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## **CASE FILE**

### **Evaluation Case Competition, 1997**

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### **CASE COMPETITION SCENARIO**

The Government of Ontario recently announced the downloading of public health programming to local municipalities. As a result, the Community Services Committee, a sub-committee of the Regional Council, is scrutinizing all public health programs delivered by its Health Department. The HIV Prevention Program for Injection Drug Users (IDU) is the first program to be reviewed.

An evaluation of the HIV Prevention Program for IDUs has been started. In fact, the data collection and analysis phases are complete and some of the background information and methodology have already been written up. With future job security uncertain, however, the evaluator in charge of the evaluation has accepted a new position, effective immediately.

Your team has been called in to review the evaluation materials and prepare a Committee briefing document. The Community Services Committee is expecting your written brief by 3:00 pm today.

Good luck!

## 1.0 INTRODUCTION

This report presents an overview of the operation of the three components of the needle exchange programme of the Ottawa-Carleton Health Department (OCHD). In addition, the objectives, methods and results of the evaluation are presented. Recommendations for suggested amendments to the delivery of services to injection drug users (IDUs) in Ottawa-Carleton are provided.

The operation of the needle exchange programme is described from the commencement of operations in July 1991 until the end of the evaluation project in August 1993. The evaluation findings relate to the period June 1992 to August 1993.

## 2.0 THE HIV PREVENTION PROGRAMME FOR INJECTION DRUG USERS

### 2.1 Services Prior to the Needle Exchange Programme.

From the outset of the HIV epidemic, OCHD's philosophy has been to integrate HIV/AIDS preventive activities with other ongoing, broad based programmes wherever possible and appropriate. Specifically, this has meant dealing with HIV as a sexually transmitted disease (STD) and approaching it primarily through the existing STD and birth control services.

What this has meant in practice is that prior to the establishment of the needle exchange, known as the SITE, IDUs received services through the HIV programme at the STD clinic. One nurse did street outreach handing out bleach kits to IDUs and condoms were provided free of charge at the STD clinic where counselling was also available. No needle exchange services were in existence.

At the same time, the Youth Services Bureau (YSB) of Ottawa-Carleton, through its outreach workers, had developed substantial contact with IDUs and sex trade workers, distributing bleach kits and condoms and offering counselling and referral services. Again no needle exchange was offered.

At the time of developing the proposal for the needle exchange programme in 1989 therefore, a

community youth agency and one programme of the Health Department were already involved in services for IDUs and had developed expertise and knowledge in this area. The needle exchange was formulated as a joint venture between the OCHD and YSB.

### 2.2 Funding

The programme was initially funded for a 18 month period from July 1991 to January 1993 as part of a Health and Welfare Canada initiative supporting pilot programmes for IDUs. Under this initiative, the programme received funding on an equal cost shared basis from both the Federal and Provincial Governments. When Federal funding ceased in January 1993, regional funding was not approved to cover the short fall. Consequently, with a 50% cut in funding, the programme was forced to make reductions in its capacity to provide services and the position of full-time coordinator was terminated. With further budget restrictions due to Ontario social contract legislation, the programme experienced further cutbacks in August 1993.

### 2.3 The Objectives of the Programme

While the programme supports the educational messages "Don't use drugs" and "Get help to quit", its primary focus is on the prevention of transmission of HIV in the specific situations where drug users are at risk. These messages include: do not share needles; if you do share, be sure your needle is clean; if you can't get a clean needle exchange it for a clean one; and, practice safer sex.

The programme is multi-faceted; programme staff offer a range of services and dependent upon their perceived need, clients are able to receive:

- Education to prevent HIV through needle sharing
- Education to prevent HIV through sexual practices (literature and condom distribution)
- Provision of new, clean needles (needle exchange)
- Provision of materials to clean used needles (bleach kits)
- HIV testing and counselling
- Referral to support services and drug rehabilitation
- Hepatitis B testing and vaccinations.

The needle exchange programme comprises three distinct modes of service delivery. Services are provided to IDUs and others perceiving themselves to be at risk at a fixed clinic location, through a mobile clinic and through outreach workers providing services on the street and at specific agencies in the community.

#### 2.4 The Fixed SITE

The SITE was initially housed in the basement of the Health Department's Birth Control Clinic (BCC). The SITE had use of office space in the basement for the co-ordinator and a part-time clerk, a shared examination room for blood work or counselling which also contained a cot for emergencies and another office for use as an additional interview room.

Clients approached the SITE through a separate entrance at the BCC, which led directly into the needle exchange via a ramp with a rail. At the end of the ramp a mobile counter was in place to greet clients and hold supplies.

A staff kitchen, accessed by lifting the counter rail, contained educational pamphlets and resource material and was the only resource available to those people waiting to see a nurse for the return of test results or for counselling, or for those people accompanying friends and partners for the return of test results or testing. People who had received hepatitis B vaccinations and needed to be observed immediately post administration of the vaccine for a period of 20 minutes similarly lacked a waiting area.

In June 1993, the needle exchange programme was amalgamated with the STD and Birth Control clinics to form the Sexual Health Centre. The new fixed site location is a long narrow room at the entrance to the main Sexual Health Centre. Again no waiting room is available for use by IDUs but a well equipped counselling room adjacent to the SITE is used for blood work and counselling.

##### 2.4.1 Services Available at the Fixed SITE

Services that have been available at the SITE are based largely on those indicated in the original funding proposal, and fall into two groupings: hard resources and soft resources. **Provision of hard resources** relates to the supplies that are distributed

to people attending the exchange, such as clean, unused one cc 100 unit disposable needles and syringes, educational materials, bleach kits, condoms, and Hep.B. vaccine. **Soft resource provision** available at the SITE includes educational counselling around the area of quitting drugs, safer injecting and sexual behaviour, first aid, referrals to medical and community agencies, supportive counselling around areas of concern raised by the IDUs themselves and pre and post test counselling around the provision of HIV testing.

##### 2.4.2 Staffing and Hours of Operation

The hours of operation of the fixed location varied over time, determined largely by financial considerations and latterly by location constraints. Similarly, the staff complement, the balance between nursing staff and youth counsellors also varied, responding to the needs of the IDUs for services only able to be provided by Public Health Nurses (PHNs) and responding to the same financial considerations.

When the SITE first opened in July 1991 it was staffed by two PHNs and operated Friday, Saturday and Sunday from 4:00 pm to 10:00 pm and Monday from 7:00 pm to 10:00 pm. It operated while the BCC was not in operation. One month later, in August 1991, one YSB counsellor joined the PHNs and the staff complement was increased to three.

This schedule of services at the fixed SITE location remained in effect until the summer of 1992. In June 1992 the total complement of staff was reduced to two on two nights in order to accommodate increased demand for staff to cover the increase in street outreach hours. Three staff remained on Fridays and Saturdays due to testing demands, which could only be met by PHNs and not by counsellors from YSB.

In January 1993 Federal funding ceased, resulting in a 50% reduction in the needle exchange programme's budget. In order to accommodate this reduction, the SITE hours were reduced by two hours on Friday, Saturday and Sunday as was the staff complement from three to two staff. Thus, the clinic hours at the fixed location were reduced from 21 hours to 15 hours per week.

At the end of June 1993 when the SITE was amalgamated with the other clinics in the Healthy Sexuality Programme and became part of the newly created Sexual Health Centre at new premises, it was necessary to revise the SITE clinic hours to take account of different constraints imposed as a consequence of the move to the new location. As a condition of the lease of the new building, which is the ground floor of a City Living Housing Development, all clinic activity had to cease at 8 pm and no clinics could be held on the weekends. In addition, the SITE could not operate when other clinics in the building were in operation. Consequently, the fixed site location hours were reduced to four hours a night on Monday, Tuesday and Wednesday with a staff complement of two for a total of 12 hours per week.

Finally, Ontario social contract legislation in August 1993 necessitated the closure of one clinic. The fixed location therefore currently operates two nights a week for four hours a night for a total of eight hours per week.

## **2.5 The Mobile SITE**

The SITEmobile, referred to as the van, started operating as a second mode of service of the needle exchange on August 6 1991.

### **2.5.1 Services Available at the Mobile SITE**

The majority of the services and resources that are offered at the fixed site are available from the van. The exchange of needles and the distribution of condoms and bleach kits takes place, as does the full range of referral services.

Due to time and space constraints, limited counselling is available; rather people were encouraged to go to the fixed location. Similarly, for the same reasons, HIV testing and hepatitis B vaccinations were not available from the van, with people again being encouraged to visit the fixed SITE.

### **2.5.2 Staffing, Hours of Operation and Locations**

Many people were contacted to determine the best locations for the van, including Youth Services Bureau outreach workers and supervisors, clients, police and other community based agencies.

Initially the van operated with one PHN and one YSB counsellor on Tuesday, Wednesday and Thursday evenings when the fixed SITE was not open. For a period of 4 hours on the three weekday evenings the van toured the downtown core promoting the services available at the fixed location, distributing condoms, bleach kits and educational pamphlets and exchanging needles.

Two months after commencing operations, promotional street outreach was added to the van hours. One month later, in November, promotional street outreach from the van was added beyond the original downtown area still served by the van on weekday nights. With minor scheduling amendments due to inclement winter weather conditions, the van essentially continued a three day programme from its inception in August 1991 until the following summer.

As a pilot programme, the van tested out various locations and timings. For example, in the summer of 1992, following successful negotiations with community agencies and the Police in the West End, four new West End locations were added to the van schedule one day a week and the van hours on this day were extended to take account of the necessary travel time involved. At the same time, one night of van activity had to be suspended for the months of July and August due to staff shortages. It was not until September 1992 that the additional night could be re-instated. At this point it was decided to operate the van on Fridays rather than Thursdays responding to increased activity on the street on Fridays.

This schedule continued until the federal funding ceased in January 1993. As a result of the subsequent budget restrictions, the hours of the sitemobile were reduced in a similar manner to the hours of the fixed location. The Friday night van clinic was terminated as the services of the needle exchange were available at the fixed location.

With the move to new premises and the amalgamation of the needle exchange into the newly created Sexual Health Centre in June 1993, the

hours of both the fixed and mobile needle exchange locations were revised.

As the fixed location could only operate on three weekdays, the mobile location commenced operations on weekend nights. In response to comments from users of the service, the hours were extended further into the night to respond to the time when needle exchange services were most needed. In addition, the previous pattern of half hour stops was amended to a more realistic pattern of an hour long stop at two locations with the shift commencing and terminating with a half hour stop in the market area each night. The van has always had a staff complement of two.

### **2.5.3 Street Outreach**

Promotional street outreach has been a service of the needle exchange since the early days in October 1991, when it was a feature of the mobile site. Staff would leave the van at van stops, promote the services of the SITE, STD Clinic, BCC and YSB Drop in Centres. Condoms and bleach kits were distributed but no needle exchange took place. In January 1992 when the weather made it impossible to continue street outreach at night, promotional activities took place one day a week from 12:30 to 4:00 pm.

