

**Integrated Biological and Behavioural Surveillance (IBBS)  
Surveys among People Who Inject Drugs (PWID) in West to  
Far West Terai Districts**

**Round VI-2017**



**Ministry of Health  
National Centre for AIDS and STD Control  
Teku, Kathmandu**

## ACKNOWLEDGEMENTS

This survey, conducted in accordance with the National Plan on HIV and STI Surveillance, aims to support evidence generation towards HIV/AIDS, STI, knowledge, related risk behavior, and prevalence trends through of Integrated Biological and Behavioral Surveillance (IBBS) survey. The survey was carried out by Intrepid Nepal Pvt. Ltd. (INPL) under the leadership of the National Centre for AIDS and STD Control (NCASC). Financial support for the survey was provided by the Pool Fund.

The NCASC team helped ensure the work was carried out efficiently and scientifically. Mr. Bir Bahadur Rawal, Statistical Officer, NCASC, Mr. Keshab Deuba, Strategic Information Specialist, Mirak Raj Angdembe, FHI and Komal Badal, UNAIDS primarily provided the technical support required to ensure proper planning and monitoring of the survey. The survey was successfully completed with support from stakeholder organizations and different individuals. From the outset, we received support from various NGOs and community experts working with PWID namely – NNSWA, NAMUNA, AHH, UNFL, Recovering Nepal and other stakeholders. We thank the staff of Nepal Public Health Laboratory (NPHL) for carrying out quality control assessments of serological tests from biological samples received during the study.

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We are confident that the findings of this survey will provide crucial evidence regarding the ground realities of HIV/AIDS, HCB/HCV and STIs in Nepal. Furthermore, we believe that the results will aid in framing policies for reducing prevalence of HIV/AIDS and improving HIV/AIDS related prevention stratagem.

Dr. Tarun Poudel  
Director  
National Centre for AIDS and STD Control  
Teku, Kathmandu

## **STUDY TEAM**

### **PRINCIPAL INVESTIGATORS**

Dr. Tarun Poudel

### **CO-INVESTIGATORS**

Mr. Bir Bahadur Rawal, SITWG Focal Person, NCASC

Mr. Rajan Bhattarai, DCoP, Save the Children

Mr. Purusottam Raj Shedain, SMO, NCASC

Dr. Keshab Deuba SI Specialist, SI Specialist, NCASC/GF Programs

Mr. Upendra Shrestha, M&E Coordinator, NCASC/GF Programs

### **CONSULTANT**

Dr. Sampurna Kakchapati

### **KEY FIELD TEAM MEMBERS (INPL)**

Rajesh Man Rajbhandari	Team Leader
Bishwo Parakarma Shrestha	Research Officer
Dhirendra Shahi	Data Manager
Sulochana Manandhar	Lab Manager
Manisha Subedi	Lab Research Officer
Anupa Ghimire	Data Supervisor

<b>Field Team</b>	
Dhirendra Shahi	Field Supervisor
Prakash Bhatta	Lab Technician
Deepa Kumari Sinal	STI Clinician
Kalpana GC	Enumerator
Bikram Rawal	Enumerator
Nav Raj Bhatta	Enumerator

### **TABLET BASED APP AND DATA MANAGEMENT TEAM (PATHWAY)**

Mr. Suraj Shrestha

Mr. Bikram Kuwar

## ABBREVIATIONS

ABC	: Abstinence, Being Faithful, Condom Use
AIDS	: Acquired ImmunoDeficiency Syndrome
ART	: AntiRetroviral Therapy
BSS	: Behavioral Surveillance Survey
CC	: Community Centers
CHBC	: Community and home-based Care
CI	: Confidence Interval
CMs	: Community Motivators/Mobilisers
DIC	: DropinCentre
EQA	: External Quality Assessment
EQAS	: External Quality Assurance Scheme
FSW	: Female Sex Worker
GOs	: Governmental Organizations
HTC	: HIV Testing and Counseling
HIV	: Human ImmunoDeficiency Virus
IBBS	: Integrated Biological and Behavioral Surveillance
IC	: Information Center
ID	: Identifier
KAP	: Key Affected Population
LSD	: Lysergic acid diethylamide
NCASC	: National Center for AIDS and STD Control
NGO	: NonGovernmental Organization
NHRC	: Nepal Health Research Council
NPHL	: National Public Health Laboratory
OE	: Outreach Educator
PE	: Peer Educator
PHCC	: Primary Health Care Center
PLHIV	: People Living with HIV

PMTCT	:	Prevention of Mother to Child Transmission of HIV
PPS	:	Probability Proportional to Size
PWID	:	People Who Inject Drugs
RDT	:	Rapid Diagnostic Test
RPR	:	Rapid Plasma Regain
SGS	:	Second Generation Surveillance
SITWG	:	Strategic Information Technical Working Group
SPSS	:	Statistical Package for the Social Sciences
STI	:	Sexually Transmitted Infection
TPHA	:	Treponema Pallidum Hemagglutination Assay
TPPA	:	Treponema Pallidum Particle Agglutination
UNAIDs	:	Joint United Nations Programme on HIV/AIDS
USAID	:	United States Agency for International Development
UNGASS	:	United Nations General Assembly Special Session
WHO	:	World Health Organization

