

**Integrated Bio-behavioral Survey (IBBS)  
among Injecting Drug Users in  
Pokhara Valley - 2007**

***Submitted to:***

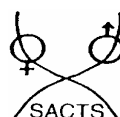
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## ABBREVIATIONS

AIDS	-	Acquired Immuno-Deficiency Syndrome
ASHA	-	Advancing Surveillance, Policies, Prevention, Care & Support to Fight HIV/AIDS
CI	-	Confidence Interval
DIC	-	Drop-in-Centre
ELISA	-	Enzyme Linked Immuno Assays
FHI	-	Family Health International
FSW	-	Female Sex Worker
HIV	-	Human Immuno-Deficiency Virus
IBBS	-	Integrated Bio-Behavioral Survey
ID	-	Identification Number
IDU	-	Injecting Drug User
IEC	-	Information, Education and Communication
LALS	-	Life Giving and Life Saving Society
MARPs	-	Most At Risk Populations
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
RDS	-	Respondent Driven Sampling
RDSAT	-	Respondent Driven Sampling Analysis Tools
RPR	-	Rapid Plasma Reagin
SACTS	-	STD/AIDS Counseling and Training Services
SLC	-	School Leaving Certificate
SMF	-	Siddhi Memorial Foundation
SPSS	-	Statistical Package for the Social Sciences
STI	-	Sexually Transmitted Infection
TPHA	-	Treponema Pallidum Hemagglutination 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 that includes Integrated Biological and Behavioral Survey (IBBS) that is 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 epidemic to inform the HIV response in Nepal.

The IBBS is conducted by NCASC with technical and financial support from Family Health International/Nepal and the United States Agency for International Development (USAID). The current MARPs included in this IBBS 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 the IBBS conducted among 300 male IDUs in the Pokhara Valley. The primary objective of the study was to collect strategic information to analyze trend in risk behavior and HIV and STIs among IDUs.

It is a challenging task to collect information from high-risk population group such as IDUs, FSWs and MSM. These groups are highly stigmatized and potential respondents may be reluctant to come forward to participate in research studies. Innovative sampling methods are needed in order to reach these individuals. The most effective method developed to date is Respondent Driven Sampling (RDS). RDS methodology is a relatively new adaptation of chain referral sampling where subsequent respondents are recruited by previous respondents through their network of acquaintances.

RDS methodology was used in this study to recruit 300 male IDUs. In the first stage of RDS a list of locations where the IDUs inject drugs and gather frequently was prepared for the sampling design. In the second stage, a structured questionnaire was administered to the respondents at centrally located study clinics. The questionnaire collected information on sexual behavior and HIV/AIDS awareness as well as socio-demographics.

Interview was followed by clinical examination by a Health Assistant and collection of blood samples for biological testing of HIV and Syphilis. Study centers with laboratories/clinics were set up at Prithvi Chowk in Pokhara. Samples were collected only after pre-test counseling sessions were held. The participants were also provided syndromic treatment for STI symptoms if warranted. HIV and syphilis test results were provided later at Naulo Ghumti where experienced counselors provided post test counseling.

### **Below are the Key Findings:**

#### **Socio-Demographic Characteristics**

The IDUs were mostly below the age of 30 years (87.3%). Some were below 19 years of age (15.6%).

Many IDUs (65.5%) were unmarried. Around seven in ten IDUs (71%) were living without a sexual partner.



The IDUs in Pokhara Valley represented diverse caste/ethnic groups residing in the valley such as Gurung/Rai (34.3%), Chettri/Thakuri (19.1%) and Tamang/Lama/Magar (17.1%).

### **HIV/STI Prevalence**

The clinical test results indicated that out of 300 IDUs participating in the study, 6.8 percent were HIV-positive. Syphilis history was found among 0.3 percent of IDUs while 1.3 percent was currently infected with syphilis.

HIV prevalence differed significantly according to marital status. Prevalence was higher among IDUs who are or were married (13.2%) than among those who had never been married (3.8%) before.

A statistically significant relation was noted between literacy status and HIV infection. Literate IDUs had 5.6 percent HIV prevalence compared to 29.5 percent among illiterate participants.

Moreover, IDUs who were older than 20 (7.7%) were more likely to be HIV-positive than younger IDUs (1.1%) which may be explained by the relation between HIV prevalence and how long participants have been injecting drugs. A significant relation was observed between these two variables. HIV prevalence was 16.9 percent among those IDUs who had been injecting for more than five years compared with 1.4 percent among those who had been injecting for less than two years.

More markedly, HIV prevalence was significantly higher among those IDUs who had ever injected with a previously used syringe in the past week (25.6%) than those who had never injected with such needle/syringe (5.5%).

### **Injecting Behavior**

Thirty eight percent of IDUs had been injecting drugs for the past two to five years while 32.9 percent had been injecting for less than two years.

The majority of respondents were 20 or younger (60.8%) when they injected for the first time. Around ninety two percent of IDUs injected combination of different drugs.

The majority of respondents (93.2%) had injected drugs the week before the survey. Past week's injecting practice revealed that 7.6 percent respondents had at least once injected with a needle syringe used by someone else, 3.4 percent had used a needle/syringe kept in a public place and five percent had passed their used needle/syringe on to others.

Nearly all respondents (98.9%) knew about the sources for new syringes. Ninety nine percent IDUs mentioned that they could have a new syringe whenever necessary from a drugstore. Similarly a large proportion of IDUs (96.6%) said that needle exchange program conducted by Naulo Ghumti made new syringes available whenever they needed one.

Among those IDUs who had been mobile in the past year 3.4 percent had injected with a pre-used needle/syringe and 4.5 percent had given a needle/syringe to someone else after use at the place/s of their visit.

### **Sexual Behavior**

Overall 96.1 percent IDUs had experienced sexual contact before. Among them, 83.2 percent had been sexually active even in the past year.

The sex partners of IDUs in Pokhara included regular female parents, non-regular female partners as well as female sex workers.

Thirty percent of sexually active IDUs had sex with regular partner in the past year. Most of these (87.9%) had sexual contact with their regular partners in the month preceding the survey.

Fifty one percent of IDUs, who ever had sex, had non-regular female sex partners in the past year. Thirty eight percent of them had sex with their non-regular partners in the previous month.

A total of 49.1 percent of sexually active IDUs have had sexual contact with female sex workers in the past 12 months. Among them, 41.8 percent had sex with FSW in the last month.

Condom use in last sex with sex worker was reported by 83.9 percent IDUs. The proportions of those who used condoms in last sex with regular partner (32.7%) and with non-regular partner (60.5%) were comparatively less. Similar pattern was observed in their last year's sexual contacts.

### **STI and HIV/AIDS Awareness**

Overall, 9.7 percent of IDUs had not heard about STIs.

Five in hundred IDUs (5.4%) had genital discharge and 9.1 percent had genital ulcer/sore in the past year. Among them 17.4 percent had been experiencing genital discharges, while 41.7 percent have had genital ulcer/sore at the time of survey.

Over two fifth (44.4%) of those IDUs who had experienced at least one STI symptom in the past year had not sought any treatment.

All the respondents had heard of HIV/AIDS and 75.3 percent knew someone who had been living with HIV/AIDS or had died because of it.

While 86.9 percent IDUs knew about all three major indicators, abstinence from sexual contact (A), being faithful to one partner (B) and condom use during each sexual contact (C), 73.4 percent of IDUs were aware of all major indicators BCDEF. These indicators are being faithful, consistent condom use, understanding that a healthy looking person can be infected with HIV, knowing that a person can not get the HIV virus from mosquito bite and agreeing that sharing meal with an HIV infected person do not transmit HIV virus.

### **HIV Test**

The majority of respondents (93.9%) knew that a confidential HIV testing facility was available in their communities.

A total of 57.4 percent had ever tested themselves for HIV. Most of these IDUs (87.8%) had received test result.

## **Exposure to the HIV/AIDS Related Programs**

Around 67 percent IDUs had met peer/outreach educators at least once before, 86.6 percent of them had visited a DIC and 37.1 percent had paid visit to a VCT Center in the past year. Very few IDUs (5.7%) had visited an STI clinic.

Around 25 percent IDUs had ever participated in a HIV/AIDS awareness program.

# 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 also estimated about 70,000 people (including children and adults above the age of 49 years) to be infected by HIV in Nepal. There is 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 conducted among IDUs in Pokhara valley. 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 in 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 52 percent HIV prevalence rate among IDUs in Kathmandu. IDUs, who lived in the Kathmandu Valley had higher HIV prevalence compared to IDUs from other places. In Pokhara about 22 percent IDUs were found HIV positive both in 2003 and 2005 rounds of IBBS. Similarly, in three districts (Morang, Sunsari, and Jhapa) of Eastern Terai HIV among IDUs was 35 and 32 percent in 2003 and 2005 respectively (IBBS, New ERA/SACTS/FHI 2005). Although HIV prevalence among IDUs in Kathmandu had dropped in 2005 since 2003, it was still alarmingly high.

This third round of IBBS was conducted in the Kathmandu Valley, Pokhara, Eastern Terai and West to Far West Terai. This report deals with the findings in Pokhara.

## **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 also undertaken primarily to determine the prevalence of HIV and to assess HIV/STI related risk behavior among IDUs in the Pokhara Valley.

This study also collected specific information on IDUs; their socio-demographic characteristics, level of awareness about HIV/STI and exposure to intervention programs in the Pokhara Valley. For the first time IDUs were tested for syphilis infection as well in this round of IBBS.

### **2.2 Study Population**

The cross-sectional study was conducted among IDUs who are considered as one of the 'core groups' for transmission of HIV/STI. For the purposes of this study the inclusion definition for IDUs was "those current injectors aged 16 years or above who had been injecting drugs for at least three months prior to the date of survey".

#### ***2.2.1 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 basic statistical formula (Annex 2). Based on the formula a total of 300 IDUs were included for this study.

The respondent-driven sampling (RDS), a form of chain-referral, was used to recruit participants. The RDS, unlike the "snowball" method, attempts to overcome the biases such as masking, volunteerism and over sampling of groups with large networks and thus gives unbiased estimates of population parameters (Heckathorn, 1997) hence provides more representative samples.

Since it relies on social networks, RDS has the potential to reach individuals who are not easily accessible such as MSM, IDU (Injecting Drug User), MSWs and FSWs. In RDS, the sampling frame is created based on information collected from the participants during the sampling process itself. This information includes (1) who recruited whom, (2) the relationship of the participant to the recruiter; RDS population estimates are based on an assumption that the recruiter and the participant know each other, (3) the participants' personal network sizes; network size is used to estimate the average network size by different sample characteristics such as gender, race/ethnicity and age.

Since RDS population estimates are based on the recruiter and recruit knowing one another, RDS design includes means for encouraging participants to recruit those they already know. This involves offering rewards for recruiters and making recruitment rights scarce through quotas, so that recruitment is not wasted on strangers (Ramirez-Valles et. al., 2005).

The preliminary mapping exercise carried out with the help of some local NGO partners before the initiation of the actual field study acquainted the study team with many IDUs, their gathering locations and their networks.

This information helped the study team recruit a total of nine known IDUs as "seeds" who met study eligibility criteria from different sites and different injecting groups. In some cases the local key informants helped in seed recruitment process.

Seeds were informed of the study protocol and procedures and were encouraged to recruit other eligible individuals from their social networks to participate in the study. The participants recruited by the seeds were then asked to recruit the next wave of participants, with the process continuing until the target sample size was achieved. Each participant who agreed to become a study recruiter was given three referral coupons to distribute to others. The referral coupon had a unique serial number that was used to link the recruiter to his recruit.

### ***2.2.2 Seeds and Recruitment***

Following RDS theory, research staff recruited the seeds (e.g., initial participants), who then began the chain referral by recruiting their peers into the study. It was decided that "seeds" selected to initiate the recruitment process needed to be as diverse as possible (heterogeneous in age, gender, ethnicity and for how long participants were injecting drugs).

The first wave of participants recruited for the study was brought in by seeds. Thereafter, each person recruited for and enrolled in the study received three recruitment coupons to recruit their peers into the study. Each coupon was uniquely coded in order to link recruiters with recruits. The coupon ID numbers were carefully recorded in each questionnaire.

The recruitment process in this study started with nine "seeds". Each "seed" was given three coupons to pass on three peers they recruited for the study. These peers who successfully participated in the study were given another three coupons. In this way the recruitment process continued until 300 IDUs were recruited. At the end some "seed" and "recruiter" generated up to 14 waves. Of the total nine "seeds", one seed completed 14 waves, one seed generated six waves, another seed completed five, and one seed recruited three waves. Five others completed two waves each (Annex 3). By RDS theory, if at least six waves of recruitment can be generated there will be equilibrium, which means that the recruited IDUs will sufficiently represent the population being sampled.

Since RDS is a dual incentive system to induce recruitment, each participant received Rs. 100 (equivalent to \$ 1.6) for the participation in the study and another Rs. 50 (equivalent to \$ 0.8) for each individual they recruited to the study. A participant could have received up to Rs. 50 for successfully recruiting three peers in the study.

Those who did not meet the study criteria and those who were not willing to participate in the study because of personal reasons were not recruited in the study. In total there were 51 refusals. Forty-four did not meet the study criteria, four were afraid of drawing blood for the test and three said that they were too busy to be interviewed.

## 2.3 Study Process

A quantitative research approach was adopted in the study. Structured questionnaires were used to collect behavioral data relating to drug injection, syringe/needle sharing and sexual behavior among the IDUs. Additionally, some demographic and social characteristics were collected. In order to draw up a comparative analysis of the behavioral trends over the years questions asked during the first and the second round were repeated. A new section was added to the questionnaire this year to derive information on issues like exposure of the IDUs to the 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 the referral cards were asked some screening questions in order to ensure that they met the inclusive criterion set for the study. Injecting marks were also observed for confirming their injecting behavior.

Strict confidentiality was maintained throughout the study process. The names of the study participants or their full addresses were not recorded anywhere. Instead, they were provided a unique ID number written on a plastic-coated card. 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 the card were provided the HIV and Syphilis test results verbally with pre and post-test counseling.

**The fieldwork started on 13 June and was completed on 11 August, 2007.**

### 2.3.1 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, 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 prior to the interview and collection of blood sample in the presence of a witness. 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.

### 2.3.2 Clinical and Laboratory Procedure

The study participants were clinically checked for any symptom of STIs by the health assistant who also filled in a checklist with the 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, alkalising agents and vitamins were given as necessary.

About 5 ml blood sample 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 of the study participant. The specimens were transported by SACTS in Kathmandu in a cold box once in every 10 days. The serum samples were stored at a temperature of  $-12^{\circ}$  to  $-20^{\circ}\text{C}$  at SACTS laboratory.

Syphilis was tested using *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 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 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 “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 (NCASC, 2004).

## 2.4 Study Management

The study was conducted by a team comprised of one study director, one research coordinator, one research officer, two research assistants and field teams. The field team 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 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 STI and HIV/AIDS and pre-test counseling. The study team was also made familiar with the general behavior of IDUs and skills required to deal with them by personnel from Recovering Nepal, an organization that works with IDUs. In addition to these, the training focused on providing a clear concept of informed consent to the research team.

A centrally located study center was established at Prithvi Chowk in Pokhara for the study purpose (Annex 6). Individual interviews, clinical examination and blood collection process were carried out in separate rooms.



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.

## **2.5 Post-Test Counseling and Test Result Distribution**

All the study participants who went to receive their test results with their ID cards were provided HIV and Syphilis test results with post-test counseling by a trained counselor at Naulo Ghumti VCT center. The study participants were informed about the location and operating hours of the VCT site right after the collection of their blood sample for the test.