With improving weather in April 1992, street outreach was increased to two days a week from noon to 6:00 pm. Concentrating on the market area, two workers would engage with people on the street, offering advice and information, bleach kits, condoms and for the first time were able to exchange needles. With distinctive yellow backpacks, the workers carried their provisions with them and by using a small biohazard container, could accept used needles for exchange and subsequent disposal.

November 1992 saw a significant shift in the method of street outreach delivery. Rather than meeting with people on the street, in response to several requests from agencies in the community, street outreach was amended to community outreach. SITE outreach staff commenced calling in on drop-in centres and lunch programmes to continue all counselling services and to carry out needle exchange.

The outreach component of the needle exchange has remained a constant feature of the SITE programme. Street outreach has continued on the same days but the hours have been changed from time to time to fit around the activities of the drop-in centres and particularly the lunch programmes.

## **3.0 THE EVALUATION**

### **3.1 The Objectives of the Evaluation**

The overall goal of the evaluation was to determine the success of the needle exchange programme in modifying high risk behaviour and preventing HIV infection in IDUs. The four study objectives developed to achieve this goal were:

1. To determine the integrity of the programme process in terms of development and implementation.
2. To determine the demographic and risk characteristics of IDUs.
3. To determine the extent of HIV infection in the IDU population.
4. To determine the effectiveness of the needle exchange programme in achieving positive health outcomes: changes in HIV-related knowledge, attitudes and behaviour.

For each study objective, specific evaluation research questions and indicators were developed. The research questions for each objective are outlined below.

### **3.2 The Research Questions**

#### **3.2.1 Process Evaluation : Monitoring of Programme Development and Implementation**

The process by which the needle exchange programme was developed and implemented was monitored with a focus on such issues as client retention, client satisfaction, services provided, materials distributed and professional and community group satisfaction.

The specific evaluation questions were:

- i. How well received is the programme by professional and community groups?
- ii. Who is using the exchange (IDUs and non-IDUs) and are they returning after a first visit?
- iii. Are exchange attenders satisfied with programme services?
- iv. How many educational materials and condoms were distributed?
- v. How many needles were distributed and returned?
- vi. How many bleach kits were distributed?
- vii. How many counselling sessions were held?
- viii. How many referrals were made to community support, treatment and rehabilitation services?

### **3.2.2 Demographic and Risk Characteristics of Ottawa IDUs Including Extent of HIV Infection**

Few data pertaining to the demographic and risk characteristics of IDUs in Ottawa, who are not in contact with drug treatment agencies, are available. The needle exchange programme has provided the opportunity to collect data to describe the IDU population.

This component of the evaluation was developed to answer the following questions:

- i. What are the demographic characteristics of IDUs attending and not attending the needle exchange?
- ii. What are the HIV-related risk behaviours of Ottawa IDUs attending and not attending the needle exchange?
- iii. What is the prevalence of HIV infection among IDUs attending and not attending the programme?

### **3.2.3 Impact Evaluation : Study of Changes in the Risk Behaviours of IDUs**

In order to determine if the needle exchange programme has been effective in achieving its risk reduction goals, it is necessary to document that contact with the programme has resulted in improvement in knowledge regarding HIV risk factors and to document attitude and behaviour changes which reduce the risk of contracting and/or spreading HIV.

The following evaluation questions were addressed through this component of the evaluation:

- i. Has the programme improved knowledge of safer injection practices?
- ii. Has the programme improved knowledge of safer sex and HIV/AIDS transmission?
- iii. Has the programme changed attitudes towards HIV/AIDS among IDUs?
- iv. Has the needle exchange reduced sharing and/or use of uncleaned needles/syringes?
- v. Has the programme increased condom use and reduced high risk sexual practices?
- vi. Has the programme increased the number of referrals to addiction treatment programmes and other services?
- vii. Does the programme encourage drug use?
- viii. Has the programme reduced the incidence of HIV infection?

### **3.3 Methods**

The methodological approaches selected for this evaluation focused on formulating conclusions in relation to the specific evaluation questions. The four methods of data collection were as follows:

- 1) Key informant interviews with professional and community agencies.
- 2) Computerized monitoring of process records and programme observations.
- 3) Anonymous HIV seroprevalence testing of IDUs attending and not attending the SITE at baseline and at three month follow-up.
- 4) Face-to-face interviews with IDUs attending and not attending the SITE at baseline and at three month follow-up.

#### **3.3.1 Key Informant Interviews with Professional and Community Agencies**

The key informant interview approach was designed and implemented in order to provide further data with which to answer the following questions:

1. Has the needle exchange programme increased the number of referrals to addiction treatment programmes and other services?
2. How aware are professional and community groups of the programme?
3. How well received is the programme by professional and community groups?

### **i. Description of Informants**

Personnel from three categories of agencies were interviewed.

#### **CATEGORY ONE**

This category included agencies that were judged to be most likely to receive referrals from the SITE and were those to which needle exchange staff were encouraged to make referrals. Data collected from such agencies would specifically address the evaluation question of whether the SITE had increased referrals to addiction treatment programmes.

Representatives of three agencies in this category agreed to be interviewed. They included two community agencies in the Ottawa-Carleton area offering detoxification programmes and a community-based service providing information, education, consultation, assessment and referrals to drug treatment programmes.

#### **CATEGORY TWO**

Agencies in this category included those drug treatment programmes which were considered likely to initiate referrals on to the SITE to maintain safer injecting practices and safer sexual behaviour.

Information from fourteen drug treatment/rehabilitation programmes in the immediate Ottawa - Carleton area offering a range of day and residential, short and long-term drug treatment programmes in single or mixed gender, anglophone or francophone, urban or rural environments was reviewed. One agency in the immediate down town area was selected as a key informant. Offering a mixed gender, residential environment, the agency is geared specifically to the needs of men and women with addictions including the needs of chemically addicted people.

#### **CATEGORY THREE**

Included in this category were community agencies whose clientele included IDUs. These agencies were approached to answer the questions of awareness and acceptance of the SITE programme.

The agencies included Drop in Centres for both men and women, shelters for men and women, a supportive housing agency, a youth service agency, a community agency working with people infected or

affected by HIV/AIDS and the Regional Social Service Planning and Review Department. In addition, medical personnel were interviewed from practices where it has been established that personnel at these centres are known to be sensitive to the needs of IDUs and people at risk of HIV infection. Personnel from five agencies were interviewed.

### **ii. Method of Data Collection**

A semi-structured interview was the approach selected to collect data. This allowed for maximum descriptive data to be gathered around certain core questions. The presence of one trained interviewer ensured that all questions were covered and that neutral probes used to expand answers were consistent.

Directors or coordinators of those agencies to be included in the survey were contacted by phone by the interviewer. They were given information about the evaluation programme in general and the community agency survey in particular and a mutually convenient time for an interview was established. There were no refusals to participate in the interview.

In addition, at those agencies included in category one, records of referrals were accessed by the interviewer and a representative of the organisation in order to provide additional quantitative data on referrals from the SITE.

### **iii. Data Analysis**

Qualitative data were recorded verbatim and analyzed for content according to the research questions posed. The analyzed contents of the interviews were mailed to the participants with their consent and cooperation in order to ensure participants' views were reliably and accurately represented. Revisions were made only to update descriptions of the agencies involved, reported findings from the interviews were accepted by all the representatives interviewed.

### **3.3.2 Examination of the Programme's Process Records**

#### **i. Method of Data Collection**

SITE programme staff were asked to routinely complete a log sheet for each shift of the needle

exchange programme. For each visit, the content of the interaction was recorded with the client's unique identifier, noting the time, date and status (first or repeat) of the visit and the client's injecting and needle sharing status. When determining if a client shared, staff were instructed to phrase the question, "Are you currently sharing used needles and syringes with someone else, including your partner?" This was to ensure that the IDU's perception of the term "sharing" corresponded with that of the evaluation team, particularly in the sense that equipment used by very close friends or sexual partners constituted sharing.

The number of hard resources distributed was recorded. For example, the number of condoms or bleach kits distributed and the number of needles given and exchanged. Other services offered to and accepted by the client were noted, such as counselling sessions, referrals to another agency, emergency first aid and referral to medical care. Details of medical testing for the presence of the AIDS virus and Hep B. testing and provision of Hep. B vaccines were recorded.

The log sheets were routinely entered into a computerized monitoring information system written in Clipper 5.1. The programme checked the data for consistency and allowed for the immediate production of reports on client volume, exchange rates and service provision over time.

## **ii. Data Analysis**

The needle exchange log sheet data were exported from the computerized programme and analyzed using SPSS. Simple frequencies and descriptive statistics were produced from the data to document the number of visits, resources distributed, exchange rates, and referrals made over time and between IDUs and non-IDUs.

### **3.3.3 HIV Seroprevalence Testing**

#### **i. Informed Consent**

Each participant, at the conclusion of the interview, was asked to give their consent to the anonymous collection and testing of either a saliva sample or a finger prick blood sample. Participants were read a separate consent form explaining the benefits and possible disadvantages of agreeing to the test, the details of the aggregate reporting of the results and

that the result of the test could not be given to them. The fact that the participant's right to treatment or service at any agency would not be affected by their decision to participate in this final section of the interview was emphasized. At the same time, participants were offered assistance in deciding on and planning for a further separate test to detect for the presence of the virus from which they could obtain their results.

#### **ii. Specimen Collection Devices and Procedures**

Consenting participants were offered a choice of providing either a finger prick blood sample drawn using a lancet to saturate three small circles on a blotter or a saliva sample using the Omni-Sal saliva collection device. The collection of the saliva sample was a less intrusive technique that had a high documented compliance rate relative to finger prick blood testing and a documented adequate sensitivity and specificity for seroprevalence studies (Major et al., 1991). In addition, eliminating the need for blood collection substantially reduced the risk of biohazard to the interviewers administering the test. Only two of the participants volunteering to be tested opted for the finger prick blood test rather than the saliva test.

The materials used for the finger prick blood test were those used for PKU tests on newborns. The saliva collection device consisted of a lint wand which was placed in the participant's mouth to collect the saliva and a sealed plastic test tube containing buffer solution to preserve the subsequent obtained saliva sample for storage and transportation prior to testing. Initially sufficient saliva for testing was judged to be obtained when after approximately one minute the lint pad, when removed from the mouth, drooped limply. In the latter months of the project, this procedure was improved by the introduction of new collection devices. In the new devices, a dramatic colour change, from white to blue, occurred in the lint pad once sufficient saliva had been obtained.

