Integrated Bio-behavioral Survey (IBBS)

among Injecting Drug Users

in Eastern Terai – 2007

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ASHA
Advancing Surveillance, Policies, Prevention, Care and Support to Fight HIV/AIDS

Submitted to:

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ANNEXES

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ABBREVIATIONS

AIDS	-	Acquired Immuno-Deficiency Syndrome
AMDA	-	Association of Medical Doctors of Asia
ASHA	-	Advancing Surveillance, Policies, Prevention, Care & Support to Fight HIV/AIDS
DIC	-	Drop-in-Centre
ELISA	-	Enzyme Linked Immuno Assays
FHI	-	Family Health International
FPAN	-	Nepal Family Planning Association
FSW	-	Female Sex Worker
GO	-	Government Organization
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Bio-Behavioral Survey
ID	-	Identification Number
IDU	-	Injecting Drug User
IEC	-	Information, Education and Communication
INF	-	International Fellowship Nepal
KCC	-	Knight Chess Club
KYC	-	Kirat Yakthum Chumlung
MARPs		Most At Risk Populations
MRMG	-	Mountain Resource Management Group
MSM	-	Men who Have Sex with Men
NCASC	-	National Centre for AIDS and STD Control
NGO	-	Non-Governmental Organization
NHRC	-	Nepal Health Research Council
OE	-	Outreach Educator
PE	-	Peer Educator
PHSC	-	Protection of Human Subjects Committee
PJK	-	Punarjiwan Kendra
PPS	-	Probability Proportional to Size
PSK	-	Punarjiwan Sarokar Kendra
RPR	-	Rapid Plasma Reagin
SACTS	-	STD/AIDS Counseling and Training Services
SLC	-	School Leaving Certificate
SPSS	-	Statistical Package for the Social Sciences
STI	-	Sexually Transmitted Infection
TPHA	-	Treponema Pallidum Hemaggultination Assay
VCT	-	Voluntary Counseling and Testing
WHO	-	World Health Organization

EXECUTIVE SUMMARY

The National Center for AIDS and STD Control (NCASC), Nepal has developed a comprehensive National Surveillance Plan for HIV and AIDS which includes Integrated Biological and Behavioral Surveys (IBBS) to be conducted at regular intervals among most at risk populations (MARPs).These surveillance studies are aimed at assessing health risk behaviors and measuring the prevalence of HIV and Sexually Transmitted Infections (STIs) among MARPs, as well as monitoring trends in the epidemic to inform the HIV response in Nepal.

The IBBS is conducted by NCASC with technical and financial support from Family Health International/Nepal (FHI) and the United States Agency for International Development (USAID). The current MARPs who are the focus of various IBBS which have been conducted to this date are injecting drug users (IDUs), female sex workers (FSWs) and men who have sex with men (MSM).

This report details the findings of the third round of IBBS conducted among 345 male IDUs in the Eastern Terai. The primary objective of the study was to collect strategic information to analyze trends in risk behavior and HIV and STI knowledge and prevalence among IDUs.

The study was conducted among IDUs in the three districts of Jhapa, Morang and Sunsari in the Eastern Terai. A total of 345 male IDUs were sampled using two stage cluster sampling methodology.

Structured questionnaires were used to collect behavioral data and information on STI/HIV/AIDS awareness among respondents.

Study centers with laboratories/clinics were set up at easily accessible locations in all three districts. Pre-test counseling sessions were held before clinical examinations and blood sample collections. All the respondents were then examined for STI identification and blood samples were collected for biological testing of HIV and syphilis infection. Study participants were provided syndromic treatment for STI symptoms if warranted. HIV and syphilis test results were provided later at locally established VCT centers. Post test counseling was also provided at these sites by experienced counselors.

Below are the Key Findings:

Socio Demographic Characteristics

The IDUs were mostly below 30 (77.4 %) with 13 percent of them aged less than 19.

Over one half of IDUs (54.8%) were single; 64.1 percent of IDUs were found to be either living alone or without a co-habiting sex partner.

IDUs in Eastern Terai were fairly well educated with 77.7 percent of them having attended secondary school or higher education

IDUs from various castes/ethnicities were represented in this study. Over one third (34.5%) came from Gurung/Rai/Limbu ethnic community while 15.9 percent were from the Chhetri/Thakuri ethnic group, followed by 13 percent from Lama/Tamang/ Magar/Sherpa castes.

STI/HIV/AIDS Prevalence

The HIV prevalence has halved since the first time IBBS was conducted in the Eastern Terai in 2003.. In 2007, 17.1 percent of study participants were tested HIV-positive compared with 31.6 percent in 2005 and 35.1 percent in 2003.

Respondents from Morang district had the highest prevalence rate (21.5%) followed by Sunsari (14.8%) and Jhapa (13.3%) in 2007. The prevalence rate decreased significantly in Morang and Sunsari in the last four years whereas it increased in Jhapa by 5.3 percent.

Syphilis history was found among 1.7 percent of IDUs while 0.6 percent of respondents were currently infected with high titre syphilis.

The prevalence of HIV differed significantly with the age and marital status of respondents, with a high prevalence among 20+ years old IDUs and married IDUs. Although HIV prevalence was higher among illiterate IDUs than literate ones, the difference was not statistically significant.

On the other hand, a significant relation was observed between drug injecting duration and prevalence of HIV among IDUs. HIV prevalence was significantly higher among those IDUs who had been injecting drugs for five years or more.

Drug Injecting Practice

Most of the respondents had been injecting drugs for a long time with an average injecting period of 4.8 years. Around 36 percent of IDUs had been injecting drugs for more than five years, while 44 percent of them had been injecting for between two and five years. Two in ten had been injecting drugs for less than two years. The median age at first drug injection was 20 years. About 59 percent of respondents were below 21 when they injected for the first time.

Only a small proportion of respondents (4.3%) had not injected the week preceding the survey. Three in ten (29.3%) reported injecting less than once a week, while over two thirds (66.4%) had injected once a day or more.

As for the frequency of injection on the last day they had injected, 14.8 percent of IDUs had injected three or more times. One third (33.3%) had injected two times while 51.9 percent had injected once the last time they injected drugs.

Needle/Syringe Using Practice

Data relating to injecting practices of the study population in the past week showed that the IDUs have become increasingly more cautious in avoiding risky practices over the past three rounds.

In the past week 13.9 percent of respondents had injected with another's previously used needle/syringe, while 6.7 percent had used a needle/syringe that had been kept in a public place at least once.

Among those IDUs who had injected in other towns/cities, 13.4 percent had used a pre-used needle/syringe and 13.1 percent had given a needle/syringe to someone else after use.

Sexual Behavior

Among those respondents who had engaged in sexual contact in the past 12 months, 40.4 percent had sex with a regular female sex partner. Mostly all of them (99.2%) had just one regular sex partner. Overall, 86.3 percent had sex with their regular female sex partner in the month preceding the survey during which around 71 percent engaged in at least five sexual contacts.

Over a quarter (28.1%) of IDUs had sex with non-regular female sex partners in the past year. Of them, almost two fifths (39.6%) have had two or more non-regular female sex partners. About 35 percent had sexual contact with their non-regular female sex partners in the previous month with 19 percent having had at least five sexual contacts during that time.

Of those IDUs who had ever experienced sexual intercourse, around 28 percent had engaged in sex with a female sex worker in the past year. Among them, a majority (60.7%) had sex with two or more female sex workers. Around 35 percent had sexual encounters with female sex workers in the month preceding the survey, of which 16.1 percent had engaged in five or more sexual contacts.

Twenty six percent of IDUs had used a condom during their last sexual encounter with their regular partner, while 46.2 percent had used a condom during the last sexual encounter with a non- regular partner; 75.3 percent had used a condom with their last sex worker.

In the past year, 57.3 percent of IDUs had used condoms consistently with female sex workers as compared to 33 percent with non-regular female sex partners and 9.2 percent with regular female sex partners.

Consistent condom use had increased with sex workers and non-regular partners, but decreased with regular partners since 2002.

STI and HIV/AIDS Awareness and Treatment Practices

Overall, 3.8 percent of IDUs had not heard of STIs before.

In the past one year, 8.4 percent of respondents have had genital discharge and 5.8 percent have had genital ulcer(s)/sore(s). Among them, 37.9 percent of IDUs were experiencing genital discharges and 60 percent were experiencing genital ulcer(s)/sore(s) at the time of this survey.

Six in ten (61%) of those IDUs who had ever experienced STI symptom never sought treatment.

In total, 95.4 percent of IDUs were aware of all three main prevention measures namely (A)abstinence from sex (B) being faithful to one sex partner (C) and regular condom use.

HIV Test

The majority of respondents (91.3%) knew that a confidential HIV testing facility was available in their communities. Among them, 57 percent had ever tested themselves for HIV.

Exposure to HIV/AIDS Related Programs

Altogether 82.3 percent of IDUs had met peer/outreach educators at least once in the past year. Eighty percent had visited a DIC and 23.3 percent had visited a VCT center in the last 12 months. However, only 2.9 percent of IDUs had visited an STI clinic in the past 12 months.

Overall, 30.4 percent of respondents had participated in at least one HIV/AIDS awareness raising program or similar community event before.

1. INTRODUCTION

1.1 Background

The National Center for AIDS and STD Control (NCASC) has been compiling and publishing data on reported HIV cases in different population subgroups since 1991. As of December 2007 a cumulative total of 10,546 HIV infections, including 1,610 cases of AIDS, have been reported in Nepal (NCASC, December 2007). In 2007 the NCASC has estimated about 70,000 people (including children and adults above the age of 49 years) to be infected by HIV in Nepal. These numbers indicate a big gap between the estimated number of HIV infections and the number of people who have been tested and know their status.

The IBBS is conducted at regular intervals in Nepal. This is the third round of the study to be conducted among IDUs in the Eastern Terai. IDUs function as a core HIV risk group because of their high risk behavior of sharing needles/syringes between different injecting partners and also re-using needles kept in public places. Moreover, high-risk sexual behavior associated with drug use has also been found to be a major contributing factor to the spread of HIV among the non-injecting population (AIDS in Asia, MAP Report, 2004).

HIV prevalence among IDUs varies by location in Nepal. The first round of the IBBS conducted in 2002 indicated quite a high prevalence of HIV (68%) among IDUs in the Kathmandu Valley (New ERA/SACTS/FHI 2002). The second round of IBBS conducted in 2005, indicated a 52 percent HIV prevalence rate among IDUs in Kathmandu, illustrating that IDUs who lived in the Kathmandu Valley had higher HIV prevalence compared to those IDUs from other places. In Pokhara, about 22 percent of IDUs were found to be HIV positive in both the 2003 and 2005 rounds of IBBS. Similarly, in the three districts (Morang, Sunsari, and Jhapa) of the Eastern Terai, HIV among IDUs was 35 and 32 percent in 2003 and 2005 respectively (IBBS, New ERA/SACTS/FHI 2005). Although slightly lower than the 2003 IBBS result, the findings of the second round of study in the Eastern Terai was still quite alarming.

This report focuses on the findings from the third round of studies which has been conducted on IDUs in the Eastern Terai and compares the results from all three surveys where possible.

2. DESIGN AND METHODOLOGY

2.1 Objectives of the Study

In line with the objectives of the previous rounds of IBBS, this third round of the study was undertaken primarily to determine the prevalence of HIV/STI and to assess HIV/STI related risk behavior among IDUs in the Eastern Terai.

In addition, this study collected specific information on IDUs; their socio-demographic characteristics, level of awareness about HIV/STI and exposure to intervention programs in the Eastern Terai. Not undetaken in the first two rounds, this round of IBBS tested IDUs for syphilis infection for the first time.

2.2 Study Population

This cross-sectional study was conducted among IDUs who are considered as one of the 'core groups' for transmission of HIV/STI infection in Nepal. Current IDUs from the three districts of Jhapa, Morang and Sunsari were included in this study. All participants were screened for eligibility criteria. For the purposes of this study the inclusion definition for IDUs was "those current injectors aged 16 years and above who have been injecting illicit drugs for at least three months prior to the date of this survey".

2.3 Sample Size and Sampling Design

The sample size was calculated to detect 15 percent differences in key indicators, such as needle/syringe sharing and consistent condom use in two successive IBBS among IDUs. The sample size was determined by using a basic statistical formula which estimated a sample size of 345 IDUs (Annex 2).

This is the third round of IBBS being conducted among IDUs of the Eastern Terai region of Nepal. Before the initiation of the study, a preliminary field survey was conducted to understand the actual field situation and to map out the IDUs concentration sites in the study districts.

A networking study of IDUs in the Eastern Terai was conducted before the actual survey to see if Respondent Driven Sampling (RDS) methodology would be feasible in the region. The IDU network study indicated that IDUs in the study districts primarily have short term acquaintances with other IDUs and that they share a weak or virtually anonymous relation with each other. They do not meet frequently and many of them share a very casual relationship which is limited to occasional meetings at DICs, drug purchasing places and adjoining Indian markets. Although inter-district traveling is quite easy in the Eastern Terai, and some IDUs in Jhapa, Morang and Sunsari districts also share drugs among them, inter-district networking among IDUs is very limited. On this basis two stage cluster sampling methodology was chosen over RDS.

Concerned stakeholders at the district level, as well as representatives from local governmental organizations (GOs) and non-governmental organizations (NGOs)

were consulted to collect information on IDUs and their injecting practices. A rapid listing of the IDUs and their gathering/injecting locations was made. In addition to this, estimated maximum and minimum numbers of IDUs to be found in the identified locations were listed.

Based on the preliminary information collected during the mapping exercise, lists of locations and estimated numbers of IDUs in each location were prepared.

Two-stage cluster sampling was used to draw the sample. A location with at least 30 IDUs was defined as a cluster in the first stage. Those sites with less than 30 estimated IDUs were combined with the neighboring site to make a cluster with a minimum size of 30. In the first stage, 30 clusters were selected using the probability proportional to the size (PPS) method, and in the second stage from each selected cluster 15 respondents were selected randomly.

The fieldwork started on 18 August and was completed on 10 October 2007.

2.4 Study Process

A quantitative research approach was adopted for this study. Structured questionnaires were used to collect behavioral data relating to drug injection, syringe/needle sharing and sexual behavior among IDUs. Additionally, some demographic and social characteristics were collected. In order to draw up a comparative analysis of behavioral trends over the years, questions asked during the first and second rounds were repeated during this survey. A new section was also added to the questionnaire this year to derive information on issues like exposure of IDUs to ongoing HIV/AIDS awareness programs and their participation in such activities. The questionnaires were developed based on the "Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV" (FHI, 2000). The new section on program exposure was pre-tested before finalizing the questionnaire (Annex 1).

Before initiating the actual interview, all those coming with referral cards were informally asked certain questions in order to ensure that they met the inclusive criterion set for the study. Injecting marks were also observed for confirmation of their injecting behavior.

Strict confidentiality was maintained throughout the study process. The names of the study participants and their full addresses were not recorded anywhere. Instead, they were provided a unique ID number written on a plastic-coated card. The same number was marked on the questionnaire, medical records, and blood specimen of the particular respondent. This card was also used for the distribution of the test results. Only those participants who produced their ID card were provided the HIV and Syphilis test results verbally with pre and post-test counseling.

2.4.1 Recruitment of Respondents in the Sample

Using the information gathered on locations and the estimated number of IDUs in those locations, thirty first stage clusters were defined as explained above. From each of these first stage clusters, 15 IDUs were randomly selected for the sample. After careful observation of different sites within the clusters, selected IDUs were

approached and informed about the study. If during this process some of the selected IDUs were not able to be easily identified, key people from the specific locality were used to identify the IDU.

Because of the social stigma and discrimination associated with injecting drugs, some of the randomly selected IDUs were not easily accessible as they did not want to disclose their IDU status. In such situations community mobilizers and peer educators of on-going HIV/AIDS programs, ex-IDUs, social workers, IDUs who had successfully participated in the study or any other key person who could identify and approach the selected IDUs were mobilized for contacting them. At least three attempts were made to contact and include the person randomly selected. If it was not successful after three attempts, that individual was replaced by the next IDU in the cluster.

2.4.2 Refusal

All respondents participated voluntarily in the study. Those who did not meet the study criteria and those who were not willing to participate were not involved in the study.

There were 21 such refusal cases at the study sites. Among them, 15 IDUs did not meet the study criteria, one was afraid of being exposed, one was not interested in participating in the study, two had just injected drugs so were not in a position to be interviewed and two said that they were too busy to take part in the survey.

All of those who decided to quit the study because of an unavailability of time were offered a second visit at a more suitable time. Those who came to the study centre but could not take part in the study due to some reasons also were offered free health check ups at the study clinic.

2.4.3 Ethical Review

The research was conducted in compliance with both ethical and human rights standards. These standards included participants' anonymity as well as pre- and post-test counseling. As this study focused on individuals who are highly stigmatized, and as injecting drugs is illegal in Nepal, "ethical" as well as "technical" approvals were obtained from Family Health International's ethical review body, the Protection of Human Subject Committee (PHSC), and the Nepal Health Research Council (NHRC) prior to the commencement of the fieldwork. The study protocols were carefully reviewed and approved by these organizations. Moreover, verbal informed consent was obtained from all the participants in the presence of a witness prior to the interview and collection of a blood sample. The consent form was administered in a private setting. The verbal consent form used in the study is included in Annex 4. No personal identifiers were collected and the samples were labeled only with the ID number provided to the study participant.

2.4.4 Clinical and Laboratory Procedure

The study participants were clinically checked for any symptoms of STIs by the health assistant who also filled in a checklist with information provided by the

respondents (Annex 5). They provided syndromic treatment to the respondents with STI symptoms in accordance with the "National STI Case Management Guidelines." Other over-the-counter medicines such as paracetamol, alkalysing agents and vitamins were given as necessary.

About 5 ml of blood was collected from each study participant using a disposable syringe. The blood sample was placed in a centrifuge to separate the blood cells from the serum. Serum samples were stored in the refrigerator at the study site. Each sample was labeled with the ID number which had been assigned to the study participant. The specimens were transported by SACTS in Kathmandu in a cold box once every 10 days. The serum samples were stored at a temperature of minus 12 to minus 20°C at SACTS laboratory.

Syphilis was tested using the *Rapid Plasma Reagin* (RPR) test card manufactured by Omega Diagnostics Ltd UK and confirmed by means of *the Serodia Treponema Pallidum Hem Agglutination test* (TPHA; Omega Diagnostics Ltd. UK). TPHA positive samples and all samples with positive RPR were further tested for the titre up to 64 times dilution. On the basis of titre of RPR, all the specimens with RPR/TPHA positive results were divided into two categories.

- TPHA positive with RPR negative or RPR positive with titre < 1:8 were classified as history of syphilis
- TPHA positive with RPR titre 1:8 or greater were classified as current syphilis requiring immediate treatment

For detection of HIV antibody *Enzyme Linked Immuno Sorbent Assay* (ELISAs) was used. If the ELISA test showed negative result then no further test was conducted and the test result was reported as non-reactive. But if the first test showed a positive result then a second ELISA test was performed. If the second result too confirmed the first result then the test result was reported as reactive. But if the second result contradicted with the first, then a third test was done. The final test results thus were declared positive if the test results showed "positive, negative, negative, positive" and negative if it gave out "positive, negative, negative". The proposed testing protocol is based on World Health Organization (WHO) guidelines (strategy 3) and the National VCT Guidelines of Nepal developed by the NCASC, 2004.

2.5 Study Management

The study team was comprised of one study director, one research coordinator, one research officer, two research assistants and three field teams. The field teams formed for the survey included one research assistant, five supervisors/interviewers, one health assistant, one lab technician, one runner and local motivator/s (as per need).