Post-test counseling and individual report dissemination were completed between 6 July and 22 August 2007 at the Naulo Ghumti VCT Centre. Out of the 300 IDUs tested for HIV, only 11.3 percent turned up for the test results (Annex 7). This low turnover might be because there was no provision for reimbursement of transportation cost which would have otherwise prompted the IDUs to visit the VCT center and collect the report. Secondly the time gap between the actual interview and test result dissemination might have also diminished their concern for the test result. Trained counselors from the VCT of Naulo Ghumti gave the test results to those who turned up 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 HIV and STI.

## **2.6 Data Management and Analysis**

Data were entered using FoxPro Software. Double entry procedure was performed. Respondent-Driven Sampling Analysis Tool (RDSAT) software (RDSAT 5.6, Cornell University, 2005) was used for analysis of the sample. This software is designed to control three types of potential biases in chain-referral sampling namely (1) affiliation bias, (2) homophily and (3) network size bias (Heckathorn 1998).

Raw data was first prepared using SPSSWIN Version 11. This included generating new variables and re-coding missing values. Datasets were then converted to Microsoft Excel files and then to RDS files (Tab Delimited Text). Frequency, cross-tabulation, and prevalence estimates of key-indicators were performed in RDSAT.

RDSAT the pull-in outlier option was used to eliminate extremely small and large outliers in network sizes. When the program encounters an individual whose network size is outside of the specified bounds, their network size is set to the value of the nearest lower or upper bound (percentage) with the help of pull in outliers option. The RDSAT analysis for this study used 5 percent pull-in outliers of network size.

There were certain limitations in using RDSAT for the entire data in the report. Some data obtained from the study did not meet the required numerator to be calculated with RDSAT. Such data have been calculated using SPSS and have been marked with asterisk in the tables in this report. They represent unadjusted proportions.

### 3. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF IDUs

This chapter describes the socio-demographic characteristics of IDUs in Pokhara valley.

#### 3.1 Demographic Characteristics

The IDUs who took part in this survey were young; 87.3 percent were below the age of 30 and 58.6 percent were younger than 25.

The majority of IDUs (65.5%) were single. Around one third (29.9%) were married and a small proportion was divorced/widowed/separated. Nine in ten IDUs who had ever married (90%) had chosen their partners before they turned 25. Nearly all married IDUs lived with their spouses whereas the rest lived alone.

**Table 3.1: Demographic Characteristics of the IDUs**

Demographic Characteristics	Estimated Population Proportions (%)	95% CI
<b>Age (N=300)</b>		
<=19 Yrs	15.6	10.5 – 21.6
20-24	43.0	36.7 – 49.5
25-29	28.7	22.9 – 34.8
30-34	7.5	4.3 – 11.3
35-42	5.3	2.1 – 8.1
<b>Marital status (N=300)</b>		
Married	29.9	23.8 – 35.9
Divorced/Separated/ widower	4.6	1.8 – 7.7
Never married	65.5	59.6 – 71.9
<b>Age at first marriage (n=116)</b>		
<=19	34.1	17.7 – 52.0
20-24	55.9	38.8 – 71.8
25 and above	10.1	3.0 – 19.6
<b>Currently living with (N=300)</b>		
Spouse	29.0	23.1 – 35.0
Living with female sexual partner	0.3	0.2 – 0.8
Living without sexual partner/alone	70.7	64.6 – 76.5

#### 3.2 Social Characteristics

One in four IDUs (25.5%) had no or little education having attended only up to primary school, if any school at all. Nearly half (48.3%) had completed secondary level and one quarter (25.7 %) had passed SLC or attended higher level of education.

IDUs from all major caste/ethnic groups in Pokhara were represented in the study. Gurung/Rai made up the largest part of the respondents with 34.3 percent followed by Chhetri/Thakuri caste (19.1%), Tamang/Lama/Magar ethnic groups (17.1%) and other castes (13.9 %)

**Table 3.2: Social Characteristics of the IDUs**

Social Characteristics	Estimated Population Proportions (%) (N=300)	95% CI
<b>Education</b>		
Illiterate	5.1	2.6 – 8.5
Literate only	0.5	0.4 – 1.5
Primary	20.4	15.3 – 25.9
Secondary	48.3	41.2 – 54.3
SLC and above	25.7	19.5 – 32.6
<b>Ethnicity</b>		
Brahmin	5.3	2.7 – 8.2
Chhetri/Thakuri	19.1	14.1 – 24.3
Newar	8.5	4.9 – 12.3
Tamang/Lama/Magar	17.1	13.3 – 21.4
Gurung/Rai	34.3	27.1 – 40.5
Occupational caste	13.9	9.9 – 19.3
Others (Musalman, Terai caste)	1.9	0.8 – 3.3
<b>Duration of stay in Pokhara Valley</b>		
Since birth	70.6	64.8 – 76.1
< =5 yrs.	6.7	4.2 – 9.3
More than 5 years	22.6	17.6 – 28.2

Seven in ten (70.6%) IDUs were born in Pokhara, 22.6 percent had been living in the region for more than five years while 6.7 percent had moved to the valley in less than five years ago.

## 4. PREVALENCE OF HIV AND STI

Enzyme Linked Immuno Sorbent Assay (ELISAs) was used to detect HIV antibody. Syphilis was tested using Rapid Plasma Reagin (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 Pokhara about 6.8 percent IDUs are estimated to be HIV-positive. Out of 300 IDUs participating in the study, only one IDU (0.3%) had syphilis history while four (1.3%) had active syphilis. Because of the small number of cases RDSAT could not estimate the syphilis prevalence rate for IDUs in Pokhara. This indicates that sexually transmitted infection is a relatively minor problem among IDUs in the valley.

**Table 4.1: HIV and STI Prevalence among IDUs**

HIV and STI Prevalence	Estimated Population Proportions (%) (n=300)	95% CI
<b>HIV and STI Prevalence</b>		
HIV	6.8	4.0 – 10.2
Active Syphilis	1.3 *	NC
Syphilis History	0.3 *	NC

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

### 4.2 Relation between Socio-Demographic Characteristics and HIV Infection

HIV prevalence was significantly higher among respondents aged 20 years and above compared to younger IDUs. The infection rate was 7.7 percent among IDUs aged 20 or more years and 1.1 percent among those young IDUs, aged 20 or less. This difference is statistically significant.

HIV prevalence differed significantly according to marital status also. Prevalence rate was higher among ever-married respondents (13.2%) than among single IDUs (3.8%). A statistically significant relation was noted between literacy and HIV infection; illiterate IDUs (29.5%) were five times more likely to be HIV positive than literate IDUs (5.6%).

**Table 4.2: Relation between Socio-Demographic Characteristics and HIV Infection**

Socio-demographic characteristics	Estimated HIV Prevalence (%) (N=300)	95% CI
<b>Age</b>		
Below 20 years	1.1	0.8 – 3.8
20 years and above	7.7	4.6 – 11.4
<b>Marital status</b>		
Ever married	13.2	6.6 – 20.3
Never married	3.8	1.7 – 6.4
<b>Literacy</b>		
Illiterate	29.5	8.9 – 64.3
Literate/formal School	5.6	3.1 – 8.4
<b>Total</b>	<b>6.8</b>	<b>4.0 – 10.2</b>

### 4.3 Relation between Drug Injection Behavior and HIV

Unsafe injecting practices often put IDUs at greater risk of HIV infection. This section examines the relationship between HIV prevalence and some of the drug injecting practices.

As the table 4.3 indicates, participants who have been injecting drugs for longer period of time were significantly at greater risk of HIV. HIV prevalence was more than three times higher among those who may have been injecting drugs for more than five years (16.9%) than those who have been injecting drugs for less than five years (5.4%). This difference is statistically significant.

Similarly the rate of HIV infection was significantly higher among IDUs who had been injecting drugs two or more times a day (18.5%) than those who inject six or less times in a week (2.1%).

**Table 4.3: Relation between Drug Injecting Behavior and HIV Infection**

Drug injecting behavior	Estimated HIV Prevalence (%) (n=300)	95% CI
<b>Injecting drugs since</b>		
Less than 2 years	1.4	0.4 – 3.5
2-5 years	4.0	1.3 – 8.0
More than 5 years	16.9	9.0 – 26.0
<b>Frequency of injected drugs in the past week</b>		
Up to 6 times a week	2.1	0.7 – 3.7
Everyday	4.8	1.5 – 8.6
2 or more times a day	18.5	8.2 – 26.8
<b>Used another's previously used needle/syringe during the past week</b>		
Not injected/Never Used	5.5	3.1 – 8.6
Used	25.6	5.4 – 49.1
<b>Used a needle/syringe kept in public place during the past week</b>		
Not injected/Never Used	6.1	3.6 – 9.0
Used	26.8	7.0 – 56.9
<b>Total</b>	<b>6.8</b>	<b>4.0 – 10.2</b>

Furthermore findings from this round of survey indicate that sharing syringes put the IDUs at a higher risk of HIV. HIV infection rate was 25.6 percent among those IDUs who had used someone else's syringe in the past week compared with 5.5 percent among those who had either not injected in the past week or never injected with a used needle/syringe. In the same way, those respondents who had injected with a needle/syringe left at public place had higher HIV prevalence rate (26.8%) than other IDUs who had not used needle/syringe kept in public places in the past week (6.1%).

### 4.4 Relation between Sexual Behavior and HIV

This section examines sexual behavior and its relation to HIV among IDUs in the Pokhara Valley. It is important to interpret the findings with caution in this section as some IDUs may have changed their past sexual behavior after being diagnosed with HIV.

All IDUs in this survey had entered into a sexual relationship before. The data indicates those who had sex in the last 12 months, either with a regular partner (8.1%), a non-regular partner (6.7%) or with a sex worker (8.6%) were *less* likely to be HIV-positive than those who did not have sex with either of these type of partners (9.5%, 11% and 9.3% respectively). Since HIV is a sexually transmitted disease, this finding comes across as counterintuitive hence requires a careful interpretation. One of the possible explanation as to why not having sex is associated with higher HIV prevalence is that IDUs who are diagnosed with HIV may be

more likely to restrain from having sex, at all, with either type of partners; regular, one-time or paid.

There is, however, a more straightforward relation between the type of partners and HIV prevalence. The data indicates that IDUs who had sex with sex workers in the last 12 months (8.6%) were more likely to be HIV-positive than those who had regular partners (8.1%) or non-regular partners (6.7%).

**Table 4.4: Relation between sexual behavior and HIV Infection**

Sex with different partners in the past 12 months	Estimated HIV Prevalence (%) (n=300)	95% CI
<b>With regular partner</b>		
Yes	8.1*	NC
No	9.5*	NC
Never had sexual experience	0.0*	NC
<b>With Non-regular partners</b>		
Yes	6.7*	NC
No	11.0*	NC
Never had sexual experience	0.0*	NC
<b>With sex worker</b>		
Yes	8.6*	NC
No	9.3*	NC
Never had sexual experience	0.0*	NC
<b>Number of Regular partner in the past 12 months</b>		
0 partner	9.0*	NC
1 partner	8.4*	NC
2 partners	0.0*	NC
<b>Number of non-regular partner in the past 12 months</b>		
0 partner	7.9	3.7 – 13.1
1 partner	5.3	1.4 – 9.8
2 or more partners	6.5	1.5 – 11.8
<b>Number of sex workers in the past 12 months</b>		
0 sex worker	8.7*	NC
1 sex worker	0.0*	NC
2 or more sex workers	11.1*	NC
<b>Total</b>	<b>6.8</b>	<b>4.0 – 10.2</b>

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

NC; Not calculate as RDSAT conditions were not met.

It is interesting to note here that IDUs who had sex with regular partners in the last year were more likely to have HIV than those who had sex with non-regular partners. This finding may be partly explained by a change in sexual behavior; HIV-positive IDUs may have stopped having non-regular partners after being diagnosed or by consistent use of condoms with non-regular partners which will be covered later in this report.

## 5. DRUG USE, NEEDLE SHARING AND TREATMENT

IDUs are considered as one of the core groups of HIV transmission primarily because of their unsafe drug using and needle sharing habits. An understanding of current drug using practices among IDUs helps in designing effective intervention strategies. This chapter deals with the drug using practices of the IDUs. The information in this chapter relates specifically to alcohol intake, drug using and needle sharing habits as well as addiction treatment among IDUs in Pokhara valley.

### 5.1 Alcohol Consumption and Oral Drug Use among IDUs

Overall, 82.2 percent respondents had consumed alcohol at least once in the month preceding the survey. Over one-third (34.5%) had consumed alcohol everyday in the past month while around 28 percent had alcohol less than once a week.

The majority of IDUs (93.5%) had been using drugs for more than two years and a small proportion (6.5%) for less than two years.

**Table 5.1: Alcohol Intake and Oral Drug Use among IDUs**

Alcohol consumption and oral drug use	Estimated Population Proportions (%) (n=300)	95% CI
<b>Alcohol used during the past month</b>		
Everyday	34.5	29.1 – 41.1
More than once a week	27.8	22.4 – 33.1
Once/Less than once a week	19.9	14.7 – 24.7
Never	17.8	12.5 – 23.2
<b>Duration of drug use</b>		
Less than 2 years	6.5	3.6 – 9.8
2 – 5 years	37.9	31.7 – 44.4
More than 5 years	55.5	48.9 – 61.9

Use of oral/inhaling drugs was common practice among the IDUs in Pokhara. They had used a variety of oral/inhaling drugs in the week preceding the survey. Marijuana locally known as Ganja was the most popular drug taken by 67.7 percent of IDUs in the past week. This was followed by Nitrostate (34.1%) Charas (26.3%), Proxygin (21.1 %), brown sugar (20.8%) and Nitrosun (20.2%) (Table 5.2).

**Table 5.2: Types of Drugs Used Orally by IDUs in the Past Week**

Types of drugs used orally	Estimated Population Proportions (%) (n=300)	95% CI
Ganja	67.7	61.2 – 73.5
Nitrostate	34.1	27.0 – 39.7
Charas	26.3	20.7 – 31.9
Brown sugar	20.8	16.1 – 25.7
Proxygin	21.1	16.7 – 26.9
Nitrosun	20.2	15.1 – 25.1
Codeine	7.5	4.7 – 10.7
Combination	0.9	0.3 – 1.9
Others	11.1	7.5 – 15.5

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

### 5.2 Drug Injecting Practice of IDUs

One third of respondents (32.9%) started injecting drug less than two years ago. Around one in four (37.9%) had been injecting drugs for the past 2 to 5 years and 29 percent for more than five years.

The majority of respondents had started injecting drugs when they were relatively young. While 60.8 percent of them were less than 21 when they had their first drug injected, 39.2 percent were 21 or over.

As for the frequency of injection in the past week, only a small minority (6.8%) had not injected in the week preceding this survey. Twenty eight percent of respondents had injected once a day 23 percent had injected 2 to 3 times a day in the past week. A small fraction of respondents (1.1%) had injected drugs more than four times a day in the past week.

IDUs were also asked about the number of shots last time they injected drugs. Sixty six percent had injected only once while 23.7 percent had injected twice. Around 10 percent had more than three shots last time they injected drugs.