Participants were encouraged to produce saliva only, not sputum, and latterly, as one of four methods to decrease the number of samples with insufficient volume for testing, sugar-free candies were offered to participants to facilitate the production of saliva.

At the point of collection, saliva samples were immediately stored in a refrigerator if the interview was carried out on Health Department premises. In other locations, samples were stored in coolers and transported to clinic refrigerators as soon as possible. Once thoroughly dry, dried blood spot samples were placed in individual long term storage bags with two packs of desiccant to minimise humidity and refrigerated as above.

Blood and saliva samples were marked by the interviewer with the participant's unique identifier before refrigerated storage and subsequent transportation to the project coordinator. Having recorded and then removed the participant's identifier, a unique code was assigned to the sample by the project coordinator. Samples with only a unique code were transported by cooler to the Federal Testing Laboratory in Ottawa. This procedure removed the possibility of anyone other than the project coordinator linking the coded result with the participant's identifier.

### iii. Specimen Collection : Laboratory Testing

Saliva samples were tested at the HIV/AIDS Laboratory, Laboratory Centre for Disease Control in Ottawa, Ontario.

The Cambridge Biotech Recombigen HIV -1 EIA (Cambridge Biotech Corp., Worcester, MA) was used to screen the samples for antibodies to HIV-1. The sensitivity (98.3%) and specificity (100%) of the Cambridge assay for saliva has previously been reported (Major et al., 1991). The procedure was slightly modified (i.e. increased sample volume and lowered calculated cutoff value) to allow for the lower antibody levels in saliva as compared to serum or plasma.

Samples that did not react on the Cambridge assay were reported as HIV-1 antibody negative. Those samples that were repeatedly reactive by EIA were further tested by Western Blot (Cambridge Biotech HIV-1 Western Blot, Worcester, MA.). Sample volume was again adjusted to compensate for lower antibody levels. The same interpretive criteria were used for saliva as is used for serum or plasma. A sample was reported as being positive for HIV-1 antibodies if at least 2 envelope bands were detected.

Dried blood spot samples were tested at the same laboratory using the Genetic Systems LAV EIA (Genetic Systems Corp., Seattle, WA.). Samples which were non-reactive by EIA were reported as HIV-1 antibody negative. Repeatedly reactive specimens were further tested using Genetic Systems Pageblot HIV-1 (Genetic Systems Corp., Seattle, WA.) The same interpretive criteria as previously described were used.

### 3.3.4 Interviews with Injection Drug Users

#### i. Criteria for Inclusion in the Study

To be eligible for inclusion in the study, IDUs had to meet the following criteria in order to complete an initial interview:

- \* To have injected drugs in the previous two months
- \* Not to have been interviewed previously for this study.

For follow-up interviews, drug use within the last two months was no longer a criterion for inclusion in the study. The only criterion was that the person should have completed an initial interview with the project at least three months previously.

#### ii. Recruitment

IDUs were recruited by means of a distinctive neon poster and business cards. Posters were regularly and prominently displayed in such public areas as downtown streets and parks, downtown shelters, Drop in Centres, lunch and breakfast programmes, bar and garage washrooms and travel centres for a 12 month period from June 29 1992 until June 28 1993.

IDUs were encouraged to "inject their opinion" by calling to arrange a completely confidential hour long interview and receiving \$20.00. A replica of the poster was reproduced as a business card to be distributed as appropriate on an individual basis by staff of the needle exchange and other community and professional agencies participating in recruitment for the study.

All IDUs ultimately called to arrange an interview time. The parameters of the study were outlined, emphasising the confidential and voluntary nature of the interview and subsequent use of the data.

Potential participants were screened as to their current or recent drug use. The use of screening questions integrating local IDU jargon and technical terms, developed in conjunction with recovering addicts, acted as a first stage screening for inclusion in the sample frame. Status as an IDU and use of drugs were later confirmed by the interviewers using similar questions. Such screening questions were considered to be a less intrusive method of determining injection drug use status rather than requesting to verify track marks.

Participants were offered the choice of an interview at various clinics of the Health Department or at a more neutral location within a community non-profit housing complex. Appointments for interviews were available either during the day or throughout the evening both on weekdays and over the weekend. Participants were given the choice of gender for the interviewer and the choice of official languages for the interview.

A tailor-made computer programme, written in Clipper 5.1, allowed for the immediate monitoring of all telephone requests for interviews. The programme proved extremely useful in tracking duplicate requests for interviews and for giving extra attention and support to people requesting an interview who had already missed previous appointments. The programme proved invaluable in arranging follow-up interviews, controlling for "no shows" and scheduling appointments. The eligibility of IDUs for a follow-up interview three months after baseline interview could be easily accessed and ineligible people given a date to call again for an appointment. Duplicate and erroneous requests for follow-up interviews could also be easily identified at an early stage before the interview took place.

The computerized monitoring of requests for interviews also allowed for the identification of the most beneficial times for scheduling interviews (e.g. avoiding scheduling interviews during weeks when local welfare checks were distributed) and resulted in a decrease in the no show rate from a high of 53.5% in August, two months into the project, to the maintained average rate of 26.5%.

### **iii. The Research Instrument**

The instrument used in the interviews with IDUs was based on the questionnaire developed by the Social and Behavioral Research Global Programme on AIDS, World Health Organisation and modified by the Study Group from the Department of Preventative Medicine and Biostatistics, University of Toronto (March 1991) and the Needle Exchange Evaluation Team of the Ottawa-Carleton Health Department, Ottawa, Ontario (May 1992). The use of this questionnaire entitled, "Drug Injecting and Risk of HIV Infection", permits comparability of data with other evaluation sites.

A unique identifier was developed and used to allow the matching of baseline and follow-up interview responses and to track utilization of the SITE and participation in the study. The identifier consisted of the first letter of the participant's first name, the first and second letter of their father's or mother's first name, the participant's year and month of birth and their gender.

The questionnaire used at both baseline and follow up interviews, consisted of nine sections with questions focusing on: socio-demographic background information; treatment utilization; drugs used and injected; needle and syringe sharing behaviour; source of new needles and syringes; physical health including immunization with vaccine for Hep. B.; sexual behaviour with long term regular partners, short term casual partners and clients of both the opposite and same sex as the IDU; AIDS knowledge and sources of information about HIV/AIDS; agreement with statements about AIDS and about using drugs; perceived comparative susceptibility to the virus; a rating of their sexual practices in terms of avoiding transmission of or becoming infected with HIV; different places a user may have injected and shared needles and had unprotected sexual intercourse; usage and satisfaction with aspects of the services offered; and history of medical tests for infection with HIV, including the provision of pre and post test counselling.

Although the content and face validity of the proposed instrument had been assessed by the working groups of the WHO and the Toronto team, the inclusion of additional untested material

necessitated the pretesting of the instrument. Pretest interviews were conducted with 13 IDUs, 9 male and 4 female, who met the eligibility criteria established for inclusion in the sample.

As a result of the pre-test, modifications were made to the skip logic to further lessen response burden and the instructions to the interviewers were further refined. No changes were made to the consent documents for either the interview itself or for the anonymous testing.

The finalized questionnaire was administered by a team of trained interviewers and an interviewer's manual and handbook were produced. These were produced in order to maximise accuracy and uniformity in administering the questionnaire and in conducting the debriefing.

A consent form was read out to participants at the commencement of the interview emphasising the confidential anonymous nature of the interview, the fact that participants could choose not to answer questions, could terminate the interview at any time and equally as important, that their right to services or treatment would not be affected by their decision to participate in the interview. The interviewers recorded the participant's verbal consent on the consent form.

Debriefing after the interview was conducted to correct misinformation on HIV transmission, to counsel on safer sexual and drug injecting practices whenever appropriate and to answer the participant's questions. Information on SITE services and schedules of operating hours were routinely offered to all participants and in all cases were accepted.

#### iv. Sampling

Baseline interviews were initiated with 647 IDUs during the 12 months of recruitment into the project, that is between June 29 1992 and June 28 1993.

Of these, eight interviews were terminated at an early stage as participants did not meet eligibility of injection drug use within the previous two months. A further two were terminated at later stages as the participant was considered to be too affected by drugs or alcohol to complete the interview. In each case, the participants were debriefed on the answers

they had given and were encouraged to reschedule at a more suitable time. Both of these participants subsequently completed baseline interviews. Of the 637 interviews completed, two were considered to be duplicates of earlier interviews and were therefore removed.

The final sample, therefore, consisted of **635 baseline interviews**. 552 (86.9%) were completed by males, 79 (12.5%) by females and four (0.6%) were completed by transsexuals. Throughout the evaluation the number of women presenting for interviews was low in comparison to the number of males despite efforts to access more women through community agencies with mostly female clients and by encouraging women participants to encourage their own drug using women friends to participate. The final sample of baseline interviews consisted of 230 (36.2%) individuals who had attended one or more components of the SITE programme and 405 (63.8%) who had not attended any of the services offered by the SITE programme.

Of this sample of baseline interviews, 591 (93.1%), were eligible to complete a **follow-up** interview three months after baseline, before the end of the project in August 1993. By the end of the project, 207 people had completed follow-up interviews. Of these, two were subsequently dropped from the sample as the follow-up interview had taken place within the required three month period.

The final sample consisted therefore of **205 follow up interviews**, 35% of those eligible to complete follow-up interviews. For the purpose of analysis, this sample of 205 participants was classified into three groups depending on their attending status over time. Consistent Attenders were those who were attending any of the needle exchange services at the time of both their baseline and follow-up interview (n=84); New Attenders were those who were not attending any of the needle exchange services at the time of their baseline interview but were at the time of their follow-up (n=59); and Consistent Non-Attenders were those who had never utilized any of the SITE services (n=62).

The gender ratio corresponded to that obtained for the baseline interviews. The final sample of follow-

up interviews contained 179 (87.3%) males and 26 (12.7%) females. The ratio of attenders and non-attenders was however almost completely reversed for follow-up interviews compared with baseline interviews as 143 (69.8%) were completed by attenders and 62 (30.2%) by non-attenders.

#### **v. Representativeness of Follow-Up Sample**

In order to determine if the group of IDUs who completed both a baseline interview and a follow up interview (respondents,  $N = 205$ ) were different in any way from those IDUs who completed only a baseline interview (non-respondents,  $N = 430$ ), the two groups were compared on key demographic variables and HIV risk-related sexual behaviour and HIV risk-related injecting behaviour.

The two groups did not differ significantly on age, gender, marital status, education level, income level, living accommodation, sexual orientation, number of times in jail, treatment received, or self-disclosed HIV status. In addition, there were no significant differences with respect to self-reported needle sharing or condom use behaviour. The only significant difference between the group of respondents and the group of non-respondents was in the number of months that they had lived in Ottawa prior to their interview. Respondents had lived significantly longer in Ottawa than non-respondents. The mean for the number of months respondents had lived in Ottawa before their baseline interview was 123 months compared with a mean of 79 months for non-respondents,  $t(321.8) = 3.49, p < .001$ .

