements describe you:	**Always**	**Sometimes**	**Never**
12. I won't share needles with other people.	3	2	1
13. I'll watch my health and diet carefully.	3	2	1
14. I won't use a needle if I can't clean it first.	3	2	1
15. I'll use condoms (rubbers).	3	2	1
16. I'll tell my friends to clean needles before they share them.	3	2	1
17. I won't share needles with my friends even if I'm high.	3	2	1

[04]

THANK YOU FOR YOUR HELP

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