**Table 5.3: Drug Injecting Practice of IDUs**

Drug Injecting practice	Estimated Population Proportions (%) (n=300)	95% CI
<b>Duration of drug injection habit</b>		
Less than 2 years	32.9	27.0 – 39.1
2 – 5 years	37.9	32.3 – 43.7
More than 5 years	29.2	23.2 – 35.3
<b>Age at first drug injection</b>		
Up to 20 years	60.8	54.4 – 67.4
21 + years	39.2	32.6 – 45.6
<b>Frequency of drug injections within the past week</b>		
Not injected	6.8	2.8 – 11.0
Once a week	5.6	2.1 – 8.1
2-3 times a week	18.1	13.2 – 25.1
4-6 times a week	17.7	12.9 – 22.2
Once a day	28.0	22.4 – 34.6
2-3 times a day	22.7	17.7 – 28.2
4 or more times a day	1.1	0.3 – 2.1
<b>Frequency of drug injection in the last day</b>		
1 time	66.0	60.3 – 72.2
2 times	23.7	18.1 – 28.9
3 or more times	10.3	7.1 – 14.1

Overall, one in five IDUs (21.3%) reported not having injected drugs on the day before the interview (not shown in the Table). The main reason for not injecting was being short of money (43.8%) trying to quit the habit slowly (37.5%), taking other medicines (6.3%) and unavailability of drugs in the market (4.7%) (Annex 8).

IDUs injected on different parts of the body according to the ease in locating the veins. 39.3 percent injected on their wrists, 18.7 percent on their elbows and 13 percent said that they injected on their arms (Annex 9).

Over half of the respondents (58.7%) reported gathering and injecting near forest/bush or some woodland. Some met at their own room or that of a friend (17.7%) and some at riverbank/slum area (12.7%) for injecting drugs (Annex 10).

The IDUs in Pokhara predominantly injected a combination of different drugs (92%). Types of drugs injected by them are listed in the following table (for types of combinations see Annex 11).



**Table 5.4: Types of Drugs Injected by IDUs**

Types of drugs injected	Estimated Population Proportions (%) (n=300)	95% CI
Combination	91.9	88.1 – 95.8
Diazepam	5.5	3.1 – 9.9
Tidigesic	5.0	2.4 – 8.9
Phenergan	5.0	2.4 – 8.7
Brown sugar	3.3	1.3 – 5.8
Calmpose	3.2	1.3 – 5.2
Others	11.8	8.1 – 15.8

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

In the past month five IDUs (1.7%) had switched from one drug to another. Three IDUs had done so because they had been facing problems in locating veins (Annex 12).

### 5.3 Syringe Use and Needle Sharing Habits

Syringe use and needle sharing habits of the IDUs were assessed in terms of their last three injections. Respondents were specifically asked about the sources of needle/syringe used in the last three injections. Answers provided by the IDUs have been categorized as low risk (Low risk: Use of new needles and syringes obtained from different places) or high risk (High Risk: Use of own previously used syringe, use of needles and syringes given by friends or relatives, Use of needles and syringes kept in public places by himself or others) injecting behavior in the following table (Table 5.5).

**Table 5.5: Syringe Use and Needle Sharing Habits 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	
	Estimated Population Proportions (%) (n=300)	95% CI	Estimated Population Proportions (%) (n=300)	95% CI	Estimated Population Proportions (%) (n=300)	95% CI
<b>Needle/syringe used:</b>						
Low risk behavior	99.0	98.1 – 99.7	97.4	95.7 – 98.9	98.1	96.6 – 99.3
High risk behavior	1.0	0.3 – 1.9	2.6	1.1 – 4.3	1.9	0.7 – 3.4
<b>Persons in the group using the same needle/syringe</b>						
2 person	0.3 *	NC	0.7 *	NC	1.0 *	NC
3 or more persons	0.0 *	NC	0.7 *	NC	0.3 *	NC
None/Alone	99.7 *	NC	98.7 *	NC	98.7 *	NC

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

As reflected in the above table most of the IDUs had consciously avoided high-risk behaviors like the use of pre-used needles and syringes in their last three injections. More than nine in every ten respondents had used a new needle either self-purchased, given by a friend or an NGO.

Overall one percent respondents in most recent, 2.6 percent in second most recent and 1.9 percent in the third most recent injection had reported high-risk behavior. They had mostly injected with an old needle/syringe they themselves, had used before. A small percentage of respondents had shared the same needle/syringe with two (1%) or three (0.3%) others.

Data on needle/syringe using behavior in the week preceding the survey also point towards increasing consciousness among current IDUs regarding the risks associated with sharing needle/syringe. A significant proportion of IDUs (92.4%) had never used a needle/syringe that had been used by others while 95 percent had never given any needle/syringe to anyone

else after using them. The majority (96.6%) had also avoided needles/syringes kept in a public place and never shared syringe (92.7%)

Only a small proportion of respondents had ever injected with a needle/syringe used by someone else (7.6%), used a needle/syringe kept in a public place (3.4%), or had given their used needle/syringe to others (5%). 8.5 percent had shared needle/syringes with two partners; mostly their friends (5.6%).

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

Needle/syringe use throughout the past week	Estimated Population Proportions (%) (N=300)	95% CI
<b>Used a needle/syringe that had been used by another</b>		
Never used	92.4	88.9 – 95.6
Used	7.6	4.4 – 11.1
<b>Used a needle/syringe that had been kept in public place</b>		
Never used	96.6	94.5 – 98.3
Used	3.4	1.7 – 5.5
<b>Gave a needle/syringe to some one</b>		
Yes	5.0	2.9 – 7.4
No	95.0	92.6 – 97.1
<b>Number of needle/syringe shared partners</b>		
None	91.5	88.2 – 95.0
Two partners	8.5	5.0 – 11.8
<b>Shared needle/syringe with</b>		
Friend	5.6	3.2 – 8.7
Not shared	92.7	89.0 – 95.6
Others	1.7	0.5 – 3.3

## 5.4 Drug-Sharing Behavior

Table 5.7 reflects that although the majority of the respondents had refrained from unsafe drug sharing practices, some put them selves at risk by using a pre-filled syringe (4.7%) or a syringe that was filled by another syringe (4.4%). Moreover eight percent (7.6%) had drew drugs from a common container and six percent (5.5%) had shared one or the other injecting equipments like bottle, spoon, cooker, vial/container, cotton/filter, water with others at least once in the week before (Table 5.7).

**Table 5.7: Past Week's Drug-Sharing Behavior**

Drug Sharing Practice during Past Week	Estimated Population Proportions (%) (N=300)	95% CI
<b>Injected with a pre-filled syringe</b>		
Yes	4.7	2.7 – 6.9
No	95.3	93.1 – 97.3
<b>Injected with a syringe after drugs were transferred into it from another's syringe</b>		
Injected with such syringe	4.4	2.4 – 6.6
Never injected with such syringe	95.6	93.4 – 97.6
<b>Shared a bottle, spoon, cooker, vial/container, cotton/filter and rinse water</b>		
Shared	5.5	2.8 – 8.8
Never shared	94.5	91.2 – 97.2
<b>Drew drug solution from a common container used by others</b>		
Drew at least once	7.6	4.7 – 10.9
Never	92.4	89.1 – 95.3

Information on the movement of the IDUs both within and outside the country and their injecting practices in the place/s they visited was also collected during this survey. Of the total 300 IDUs in Pokhara, 43 percent had injected drugs at the places they visited in the past year.

The majority of respondents who had injected drugs at the place/s of their visit had neither used others' needle/syringe (99%) nor had given their used needle/syringe to anyone else (95.5%), whereas a small number of IDUs reported injecting with somebody else's previously used syringe (1%) or giving their used needle/syringe to others (4.5%).

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

Injecting practice in other parts of the country and out of the country	Estimated Population Proportions (%)	95% CI
<b>Injected in other parts of country as well as out of country (n=300)</b>		
Yes	43.0	36.4 – 49.6
No	57.0	50.4 – 63.6
<b>Used a needle/syringe that had been used by another (n=146)</b>		
Yes	3.4*	NC
No	96.6*	NC
<b>Gave a needle/syringe to someone after use (n=146)</b>		
Sometimes – always	4.5	0.5 – 14.6
Never	95.5	85.5 – 99.5

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 5.5 Needle/Syringe Cleaning Practice

Previous studies have shown that IDUs follow different practices of cleaning a used needle/syringe before using them again. Improper methods of cleaning not only reflect lack of awareness but also put IDUs at a greater risk of HIV transmission. In Pokhara, about 15 percent IDUs had cleaned a pre-used needle/syringe in the past week. Among them, only 4.2 percent had cleaned it with bleach before re-using it. Others had used saliva, water, distilled water or paper/cotton to clean their needle/syringe.

**Table 5.9: Needle/Syringe Cleaning Practice of IDUs**

Needle/Syringe Cleaning Behavior	Estimated Population Proportions (%)	95% CI
<b>Cleaned previously used needle/syringe in the past week (n=300)</b>		
Yes	14.6	10.3 – 19.1
No	85.4	80.9 – 89.7
<b>Ways of cleaning needle/syringe (n=48)</b>		
Bleach	4.2 *	NC
Without bleach	95.8 *	NC

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 5.6 Accessibility of Syringe

The majority of respondents (98.9%) knew about the sources for new syringes. Ninety nine percent IDUs mentioned that they could have a new syringe whenever necessary from a drugstore. Similarly a large proportion of IDUs (96.6%) said that needle exchange program conducted by Naulo Ghumti made new syringes available whenever they needed one. Additionally 21.8 percent IDUs said that they could have new syringe from hospitals.

**Table 5.10: Knowledge of Sources of New Syringe among IDUs**

Descriptions	Estimated Population Proportions (%)	95% CI
<b>Could obtain new syringe (n=300)</b>		
Yes	98.9	97.9 – 99.7
No	1.1	0.3 – 2.1
<b>Could obtain syringe from # (n=295)</b>		
Drugstore	99.0 *	NC
Needle exchange program (Naulo Ghumti)	96.6	93.6 – 98.9
Friends	5.0	2.8 – 7.8
Hospital	21.8	16.6 – 27.4
Health worker	0.7 *	NC
Drug seller	0.3 *	NC
Others	2.5	0.6 – 5.0

Note: # Because of multiple answers percentages may add up to more than 100.  
 Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 5.7 Treatment Status

Table 5.11 shows the status of treatment received by the IDUs in Pokhara. Sixty seven percent had not received any kind of treatment so far. Out of those who have ever been treated, 32.2 percent had been treated less than six months before the survey, and 24.3 percent had received treatment 6-11 months prior to the survey. Others had been treated more than a year ago. Types of treatment received by the IDUs mostly included detoxification treatment with the help of other drugs (23.5%) or residential rehabilitation (21%) (See Annex 13 for NGO list and treatment provided).

**Table 5.11: Treatment Received by IDUs**

Treatment for de-addiction	Estimated Population Proportions (%)	95% CI
<b>Treatment status (n=300)</b>		
Ever treated	33.0	27.4 – 38.9
Never treated	67.0	61.2 – 72.6
<b>When treatment was received (n=115)</b>		
Less than 6 months	32.2 *	NC
6-11 months before	24.3 *	NC
12-23 months before	25.2 *	NC
24-35 months before	8.7 *	NC
36-47 months before	6.1 *	NC
48 or more months before	2.6 *	NC
<b>Types of treatment received# (n=115)</b>		
Detoxification w/other drugs	23.5	18.2 – 28.9
Residential rehabilitation	21.0	16.1 – 26.4
Out patient counseling	8.6	5.0 – 12.5
Detoxification w/no drugs	2.7	0.5 – 5.6
Other treatment	5.2	3.0 – 7.9

Note: Because of multiple answers percentages may add up to more than 100.  
 Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 6. SEXUAL BEHAVIOR AND CONDOM USE

HIV transmission among drug users is most often correlated with their needle/syringe-sharing behavior. This combined with 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 the IDUs.

### 6.1 Sexual Behavior of IDUs

The majority of IDUs in Pokhara were sexually active; 96.1 had experienced sexual intercourse before and 83.2% had sex in the past 12 months. Among those who had ever had sex before, a high proportion (92.8%) was aged less than 20 at the time of their first sexual encounter. The majority (83.3%) of those who had sex in the last 12 months had more than one partner. Around 11 percent respondents had seven or more sex partners in the past year.

**Table 6.1: Sexual History of IDUs**

Sexual Behavior	Estimated Population Proportions (%)	95% CI
Had sexual intercourse (n=300)	96.1	93.6 – 98.5
Never had sexual intercourse	3.9	1.5 – 6.4
<b>Age at first sexual intercourse (n=289)</b>		
Below 20 years	92.8	89.4 – 96.0
20 years of age and above	7.2	4.0 – 10.6
<b>Sexual intercourse in the past 12 months (n=289)</b>		
Yes	83.2	78.0 – 87.9
No	16.8	12.1 – 22.0
<b>Numbers of different sexual partners in the past 12 months (n=242)</b>		
1 partner	26.7	20.0 – 37.0
2 –3 partners	34.2	24.4 – 40.1
4 – 6 partners	28.2	20.7 – 36.7
7 or more partners	10.9	6.8 – 15.9

Among those respondents who had at least one sexual contact in the past 12 months, 30 percent had sex with regular female partner in the past year. Although the majority of them (96%) had one regular female sex partner, four percent reported having two regular partners. Nine in ten (87.9%) IDUs with regular partners mentioned that they had sexual contact with their regular partners in the month preceding the survey. Seventy eight percent of them had more than five sexual encounters with their regular partners during the course of the month preceding the survey.

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

Sexual practice	Estimated Population Proportions (%)	95% CI
<b>Sex with a regular female sex partner during the past 12 months (n=289)</b>		
Yes	30.0	23.6 – 36.0
No	70.0	64.0 – 76.5
<b>Regular partner (n=99)</b>		
1 partner	96.0*	NC
2 partners	4.0*	NC
<b>Sex with a regular female sex partner during last month (n=99)</b>		
Yes	87.9*	NC
No	12.1*	NC
<b>Frequency of sex with last regular female sex partner during last month (n=87)</b>		
1- 4	22.0	4.2 – 34.8
5+	78.0	65.5 – 95.9

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

The respondents were also asked whether they ever had sex with non-regular female partners in the past year. "Non-regular partner" definition included those sex partners who are neither respondents' spouses nor are their live-in partners and who did not exchange money or drugs for sex.

Table 6.3 shows that 51 percent IDUs had sex with non-regular female partners in the past year. Of them, little over a half (53.1%) had two or more non-regular partners. Thirty eight percent of IDUs with non-regular female partners had sexual contact with them in the last one-month and among them 20.7 percent had five or more sexual contacts in the month before the survey.

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

Sexual practice	Estimated Population Proportions (%)	95% CI
<b>Sex with non-regular female sex partner in the past 12 months (n=289)</b>		
Yes	51.0	45.5 – 57.9
No	49.0	42.1 – 54.5
<b>No. of Non-Regular female sex partner in the pas 12 months (n=135)</b>		
1 partner	46.9	27.1 – 59.4
2 or more partners	53.1	40.6 – 72.9
<b>Sex with non-regular female sex partner during last one month (n=135)</b>		
Yes	38.0	25.2 – 50.4
No	62.0	49.6 – 74.9
<b>Frequency of sex during last one month with last non-regular female sex partners (n=58)</b>		
1- 4	79.3 *	NC
5+	20.7 *	NC

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

In order to further examine the sexual behavior of the IDUs they were also asked if they had ever maintained sexual relation with sex workers. In this context, "sex workers" are defined as those who bought or sold sex in exchange for money or drugs.

Nearly half of sexually active IDUs (49.1%) had sex with female sex workers during the past 12 months and 41.8 percent in the month preceding the survey.

The majority of those who had sex with FSW in the last year (80.1%) had done so with more than two partners. A considerable proportion of those who had sex with FSWs (83.6%) in the last month have had less than five sexual contacts in the month preceding the survey.