#### **v. Statistical Analysis**

The statistical analysis of the collected data was performed to focus primarily on formulating conclusions in relation to the evaluation questions using SAS.

First, overall frequencies and cross tabulations were prepared for attenders and non-attenders of the needle exchange ( $N=635$ ) which responded under the nominal and discrete categories of the dependent variables being measured. For univariate comparisons, a two-tailed  $\chi^2$  test or Fisher's Exact test was used to determine the relationship between attending status and categorical variables such as sex, marital status, education level, reported drug use, needle sharing and sexual behaviour. Student's t-Test for independent groups was performed to

determine significant differences between attenders and non-attenders on ordinal and continuous dependent variables such as age, age first injected, the number of people shared with, perceived susceptibility and the number of sexual partners.

Second, to determine the impact of the SITE on changing knowledge, attitudes and behaviour of IDUs, multivariate comparisons were performed for each of the three groups ( $N=205$ ) at baseline and follow-up on the dependent variables being measured (eg. needle sharing, unsafe sexual practices, knowledge, attitudes and entry into drug treatment). Repeated measures MANOVA with Scheffe's test or the Least-Significant Difference (LSD) test for multiple comparisons was used for the ordinal and continuous dependent variables to determine differences between the three groups over time. For categorical dependent variables, categorical data modelling for repeated measures was undertaken using CATMOD with  $\chi^2$  tests used to determine significant group, time and interaction effects. Finally, HIV seroprevalence rates were computed along with 95% confidence intervals and compared between groups and over the two points in time.

Specific procedures were followed to ensure the integrity of the data entered into SAS. These included: preparation of a coding manual for the data; verification of coding and data input through comparing a 10% random sample of baseline and follow-up questionnaire responses with the entered data; performance of range checks to ensure that all values for each variable fell within the expected range and consistency edits to ensure that responses to questions were consistent with those of other questions.

# TABLES 1 to 5 FROM TEXT

**Table 1 Demographic Profile of Injection Drug Users - Baseline Interview Findings**

	Attenders (N=230)	Non-attenders (N=405)	P value
<b>Sex</b>			
Male	85.5%	88.6%	N.S.
Female	14.5%	11.4%	
<b>Age</b>			
< 20	10.0%	6.9%	.01
20-24	22.5%	15.6%	
25-29	22.5%	20.8%	
30-39	33.3%	36.6%	
40+	11.7%	20.1%	
<b>Sexual Orientation</b>			
Heterosexual	80.7%	91.1%	.001
Gay	4.4%	2.5%	
Bisexual	14.9%	6.2%	
<b>Level of Education</b>			
None	.4%	.5%	N.S.
Elementary School	7.5%	8.4%	
High School	73.3%	75.9%	
Post High School	18.9%	15.1%	
<b>Income</b>			
Under 20,000	84.7%	82.6%	N.S.
20,000-29,000	6.1%	6.7%	
30,000-60,000	6.6%	7.7%	
over 60,000	1.3%	2.0%	
Don't Know	1.3%	1.0%	
<b>Marital Status</b>			
Married	1.8%	1.7%	N.S.
Widowed	.4%	2.0%	
Separated	4.4%	8.7%	
Divorced	15.8%	16.9%	
Single	70.6%	66.0%	
Lived as Married	7.0%	4.7%	
<b>Living in Ottawa</b>			
Mean number of months	120.4	79.0	.0005

**Table 3** *Percentage of IDUs Having Knowledge of Sharing Injection Equipment at Baseline and Follow Up*

Group	Time	
	Baseline	Follow-up
(n=84)	83%	88%
New attenders (n=59)	76%	92%
Non attenders (n=62)	76%	95%

**Table 2** *Mean Attitudinal Response for HIV Risk Related Injection Behaviour*

Group	Time			
	Baseline		Follow-up	
	M	SD	M	SD
Attenders (n=69)	14.9	4.0	15.8	3.5
New attenders (n=48)	14.1	3.3	15.4	3.7
Non attenders (n=53)	16.1	3.6	16.3	3.7

**Table 4** Mean Attitudinal Response for HIV Risk Related Sexual Behaviour

Group	Time			
	Baseline		Follow-up	
	M	SD	M	SD
Attenders (n=65)	9.1	2.3	9.4	2.2
New attenders (n=48)	8.8	1.9	9.2	1.9
Non attenders (n=55)	9.7	2.6	9.7	2.4

**Table 5** Percentage of IDUs Having Knowledge of Sex Without a Condom at Baseline and Follow-up

Group	Time	
	Baseline	Follow-up
Attenders (n=84)	24%	33%
New attenders (n=59)	22%	34%
Non attenders (n=62)	27%	50%

# APPENDIX TABLES

Table I

## DESCRIPTIVE INFORMATION FOR INJECTION DRUG USERS BY ATTENDING STATUS - 1st INTERVIEW

Characteristics		Total (N=635) # (%)	Attendees (N=230) # (%)	Non-attendees (N=405) # (%)
Age **	Mean	30.80 ± 8.4	29.3 ± 7.9	31.7 ± 8.6
	Range	16 - 62	16 - 52	16 - 62
	By group: <20	51 (8.0)	23 (10.0)	28 (6.9)
	20 - 24	115 (18.1)	52 (22.5)	63 (15.6)
	25 - 29	136 (21.4)	52 (22.5)	84 (20.8)
	30 - 39	225 (35.4)	77 (33.3)	148 (36.6)
	40+	108 (17.0)	27 (11.7)	81 (20.1)
Sex	Male	552 (87.5)	195 (85.5)	357 (88.6)
	Female	79 (12.5)	33 (14.5)	46 (11.4)
Living in Ottawa**	12+ months	387 (61.4)	167 (73.3)	245 (60.9)
Level of Education	None	3 (0.5)	1 (0.4)	2 (0.5)
	Elementary School	51 (8.1)	17 (7.5)	34 (8.4)
	High School	473 (75.0)	167 (73.3)	306 (75.9)
	Post High School	104 (16.5)	43 (18.9)	61 (15.1)
Personal Income	Under 20,000	526 (83.4)	193 (84.7)	333 (82.6)
	20,000 - 29,000	41 (6.5)	14 (6.1)	27 (6.7)
	30,000 - 60,000	46 (7.3)	15 (6.6)	31 (7.7)
	over 60,000	11 (1.7)	3 (1.3)	8 (2.0)
	Don't know	7 (1.1)	3 (1.3)	4 (1.0)
Income Source	Employed with a regular salary	58 (9.2)	17 (7.5)	41 (10.2)
	Unemployed with no regular income from state	11 (1.8)	5 (2.2)	6 (1.5)
	Temporary work	21 (3.3)	6 (2.6)	15 (3.7)
	Welfare	374 (59.4)	137 (60.1)	237 (59.0)
	Welfare & pan handling	26 (4.1)	16 (7.0)	10 (2.5)
	Partner or relative	4 (0.6)	1 (0.4)	3 (0.8)
	Unemployment Insurance	23 (3.7)	11 (4.8)	12 (3.0)
	Self employed	17 (2.7)	6 (2.6)	11 (2.7)
	Other	81 (12.9)	25 (11.0)	56 (13.9)
	None (All income illegal)	15 (2.4)	4 (1.8)	11 (2.7)
	Marital Status	Legally married	11 (1.7)	4 (1.8)
Widowed		9 (1.4)	1 (0.4)	8 (2.0)
Separated		45 (7.1)	10 (4.4)	35 (8.7)
Divorced		104 (16.5)	36 (15.8)	68 (16.9)
Never married/single		427 (67.7)	161 (70.6)	266 (66.0)
Living as married: different sex		32 (5.1)	15 (6.6)	17 (4.2)
Living as married: same sex		3 (0.5)	1 (0.4)	2 (0.5)

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

Characteristics	Total (N=635) # (%)	Attendees (N=230) # (%)	Non-attendees (N=405) # (%)
Sexual relations with live-in partner**			
Yes	119 (18.9)	59 (25.9)	60 (14.9)
No	510 (80.8)	169 (74.1)	341 (84.6)
Accommodation (past 6 months)**			
No fixed address	34 (5.4)	21 (9.2)	13 (3.2)
Room rented on a daily/weekly basis	160 (25.4)	47 (20.6)	113 (28.0)
Your own (or partner's) house, flat or apartment	290 (46.0)	97 (42.5)	193 (47.9)
Someone else's (including parents, relatives, friends) place	57 (9.0)	24 (10.5)	33 (8.2)
Shelter, welfare residence	38 (6.0)	17 (7.5)	21 (5.2)
Other	52 (8.2)	22 (9.7)	30 (7.4)
In jail since drug taking started	514 (81.5)		
Number of times			
Mean	16.4 ± 63.0	18.5 ± 71.0	15.3 ± 58.1
Range	1 - 1000		
Inject while in prison	111 (21.6)	42 (22.5)	69 (21.2)
Share needles while in prison	73 (65.8)	28 (66.7)	45 (65.2)
Treatment Received Since Taking Drugs			
Drug free counselling (outpatient)	38 (6.0)	18 (7.9)	20 (5.0)
Self-help groups	191 (30.3)	71 (31.1)	120 (29.8)
Traditional healer	29 (4.6)	7 (3.1)	22 (5.5)
Methadone maintenance	9 (1.4)	5 (2.2)	4 (1.0)
Detoxification	144 (22.8)	53 (23.3)	91 (22.6)
Residential rehabilitation	254 (40.3)	100 (43.9)	154 (38.2)
Other	84 (13.3)	34 (14.9)	50 (12.4)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