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# EXECUTIVE SUMMARY

## Introduction

HIV in Nepal is characterized as concentrated epidemic. Nepal is categorized as a country facing concentrated HIV epidemic. The National Centre for AIDS and STD Control (NCASC) has estimated that there were 39,249 people living with HIV (PLHIV) in Nepal in 2014 with adult HIV prevalence 0.20% (NCASC, 2014). The National HIV/AIDS strategy 2011-2016 has adopted strengthening of the Second Generation Surveillance (SGS) system as one of the key principle of strengthening surveillance of HIV and STI in Nepal. One of the major components of SGS, and also strategic direction of the national strategy, is to conduct Integrated Biological and Behavioural Surveillance (IBBS) among key populations at higher risk for HIV in selected high risk areas in regular interval based on the national plan on HIV and STI surveillance.

IBBS surveys have been successfully conducted in various rounds in Nepal for the last about a decade among key populations at higher risk for HIV. Different round of IBBS were successfully carried out under leadership of NCASC. Evidences from different rounds of IBBS surveys carried out in Nepal suggest that HIV prevalence is still high among PWID compared to other Key population such as Female Sex workers (FSW) and Male having sex with Male (MSM). This is six round of IBBS surveys among PWID West to Far West Terai Districts.

## Methodology

This descriptive serial cross-sectional study was conducted among PWIDs Western To Far West Terai Districts namely Rupandehi, Kapilvastu, Dang, Banke, Bardiya, Kailali and Kanchanpur. For the purpose of this survey, the definition of a PWID was "*Male aged 16 years or above who had been injecting drugs for at least three months prior to the date of the survey*".

A two stage cluster sampling was used to recruit 300 PWIDs from 7 Western To Far West Terai Districts. A site or hotspot with at least 30 PWIDs was defined as a cluster. To make sure proper representation of the survey population, out of 132 clusters, 30 clusters were selected from 7 highway districts, in the second stage, 10 PWIDs were selected from each cluster using systematic random sampling method.

The research was conducted in compliance with both ethical and human rights standards. Ethical approval for this survey was permitted by Nepal Health Research Council. Informed consent was obtained from the PWIDs in presence of a witness who signed on their behalf prior to the interview and collection of blood samples. Survey centers with laboratories/clinics were set up at easily accessible locations in each study district. Individual interviews, clinical examinations, and blood collection were carried out in separate rooms at each of the study centers.



## **Laboratory Methods**

HIV testing was done using Determine HIV 1/2 as the primary method for detecting antibodies against HIV. If the first test presented a negative result, no further tests were conducted. But, if the first test was positive, a second and third test was performed using UniGold and Stat Pak HIV 1/. Syphilis was tested using the Rapid Plasma Reagin (RPR) test card and confirmed by means of the Serodia Treponema Pallidum Particle Agglutination (TPPA) test. Serum samples that tested RPR positive with titer value above or equal to 1:8 were reported as active syphilis; titration less than 1:8 were reported as a case with history of syphilis. HCV and HBsAg was done using rapid test kits .

## **Key Findings**

### **Prevalence of HIV and Syphilis**

HIV prevalence among PWID was 5.3 percent. HCV prevalence among them in 2017 found to be 23.7 percent. Likewise HBC prevalence among PWID was 2.7 percent. Among the total respondents, STI prevalence was found to be 2.0 percent.

### **Background Characteristics**

Majority of the PWIDs (69.4%) were below 35 years and literate (93.7%).The representation of both disadvantaged janajati ethnic groups and upper caste groups was high (69.3%). Half of the PWIDs (50.7%) were married. Among the married PWIDs, 32.4 percent had got married before the age of 19. Most PWIDs (53.7%) were living with their female sexual partner. And among the married PWIDs, about 95 percent were living with their wife.

### **Sexual Behaviors of PWIDs**

Majority of respondents (96%) in the survey reported to be ever involved in sexual activity. Most of the PWIDs had their first sexual intercourse before age 20 (77.1%). More than 40 percent of PWIDs (41.9%) have more than one female sex partner.

### **Drug Injecting Practice of PWIDs**

The survey indicated that 36.3 percent PWIDs had been injecting drugs for more than 5 years while 27.7 percent had been injecting for past 2-5 years. A low number of respondents (10.3%) had started injecting drugs more recently, within a year. More than half of the PWIDs (55%) had injected for the first time at the age of 16-24 years. As for the frequency of injections in the last day prior to the survey, 43.3 percent of respondents reported that they injected more than once in the last day. Majority of the PWIDs (95.1%)(N=41) shared needle with friend in the last week.

### **Consistent Condom Use with Different Partners**

Nearly 47 percent of the of the PWIDs (46.9%) reported to use the condom every time with female sex workers in the past year. In case of regular female sex partner, 57.4 percent PWIDs used condom in the last sex. While half of them (50%)(N=4) used a condom during anal sex with a male partner in the past year. Majority of PWIDs (71%) did not have sexual intercourse with female non regular sex partner in last 12 months. More than half of the PWIDs (55.8%) used condom in the last sexual intercourse.