Before data collection started, a one-week intensive training was organized for the study team. The training session familiarized the team with the study objectives, characteristics of the target groups, rapport-building techniques, contents of the questionnaire and the study process. The training session also included theory and practical classes on pre-test counseling and questionnaire administration. Experienced counselors from SACTS conducted a separate session on STIs,

HIV/AIDS and pre-test counseling. The personnel from Recovering Nepal, an organization that works with IDUs, provided the study team was with information regarding the general behavior of IDUs and skills which can be required to deal with them. In addition, the training focused on providing a clear concept of informed consent to the research team.

Centrally located study centers were established at Kakarvitta, Bhadrapur, Birtamod and Damak in Jhapa district. Similarly, in Morang district study centers were set at Urlabari, Belbari and Biratnagar. In Sunsari district, two study centers were set at Dharan and Itahari (Annex 6). Individual interviews, clinical examinations and blood collections were carried out in separate rooms in each study center.

To ensure the quality of data, New ERA and FHI officials supervised the fieldwork regularly. Field supervisors reviewed all the completed questionnaires and any inconsistencies in the responses were clarified through discussions with the concerned interviewer later that day. Cross-checking questions were also asked to the study participants to avoid duplication.

2.6 Post-Test Counseling and Test Result Distribution

All the study participants who went to receive their test results with their ID card were provided their HIV and Syphilis test results accompanied by post-test counseling with a trained counselor at Kakarvitta, Bhadrapur, Birtamod and Damak VCT Centers run by AMDA, Dharan and Itahari VCT Centers run by Punarjiwan Kendra (PJK) and Urlabari, Belbari and Biratnagar VCT Centers run by Help Group. The study participants were informed about the location and operating hours of their VCT site right after the collection of their blood sample for the test.

Post-test counseling and individual report dissemination was completed between the 16th of September and the 17th of October, 2007, at the aforementioned VCT centers in the study districts. Out of the 345 IDUs tested for HIV, only 73 (21.2%) turned up for their test results (Annex 7). This low turnover could be contributed to the lack of provisions for the reimbursement of transportation costs which may have otherwise prompted the IDUs to visit the VCT centers to collect their report. Secondly, the time gap between the actual interview and the dissemination of test results may have diminished their concern or interest in receiving their results. Trained counselors distributed test results to the participants in a private setting only after they had produced their ID cards. The counseling session was focused on high-risk behavior and other aspects of STI and HIV. Some participants were also referred to other health facilities for additional services.

2.7 Data Management and Analysis

All the questionnaires were collected and transported to the New ERA Kathmandu office after the fieldwork was completed. The questionnaires were thoroughly checked for any inconsistencies before the data was entered into a computer using FoxPro software. The double entry approach was used to minimize errors during data entry. Later, the data file was transferred to SPSS files for further analysis.

Simple statistical tools, such as frequency distribution, percentages, range, proportion, mean and median, were used to analyze the results of the survey. Chi-square test values were also calculated to measure the statistical significance of the relationships between cross-tabulated categorical variables. Odd ratios were calculated to measure the relative risk of HIV infection between the categories of the selected explanatory variables. Clinical and behavioral data were merged in order to examine the relationship between the participants' HIV status, background characteristics, injecting and sexual behaviors.

3. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF IDUs

This chapter discusses the demographic and social characteristics of 345 male IDUs recruited from the different areas of Jhapa, Sunsari and Morang districts of the Eastern Terai for this study.

3.1 Demographic Characteristics

The IDUs were mostly young. The majority of respondents (77.4%) were younger than 30. Only a small proportion of respondents (1.7%) were 40 years or older. The median age was 26.

Over half of the IDUs (54.8%) were single. Four in ten (39.1%) were married at the time of the survey, while 6.1 percent were divorced, separated or widowed from their wives.. The majority of those who ever got married (83.3%) had done so before the age of 25. The median age at respondents' first marriage was 21 years.

Six in ten (64.1%) lived alone or without a sexual partner while over a third (35.9%) lived with their spouses.

Table 3.1: Demographic Characteristics of IDUs

Demographic Characteristics	N	%
Age		
< = 19 Yrs	43	12.5
20-24	126	36.5
25-29	98	28.4
30-34	54	15.7
35-39	18	5.2
40 +	6	1.7
Median age	**25**	**100.0**
Marital status		
Never married	189	54.8
Married	135	39.1
Divorced/Separated/Widower	21	6.1
Total	**345**	**100.0**
Age at first marriage		
< =14 years	2	1.3
15-19 years	54	34.6
20-24 years	74	47.4
25-29years	23	14.7
= > 30 years	3	1.9
Median age	**21**	**-**
Total	**156**	**100.0**
Currently living with		
Spouse	124	35.9
Alone/ without sexual partner	221	64.1
Total	**345**	**100.0**

3.2 Social Characteristics

IDUs in the Eastern Terai were fairly well educated with 77.7 percent having attended secondary school or higher education. One in five (17.1%) had attended primary school, 2.9 percent were literate but had no formal education and 2.3 percent of the IDUs were illiterate.

IDUs from various castes/ethnicities were represented in this study. Over one third (34.5%) came from Gurung/Rai/Limbu ethnic community, while 15.9 percent were from the

Chhetri/Thakuri ethnic group, followed by 13 percent from Lama/Tamang/Magar/Sherpa castes.

A large majority (78.3%) of participants had been born, and always resided, in the districts under study; the rest had migrated from other districts. Eighteen percent had been living in the study districts for five years or more while 3.8 percent had migrated more recently.

Table 3.2: Social Characteristics of IDUs

Social Characteristics	N=345	%
Education		
Illiterate	8	2.3
Literate only	10	2.9
Primary	59	17.1
Secondary	195	56.5
SLC & above	73	21.2
Ethnicity		
Gurung/Rai/Limbu	119	34.5
Chhetri/Thakuri	55	15.9
Tamang/Lama/Magar/Sherpa	45	13.0
Newar	26	7.5
Terai caste	19	5.5
Brahmin	18	5.2
Occupational caste	15	4.3
Chaudhary/Tharu	11	3.2
Rajbanshi	9	2.6
Majhi/Chepang	9	2.6
Musalman	6	1.7
Bhujel	4	1.2
Giri/Puri/Sanyasi	4	1.2
Mandal	3	0.9
Teli/Shah	1	0.3
Others (Other Hill Caste)	1	0.3
Duration of stay in Eastern Region (Jhapa, Morang and Sunsari districts)		
Since birth	270	78.3
Since 5 years	13	3.8
More than 5 years	62	18.0

4. PREVALENCE OF HIV AND STI

Enzyme Linked Immuno Sorbent Assay (ELISA) was used to detect the HIV antibody. Syphilis was tested using Rapid Plasma Regain (RPR).All the specimens with RPR/TPHA positive results were divided into two categories on the basis of titre of RPR:

- TPHA positive with RPR negative or RPR positive with titre $\leq$ 1:8 were classified as history of syphilis
- TPHA positive with RPR titre 1:8 or greater were classified as current syphilis requiring immediate treatment

4.1 HIV/STI Prevalence

In the Eastern Terai, 17.1 percent of study participants tested HIV-positive. Respondents from Morang district had the highest prevalence rate (21.5%) followed by Sunsari (14.8%) and Jhapa (13.3%) (Annex 4).

Among the 345 study participants, a history of syphilis was found among 6 (1.7%) IDUs while two (0.6%) were currently infected with high titre syphilis. This indicates that sexually transmitted infection is a relatively minor problem among IDUs in the Eastern Terai.

Table 4.1: HIV and STI Prevalence among IDUs

HIV and STI Prevalence	N=345	%
HIV	59	17.1
Active Syphilis	2	0.6
Syphilis History	6	1.7

4.2 Relation between Socio-Demographic Characteristics and HIV Infection

As Table 4.2 indicates, HIV prevalence differs significantly with age ($p<0.01$). IDUs who were aged 20 years or older (19.2%) were more likely to be HIV-positive than those who were aged 19 or less (2.3%). Similarly, the prevalence of HIV differed significantly ($p<0.05$) according to marital status. IDUs who were married/divorced/separated or widowed (23%) were nearly twice more likely to carry HIV than single participants (12.7%).

Level of education was another important variable for HIV prevalence. Illiterate IDUs (25%) were more likely to be HIV-positive than the rest of the respondents who took part in this survey (16.9%). However, the difference is not large enough to be statistically significant (Table 4.2).

Table 4.2: Relationship between Socio-Demographic Characteristics and HIV Infection

Characteristics	N	HIV+	%	P Value
Age				
Below 20 years	43	1	2.3	<0.01
20 years and Above	302	58	19.2	
Marital status				
Ever married	156	35	23.0	<0.05
Never married	189	24	12.7	
Literacy				
Illiterate	8	2	25.0	>0.05
Literate/formal school	337	57	16.9	
Total	**345**	**59**	**17.1**	

4.3 Relation between Drug Injection Behavior and HIV

The relationship between HIV prevalence and drug injection behaviors, such as how long respondents have been injecting, frequency of injections during the past week and type of syringes they used, have been reviewed in this section.

By and large, injecting drugs and certain behaviors practiced by respondents put them at the risk of HIV infection. A statistically significant relationship was observed between how long respondents have been injecting drugs and HIV prevalence. In this survey, nearly a third of the participants (29.8%) who had been injecting drugs for five years or more were HIV-positive. A comparatively lower proportion of respondents carried HIV among those who have been injecting for two to five years (11.8%). Notably, the prevalence level was as low as 5.8 percent among those who had been injecting for less than two years (Table 4.3).

Although those IDUs who injected drugs everyday in the week preceding this survey had a higher rate of HIV infection (19.6%) than those who did not inject so frequently, the frequency of injection during the preceding week did not have a significant association with HIV prevalence ($p > 0.05$). In the same way, behaviors like the use of needles/syringes which had been previously used by others and the use of syringe/needles left in public places also did not show a strong association with HIV infection ($p>0.05$) (Table 4.3) in the Eastern Terai.

Table 4.3: Relation between Drug Injecting Behavior and HIV Infection

Drug injecting behavior	N	HIV+	%	P value
Injecting drugs for:				
Less than 2 years	69	4	5.8	<0.01
2-5 Years	152	18	11.8	
More than 5 years	124	37	29.8	
Frequency of injecting drugs in the past week				
Not Injected	15	0	0.0	>0.05
1-6 times a week	101	18	17.8	
Everyday	92	18	19.6	
2 or more times a day	137	23	16.8	
Used another's previously used needle/syringe during the past week				
Never/not injected	297	51	17.2	>0.05
Ever injected	48	8	16.7	
Used a needle/syringe kept in a public place during the past week				
Never /Not injected	322	57	17.7	>0.05
Ever injected	23	2	8.7	
Total	**345**	**59**	**17.1**	

4.4 Relation between Sexual Behavior and HIV

This section examines sexual behavior and its relationship to HIV prevalence among IDUs in the Eastern Terai. It is important to interpret the findings in this section with caution as some IDUs may have changed their past sexual behavior since being diagnosed with HIV.

Table 4.4: Relation between Sexual Behavior and HIV

Sex with different partners in the past 12 months	N	HIV+	%	P value
With regular female sex partner(s)				
Yes	131	28	21.4	>0.05
No	193	29	15.0	
Never had sexual experience	21	2	9.5	
With Non-regular female sex partner(s)				
Yes	91	8	8.8	
No	233	49	21.0	<0.05
Never had sexual experience	21	2	9.5	
With female sex worker(s)				
Yes	89	14	15.7	>0.05
No	235	43	18.3	
Never had sexual experience	21	2	9.5	
Number of female partners in the past 12 months				
Number of regular female sex partner in the past 12 months				
0 Partner	214	31	14.5	>0.05
1 partner	130	28	21.5	
2 partners	1	0	0.0	
Number of non-regular female sex partners in the past 12 months				
0 Partner	254	51	20.1	<0.05
1 partner	55	5	9.1	
2 or more partners	36	3	8.3	
Number of female sex workers in the past 12 months				
0 Partners	256	45	17.6	>0.05
1 sex worker	35	6	17.1	
2 or more sex workers	54	8	14.8	
Total	**345**	**59**	**17.1**	

The HIV infection rate is 21.4 percent among those IDUs with regular female sex partners, 15 percent among those who did not have regular partners, and 9.5 percent among those who never had sexual experience. This finding further reiterates that current sexual behaviors of IDUs are not necessarily associated with their HIV status.

With regard to non-regular and commercial sex partners of IDUs, higher infection rates were observed among those who did not have sexual contact in the past one year with these types of sexual partners than among those who had. Likewise among the IDUs of the Eastern Terai, HIV prevalence was not significantly associated with intercourse with female sex workers in the past year.

The number of sex partners during the past year was found not to be related with HIV infection. IDUs with two regular sexual partners had a zero HIV prevalence rate, compared to a 21.5 percent prevalence rate among those with one regular partner and a 14.5 percent prevalence rate among those who did not have sex with a regular partner in the past year. Likewise, HIV prevalence is significantly higher among IDUs who did not have sexual contact with non-regular sex partner(s) (20.1%), as compared to those with one or more non-regular sex partners in the past year. Moreover, sexual relations with one or more sex workers in the past year did not show a significant association with HIV infection among IDUs in the Eastern Terai.

To analyze the risk associated with infection, unadjusted odd ratios of HIV risk were calculated for selected characteristics of IDUs. Odd ratio of HIV infection shows that IDUs aged 20 years and above were at a greater risk of HIV infection compared to

their younger counterparts. For example, the odds ratio is about 9.98 times higher among those aged 20 and above than among younger IDUs. This odds ratio is statistically significant at 95 percent confidence interval.

As for marital status of the respondents, ever married IDUs were at a greater risk of HIV infection compared to their never married counterparts. For example, the odds ratio is about 1.99 times higher among ever married IDUs than of those who had never been married; this association is statistically significant as well.

Other selected variables which have not been discussed above and are listed in Table 4.5 do not have a significant association with HIV infection (see the 95% confidence intervals).

Table 4.5: Odds Ratios of HIV Infection by Selected Characteristics of IDUs

Characteristics	Odd Ratio	# cases (n)	95% Confidence Interval
Age			
<20 years	-	43	(1.43,199.11)
= >20 years	9.98	302	
Education			
Illiterate	1.64	8	(0.22,9.29)
Literate	-	337	
Marital Status			
Never married	-	189	(1.08,3.66)
Ever married	1.99	156	
Injected with another's previously used syringe during past week			
Yes	-	48	
No	1.04	156	(0.43,2.56)
Injected with a syringe kept in a public place			
Yes	-	23	(0.49,14.35)
No	2.26	322	
Injected with a pre-filled syringe			
Yes	1.04	17	(0.23,4.05)
No	-	328	
Injected in another part of the country or in another country			
Yes	1.56	320	(0.42,6.77)
No	-	25	

5. DRUG USE, NEEDLE SHARING AND TREATMENT

Needle/syringe use and drug sharing behaviors of IDUs needs to be carefully explored in order to design and implement preventive strategies for the target population. This chapter deals with the drug using behavior of IDUs. The information here relates specifically to alcohol intake, drug use and needle sharing behavior among IDUs, in addition to any kind of treatment sought by the respondents in order to quit drugs.

5.1 Alcohol Consumption and Oral Drug Use among IDUs

Seventy five percent of respondents had consumed alcohol at least once in the past month. Almost one-fourth (24.3%) had consumed alcohol everyday.

Overall, 61.4 percent of IDUs had been using drugs orally for over five years and 31.3 percent had been doing so for the last 2-5 years. The average duration of oral drug use among the respondents was 7.4 years.

Table 5.1: Alcohol Intake and Oral Drug Use among IDUs

Alcohol and oral drug use	N=345	%
Alcohol Intake during the past month		
Everyday	84	24.3
More than once a week	86	24.9
Less than once a week	89	25.8
Never	86	24.9
Duration of drug use		
Up to 23 months	25	7.2
24 – 60 months	108	31.3
More than 60 months	212	61.4
Median duration in years	**7**	-
Average duration in years	**7.4**	-

As for the types of oral drugs used, marijuana, locally called *Ganja*, was the most popular oral drug with 58.3 percent reporting to have used it in the previous week; this was followed by Nitrosun which was used by 52.2 percent of the respondents. Other drugs used orally by the respondents are listed in the following table.

Table 5.2: Types of Drugs Used Orally by IDUs

Types of drugs used orally	N=345	%
Ganja	201	58.3
Nitrosun	180	52.2
Phensydyl	40	11.6
Nitrovate	30	8.7
Brown Sugar	24	7.0
Corex	21	6.1
Proxygin	13	3.8
Spas Capsule	13	3.8
Velium 10	6	1.7
Codeine	5	1.4
Chares	5	1.4
Buscopan	3	0.9
Ginadial	3	0.9
Diazepam	2	0.6
Others	6	1.7

Note: Because of multiple answers percentage may add up to more than 100.

5.2 Drug Injecting Practices of IDUs

Most of the respondents had been injecting drugs for quite a long time with the average duration being 4.8 years. Around 36 percent of IDUs had been injecting drugs for more than five years, while 44 percent had been injecting for the past two to five years. The median age of IDUs at their first injection was 20 years. About 59 percent of respondents were below 21 when they had injected for the first time.

Only a small proportion of respondents (4.3%) had not injected the week preceding the survey. Three in ten (29.3%) reported injecting less than once a week, while over two thirds (66.4%) had injected once a day or more.

As for the frequency of injection on the last day respondents injected drugs, 14.8 percent of IDUs had injected three or more times; one third (33.3%) had injected two times, while 51.9 percent had injected once on the last day (Table 5.3).

Table 5.3: Drug Injecting Practice of IDUs

Drug injecting practice	**N=345**	**%**
Duration of drug injection habit		
Less than 2 years	69	20.0
2-5 years	152	44.1
More than 5 years	124	35.9
Average duration in years	**4.8**	-
Age at first drug injection		
Up to 20 years	202	58.6
21+ years	143	41.4
Median age	20	-
Frequency of drug injections within the past week		
Not injected	15	4.3
Once a week	10	2.9
2-3 times a week	29	8.4
4-6 times a week	62	18.0
Once a day	92	26.7
2-3 times a day	121	35.1
4 or more times a day	16	4.6
Frequency of drug injections on the last day		
1 time	179	51.9
2 times	115	33.3
3 or more times	51	14.8
Mean	**1.7**	-

Respondents injected drugs in different parts of their body as per their convenience in locating their veins. Over one third of the respondents (34.5%) mentioned that they injected in their wrists. While 23.8 percent injected in their upper arm, 21.7 percent injected in their armpit and 12.2 percent injected in their calves (Annex 8).

The respondents gathered at different sites to inject drugs; 30.4 percent crossed the border to inject at the nearby Indian town of Jogbani. Others gathered and injected in the forest/bush (28.4%) or in their own/friends room (21.7%) (Annex 9).

Table 5.4 lists the types of drugs which were used by IDUs during the week preceding this survey. Eighty nine percent of them had used a combination of various drugs. In this regard, the most common combination of drugs was Norphin, Diazepam and Avil (See Annex 10 for other types of combinations). Around seven percent had also injected brown sugar in the last week.

Table 5.4: Types of Drugs Injected by IDUs in the Last Week

Types of drugs injected in the last week	N=345	%
Combination	307	89.0
Proxibon	34	9.9
Brown Sugar	23	6.7
Tidigesic	18	5.2
Others	8	2.3

Note: Because of multiple answers, the percentages may add up to more than 100.

Very few IDUs (0.9%) had switched from one drug to another in the past month. The unavailability of drugs in the market, lack of money and problems in locating veins were mentioned as reasons for switching (Annex 11).