**Table II**

**DRUG USE INFORMATION FOR INJECTION DRUG USERS  
BY ATTENDING STATUS - 1st INTERVIEW**

Characteristics		Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Drug of Choice	Cocaine	535 (84.3)	184 (80.0)	351 (86.7)
	Heroin	34 (5.4)	13 (5.7)	21 (5.2)
	Other	66 (10.4)	33 (14.3)	33 (8.1)
Use of (past 3 months):	Crack	155 (24.4)	57 (24.8)	98 (24.2)
	Cannabis, Hashish or Marijuana	525 (82.8)	197 (85.7)	328 (81.2)
	Alcohol	584 (91.9)	213 (92.6)	371 (91.6)
Frequency of drinking	Everyday	154 (26.3)	62 (29.1)	92 (24.7)
	4 - 6 times a week	105 (17.9)	33 (15.5)	72 (19.3)
	2 - 3 times a week	154 (26.3)	56 (26.3)	98 (26.3)
	Once a week	85 (14.5)	30 (14.1)	55 (14.8)
	Once or twice a month	61 (10.4)	19 (8.9)	42 (11.3)
	Less than once a month	27 (4.6)	13 (6.1)	14 (3.8)
Use of tobacco		517 (94.5)	180 (95.7)	337 (93.9)
Age first injected**	Mean		19.33 ± 5.57	21.02 ± 7.07
	Range	7 - 61	7 - 41	8 - 61
Source of New Needles/syringes				
	Pharmacist/chemist	273 (43.1)	102 (44.4)	171 (42.3)
	Drugstore/other shop	184 (29.0)	65 (28.3)	119 (29.4)
	Family/partner	17 (2.7)	6 (2.6)	11 (2.7)
	Friends/other drug users*	203 (32.0)	60 (26.1)	143 (35.3)
	Drug dealer	17 (2.7)	5 (2.2)	12 (3.0)
	SITE in Ottawa***	179 (28.2)	176 (76.5)	3 (0.7)
	Needle Exchange scheme in another city	73 (11.5)	20 (8.7)	53 (13.1)
	Theft from legitimate source	24 (3.8)	7 (3.0)	17 (4.2)
	Purchase on illicit market	4 (0.6)	1 (0.4)	3 (0.7)
	Other*	49 (7.7)	24 (10.4)	25 (6.2)
Most Important Source Mentioned***				
	Pharmacist/chemist	213 (34.1)	65 (28.9)	148 (37.1)
	Drugstore/other shop	147 (23.6)	44 (19.6)	103 (25.8)

Drug Name	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
	Use?			Inject?		
Heroin	135 (21.3)	53 (23.0)	82 (20.3)	125 (91.9)	51 (96.2)	74 (89.2)
Cocaine	612 (96.5)	219 (95.6)	393 (97.0)	603 (98.5)	217 (99.1)	386 (98.2)
Heroin & Coke together	69 (10.9)*	33 (14.4)	36 (8.9)	67 (97.1)	32 (97.0)	35 (97.2)
Methadone	20 (3.2)	9 (3.9)	11 (2.7)	12 (60.0)	6 (66.7)	6 (54.6)
Amphetamines	99 (15.6)	39 (17.0)	60 (14.8)	46 (46.5)***	26 (66.7)	20 (33.3)
Tranquilizers	276 (43.5)**	117 (51.1)	159 (39.3)	48 (17.4)**	29 (24.8)	19 (12.0)
Barbiturates	77 (12.2)***	41 (17.9)	36 (8.9)	19 (24.4)	12 (28.6)	7 (19.4)

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

**Table III**

***NEEDLE SHARING RISK BEHAVIOUR FOR INJECTION DRUG USERS  
BY ATTENDING STATUS - 1st INTERVIEW***

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Do you currently inject with used needles given, sold or rented to you by someone else			
Yes	171 (26.9)	65 (28.3)	106 (26.2)
No	464 (73.1)	165 (71.7)	299 (73.8)
How often did you inject with used needles			
Never/none	410 (64.6)	140 (60.9)	270 (66.7)
Less than once a month	94 (14.8)	38 (16.5)	56 (13.8)
One to three times a month	58 (9.1)	20 (8.7)	38 (9.4)
About once a week	26 (4.1)	12 (5.2)	14 (3.5)
Two to three times a week	20 (3.2)	10 (4.4)	10 (2.5)
Four to six times a week	5 (0.8)	1 (0.4)	4 (1.0)
About once a day	6 (0.9)	2 (0.9)	4 (1.0)
2-3 times a day, almost every day	9 (1.4)	2 (0.9)	7 (1.7)
Four or more times a day, almost every day	7 (1.1)	5 (2.2)	2 (0.5)
Did you ever inject with a needle or syringe which had already been used by someone else			
Yes	184 (44.9)	60 (42.9)	124 (45.9)
No	226 (55.1)	80 (57.1)	146 (54.1)
When you injected with used needles and syringes in the last 3 months, were they from:			
A regular sexual partner	69 (30.8)	31 (34.8)	38 (28.2)
A relative	11 (4.9)	4 (4.5)	7 (5.2)
A close friend**	152 (67.9)	52 (58.4)	100 (74.1)
An acquaintance	59 (35.1)	28 (41.8)	31 (30.7)
A dealer	38 (17.0)	14 (15.7)	24 (17.8)
Someone in a shooting gallery	35 (15.6)	17 (19.1)	18 (13.3)
A fellow prisoner	6 (2.7)	1 (1.1)	5 (3.7)
Someone you did not know	38 (17.0)	20 (22.5)	18 (13.3)
Somewhere in the street	21 (9.4)	8 (9.0)	13 (9.6)
Someone who is HIV positive/has AIDS	8 (3.6)	5 (5.6)	3 (2.2)
When using used needles from someone else, how often did you clean them first			
Always	133 (59.4)	58 (65.2)	75 (55.6)
Mostly	25 (11.2)	10 (11.2)	15 (11.1)
About half the time	9 (4.0)	1 (1.1)	8 (5.9)
Occasionally	22 (9.8)	9 (10.1)	13 (9.6)
Never	34 (15.2)	11 (12.4)	23 (17.0)
Don't know	1 (0.5)	---	1 (0.7)
How do you usually clean used needles			
Cold water	32 (17.0)	15 (19.2)	17 (15.5)
Hot water	34 (18.1)	14 (18.0)	20 (18.2)
Boiling	7 (3.7)	1 (1.3)	6 (5.5)
Bleach	83 (44.2)	36 (46.2)	47 (42.7)
Alcohol	3 (1.6)	1 (1.3)	2 (1.8)
Other	29 (15.4)	11 (14.1)	18 (16.4)

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Reasons why you shared in the past 3 months.			
Do any of these apply to you			
I enjoy sharing	12 (5.4)	4 (4.5)	8 (6.0)
I always share	19 (8.5)	7 (7.9)	12 (8.9)
My friends put pressure on me to share	25 (11.2)	9 (10.1)	16 (11.9)
I thought it was safe because I cleaned it	135 (60.3)	53 (59.6)	82 (60.7)
I am careful who I share with	150 (67.0)	55 (61.8)	95 (70.4)
I didn't have my own needles and syringes	191 (85.3)	73 (82.0)	118 (87.4)
Needles and syringes are hard to get	78 (34.8)	28 (31.5)	50 (37.0)
I was in custody or in prison	5 (2.2)	3 (3.4)	2 (1.5)
Needles and syringes cost too much	25 (11.2)	10 (11.2)	15 (11.1)
It's not legal to have them	19 (8.5)	5 (5.6)	14 (10.4)
No particular reason	25 (11.2)	11 (12.4)	14 (10.4)
Pharmacy refused to sell to me	60 (26.8)	24 (27.0)	36 (26.7)
Other	80 (35.7)	34 (38.2)	46 (34.1)
Plans to stop using used needles in			
next month			
Yes	189 (84.4)	75 (84.3)	114 (84.4)
No	32 (14.3)	13 (14.6)	19 (14.1)
Don't know	3 (1.3)	1 (1.1)	2 (1.5)
Plans to stop using used needles in			
next 3 months			
Yes	192 (85.7)	78 (87.6)	114 (84.4)
No	29 (13.0)	10 (11.2)	19 (14.1)
Don't know	3 (1.3)	1 (1.1)	2 (1.5)
Number of times in past year that you've			
tried to stop using used needles			
None	77 (34.4)	33 (37.1)	44 (32.6)
One or more times	145 (64.7)	56 (62.9)	89 (65.9)
Don't know	2 (0.9)	---	2 (1.5)
Do you currently give, lend or sell to someone			
else a needle you have already used			
Yes	148 (23.3)	59 (25.7)	89 (22.0)
No	486 (76.7)	171 (74.4)	315 (78.0)
In the last 3 months, how often did you give			
lend or sell to someone else a needle you had			
already used*			
Never/none	456 (71.8)	154 (67.0)	302 (74.6)
Less than once a month	62 (9.8)	25 (10.9)	37 (9.1)
One to three times a month	54 (8.5)	27 (11.7)	27 (6.7)
About once a week	18 (2.8)	5 (2.2)	13 (3.2)
Two to three times a week	23 (3.6)	8 (3.5)	15 (3.7)
Four to six times a week	2 (0.3)	1 (0.4)	1 (0.3)
About once a day	8 (1.3)	2 (0.9)	6 (1.5)
2-3 times a day, almost every day	5 (0.8)	3 (1.3)	2 (0.5)
Four or more times a day, almost every day	7 (1.1)	5 (2.2)	2 (0.5)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
When you gave, sold or rented to someone else a used needle or syringe in the last 3 months, was it ever to:			
A regular sexual partner	66 (36.9)	28 (36.8)	38 (36.9)
A relative	8 (4.5)	3 (4.0)	5 (4.9)
A close friend	116 (65.2)	46 (61.3)	70 (68.0)
An acquaintance	57 (40.4)	25 (43.9)	32 (38.1)
A dealer	17 (9.6)	7 (9.3)	10 (9.7)
Someone in a shooting gallery	31 (17.4)	15 (20.0)	16 (15.5)
A fellow prisoner	7 (3.9)	1 (1.3)	6 (5.8)
Someone you did not know well	46 (25.8)	20 (26.7)	26 (25.2)
Someone who is HIV positive/has AIDS	9 (5.1)	5 (6.7)	4 (3.9)
Reasons why you may have given, sold or rented needles in the past 3 months. Do any of these apply to you:			
I enjoy sharing	10 (5.6)	4 (5.3)	6 (5.8)
I always share	19 (10.7)	11 (14.7)	8 (7.8)
My friends put pressure on me to share	49 (27.5)	18 (24.0)	31 (30.1)
I thought it was safe because I cleaned it	79 (44.4)	37 (49.3)	42 (40.8)
I am careful who I share with	101 (56.7)	44 (58.7)	57 (55.3)
They didn't have their own needles and syringes	158 (88.8)	68 (90.7)	90 (87.4)
Needles and syringes are hard to get	56 (31.5)	18 (24.0)	38 (36.9)
We were in custody or in prison	5 (2.8)	1 (1.3)	4 (3.9)
Needles and syringes cost too much	20 (11.2)	8 (10.7)	12 (11.7)
It's not legal to have them	15 (8.4)	6 (8.0)	9 (8.7)
Pharmacy wouldn't to sell to me	36 (20.2)	16 (21.3)	20 (19.4)
It's a way to get money	13 (7.3)	8 (10.7)	5 (4.9)
No particular reason	17 (9.6)	10 (13.3)	7 (6.8)
Other	39 (21.9)	15 (20.0)	24 (23.3)
Planning to stop giving, lending or selling needles which you had already used within the next 30 days			
Yes	124 (69.7)	52 (69.3)	72 (69.9)
No	52 (29.2)	29 (29.3)	30 (29.1)
Maybe	2 (1.1)	1 (1.3)	1 (1.0)
Planning to stop the giving, lending or selling of needles which you have already used within the next 3 months			
Yes	129 (72.5)	54 (72.0)	75 (72.8)
No	46 (25.8)	19 (25.3)	27 (26.2)
Maybe	3 (1.7)	2 (2.7)	1 (1.0)
In the last year how many times have you tried to stop giving, lending or selling needles you had already used?			
None	91 (51.4)	39 (52.0)	52 (51.0)
One or more times	85 (48.0)	36 (48.0)	49 (48.0)
Don't know	1 (0.6)	---	1 (1.0)
In the last 3 months, have you used other injecting equipment along with others when injecting			
Spoons	357 (56.3)	134 (58.3)	223 (55.2)
Cooker	258 (40.6)	103 (44.8)	155 (38.3)
Cotton	254 (40.0)	97 (42.2)	157 (38.8)
Water	337 (53.1)	129 (56.1)	208 (51.4)