**Table 6.4: Sexual Intercourse of IDUs with Female Sex Worker**

Sexual practice	Estimated Population Proportions (%)	95% CI
<b>Sex with female sex worker in the past 12 months (n=289)</b>		
Yes	49.1	41.9 – 56.4
No	50.9	43.6 – 58.1
<b>Number of female sex workers in the past 12 months (n=139)</b>		
1 partner	19.9	11.3 – 37.2
2 or more partners	80.1	62.9 – 88.7
<b>Sex with female sex worker during last one month (n=139)</b>		
Yes	41.8	29.9 – 54.4
No	58	45.6 – 70.1
<b>Frequency of sex with last female sex worker during the last month (n=59)</b>		
1- 4	83.6*	NC
5+	16.4*	NC

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

As the findings indicate IDUs with regular female partners were more likely to have had sex with their regular female partners than IDUs with non-regular female partners or IDUs who had sex with FSWs, in the month preceding the interview.

## 6.2 Knowledge and Use of Condom

Condom promotion has been one of the important components of HIV/AIDS awareness campaign. All the IDUs had heard of condoms before. However, the high level of awareness about condoms was not reflected in IDUs condom using habits.

Respondents were asked about condom use during last sexual contact with their regular, non-regular partners as well as with FSWs. Overall, 67.3 percent IDUs had not used condom in their last sexual contact with regular partners, 39.5 percent with non-regular partners and 16.1 percent with female sex workers. Condom use in the last sex was highest with female sex workers and lowest with regular partners.

**Table 6.5: Knowledge and Use of Condoms among IDUs**

Knowledge and Use of Condom in the Last Sex	Estimated Population Proportions (%)	95% CI
<b>Condom use with regular partner during last sexual intercourse (n=99)</b>		
Yes	32.7	20.9 – 54.7
No	67.3	45.3 – 79.2
<b>Condom use with non-regular partner during last sexual intercourse (n=135)</b>		
Yes	60.5	45.0 – 76.4
No	39.5	23.7 – 55.1
<b>Condom use with sex worker during last sexual intercourse (n=139)</b>		
Yes	83.9	76.2 – 92.7
No	16.1	7.3 – 23.8

IDUs who did not use condom in their last sexual contact with different partners were asked about the reasons for choosing not to use one. Data obtained from the IDUs in Pokhara show that around two thirds of respondents said that they did not consider using condom necessary with their regular or non-regular female partners. Some IDUs perceived condoms merely as a contraceptive measure; 26 percent said that they had been using other contraceptive methods hence did not use condom. 14.5 percent did simply not like to use condom with their regular partners.

As for the other reasons provided by the IDUs for not using condoms with non-regular partners, 25.4 percent said that condoms were not available at the time and 21.8 percent did

not like to use one. In contrast, IDUs were more conscious that they had to use condom with female sex workers and only a small proportion of IDUs (7.4%) said that they did not consider it necessary to use condom in the last sex with a female sex worker. Top reasons for not using condom in the last sex with the female sex workers were that condoms were more available (55.5%), they did not like using them (37%) or they did not think of using them at that time (11.1%) (Annex 14).

HIV/AIDS prevention campaigns focus on educating their target groups on the need to use condom in every sexual act to avoid HIV/STI transmission. The IDUs were also asked about their record of consistent use of condom with their sex partners in the last year. As before, data indicate that IDUs used condom more consistently with female sex workers than with regular and non-regular sex partners in the last year.

Overall, 80.5 percent of the IDUs had used condom in every sexual contact with a female sex worker. 52.9 percent used condom consistently with a non-regular female sex partners in the past year. On the contrary only 21.7 percent IDUs had been consistent in using condoms with regular female sex partners in the past year (Table 6.6).

**Table 6.6: Consistent Use of Condom with Different Female Sex Partners during Past Year**

Consistent Use of Condom	Estimated Population Proportions (%)	95% CI
<b>Use of condom with regular female sex partners during past 12 months (n=99)</b>		
Every time	21.7	4.0 – 25.5
Sometimes – Never	78.3	74.6 - 96.1
<b>Use of condom with non-regular female sex partners during past 12 months (n=135)</b>		
Every time	52.9	42.8 – 73.6
Sometimes or Never	47.1	26.4 – 57.3
<b>Use of condom with female sex workers during past 12 months (n=139)</b>		
Every time	80.5	75.1 – 91.6
Sometimes or Never	19.5	8.3 – 24.7

The findings indicate regular female partners of IDUs were at higher risk of HIV than non-regular or paid partners as they are more likely to have sex and have sex more often with their IDU partners who were reluctant to use condoms consistently with them.

### 6.3 Sources of Condoms

The IDUs were also asked if they knew about the places from where they could obtain condoms. Pharmacy was cited as the most common place for obtaining condoms by a majority of 96.9 percent IDUs. NGOs like Naulo Ghumti were also mentioned as source of condoms by 56.4 percent of the respondents. Other major sources of condoms were shop (52.7%), peer/outreach educators (35.2%) and hospital (32.3%).

The majority of the IDUs (99.3%) said that when necessary they could get condoms in less than 30 minutes (Table 6.7).



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

Sources of Condom and Time to obtain it	Estimated Population Proportions (%) (n=300)	95% CI
<b>Place/person from where condom can be obtained#</b>		
Pharmacy	96.9	94.6 – 98.7
Naulo Ghumti	56.4	49.8 – 63.3
Shop	52.7	46.5 – 59.1
Peer educator/outreach worker	35.2	29.0 – 41.8
Hospital	32.3	26.2 – 38.6
Clinic	21.4	16.5 – 26.6
Pan shop	14.0	9.6 – 18.3
Bar/Guest house/hotel	10.0	6.0 – 13.7
Health worker/health post	9.0	5.1 – 13.1
Family planning center	6.6	3.3 – 10.5
Friends	4.0	2.4 – 5.8
Others	2.8	1.4 – 4.5
<b>Time taken to obtain condom</b>		
Less than 30 minutes	99.3 *	NC
More than 30 minutes	0.0 *	NC
No response	0.7 *	NC

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

Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 6.4 Sources of Information about Condom

The IDUs had heard about condoms from different sources. The most common sources of information as cited by more than nine in ten were pharmacies, television, radio, billboards/signboards, friends/neighbors, and newspapers/posters. A good proportion of them had also heard about condoms from NGO workers (84.6%) or hospitals (63%). Other sources of information about condoms as mentioned by the respondents are listed in Table 6.8 below.

**Table 6.8: Sources of Information about Condoms among IDUs**

Sources of Knowledge of Condom	Estimated Population Proportions (%) (n=300)	95% CI
Pharmacy	98.7 *	
Television	95.8	93.1 – 98.1
Radio	94.0	90.2 – 97.5
Bill board/sign board	93.2	89.2 – 97.4
Friends/neighbors	92.8	89.1 – 96.0
Newspapers/posters	91.6	87.9 – 95.1
NGO workers	84.6	80.2 – 89.9
Hospital	63.0	57.3 – 68.6
Health workers/volunteers	59.4	52.8 – 65.6
Street drama	50.3	42.7 – 56.5
Cinema hall	45.4	38.4 – 51.8
Comic books	44.1	38.7 – 50.9
Health Post	34.9	29.1 – 42.0
Community worker	31.7	25.7 – 37.4
Community event/training	28.8	22.9 – 34.6
Video van	20.4	16.1 – 26.0
Health Center	20.3	15.8 – 25.6
Others	1.3 *	NC

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

Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

In order to analyze the exposure of the IDUs to the ongoing initiatives to educate the target groups about condoms and HIV/AIDS prevention in Pokhara Valley, respondents were also asked if they were aware of any of the messages being publicized with the help of IEC materials like poster, pamphlets, billboards or those aired on radio/television. The survey focused on certain specific messages about condoms and HIV/STI prevention. A good proportion of the respondents were aware of messages like *Condom bata surakchhya youn*

*swastha ko rakchhya (89.5%), HIV/AIDS bare aajai dekhi kura garau (87.8%), Ramro sanga prayog gare jokhim huna dinna (85.8%), Yaun rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai (85.7%), Jhilke dai chha chhaina condom (85.4%), and Condom kinna ma bhaya hunna ra, (84.5%).* A considerable proportion of respondents (53.8%) had also heard message *Maya garaun sadbhav badaun*.

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

Heard/seen/read the following messages/characters in past one year	Estimated Population Proportions (%) (n=300)	95% CI
Condom Bata Surakchhya Youn Swastha ko Rakchhya	89.5	85.4 – 93.3
HIV/AIDS Bare Aaji Dekhi Kura Garaun	87.8	83.4 – 91.6
Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	85.8	80.6 – 90.7
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	85.7	80.8 – 90.1
Jhilke Dai Chha Chhaina Condom	85.4	80.7 – 90.0
Condom Kina Ma Bhaya Hunna Ra	84.5	79.8 – 88.9
Maya Garaun Sadbhav Badaun	53.8	48.0 – 59.4
Manis Sanga Manis Mile Hara Jeeta Kasko Hunchha	32.5	27.3 – 37.9
Ek Apas ka kura	27.0	21.1 – 32.9
Des Pardes	19.7	14.9 – 24.8

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

## 7. KNOWLEDGE OF STIs AND HIV/AIDS

This chapter deals with the level of knowledge about STIs and HIV/AIDS among IDUs in the Pokhara Valley as well as respondents' awareness levels 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 of STIs

Around nine in ten IDUs in Pokhara (90.3%) had heard of STIs. There were however some IDUs (9.7%) who had never heard about STIs before.

**Table 7.1: STI Awareness among IDUs**

Heard of STIs	Estimated Population Proportions (%) (n=300)	95% CI
Yes	90.3	86.0 – 94.2
No	9.7	5.8 – 14.0

Those who had heard of STIs before had a general understanding of male and female symptoms. They mentioned genital ulcer/sore blister (57.4% in female and 68.6% in male) and genital discharge (42.8% in female and 55.3% in male) as important STI symptom. Symptoms like foul smelling discharges (27%) and abdominal pain (3.4%), were specifically mentioned as female STI symptoms by the respondents. Other symptoms as mentioned by the respondents are shown in the following Table 7.2.

**Table 7.2: Knowledge of STI Symptom among IDUs**

Knowledge of Symptoms of STIs	Female STI symptoms		Male STI symptoms	
	Estimated Population Proportions (%) (n=276)	95% CI	Estimated Population Proportions (%) (n=276)	95% CI
Genital ulcer/sore blisters	57.4	50.1 – 63.8	68.6	61.6 – 74.7
Genital discharge	42.8	36.6 – 50.0	55.3	48.9 – 61.9
Foul-smelling discharge	27.0	22.2 – 34.1		
Itching	25.6	20.0 – 31.3	22.8	18.0 – 28.8
Burning/pain during urination	14.0	8.9 – 18.1	23.4	17.4 – 28.5
Abdominal pain	3.4	1.7 – 6.1		
Swelling in groin area	18.6	12.6 – 24.0	23.3	17.1 – 29.4
Others	5.3	3.2 – 8.3	9.2	5.2 – 12.8

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

IDUs in Pokhara were asked if they ever had experienced symptoms like genital discharge, genital ulcer/sore in the past year or at the time of the survey. In response, 5.4 percent reported having genital discharge and 9.1 percent said that they had genital ulcer/sore/blister in the past year (Table 7.3).

**Table 7.3: STI Symptoms Experienced by IDUs**

Experienced of STI Symptoms	Estimated Population Proportions (%) (n=300)	95% CI
<b>Had genital discharge in the past year</b>		
Yes	5.4	3.2 – 8.1
No	94.6	91.9 – 96.8
<b>Had genital ulcer/sore blister in the past Year</b>		
Yes	9.1	5.7 – 12.9
No	90.9	87.1 – 94.3

Among those IDUs who ever had experienced at least one STI symptom in the past year, 17.4 percent had genital discharge while 41.7 percent had genital ulcer/sore/ blister.

Overall, 12.5 percent IDUs had experienced at least one STI symptom so far. When asked what they had done for the treatment, 44.4 percent of those with STI symptoms mentioned that they had not sought any treatment yet, 20.4 percent had been to a private doctor and 11.1 percent had been treated at a hospital/health post (Table 7.4).

**Table 7.4: STI Symptom Experienced and Treatment Sought by IDUs**

STI symptoms and treatment	Estimated Population Proportions (%)	95% CI
<b>Currently has genital discharge (n=23)</b>		
Yes	17.4 *	NC
No	82.6 *	NC
<b>Currently has genital ulcer/sore blister (n=24)</b>		
Yes	41.7 *	NC
No	58.3 *	NC
<b>STI experience (n=300)</b>		
Never STI	87.5	83.1 – 91.6
Ever STI	12.5	8.4 – 17.0
<b>Source of treatment (n=54)</b>		
Private Doctor	20.4 *	NC
Hospital/Health Post	11.1 *	NC
Did not seek treatment	44.4 *	NC
Others	24.1 *	NC

Note: Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 7.2 Knowledge of HIV/AIDS

All the IDUs had heard about HIV/AIDS. A majority of them (75.3%) knew of people who had HIV/AIDS or had died due to the disease. When asked about the kind of relation that the respondents shared with these people, 24.2 percent said that they were close friends and 12.5 percent reported that they were their relatives. Rest of the IDUs (63.3%) did not have any formal relationship with the people they knew had HIV/AIDS or had died of AIDS.

**Table 7.5: Awareness of HIV/AIDS among IDUs**

Knowledge about HIV/AIDS	Estimated Population Proportions (%)	95% CI
<b>Know anyone who has HIV/AIDS/died due to AIDS (n=300)</b>		
Yes	75.3	69.6 – 80.8
No	24.7	19.2 – 30.4
<b>Nature of relationship with the person living with HIV/AIDS /died due to AIDS (n=233)</b>		
Close friend	24.2	15.2 – 28.9
No relation	63.3	55.8 – 73.0
Close relative	12.5	8.5 – 19.0

IDUs' knowledge about ways in which HIV is transmitted was further analyzed with the help of some questions on HIV/AIDS prevention. In this regard their understanding of three major HIV/AIDS prevention measures including (A)abstinence from sex (B) being faithful to one sex partner (C) and regular condom use was assessed. The majority of respondents were aware that abstinence from sexual contact (A) (91.1%) having only one sexual partner (B) (95.3%) and using condom every time during sex (C) (99%) prevented them from HIV. In total 86.9 percent IDUs were aware of all three.

Additionally, 98.4 percent were aware that a healthy looking person can be infected with HIV (D) and a similar proportion (98.3%) also knew that sharing meal with an HIV infected person do not put them at risk of HIV (F). However a relatively low proportion of IDUs (77.6%) agreed that a person cannot get HIV virus from mosquito bite (E). In total 73.4

percent IDUs were aware of all the five major indicators (BCDEF) which helped to assess the level of awareness regarding HIV preventive measures (Table 7.6).

**Table 7.6: Knowledge of Major Ways of Avoiding HIV/AIDS among IDUs**

Knowledge of Six Major Indicators on HIV/AIDS	Estimated Population Proportions (%) (n=300)	95% CI
<b>HIV transmission can be avoided through</b>		
A Abstinence from sexual contact	91.1	86.8 – 94.3
B Being faithful to one partner	95.3	92.4 – 97.8
C Condom use during each sexual contact	99.0 *	NC
<b>Perception on HIV/AIDS transmission</b>		
D A healthy-looking person can be infected with HIV	98.4	96.3 – 99.2
E A person can not get the HIV virus from mosquito bite	77.6	72.1 – 82.7
F Sharing a meal with an HIV infected person do not transmit HIV	98.3	96.8 – 99.4
Knowledge of all the three (ABC)	86.9	82.3 – 91.0
Knowledge of all five major indicators – BCDEF of HIV/AIDS	73.4	67.9 – 79.0

Note: Because of multiple answers percentages may add up to more than 100. Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

The IDUs' understanding of HIV/AIDS and its different modes of transmission were further tested with the help of certain probing questions. Nearly all respondents said that a person can not get HIV by holding a HIV infected person's hand (99.3%), a person can get HIV by using previously used needle/syringe (99%), that HIV can be transmitted through the transfusion of blood from an infected person to another (98.6%), a pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child (91.2%) and that a person can protect himself from HIV by switching to non-injecting drugs (93%). A relatively lower percentage of respondents (52.7%) believed that women with HIV could transmit the virus to their newborn child through breast-feeding.