5.3 Syringe Use and Sharing Behavior

Drug injecting/sharing habits of the respondents were assessed in terms of their last three injections. In this regard, respondents were asked how they had obtained the needle/syringe used in the last three injections. Answers provided by IDUs have been categorized as low risk (Low risk: Use of newly purchased needles or new needles obtained from a reliable source, i.e.NGO staff, volunteer, trusted friend) or high risk (High Risk: Use of own previously used syringe, use of previously used needles given by friends or relatives, Use of needles and syringes kept in public places by himself or others).These injecting behaviors are illustrated in the following table (Table 5.5).

Table 5.5: Syringe Use and Sharing Behavior among IDUs during the Last Three Injections

Needle/syringe use during recent drug injections	Drug injecting acts					
	Most Recent		Second Most Recent		Third Most Recent	
	N	%	N	%	N	%
Low risk injection behavior						
Used a newly purchased needle/syringe	189	54.8	190	55.1	192	55.7
Used new needle/syringe given by NGO staff/volunteers/friend	109	31.6	108	31.3	116	33.6
Low risk behavior total	**298**	**86.4**	**298**	**86.4**	**308**	**89.3**
High risk injection behavior						
Used own previously used needle/syringe	38	11.0	32	9.3	26	7.5
Used needle/syringe given by friend/relative after their use	5	1.4	9	2.6	5	1.4
Used needle/syringe that had been kept in public place by himself	3	0.9	6	1.7	2	0.6
Used needle/syringe that had been kept in public place by someone else	1	0.3	0	0.0	1	0.3
Others	0	0.0	0	0.0	3	0.9
High risk behavior total	**47**	**13.6**	**47**	**13.6**	**37**	**10.7**
Persons in the group using the same needle/syringe						
2 persons	14	4.1	16	4.6	11	3.2
3 or more persons	1	0.3	1	0.3	2	0.6
None/Alone	330	95.6	328	95.1	332	96.2
Total	**345**	**100.0**	**345**	**100.0**	**345**	**100.0**

As reflected in the above Table, many IDUs avoided high risk behavior in their last three injections. Overall, 86.4 percent, both in most recent and second most recent injections, and 89.3 percent in the third most recent injection, had used a new syringe/needle either self purchased or given by NGO staff or friends. Among them, more than half had used a self-purchased needle/syringe in all the three injections.

On the other hand, some IDUs reported engaging in high risk behavior in the last three injections (13.6% both in the most recent and in second most recent, and 10.7% in the third most recent injections). These individuals had either injected with a previously used

needle/syringe which had been previously used by themselves or which had been given by friends or relatives after their use, or which had been left in a public place.

The respondents were also asked if they had shared their needle/syringe with others in a group. Approximately four percent (4.4%) had shared their needle/syringe with at least one injecting partner during their most recent injection; 4.9 percent had done so during their second most recent and 3.8 percent had shared during their third most recent injection (Table 5.5).

Data regarding the needle/syringe use behavior in the last week, as well as in the three most recent injections, points towards an increasing consciousness among current IDUs regarding the risks associated with needle/syringe sharing. Many IDUs had avoided high-risk behavior in the week preceding the survey.

Nevertheless, there is still room for improvement as 13.9 percent of IDUs had used an old needle/syringe, 6.7 percent had injected with a syringe left in a public place and 14.2 percent had given their used needle/syringe to others at least once in the past week. Similarly, 20 percent of IDUs had also shared a syringe with two or more injecting partners in the week preceding the survey; among them, 94.2 percent had shared their needle/syringe with their friends (Table 5.6).

Table 5.6: Past Week's Syringe Use and Sharing Behavior among IDUs

Needle/syringe use throughout the past week	N=345	%
Used a needle/syringe that had been used by another		
Never Used	297	86.1
Used	48	13.9
Used a needle/syringe that had been kept in a public place		
Never Used	322	93.3
Used	23	6.7
Gave a needle/syringe to someone		
No	296	85.8
Yes	49	14.2
Number of needle/syringe sharing partners		
None	276	80.0
Two partners	49	14.2
Three or more partners	20	5.8
Type of partners needle/syringe were shared with	**N=69**	
Friend	65	94.2
Usual sexual partner	2	2.9
Unknown person	3	4.3
Others	4	5.8

* Note: Because of multiple answers, the percentages may add up to more than 100.

5.4 Drug Sharing Behavior

The injecting practices during the week preceding the survey, as shown in Table 5.7, indicates that some IDUs had practiced unsafe drug sharing behaviors during this time. Almost five percent had injected with a pre-filled syringe, while about 15 percent had injected from a syringe filled with drugs transferred from someone else's syringe. Moreover, 42.3 percent of IDUs had also shared injecting equipment such as a bottle, spoon, cooker, vial/container, cotton/filter or water with others at least once during the previous week. In the same way, the practice of sharing containers for drawing solution also was prevalent among IDUs in the Eastern Terai, as 43.5 percent had done so at least once in the week preceding the survey.

Table 5.7: Past Week's Drugs Sharing Behavior among IDUs

Drug sharing practice during past week	N=345	%
Injected with a pre-filled syringe		
Yes	17	4.9
No	328	95.1
Injected with a syringe after drugs were transferred into it from another's syringe		
Never Injected	294	85.2
Injected	51	14.8
Shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water		
Never Shared	199	57.7
Shared	146	42.3
Drew drug solution from a common container used by others		
Never	195	56.5
Draw at least once	150	43.5

Information on the internal and external mobility of the respondents, as well as the injecting behaviors they practiced at the place/s they visited, was also collected during this survey. Out of the total 345 respondents in the Eastern Terai, 92.8 percent of IDUs had injected drugs elsewhere in Nepal or in other countries. However, with that said, it is important to note that the study districts are close to Indian borders and movement across the border is not very difficult.

Although about 87 percent of IDUs had never injected with a pre-used syringe at the place/s of their visit; 13.4 percent of IDUs had done so at least once. Respondents also reported giving their used syringes to other IDUs (13.1%) while visiting another place in the past year (Table 5.8).

Table 5.8: Injecting Behavior of IDUs in Other Parts of Country and Out of the Country

Injecting practice in other parts of the country and out of the country	N	%
Injected in other parts of the country / out of the country		
Yes	320	92.8
No	25	7.2
Total	**345**	**100.0**
Used a needle/syringe that had been used by others		
Yes	43	13.4
No	277	86.6
Gave a needle/syringe to someone else after use		
Sometimes (including Always)	42	13.1
Never	278	86.9
Total	**320**	**100.0**

5.5 Needle/Syringe Cleaning Practices

Previous studies have shown that some IDUs inject with previously used syringe/needle after washing them, however, improper cleaning of shared and used needles/syringes increases the risk of HIV infection. Overall, 31.3 percent of respondents had cleaned a pre-used syringe/needle in the past week. Among them, 20.4 percent cleaned such a needle/syringe with bleach; the rest cleaned them with substances like saliva, water, distilled water, paper and urine.

Table 5.9: Needle/Syringe Cleaning Practices of IDUs

Needle/syringe cleaning behavior	N	%
Cleaned a pre-used needle/syringe in the past week		
Yes	108	31.3
No	237	68.7
Total	**345**	**100.0**
Ways of cleaning needle/syringe		
Bleach	22	20.4
Without Bleach	86	79.6

Total	**108**	**100.0**

5.6 Knowledge of and Access to New Needle/Syringes

The majority of respondents (95.4%) said that they could obtain a new syringe whenever necessary. Needle exchange programs run by different NGOs and drugstores were named as the main places for obtaining syringes by 91 percent and 87.5 percent of IDUs respectively. A little over a third of respondents (34.2%) also mentioned that they could get a new syringe from drug sellers (Table 5.10).

Table 5.10: Knowledge of Sources of New Syringes among IDUs

Descriptions	N=345	%
Can obtain new syringe		
Yes	329	95.4
No	16	4.6
Can obtain syringe from *		
Needle exchange program	314	91.0
Drugstore	302	87.5
Drug seller	118	34.2
Hospital	30	8.7
Drug wholesaler	18	5.2
Friends	17	4.9
Other drug users	4	1.6
Other shop	3	0.9
Others	6	1.7

*Note: Because of multiple answers, the percentages may add up to more than 100.

5.7 Treatment Practice

Table 5.11 shows the status of treatment received by IDUs in the study districts. Around 65 percent of respondents had never received any such treatment at the time this survey was conducted. Among IDUs who had received treatment before, three in ten (30.2%) had received treatment less than a year ago while, 13.1 percent had received their last treatment more than three years ago.

Table 5.11: Treatment Received by IDUs

Treatment for De-addiction	N	%
Treatment status		
Ever treated	122	35.4
Never treated	223	64.6
Total	**345**	**100.0**
Last treatment received		
Less than 6 months	21	17.2
6-11 months before	28	23.0
12-23 months before	36	29.5
24-35 months before	21	17.2
36-47 months before	9	7.4
48 or more months before	7	5.7
Total	**122**	**100.0**
Types of treatment received		
Residential rehabilitation	90	73.8
Detoxification with/without drugs	25	20.5
Out patient counseling	3	2.5
Others	2	1.6
Total	**122**	*****

Overall, 73.8 percent of the IDUs who had undergone treatment were kept at residential rehabilitation centers run by different NGOs, while around 21 percent had been provided detoxification treatment (for types of treatment and list of NGOs see Annex 12).

6. SEXUAL BEHAVIOR AND CONDOM USE

HIV transmission among drug users is most often correlated with their needle/ syringe sharing behavior. This, combined with the risky sexual behavior of the study population, often associated with drug use, contributes greatly towards making IDUs more vulnerable to HIV transmission. HIV infected IDUs further transmit the virus to their spouses or sex partners through unsafe sexual contact. In this chapter the sexual behavior of the respondents and their sex partners have been reviewed. This chapter also deals with sexual history and condom use among IDUs.

6.1 Sexual Behavior of IDUs

The majority of IDUs (94%) in the study districts had engaged in sexual intercourse; among them, 85.2 percent had their first sexual contact before they turned 20. The median age of the respondents at their first sexual encounter was 17 years.

Out of those respondents who had sex before, 76.2 percent had been sexually active in the last year. More than half, (56.3%) had one female sex partner; the others (43.7%) had two or more sex partners during the same period of time.

Table 6.1: Sexual History of IDUs

Sexual behavior	N	%
Had sexual intercourse	324	93.9
Never had sexual intercourse	21	6.1
Total	**345**	**100.0**
Age at first sexual intercourse		
Below 20 years	276	85.2
20 years of age and above	48	14.8
Median Age	**17**	**-**
Sexual intercourse in the past 12 months		
Yes	247	76.2
No	77	23.8
Total	**324**	**100.0**
Numbers of different sexual partners in the past 12 months		
1 partner	139	56.3
2 or more partners	108	43.7
Total	**247**	**100.0**

The sex partners of the study population were categorized under regular partners, non-regular partners and female sex workers. A regular female sex partner has been defined as a spouse or any sexual partner who is currently living with the respondent. Among those respondents who had engaged in sexual contact throughout the past year, 40.4 percent had sex with a regular female sex partner, of which nearly all of them (99.2%) had just one. Around eighty six percent (86.3%) of respondents had sex with their regular female sex partner in the month preceding the survey and of them, seven in ten (70.8%) had five or more sexual contacts with their regular partner during that period.

Table 6.2: Sexual Intercourse of IDUs with Regular Female Sex Partners

Sexual Practices	N	%
Sex with a regular partner during the past 12 months		
Yes	131	40.4
No	193	59.6
Total	324	100.0
Number of Regular partners		
1 partner	130	99.2
2 partners	1	0.8
Sex with a regular female sex partner during the last month		
Yes	113	86.3
No	18	13.7
Total	131	100.0
Frequency of sex with a regular partner during the last month		
1-4	33	29.2
5+	80	70.8
Total	113	100.0

The IDUs with sexual experience were also asked whether they had sex with any non-regular female partners in the past year. "Non-regular female sex partners" were defined as those with whom the participants were not married to or living with. However, non-regular female sex partners were also defined as being distinct and separate from female sex workers. Table 6.3 shows that 28.1 percent of IDUs had sex with non-regular female sex partners during the past year. Of them, almost two fifths (39.6%) have had two or more non-regular female sex partners. About 35 percent had sexual contact with their non-regular female sex partners in the previous month; among them 19 percent had five sexual contacts or more.

Table 6.3: Sexual Intercourse of IDUs with Non-Regular Female Sex Partners

Sexual Practice	N	%
Sex with non-regular partner in the past 12 months		
Yes	91	28.1
No	233	71.9
Total	**324**	**100.0**
Number of Non-Regular partners		
1 partner	55	60.4
2 or more partners	36	39.6
Sex with non-regular partner during the past one month		
Yes	32	35.2
No	59	64.8
Total	**91**	**100.0**
Frequency of sex with non-regular partners during the past one month		
1- 4	26	81.3
5+	6	18.8
Total	**32**	**100.0**

Some IDUs (27.5%) had also engaged in sexual relationships with female sex workers during the past year. "Female sex workers" were defined as those who sell sex in exchange for cash, kind, or drugs. Among them, the majority (60.7%) had sex with two or more female sex workers with 35 percent having had sexual encounters in the month preceding the survey. Among those who had sex with a FSW in the past month, 16.1 percent had five or more sexual contacts during that time.

Table 6.4: Sexual Intercourse of IDUs with Female Sex worker

Sexual Practice	N	%
Sex a with female sex worker in the past 12 months		
Yes	89	27.5
No	235	72.5
Total	**324**	**100.0**
Number of female sex workers in the past 12 months		
1 partner	35	39.3
2 or more partners	54	60.7
Sex with a female sex worker during the past month		
Yes	31	34.8
No	58	65.2
Total	**89**	**100.0**
Frequency of sex with a female sex worker during the past month		
1- 4	26	83.9
5+	5	16.1
Total	**31**	**100.0**

6.2 Knowledge About and Use of Condoms

Condom promotion has been one of the most important components of HIV/AIDS awareness campaigns. All IDUs in this survey had heard of condoms before, but not all had used one during their last sexual encounter. As seen in Table 6.5, condom use was higher during the last sexual contact with a female sex worker (75.3%) than with a non-regular partner (46.2%) or with a regular partner (26%). In other words, 74 percent of IDUs had not used a condom during their last sex with a regular female partner, 53.8 percent had not with a non-regular female partner and 24.7 percent did not use a condom during their last sexual encounter with a sex worker (Table 6.5).

Table 6.5: Knowledge About and Use of Condoms among IDUs

Knowledge and use of condom during last sex	N	%
Condom use with regular partner during last sexual intercourse		
Yes	34	26.0
No	97	74.0
Total	**131**	**100.0**
Condom use with non-regular partner during last sexual intercourse		
Yes	42	46.2
No	49	53.8
Total	**91**	**100.0**
Condom use with female sex worker during last sexual intercourse		
Yes	67	75.3
No	22	24.7
Total	**89**	**100.0**

HIV/AIDS awareness campaigns focus on educating target groups on the need to use condoms in every sexual act. In this context, Table 6.6 deals with information relating to the use of condoms by IDUs with different female sexual partners during the year preceding the survey. Partner wise, consistent condom use was found to be lowest with regular partners (9.2%) followed by non-regular partners (33%). It was the highest with female sex workers (57.3%).

Table 6.6: Consistent Use of Condoms with Different Female Sexual Partners in the Past Year

Consistent use of condoms	N	%
Use of condoms with regular female sex partners during the past 12 months		
Every time	12	9.2
Sometimes or Never	119	90.8
Total	**131**	**100.0**
Use of condoms with non-regular female sex partners during the past 12 months		
Every time	30	33.0
Sometimes or Never	61	67.0
Total	**91**	**100.0**
Use of condoms with female sex workers during the past 12 months		
Every time	51	57.3
Sometimes or Never	38	42.7
Total	**89**	**100.0**

Respondents reporting to have not used a condom during their last sexual contact were asked further questions as to their reasons for choosing not to use one. Data obtained from the study participants, as shown in Annex 13, indicate that a significant proportion of IDUs in the study districts avoided using condoms with their regular partners simply because they did not consider it necessary (62.9%); some perceived condoms merely as contraceptive device as 32 percent said that they had been using other contraceptive methods and so did not use condoms consistently with their regular partners.

As for the reasons provided by IDUs for not using condoms with non-regular partners, 40.9 percent mentioned that condoms were not available at the time and 31.8 percent said that they did not like using condoms.

More than half of IDUs who had sex with a FSW (53.1%) said they did not consider using a condom necessary during their last sexual contact with a sex worker. Another 28.6 percent said they could not use a condom because there were none available (Annex 13).

6.3 Source of Condoms

The IDUs were also asked if they knew about places from which they could obtain condoms. All the respondents knew at least one place where they could obtain condoms. The pharmacy was the most commonly mentioned place (96.5%) to obtain condoms; other sources mentioned were peer/outreach educators (35.7%), *paan* shop (34.8%), shop (33.6%) and Kirat Yakthum Chumlung (KYC) (31%). Around 98 percent of respondents said that they could get condoms when necessary in less than 30 minutes. Only two percent said that it would take more than 30 minutes to obtain condoms from the nearest source (Table 6.7).

Table 6.7: Sources of Condom and Time Needed to Obtain It

Sources of condom and time to obtain it	N=345	%
Place/person from where condom can be obtained *		
Pharmacy	333	96.5
Peer Educator/Outreach Educator	123	35.7
Paan shop	120	34.8
Shop	116	33.6
KYC	107	31.0
Clinic	98	28.4
Hospital	76	22.0
Knight Chess Club	65	18.8
Family Planning Center	58	16.8
Help Group Nepal	58	16.8
Health worker/Health Post	39	11.3
Friends	22	6.4
Richmond	11	3.2
Bar/Guesthouse/Hotel	8	2.3
Female Sex Partner	4	1.2
Punarjivan Sarokar Kendra	3	0.9
Naulo Ghumti	2	0.6
Others	13	3.8
Time taken to obtain condom		
Less than 30 minutes	337	97.7
More than 30 minutes	8	2.3

*Note: Because of multiple answers, the percentages may add up to more than 100.

6.4 Sources of Information about Condoms

Respondents had heard about condoms from different sources. The most common sources of information about condoms for more than 90 percent respondents were radio (95.4%), television (93.3%), billboards/signboards (91.9%), newspapers/posters (91.6%), and pharmacies (91%). A considerable proportion of respondents had also heard about condoms from NGO workers (86.7%), friends/neighbors (80.9%), and hospitals (77.1%). Other information sources as mentioned by the respondents are listed in Table 6.8.

Table 6.8: Sources of Information about Condoms among IDUs

Sources of knowledge about condoms	N=345	%
Radio	329	95.4
Television	322	93.3
Bill board/sign board	317	91.9
Newspapers/posters	316	91.6
Pharmacy	314	91.0
NGO people	299	86.7
Friends/neighbors	279	80.9
Hospital	266	77.1
Health Post	224	64.9
Health workers/volunteers	219	63.5
Health Center	192	55.7
Street drama	177	51.3
Cinema hall	162	47.0
Comic books	162	47.0
Community worker	135	39.1
Community event/training	114	33.0
Video van	46	13.3

Note: Because of multiple answers, the percentages may add up to more than 100.

In order to further analyze exposure of IDUs to ongoing initiatives to educate target groups about condoms, the study participants were also asked if they were aware of any of the messages being publicized with the help of IEC materials such as posters, pamphlets, billboards or advertisements aired on radio/television. The survey asked the respondents about certain specific messages regarding condoms and HIV/STI prevention.