### **Comprehensive knowledge on HIV**

More than half of the PWIDs (74.7%) correctly identified all three ABCs (A. Abstaining from sex; B. Being faithful to one partner/avoiding multiple sex partners; C. Consistent condom use or use of condom during every sex act) as HIV preventive measures. However, comprehensive knowledge and misconceptions related to HIV among PWIDs, 70 percent correctly identified all five 'BCDEF' (D. a healthy looking person can be infected with HIV; E. HIV cannot be transmitted through a mosquito bite; F. HIV cannot be transmitted while sharing a meal with a HIV positive person).

### **Exposure to ongoing HIV Awareness Programs**

More than half of the PWIDs (56%) had met a Peer Educator/Outreach Educators (PE/OE) in the last 12 months. In addition, 63 percent of the PWIDs had visited a Drop in Clinic (DIC) in the past year. About 12 percent of PWIDs (11.7%) had visited a STI clinic and less than one fourth of them (22.3%) had visited a HTC center within the last year.

### **Knowledge on PMTCT, ART, Viral Load and CHBC Services**

Only 12 percent of PWID reported to have heard about prevention of mother to child transmission (PMTCT) services. Majority of the PWIDs(36%) had heard about antiretroviral therapy (ART) services for PLHIV. Among them 28 percent knew where to obtain ART services. About 14 percent of PWIDs (14.3%) had knowledge of viral load testing services for PLHIV. And when asked if they had heard about CHBC services, about one fourth of the PWIDs (25.3%) responded that they were aware of CHBC services provided for PLHIV.

### **Program Implications and Recommendations**

Based on the findings from this study, the following program implications and recommendation are discussed.

- The prevalence of HIV has been increased in this round of IBBS survey. *Targeted outreach programs are needed to reach PWID and bring them for treatment to prevent HIV transmission.*
- According to the data, prevalence of syphilis has increased from 0.3 percent in 2015 to 2 percent in 2017. *Intensified and focused programs on STI awareness which incorporates GOs and I/NGOs is needed to reduce prevalence of syphilis in the study districts. There is a need for further research to explore the factors for the sudden rise in prevalence of syphilis.*
- Consistent use of condoms with regular sex partner has increased but with non regular sex partner and FSW it has decreased as compared to the previous rounds of IBBS surveys. *The low incidence of use of condom among FSWs and non regular sex partner may increase vulnerability for HIV and STI transmission. Therefore, programs should focus on promotion of consistent use of condom with all types of partners.*
- Exposure to ongoing HIV programs and services (peer education, DICs, HTC clinics etc.) were found to be decreasing as compared to previous rounds of IBBS surveys. But PWID visiting STI clinic was increased from previous round of survey. *Targeted interventions among PWID with the provisions of peer and outreach education, partnerships with HTC/STI clinics, and inclusion of care and support are necessary for increasing exposure of the PWID to the programs and services related to HIV and AIDS.*
- The comprehensive knowledge (ABC), and comprehensive knowledge and misconceptions (BCDEF) of the PWID has increased significantly in 2017 as compared to the data from 2016. *Therefore, comprehensive knowledge, education, and awareness regarding HIV/ should be promoted through multiple channels.*
- Knowledge regarding ART services and CHBC services were considerably high in comparison with knowledge regarding PMTCT services among the PWID. *Scaling up HIV and AIDS education and awareness programs, which incorporate material on these services, is essential for increasing comprehensive knowledge of HIV/AIDs among PWID.*

# CHAPTER I: Introduction

## 1.1 Introduction

In Nepal, the spread of Human Immunodeficiency Virus (HIV) is concentrated among Key Populations (KPs) comprising of people who inject drugs (PWIDs), men who have sex with men (MSM), labor migrants, spouses, and Female Sex Workers (FSWs). The transmission of HIV is largely driven by KPs and consequential health risk behaviors. The Integrated Biological and Behavioral Surveillance (IBBS) survey is a descriptive serial cross-sectional survey conducted to monitor trends in HIV and STI prevalence and to explore behavioral information from high-risk groups. Behavioral surveillance is a systematic and ongoing collection of data about risk behaviors related to disease and health conditions, with the purpose of correlating trends in behavior with changes in disease over time. In biological surveillance, biological samples are collected and tested for HIV and other related illnesses. In Nepal, the National Center for AIDS and STD Control (NCASC) aims to track patterns of HIV incidence and prevalence, related awareness, and risk behaviors among high-risk populations. A standardized format of the questionnaire is used for each group, which is repeated with relevant modification in the following rounds of the survey to explore behavioral changes over time (NCASC, 2016).

IBBS surveys have been successfully conducted in various rounds in Nepal for the last about a decade among key populations at higher risk for HIV. Different rounds of IBBS were successfully carried out under leadership of NCASC with support from USAID, Global Fund and Pooled Fund. Evidences from different rounds of IBBS surveys carried out in Nepal suggest that HIV prevalence is still high among PWID compared to other Key population such as Female Sex workers (PWID) and Male having sex with Male (MSM). This is six round of IBBS surveys among PWID in west to far west Terai Highway Districts.