Those IDUs who said that that a HIV infected pregnant woman can transmit the virus to her unborn child were asked if they were aware of any measure that could reduce such risk of HIV transmission. Among them, there were only around eight percent respondents who suggested that the expecting mother should take medicine or antiretroviral treatment. Others suggested different measures like consulting with the doctor or performing cesarean delivery.

**Table 7.7: IDUs' Knowledge about HIV/AIDS Transmission**

Statements Related to HIV/AIDS	Estimated Population Proportions (%) (n=300)	95% CI
A person can get HIV by using previously used needle by others	99.0	97.9 – 99.8
An IDU can protect themselves from HIV/AIDS by switching to non-injecting drugs	93.0	89.2 – 95.6
A woman with HIV/AIDS can transmit the virus to her new-born child through breast feeding	52.7	46.6 – 59.4
Blood transfusion from an infected person to the other transmit HIV	98.6	96.8 – 99.8
A person can not get HIV by holding an HIV infected person's hand	99.3	98.5 – 99.8
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	91.2	87.4 – 94.7
<b>Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child (n=274)</b>		
Take medicine (Anti retro viral)	7.9	4.9 – 10.4
Others	92.1	89.6 – 95.1

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

### 7.3 Knowledge about HIV Testing Facilities

Availability of a confidential HIV testing facility and awareness of such provision allow people to take up HIV test promptly and without the fear of getting exposed. Although 93.9 percent IDUs were aware of the existence of HIV testing facilities only little over a half (57.4%) had HIV testing.

Among 57.4 percent respondents who had taken up the test, 80 percent had done so voluntarily. Remaining 20 percent had been required to test for HIV. Nine in ten IDUs who had the test (87.8%) had received the test result.

Over one third of these IDUs (37.1%) had tested for HIV more than a year before the survey while 62.9 percent had been tested within last year.

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

Description of HIV testing	Estimated Population Proportions (%)	95% CI
<b>A confidential HIV testing facility available in the community (n=300)</b>		
Yes	93.9	90.9 – 96.7
No	6.1	3.3 – 9.1
<b>Ever had HIV test (n=300)</b>		
Yes	57.4	50.2 – 64.6
No	42.6	35.4 – 49.8
<b>Type of test taken (n=193)</b>		
Required HIV test	20.0	11.9 – 27.4
Voluntary HIV test	80.0	72.6 – 88.1
<b>Test result received (n=193)</b>		
Yes	87.8	82.3 – 94.2
No	12.2	5.8 – 17.7
<b>Timing of last HIV test (n=193)</b>		
Within the past 12 months	62.9	50.4 – 69.9
Between 13-24 months	23.0	16.7 – 34.2
Between 25-48 months	6.3	2.8 – 13.1
49 or more than 49 months	7.8	2.2 – 13.1

#### 7.4 Source of Knowledge about HIV/AIDS

Television, billboard/signboard and friends/relatives were the most commonly cited sources of information on HIV/AIDS among the IDUs. These sources were mentioned by more than 95 percent of the IDUs. A considerably high proportion of respondents had also been aware of HIV/AIDS through radio (92.8%), pamphlets/posters (91.9%) NGO workers (90.1%) and newspaper/magazines (84.4%). Other sources of information mentioned by the IDUs have been listed in the table below (Table 7.9).

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

Sources of Knowledge of HIV/AIDS	Estimated Population Proportions (%) (n=300)	95% CI
Friends/Relatives	97.9	96.5 – 99.1
Television	96.0	93.4 – 98.3
Billboard/signboard	95.3	92.3 – 98.0
Radio	92.8	88.1 – 97.4
Pamphlets/Posters	91.9	88.5 – 95.2
NGO workers	90.1	86.4 – 94.5
Newspapers/Magazines	84.4	79.9 – 89.0
Health workers/Volunteers	70.5	64.4 – 75.9
School/Teachers	59.9	53.3 – 66.2
Street drama	52.7	43.4 – 57.9
Cinema halls	52.3	45.9 – 58.9
Comic books	45.4	39.7 – 52.2
Community workers	34.1	28.8 – 40.5
Workplace	32.2	26.3 – 37.9
Community events or training	31.0	25.1 – 36.6
Video van	21.0	16.9 – 26.4
Others	0.5	0.1 – 1.2

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

In the past year 67.6 percent of IDUs in the valley had received HIV/AIDS related IEC materials from different sources. When asked about the kind of information or material received, 75 percent said that they received information relating to HIV/AIDS, 67.6 percent

had received condoms/information on condoms and 62.4 percent had received printed materials like brochures/booklets/pamphlets (Table 7.10).

**Table 7.10: Information/Materials Received During the Past Year by IDUs**

Informative Materials Received	Estimated Population Proportions (%) (n=300)	95% CI
<b>Received information on condom/Condom</b>		
Yes	67.6	60.9 – 73.8
No	32.4	26.2 – 39.1
<b>Received brochures/booklets/pamphlets on HIV/AIDS</b>		
Yes	62.4	55.6 – 69.0
No	37.6	31.0 – 44.4
<b>Received information on HIV/AIDS</b>		
Yes	75.0	69.6 – 80.8
No	25.0	19.2 – 30.4
<b>Received other IEC materials</b>		
Yes	2.4	0.2 – 5.1
No	97.6	95.0 – 99.8

## 7.5 Perception on HIV/AIDS

The stigma associated with HIV/AIDS increases the impact of HIV on the patient as well as most at risk population. IDUs perception of HIV positive persons and stigma associated with the disease was examined in this survey. The majority of respondents said that they would willingly take care of a HIV positive male relative (96.1%) or a HIV-positive female relative (94.3%) at their homes if such need arose. More than one half of the sample population (58.2%) however said that if a family member had HIV they would rather keep it confidential and not talk about it with others.

The majority of respondents (98.9%) said that they would readily buy food from a HIV infected vendor. A significant proportion (97.9%) 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, 76.2 percent IDUs maintained that they should be provided the same care and treatment as necessary for chronic disease patients while 22 percent believed that the health care needs of a HIV infected person were more than people suffering from chronic diseases.

**Table 7.11: Attitude of IDUs towards HIV/AIDS**

Stigma and Discrimination	Estimated Population Proportions (%) (n=300)	95% CI
<b>Willing to take care of HIV positive male relative in the household</b>		
Yes	96.1	93.1 – 98.7
No	3.9	1.3 – 6.9
<b>Willing to take care of HIV positive female relative in the household</b>		
Yes	94.3	91.1 – 97.1
No	5.7	2.9 – 8.9
<b>Willing to maintain confidentiality of a HIV positive family member</b>		
Yes	58.2	51.8 – 64.5
No	41.8	35.5 – 48.2
<b>Willing to buy food from HIV infected shopkeeper</b>		
Yes	98.9	97.9 – 99.7
No	1.1	0.3 – 2.1
Don't know		
<b>HIV infected person should get the same, more or less health care than someone with any other chronic disease</b>		
Same	76.2	70.6 – 80.8
More	22.0	17.6 – 27.5
Less	1.8	0.6 – 3.2
<b>HIV infected person should be allowed to continue working together</b>		
Yes	97.9	95.8 – 99.5
No	2.1	0.5 – 4.2

## 8. EXPOSURE TO HIV/AIDS AWARENESS PROGRAMS

This is a new section added to the survey in 2007. The exposure of the IDUs to the ongoing HIV/AIDS awareness programs and their participation in these activities has been examined in this round of survey. To this end respondents were asked several questions relating to some of the most important 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) and outreach educators (OEs) for organizing awareness raising activities in community sites. They meet the target groups and hold discussions with them regarding HIV/AIDS, safe injecting practices, safe sex and other related topics. They distribute IEC materials, condoms, and refer the target group to drop-in center and STI treatment services. Some also carry new needle/syringe for distribution among the IDUs.

Around 67 percent of IDUs in Pokhara had ever met or interacted with PE/OEs representing various organizations. The majority (80.4%) had discussed safe injecting behavior with them. Over a half (56%) had also been told about how HIV is transmitted from one person to other by PE/OEs educators. Besides, around one-fourth respondents had discussed STI (24.9%) and condom use (24.4%) with them. Some IDUs (17.4%) also had been given new syringe by PE/OEs.

The majority of IDUs who had met with PEs/OEs had done so with Naulo Ghumti workers (98.3%). It is further evident from the Table that four in ten (41.1%) IDUs met with PE/OEs more than once a month, only few (4%) had met them just once (Table 8.1).

**Table 8.1: Meeting with Peer Educators/Outreach Educators in the Last 12 months**

Meeting with Peer Educators (PE) or Outreach Educators (OE) in the Last 12 Months	Estimated Population Proportions (%)	95% CI
<b>Met or Discussed or Interacted with PE or OE in the Last 12 months (n=300)</b>		
Yes	66.7	60.6 – 72.8
No	33.3	27.2 – 39.4
<b>Activities Carried out with OE/PE# (n=202)</b>		
Discussion on safe injecting behavior	80.4	72.9 – 87.4
Discussion on how HIV/AIDS is/isn't transmitted	55.9	46.2 – 61.0
Discussion on how STI is/isn't transmitted	24.9	18.5 – 33.9
Discussion on Regular/non-regular use of condom	24.4	15.8 – 32.2
Given syringe	17.4	14.1 – 26.5
Demonstration on using condom correctly	15.3	9.7 – 21.4
Discussion of giving up drugs	9.8	4.9 – 16.8
Others	12.2	6.9 – 17.5
<b>Organizations Represented by OE/PE# (n=202)</b>		
Naulo Ghumti	98.3	97.5 – 99.8
RICHMOND	4.8	1.6 – 7.5
CSG	3.7	0.9 – 8.2
Others (Youth Vision, Magic Circle, Serene Foundation, etc)	4.7	2.1 – 7.0
<b>Number of Meeting with PE or OE (n=202)</b>		
Once	4.0	0.8 – 5.8
2-3 times	17.6	11.6 – 24.2
4-6 times	20.7	12.8 – 28.5
7-12 times	16.5	9.2 – 23.4
More than 12 times	41.1	34.7 – 51.7

Note: Because of multiple answers 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 the target communities to socialize but are also the site for educational and counseling activities. The DICs offer a number of services to the target group, including counseling, group classes and discussions, individual counseling, and video shows on STI/HIV/AIDS. Certain NGOs also run needle exchange program through their DICs. The IDUs are also provided IEC materials and condoms at DICs.

A large proportion of (86.6%) IDUs in Pokhara had visited a DIC in the last year. Most of these (99.1%) had been to a DIC to have a new syringe. Some had also visited them to learn about safe injecting (24.4%) and collect condoms (20.2%). DICs run by Naulo Ghumti were the most popular ones; visited by high proportion of IDUs who have been to a DIC before (97.2%). There were 1.7 percent IDUs who had been to a DIC just once; others had visited these centers quite frequently. Among them 77.6 percent had visited a DIC more than 12 times in the past year.

**Table 8.2: DIC Visiting Practices of IDUs**

DIC Visiting Practices	Estimated Population Proportions (%)	95% CI
<b>Visited DIC Visit in the Last 12 months (n=300)</b>		
Yes	86.6	83.8 – 92.8
No	13.4	7.2 – 16.2
<b>Participated Activities at DIC# (n=277)</b>		
Got new syringe	99.1	98.3 – 99.7
Learnt about safe injecting behavior	24.4	19.4 – 30.5
Collected condoms	20.2	15.0 – 26.6
Participated in discussion on HIV transmission	12.1	8.1 – 17.6
Learnt the correct way of using condom	10.4	6.5 – 14.8
Had wound dressing	5.7	3.2 – 8.3
Returned old syringe	4.9	2.6 – 8.1
Others (Watch film on HIV/AIDS, To have medicine, etc)	15.9	11.3 – 20.3
<b>Name of Organizations that Run DIC Visited by Them# (n=277)</b>		
Naulo Ghumti	97.2	94.3 – 99.1
Youth Vision	0.4 *	NC
RICHMOND	0.4 *	NC
Others	1.5	0.5 – 3.0
Don't Know	2.2 *	
<b>Number of Visits to the DICs (n=277)</b>		
Once	1.7	0.6 – 3.2
2-3 times	4.9	2.2 – 8.2
4-6 times	8.7	4.6 – 12.7
7-12 times	7.1	4.4 – 9.5
More than 12 times	77.6	72.4 – 83.5

Note: Because of multiple answers percentages may add up to more than 100.  
Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 8.3 STI Clinic

The IDUs who engage in unsafe sexual encounters are at the risk of contracting certain STIs. Timely detection of STIs may prevent them from serious health problems. There are several clinics being run by government as well as non-government organizations for providing STI testing and treatment facilities.

Despite the availability of testing and treatment facilities, the majority of IDUs (94.3%) had not visited an STI clinic in the last year. Among those (5.7%) who had been to a clinic in the past year, most (82.4%) had given their blood sample for STI identification, and had received physical examination at the clinic (52.9%). Additionally, IDUs had participated in discussion

on use of condom (41.2%) and had also been told about how STI is transmitted (35.3%) and about safe injecting practices (35.3%) in these STI clinics 58.8 percent had visited STI clinics just once while others had been there more than once. STI clinic ran by Naulo Ghumti were the most popular ones (76.5%) (Table 8.3).

**Table 8.3: STI Clinic Visiting Practices of IDUs**

STI Clinic Visiting Practices	% *
<b>Visited any STI Clinic in the Last 12 Months (n=300)</b>	
Yes	5.7 *
No	94.3 *
<b>Participated Activities at STI Clinic# (n=17)</b>	
Blood tested for STI detection	82.4 *
Underwent Physical examination for STI identification	52.9 *
Participated in discussion on regular/non-regular use of condom	41.2 *
Participated in discussion STI transmission modes	35.3 *
Participated in discussion on safe injecting behavior	35.3 *
<b>Name of Organizations that Run STI Clinic Visited# n=17)</b>	
Naulo Ghumti	76.5 *
FPAN	5.9 *
Others	29.4 *
<b>Number of Visits to STI Clinics (n=17)</b>	
Once	58.8 *
2-3 times	23.5 *
4-6 times	5.9 *
7-12 times	5.9 *

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

Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 8.4 VCT Centers

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

Around 63 percent IDUs in Pokhara had not visited any of the VCT centers in the last year. Ninety five percent of those who had gone to a VCT center had given their blood for HIV testing. Three quarters had received pre HIV test counseling (74.9%), whilst fewer had post HIV test counseling (46.2%) and information on safe injecting behavior (43.7%) at these centers. Little over a half (52.2%) had received their HIV test result at VCT centers. Among these IDUs 48.2 percent had visited a VCT center just once while the rest had been there more than 2 times. The VCT center run by Naulo Ghumti was by most popular among the IDUs (94.6%).