A considerable proportion of IDUs were aware of messages like *Condom bata surakchhya youn swastha ko rakchhya (87.8%), HIV/AIDS bare aajai dekhi kura garau (87.5%), Youn rog ra AIDS bata bhachnalai (79.4%), Ramro sanga prayog gare jokhim huna dinna (77.4%) Jhilke dai chha chhaina condom (73.3%), and Condom kinna ma bhaya hunna ra (71.6%).*

Table 6.9: Exposure of IDUs to Specific Condom Messages in the Past Year

Heard/seen/read messages/characters in past one year	N=345	%
Condom Bata Surakchhya Youn Swastha ko Rakchhya	303	87.8
HIV/AIDS Bare Aaji Dekhi Kura Garaun	302	87.5
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	274	79.4
Ramro Sanga Prayog Gare Jokhim Huna DinnaBharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	267	77.4
Jhilke Dai Chha Chhaina Condom	253	73.3
Condom Kina Ma Bhaya Hunna Ra	247	71.6
Maya Garaun Sadbhav Badaun	209	60.6
Manis Sanga Manis Mile Hara Jeet Kasko Hunchha	117	33.9
Ek Apas Ka Kura	95	27.5
Des Pardes	63	18.3
Others	16	4.6

Note: Because of multiple answers, the percentages may add up to more than 100.

7. KNOWLEDGE ABOUT STIs AND HIV/AIDS

This chapter deals with the level of knowledge about STIs and HIV/AIDS among IDUs in the Eastern Terai, as well as respondents' awareness level regarding the ways in which HIV is transmitted. Their knowledge about the availability of HIV testing facilities and perceptions of HIV testing are also covered in this chapter.

7.1 Knowledge about STIs

Table 7.1 shows that the majority of the respondents (96.2%) had heard about STIs before. On the other hand, a small proportion of IDUs in the Eastern Terai (3.8%) had never heard about STIs before this survey.

Table 7.1: STI Awareness among IDUs

Heard of STIs	N=345	%
Yes	332	96.2
No	13	3.8

IDUs reporting to have heard about STIs had a general understanding of male and female STI symptoms. The most common symptoms cited by the respondents were genital ulcer/sore/ blister(s) (74.7% in female and 85.5% in male), genital discharge (54.8% in female and 71.4% in male) and burning sensation while urinating (33.4% in male and 21.7% in female). Symptoms like foul smelling discharges (31.3%) and abdominal pain (12.3%), were specifically mentioned as female STI symptoms (Table 7.2).

Table 7.2: STI Understanding among IDUs

STI symptoms as mentioned by IDUs	Among Females		Among Males	
	n=332	%	n=332	%
Genital ulcer/sore/blisters	248	74.7	284	85.5
Genital discharge	182	54.8	237	71.4
Foul-smelling discharge	104	31.3		
Itching	91	27.4	99	29.8
Burning/pain during urination	72	21.7	111	33.4
Abdominal pain	41	12.3		
Swelling in groin area	30	9.0	38	11.4
Becoming thinner	11	3.3	11	3.3
Fever	8	2.4	8	2.4
Irregular Menstruation	1	0.3		
Ulcer in the body	0	0.0	2	0.6
Swelling Private Part	0	0.0	5	1.5
Others	7	21.1	7	2.1
Don't know	70	21.8	41	12.3

Note: Because of multiple answers, the percentages may add up to more than 100.

After assessing their awareness regarding STI symptoms, the respondents were asked if they had ever experienced symptoms such as genital discharges or genital ulcer/sore in the past year. In response, 8.4 percent of IDUs said that they had genital discharge, while 5.8 percent mentioned that they had genital ulcer/sore in the past year.

Table 7.3: STI Symptom/s Experienced by IDUs

STI symptoms reported by IDUs	N=345	%
Had a genital discharge in the past year		
Yes	29	8.4
No	316	91.6
Had a genital ulcer/sore blister in the past year		
Yes	20	5.8
No	325	94.2

Among those IDUs who have had genital discharge in the past year, 37.9 percent were experiencing genital discharge at the time of this study. Similarly, 60 percent of those IDUs who have had genital ulcer/sore in the past year had been experiencing the symptom during the course of this study.

Overall, 12.5 percent of IDUs reportedly had experienced at least one STI symptom during their lives at the time of this study. Among them, 60.5 percent had not sought any medical aid to treat the symptom. Some had been to a private doctor (18.6%) or to hospital/health post (4.7%) (Table 7.4).

Table 7.4: STI Symptoms Experienced and Treatment Sought by IDUs

STI Symptoms and Treatment	N	%
Currently has genital discharge		
Yes	11	37.9
No	18	62.1
Total	**29**	**100.0**
Currently has genital ulcer/sore blister		
Yes	12	60.0
No	8	40.0
Total	**20**	**100.0**
STI Experience		
Never had STI symptoms	302	87.5
Ever had some symptoms	43	12.5
Total	**345**	**100.0**
Source of treatment		
Private Doctor	8	18.6
Hospital/Health Post	2	4.7
Others	7	16.3
Did not seek treatment	26	60.5
Total	**43**	**100.0**

7.2 Knowledge about HIV/AIDS

All the respondents had heard of HIV/AIDS before. More than three quarters (77.1%) knew people who had HIV/AIDS or had died because of the disease. When asked about the kind of relation that they shared with those people, 42.9 percent said they were their close friends and 8.3 percent said they were their relatives. Another 48.9 percent shared no relation with the people who they knew had HIV/AIDS or had died because of the disease (Table 7.5).

Table 7.5: Awareness of HIV/AIDS among IDUs

Knowledge of HIV/AIDS	N	%
Know anyone living with HIV/AIDS or who has died due to AIDS		
Yes	266	77.1
No	79	22.9
Total	**345**	**100.0**
Nature of relationship with the deceased		
Close friend	114	42.9
No relation	130	48.9

Close relative	22	8.3
Total	**266**	**100.0**

The respondents' knowledge regarding ways in which HIV is transmitted was also analyzed with the help of some questions regarding HIV/AIDS prevention measures. In this regard, their understanding of three major HIV/AIDS prevention measures including, abstinence from sex (A) being faithful to one sex partner (B) and regular condom use (C) was assessed.

A majority of IDUs were aware that abstinence from sex (A), being faithful to one sexual partner (B) and using a condom every time during sex (C) would prevent them from contracting HIV (96.8%, 97.4% and 99.7% respectively). Overall, 95.4 percent of IDUs were aware of all three major modes of HIV/AIDS transmission A, B and C.

Additionally, 96.2 percent were aware that a healthy looking person can be infected with HIV (D) and 94.5 percent knew that sharing meal with an HIV infected person did not transmit HIV (F). However, comparatively fewer IDUs (70.7%) agreed that a person could not get the HIV virus from a mosquito bite. In total, 65.5 percent of IDUs were aware of all five major indicators, excluding abstinence (BCDEF) (Table 7.6).

Table 7.6: Percentage of IDUs with Knowledge of Major Ways of Avoiding HIV/AIDS

Knowledge of Six Major Indicators on HIV/AIDS	N=345	%
HIV transmission can be avoided through:		
A Abstinence from sexual contact	334	96.8
B Being faithful to one partner	336	97.4
C Condom use during each sexual contact	344	99.7
Perception regarding HIV/AIDS:		
D A healthy-looking person can be infected with HIV	332	96.2
E A person can not get the HIV virus from a mosquito bite	244	70.7
F Sharing a meal with an HIV infected person does not transmit the HIV virus	326	94.5
Knowledge of all **ABC**	329	95.4
Knowledge of all five major indicators – **BCDEF** of HIV/AIDS	226	65.5

The IDUs' understanding of HIV/AIDS and its different modes of transmission were further tested with the help of certain probing questions. More than nine in ten respondents said that HIV can be transmitted through a blood transfusion from an HIV positive person (99.1%), a person can get HIV by using previously used needle/syringe and a person can not get HIV by holding an HIV infected person's hand (98.8%, each). Additionally, almost all IDUs were aware that a drug user can protect himself from HIV by switching to non-injecting drugs (96.2%) and that a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (92.2%). A relatively lower percentage of respondents (61.2%) said that women with HIV can transmit the virus to their newborn child through breast-feeding.

When asked if they were aware of any means by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child, 62.9 percent said that they were not aware of any such measures. while the rest suggested she should follow doctor's advice (22.6%) and take medicine (5.0%) (Table 7.7).

Table 7.7: IDUs' Knowledge on Ways of HIV/AIDS Transmission

Statements Related to HIV/AIDS	N=345	%
A person can get HIV by using a needle previously used by others	341	98.8
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	332	96.2
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	211	61.2
A blood transfusion from an infected person can transmit HIV infection to the recipient	342	99.1
A person can not get HIV by holding an HIV infected person's hand	341	98.8
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	318	92.2
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child	**N=318**	**%**
Treatment/ consultation with doctor	72	22.6
Take medicine	16	5.0
Nothing	23	7.2
Others	7	2.2
Don't Know	200	62.9

7.3 Knowledge about HIV Testing Facilities

Availability of confidential HIV testing facilities allows people to take an HIV test promptly and without the fear of being exposed. Although a good proportion of the IDUs (91.3%) were aware of the existence of HIV testing facilities in their communities, around nine percent of them expressed they did not know of any such places to have an HIV test.

A little under half (42.9%) of the respondents had never tested themselves for HIV, while the rest (57.1%) had taken an HIV test before this survey Among them, 84.8 percent had taken up the test voluntarily and 86.3 percent had received their test result. Although 54.3 percent of IDUs had undergone the test within the past year, others (45.7%) had tested themselves more than one year ago (Table 7.8).

Table 7.8: Knowledge about HIV Testing Facilities and History of HIV Testing among IDUs

Description of HIV testing	N	%
A confidential HIV testing facility is available in the community		
Yes	315	91.3
No	20	5.8
Don't know	10	2.9
Ever had an HIV test		
Yes	197	57.1
No	148	42.9
Total	**345**	**100.0**
Type of test taken		
Required HIV test	30	15.2
Voluntary HIV test	167	84.8
Test result received		
Yes	170	86.3
No	27	13.7
Timing of last HIV test		
Within the past year	107	54.3
1-2 years ago	48	24.4
2-4 years ago	30	15.2
More than 4 years ago	12	6.1
Total	**197**	**100.0**

7.4 Sources of Knowledge about HIV/AIDS

Radio (98%), pamphlets/posters (96.2%), television (95.1%), NGO workers (94.5%), billboard/signboard (94.2%), and friends/relatives (92.2%) were the most often cited

sources of information regarding HIV/AIDS. A considerable proportion of the respondents had also received some information on HIV/AIDS from newspaper/magazines (86.4%), health workers/volunteers (73.3%), street dramas (72.2%) and cinema halls (60.6%). Other sources of information as mentioned by the IDUs are shown in the Table below (Table 7.9).

Table 7.9: Sources of Knowledge Regarding HIV/AIDS among IDUs

Sources of knowledge of HIV/AIDS	N=345	%
Radio	338	98.0
Pamphlets/Posters	332	96.2
Television	328	95.1
NGO workers	326	94.5
Billboard/signboard	325	94.2
Friends/Relatives	318	92.2
Newspapers/Magazines	298	86.4
Health workers/Volunteers	253	73.3
Street drama	249	72.2
Cinema halls	209	60.6
School/Teachers	190	55.1
Comic books	181	52.5
Community workers	161	46.7
Workplace	156	45.2
Community events or training	153	44.3
Video van	62	18.0
Others	3	0.9

Note: Because of multiple answers, the percentages may add up to more than 100.

In the past year, a fairly large proportion (88.7%) of the study participants had also received HIV/AIDS related IEC materials from different sources.. IEC materials like brochures/booklet/pamphlets on HIV/AIDS had reached 74.8 percent of IDUs while 69.3 percent had received condoms/information relating to condoms (Table 7.10).

Table 7.10: Information/Materials Received During the Past Year

Informative materials received	N=345	%
Condom/information on condom		
Yes	239	69.3
No	106	30.7
Brochure/booklets/pamphlets on HIV/AIDS		
Yes	258	74.8
No	87	25.2
Information on HIV/AIDS		
Yes	306	88.7
No	39	11.3
Other IEC materials		
Yes	2	0.6
No	343	99.4

7.5 Perceptions about HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patients as well as on MARPs. The perception of IDUs regarding HIV infected persons and stigma associated with the disease was examined with the help of a series of questions.

The majority of the respondents were ready to take care of an HIV-positive male relative (98.3%) or an HIV-positive female relative (97.7%) at their homes if such a need arose. More than half (55%), however, said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

Nearly all respondents (97.7%) said that they would readily buy food from a HIV infected vendor. The majority (98.8%) also agreed that, unless very sick, people with HIV/AIDS should be allowed to continue his/her job.

When asked about the health care needs of HIV infected persons, 63.2 percent of IDUs maintained that they should be provided the same care and treatment as is necessary for chronic disease patients, while 30.7 percent believed that the health care needs of an HIV infected person are more involved than those of people suffering from other chronic diseases.

Table 7.11: Attitude of IDUs towards HIV/AIDS

Stigma and Discrimination	N=345	%
Would readily take care of an HIV positive male relative in the household		
Yes	339	98.3
No	6	1.7
Would readily take care of an HIV positive female relative in the household		
Yes	337	97.7
No	8	2.3
Would prefer not to talk about a family member being HIV positive		
Yes	189	54.8
No	151	43.8
Don't know	5	1.4
Would readily buy food from an HIV infected shopkeeper		
Yes	337	97.7
No	8	2.3
Believe that the health care needs of an HIV infected person is the same, more or less than those required by someone with other chronic disease		
Same	218	63.2
More	106	30.7
Less	13	3.8
Don't know	8	2.3
Believe that an HIV infected person should be allowed to continue working unless very sick		
Yes	341	98.8
No	4	1.2

8. EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

This is a new section added to the survey in 2007. The exposure of IDUs to ongoing HIV/AIDS awareness programs and their participation in activities has been examined for the first time in this round. To this end, respondents were asked several questions relating to different components of current HIV/AIDS related programs run by different organizations.

8.1 Peer/Outreach Education

The peer/outreach education component consists of activities that involve the mobilization of peer educators (PEs), community mobilizers (CMs) and outreach educators (OEs) for conducting awareness raising activities in community sites. They meet with target groups and hold discussions with them regarding HIV/AIDS, safe injecting practices, safe sex and other related topics. They also distribute IEC materials, condoms, and refer the target group to drop-in centers and STI treatment services. Some also carry new needles/syringes for distribution among IDUs.

The majority (82.3%) of respondents had met with PE/OEs representing various organizations at least once. During such meetings, 87 percent had been told how HIV is transmitted from one person to another, while 81.3 percent had discussed safe injecting behavior. The study participants had also been informed about STIs and how they are transmitted (40.8%), in addition to being provided with new syringes (32.4%) during these meetings.

Over two-fifths of IDUs had met PE/OEs from Kirat Yakthum Chumlung (KYC) (40.5%). Some had also met PE/OEs representing Knight Chess Club (KCC) and Help Group (29.2% each). It becomes evident from Table 8.1 that IDUs meet PE/OEs quite often as around 11 percent of IDUs had met with them two or three times and all others had met with them more than four times in the past year. Over two thirds of IDUs (68.3%) had met with PE/OEs more than once a month.

Table 8.1: IDUs' Meeting with Peer Educators/Outreach Educators in the last 12 months

Meeting with peer educators (PE) or Outreach Educators (OE)	N	%
Met , discussed or interacted with PE or OE in the Last 12 months		
Yes	284	82.3
No	61	17.7
Total	**345**	**100.0**
Activities carried out with OE/PEs		
Discussion on how HIV/AIDS is/isn't transmitted	247	87.0
Discussion on safe injecting behavior	231	81.3
Discussion on how STI is/isn't transmitted	116	40.8
Exchanged syringe	92	32.4
Told about regular/non-regular use of condom	53	18.7
Given condom	42	14.8
Given distilled water	34	12.0
Provided condom use demonstration	27	9.5
Discussion of quitting drugs	11	3.9
Given alcohol pad	8	2.8
Suggested to stay at rehabilitation center	6	2.1
Others	10	3.5
Total	**284**	*****
Organizations Represented by OE/PEs		
KYC	115	40.5
KCC	83	29.2
Help Group	83	29.2
RICHMOND	28	9.9
Nav Kiran	11	3.9
Dharan Positive Group	5	1.8
Community Rehabilitation Centre	5	1.8
LALS	1	0.4
Youth Vision	1	0.4
PSK	1	0.4
SAHARA Nepal	1	0.4
Others	13	4.6
Total	**284**	*****
Number of Meetings with PE or OE		
2-3 times	31	10.9
4-6 times	33	11.6
7-12 times	26	9.2
More than 12 times	194	68.3
Total	**284**	**100.0**

* Note: Because of multiple answers, the percentages may add up to more than 100.

8.2 Drop-in-Center

Drop-in-centers (DICs) are another important component of HIV prevention programs. The DICs not only provide a safe space for target communities to socialize, but are also the site for educational and counseling activities. The DICs offer a number of services to the target groups, including counseling, group classes, group discussions, individual counseling, and video shows on STI/HIV/AIDS. Certain NGOs also run needle exchange programs through their DICs. The IDUs are also provided IEC materials and condoms at DICs.

Eighty percent of respondents had visited a DIC in the past one year. The majority of them (94.9%) had been to a DIC to get a new syringe. Respondents also reported being informed about safe injecting behaviors (52.9%) and being provided with condoms (41.7%) from the DIC; four in ten had also participated in discussions on HIV transmission (39.5%).

DICs visited by the respondents were run by various organizations implementing HIV/AIDS awareness and prevention programs in the region such as KYC (36.6%), Help Group (32.6%) and KCC (31.9%). Most of the IDUs had been to a DIC more than once in the past year (97.8%). Around 74 percent of IDUs had visited DICs more than 12 times in the last year (Table 8.2).

Table 8.2: DIC Visiting Practices of IDUs

DIC Visiting Practices	N	%
DIC Visit in the Last 12 months		
Yes	276	80.0
No	69	20.0
Total	**345**	**100.0**
Activities participated in at DIC		
Got new syringe	262	94.9
Learnt about safe injecting behavior	146	52.9
Collected condoms	130	47.1
Participated in discussion on HIV transmission	109	39.5
Got distilled water	43	15.6
Got medicine	33	12.0
Watched film on HIV/AIDS	30	10.9
Learnt the correct way of using condom	28	10.1
Provided treatment	10	3.6
Had wound dressing	6	2.2
Gave old syringe back	1	0.4
Participated in discussion on reducing drug taking	1	0.4
Others	24	8.7
Total	**276**	*****
Name of Organizations that Runs DIC Visited		
KYC	101	36.6
Help Group	90	32.6
KCC	88	31.9
RICHMOND	29	10.5
LALS	3	1.1
Youth Vision	1	0.4
PSK	1	0.4
Others	9	3.3
Total	**276**	*****
Number of Visits to the DICs		
Once	6	2.2
2-3 times	22	8.0
4-6 times	24	8.7
7-12 times	20	7.2
More than 12 times	204	73.9
Total	**276**	**100.0**

* Note: Because of multiple answers, the percentages may add up to more than 100.

8.3 STI Clinic

IDUs who engage in unsafe sexual behaviors are at risk of contracting certain sexually transmitted infections (STIs). Timely detection of STIs may prevent serious health hazards. Many different clinics are being run by various governmental and non-governmental organizations which provide STI testing and treatment facilities. Nevertheless, the majority of the respondents (97.1%) had not been to an STI clinic in the past year.

Among the few (2.9%) who had visited an STI clinic, most had received physical examination for STI detection (60%) and discussed the means by which an STI is/is not transmitted (50%). They were also informed about safe injecting behavior and use of condoms at the clinic.

Of the STI clinics respondents cited, 60% were run by KYC. Fifty percent of respondents had paid just one visit to the STI clinic while the other 50% had been there two or three times in the past year.