IBBS surveys are meant to generate evidence on the prevalence of and risk behaviors for HIV amongst high-risk-groups across Nepal. The goal of IBBS is to guide HIV prevention planning and resource allocation and to inform the development of effective HIV prevention interventions for key populations. Periodic IBBS with sub-populations help to design and implement timely intervention strategies and monitor the changes in diversity and effectiveness of existing interventions in controlling the epidemic. IBBS are a major source of information for understanding the HIV dynamics including behavior as well as HIV and STI prevalence among key population. Data on key national HIV indicators are based on IBBS surveys. IBBS survey is a key component of the national HIV surveillance plan of Nepal and is collected at regular intervals. Estimation and projection of HIV infections in the country are also heavily based on IBBS surveys data. Data on key National HIV Indicators (outcome and impact) are calculated from IBBS survey findings. Indeed, IBBS survey has established its reputation for quality and is the major set of surveillance data in Nepal

## **1.2 Objectives of the Study**

The objective of the survey is to determine the trends of HIV and STI prevalence and to assess HIV and STI-related risk behavior among PWIDs in Western Terai Highway districts. Moreover, the objective is also to find the prevalence of Hepatitis B and Hepatitis C among PWID.

The primary objectives are:

- To track the trend in the prevalence of STI and HIV infection among PWIDs in Western Terai Highway districts.
- To determine the trend in the prevalence of Hepatitis B and Hepatitis C among PWIDs in Terai Highway districts.
- To assess the sexual and injecting behaviors related to HIV and STI among the survey populations in the selected study areas.

**The secondary objectives are:**

- To estimate the knowledge of HIV/STI as well as sexual and injecting behaviors among PWIDs in Western Terai Highway districts.
- To explore associations between risk behaviors and infections with HIV or STI among PWIDs in Western Terai Highway districts.
- To estimate the prevalence of STI syndromes among PWIDs.
- To collect information related to socio-demographic characteristics; alcohol and drug use and needle sharing behaviours; sexual behaviours including knowledge and use of condoms; knowledge of transmission and prevention of HIV; knowledge and treatment of STI; access to available HIV and STI prevention, treatment, care and support services in selected survey areas; experience of stigma, discrimination and physical, sexual and other forms of violence; and exploring the association between the risk behaviours and HIV and other specified sexually transmitted infection in Western Terai Highway Districts.

## **1.3 Rationale for the Study**

IBBS Surveys are a strong component of HIV surveillance whose findings are widely used in designing HIV response, monitoring HIV prevention, care and treatment programs and estimating and projecting HIV infections throughout the world. These are the major source of information used by donors, policymakers, program designers, implementers, academicians and civil society organizations in order to track the level of HIV epidemic and related risk behaviours in Nepal. As a key component of national HIV surveillance plan of Nepal, IBBS are conducted at a regular interval in Nepal. Data on key National HIV Indicators (outcome and impact) as well as estimation and projection of HIV infections in the country

are heavily based on IBBS survey data. Likewise, IBBS are a major source of information for understanding the HIV dynamics including behavior as well as prevalence of HIV and STI among KAPs. Similarly, key UNGASS indicators were also calculated and reported using the IBBS survey data.

In our country Nepal, the HIV epidemic is driven by major three causes; injecting drug use, sex work and migration. Injecting drug use is one major risk behavior that often triggers the transmission of HIV and AIDS among the population who practice injecting habits. Injection of drugs is strongly linked to HIV because of the higher rate of HIV transmission through needles. Syringe use and needle sharing habits are one of the key behavioral factors that act as the principle driver in the transmission of HIV and other blood borne pathogens. Findings obtained from the previous survey have shown that the prevalence of HIV in PWIDs ranges from 11.7 percent in 2005, 11 percent in 2005 to 2.4 percent in 2015 in Western Terai districts. Although the prevalence is on a decreasing trend, the current status of HIV among PWIDs cannot be ignored. Thus the investigation of prevalence of HIV and social and behavioral correlates of HIV infection among people who inject drugs in Nepal is very essential.

In addition our country Nepal has a great experience of conducting IBBS surveys successfully among PWID for almost 10 years and the evidences obtained from different rounds of IBBS surveys carried out in Nepal suggest that HIV prevalence is still high among PWID compared to other KAPs such as Female Sex workers (FSW) and Male having sex with Male (MSM). PWID also possess high risk behavior of sharing needles/syringes between different injecting partners and also re-using needles kept in public places. With this evidence of importance, NCASC and Save the Children, through the support of Global Fund for AIDS, Tuberculosis, and Malaria (GFATM), conducted the sixth round of IBBS survey in seven West to Far Western Terai Districts (Rupandehi, Kapilvastu, Dang, Banke, Bardiya, Kailali and Kanchanpur). We are hopeful that the results obtained from the survey will be utilized by policy makers, program planners, and implementers to mobilize the national HIV response towards addressing the current epidemic in Nepal. Furthermore, we envision the study findings will be pivotal in guiding policy makers and program managers for identifying the useful points and areas to target and focus intervention strategies at different groups of People Who Inject Drugs.

## CHAPTER II: Methodology

### 2.1 Survey design

The survey was descriptive serial cross-sectional in design.

### 2.2 Survey Population

The study population of the survey was "Male aged 16 years or above who had been injecting drugs for at least three months prior to the date of the survey."