**Table 8.4: VCT Center Visiting Practices of IDUs**

VCT Center Visiting Practices	Estimated Population Proportions (%)	95% CI
<b>Visited VCT Center in the Last 12 months (n=300)</b>		
Yes	37.1	30.5 – 42.5
No	62.9	57.5 – 69.5
<b>Participated activities at VCT center # (n=134)</b>		
Gave blood sample for HIV test	95.0	91.1 – 98.6
Received pre-HIV test counseling	74.9	59.4 – 85.0
Received HIV test result	52.2	41.5 – 66.2
Received post HIV test counseling	46.2	36.2 – 61.1
Received information on safe injecting behavior	43.7	31.0 – 54.8
Received counseling on using condom correctly in each sexual intercourse	24.2	14.2 – 31.8
Got information on HIV/AIDS window period	8.5	3.6 – 17.8
Others (Took a friend with me, STI test, etc)	4.2	1.0 – 17.2
<b>Name of the Organization that Run the VCT centers Visited# (n=134)</b>		
Naulo Ghumti	94.6	92.4 – 99.6
FPAN	1.5 *	NC
NRCS	0.7 *	NC
Others	3.7 *	NC
Don' t know	1.5 *	NC
<b>Number of Visits to VCT centers (n=134)</b>		
Once	48.2	32.7 – 54.2
2-3 times	39.8	32.5 – 52.8
4-6 times	9.7	1.1 – 21.8
7-12 times	1.2	0.3 – 2.8
More than 12 times	1.2	0.2 – 5.0

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

Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 8.5 Participation in HIV/AIDS Awareness Program

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

Around 75 percent respondents had never participated in any HIV/AIDS awareness programs or community events. One quarter (24.9%) had participated at least once in these kinds of activities. The events they had participated in were AIDS day celebration (49.2%), condom day celebration (40.8%), group discussions (26.9%) and street drama (14.6%). Few (8.1%) had also participated in HIV/AIDS related training programs. As for the frequency of participation in awareness raising activities in the past year, 31.9 percent had participated once. The IDUs had mostly participated in programs conducted by Naulo Ghumti (48.3%).

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

Participations in HIV/AIDS Awareness Programs	Estimated Population Proportions (%)	95% CI
<b>Ever Participated in HIV/AIDS Awareness Raising Program or Community Events (n=300)</b>		
Yes	24.9	19.3 – 30.6
No	75.1	69.4 – 80.7
<b>Activities Participated in# (n=72)</b>		
AIDS Day celebration	49.2	34.0 – 86.5
Condom Day celebration	40.8	13.5 – 73.7
Group discussions	26.9	15.8 – 71.1
Street drama	14.6	3.1 – 10.0
HIV/AIDS related training	11.1*	NC
Condom use demonstrations	6.9*	NC
Video Shows	6.9 *	NC
HIV/AIDS related Workshops	5.6 *	NC
Others	29.2*	NC
<b>Name of the Organizations that Organized Such Activities# (n=72)</b>		
Naulo Ghumti	48.3	28.0 – 85.2
CSG	11.2	0.9 – 22.3
Recovery Nepal	4.2 *	NC
NRCS	1.4 *	NC
RICHMOND	2.8 *	NC
Others	30.6 *	NC
Don't Know	2.8 *	NC
<b>Frequency of Such Participation in past 12 months (n=72)</b>		
Once	31.9 *	NC
2-3 times	43.1 *	NC
4-6 times	13.9 *	NC
7-12 times	2.8 *	NC
More than 12 times	2.8 *	NC
Not Participated During the Past Year	5.6 *	NC

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

Estimated population Proportion (%) of the variables with asterisk (\*) was calculated with SPSS as they did not meet the required numerator to be calculated with RDSAT. The proportion represented is therefore unadjusted and no value is mentioned under CI.

## 9. COMPARATIVE ANALYSIS OF SELECTED CHARACTERISTICS

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

### 9.1 Socio-Demographic Characteristic

The socio-demographic characteristics of IDUs in Pokhara presented similar pattern in all of the three rounds. This is to a certain extent, a consequence of adopting the same sampling methodology for all three rounds.

The majority of respondents in three surveys were young with over half of them aged 25 or less. (68.7% in 2003, 62.3% in 2005 and 58.2% in 2007) and a relatively low proportion of IDUs were above 25 years of age (31.3% in 2003, 37.7% in 2005 and 41.8% in 2007). The median age of respondents gradually increased by a year over three rounds (22 years in 2003, 23 years in 2005 and 24 years in 2007).

A small minority of respondents were illiterate in all rounds (6.3% in 2003, 5.3% in 2005 and 5.1% in 2007) whereas the majority of respondents in all three rounds had completed secondary level of education (63% in 2003, 56% in 2005 and 48.3% in 2007).

**Table 9.1: Socio-Demographic Characteristics of the IDUs**

Socio-Demographic Characteristics	First Round (2003)		Second Round (2005)		Third Round (2007)
	N=300	%	N=300	%	RDS EPP (%) N=300
<b>Age</b>					
< 25 Years	206	68.7	187	62.3	58.2
<=25 Years	94	31.3	113	37.7	41.8
<=19 Years	69	23.0	50	16.7	15.6
20-24	137	45.7	137	45.7	43.0
25-29	47	15.7	66	22.0	28.7
30-34	31	10.3	32	10.7	7.5
35-42	16	5.3	15	5.0	5.3
<b>Median age</b>	<b>22</b>	<b>-</b>	<b>23</b>	<b>-</b>	<b>24</b>
<b>Education</b>					
Illiterate	19	6.3	16	5.3	5.1
Literate only	3	1.0	5	1.7	0.5
Primary	51	17.0	63	21.0	20.4
Secondary	189	63.0	168	56.0	48.3
SLC & above	38	12.7	48	16.0	25.7
<b>Ethnicity</b>					
Brahmin	14	4.7	10	3.3	5.3
Chhetri/Thakuri	50	16.7	60	20.0	19.1
Newar	21	7.0	29	9.7	8.5
Tamang/Lama/Magar	65	21.7	45	15.0	17.1
Gurung/Rai/Thakali/Sherpa	101	33.7	90	30.0	34.3
Occupational caste	34	11.3	49	16.3	13.9
Others (Musalman, Terai caste)	15	5.0	17	5.7	1.9

Ethnic/caste composition of IDUs remained unchanged since the first round in 2003. Around one-third of IDUs in the first and third round (33.7% and 34.3% respectively) were from Gurung/Rai/Thakali/Sherpa ethnic groups; similarly 30 percent IDUs represented this group

in the second round. The proportion of IDUs belonging to Brahmin cast in the third round was 19.1 percent, 16.7 percent in the first and 20 percent in the second round; the difference between these rounds is not statistically significant. Other caste/ethnic group representation was similar in all three waves of the survey.

## 9.2 Drug Injecting Practices

Most of the IDUs had been injecting drugs since more than a year. The average duration of injecting drugs was 3.7 years in 2003, 4.8 years in 2005 and 4.7 years in 2007. Over two-fifth IDUs had been injecting drugs since more than two years but less than five years in first and the second round (43.3% and 41%); in the third round the percentage went down to 32.2 percent which represents a statistically significant difference. On the other hand the proportion of IDUs who had the habit for 5 years or more has also significantly increased since 2003 (30.7% in 2003, 41.3% in 2005 and 35.6% in 2007).

The median age of the respondents when they had injected drugs for the first time was 19 years in 2003 and 2007 while it was 18 years in 2005; the difference however is not significant. The respondents had started injecting drugs mostly at an early stage of life as more than 60 percent of them had injected drugs by the time they were 20 in all three rounds (64% in 2003, 68.3% in 2005 and 60.8% in 2007).

**Table 9.2: Drug Injecting Practice of IDUs**

Drug Injecting Practice	First Round (2003)		Second Round (2005)		Third Round (2007)
	N=300	%	N=300	%	RDS EPP (%) N=300
<b>Duration of drug injecting habit</b>					
Up to 11 months	36	12.0	25	8.3	14.8
12 – 23 months	42	14.0	28	9.3	17.5
24 – 59 months	130	43.3	123	41.0	32.2
60 and above months	92	30.7	124	41.3	35.6
<b>Average duration years</b>	<b>3.7</b>	<b>-</b>	<b>4.8</b>	<b>-</b>	<b>4.7</b>
<b>Age at first drug injection</b>					
Up to 20 years	192	64.0	205	68.3	60.8
21+ years	108	36.0	95	31.7	39.2
<b>Median age</b>	<b>19</b>	<b>-</b>	<b>18</b>	<b>-</b>	<b>19</b>

## 9.3 Needle/Syringe Using Practice in the Past Week

Data in 2007 showed that a considerable proportion of IDUs avoided unsafe injecting behavior in the past week. The proportion of IDUs who had avoided unsafe injecting practice in the week preceding the survey has been steadily increased since the first round. High-risk behavior like injecting with previously used needle/syringe significantly decreased from 21 percent in 2003 to 14.7 percent in 2005 and finally to 7.6 percent in 2007. A similar improvement is observed with regards to using syringes left in a public place; 20.3 percent IDUs had injected with syringes left in a public place in the week preceding the survey in 2003, the figure went down to 6.7 percent in 2005 while only 3.4 percent reported using syringes left in public places in 2007. The decrease in proportions of IDUs using syringes left in public was a statistically significant difference.

Additionally, since the first round a significantly higher proportion of IDUs in Pokhara have been injecting alone. The proportion of IDUs who had not shared their needle/syringe with anyone in the past week increased from 68 percent in the first round to 81 percent in second and finally 91.5 percent in the third round.

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

Needle/Syringe use throughout the Past Week	First Round (2003)		Second Round (2005)		Third Round (2007)
	N=300	%	N=300	%	RDS EPP (%) N=300
<b>Used a needle/syringe that had been used by another</b>					
Never Used	237	79.0	256	85.3	92.4
Ever Used	63	21.0	44	14.7	7.6
<b>Used a needle/syringe kept in public place</b>					
Never Used	239	79.7	280	93.3	96.6
Ever Used	61	20.3	20	6.7	3.4
<b>Number of partners sharing needle/syringe</b>					
None	204	68.0	243	81.0	91.5
Two or more partners	96	32.0	57	19.0	8.5

#### 9.4 Consistent Use of Condom with Different Partners

Responses regarding condom use with different partners indicate that since the first round of survey, a larger proportion of IDUs have been using condom consistently with their sex partners either regular, non-regular or female sex workers

Consistent use of condom with regular partners was higher in third round (21.7%) than in the second (12.4%) and first round (9.3%); however this increase is not statistically significant. As for their sexual contacts with non-regular partners in the year preceding the survey, a significantly higher proportion of IDUs in the third round than in the first and the second rounds had reported using condom consistently with them (29.9% IDUs 2003, 39.6% in 2005 and 52.9% in 2007).

Likewise, while in the first round 59.6 percent IDUs had used condom every time they had sex with female sex workers in the past year; a relatively lower proportion of them (49.6%) reported doing so in second round. In third round the proportion of IDUs reporting so increased to 80.5 percent; a statistically significant increase from 49.6 percent.

**Table 9.4: Consistent Use of Condom with Different Female Sex Partners during the Past Year**

Consistent Use of Condom	First Round (2003)		Second Round (2005)		Third Round (2007)
	N=86	%	N=89	%	RDS EPP (%) N=99
<b>Use of condom with regular female sex partners during past 12 months</b>					
Every time	8	9.3	11	12.4	21.7
Some time or Never	78	90.7	78	87.6	78.3
<b>Use of condom with non-regular female sex partners during past 12 months</b>					
Every time	23	29.9	38	39.6	52.9
Some time or Never	54	70.1	58	60.4	47.1
<b>Use of condom with female sex workers during past 12 months</b>					
Every time	53	59.6	60	49.6	80.5
Some time or Never	36	40.4	61	50.4	19.5

#### 9.5 HIV Prevalence

HIV prevalence among the IDUs has gradually decreased since the first round. As seen in Table 9.5 the first and the second round of IBBS showed almost same HIV prevalence rate among IDUs in Pokhara (22% in 2003 and 21.7% in 2005). The prevalence rate however decreased to 6.8 percent in 2007; this is a significant change since the first round.

From the other findings of the study, it is evident that the IDUs in Pokhara have been increasingly becoming conscious of HIV/AIDS risk factors. Their behavioral trend also

points towards a considerable improvement with regards to injecting habits and sexual behavior. Seventy nine percent IDUs had avoided injecting with a previously used needle in the first round, the figure reached to 92.4 percent in 2007. Likewise, practice like injecting with a syringe that had been kept in the public place also decreased from 20.3 percent in 2003 to 3.4 percent in 2007. At the same time a considerable proportion of IDUs have been practicing safe sex with their sex partners like female sex workers. While in 2003, 59.6 percent had used condom consistently in sexual relation with female sex workers in the year preceding the survey, 80.5 percent reported doing so in 2007. It was further evident from this study that IDUs in the Pokhara mostly do not share their needle/syringe with others as around 99 percent IDUs have had their last three injections alone.

**Table 9.5: HIV Prevalence among IDUs**

HIV Prevalence	First Round (2003)		Second Round (2005)		Third Round (2007)	
	N=300	%	N=300	%	Estimated population Proportion (%) (n=300)	95% CI
HIV	66	22	65	21.7	6.8	4.2 – 9.8



## 10. SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

### 10.1 Summary of Major Findings

- Overall 6.8 percent were tested HIV positive. Syphilis history was found among 0.3 percent of IDUs while 1.3 percent currently had high titre syphilis.
- The prevalence of HIV significantly differed with marital status, literacy status and drug injecting duration of the respondents. The rate of infection was significantly higher among those IDUs who had injected with a previously used needle/syringe in the past week than average. HIV prevalence however had no significant relation with type of sex partners that the respondents had sexual contact with.
- The IDUs consisted predominantly of young individuals with 87.3 percent below the age of 30 years.
- Thirty eight percent of IDUs had been injecting drugs for two to five years while 32.9 percent had been injecting for less than two years.
- Respondents indicated that 7.6 percent had used a needle syringe used by someone else and 3.4 percent had used a needle/syringe kept in a public place in the past week.
- Among those IDUs who had been mobile in the past year, 3.4 percent had injected with a previously used needle/syringe and 4.5 percent had given a needle/syringe to someone else after using it at the place/s visited by them.
- Around 96 percent IDUs have had sex before. Among them 83.2 percent had been sexually active in the past year.
- The sexual partners of the respondents included female regular, non-regular female partners and female sex workers.
- Consistent condom use was reported highest with female sex workers (80.5%) followed by with non-regular sex partners (52.9%) and with regular female sex partners (21.7%) in the past year.
- One in ten IDUs had not heard about STIs before.
- The majority of IDUs (87.5%) reportedly had never experienced any STI symptom so far, 5.4 percent have had genital discharge and 9.1 have had genital ulcer/sore in the past year. Among them 17.4 percent had been experiencing genital discharge and 41.7 percent have had genital ulcer/sore at the time of survey.
- Over two fifth (44.4%) of those IDUs who had ever experienced one or more STI symptoms had never sought any treatment.
- All the respondents had heard about HIV/AIDS. While 86.9 percent IDUs knew about all three major indicators, abstinence from sexual contact (A), being faithful to one

partner (B) and condom use during each sexual contact (C), 73.4 percent IDUs were aware of all major indicators BCDEF namely being faithful, consistent condom use, understanding that a healthy looking person can be infected with HIV, knowing that a person can not get the HIV virus from mosquito bite and agreeing that sharing meal with an HIV infected person do not transmit HIV virus .

- Among those IDUs who were aware of HIV testing facilities, 57.4 percent had ever taken up HIV testing. Most of them (87.8%) had received test result.
- Overall, 66.7 percent IDUs had ever met PE/OEs, 86.6 percent had at least once visited a DIC and 37.1 percent had visited a VCT center in the past year. However, very few IDUs (5.7%) had visited an STI clinic.
- Around 25 percent respondents had ever participated in at least one HIV/AIDS awareness program or similar community events.