Table 8.3: STI Clinic Visiting Practices of IDUs

STI Clinic Visiting Practices	N	%
Visited any STI Clinic in the Last 12 Months		
Yes	10	2.9
No	335	97.1
Total	**345**	**100.0**
Activities participated in at the STI Clinic		
Physical examination conducted for STI identification	6	60.0
Participated in discussion how STI is/isn't transmitted	5	50.0
Blood tested for STI detection	4	40.0
Participated in discussion on safe injecting behavior	3	30.0
Participated in discussion on regular/non-regular use of condom	2	20.0
Others	2	20.0
Total	**10**	*****
Name of Organizations that Runs STI Clinic Visited		
KYC	6	60.0
Koshi Anchal Hospital	1	10.0
MRMG	1	10.0
Private clinic	1	10.0
Pharmacy	1	10.0
Total	**10**	*****
Number of Visits to STI Clinics		
Once	5	50.0
2-3 times	5	50.0
Total	**10**	**100.0**

* Note: Because of multiple answers, the percentages may add up to more than 100.

8.4 VCT Centers

VCT centers form an integral part of the HIV/AIDS prevention program. VCT centers not only provide HIV/AIDS/STI testing facilities, but also offer pre- and post test counseling. In addition to other necessary information related to safe injecting practices, HIV/AIDS and STI transmission, treatment facilities are also provided for visitors at these centers.

A relatively small proportion of IDUs (23.3%) had been to a VCT center in the past year, but of those who had visited one, nearly all of them had given their blood for HIV testing (96.3%) Significant proportions also received pre- HIV test counseling (87.5%), post HIV test counseling (85 %), received their test results (80%) and were provided with information on safe injecting behavior (50%).

Almost 49 percent of IDUs had visited the VCT center run by Punar Jiwan Kendra (PJK). Some others had been to the Association of Medical Doctors of Asia (AMDA) VCT center (26.3%) and the VCT center run by Family Planning Association-Nepal (FPAN) (13.8%). Sixty six percent had been to a VCT center once, while around 31 percent had visited a VCT center two or three times in the past year (Table 8.4)

Table 8.4: VCT Visiting Practices of IDUs

VCT Visiting Practices	N	%
Visited VCT Center in the Last 12 months		
Yes	80	23.3
No	265	76.8
Total	**345**	**100.0**
Activities participated in at VCT		
Blood sample taken for HIV test	77	96.3
Received pre HIV test counseling	70	87.5
Received post HIV test counseling	68	85.0
Received HIV test result	64	80.0
Received information on safe injecting behavior	40	50.0
Received counseling on using condom correctly in each sexual intercourse	19	23.8
Got information on HIV/AIDS window period	12	15.0
Accompanied a friend	5	6.3
Others	3	3.8
Total	**80**	*****
Name of the Organization that Runs VCT Visited		
PJK	39	48.8
AMDA	21	26.3
FPAN	11	13.8
Youth Vision	1	1.3
Others	9	11.3
Total	**80**	*****
Number of Visits to VCT		
Once	53	66.2
2-3 times	25	31.3
4-6 times	1	1.3
More than 12 times	1	1.3
Total	**80**	**100.0**

* Note: Because of multiple answers, the percentages may add up to more than 100.

8.5 Participation in HIV/AIDS Awareness Program

Various government agencies, as well as non-government organizations, have been involved in implementing HIV/AIDS awareness activities. Their programs include workshops, group discussions, talk programs, training sessions, radio programs, condom day/AIDS day celebrations and street dramas. Some of these programs specifically target the most at risk population while some include the general population.

Two thirds of the respondents (69.6%) in the study districts had never participated in any HIV/AIDS awareness-raising program or similar community event at the time of this study. Among those who had participated in at least one of such activities (30.4%), 59 percent had taken part in an AIDS day celebration and around 38 percent in a street drama. There were about 28 percent of IDUs who had participated in a Condom day celebration and 22 percent who had taken part in HIV/AIDS related group discussions. The activities respondents mentioned were conducted by PJK (33.3%), Help (16.2%) and other organizations listed in Table 8.5.

Among those who had taken part in a HIV/AIDS awareness program, one-third (33.3%) had participated in one activity in the past year while 35.2 percent had participated in two or more events (Table 8.5).

Table 8.5: Participation in HIV/AIDS Awareness Programs by IDUs

Participation in HIV/AIDS Awareness Programs	N	%
Ever Participated in HIV/AIDS Awareness Raising Program or Community Event		
Yes	105	30.4
No	240	69.6
Total	**345**	**100.0**
Activities participated in		
AIDS Day	62	59.0
Street drama	40	38.1
Condom Day	29	27.6
Group discussions	23	21.9
HIV/AIDS related training	19	18.1
HIV/AIDS related Workshops	5	4.8
Talk programs	1	1.0
Others	3	2.9
Total	**105**	*****
Name of the Organizations that Conducted Such Activities		
PJK	35	33.3
AMDA	10	9.5
Help	17	16.2
NIDC, Pani Tanki (India)	6	5.7
Nav Kiran Plus	2	1.9
KCC	1	1.0
Naulo Ghumti	1	1.0
Youth Vision	1	1.0
Recovery Nepal	1	1.0
Others	31	29.5
Don't Know	8	7.6
Total	**105**	*****
Frequency of Such Participation in the past 12 months		
Once	35	33.3
2-3 times	29	27.6
4-6 times	6	5.7
More than 12 times	2	1.9
Not participated during the past year	33	31.4
Total	**105**	**100.0**

* Note: Because of multiple answers, the percentages may add up to more than 100.

9. A COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

This chapter seeks to analyze the trends through a comparison of the data obtained during the first, second and third round of studies. It specifically tackles socio-demographic characteristics, drug injecting habits, needle/syringe using practices, and condom use among IDUs. It should be noted here that these comparisons are only possible because the same sampling design and procedures were used in all three rounds.

9.1 Socio-demographic Characteristic

The socio-demographic characteristics of the study participants present a similar pattern throughout all three rounds. This is, to a certain extent, a consequence of adopting the same sampling methodology for all three rounds.

IDUs were young in all three surveys; the median age was 25 in 2003, 2005 and 2007. Notably, the proportion of respondents younger than 25 increased from 45.5 percent in the first two rounds to 49 percent in the third round. However, this increase is not statistically significant.

Table 9.1: Socio-Demographic Characteristics of IDUs

Socio-Demographic Characteristics	First round (2003)		Second round (2005)		Third round (2007)	
	N=345	%	N=345	%	N=345	%
Age						
< 25 Yrs	157	45.5	157	45.5	169	49.0
>25 Yrs	188	54.5	188	54.5	176	51.0
Median age	**25**	-	**25**	-	**25**	-
Education						
Illiterate	15	4.3	18	5.2	8	2.3
Literate only	5	1.4	5	1.4	10	2.9
Primary	48	13.9	76	22.0	59	17.1
Secondary	200	58.0	177	51.3	195	56.5
SLC & above	77	22.3	69	20.0	73	21.2
Ethnicity						
Brahmin	26	7.5	13	3.8	18	5.2
Chhetri/Thakuri	56	16.2	59	17.1	55	15.9
Tamang/Lama/Magar/Sherpa	41	11.9	81	23.5	45	13.0
Newar	27	7.8	48	13.9	26	7.5
Gurung/Rai/Limbu	120	34.8	62	18.0	119	34.5
Terai caste	16	4.6	23	6.7	19	5.5
Occupational caste	13	3.8	21	6.1	15	4.3
Musalman	12	3.5	7	2.0	6	1.7
Rajbanshi	8	2.3	6	1.7	9	2.6
Chaudhary/Tharu	6	1.7	8	2.3	11	3.2
Giri/Puri/Sanyasi	5	1.4	6	1.7	4	1.2
Mandal	5	1.4	3	0.9	3	0.9
Teli/Shah	4	1.2	3	0.9	1	0.3
Majhi/Chepang	0	0.0	0	0.0	9	2.6
Bhujel	0	0.0	0	0.0	4	1.2
Others (Other Hill Caste)	6	1.7	5	1.4	1	0.3

The literacy status of respondents also has not changed significantly between the three rounds. More than one half of respondents had completed secondary education in both rounds (58% in 2003; 51.3% in 2005 and 56.5% in 2007). Almost the same proportion in all three rounds of the survey had also completed SLC or higher grades

(22.3% in 2003, 20% in 2005, and 21.2% in 2007). Overall, 4.3 percent of respondents were illiterate in the first round while 5.2 percent and 2.3 percent were illiterate in the second and third rounds respectively.

Ethnic/caste composition of IDUs has not significantly changed since the first round of study. Gurung/Rai/Limbu, Chhetri/Thakuri and Taman/Loama/Magar/ Sherpa ethnic groups have been the main ethnic groups represented in the sample for all three surveys.

9.2 Drug Injecting Practices

Most of the study participants had been injecting drugs for more than one year in all three rounds with an average duration of 4.1 years in 2003, 5 years in 2005 and 4.8 years in 2007. Those respondents who had been injecting for less than two years comprised 29 percent of the total respondents in 2003 and 20 percent in both 2005 and 2007.

The median age of respondents at their first injection was 21 years in 2003 while it came down to 20 in 2005 and 2007. Notably, the proportion of IDUs experiencing their first injection before the age of twenty increased steadily since the first round, rising from 45.8 percent in 2003, to 51 percent in 2005 and 58.6 percent in 2007.

Table 9.2: Drug Injecting Practices of Respondents

Drug Injecting Practices	First round (2003)		Second round (2005)		Third round (2007)	
	N=345	%	N=345	%	N=345	%
Duration of drug injection habit						
Up to 11 months	44	12.8	31	9.0	33	9.6
12–23 months	56	16.2	38	11.0	36	10.4
24-59 months	113	32.8	124	35.9	117	33.9
More than 60 months	132	38.3	152	44.1	159	46.1
Average duration of years	**4.1**	-	**5.0**	-	**4.8**	-
Age at first drug injection						
Up to 20 years	158	45.8	176	51.0	202	58.6
21+ years	187	54.2	169	49.0	143	41.4
Median age	**21**	-	**20**	-	**20**	-

9.3 Needle/Syringe Using Practices in the Past Week

Data relating to the injection practices of the study population in the week preceding each round indicates that IDUs are increasingly more cautious in avoiding risk behavior. The proportion of respondents who had not injected with anothers' previously used needle/syringe has significantly increased since the first round (66.4 % in 2003, 69.6 % in 2005 and 86.1 % in 2007). Likewise, there has been a significant decrease in the proportion of IDUs who had used a needle/syringe kept in a public place during the week preceding the survey (23.5% in 2003, 24.3% in 2005 and 6.7% in 2007).

The proportion of IDUs who did not share their needle/syringe with anyone in the past week also increased significantly from 49.9 percent in 2003 to 60 percent in 2005 and finally to 80 percent in 2007. In the same way, fewer IDUs in the third round (31.1%) than in the first (64.9%) and second (56.8%) rounds had injected with a previously used needle/syringe in the past week which represents a statistically significant difference.

Table 9.3: Past Week's Syringe Use and Sharing Behavior

Needle/syringe use throughout the past week	First round (2003)		Second round (2005)		Third round (2007)	
	N=345	%	N=345	%	N=345	%
Used needle/syringe that had been used by another						
Never Used	229	66.4	240	69.6	297	86.1
Ever Used	116	33.6	105	30.4	48	13.9
Used needle/syringe that had been kept in a public place						
Never Used	264	76.5	261	75.7	322	93.3
Ever Used	81	23.5	84	24.3	23	6.7
Number of partners shared a needle/syringe with						
None	172	49.9	207	60.0	276	80.0
Two partners	85	24.6	76	22.0	49	14.2
Three or more partners	88	25.5	62	18.0	20	5.8
Reused needle/syringe in the past week						
Yes	224	64.9	196	56.8	108	31.3
No	121	35.1	149	43.2	237	68.7

9.4 Condom Use with Different Partners

In all three rounds a relatively fewer number of IDUs used condoms consistently during sexual contact with their regular female sex partners than with sex workers and non-regular female sex partners. Consistent condom use with a regular partner in the year preceding the survey has slowly been decreasing; the lowest percentage of 9.2 percent has been calculated in the third round, compared with 11.3 percent and 12.2 percent in the second and first rounds respectively.

Not much change has been observed in condom using practices with non-regular partners. Twenty eight percent of respondents had consistently used condoms in the first round with their non-regular partners, while 24.1 percent reported doing so in the second round and 33 percent in the third.

Consistent use of condoms with female sex workers has steadily been on the rise with 41.4 percent of respondents in 2003, 50 percent in 2005 and 57.3 percent in 2007 reporting to have used one during every sexual encounter with a FSW.

Table 9.4: Consistent Use of Condom with Different Sex Partners in the Past Year

Consistent use of condoms	First round (2003)		Second round (2005)		Third round (2007)	
	N	%	N	%	N	%
Use of condom with regular female sex partners during past 12 months						
Every time	15	12.2	14	11.3	12	9.2
Sometimes - Never	108	87.8	110	88.7	119	90.8
Total	**123**	**100.0**	**124**	**100.0**	**131**	**100.0**
Use of condom with non-regular female sex partners during past 12 months						
Every time	14	28.0	19	24.1	30	33.0
Sometimes – Never	36	72.0	60	75.9	61	67.0
Total	**50**	**100.0**	**79**	**100.0**	**91**	**100.0**
Use of condom with female sex workers during past 12 months						
Every time	29	41.4	42	50.0	51	57.3
Sometimes – Never	41	58.6	42	50.0	38	42.7
Total	**70**	**100.0**	**84**	**100.0**	**89**	**100.0**

9.5 HIV prevalence among IDUs

HIV prevalence among IDUs has significantly decreased statistically since the first round of the survey in 2003. As seen in Table 9.5, the first round of IBBS showed the rate of infection to be 35.1 percent among IDUs in the Eastern Terai, this number decreased by a few percent in the second round (31.6%) and went further down to 17.1 percent in the third round. The study findings indicate that various factors are responsible for the drop in HIV prevalence rates since the first round; it is important to note that the sample composition may be one of the contributing factors

Several findings in this study indicate that IDUs in the Eastern Terai have been becoming increasingly conscious of HIV/AIDS risk factors. This is evidenced by behavioral trends which point towards considerable improvements in regards to the injecting and sexual behaviors of IDUs.

In the week preceding the survey, 66.4 percent of IDUs had avoided injecting with a previously used needle in the first round; in the third round this figure has reached 86.1 percent. Likewise, the proportion of respondents who had injected with a syringe that had been kept in a public place decreased from 24 percent in 2003 to 7 percent in 2007. In the same way, 50 percent of respondents had not shared a syringe with anyone in the week prior to the survey in 2003, while 80 percent of IDUs reported this behavior in 2007.

It is further evident from the study findings that a considerable proportion of IDUs have been practicing safer sex with their sex partners; particularly with female sex workers. During the year preceding the survey conducted in 2003, 41.1 percent had reported using condoms consistently during sexual relations with female sex workers; 57.3 percent reported doing so in 2007.

Table 9.5: District HIV Prevalence among IDUs

District	First round (2003)			Second round (2005)			Third round (2007)		
	Total sample	HIV+	%	Total sample	HIV+	%	Total sample	HIV+	%
Interviewed Districts									
Morang	135	70	51.8	135	56	41.5	135	29	21.5
Sunsari	135	45	33.3	135	45	33.3	135	20	14.8
Jhapa	75	6	8.0	75	8	10.7	75	10	13.3
Total	**345**	**121**	**35.1**	**345**	**109**	**31.6**	**345**	**59**	**17.1**

In Morang the prevalence rate has been significantly decreasing throughout the rounds from 51.8 percent in 2003, 41.5 percent in 2005 to 21.5 percent in 2007. Similarly, in Sunsari, the HIV infection rate has significantly declined from 33.3 percent in both 2003 and 2005 to 14.8 percent in 2007.

However, in Jhapa the HIV infection rate was higher in the third round (13.3%) than in the first (8%) and second rounds (10.7%); in spite of this, the difference is not statistically significant.

Despite the changes in prevalence rates in the districts, data shows that the rate of infection is still highest among IDUs of Morang district (21.5%) compared with Sunsari (14.8%) and Jhapa districts (13.3%).

10. SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

10.1 Summary of Major Findings

- Overall, 17.1 percent of IDUs tested HIV positive. Syphilis history was found among 1.7 percent of IDUs while 0.6 percent of study participant currently had high titre syphilis.

- The prevalence of HIV was significantly higher ($p<0.05$) among IDUs aged 20 years and above, those who were married and those who had been injecting drugs for more than five years.

- The IDUs consisted predominantly of members of the younger population with 77.4 percent being below the age of 30.

- Thirty six percent of IDUs had been injecting drugs for more than five years.

- Injecting practices during the week preceding the survey indicated that 13.9 percent of respondents had injected with another's used needle/syringe, 6.7 percent had used a needle/syringe which had been kept in a public place and 20 percent had shared their needle/syringe with another person at least once. These figures represent significant improvements in injecting behavior when compared with the 2003 and 2005 figures.

- About 94 percent of IDUs have had sexual contact before. Among them 76.2 percent had been sexually active in the past year.

- 57.3 percent of respondents used condoms consistently with sex workers, 33 percent with non-regular partners and 9.2 percent with regular sex partners. Consistent condom use has increased with sex workers and non-regular partners, but decreased with regular partners since 2003.

- Very few IDUs (3.8%) had not heard about STIs.

- About 13 percent of IDUs had experienced at least one STI symptom in their life. Among them, 60.5 percent had not sought any treatment.

- In total, 95.4 percent of IDUs were aware of all three main prevention measures namely (A)abstinence from sex (B) being faithful to one sex partner (C) and regular condom use.

- Around 91 percent of IDUs knew that a confidential HIV testing facility was available in their community, however, 42.9 percent of them had never taken an HIV test before participating in this study.

- Overall, 82.3 percent of IDUs had met with PE/OEs, 80 percent had visited a DIC and 23.3 percent had visited a VCT center at least once during the last 12 months. However, very few (2.9%) had visited an STI clinic.

- Only 30.4 percent of respondents had participated in HIV/AIDS awareness programs or similar community events before the survey.

10.2 Recommendations

Based on the findings of this study, a few specific recommendations have been made. They are as follows:

- Data from the study indicates that youth and adolescents are particularly susceptible to falling into an injecting habit, as 49 percent of respondents were below 25 years of age and 58.6% reported having their first injection when they were less than 21 years old. Specific program activities that target school children, college students, youth, and adolescents should be designed to impart knowledge on the dangers of drug use, HIV/AIDS awareness and sex education

- The injecting behaviors practiced the week preceding the survey show that around 14 percent of IDUs had injected with a used needle/syringe, almost 7 percent had injected with a needle/syringe left at public place and 20 percent had shared their needle/syringe with two or more partners. Advocacy, behavioral change activities and health promotion interventions should be further scaled up to cover more of the IDU population. Harm reduction initiatives like wider dissemination of information on safe injecting behavior and needle exchange programs should be continued and expanded further.

- Consistent use of condoms during the past year was reported by only 9.2 percent of IDUs when they're engaging in sex with their regular partners, 33 percent when with non-regular partners and 57.3 percent when with commercial sex workers. Barriers to inconsistent condom use should be explored and intervention initiatives targeting not just IDUs, but also female sex workers and the general population, should be stressed.

- Around 65 percent of IDUs had never been to a de-addiction treatment center. PE/OEs and DICs should put more emphasis on treatment alternatives. Access to rehabilitation and detoxification centers should be further extended and supported for providing necessary services to IDUs, especially to those belonging to economically deprived families. Rehabilitation programs should also incorporate family counseling services to make it more effective.

- Around 61 percent of those IDUs who had ever experienced any STI symptom had never sought treatment. At the same time, around 43 percent of IDUs had never taken an HIV test. HIV/AIDS awareness campaigns should also focus on STI education. Client friendly HIV/STI testing facilities should be made available to encourage more IDUs to voluntarily come forward for such services.