### 2.3 Survey Site

This survey was conducted in in Western To Far West Terai Districts namely Rupandehi, Kapilvastu, Dang, Banke, Bardiya, Kailali and Kanchanpur



Figure 1: Map of Nepal showing survey districts

### 2.4 Survey Period

The fieldwork for the survey started on 16<sup>th</sup> March 2017 and was completed on 10<sup>th</sup> April 2017.

### 2.5 Sample Design

Two stage cluster sampling method was used to select the PWIDs. All together 132 clusters were selected from Survey highway districts, 30 clusters were selected from the sampling to ensure proper representation of the survey population.

#### *First Stage: Selection of Clusters*

The information on the estimated size of the PWIDs within each district was based on the "Mapping and size estimations report 2016" carried out the by NCASC

A site or hotspot with at least 30 PWIDs was defined as a cluster. In the cluster Based on the report of mapping and size estimations report 2016. A list of locations and an estimated number of PWIDs for each location was prepared. The sites with less than 30 estimated PWIDs were combined with a neighboring site to form a full cluster, with a minimum number of a cluster not exceeding 30 PWIDs. The clusters were arranged in serpentine order based on location starting from Rupendehi to Kanchanpur. All together 132 clusters were identified from this region. Among them, 30 clusters were selected from using systematic random sampling method with the probability proportional to size (PPS) method. The selected clusters along with map are presented in the annexure.

#### *Second Stage: Selection of Respondents*

The field teams visited each of the selected clusters to prepare a list of PWIDs who met the eligibility criteria for the study. Only those PWID who were available in the clusters of the study districts were included in the list. 10 PWIDs were selected by systematic random sampling method from each of the respective clusters. This resulted in the selection of a total of 300 PWIDs .

**Table 1: An Overview of Number of Clusters Selected in Study Districts**

<b>Districts</b>	<b>Total no. of clusters</b>	<b>No. of clusters selected</b>
Rupendehi	26	6
Kapilvastu	5	1
Dang	16	4
Banke	41	9
Bardiya	14	3
Kailali	16	4
Kanchanpur	14	3

## **2.6 Sample Size**

The same size of sample used for previous rounds of IBBS surveys was also used in this round as well. Initially, the sample size was determined by using a basic statistical formula that estimated a sample size of 300 PWIDs (Annex 2).

## **2.7 Recruitment**



Using the mapping information on locations and the estimated number of PWIDs in those locations, first stage clusters were defined and 30 such clusters were selected using PPS method. Then from each of the first stage clusters selected, 12PWIs were systematically selected at random from the sample. The field teams, along with community motivators, visited selected clusters to prepare a list of PWIDs who met the criteria of the study. From the list created separately, 10 PWIDs were selected by systematic random sampling method from each selected cluster. Then the selected PWIDs were invited from each cluster to participate in the study. In such situations, community mobilizers and peer educators of ongoing HIV/AIDS programs, and social workers approached the selected PWIDs and invited them to participate in the study. At least three attempts were made to contact and include the potential participants. If this was not successful within three attempts, the person was replaced by another PWIDs selected randomly from the same cluster.

## **2.8 Data collection tools and techniques**

Both biological and behavioral data was collected, including handling of biological data for external quality assurance. The survey used a structured questionnaire to assess background characteristics, sexual risk behaviors, use of condoms, knowledge and awareness of HIV/AIDS, HCV/HBsAg and STIs, violence, exposure to HIV/AIDS programs, drug injecting behaviors, stigma, and discrimination. The questionnaire was developed with reference to the existing questionnaire used in the previous round (VI) of IBBS survey among PWIDs in the same districts. Modifications were made to the questionnaire based on pretest and in consultation with Strategic Working Technical Working Group (SITWG) members. All data collection tools were developed in Nepali and the interviews were conducted in Nepali language by female researchers.

## **2.9 Study Personnel**

The study team comprised of a team leader, a research officer, a database developer, data entry personnel, a statistician, field researchers, lab technicians, health assistants, counselors, community motivators, and support staff. The field team included a research officer, field researchers, lab personal, a health assistant, counselors, and support staff, whereas the study team included a database developer, data entry personnel, and a statistician.

## **2.10 Training of Field Team and Pretesting**

The field team was provided with 6 days of training by Intrepid Nepal. The training was facilitated by the relevant experts from NCASC, Save the Children, FHI 360, and Joint United Nations Programme on HIV/AIDS (UNAIDS).The training covered an overview of IBBS, HIV