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
How often were you using any drugs this time last year			
Not using then	62 (9.8)	24 (10.4)	38 (9.4)
Using less then	174 (27.4)	68 (29.6)	106 (26.2)
Using about the same	127 (20.0)	44 (19.1)	83 (20.5)
Using more then	272 (42.8)	94 (40.9)	178 (44.0)
How often were you injecting this time last year			
Not injecting then	132 (20.8)	58 (25.2)	74 (18.3)
Injecting less then	146 (23.0)	53 (23.0)	93 (23.0)
Injecting about the same	106 (16.7)	35 (15.2)	71 (17.5)
Injecting more then	251 (39.5)	84 (36.5)	167 (41.2)
Percent of time using new, sterile, never-used needles			
Always	158 (24.9)	54 (23.5)	104 (25.7)
Mostly	208 (32.8)	70 (30.4)	138 (34.1)
About half the time	177 (27.9)	68 (29.6)	109 (26.9)
Occasionally	88 (13.9)	36 (15.7)	52 (12.8)
Never	4 (0.6)	2 (0.9)	2 (0.5)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

**Table IV**

**SEXUAL BEHAVIOUR OF INJECTION DRUG USERS  
BY ATTENDING STATUS - 1st INTERVIEW**

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Do you consider yourself***			
Heterosexual	553 (87.4)	184 (80.7)	369 (91.1)
Gay	20 (3.2)	10 (4.4)	10 (2.5)
Bisexual	59 (9.3)	34 (14.9)	25 (6.2)
<b>Sexual behaviour (3 months) with long-term/regular partner of opposite sex</b>			
Number of times you have had sexual contact with someone of the opposite sex			
Never/none	147 (23.2)	53 (23.1)	94 (23.3)
Less than once a month	64 (10.1)	20 (8.7)	44 (10.9)
One to three times a month	109 (17.2)	36 (15.7)	73 (18.1)
About once a week	62 (9.8)	21 (9.2)	41 (10.2)
Two to three times a week	101 (16.0)	37 (16.2)	64 (15.8)
Four to six times a week	54 (8.5)	22 (9.6)	32 (7.9)
About once a day	50 (7.9)	17 (7.4)	33 (8.2)
2-3 times a day, almost every day	31 (4.9)	17 (7.4)	14 (3.5)
Four or more times a day, almost every day	15 (2.4)	6 (2.6)	9 (2.2)
How often have you had vaginal intercourse			
Never/none	217 (44.5)	74 (41.8)	143 (46.0)
Less than once a month	16 (3.3)	2 (1.1)	14 (4.5)
One to three times a month	37 (7.6)	14 (7.9)	23 (7.4)
About once a week	32 (6.6)	12 (6.8)	20 (6.4)
Two to three times a week	64 (13.1)	23 (13.0)	41 (13.2)
Four to six times a week	40 (8.2)	15 (8.5)	25 (8.0)
About once a day	50 (10.3)	22 (12.4)	28 (9.0)
2-3 times a day, almost every day	22 (4.5)	12 (6.8)	10 (3.2)
Four or more times a day, almost every day	10 (2.1)	3 (1.7)	7 (2.3)
How often have you had anal intercourse			
Never/none	446 (91.4)	162 (91.5)	284 (91.3)
Less than once a month	14 (2.9)	7 (4.0)	7 (2.3)
One to three times a month	8 (1.6)	1 (0.6)	7 (2.3)
About once a week	8 (1.6)	3 (1.7)	5 (1.6)
Two to three times a week	4 (0.8)	---	4 (1.3)
Four to six times a week	1 (0.2)	---	1 (0.3)
About once a day	2 (0.4)	---	2 (0.6)
2-3 times a day, almost every day	2 (0.4)	2 (1.1)	---
Four or more times a day, almost every day	3 (0.6)	2 (1.1)	1 (0.3)

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
How often have you had oral sex			
Never/none	244 (50.0)	79 (44.6)	165 (53.1)
Less than once a month	26 (5.3)	8 (4.5)	18 (5.8)
One to three times a month	43 (8.8)	20 (11.3)	23 (7.4)
About once a week	48 (9.8)	17 (9.6)	31 (10.0)
Two to three times a week	49 (10.0)	17 (9.6)	32 (10.3)
Four to six times a week	33 (6.8)	13 (7.3)	20 (6.4)
About once a day	38 (7.8)	20 (11.3)	18 (5.8)
2-3 times a day, almost every day	3 (0.6)	2 (1.1)	1 (0.3)
Four or more times a day, almost every day	4 (0.8)	1 (0.6)	3 (1.0)
With how many partners have you had vaginal, oral or anal sex			
One	242 (88.0)	92 (87.6)	150 (88.2)
Two	19 (6.9)	7 (6.7)	12 (7.1)
Three	7 (2.6)	3 (2.9)	4 (2.4)
Four	2 (0.7)	---	2 (1.2)
Five	1 (0.4)	---	1 (0.6)
Eight	2 (0.7)	2 (1.9)	---
Fifteen	2 (0.7)	1 (1.0)	1 (0.6)
Main contraception used with LT partner			
None*	56 (20.4)	16 (15.2)	40 (23.5)
Condoms	96 (34.9)	42 (40.0)	54 (31.8)
Oral contraceptives	104 (37.8)	44 (41.9)	60 (35.3)
Intrauterine device	2 (0.7)	1 (1.0)	1 (0.6)
Diaphragm/cap	2 (0.7)	2 (1.9)	---
Rhythm method	5 (1.8)	1 (1.0)	4 (2.4)
Spermicide	6 (2.2)	5 (4.8)	1 (0.6)
Withdrawal	4 (1.5)	2 (1.9)	2 (1.2)
Sterilization	55 (20.0)	22 (21.0)	33 (19.4)
Don't know	1 (0.4)	---	1 (0.6)
Other	10 (3.6)	5 (4.8)	5 (2.9)
<b>Sexual behaviour (3 months) with short-term/casual partner of opposite sex</b>			
How often have you had vaginal intercourse			
Never/none	193 (39.6)	73 (41.2)	120 (38.6)
Less than once a month	89 (18.2)	36 (20.3)	53 (17.0)
One to three times a month	90 (18.4)	25 (14.1)	65 (20.9)
About once a week	31 (6.4)	9 (5.1)	22 (7.1)
Two to three times a week	47 (9.6)	19 (10.7)	28 (9.0)
Four to six times a week	16 (3.3)	4 (2.3)	12 (3.9)
About once a day	12 (2.5)	8 (4.5)	4 (1.3)
2-3 times a day, almost every day	9 (1.8)	3 (1.7)	6 (1.9)
Four or more times a day, almost every day	1 (0.2)	---	1 (0.3)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
How often have you had anal intercourse			
Never/none	448 (91.8)	165 (93.2)	283 (91.0)
Less than once a month	21 (4.3)	7 (4.0)	14 (4.5)
One to three times a month	7 (1.4)	2 (1.1)	5 (1.6)
About once a week	3 (0.6)	---	3 (1.0)
Two to three times a week	4 (0.8)	1 (0.6)	3 (1.0)
Four to six times a week	1 (0.2)	---	1 (0.3)
About once a day	2 (0.4)	1 (0.6)	1 (0.3)
2-3 times a day, almost every day	1 (0.2)	---	1 (0.3)
Four or more times a day, almost every day	1 (0.2)	1 (0.6)	---
How often have you had oral sex			
Never/none	255 (52.3)	90 (50.9)	165 (53.1)
Less than once a month	80 (16.4)	34 (19.2)	46 (14.8)
One to three times a month	67 (13.7)	18 (10.2)	49 (15.8)
About once a week	28 (5.7)	10 (5.7)	18 (5.8)
Two to three times a week	32 (6.6)	16 (9.0)	16 (5.1)
Four to six times a week	12 (2.5)	2 (1.1)	10 (3.2)
About once a day	8 (1.6)	4 (2.3)	4 (1.3)
2-3 times a day, almost every day	5 (1.0)	3 (1.7)	2 (0.6)
Four or more times a day, almost every day	1 (0.2)	---	1 (0.3)
Number of partners you have had vaginal or anal intercourse or oral sex			
1	76 (25.6)	30 (28.3)	46 (24.1)
2	68 (22.9)	25 (23.6)	43 (22.5)
3	46 (15.5)	21 (19.8)	25 (13.1)
4 - 9	76 (25.6)	19 (17.9)	57 (29.8)
10 +	31 (10.4)	11 (10.4)	20 (10.5)
<b>Sexual behaviour (3 months) with clients of opposite sex</b>			
Clients who paid money, goods or drugs for sex**			
Yes	48 (9.8)	23 (13.0)	25 (8.0)
No	440 (90.2)	154 (87.0)	286 (92.0)
<b>Males - Long Term Partners (same sex)</b>			
Anal or oral sex within the last 5 years***			
Yes	83 (15.0)	44 (22.2)	39 (10.9)
No	472 (85.1)	154 (77.8)	318 (89.1)
Anal intercourse (either performing or receiving)			
Never/none	68 (81.9)	35 (81.4)	33 (82.5)
Less than once a month	2 (2.4)	2 (4.7)	---
About once a week	3 (3.6)	---	3 (7.5)
Two to three times a week	5 (6.0)	2 (4.7)	3 (7.5)
Four to six times a week	2 (2.4)	2 (4.7)	---
About once a day	2 (2.4)	2 (4.7)	---