## **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 indicate that basically youth and adolescents fall into injecting habit (58.6% respondents were below 25 while 60.8% had their first injection before they were 20). Specific program activities that target school children, college students, youth, and adolescents should be designed to impart HIV/AIDS awareness and sex education.
- HIV prevalence was significantly related with the drug injecting behavior. Ongoing HIV/AIDS awareness activities should continue and be expanded geographically to cover more IDUs – especially illiterate ones. Advocacy, behavioral change activities, health promotion interventions should be further scaled up.
- Past week’s injecting practice of the respondents revealed that 7.6 percent IDUs had injected with a previously used syringe, 3.4 percent had used a syringe left at public place. Around five percent of IDUs had also practiced risky injecting behavior like using a pre-filled syringe, injecting with a syringe after drugs were transferred into it from another syringe and sharing injecting equipment. Similarly 8.1 percent of them had shared a container to draw drugs with others in the past week. Comprehensive drug prevention and treatment interventions should be promoted. Harm reduction initiatives like wider dissemination of information on safe injecting behavior, and needle exchange program should be continued and expanded further.
- Over one-third IDUs (33%) had at least once received de-addiction treatment while 67 percent had never received any such treatment. Rehabilitation and detoxification centers should be supported for providing necessary services to the IDUs especially to those belonging to economically deprived families. Rehabilitation program should also incorporate family counseling services.
- Around 74 percent of IDUs had maintained sexual contact with more than two partners in the past year. While 30 percent had sex with regular sex partners, 51

percent and 49.1 percent had sexual contact with non-regular partners and female sex workers respectively in the last year. Among them, 78.3 percent IDUs had not used condom consistently with regular female sex partner, 47.1 percent with non regular female sex partners and 19.5 percent with female sex workers. Barriers to inconsistent condom use should be explored and intervention targeting not just IDUs but also female sex workers and general population should be stressed.

- Over two fifth (44.4%) of those IDUs who had ever experienced one or more STI symptom had never sought any treatment. HIV/AIDS awareness campaigns should also focus on STI education. Client friendly STI testing and treatment facilities, VCT centers 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 population. Around 66.7 percent respondents had met them at least once in 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.
- Around 87 percent respondents had visited a DIC in the past year. More DICs with expanded activities at central locations could cover more of the target groups.
- Around 75 percent respondents had never participated in any HIV/AIDS related program. Ongoing programs should be expanded geographically and capacity building of local.
- NGOs should be focused on to increase access to more of target population. Monitoring and evaluation of HIV prevalence and risk behaviors of IDUs to design and implement timely intervention a strategy is needed at regular time interval.

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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.**

Code Respondents:

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 #: 

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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 ..... <input type="text"/> <input type="text"/> VDC/Municipality _____ District _____	
101.1	How long have you been living continuously at this location?	Month ..... <input type="text"/> <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> (write the completed years)	
104	What is your educational status?	Illiterate .....0 Literate.....19 Grade ..... <input type="text"/> <input type="text"/> (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 ..... <input type="text"/> <input type="text"/> (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



Q. N.	Questions	Coding Categories	Skip to Q.N.
10 9	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
10 9.1	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..... <input type="text"/> <input type="text"/> Months..... <input type="text"/> <input type="text"/> No response .....99							
202.	How old were you when you first injected drugs?  (Include self-injection or injection by another)	Years ..... <input type="text"/> <input type="text"/> <i>(write the completed years)</i>							
203	How long have you been injecting drugs?  (Include self-injection or injection by another)	Years..... <input type="text"/> <input type="text"/> Months..... <input type="text"/> <input type="text"/> 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? ( <i>Read the list, multiple answer possible</i> )								
	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

Q. N.	Questions	Coding Categories						Skip to Q.N.	
	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
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..... <input type="checkbox"/> 1 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..... <input type="checkbox"/> <input type="checkbox"/>							
208.	How many times would you say you injected drugs on the last day?	Times..... <input type="checkbox"/> <input type="checkbox"/>							
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 ..... <input type="text"/> <input type="text"/>	
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 <sup>+</sup> ..... 3 I picked it up from a public place which was left there by myself <sup>+</sup> ..... 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	
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. .... <input type="text"/> <input type="text"/> 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 <sup>+</sup> ..... 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. .... <input type="text"/> <input type="text"/> Injected alone..... 96	

Q. N.	Questions	Coding Categories	Skip to Q.N.
304.	Now think about the time before <b>(before Q. 303)</b> , how did you get that syringe/needle?  <b>(Public place means places other than the IDU's home that are used to hide syringe/needle)</b>	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 <sup>+</sup> ..... 3 I picked it up from a public place which was left there by myself <sup>+</sup> ..... 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. .... <input type="text"/> <input type="text"/> 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
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?  <b>(Public place means places other than the IDU's home that are used to hide syringe/needle)</b>	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?  <b>Read out list. Multiple answers possible</b>		
	1. Your usual sexual partner	<b>Yes</b> 1 <b>No</b> 2 <b>DK</b> 98 <b>NR</b> 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?  <b>(Count everyone who injected from the same syringe)</b>	Number of partners ..... <input type="text"/> <input type="text"/> Don't know ..... 98 No response..... 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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	
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	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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?  <b>(Do not read out list. Multiple answers possible. Probe only with "Anywhere Else?"</b> )	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	
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 ..... <input type="text"/> <input type="text"/> Don't know ..... 98 No response..... 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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.)		
	<b>Types of Treatments</b>	<b>Name of Institutions</b>	
	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 <i>cold turkey</i>		
	9. Forced for <i>cold turkey</i>		
	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 ..... <input type="text"/> <input type="text"/> (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 ..... <input type="text"/> <input type="text"/>	
403.1	How many were female "regular partners"? (Your wife or live-in sexual partners)	Number ..... <input type="text"/> <input type="text"/> Don't know ..... 98 No response..... 99	
403.2	How many were female "sex worker"? (Partners to whom you bought or sold sex in exchange for money or drug)	Number ..... <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> 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

Q. N.	Questions	Coding Categories	Skip to Q.N.
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 ..... <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> 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	
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	



Q. N.	Questions	Coding Categories	Skip to Q.N.
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? <i>(Check 403.2 and circle the response of Q. 502)</i>	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..... <input type="text"/> <input type="text"/> 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..... <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> 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?  <b>(Do not read the possible answers, multiple answer possible)</b>	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	
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	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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? <b>(Check 403.3 and circle the response of Q. 503)</b>	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 ..... <input type="text"/> <input type="text"/> 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?  <b>(Don't read the possible answers, multiple answer possible)</b>	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	
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

Q. N.	Questions	Coding Categories	Skip to Q.N.
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 ..... <input type="text"/> <input type="text"/> 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 in an anal sex with a male partner in 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 Never used ..... 4 Don't know ..... 98 No response..... 99	

Q. N.	Questions	Coding Categories	Skip to Q.N.
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 <i>Pan Pasa</i> ..... 10 Others (Specify) ..... 96 No response ..... 99	
605.	How long would it take ( <i>from your house or the place where you work</i> ) 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	804 804
802.	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes ..... 1 No..... 2 No response..... 99	804
803.	Do you have close relative or close friend 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.	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? <b>(By confidential, I mean that no one will know the result if you don't want him or her to know it.)</b>	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.	<p>Of the following sources of information, from which sources have you learned about HIV/AIDS?  <i>(Read the following list, multiple answers possible)</i></p> <p style="text-align: center;"><b>Source of Information</b></p> <p>1. Radio</p> <p>2. Television</p> <p>3. Newspapers/Magazines</p> <p>4. Pamphlets/Posters</p> <p>5. School/Teachers</p> <p>6. Health Worker/Volunteer</p> <p>7. Friends/Relatives</p> <p>8. Work Place</p> <p>9. People from NGO</p> <p>10. Video Van</p> <p>11. Street Drama</p> <p>12. Cinema Hall</p> <p>13. Community Event/Training</p> <p>14. Bill Board/Sign Board</p> <p>15. Comic Book</p> <p>16. Community Workers</p> <p>96. Others (Specify) _____</p>	<p><b>Yes</b></p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p><b>No</b></p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	
902.	<p>Has anyone give you following information or items in the past year?  <i>(Multiple answer possible, read the list)</i></p> <p style="text-align: center;"><b>Items</b></p> <p>1. Condom</p> <p>2. Brochure/Booklets/Pamphlets about HIV/AIDS</p> <p>3. Information about HIV/AIDS</p> <p>96. Others (Specify) _____</p>	<p><b>Yes</b></p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p><b>No</b></p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	



## 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? ( <i>Read the following list, multiple answer possible</i> )			
	<b>Sources</b>	<b>Yes</b>	<b>No</b>	
	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? ( <i>Multiple answer possible</i> )			
	<b>Message/characters</b>	<b>Yes</b>	<b>No</b>	
	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? <b>Knowing someone is defined as being able to contact them, and having had contact with them in the past 12 months – knowing each other</b>	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 Mobilizers (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?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	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?  <b>(Multiple answers. DO NOT READ the possible answers)</b>	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? <b>Drop-In Center (DIC), Information Center (IC), Counseling Center (CC)</b>	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: Sample Size Formula

### Basic Equation Used in Sample Design

$$n = \frac{D [(Z_{\alpha} + Z_{\beta})^2 * (P_1 (1 - P_1) + P_2 (1 - P_2))]}{(P_2 - P_1)^2}$$

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<sub>1</sub> = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area

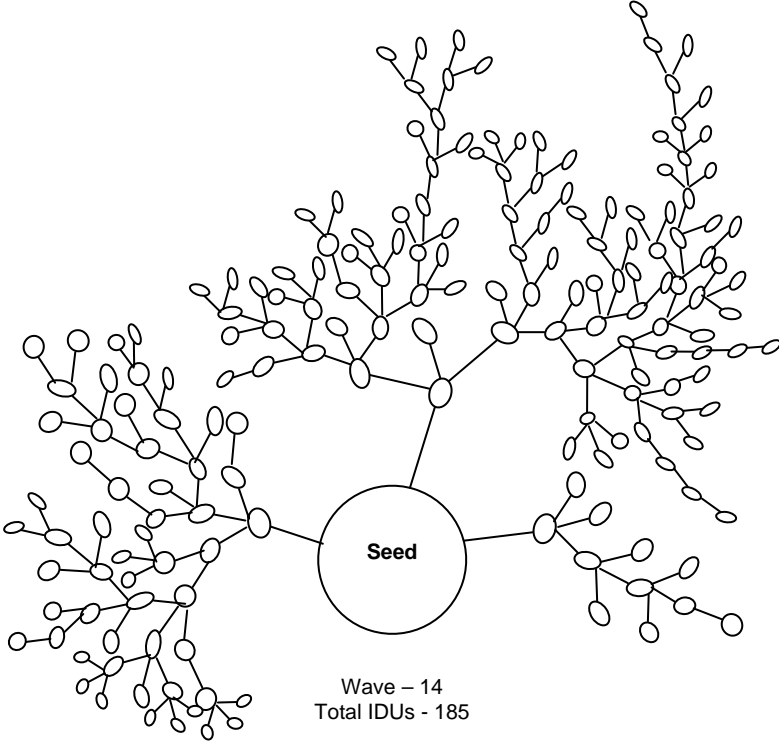
P<sub>2</sub> = the expected level of the indicator either at some future date or for the project area such that the quantity (P<sub>2</sub>-P<sub>1</sub>) is the size of the magnitude of change it is desired to be able to detect

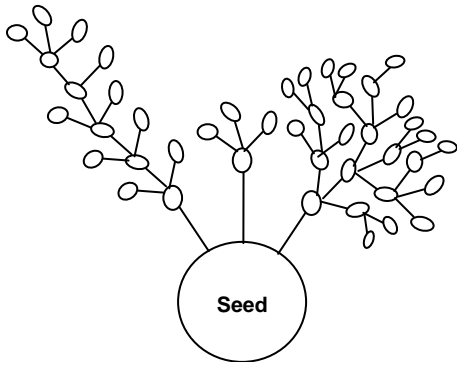
Z<sub>α</sub> = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P<sub>2</sub>-P<sub>1</sub>) would not have occurred by chance (α – the level of statistical significance), and

Z<sub>β</sub> = the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P<sub>1</sub>-P<sub>2</sub>) if one actually occurred (β – statistical power)

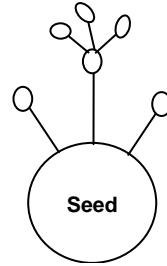


**ANNEX – 3: Respondent Driven Sample of IDUs**

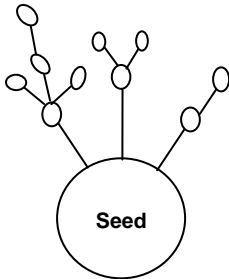




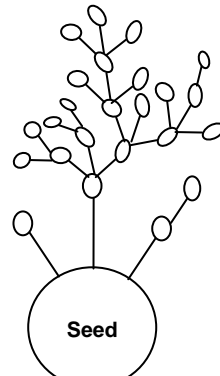
Wave - 6  
Total IDUs - 46



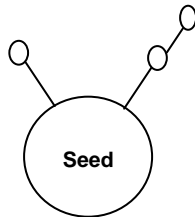
Wave - 2  
Total IDUs - 7



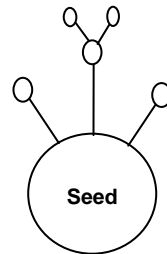
Wave - 3  
Total IDUs - 11



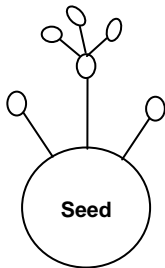
Wave - 5  
Total IDUs - 25



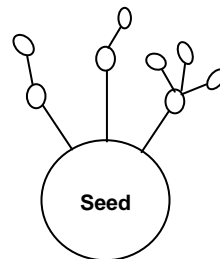
Wave - 2  
Total IDUs - 4



Wave - 2  
Total IDUs - 6



Wave - 2  
Total IDUs - 7



Wave - 2  
Total IDUs - 9

## ANNEX – 4: 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  
Dr. Laxmi Bilas Acharya, FHI/Nepal

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Gopal Bhawan, Anamika Galli, Ward No4,  
Baluwatar, Kathmandu, Nepal  
Phone: +977 1 443 7173  
FAX: +977 1 441 7475

### 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 and an additional NRs. 50.0 (US\$ 0.70) for each successful referral of peers for the study. You may refer up to three peers or friends.