- PE/OEs are good contact points to disseminate necessary information and IEC materials to the target populations. Around 82 percent of respondents had met with a PE/OE at least once during the past year. One to one education for behavioral change and safe injecting and sexual practices through wider mobilization of PE/OEs could yield positive results.

- A good number of IDUs visit DICs with 80 percent of respondents having visited one during the past year. More DICs with expanded activities at central locations could cover more of the population of target groups.

- Around 70 percent of respondents had never participated in any HIV/AIDS related programs. Ongoing programs should be expanded geographically and capacity building of local NGOs should be focused on to increase access to more of the target population.

- Monitoring and evaluation of HIV prevalence and risk behaviors of IDUs to design and implement timely intervention strategies are needed at regular time intervals.

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ANNEXES

ANNEX – 1 Questionnaire

Confidential

Integrated Bio-Behavioral Survey (IBBS) among Injecting Drug Users in Selected Sites of Nepal
FHI/New ERA/SACTS – 2007

Namaste! My name is……. I am here from New ERA to collect data for a research. During this data collection, I will ask you some personal questions that will be about drugs, use of needle/syringe when injecting drugs, sexual behavior, use of condoms and knowledge about STI/HIV/AIDS. You may feel uneasy responding to some personal questions. But it is important that you answer truthfully. We will also take your blood sample for laboratory testing for syphilis and HIV. If it is determined that you have any STI symptoms, we will provide treatment free of charge. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk about because your name will not be mentioned on this form and collected samples. All the mentioned information will be used only for the research purpose. This survey will take about 40 to 60 minutes.

It depends on your wish to participate in this survey or not. You do not have to answer those questions that you do not want to answer, and you may end this interview at any time you want to. But I hope you will participate in this survey and make it a success by providing correct answers to all the questions.

Would you be willing to participate?

1. Yes 2. No

Signature of the interviewer: _____ Date:_____/_____/2064

Operational definition of respondent:

Male Injecting Drug User (IDU): Person who injects various drugs in muscles or in veins for intoxication purposes. Please note that people who inject drugs as part of medical treatment are not included in IDUs. The respondent must be a current injecting drug user who has started injecting at least ***three months before the interview date***. Those who have started injection within last three months are not eligible for interview.

Male IDUs under the age of 16 will be excluded.

Seed: 1. Yes 2. No

IDENTIFICATION NUMBER (Coupon Number): _____ ***(Write '0' for seed)***

Coupon number given: 1) _____ 2) _____

3) _____

Did the interviewee abandon the interview?

1. Yes (Precise the number of the last question completed: Q ____)
2. No

Interviewer Name: _____ Code Interviewer: _____

Date Interview: _____ / _____ / 2064
Checked by the supervisor: Signature: _____ Date: ____/ ____ / 2064

Data Entry # 1: Clerk's name: _____ Date _____/_____/2064
Data Entry # 2: Clerk's name: _____ Date _____/_____/2064

001. Has someone interviewed you from New ERA with a questionnaire in last few weeks?

1. Yes 2. No **(continue interview**)

↓

When?
_____Days ago **(make sure that it was interviewed by New ERA and close the interview)**

002. Respondent's ID #: | | | | | | |

002.1 Respondent referred by coupon no. _____

002.2 In which part of the body respondent usually inject? **(Conform by observation)**

_____

002.3 Did you share needle/syringe with the friend who brought you here? (Don't ask with seed)

1. Yes 2. No

002.4 How long you have been injecting drugs?

Years ☐☐ Months ☐☐

(NOTE: THIS IS A SCREENING QUESTION. IF THE RESPONSE IS LESS THAN THREE MONTHS STOP INTERVIEW BECAUSE THIS PERSON IS NOT ELIGIBLE FOR INCLUSION IN THE SAMPLE)

003. Interview Location
(to be filled by interviewer)

003.1 Name of location _____

003.2 Ward No. ☐☐

003.3 VDC/Municipality: _____

003.4 District: _____

1.0 BACKGROUND OF RESPONDENT

Q. N.	Questions	Coding Categories	Skip to Q.N.
101	Where are you living now? **(Write current place of residence: Ward No. Tole, Lane etc.)**	Ward..... ☐☐ VDC/Municipality_____ District_____	
101.1	How long have you been living continuously at this location?	Month..... ☐☐☐ Always (since birth).....0 Others (Specify)_____.96	
102	In the last 12 months have you been away from your home for more than one-month altogether? **(Left home, village/district)**	Yes .....1 No.....2 Don't know.....98 No response 99	
103	How old are you?	Age ..... ☐☐ **(write the completed years)**	
104	What is your educational status?	Illiterate.....0 Literate .....19 Grade..... ☐☐ **(write the completed grade)**	
105	What is your caste? **(Specify Ethnic Group/Caste)**	Ethnicity/Caste _____	
106	What is your current marital status?	Never married .....1 Married.....2 Divorced/Permanently separated .....3 Widow.....4 Other (Specify)_____ 96	108
107	How old were you when you first married?	Age ..... ☐☐ **(write the completed years)**	
108	With whom you are living now?	Living with wife.....1 Living with female sexual partner .....2 Living without sexual partner .....3 Others (Specify)_____ .....96 No response 99	 110 110 110
109	Do you think your wife/female sexual partner has any other sexual partners?	Yes .....1 No.....2 Don't know.....98 No response 99	 110 110 110

Q. N.	Questions	Coding Categories	Skip to Q.N.
109.1	If yes, what is the sex of the partner?	Male ..... 1 Female..... 2	
110	During the past one-month how often have you had drinks containing alcohol? **(Such as beer, local beer etc.)**	Every day ..... 1 More than once a week ..... 2 Less than once a week..... 3 Never drink ..... 4 Others (Specify)_____ ..... 96 No response..... 99	

2.0 DRUG USE

Q. N.	Questions	Coding Categories	Skip to Q.N.
201.	How long have you been using drugs? **(Drug means medicine not used for treatment purpose rather used for Intoxication)**	Years ..... ☐☐ Months ..... ☐☐ No response 99	
202.	How old were you when you first injected drugs? **(Include self-injection or injection by another)**	Years ..... ☐☐ *(write the completed years)*	
203	How long have you been injecting drugs? **(Include self-injection or injection by another)**	Years ..... ☐☐ Months ..... ☐☐ No response 99	
203.1	Have you injected drugs in the last month?	Yes ..... 1 No..... 2	204
203.2	If Yes, have you used non-sterile injecting equipment at any time in the last month?	Yes ..... 1 No..... 2	

204. Which of the following types of drugs have you used and/or injected in the past one-week? ***(Read the list, multiple answer possible)***

Description	Used in Last-Week				Injected in Last-Week			
	YES	NO	DK	NR	YES	NO	DK	NR
1. Tidigesic	1	2	98	99	1	2	98	99
2. Brown Sugar	1	2	98	99	1	2	98	99
3. Nitrosun	1	2	98	99	1	2	98	99
4. Ganja	1	2	98	99	1	2	98	99
5. Chares	1	2	98	99	1	2	98	99
6. White Sugar	1	2	98	99	1	2	98	99
7. Phensydyl	1	2	98	99	1	2	98	99
8. Calmpose	1	2	98	99	1	2	98	99
9. Diazepam	1	2	98	99	1	2	98	99
10. Codeine	1	2	98	99	1	2	98	99
11. Phenergan	1	2	98	99	1	2	98	99
12. Cocaine	1	2	98	99	1	2	98	99
13. Proxygin	1	2	98	99	1	2	98	99
14. Effidin	1	2	98	99	1	2	98	99
15. Velium 10	1	2	98	99	1	2	98	99
16. Lysergic Acid Dithylamide(LSD)	1	2	98	99	1	2	98	99
17. Nitrovate	1	2	98	99	1	2	98	99
18. Combination (Specify) ___	1	2	98	99	1	2	98	99
96. Others (Specify)_____	1	2	98	99	1	2	98	99

Q. N.	Questions	Coding Categories	Skip to Q.N.
204.1	Did you switch in the last month from one drug to another?	Yes ..... 1 No..... 2	205
204.1.1	If yes	From _____drug To _____drug	
204.1.2	What is the reason for switching?	_____ _____	
205.	How many times would you say you injected drugs yesterday?	Times ..... ☐ Not injected..... 0	209
206.	Would you like to tell me why you did not injected yesterday?	_____ _____	
207.	How many days ago did you get injected?	Days ago ..... ☐☐	
208.	How many times would you say you injected drugs on the last day?	Times ..... ☐☐	
209.	During the past one-week how often would you say you injected drugs?	Once a week ..... 1 2-3 times a week ..... 2 4-6 times a week ..... 3 Once a day ..... 4 2-3 times a day..... 5 4 or more times a day..... 6 Not injected in the last week..... 7 Don't know ..... 98 No response..... 99	

3.0 NEEDLE SHARING BEHAVIORS

Q. N.	Questions	Coding Categories	Skip to Q.N.
301.	Think about the times, you have injected drugs yesterday/last day. How many times did you inject drugs that day? **(Fill the number from answer to Q. 205 or 208 and verify by asking the respondent)**	Times ..... ☐☐	
302.	The last time you injected, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it **to me. 2** I picked it up from a public place which was left there by others+ .. 3 I picked it up from a public place which was left there by myself+ .... 4 I used a new needle/syringe given by NGO staff/volunteer..... 5 I used a needle/syringe which I purchased ..... 6 I reused my own needle/syringe..... 7 Others (Specify) _____ ..... 96 Don't know ..... 98 No response..... 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
302.1	If you were in a group the last time that you injected, how many different people in the group do you think used the same needle?	Nos. ..... ☐☐ Injected alone 96	
303.	Think about the time before the last time you injected, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it to me ..... 2 I picked it up from a public place which was left there by others+ ..... 3 I picked it up from a public place which was left there by myself ..... 4 I used a new needle/syringe given by NGO staff/ volunteer ..... 5 I used a needle/syringe which I purchased ..... 6 I reused my own needle/syringe 7 Others (Specify) _____ 96 Don't know ..... 98 No response 99	
303.1	That time, If you were in a group, how many different people in the group do you think used the same needle?	Nos..... ☐☐ Injected alone 96	
304.	Now think about the time before **(before Q. 303)**, how did you get that syringe/needle? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	My friend/relative gave it to me after his use ..... 1 Unknown person gave it to me ..... 2 I picked it up from a public place which was left there by others+ ..... 3 I picked it up from a public place which was left there by myself+ ..... 4 I used a new needle/syringe given by NGO staff/ volunteer ..... 5 I used a needle/syringe which I purchased ..... 6 I reused my own needle/sy ..... 7 Others (Specify) _____ ..... 96 Don't know ..... 98 No response 99	
304.1	That time If you were in a group, how many different people in the group do you think used the same needle?	Nos..... ☐☐ Injected alone 96	
305.	Think about the times, you have injected drugs during the past one-week. How often was it with a needle or syringe that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Not injected in the last week .... 5 Don't know ..... 98 No response 99	314

Q. N.	Questions	Coding Categories	Skip to Q.N.
305.1	When you injected drug during the past week, how often did you use a syringe/needle that had been left in public place? **(Public place means places other than the IDU's home that are used to hide syringe/needle)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
306.	In the past one-week, did you ever share needles and syringes with any of the following?		

Read out list. Multiple answers possible	**Yes**	**No**	**DK**	**NR**
1. Your usual sexual partner	1	2	98	99
2. A sexual partner who you did not know	1	2	98	99
3. A friend	1	2	98	99
4. A drugs seller	1	2	98	99
5. Unknown Person	1	2	98	99
96. Other (Specify) _____	1	2	98	99

307.	With how many different injecting partners did you share needles or syringes in the past one-week? **(Count everyone who injected from the same syringe)**	Number of partners ..... ☐☐ Don't know ..... 98 No response 99	
308.	In the past one-week, how often did you give a needle or syringe to someone else, after you had already used it?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
309.	In the past-week, did you ever inject with a pre-filled syringe? **(By that I mean a syringe that was filled without you witnessing it)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
310.	In the past one-week, how often did you inject drugs using a syringe after someone else had squirted drugs into it from his/her used syringe? **(front-loading/back-loading/ splitting)**	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
311.	In the past one-week, when you injected drugs, how often did you share a cooker/ vial/container, cotton/filter, or rise water?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
312.	In the past one-week, how often you draw up your drug solution from a common container used by others?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
313.	In the past one-week, when you injected with needles or syringes that had previously been used, how often did you clean them first?	Every time ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Never reused ..... 5 Others (Specify)_____ 96 Don't know ..... 98 No response 99	 314 314 314 314 314
313.1	If cleaned, how did you usually clean them?	With water ..... 1 With urine ..... 2 With saliva ..... 3 Boil the syringe in water ..... 4 With bleach ..... 5 Burning the needle with matchstick ..... 6 Others (Specify)_____ 96 Don't know ..... 98 No response 99	
314.	Can you obtain new, unused needles and syringes when you need them?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 316 316 316
315.	Where can you obtain new unused needles and syringes? **(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?")**	Drugstore ..... 1 Other shop ..... 2 Health worker ..... 3 Hospital ..... 4 Drug wholesaler/drug agency ..... 5 Family/relatives ..... 6 Sexual partner ..... 7 Friends ..... 8 Other drugs users ..... 9 Drugs seller ..... 10 Needle exchange program of_____ ..... 11 Theft from legitimate source ..... 12 Buy on streets ..... 13 Other (Specify) _____96	
316.	In the past one-year, did you ever inject drug in another city/district?	Yes ..... 1 No ..... 2 Don't remember ..... 98 No response 99	 317 317 317
316.1	If yes, in which other cities/districts did you inject, including cities in other countries?	Cities_____ Districts_____ Country _____	
316.2	Think about the times you injected drugs in another city/district (including abroad) how often was it with a syringe/needle that had previously been used by someone else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
316.3	When you injected drugs in another city, how often did you gave a syringe/needle to some one else?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never ..... 4 Don't know ..... 98 No response 99	
317.	Are you currently under treatment (or receiving help) or have you ever received treatment (or help) because of your drug use?	Currently under treatment ..... 1 Was in treatment but not now…2 Have never received treatment ..... 3 No response 99	 401 401
318.	How many months ago did you last receive treatment or help for your drug use?	Months ..... ☐☐ Don't know ..... 98 No response 99	
319.	What kind of treatment or help have you received? **(Do not read out the responses, probe asking, "Are there any other kinds of treatment that you've received?" Multiple Answers Possible.)**		
	Types of Treatments	**Name of Institutions**	
	1. Outpatient counseling		
	2. Self-help groups		
	3. Detoxification w/methadone		
	4. Maintenance w/methadone		
	5. Detoxification w/other drugs		
	6. Detoxification with no drug		
	7. Residential rehabilitation		
	8. Helped for *cold turkey*		
	9. Forced for *cold turkey*		
	96. Other (Specify) _____		
	99. No response		

4.0 SEXUAL HISTORY

Q. N.	Questions	Coding Categories	Skip to Q.N.
401.	How old were you at your first sexual intercourse?	Years old ..... ☐☐ ***(Write completed years)*** Never had sexual intercourse ..... 2 Don't know ..... 98 No response 99	 601
402.	Have you had sexual intercourse in the last 12 months	Yes ..... 1 No ..... 2 No response 99	 404 404
403.	In total, how many different female sexual partners have you had sex in the last 12 months?	Total Number ..... ☐☐	
403.1	How many were female "regular partners"? **(Your wife or live-in sexual partners)**	Number ..... ☐☐ Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
403.2	How many were female “sex worker”? **(Partners to whom you bought or sold sex in exchange for money or drug)**	Number ..... ☐☐ Don't know ..... 98 No response 99	
403.3	How many were female "non-regular partners"? **(Sexual partners, you are not married to and have never lived with and did not have sex in exchange for money)**	Number ..... ☐☐ Don't know ..... 98 No response 99	
404.	We have just talked about your female sexual partners? Have you ever had any male sexual partners also?	Yes ..... 1 No ..... 2 No response 99	 501 501
404.1	If yes, have you had anal sex with any of your male partners in the last 12 months?	Yes ..... 1 No ..... 2 No response 99	 501 501
404.2	With how many different male partners have you had anal sex in the last 12 months?	Number ..... ☐☐ Don't know ..... 98 No response 99	
404.3	The last time you had anal sex with a male sex partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't Know ..... 98 No response 99	
404.4	How often have you used a condom in an anal sex with male sex partner in the past 12 months	Every Times ..... 1 Almost Every Times ..... 2 Some Times ..... 3 Never Used ..... 4 Don't Know ..... 98 No response 99	

5.0 NUMBERS AND TYPES OF PARTNERS

(Check Q. 403.1 and circle the response of Q.501)

Q. N.	Questions	Coding Categories	Skip to Q.N.
501.	Did you have sex with female regular partner during last 12 months?	Yes ..... 1 No 2	 502
501.1	Think about your most recent female regular sexual partner. How many times did you have sex with her during last one-month?	Times ..... ☐☐ Don't know ..... 98 No response 99	
501.2	The last time you had sex with a female regular partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	501.4 501.4 501.4
501.3	Why did not you or your partner use a condom that time? **(Do not read the possible answers, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like them ..... 4 Used other contraceptive ..... 5 Didn't think it was necessary ..... 6 Didn't think of it ..... 7 Other (Specify) _____ . 96 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
501.4	How often have you used a condom with female regular partners in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
501.5	Did your female regular partner also inject drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
501.6	Have you had ever-anal sex with your female regular partners?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 502 502 502
501.7	The last time you had anal-sex with a female regular partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
501.8	How often have you used a condom in an anal-sex with female regular partners in the past 12 months?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
502.	Did you have a sexual intercourse with a female sex worker in last 12 months? ***(Check 403.2 and circle the response of Q. 502)***	Yes ..... 1 No 2	 503
502.1	**Think about the female sex workers that you have had sex in the past one-month.** In total how to many female sex workers you sold sex in exchange for money or drugs?	 No ..... ☐☐ Don't know ..... 98 No response 99	
502.1.1	With how many sex workers you had sex in last month by paying them money or drugs?	 No ..... ☐☐ Don't know ..... 98 No response 99	
502.2	Think about your most recent female sex worker. How many times did you have sexual intercourse with her in the past one-month?	 Times ..... ☐☐ Don't know ..... 98 No response 99	
502.3	The last time you had sex with a female sex worker did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	502.5 502.5 502.5
502.4	Why did not you and your partner use a condom that time? **(Do not read the possible answers, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like them ..... 4 Used other contraceptive ..... 5 Didn't think it was necessary ..... 6 Didn't think of it ..... 7 Other (Specify) _____ ..... 96 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
502.5	How often have you used a condom with female sex workers in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
502.6	Do you know whether female sex worker with whom you had sex also inject drugs?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
502.7	Have you ever had anal sex with your female sex workers?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 503 503 503
502.8	The last time you had anal-sex with a female sex worker did you use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
502.9	How often have you used a condom in an anal sex with female sex workers in the past 12 months?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	
503.	Did you have a sexual intercourse with a female non-regular sex partner during last 12 months? **(Check 403.3 and circle the response of Q. 503)**	Yes ..... 1 No 2	 504
503.1	Think about your most recent female non-regular sexual partner. How many times did you have sexual intercourse with her over the past one-month?	Times ..... ☐☐ Don't know ..... 98 No response 99	
503.2	The last time you had a sex with a female non-regular partner did you and your partner use a condom?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	503.4 503.4 503.4
503.3	Why did not you and your partner use a condom that time? **(Don't read the possible answers, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like them ..... 4 Used other contraceptive ..... 5 Didn't think it was necessary ..... 6 Didn't think of it ..... 7 Other (Specify) _____ ..... 96 Don't know ..... 98 No response 99	
503.4	How often have you used a condom with a female non-regular partner in the past year?	Every times ..... 1 Almost every-times ..... 2 Sometimes ..... 3 Never used ..... 4 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
503.5	Did you know whether your female non-regular partners also inject drugs?	Yes ..... 1 No..... 2 Don't know..... 98 No response..... 99	
503.6	Have you ever had anal sex with your female non-regular partners?	Yes ..... 1 No..... 2 Don't know..... 98 No response..... 99	 504 504 504
503.7	The last time you had an anal sex with a female non-regular partner, did you and your partner use a condom?	Yes ..... 1 No..... 2 Don't know..... 98 No response..... 99	
503.8	How often have you used a condom in an anal-sex with female non-regular partners in the past year?	Every times ..... 1 Almost every-times..... 2 Sometimes..... 3 Never used ..... 4 Don't know..... 98 No response..... 99	
504	Have you had anal sex with a male partner in the past one year? **(See the response in Q. 404.1 and circle Q. 504 response)**	Yes ..... 1 No..... 2	 505
504.1	Think of your last male sex partner with whom you had anal sex: in the last one month, how many times you had anal sex with him?	Times ..... ☐☐ Don't know..... 98 No response..... 99	
504.2	The last time you had anal sex with him; did you use condom?	Yes ..... 1 No..... 2 Don't know..... 98 No response..... 99	504.4 504.4 504.4
504.3	Why didn't you use condom at that time? **(Don't read possible answer, multiple answer possible)**	Not available ..... 1 Too expensive ..... 2 Partner objected ..... 3 Don't like them..... 4 Used other contraceptive..... 5 Didn't think it was necessary..... 6 Didn't think of it..... 7 Other (Specify) _____.... 96 Don't know..... 98 No response..... 99	
504.4	How often have you used a condom is an anal sex with a male partner is the past year?	Every times ..... 1 Almost every-times..... 2 Sometimes..... 3 Never used ..... 4 Don't know..... 98 No response..... 99	
504.5	Do you know if your male partner with whom you had anal sex also injects drugs?	Yes ..... 1 No..... 2 Don't know..... 98 No response..... 99	
505.	Have you had sexual intercourse in the last month?	Yes ..... 1 No..... 2	 507
506.	If yes, did you or your partner use a condom when you had sex last month?	Every times ..... 1 Almost every-times..... 2 Sometimes..... 3	