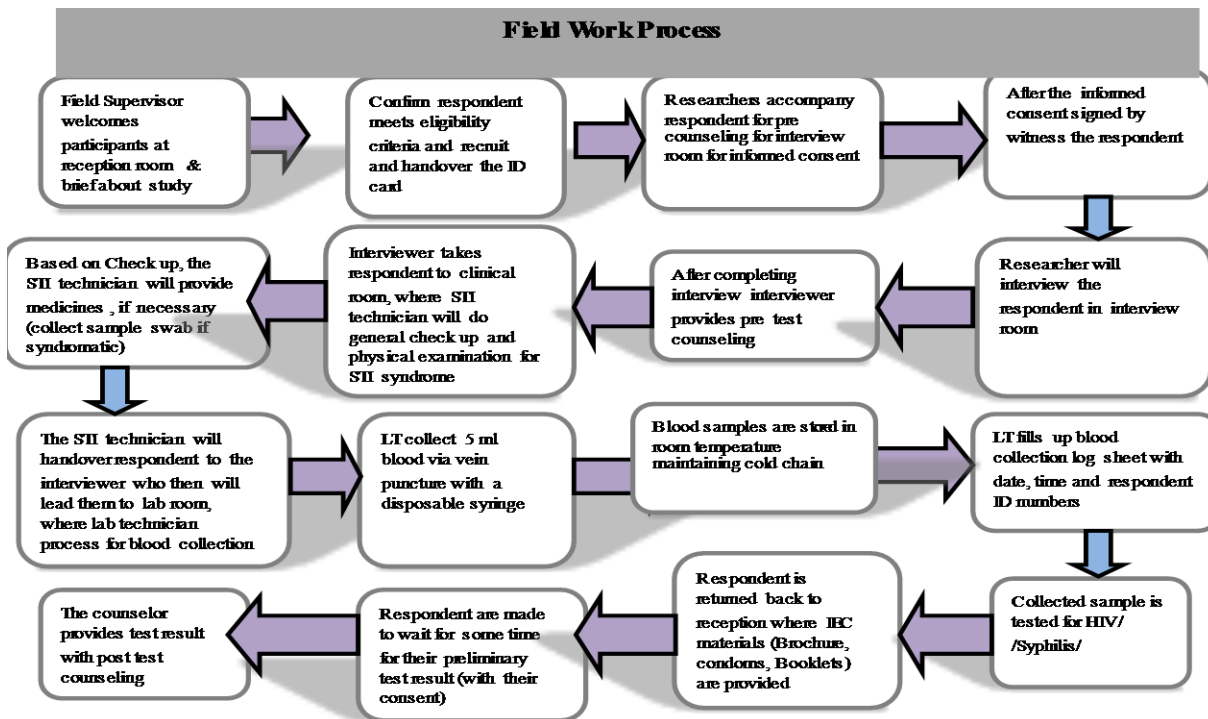
Epidemic and Surveillance System in Nepal, survey design and approaches, sampling approaches, behavioral interviews, interview process, administering informed consent/assent, data collection tools, and role(s) and responsibilities of the team members. The training was followed by mock interview exercises in pairs and large group reflection that involved a discussion of mock exercises. Additionally, experts from PWID networks and organizations also shared their experiences on working with PWIDs.

With the help of Recovering Nepal (RN), implementing agencies (through their peer educators/outreach educators), contacted PWIDs and invited them for the pretest with the inclusion of the study tools. The pretest was carried out Kalanki DIC of Sathi Samuha and consent was taken from all the study participants. A total of 4PWIDs were interviewed during the pretesting. The tools were revised based on the pretest. Information collected during the pretest was not included in the main analysis.

### **2.11 Fieldwork**

The actual fieldwork of the study started on 16<sup>th</sup> March, 2016. Before the fieldwork, a stakeholder meeting was conducted among representatives from government organizations (GOs) and I/NGOs working with PWIDs. During the meeting, participants shared their experiences and knowledge about different types of PWIDs, and provided further support for the study. After the consultation meeting, the study team contacted the potential CMs and prepared them with required information regarding the target population for the study. The study team, with the help of CMs, listed the required number of PWIDs in the selected clusters. Four survey sites were selected for the study from Kanchanpur (Mahendranagar), Kailali (Dhangadhi), Banke (Nepalgunj), Dang (Gorahi) and Rupendehi (Bhairahawa). The clinic site was centrally located specifically for the convenience of meeting and bringing the PWIDs to the individual study sites. The field office had separate rooms for each activity such as welcome and registration, interviews, general physical and STI examinations, drawing blood and laboratory testing of blood, and pretest and posttest counseling. Before the interview, PWIDs were informally asked a few questions in order to ensure that they met the eligibility criteria set for the study. Injecting marks were also observed in order to screen for injecting behavior (i.e. skin lesions, abscesses, or puncture wounds).

Strict confidentiality was maintained throughout the study. All interviews were conducted by female researchers in a private room. No names were mentioned in the tools or notes. Instead, participants were provided a unique ID number written on a card. The same number was marked on the questionnaire, on the medical record, and blood specimen of each respondent. This card was also used for the distribution of the test results. Only those participants who showed their ID card were provided the HIV, HCV, HBsAg and syphilis test results along with post-test counseling. The entire work of field work was completed on 10<sup>th</sup> April 2017



**Figure 2: Fieldwork Process for IBBS Surveys**

### 2.12 Refusal

All PWIDs participated voluntarily in the survey and none of the PWIDs approached by the survey team refused to participate in the survey.

### 2.13 Clinical and Laboratory Procedure

PWIDs were checked for any clinical symptoms of STIs by a certified health assistant who also filled out a checklist of health information provided by each participant. The clinical examination included a simple health check up (measuring blood pressure, body temperature, weight, and pulse) and a symptomatic examination for the presence of any STIs followed by any necessary syndromic treatment (NCASC, National guidelines on Case Management of sexually transmitted infections, 2014). Laboratory service entailed on-site rapid screening of HIV1/2, HBV, HCV and syphilis followed by a confirmation test.