### **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](mailto: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 – 5: Clinical/Lab Checklist

**CONFIDENTIAL**

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

#### Clinical/Lab Checklist

Respondent

Date: 2064/\_\_\_/\_\_\_

Name of Clinician: \_\_\_\_\_

Name of Lab Technician: \_\_\_\_\_

			<u>Yes</u>	<u>No</u>
(A) Clinical TEST	(B) Specimen collection			
Weight : _____ Kg	Pre-test counseled		1	2
B.P. : _____ mm of Hg	Blood Collected for HIV & Syphilis		1	2
Pulse : _____	Date & place for post-test results given		1	2
Temperature : _____ ° F	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
Kaski	Prithivichowk, Pokhara	1	300	300

### ANNEX – 7: Participation in Post Test Counseling

Date	Counseling Center	Expected Client	Client Counseled		Client with HIV+	Client with HIV-
			N	%		
July 6 – August 22, 2007	Naulo Ghumti	300	34	11.3	1	33



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

Injecting practice	First Round (2003)		Second Round (2005)		Third Round (2007)	
	n=57	%	n= 155	%	n=64	%
<b>Reasons for not injecting yesterday</b>						
Lack of money	14	24.6	48	31.0	28	43.8
To quit slowly	12	21.0	60	38.7	24	37.5
Smoked ganja	7	12.3	0	0.0	0	0.0
Due to pulling brown sugar	6	10.5	0	0.0	0	0.0
Injected alternate day	5	8.8	0	0.0	0	0.0
Drank alcohol	5	8.8	0	0.0	0	0.0
Unavailability/Lack of drugs	2	3.5	43	27.7	3	4.7
Was in custody	2	3.5	0	0.0	0	0.0
Used Nitrosun orally	2	3.5	0	0.0	0	0.0
Due to illness	0	0.0	2	1.3	1	1.6
Taking other medicines	0	0.0	2	1.3	4	6.3
Busy in housework/other work	0	0.0	2	1.3	2	3.1
Others	10	17.5	6	3.9	5	7.8

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=300	%	N=300	%	N=300	%
Arm	186	62.0	117	39.0	39	13.0
Wrist	80	26.7	130	43.3	118	39.3
Elbow	0	0.0	0	0.0	56	18.7
Calf	12	4.0	3	1.0	0	0.0
Thigh	7	2.3	22	7.4	0	0.0
Palm	7	2.3	12	4.0	16	5.3
Joint of leg and hip	0	0.0	0	0.0	17	5.7
Back of the Knee	3	1.0	0	0.0	0	0.0
Armpit	0	0.0	4	1.3	15	5.0
Finger	0	0.0	6	2.0	0	0.0
Others	5	1.7	6	2.0	39	13.0

## ANNEX – 10: Gathering Place of IDUs to Inject Drugs

SN	Gathering places of IDUs to Inject Drugs	First Round (2003)		Second Round (2005)		Third Round (2007)	
		N=300	%	N=300	%	N=300	%
1.	Forest/Bushes/lawn/Farmland	104	34.7	187	62.3	176	58.7
2.	Open Ground/Town planning area	54	18.0	0	0.0	0	0.0
3.	River bank/Slum area/Pond	47	15.7	26	8.7	38	12.7
4.	Own/friends/Drug-user's room/House	43	14.3	45	15.0	53	17.7
5.	Bus Park	18	6.0	9	3.0	5	1.7
6.	Around school/Campus/Stadium	6	2.0	7	2.3	0	0.0
7.	Camp/Company	4	1.3	0	0.0	0	0.0
8.	Cannel	4	1.3	0	0.0	0	0.0
9.	Pool House/Swimming pool	3	1.0	8	2.7	0	0.0
10.	Garage/Junk store	3	1.0	5	1.7	3	1.0
11.	Toilet/Public toilet	3	1.0	2	0.7	5	1.7
12.	Hotel/Lodge/Restaurant	2	0.7	8	2.7	3	1.0
13.	Temple Area	2	0.7	0	0.0	0	0.0
14.	Vacant house/Newly constructed house	2	0.7	0	0.0	4	1.3
15.	Shop	2	0.7	0	0.0	0	0.0
16.	Around airport	1	0.3	0	0.0	0	0.0
17.	Chowk/Tole/Galli/Road	1	0.3	0	0.0	3	1.0
18.	Lonely place	1	0.3	0	0.0	0	0.0
19.	Others	0	0.0	3	1.0	10	3.3

## ANNEX – 11: Combination of Different Drugs Injected by IDUs

S.N.	Drugs Combination	Third Round (2007)
		N=282
1	Norphin + Diazepam + Phenergan	95
2	Norphin + Diazepam	43
3	Norphin + Diazepam + Phenergan + Algic	29
4	Norphin + Diazepam + Phenergan + Avil	13
5	Norphin + Diazepam + Algic	10
6	Diazepam + Phenergan + Algic	10
7	Norphin + Algic	9
8	Norphin + Phenergan	6
9	Diazepam + Phenergan	6
10	Norphin + Diazepam + Avil	5
11	Tidigesic + Diazepam + Phenergan	5
12	Norphin + Diazepam + Phenergan + Algic + Avil	5
13	Norphin + Algic + Avil	4
14	Norphin + Diazepam + Phenergan + Calmpose	3
15	Norphin + Diazepam + Phenermine	2
16	Diazepam + Phenermine + Double 'O'	2
17	Norphin + Avil	1
18	Tidigesic + Diazepam	1
19	Diazepam + Algic	1
20	Norphin + Nitrovate	1
21	Diazepam + Saipam	1
22	Norphin + Diazepam + Calmpose	1
23	Norphin + Phenergan + Calmpose	1
24	Norphin + Diazepam + Hydrocole	1
25	Diazepam + Phenergan + Traphex	1
26	Diazepam + Phenergan + Ji gold star	1
27	Diazepam + Ji gold star + Double 'O'	1
28	Norphin + Algic + Phenergan	1
29	Norphin + Diazepam + Stargun	1
30	Norphin + Diazepam + Double 'O'	1
31	Norphin + Phenergan + Double 'O'	1
32	Norphin + Diazepam + Phenergan + Avilvet	1
33	Diazepam + Calmpose + Algic + Avil	1
34	Tidigesic + Diazepam + Phenergan + Avil	1
35	Tidigesic + Diazepam + Phenergan + Algic	1
36	Norphin + Diazepam + Phenergan + Phenermine	1
37	Norphin + Diazepam + Phenergan + Ji gold star	1
38	Norphin + Diazepam + Phenergan + Hydrocole	1
39	Norphin + Diazepam + Algic + Ji gold star	1
40	Norphin + Phenergan + Saipam + Algic	1
41	Norphin + Diazepam + Algic + Codiene	1
42	Norphin + Diazepam + Phenergan + Double 'O'	1
43	Tidigesic + Diazepam + Phenergan + Double 'O'	1
44	Tidigesic + Phenergan + Calmpose + Avil	1
45	Diazepam + Phenergan + Saipam + Algic	1
46	Diazepam + Phenergan + Algic + Double 'O'	1
47	Norphin + Diazepam + Phenergan + Calmpose + Algic	1
48	Norphin + Diazepam + Phenergan + Calmpose + Saipam	1
49	Norphin + Diazepam + Phenergan + Saipam + Avil	1
50	Norphin + Diazepam + Phenergan + Saipam + Phenermine + Double 'O'	1
51	Norphin + Diazepam + Phenergan + Algic + Codiene + Effidin + Proxyvon	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	%
<b>Switched from one drugs to another drugs in past month</b>						
Yes	1	0.3	5	1.7	5	1.7
No	299	99.7	295	98.3	295	98.3
<b>Total</b>	<b>300</b>	<b>100.0</b>	<b>300</b>	<b>100.0</b>	<b>300</b>	<b>100.0</b>
<b>Switched from</b>						
Tidigesic to Nitrosun, Ganga and Charas	1	100.0	0	0.0	0	0.0
Norphin to Alcohol	0	0.0	1	20.0	0	0.0
Norphin to Norphin + Nitrovate	0	0.0	1	20.0	0	0.0
Brown Sugar to Norphin	0	0.0	1	20.0	0	0.0
Brown Sugar to Tidigesic	0	0.0	1	20.0	0	0.0
Brown Sugar + Diaqepam to Norphin	0	0.0	1	20.0	0	0.0
Norphin+Phenargan to Norphin+ Diazepam	0	0.0	0	0.0	2	40.0
Norphin+Phenargan to Norphin+ Diazepam+Algic	0	0.0	0	0.0	1	20.0
Norphin+Saipam+Double 'O' to Phenergan+Goldstar	0	0.0	0	0.0	1	20.0
Norphin+Algic to Norphin+Diazepam+Phenergan	0	0.0	0	0.0	1	20.0
<b>Total</b>	<b>1</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>
<b>Reasons for switching *</b>						
To reduce Tidigesic/Leave slowly	1	100.0	0	0.0	0	0.0
Due to lack of money/expensive	0	0.0	3	60.0	0	0.0
Unavailability/scarcity of drugs	0	0.0	2	40.0	1	20.0
Due to nerve problem	0	0.0	0	0.0	3	60.0
Others	0	0.0	0	0.0	1	20.0
<b>Total</b>	<b>1</b>	<b>*</b>	<b>5</b>	<b>*</b>	<b>5</b>	<b>*</b>

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

## ANNEX – 13: Types of Treatment and Institutions from Where Treatment Received

Types of Treatments	Residential Rehabilitation	Out patient counseling	Helped for Cold turkey	Without drug	With other drug	Detoxification with methadone	Other treatment/help	Maintenance with methadone
<b>Types of institutions</b>								
<b>n=115</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>		<b>%</b>
Youth vision	-	0.8	-	-	1.7	-	-	0.8
Ashra/Youth Vision/Navajeevan	0.8	-	-	-	-	-	-	-
Naulo Ghumti	21.7	9.5	0.8	0.8	20.0	1.7	1.7	0.8
Aashra sudhar kendra	-	0.8	-	-	-	-	0.8	-
Aasha	-	0.8	-	-	0.8	-	-	-
Richmond Fellowship Center	16.5	6.0	0.8	1.7	12.1	1.7	1.7	1.7
Freedom Center	-	-	-	-	-	-	-	-
Nawa Kiran	-	-	-	-	-	-	-	-
Seren Foundation	8.6	4.3	-	-	13.0	2.6	-	0.8
Lajau Detox Center	-	-	-	-	-	-	-	-
Jumai in Sikkim	-	-	-	-	-	-	-	-
Gandaki Hospital	-	-	-	-	-	-	-	-
Gateway Foundation	4.3	1.7	-	0.8	6.0	-	-	0.8
Support and Care Center	0.8	-	-	-	-	-	-	-
Magic circle	5.2	0.8	-	-	6.9	-	-	0.8
Care foundation	0.8	-	-	-	0.8	-	-	-
Patan Hospital	-	-	-	-	0.8	-	-	-
Manish care	0.8	-	-	-	0.8	-	-	-
Magic care and care foundation	-	-	-	-	-	0.8	-	-
Youth vision and Manish care	-	-	-	-	0.8	-	-	-
Naulo ghumti and Richmond Fellowship	-	-	-	-	0.8	-	-	-
Youth vision, Seren foundation, Magic circle and Care foundation	-	-	-	-	0.8	-	-	-
Richmond fellowship and care foundation	-	-	-	-	0.8	-	-	-
Naulo Ghumti, Youth vision, Manish care and Aasha	0.8	-	-	-	-	-	-	-
Seren foundation and pension camp	0.8	-	-	-	-	-	-	-
Richmond fellowship, magic circle and care foundation	0.8	-	-	-	-	-	-	-
Others	-	-	0.8	0.8	2.6	-	-	-
<b>Total</b>	<b>62.6</b>	<b>25.2</b>	<b>2.6</b>	<b>4.3</b>	<b>69.6</b>	<b>7.0</b>	<b>4.3</b>	<b>6.1</b>

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 (2002)		Second Round (2005)		Third Round (2007)	
	N = 300	%	N = 300	%	N = 300	%
<b>Reasons of not using condom with regular partner in the last sexual intercourse</b>						
Partner objected	1	1.6	9	16.1	5	7.2
Don't like them	12	19.4	11	19.6	10	14.5
Used other contraceptive	8	12.9	17	30.4	18	26.0
Didn't think it was necessary	43	69.4	26	46.4	46	66.6
Didn't think of it	0	0.0	5	8.9	3	4.3
Willing to have baby	0	0.0	3	5.4	4	5.8
Not available	0	0.0	0	0.0	3	4.3
Others	0	0.0	6	10.7	2	2.9
<b>Total</b>	<b>62</b>	<b>*</b>	<b>56</b>	<b>*</b>	<b>69</b>	<b>*</b>
<b>Reasons of not using condom with sex worker in the last sexual intercourse</b>						
Not available	8	44.4	15	48.4	15	55.5
Partner objected	0	0.0	2	6.5	0	0.0
Don't like them	4	22.2	11	35.5	10	37.0
Didn't think it was necessary	3	16.7	4	12.9	2	7.4
Didn't think of it	2	11.1	9	29.0	3	11.1
Others	1	5.6	1	3.2	2	7.4
<b>Total</b>	<b>18</b>	<b>*</b>	<b>31</b>	<b>*</b>	<b>27</b>	<b>*</b>
<b>Reasons of not using condom with non-regular partner in the last sexual intercourse</b>						
Not available	13	31.7	10	23.3	14	25.4
Partner objected	1	2.4	10	23.3	4	7.3
Don't like them	6	14.6	12	27.9	12	21.8
Used other contraceptive	1	2.4	1	2.3	4	7.3
Didn't think it was necessary	15	36.6	19	44.2	37	67.3
Didn't think of it	5	12.2	9	20.9	6	10.9
Trust on partner	0	0.0	3	7.0	1	1.8
Sexual Un-satisfaction	0	0.0	1	2.3	0	0.0
Others	1	2.4	0	0.0	3	5.4
<b>Total</b>	<b>41</b>	<b>*</b>	<b>43</b>	<b>*</b>	<b>55</b>	<b>*</b>

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

## ANNEX – 15: Comparative Analysis

### Socio-Demographic Characteristics of the Sample Population

Socio-Demographic characteristics	First Round (2003)		Second Round (2005)		Third Round (2007)
	N=300	%	N=300	%	RDS EPP (%) N=300
<b>Age</b>					
<=19 Years	69	23.0	50	16.7	<b>15.6</b>
20-24	137	45.7	137	45.7	43.0
25-29	47	15.7	66	22.0	28.7
30-34	31	10.3	32	10.7	7.5
35-42	16	5.3	15	5.0	5.3
<b>Median age</b>	<b>22</b>	<b>-</b>	<b>23</b>	<b>-</b>	<b>24</b>
<b>Education</b>					
Illiterate	19	6.3	16	5.3	5.1
Literate only	3	1.0	5	1.7	0.5
Primary	51	17.0	63	21.0	20.4
Secondary	189	63.0	168	56.0	48.3
SLC & above	38	12.7	48	16.0	25.7

### Drug Injecting Practice of Respondents

Drug injecting practice	First Round (2003)		Second Round (2005)		Third Round (2007)
	N=300	%	N=300	%	RDS EPP (%) N=300
<b>Duration of drug injecting habit</b>					
Up to 12 months	56	18.7	37	12.3	24.6
13 – 60 months	199	59.7	164	54.7	46.0
More than 60 months	65	21.7	99	33.0	29.5
<b>Average duration years</b>	<b>3.7</b>	<b>-</b>	<b>4.8</b>	<b>-</b>	<b>4.7</b>
<b>Age at first drug injection</b>					
Up to 20 years	192	64.0	205	68.3	60.8
21+ years	108	36.0	95	31.7	39.2
<b>Median age</b>	<b>19</b>	<b>-</b>	<b>18</b>	<b>-</b>	<b>19</b>

### 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=300	%	N=300	%	RDS EPP (%) N=300
<b>Used a needle/syringe that had been used by another</b>					
Never Used	237	79.0	256	85.3	92.4
Ever Used	63	21.0	44	14.7	7.6
<b>Used a needle/syringe kept in public place</b>					
Never Used	239	79.7	280	93.3	96.6
Ever Used	61	20.3	20	6.7	3.4
<b>Number of partners sharing needle/syringe</b>					
None	204	68.0	243	81.0	91.5
Two or more partners	96	32.0	57	19.0	8.5
<b>Reused needle/syringe in the past week</b>					
Yes	156	52.0	84	28.0	14.6
No	144	48.0	216	72.0	85.4

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



### Consistent Use of Condom with Different Female Sexual Partners in the Past Year

Consistent use of condom	First Round (2003)		Second Round (2005)		Third Round (2007)
					RDS EPP (%)
<b>Use of condom with regular female sex partners during past 12 months</b>	<b>n=86</b>	<b>%</b>	<b>n=89</b>	<b>%</b>	<b>n=99</b>
Every time	8	9.3	11	12.4	21.7
Some time or Never	78	90.7	78	87.6	78.3
<b>Use of condom with non-regular female sex partners during past 12 months</b>	<b>n=77</b>	<b>%</b>	<b>n=96</b>	<b>%</b>	<b>n=135</b>
Every time	23	29.9	38	39.6	52.9
Some time or Never	54	70.1	58	60.4	47.1
<b>Use of condom with female sex workers during past 12 months</b>	<b>n=89</b>	<b>%</b>	<b>n=121</b>	<b>%</b>	<b>n=139</b>
Every time	53	59.6	60	49.6	80.5
Some time or Never	36	40.4	61	50.4	19.5