Q. N.	Questions	Coding Categories	Skip to Q.N.
		Never used ..... 4 Don't know ..... 98 No response 99	
507.	With whom did you have the last sexual intercourse?	FSW ..... 1 Regular partner ..... 2 **(Wife or live in sexual partner)** Other female friend ..... 4 Male friend ..... 5 Don't Know ..... 98 No response 99	
508.	Did you use condom in the last sexual intercourse	Yes ..... 1 No 2	

6.0 USE AND AVAILABILITY OF CONDOM

(Check responses in Q.N. 404.3, 404.4, 501.2, 501.4, 502.3, 501.7, 501.8, 502.5, 502.8, 502.9, 503.2, 503.4, 503.7, 503.8, 504.4, 506, 508 and circle responses Q. 601 & 602)

Q. N.	Questions	Coding Categories	Skip to Q.N.
601.	Have you ever heard of a male condom? **(Show picture or sample of condom)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 701 701 701
602.	Have you ever used a condom?	Yes ..... 1 No 2	
603.	Do you know of any place or person from which you can obtain condom?	Yes ..... 1 Don't know ..... 98 No response 99	 701 701
604.	From which place or people, you can obtain condoms? **(Multiple answer possible. Don't read the list but should probe)**	Shop ..... 1 Pharmacy ..... 2 Clinic ..... 3 Hospital ..... 4 Family planning center ..... 5 Bar/Guest house/Hotel ..... 6 Health worker ..... 7 Peer Educator/outreach educator ..... 8 Friend ..... 9 *Pan Pasal* ..... 10 Others (Specify) _____ ..... 96 No response 99	
605.	How long would it take ***(from your house or the place where you work)*** to obtain a condom?	Less than 30 minutes ..... 1 More than 30 minutes ..... 2 Don't know ..... 98 No response 99	

7.0 KNOWLEDGE AND TREATMENT OF STIs

Q. N.	Questions	Coding Categories	Skip to Q.N.
701.	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes ..... 1 No ..... 2 No response 99	 704 704
702.	Can you describe any symptoms of STIs in women? **(Do not read possible answers, multiple answers possible.)**	Abdominal pain ..... 1 Genital discharge ..... 2 Foul smelling ..... 3 Burning pain on urination ..... 4 Genital ulcers/sore ..... 5 Swelling in groin area ..... 6 Itching ..... 7 Other (Specify) _____ 96 Don't know ..... 98 No response 99	
703.	Can you describe any symptoms of STIs in men? **(Do not read possible answers, multiple answer possible)**	Genital discharge ..... 1 Burning pain on urination ..... 2 Genital ulcers/sore blister ..... 3 Swellings in groin area ..... 4 Others (Specify) _____ 96 Don't know ..... 98 No response 99	
704.	Have you had a genital discharge/burning urination during the last 12 months?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 705 705 705
704.1	Currently, do you have a genital discharge/burning urination problem?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
705	Have you had a genital ulcer/sore blister during the last 12 months?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 706 706 706
705.1	Currently, do you have a genital ulcer/sore blister problem?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
706.	Last time you had a genital discharge/ burning urination or a genital ulcer/sore blister, where did you go for treatment?	Did not seek treatment ..... 1 With private doctor ..... 2 In hospital ..... 3 No Symptoms ..... 4 Others (Specify) _____ 96	

8.0 KNOWLEDGE, OPINIONS AND ATTITUDES ON HIV/AIDS

Q. N.	Questions	Coding Categories	Skip to Q.N.
801.	Have you ever heard of HIV or the disease called AIDS?	Yes ..... 1 No ..... 2 No response 99	
802.	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes ..... 1 No ..... 2 No response 99	 804 804
803.	Do you have close relative or close fried who is infected with HIV or has died of AIDS?	Yes, a close relative ..... 1 Yes, a close friend ..... 2 No ..... 3 No response 99	 804
804.	Can a person protect himself/herself from HIV, the virus that causes AIDS, by using a condom correctly every time they have sex?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
805.	Can a person get HIV, from mosquito bites?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
806.	Can a person protect himself/herself from HIV, by having one uninfected faithful sex partner?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
807.	Can a person protect himself/herself from HIV, by abstaining from sexual intercourse?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
808.	Can a person get HIV, by sharing a meal with someone who is infected?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
809.	Can a person get HIV, by getting injections with a needle that was already used by someone else?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
810.	Can a person who inject drug protect himself/herself from HIV, the virus that causes AIDS, by switching to non-injecting drugs? **(Oral or inhaling drugs)**	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
811.	Can a pregnant woman infected with HIV transmit the virus to her unborn child?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	 813 813 813
812.	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child? **(Do not read the possible answers, multiple answer possible)**	Take medication (Antiretrovirals) ..... 1 Others (Specify) _____ . 96 Don't know ..... 98 No response 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
813.	Can women with HIV transmit the virus to her newborn child through breast-feeding?	Yes ..... 1 No..... 2 Don't know ..... 98 No response..... 99	
813.1	Do you think a healthy-looking person can be infected with HIV?	Yes ..... 1 No..... 2 Don't know 98	
813.2	Can a person get HIV by shaking hand?	Yes ..... 1 No..... 2 Don't know 98	
813.3	Can blood transfusion from an infected person to the other transmit HIV?	Yes ..... 1 No..... 2 Don't know 98	
814.	Is it possible in your community for someone to get a confidential test to find out if they are infected with HIV? **(By confidential, I mean that no one will know the result if you don't want him or her to know it.)**	Yes ..... 1 No..... 2 Don't know ..... 98 No response..... 99	
815	I don't want to know the result, but have you ever had an HIV test?	Yes ..... 1 No..... 2 No response..... 99	 901 901
816.	Did you voluntarily undergo the HIV test, or were you required to have the test?	Voluntary ..... 1 Required..... 2 No response..... 99	
817.	Please do not tell me the result, but did you find out the result of your HIV test?	Yes ..... 1 No..... 2 No response..... 9	818 818
817.1	Why did you not receive the test result?	Sure of not being infected ..... 1 Afraid of result..... 2 Felt unnecessary..... 3 Forgot it ..... 4 Others (Specify) _____96	
818.	When did you have your most recent HIV test?	Within the past 12 months ..... 1 Between 13-24 months ..... 2 Between 25-48 months ..... 3 More than 49 months ..... 4 Don't know ..... 98 No response..... 99	

9.0 AWARENESS OF HIV/AIDS

(If answer to Q. 801 "No", Go to Q. 902)

Q. N.	Questions	Coding Categories		Skip to Q.N.
901.	Of the following sources of information, from which sources have you learned about HIV/AIDS? ***(Read the following list, multiple answers possible)***			
	Source of Information	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Newspapers/Magazines	1	2	
	4. Pamphlets/Posters	1	2	
	5. School/Teachers	1	2	
	6. Health Worker/Volunteer	1	2	
	7. Friends/Relatives	1	2	
	8. Work Place	1	2	
	9. People from NGO	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify) _____	1	2	
902.	Has anyone give you following information or items in the past year? ***(Multiple answer possible, read the list)***			
	Items	**Yes**	**No**	
	1. Condom	**1**	**2**	
	2. Brochure/Booklets/Pamphlets about HIV/AIDS	1	2	
	3. Information about HIV/AIDS	1	2	
	96. Others (Specify) _____	1	2	

10.0 PROMOTION OF CONDOM

(If answer to Q. 601 "No" Go to Q. 1004)

Q. N.	Questions	Coding Categories		Skip to Q.N.
1001.	In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? ***(Read the following list, multiple answer possible)***			
	Sources	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Pharmacy	1	2	
	4. Health Post	1	2	
	5. Health Center	1	2	
	6. Hospital	1	2	
	7. Health Workers/Volunteers	1	2	
	8. Friends/Neighbors	1	2	
	9. NGOs	1	2	
	10. Newspapers/Posters	1	2	
	11. Video Van	1	2	
	12. Street Drama	1	2	
	13. Cinema Hall	1	2	
	14. Community Event/Training	1	2	
	15. Bill Board/Sign Board	1	2	
	16. Comic Book	1	2	
	17. Community Workers	1	2	
	96. Others (Specify) _____	1	2	
1002.	Have you ever seen, heard or read following messages/characters during past one year? ***(Multiple answer possible)***			
	Message/characters	**Yes**	**No**	
	1. Jhilke Dai Chha Chhaina Condom	1	2	
	2. Condom Kina Ma Bhaya Hunna Ra	1	2	
	3. Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	1	2	
	4 Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	1	2	
	5. Condom Bata Surakchhya, Youn Swasthya Ko Rakchhya AIDS Ra Younrog Bata Bachna Sadhai Condom Ko Prayog Garau	1	2	
	6. HIV/AIDS Bare Aajai Dekhee Kura Garau	1	2	
	7. Ek Apas Ka Kura	1	2	
	8. Maya Garaun Sadbhav Badaun	1	2	
	9. Des Pardes	1	2	
	10. Manis Sanga Manis Mile hara Jeeta Kasko Hunchha	1	2	
	96. Others (Specify)_____	1	2	
1003.	Have you ever heard/seen or read messages or materials other than mentioned above?	Yes ..... 1 No..... 2		1004

Q. N.	Questions	Coding Categories	Skip to Q.N.
1003.1	What? Have you seen, read or heard of?	_____ _____	
1004.	Generally, where do you gather to inject drug?	_____ _____	
1005	How many IDUs do you know who also know you? **Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months – knowing each other**	Total _____ Don't know ..... 98 No response 99	 1008 1008
1005.1	Among them persons how many are male and female?	Male _____ Female _____ Don't know ..... 98 No response 99	
1006	Among those persons, please try to estimate the number of people by range of age:	Less than 15 years old [_____] 15-19 years old [_____] 20-24 years old [_____] 25-29 years old [_____] 30-40 years old [_____] > 40 years old [_____] Don't know ..... 98 No response ..... 99 Not applicable 97	
1007	Again, among those guys, please try to estimate the number of people by religion:	Hindu [_____] Buddhist [_____] Muslim [_____] Christian [_____] Others (Specify) _____ [_____] Don't know ..... 98 No response ..... 99 Not applicable 97	
1008	How is the person who gave you the coupon related to you ?	A close friend ..... 1 A friend ..... 2 Your sexual partner ..... 3 A relative ..... 4 A stranger ..... 5 Others (Specify)_____ .... 6 Don't know ..... 98 No response 99	

11.0 KNOWLEDGE AND PARTICIPATION IN STI AND HIV/AIDS PROGRAMS

Q. N.	Questions	Coding Categories	Skip to Q.N.
1101	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizes (CM) or Community Educators (CE) in the last 12 months?	Yes ..... 1 No ..... 2 No response 99	1105
1102	When you met/discussed/interacted with PE or OE in what kind of activities were you involved? **(Multiple answers. DO NOT READ the possible answers)**	Discussion on how HIV/AIDS is/isn't transmitted.. 1 Discussion on how STI is/isn't transmitted……..... 2 Discussion on safe injecting behavior ..... 3 Regular/non-regular use of condom…… 4 Demonstration on using condom correctly…… 5 Others (Specify)_____ .. 96	
1103	Do you know from which organization were they? **(Multiple answers. DO NOT READ the possible answers)**	KCC. ..... 1 HELP. ..... 2 KYC. ..... 3 PSK ..... 4 LALS. ..... 5 Youth Vision ..... 6 Naulo Ghumti ..... 7 CSG ..... 8 INF (Nepalgunj) ..... 9 SMF ..... 10 AHH ..... 11 RICHMOND ..... 12 Nav Kiran ..... 13 Jhapa Plus ..... 14 Namuna ..... 15 Others (Specify) _____ . 96 Don't know 98	
1104	How many times have you been visited by PE, OE, CM and/or CE in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1105	Have you visited or been to any out reach center (DIC, IC or CC) in the last 12 months? **Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)**	Yes ..... 1 No 2	1109

Q. N.	Questions	Coding Categories	Skip to Q.N.
1106	When you went to the out reach center (DIC, IC or CC), in which activities did you take part? **(Multiple answers. DO NOT READ the possible answers)**	Went to collect condoms..... 1 Went to learn the correct way of using condom .....2 Went to learn about the safe injecting behavior .....3 Went to watch film on HIV/AIDS .....4 Participated in discussion on HIV transmission .....5 Went to have new syringe..... 6 Other (Specify)_____ 96	
1107	Do you know which organizations run those out reach center (DIC, IC or CC)? **(Multiple answers. DO NOT READ the possible answers)**	KCC. ..... 1 HELP. ..... 2 KYC. ..... 3 PSK ..... 4 LALS. ..... 5 Youth Vision..... 6 Naulo Ghumti ..... 7 CSG ..... 8 INF (Nepalgunj)..... 9 SMF ..... 10 AHH ..... 11 RICHMOND..... 12 Nav Kiran..... 13 Jhapa Plus ..... 14 Namuna..... 15 Others (Specify) _____. 96 Don't know..... 98	
1108	How many times have you visited out reach centers (DIC, IC or CC) in the last 12 months?	Once..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1109	Have you visited any STI clinic in the last 12 months?	Yes ..... 1 No..... 2	1113
1110	When you visited such STI clinic in what activities were you involved? **(Multiple answers. DO NOT READ the possible answers given below)**	Blood tested for STI..... 1 Physical examination conducted for STI identification .....2 Discussion on how STI is/isn't transmitted.....3 Discussion on safe injecting behavior.....4 Regular/non-regular use of Condom.....5 Took a friend with me..... 6 Other (Specify)_____ 96	

Q. N.	Questions	Coding Categories	Skip to Q.N.
1111	Do you know which organizations run those STI clinics? **(Multiple answers. DO NOT READ the possible answers)**	AMDA ..... 1 SACTS ..... 2 NFCC ..... 3 CAC ..... 4 Paluwa ..... 5 Siddhartha Club ..... 6 NRCS ..... 7 NSARC ..... 8 FPAN ..... 9 Others (Specify)_____. 96 Don't know 98	
1112	How many times have you visited STI clinic in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1113	Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes ..... 1 No 2	1117
1114	When you visited such VCT center in what activities were you involved? **(Multiple answers. DO NOT READ the possible answers)**	Received pre-HIV/AIDS test counseling ..... 1 Blood sample taken for HIV/AIDS test ..... 2 Received post HIV/AIDS test counseling ..... 3 Received information on safe injecting behavior ..... 4 Received HIV/AIDS test result ..... 5 Received counseling on using condom correctly in each sexual intercourse ..... 6 Received information on HIV/AIDS window period ..... 7 Took a friend with me ..... 8 Other (Specify)_____ 96	
1115	Do you know which organizations run those VCT centers? **(Multiple answers. DO NOT READ the possible answers)**	AMDA ..... 1 Youth Vision ..... 2 SACTS ..... 3 NFCC ..... 4 CAC ..... 5 Naulo Ghumti ..... 6 NSARC ..... 7 NRCS ..... 8 FPAN ..... 9 WATCH ..... 10 Namuna ..... 11 Others (Specify) _____ .96 Don't know 98	
1116	For how many times have you visited VCT center in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	

Q. N.	Questions	Coding Categories	Skip to Q.N.
1117	Have you ever participated in HIV/AIDS awareness raising program or community events in the last 12 months?	Yes ..... 1 No 2	1121
1118	When you participated in such events in what activities were you involved? **(Multiple answers. DO NOT READ the possible answers)**	Street drama ..... 1 AIDS Day ..... 2 Condom Day ..... 3 Video Shows ..... 4 Group discussions ..... 5 Talk programs ..... 6 HIV/AIDS related training ..... 7 HIV/AIDS related Workshops .. 8 Condom use demonstrations ..... 9 Others (Specify) _____ 96	
1119	Do you know which organizations organized those activities? **(Multiple answers. DO NOT READ the possible answers given below)**	AMDA ..... 1 HELP ..... 2 KYC ..... 3 Youth Vision ..... 4 NFCC ..... 5 LALS ..... 6 Naulo Ghumti ..... 7 WATCH ..... 8 GWP ..... 9 NRCS ..... 10 NSARC ..... 11 AHH ..... 12 Recovery Nepal ..... 13 SAHARA ..... 14 CSG ..... 15 Others (Specify) _____ .96 Don't know 98	
1120	How many times have you participated in such activities in the last 12 months?	Once ..... 1 2-3 times ..... 2 4-6 times ..... 3 7-12 times ..... 4 More than 12 times 5	
1121	Have you heard of any Community Home Based Care (CHBC) services that are provided for HIV positive people?	Yes ..... 1 No 2	
1122	Have you heard of care and support program that provide information regarding ART and ART services necessary for HIV infected people?	Yes ..... 1 No 2	

12.0 STIGMA AND DISCRIMINATION

Q. N.	Questions	Coding Categories	Skip to Q.N.
1201	If a male relative of yours gets HIV, would you be willing to take care of him in your household?	Yes ..... 1 No ..... 2 Don't know 98	
1202	If a female relative of yours gets HIV, would you be willing to take care of her in your household?	Yes ..... 1 No ..... 2 Don't know 98	
1203	If a member of your family gets HIV, would you want it to remain a secret?	Yes ..... 1 No ..... 2 Don't know 98	
1204	If you knew a shopkeeper or food seller had HIV, would you buy food from them?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	
1205	Do you think a person with HIV should get the same, more or less health care than someone with any other chronic disease?	Same ..... 1 More ..... 2 Less ..... 3 Don't know ..... 98 No response 99	
1206	If a colleague who is working with you has HIV but he is not sick, should he be allowed to continue working?	Yes ..... 1 No ..... 2 Don't know ..... 98 No response 99	

Thank You.