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attendees (N=230) # (%)	Non-attendees (N=405) # (%)
Oral sex (either performing or receiving)			
Never/none	67 (79.8)	34 (77.3)	33 (82.5)
Less than once a month	3 (3.6)	2 (4.6)	1 (2.5)
One to three times a month	1 (1.2)	3 (6.8)	---
About once a week	2 (2.4)	1 (2.3)	1 (2.5)
Two to three times a week	5 (6.0)	1 (2.3)	4 (10.0)
Four to six times a week	4 (4.8)	3 (6.8)	1 (2.5)
About once a day	2 (2.4)	2 (4.6)	---
<b>Males - Short Term Partners (same sex)</b>			
Anal intercourse (either performing or receiving)			
Never/none	61 (73.5)	29 (65.9)	32 (82.1)
Less than once a month	9 (10.8)	5 (11.4)	4 (10.3)
One to three times a month	7 (8.4)	6 (13.6)	1 (2.6)
About once a week	3 (3.6)	1 (2.3)	2 (5.1)
Two to three times a week	2 (2.4)	2 (4.6)	---
Four to six times a week	1 (1.2)	1 (2.3)	---
Oral sex (either performing or receiving)			
Never/none	46 (56.1)	20 (46.5)	26 (66.7)
Less than once a month	16 (19.5)	8 (18.6)	8 (20.5)
One to three times a month	8 (9.8)	6 (14.0)	2 (5.1)
About once a week	4 (4.9)	1 (2.3)	3 (7.7)
Two to three times a week	5 (6.1)	5 (11.6)	---
About once a day	2 (2.4)	2 (4.7)	---
2-3 times a day, almost every day	1 (1.2)	1 (2.3)	---
<b>Males - Clients (same sex)</b>			
Clients who paid money, goods or drugs for sex**			
Yes	28 (34.2)	20 (46.5)	8 (20.5)
No	54 (65.9)	23 (53.5)	31 (79.5)
Oral sex with nothing else (either performing or receiving)			
Never/none	1 (3.6)	1 (5.0)	---
Less than once a month	5 (17.9)	4 (20.0)	1 (12.5)
One to three times a month	3 (10.7)	3 (15.0)	---
About once a week	7 (25.0)	3 (15.0)	4 (50.0)
Two to three times a week	5 (17.9)	4 (20.0)	1 (12.5)
Four to six times a week	2 (7.1)	---	2 (25.0)
About once a day	2 (7.1)	2 (10.0)	---
2-3 times a day, almost every day	3 (10.7)	3 (15.0)	---
Anal intercourse (either performing or receiving)			
Never/none	15 (53.6)	11 (55.0)	4 (50.0)
Less than once a month	5 (17.9)	3 (15.0)	2 (25.0)
One to three times a month	5 (17.9)	4 (20.0)	1 (12.5)
About once a week	2 (7.1)	1 (5.0)	1 (12.5)
Two to three times a week	1 (3.6)	1 (5.0)	---

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
<b>Females - Long Term Partners (same sex)</b>			
Have you had sex with anyone of the same sex as you in the last five years			
Yes	24 (30.8)	11 (34.4)	13 (28.3)
No	54 (69.2)	21 (65.6)	33 (71.7)
Long Term Partners (same sex)			
Oral sex			
Never/none	19 (76.0)	10 (90.9)	9 (64.3)
Less than once a month	3 (12.0)	---	3 (21.4)
One to three times a month	2 (8.0)	1 (9.1)	1 (7.1)
About once a week	1 (4.0)	---	1 (7.1)
Short Term Partners (same sex)			
Oral sex			
Never/none	18 (75.0)	7 (63.6)	11 (84.6)
Less than once a month	2 (8.3)	1 (9.1)	1 (7.7)
One to three times a month	2 (8.3)	2 (18.2)	---
About once a week	1 (4.2)	---	1 (7.7)
About once a day	1 (4.2)	1 (9.1)	---

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

**Table VII**

**KNOWLEDGE AND ATTITUDES OF INJECTION DRUG USERS  
BY ATTENDING STATUS - 1st INTERVIEW**

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Talk about HIV/AIDS with: drug using friends***			
Frequently	153 (24.1)	75 (32.6)	78 (19.3)
Occasionally	253 (39.8)	86 (37.4)	167 (41.2)
Not at all	217 (34.2)	62 (27.0)	155 (38.3)
Not applicable	12 (1.9)	7 (3.0)	5 (1.2)
regular sexual partners			
Frequently	127 (20.0)	53 (23.0)	74 (18.3)
Occasionally	222 (35.0)	78 (33.9)	144 (35.6)
Not at all	151 (23.8)	45 (19.6)	106 (26.2)
Not applicable	135 (21.3)	54 (23.5)	81 (20.0)
members of your family			
Frequently	51 (8.0)	21 (9.1)	30 (7.4)
Occasionally	118 (18.6)	48 (20.9)	70 (17.3)
Not at all	422 (66.5)	144 (62.6)	278 (68.6)
Not applicable	44 (6.9)	17 (7.4)	27 (6.7)
Source of knowledge of HIV/AIDS from			
Newspapers, magazines**	271 (42.7)	81 (35.2)	190 (46.9)
Books on AIDS	83 (13.1)	32 (13.9)	51 (12.6)
TV	441 (69.5)	150 (65.2)	291 (71.9)
Radio	94 (14.8)	28 (12.2)	66 (16.3)
Pamphlet published by Public Health Services	295 (46.5)	104 (45.2)	191 (47.2)
Friends	223 (35.1)	87 (37.8)	136 (35.6)
School	70 (11.0)	26 (11.3)	44 (10.9)
SITE Needle Exchange***	97 (15.3)	88 (38.3)	9 (2.2)
Community Organizations	134 (21.1)	56 (24.4)	78 (19.3)
Doctor*	165 (26.0)	72 (31.3)	93 (23.0)
Telephone Hotline	2 (0.3)	2 (0.9)	---
Family	40 (6.3)	12 (5.2)	28 (6.9)
Other	272 (42.8)	99 (43.0)	173 (42.7)
Can a person have HIV (the AIDS virus) and look well			
Yes	577 (90.9)	210 (91.3)	367 (90.6)
No	39 (6.1)	14 (6.1)	25 (6.2)
Don't know	19 (3.0)	6 (2.6)	13 (3.2)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Knowledge of how to become infected with AIDS			
Does not know of any ways	8 (1.3)	1 (0.4)	7 (1.7)
<b>DRUG USE</b>			
Using drugs (needle sharing not mentioned)	26 (4.1)	10 (4.4)	16 (4.0)
Injecting drugs (needle sharing not mentioned)	72 (11.3)	30 (13.0)	42 (10.4)
Sharing injection equipment	364 (57.3)	134 (58.3)	230 (56.8)
Other	191 (30.1)	73 (31.7)	118 (29.1)
<b>SEXUAL CONTACT</b>			
Sexual activity (unspecified)	177 (27.9)	70 (30.4)	107 (26.4)
Sexual activity (homosexual)	51 (8.0)	17 (7.4)	34 (8.4)
Sexual activity (heterosexual)	26 (4.1)	12 (5.2)	14 (3.5)
Sexual intercourse (unspecified)	93 (14.7)	40 (17.4)	53 (13.1)
Anal intercourse	213 (33.5)	78 (33.9)	135 (33.3)
Vaginal intercourse	167 (26.3)	57 (24.8)	110 (27.2)
Oral sex*	172 (27.1)	73 (31.7)	99 (24.4)
Sexual activity with an infected person	32 (5.0)	11 (4.8)	21 (5.2)
Having sex without a condom	203 (32.0)	72 (31.3)	131 (32.4)
Having sex when have STD or genital sores	8 (1.3)	5 (2.2)	3 (0.7)
Other**	69 (10.9)	35 (15.2)	34 (8.4)
<b>TRANSFUSION</b>			
Transfusion of blood/blood products*	218 (34.3)	66 (28.7)	152 (37.5)
<b>PERINATAL</b>			
Babies can get if from mothers	28 (4.4)	6 (2.6)	22 (5.4)
<b>CASUAL CONTACT</b>			
Kissing	28 (4.4)	13 (5.7)	15 (3.7)
Sharing cups, glasses, forks or other utensils	5 (0.8)	1 (0.4)	4 (1.0)
Saliva	49 (7.7)	21 (9.1)	28 (6.9)
Sharing toothbrushes	3 (0.5)	2 (0.9)	1 (0.3)
Other	27 (4.3)	10 (4.4)	17 (4.2)
<b>OTHER</b>			
Mosquitoes	5 (0.8)	1 (0.4)	4 (1.0)
Accidental blood contact	243 (38.3)	87 (37.8)	156 (38.5)
Tattooing	5 (0.8)	1 (0.4)	4 (1.0)
Other	39 (6.1)	13 (5.7)	26 (6.4)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attendees (N=230) # (%)	Non-attendees (N=405) # (%)
For all the people who have HIV what do you think the chances are that they will become seriously ill			
Always	251 (39.7)	80 (34.9)	171 (42.3)
Mostly	220 (34.8)	90 (39.3)	130 (32.2)
About half the time	126 (19.9)	48 (21.0)	78 (19.3)
Occasionally	29 (4.6)	8 (3.5)	21 (5.2)
Never	5 (0.8)	2 (0.9)	3 (0.7)
Don't know	2 (0.3)	1 (0.4)	1 (0.3)
Since you first heard about AIDS have you done anything to avoid catching the virus*			
Yes	552 (86.9)	208 (90.4)	344 (84.9)
No	83 (13.1)	22 (9.6)	61 (15.1)
What are your chances of becoming infected with HIV compared with other injecting drug users			
Much lower	335 (52.8)	110 (47.8)	225 (55.6)
A little lower	103 (16.2)	38 (16.5)	65 (16.1)
About the same	150 (23.6)	58 (25.2)	92 (22.7)
A little higher	18 (2.8)	6 (2.6)	12 (3.0)
Much higher	8 (1.3)	5 (2.2)	3 (0.7)
Already HIV+	21 (3.3)	13 (5.7)	8 (2.0)
What are your chances of developing AIDS**			
Already have it	18 (2.8)	11 (4.8)	7 (1.7)
I am almost certain I will	8 (1.3)	7 (3.0)	1 (0.3)
A large or very large chance	20 (3.2)	9 (3.9)	11 (2.7)
Some chance	164 (25.8)	64 (27.8)	100 (24.7)
A small or very small chance	242 (38.1)	84 (36.5)	158 (39.0)
I am almost certain I will not	180 (28.4)	54 (23.5)	126 (31.1)
Don't know	3 (0.5)	1 (0.4)	2 (0.5)
How safe are your sex practices (ratings)			
Completely unsafe 1	34 (5.4)	13 (5.7)	21 (5.2)
2	14 (2.2)	3 (1.3)	11 (2.7)
3	30 (4.7)	11 (4.8)	19 (4.7)
Unsure 4	128 (20.2)	52 (22.7)	76 (18.8)
5	78 (12.3)	27 (11.8)	51 (12.6)
6	134 (21.1)	54 (23.6)	80 (19.8)
Completely safe 7	216 (34.1)	69 (30.1)	147 (36.3)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question		Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Have you heard of the SITE***	Yes	463 (72.9)	226 (98.3)	237 (58.5)
	No	172 (27.1)	4 (1.7)	168 (41.5)
Have you exchanged your used needles at the SITE***	Yes	113 (24.5)	113 (50.0)	---
	No	349 (75.5)	113 (50.0)	236 (100.0)
Have you collected needles without exchanging used needles at the SITE***	Yes	136 (29.6)	136 (60.2)	---
	No	323 (70.4)	90 (39.8)	233 (100.0)
How many times have you been to the SITE	< 5	98 (57.0)		
	5 - 19	47 (27.3)		
	> 20	27 (15.7)		
Do you know about the service and what they offer*	Yes	128 (41.3)	36 (49.3)	92 (38.8)
	No	181 (58.4)	37 (50.7)	145 (61.2)
Have you ever visited a needle exchange project in another city	Yes	246 (38.8)	95 (41.5)	151 (37.3)
	No	388 (61.2)	134 (58.5)	254 (62.7)
Have you ever been medically tested for infection with HIV**	Yes	464 (73.2)	185 (80.8)	279 (68.9)
	No	168 (26.5)	44 (19.2)	124 (30.6)
	Don't know	2 (0.3)	---	2 (0.5)
What is the result***	HIV positive	24 (5.2)	14 (7.6)	10 (3.6)
	HIV negative	407 (87.7)	148 (80.0)	259 (92.8)
	Don't know	33 (7.1)	23 (12.4)	10 (3.6)