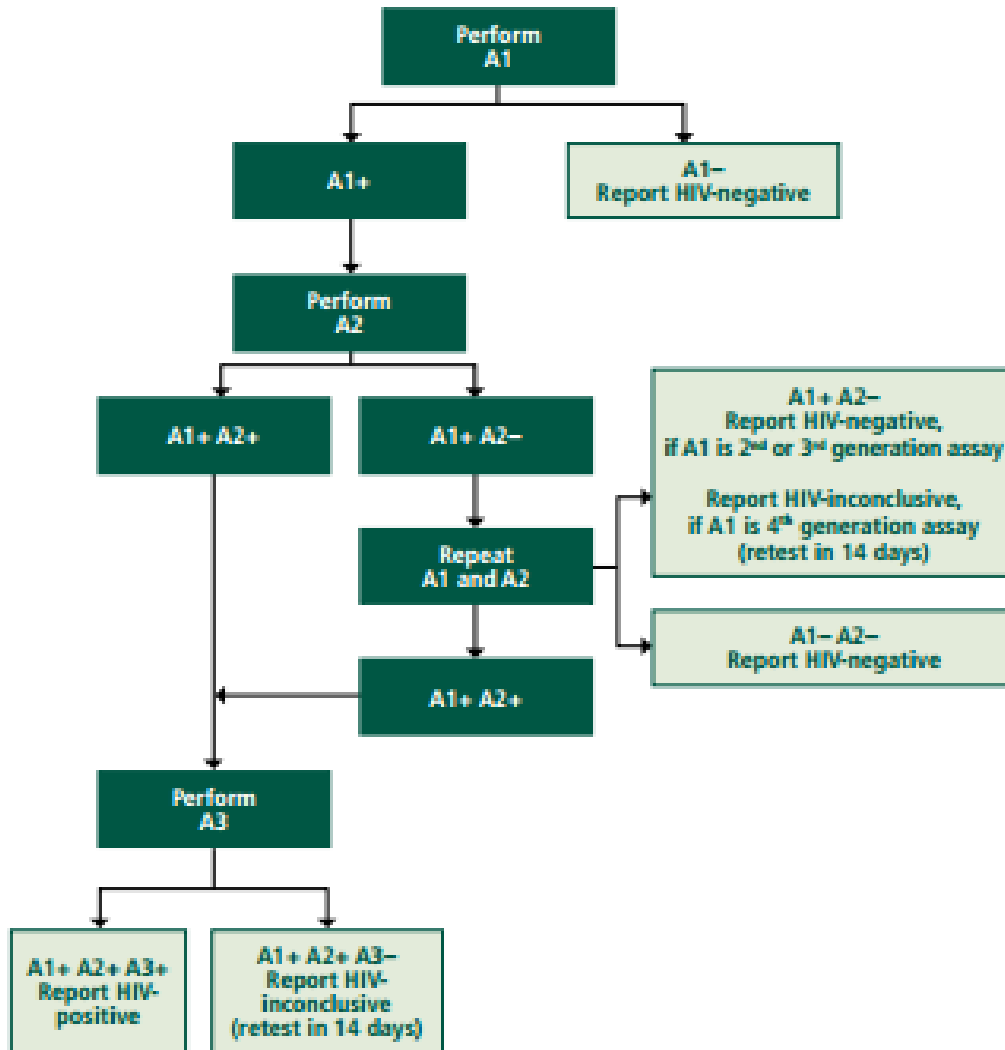
Approximately 5 ml of whole blood was drawn from each of the PWIDs using a disposable syringe. The blood sample was centrifuged to separate the blood cells from the serum. Each sample was labeled with the unique ID number correlating to an individual PWID. Following collection, a lab technician used the serum to perform a rapid HIV, HBsAg, HCV test and RPR test. Universal precautions and safe waste management practices were followed properly.

For external quality assurance of tests, all positive and 10 percent of negative samples were sent to the National Public Health Laboratory (NPHL) in Kathmandu for HIV and Syphilis.

## **HIV1/ 2**

The HIV screenings of serum samples were performed using rapid test kits following the national HIV testing algorithm. Determine HIV 1/2 (Abbot, Japan), UniGold HIV 1/2 (Trinity Biotech, Ireland), and Stat Pak HIV 1/2 (Chembio Diagnostics), as per the national Voluntary Counseling Testing (VCT) guidelines developed by NCASC in 2007, were followed. All the kits were based on the immune chromatography principle for detecting antibodies against HIV in serum or blood. Serum that tested reactive with the initial kit was confirmed with a second kit (A2) and Third Kits (A3). Samples that were found reactive on all three (A1, A2 and A3) tests were considered HIV positive. Samples that were nonreactive on the first test (A1) were considered HIV negative. Any sample that was reactive on the first (A1), second (A2) test and nonreactive on the third test (A3) then repeated all three test(A1, A2, and A3)with same individual sample and if retested were same then sample was considered HIV inconclusive. In that condition sample was suggested to repeat the test after 14 days. The internal quality of the assay was assured by the in-built control of each kit and external quality was assured by sending all positive cases and 10% of negative cases to reference lab (NPHL).