ANNEX – 2: Basic Equation Used in Sample Design

$$n = D\left[(Z_\alpha + Z_\beta)^2 * (P_1 (1 - P_1) + P_2 (1 - P_2)) / (P_2 - P_1)^2\right]$$

n= required minimum sample size per survey round or comparison groups

D = design effect (assumed in the following equations to be the default value of 2

P_1 = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area

P_2 = the expected level of the indicator either at some future date or for the project area such that the quantity (P_2-P_1) is the size of the magnitude of change it is desired to be able to detect

Z_α = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P_2-P_1) would not have occurred by chance (α – the level of statistical significance), and

Z_β = the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P_1-P_2) if one actually occurred (β – statistical power).

ANNEX – 3: Oral Informed Consent

Title: Integrated Bio-behavioral Survey among Injecting Drug Users in Kathmandu Valley, Pokhara Valley, Eastern *terai* Highway Districts, and Western to Far Western *terai* Highway Districts.

Sponsor: ASHA Project- FHI/Nepal and USAID/Nepal

Principal Investigator/s: Jacqueline McPherson, FHI/Nepal
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Introduction

We are asking you to take part in research study to collect information on knowledge of HIV/STIs, HIV/STI related risk behaviors, STI treatment practices and to measure the prevalence of HIV and STI among the populations like you. We want to be sure you understand the purpose and your responsibilities in the research before you decide if you want to be in it. Please ask us to explain any words or information that you may not understand.

Information about the Research

In total 1245 male injecting drug users (IDUs) will be selected for interview from Kathmandu Valley, Pokhara Valley, Eastern *terai* highway districts and Western to Far Western *terai* highway districts. We will ask you some questions and then ask you to provide blood sample for HIV and syphilis test. We will draw 5-6 ml blood by 10 ml disposable syringe from your vein.

You will have to spend about 45-60 minutes with us if you decide to participate in this research. We would like to inform that this is a research study and not health care provision service.

Possible Risks

The risk of participating in this study is the minor discomfort due to bleeding bruising during blood drawing. Providing blood sample does not put you at any risk. Some of the questions we ask might put you in trouble or make you feel uncomfortable to answer them. You are free not to answer such questions and also to withdraw yourself from participating in the research process at any time you like to do so. You might feel some mental stress after getting your test results. But you will get proper pre and posttest counseling on HIV and STI through a qualified counselor.

There may be some risk that people may see you associated with the study, either now or when you return for your test results.

Possible Benefits
You will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. If your STI tests are positive for the curable sexual infection such as syphilis and you are not treated for this, you will be offered free treatment. You will also be provided with information on safe sex. The information we obtain from this research will help to plan and formulate strategies to control and prevent further spread of HIV/AIDS and other sexually transmitted diseases.

At the time of sample collection the study team members will give you the detail address of the place and the dates where you can hear your test results of syphilis and HIV. Test result will be given by a qualified counselor with pre and post test counseling. Test results can only be obtained by presenting the study ID card with your code number on it. If you do not have the ID card when you return for the test results we cannot give you the results because we will not be able to recognize you without the study ID card.

If You Decide Not to Be in the Research
You are free to decide whether or not to take part in this research. Your decision will not affect in any way in the health services you are seeking now and you would normally receive.

Confidentiality
We will protect information collected about you and your taking part in this study to the best of our ability. We will not use your name in any reports. Someone from FHI might want to ask you questions about being in the research, but you do not have to answer them. A court of law could order medical records shown to other people, but that is unlikely.

Payment
We will not pay you for your participation but you will be given, condom and reading materials about STI/HIV/AIDS as compensation for your participation in the research. Moreover, we will provide you a fixed amount of Nepalese Rupees (NRs.) 100.00 (approximately, US$1.50) after completing the study requirements to cover the local transportation you may use to come to the study center for interview and for providing biological sample.

Leaving the Research
You may leave the research at any time. If you do, it will not change the healthcare you normally receive from the study clinic.

If you have a questions about the study
If you have any questions about the research, call:
Jacqueline McPherson, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173; **OR**
Siddhartha Man Tuladhar, New ERA, Kalopool, Kathmandu, Phone: 01-4413603; **OR**
Laxmi Bilas Acharya, ASHA project - FHI/Nepal, Baluwatar, Kathmandu, Phone: 01-4437173

Your Rights as a Participant
This research has been reviewed and approved by the Institutional Review Board of Family Health International and Nepal Health Research Council (NHRC). If you have any questions about how you are being treated by the study or your rights as a participant you may contact

***Jacqueline McPherson*, Family Health International (FHI), Baluwatar, Kathmandu, Phone: 01-4437173 and/or Mr. David Borasky, Protection of Human Subjects Committee, PO Box 13950, Research Triangle Park, NC 27709, USA, phone number: [International Access Code]-1-919-405-1445, e-mail: dborasky@fhi.org.]**

VOLUNTEER AGREEMENT

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

_____ _____

Signature of witness Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____ _____

Signature of Person Who Obtained Consent Date

ANNEX – 4: HIV Prevalence by Study Centers

District	Third round (2007)		
	Total sample	HIV Positive	%
Interviewed Districts			
Morang	135	29	21.5
Sunsari	135	20	14.8
Jhapa	75	10	13.3
Total	**345**	**59**	**17.1**

ANNEX – 5: CLINICAL FORM

CONFIDENTIAL

INTEGRATED BIO- BEHAVIORAL SURVEY (IBSS) AMONG INJECTING DRUG USERS IN SELECTED SITES OF NEPAL
FHI/NEW ERA/SACTS – 2007

Clinical/Lab Checklist

Respondent ID Number: | | | | | | | Date: 2064/___/__

Name of Clinician: _____

Name of Lab Technician: _____

(A) Clinical TEST

Weight : _____Kg

B.P. : _____mm of Hg

Pulse : _____

Temperature : _____^{o} F

(B) Specimen collection

	Yes	No
Pre-test counseled	1	2
Blood Collected for HIV & Syphilis	1	2
Date & place for post-test results given	1	2
Condom given	1	2
IEC materials given	1	2

1.0 Syndromic Treatment Information

101. Have you experienced genital discharge/burning urination/swelling and tenderness of testis or epididymis in the past one month?

1. Yes 2. No
[If yes, give urethral discharge/scrotal swelling syndrome treatment]

102. Have you had genital ulcer/sore blister in the past one month?

1. Yes 2. No
[If yes, give genital ulcer syndrome treatment and time for follow-up]

103. Have you had a tender or non-tender/solid or fluctuant swelling in the groin area in the past one month?

1. Yes 2. No
[If yes, give inguinal swelling (bubo) syndrome treatment and time for follow-up]

ANNEX – 6: Study Centers

District	Lab Centers	No. of Centers	Sample Covered	Total
Jhapa	Kakarvitta	4	10	75
	Bhadrapur		20	
	Birtamod		20	
	Damak		25	
Morang	Urlabari	3	20	135
	Belbari		30	
	Biratnagar		85	
Sunsari	Dharan	2	95	135
	Itahari		40	
	Total	**9**	**345**	**345**

ANNEX – 7: Participation in Post Test Counseling

Date	Counseling Center	Expected Client	Client Counseled		Client with HIV+	Client with HIV-
			N	%		
September 17 - 18,2007	Kakarvitta	10	3	30.0	0	3
September 16-19,2007	Bhadrapur	20	11	55.0	2	9
September 20-21 and 23-24,2007	Damak	25	5	20.0	1	4
September 20-21 and 23-24,2007	Birtamod	20	0	0.0	0	0
September 30- October 2,2007	Urlabari	20	7	35.0	0	7
October 3-5,2007	Belbari	30	0	0.0	0	0
October 7-17,2007	Biratnagar	85	14	16.5	3	11
September 27-October 9,2007	Dharan	95	27	28.4	3	24
October 10-16,2007	Itahari	40	6	15.0	0	6
Total		**345**	**73**	**21.2**	**9**	**64**

ANNEX – 8: Reasons for Not Injected Drugs on the Previous Day

Injecting practice	First round (2003)		Second round (2005)		Third round (2007)	
	n=50	%	n=89	%	n=78	%
Reasons for not injecting yesterday *						
Lack of money	17	34.0	51	57.3	32	41.0
To quite slowly	17	34.0	15	16.9	17	21.8
Unavailability/lack of drugs	6	12.0	6	6.7	5	6.4
Busy in house work	5	10.0	7	7.9	9	11.5
Due to illness	0	0.0	3	3.3	4	5.1
Trying other medicines	0	0.0	3	3.3	0	0.0
Not a regular users (Use sometimes only)	0	0.0	0	0.0	6	7.7
Others	7	14.0	6	6.7	6	7.7

* Note: Because of multiple answers, percentages add up to more than 100.

ANNEX – 9: Part of the Body for Injecting Drugs

Typical injection points	First round (2003)		Second round (2005)		Third round (2007)	
	N=345	%	N=345	%	N=345	%
Upper arms	141	40.9	104	30.1	82	23.8
Wrists	107	31.0	73	21.2	119	34.5
Forearms	43	12.5	76	22.0	11	3.2
Back of palm	24	7.0	16	4.6	7	2.0
Calves	14	4.1	3	0.9	42	12.2
Thigh	9	2.6	46	13.3	2	0.6
Armpit	0	0.0	13	3.8	75	21.7
Arch	0	0.0	4	1.2	0	0.0
Others	7	2.0	10	2.9	7	2.0

ANNEX – 10: Gathering Place of IDUs to Inject Drugs

S.N	Gathering places of IDUs to inject drugs	First round (2003)		Second round (2005)		Third round (2007)	
		N=345	%	N=345	%	N=345	%
1.	Own room/friends room/Drug seller's/User's house	115	33.3	36	10.4	75	21.7
2.	Jogbani (India)	70	20.3	136	39.4	105	30.4
3.	Forest/Bushes	70	20.3	98	28.4	98	28.4
4.	Open ground/town planning area /open places	35	10.1	0	0.0	0	0.0
5.	River bank/Slum area/Pond/bridge area	16	4.6	42	12.2	22	6.4
6.	Garage/Junk store	12	3.5	6	1.7	0	0.0
7.	Pani Tanki (India)	7	2.0	7	2.0	15	4.3
8.	Temple area	5	1.4	0	0.0	0	0.0
9.	Shop	5	1.4	0	0.0	0	0.0
10.	Vacant house/New construction home	4	1.2	0	0.0	1	0.3
11.	Galgaliya (India)	3	0.9	0	0.0	17	4.9
12.	Pool house/Swimming pool	2	0.6	0	0.0	0	0.0
13.	Toilet/Public toilet	1	0.3	6	1.7	7	2.0
14.	Road/Railway lick	0	0.0	8	2.3	0	0.0
15.	Naxalbadi (India)	0	0.0	2	0.6	0	0.0
16.	Around campus/school	0	0.0	2	0.6	0	0.0
17.	Others	0	0.0	2	0.6	5	1.4

ANNEX – 11: Combination of Different Drugs Injected by IDUs

S.N.	Drugs Combination	Third round (2007) N=307
1.	Norphin + Diazepam + Avil	131
2.	Nergesic + Diazepam + Avil	34
3.	Norphin + Diazepam + Phenergan + Avil	28
4.	Tidigesic + Phenergan	12
5.	Nergesic + Diazepam + Phenergan + Avil	9
6.	Tidigesic + Diazepam + Phenergan	8
7.	Norphin + Fortwin + Diazepam + Avil	8
8.	Nerjesic + Fortwin + Diazepam + Avil	7
9.	Tidigesic + Avil	6
10.	Norphin + Avil	5
11.	Norphin + Diazepam	4
12.	Tidigesic + Diazepam + Avil	4
13.	Tidigesic + Diazepam	2
14.	Norphin + Calmpose + Avil	2
15.	Nergesic + Fortwin + Avil	2
16.	Tidigesic + Calmpose + Avil	2
17.	Lubrigesic + Diazepam + Phenergan	2
18.	Norphin + Fortwin + Diazepam + Phenergan + Avil	2
19.	Nergesic + Lubrigesic + Nerhin + + Diazepam + Avil	2
20.	Nergesic + Fortwin + Diazepam + Phenergan + Avil	2
21.	Norphin + Phenergan	1
22.	Norphin + Algic	1
23.	Lubrigesic + Phenergan	1
24.	Tidigesic + Calmpose	1
25.	Lubrigesic + Diazepam	1
26.	Tidigesic + Fortwin	1
27.	Lubrigesic + Avil	1
28.	Norphin + Diazepam + Algic	1
29.	Norphin + Diazepam + Phenergan	1
30.	Bruffin + Calmpose + Phenergan	1
31.	Nergesic + Calmpose + Avil	1
32.	Tidigesic + Fortwin + Calmpose	1
33.	Fortwin + Diazepam + Phenergan	1
34.	Tidigesic + Phenergan + Saipam	1
35.	Lubrigesic + Phenergan + Avil	1
36.	Tidigesic + Algic + Avil	1
37.	Tidigesic + Avil + Nitrosun	1
38.	Tidigesic + Avil + Proxygin	1
39.	Nergesic + Fortwin + Diazpam + Phenergan	1
40.	Norphin + Diazepam + Phenarmine + Avil	1
41.	Tidigesic + Diazepam + Phenergan + Calmpose	1
42.	Tidigesic + Diazepam + Phenergan + Saipam	1
43.	Nergesic + Diazepam + Calmpose + Avil	1
44.	Tidigesic + Fortwin + Phenergan + Saipam	1
45.	Lubrigesic + Diazepam + Phenergan + Avil	1
46.	Norphin + Fortwin + Diazepam + Avil	1
47.	Lubrigesic + Norphin + Diazepam + Phenergan + Avil	1
48.	Tidigesic + Diazepam + Phenergan + Calmpose + Avil	1
49.	Tidigesic + Fortwin + Phenergan + Calmpose + Algic	1
50.	Tidigesic + Fortwin + Diazepam + Phenergan + Avil	1
51.	Tidigesic + Fortwin + Phenergan + Saipam + Avil	1
52.	Fortwin + Diazepam + Phenergan + Calmpose + Avil	1
53.	Nergesic + Diazepam + Phenergan + Calmpose + Avil	1
54.	Tidigesic + Lubrigesic + Norphin + Diazepam + Phenergan	1
55.	Nergesic + Fortwin + Diazepam + Phenergan + Calmpose + Avil	1

Note: Because of multiple answers, numbers may add up to more than 100.

ANNEX – 12: Drug Switching Practice of IDUs and Reasons for it

Drug switching behavior of IDUs	First round (2003)		Second round (2005)		Third round (2007)	
	N	%	N	%	N	%
Switched from one drugs to another drugs in past month						
Yes	8	2.3	5	1.4	3	0.9
No	337	97.7	340	98.6	342	99.1
Total	**345**	**100.0**	**345**	**100.0**	**345**	**100.0**
Switched From						
Brown sugar to Tidigesic	8	100.0	1	20.0	0	0.0
Brown sugar to Proxyvon	0	0.0	1	20.0	0	0.0
Brown sugar to Norphin + Diazepam	0	0.0	1	20.0	0	0.0
Norphin + Nitrovate to Avil	0	0.0	1	20.0	0	0.0
Norphin + Diazepam + Avil to Alcohol + Phensydole	0	0.0	1	20.0	0	0.0
Brown Sugar to Nergesic	0	0.0	0	0.0	1	33.3
Norphin + Fortwin to Nergesic + Diazepam + Avil	0	0.0	0	0.0	1	33.3
Tidigesic + Diazepam + Phenergan + Algic to Brown Sugar	0	0.0	0	0.0	1	33.3
Total	**8**	**100.0**	**5**	**100.0**	**3**	**100.0**
Reasons for switching	0	0.0	0	0.0	0	0.0
Not access of brown sugar	5	62.5	0	0.0	0	0.0
To reduce brown sugar/Leave slowly	3	37.5	0	0.0	0	0.0
Unavailability/Scarcity of drug	0	0.0	3	60.0	1	33.3
Lack of money	0	0.0	2	40.0	1	33.3
Due to having nerve problem	0	0.0	0	0.0	1	33.3
Total	**8**	**100.0**	**5**	**100.0**	**3**	**100.0**

ANNEX – 13: Types of Treatment and Institutions that Provided the Treatment

Types of Treatments / Types of Institutions	Residential rehabilitation	Without drug	With other drug	Helped for cold turkey	Out patient counseling	Self help group
N=122	**%**	**%**	**%**	**%**	**%**	**%**
Punarjivan Kendra	27.9	-	-	-	0.8	-
Happy Nepal Wisdom Foundation	10.7	0.8	-	-	-	-
Addiction Recovery Center (ARC)	4.1	-	-	-	-	-
Nava kiran Ashram/Rehabilitation Centre	4.1	-	-	-	-	-
Lifeline Help Group	4.1	-	-	-	-	-
Richmond Fellowship Center	3.3	-	-	-	-	-
New Hope Foundation	2.5	-	-	-	-	-
Nava Jeevan Punarsthapana Kendra	1.6	-	-	-	-	-
International Nepal Fellowship (INF)	1.6	-	-	-	-	-
Dharan Youth Centre (DYC)	0.8	-	-	-	-	-
Freedom Rehabilitation Center	0.8	-	-	-	-	-
Own Home	-	13.9	2.5	0.8	-	-
The Recovery Group	-	-	-	-	-	0.8
Others	12.3	-	3.3	-	1.6	-
Total	**73.8**	**14.8**	**5.7**	**0.8**	**2.5**	**0.8**

Note: Because of multiple answers percentages may add up to more than 100.

ANNEX – 14: Reasons for not Using Condom in the Last Sex with Different Sex Partners

Reasons of not using condom	First round (2003)		Second round (2005)		Third round (2007)	
	N	%	N	%	N	%
Reasons of not using condom with regular partner in the last sexual intercourse						
Not available	1	1.1	8	8.6	3	3.1
Partner objected	7	7.9	2	2.2	5	5.2
Don't like them	17	20.2	23	24.7	29	29.9
Used other contraceptive	13	14.6	14	15.1	31	32.0
Didn't think it was necessary	68	76.4	60	64.5	61	62.9
Didn't think of it	1	1.1	1	1.1	2	2.1
Willing to have baby	0	0.0	3	3.2	4	4.1
Trust on partner	0	0.0	5	5.4	0	0.0
Sexual Unsatisfaction	0	0.0	0	0.0	2	2.1
Total	**89**	*	**93**	*	**97**	*
Reasons of not using condom with sex worker in the last sexual intercourse						
Not available	14	56.0	16	66.7	9	40.9
Partner objected	3	12.0	1	4.2	3	13.6
Don't like them	4	16.0	7	29.2	7	31.8
Didn't think it was necessary	3	12.0	0	0.0	2	9.1
Didn't think of it	3	12.0	5	20.8	1	4.5
Others	1	4.0	0	0.0	3	13.6
Sexual Unsatisfaction	0	0.0	0	0.0	2	9.1
Used other contraceptive	0	0.0	0	0.0	1	4.5
Total	**25**	*	**24**	*	**22**	*
Reasons of not using condom with non- regular partner in the last sexual intercourse						
Not available	6	20.7	19	41.3	14	28.6
Partner objected	3	10.3	2	4.3	3	6.1
Don't like them	5	17.2	14	30.4	10	20.4
Used other contraceptive	1	3.4	2	4.3	4	8.2
Didn't think it was necessary	13	44.8	11	23.9	26	53.1
Didn't think of it	5	17.2	1	2.2	5	10.2
Trust on partner	0	0.0	1	2.2	0	0.0
Sexual Unsatisfaction	0	0.0	3	6.5	1	2.0
Others	3	10.3	2	4.3	3	6.1
Total	**29**	*	**46**	*	**49**	*

* Because of multiple answers percentages may add up to more than 100.

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