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question	Total (N=635) # (%)	Attenders (N=230) # (%)	Non-attenders (N=405) # (%)
Satisfaction with exchange			
The hours which you can make an exchange			
Satisfied		75 (44.9)	
Dissatisfied		82 (49.1)	
Neither		10 (6.0)	
The locality			
Satisfied		153 (91.6)	
Dissatisfied		11 (6.6)	
Neither		3 (1.8)	
The number of needles you can take away			
Satisfied		127 (76.1)	
Dissatisfied		35 (21.0)	
Neither		5 (3.0)	
The length of time you have to wait to be seen			
Satisfied		161 (96.4)	
Neither		6 (3.6)	
The degree of confidentiality			
Satisfied		157 (94.0)	
Dissatisfied		3 (1.8)	
Neither		7 (4.2)	
The people who work there			
Satisfied		164 (98.2)	
Neither		3 (1.8)	
The questions that you are asked			
Satisfied		160 (95.8)	
Dissatisfied		3 (1.8)	
Neither		4 (2.4)	
The rules and regulations there			
Satisfied		155 (92.8)	
Dissatisfied		1 (0.6)	
Neither		11 (6.6)	
The information that is available there			
Satisfied		158 (94.6)	
Dissatisfied		2 (1.2)	
Neither		7 (4.2)	
The number and type of services offered there			
Satisfied		148 (88.6)	
Dissatisfied		6 (3.6)	
Neither		13 (7.8)	

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Question		Total (N=635) # (%)	Attendees (N=230) # (%)	Non-attenders (N=405) # (%)
Have you visited the mobile van***	Yes	105 (16.5)	101 (43.9)	4 (1.0)
	No	530 (83.5)	129 (56.1)	401 (99.0)
Satisfaction with mobile van				
The hours which you can make an exchange				
	Satisfied		69 (69.0)	
	Dissatisfied		22 (22.0)	
	Neither		9 (9.0)	
The locality				
	Satisfied		83 (82.2)	
	Dissatisfied		13 (12.9)	
	Neither		5 (5.0)	
The number of needles you can take away				
	Satisfied		81 (80.2)	
	Dissatisfied		14 (13.9)	
	Neither		6 (6.0)	
The length of time you have to wait to be seen				
	Satisfied		93 (92.1)	
	Dissatisfied		3 (3.0)	
	Neither		5 (5.0)	
The degree of confidentiality				
	Satisfied		93 (92.1)	
	Dissatisfied		6 (5.9)	
	Neither		2 (2.0)	
The people who work there				
	Satisfied		98 (97.0)	
	Dissatisfied		1 (1.0)	
	Neither		2 (2.0)	
The questions that you are asked				
	Satisfied		96 (95.1)	
	Dissatisfied		1 (1.0)	
	Neither		4 (4.0)	
The rules and regulations there				
	Satisfied		91 (90.1)	
	Dissatisfied		2 (2.0)	
	Neither		8 (7.9)	
The information that is available there				
	Satisfied		90 (89.1)	
	Dissatisfied		4 (4.0)	
	Neither		7 (6.9)	
The number and type of services offered there				
	Satisfied		88 (87.1)	
	Dissatisfied		2 (2.0)	
	Neither		11 (10.9)	

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

Table VIII

**USAGE AND SATISFACTION WITH THE "SITE"  
BY ATTENDING STATUS - 1st INTERVIEW**

Table V

**SELF-REPORTED CONDOM USAGE FOR OPPOSITE SEX PARTNERS  
ACCORDING TO GENDER AND ATTENDING STATUS - 1st INTERVIEW**

Condom Use (past 3 months) (Vaginal, oral and anal intercourse)	Total (N = 635) # (%)		Attendees (N = 230) # (%)		Non-Attendees (N = 405) # (%)	
	Male	Female	Male	Female	Male	Female
<b>How often condoms used:</b>						
<b>Opposite Sex LT Partners</b>						
Always 100%	40	7	14 (17.5)	5 (21.7)	26 (19.7)	2 (5.6)
Mostly 75 - 99%	17	4	8 (10.0)	1 (4.4)	9 (6.8)	3 (8.3)
Half the time 25 - 75%	10	4	5 (6.3)	2 (8.7)	5 (3.8)	2 (5.6)
Occasionally 1 - 24%	21	11	9 (11.3)	3 (13.0)	12 (9.1)	8 (22.2)
Never 0%	124	33	44 (55.0)	12 (52.2)	80 (60.6)	21 (58.3)
<b>Opposite Sex ST Partners</b>						
Always 100%	103	7	44 (45.8)	4 (44.4)	59 (34.3)	3 (16.7)
Mostly 75 - 99%	41	5	19 (19.8)	---	22 (12.8)	5 (27.8)
Half the time 25 - 75%	20	4	6 (6.3)	2 (22.2)	14 (8.1)	2 (11.1)
Occasionally 1 - 24%	23	5	8 (8.3)	1 (11.1)	15 (8.7)	4 (22.2)
Never 0%	81	6	19 (19.8)	2 (22.2)	62 (36.1)	4 (22.2)
<b>Opposite Sex Clients - Vaginal</b>						
Always 100%	12	15	7 (63.6)	8 (88.9)	5 (50.0)	7 (63.6)
Mostly 75 - 99%	2	---	2 (18.2)	---	---	---
Half the time 25 - 75%	1	1	---	---	1 (10.0)	1 (9.1)
Occasionally 1 - 24%	1	2	1 (9.1)	1 (11.1)	---	1 (9.1)
Never 0%	5	2	1 (9.1)	---	4 (40.0)	2 (18.2)
<b>Opposite Sex Clients - Oral*</b>						
Always 100%	4	11	4 (44.4)	4 (57.1)	---	7 (63.6)
Mostly 75 - 99%	1	2	1 (11.1)	1 (14.3)	---	1 (9.1)
Half the time 25 - 75%	1	2	---	1 (14.3)	1 (14.3)	1 (9.1)
Occasionally 1 - 24%	---	---	---	---	---	---
Never 0%	10	3	4 (44.4)	1 (14.3)	6 (85.7)	2 (18.2)
<b>Opposite Sex Clients - Anal</b>						
Always 100%	5		4 (100.0)	---	1 (33.3)	---
Mostly 75 - 99%			---	---	---	---
Half the time 25 - 75%			---	---	---	---
Occasionally 1 - 24%			---	---	---	---
Never 0%	2		---	---	2 (66.7)	---

\* p < .05  
\*\* p < .01  
\*\*\* p < .001

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

**Table VI**

***SELF-REPORTED CONDOM USAGE FOR SAME SEX PARTNERS  
 ACCORDING TO GENDER AND ATTENDING STATUS - 1st INTERVIEW***

Condom Use (past 3 months) (Vaginal, oral and anal intercourse)	Total (N = 635) # (%)		Attendees (N = 230) # (%)		Non-Attendees (N = 405) # (%)	
	Male	Female	Male	Female	Male	Female
How often condoms used:						
<b>Same Sex LT Partners - Anal</b>						
Always 100%	6		4 (44.4)		2 (28.6)	
Mostly 75 - 99%	2		---		2 (28.6)	
Half the time 25 - 75%	---		---		---	
Occasionally 1 - 24%	1		1 (11.1)		---	
Never 0%	6		4 (44.4)		2 (28.6)	
<b>Same Sex LT Partners - Oral</b>						
Always 100%	2		1 (10.0)		1 (14.3)	
Mostly 75 - 99%	2		2 (20.0)		---	
Half the time 25 - 75%	---		---		---	
Occasionally 1 - 24%	1		---		1 (14.3)	
Never 0%	12		7 (70.0)		5 (71.4)	
<b>Same Sex ST Partners - Anal</b>						
Always 100%	12		9 (64.3)		3 (42.9)	
Mostly 75 - 99%	1		---		1 (14.3)	
Half the time 25 - 75%	3		2 (14.3)		1 (14.3)	
Occasionally 1 - 24%	3		2 (14.3)		1 (14.3)	
Never 0%	2		1 (7.1)		1 (14.3)	
<b>Same Sex ST Partners - Oral</b>						
Always 100%	11		7 (30.4)		4 (33.3)	
Mostly 75 - 99%	2		2 (8.7)		---	
Half the time 25 - 75%	3		3 (13.0)		---	
Occasionally 1 - 24%	6		4 (17.4)		2 (16.7)	
Never 0%	13		7 (30.4)		6 (50.0)	

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

**Table IX**

***PREVELANCE OF HIV INFECTION ---1st INTERVIEW RESULTS***

HIV+ by Attending Status:

	<i>N</i>	% HIV+
Attenders	183	10.29%
Non-attenders	<u>338</u>	<u>6.89%</u>
<b>TOTAL</b>	567	8.11%

HIV+ by Sex:

	<i>N</i>	% HIV+
Male	450	8.35%
Female	67	6.94%
Transsexual	<u>1</u>	<u>0%</u>
<b>TOTAL</b>	564	8.16%

HIV+ by Age Group:\*\*

	<i>N</i>	% HIV+
< 20 years	48	0%
20 - 24 years	107	4.67%
25 - 29 years	125	12.0%
30 - 39 years	196	9.18%
40+ years	<u>91</u>	<u>8.79%</u>
<b>TOTAL</b>	567	8.11%

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

\* p < .05  
\*\* p < .01  
\*\*\* p < .001