## HIV Rapid Test Algorithm

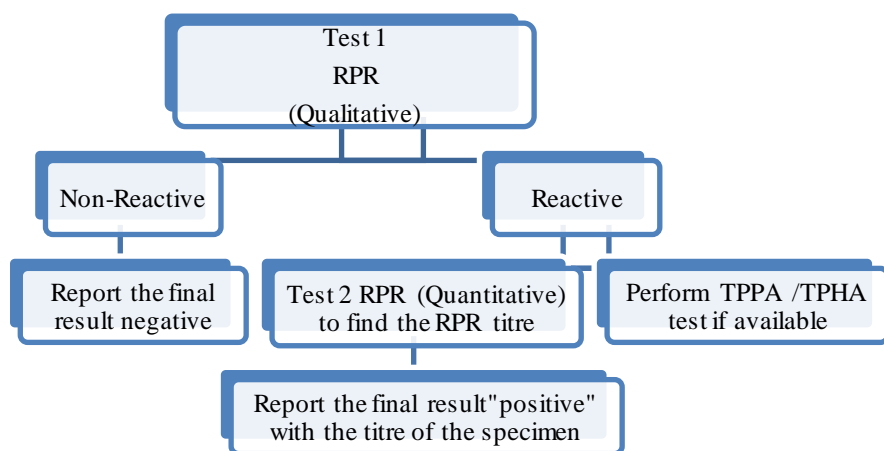


Reference Note	
A1 (First test):	→ Determine HIV ½
A2 (Second test):	→ UniGold HIV
A3(Third test):	→ Stat Pak
"+"	→ Reactive
"-"	→ Nonreactive

Figure 3: HIV Testing Algorithm

## Syphilis

A syphilis diagnosis was conducted following the National Guideline on Case Management of Sexually Transmitted Disease (NCASC, 2009). The serum was tested for nonspecific and specific treponemal agents. A nontreponemal test, Rapid Plasma Reagin (RPR) [WAMPOLE Impact RPR card test, Alere], was used for both qualitative screening and semi quantitative titration. All RPR reactive serum was confirmed using the specific Treponema Pallidum Particle Agglutination (TPPA) test (Fujirebio Inc.). Serum samples that tested RPR positive with titer value above or equal to 1:8 were reported as active syphilis; titration less than 1:8 were reported as cases with history of syphilis. The quality of reagents and test cards of the RPR test kits were assessed on the site daily using a set of strong and moderate positive and negative controls. As part of external quality assurance, internal controls (positive and negative) were used to ensure the kits were working accurately and that all reactive/positive samples and 10% of nonreactive/negative samples were sent to NPHL for retesting.



**Figure 4: Syphilis Testing Algorithm**

### Syphilis RPR and TPPA test:

**The combination of RPR Qualitative, RPR titre and TPPA test results will be used for interpretation of the status of syphilis in the clients as follows:**

- RPR positive with more than or equal to 1:8 titre value and positive TPPA test confirms active Syphilis cases.
- RPR positive with less than 1:8 titre values with positive TPPA test confirms the history Syphilis cases.

→ RPR positive with greater than, or lower than, or equal to 1:8 titre with negative TPPA test is considered syphilis negative cases. (This may be due to unspecific syphilis RPR positive scenarios.)

## Hepatitis B and C

The HBsAg and HCV screenings of serum samples were performed using rapid test kits.

### HBsAg

The Rapid Signal™ Origenics HBsAg Serum/Plasma Dipstrip is a rapid chromatographic immunoassay for the qualitative detection of Hepatitis B Surface Antigen in serum or plasma

### HCV

The rapid signal™ HCV Serum/Plasma Dipstrip is a rapid chromatographic immunoassay for the qualitative detection of antibody to Hepatitis C virus in serum or plasma.

The internal quality of the assay was assured by the in-built control of each kit and external quality was assured by sending all positive cases and 10% of negative cases to reference lab (NPHL)

Figure 0-5: Hepatitis B (HBsAg) Algorithm

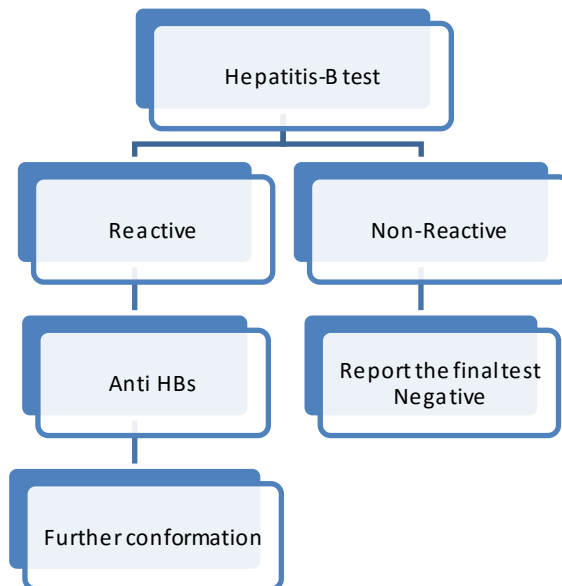
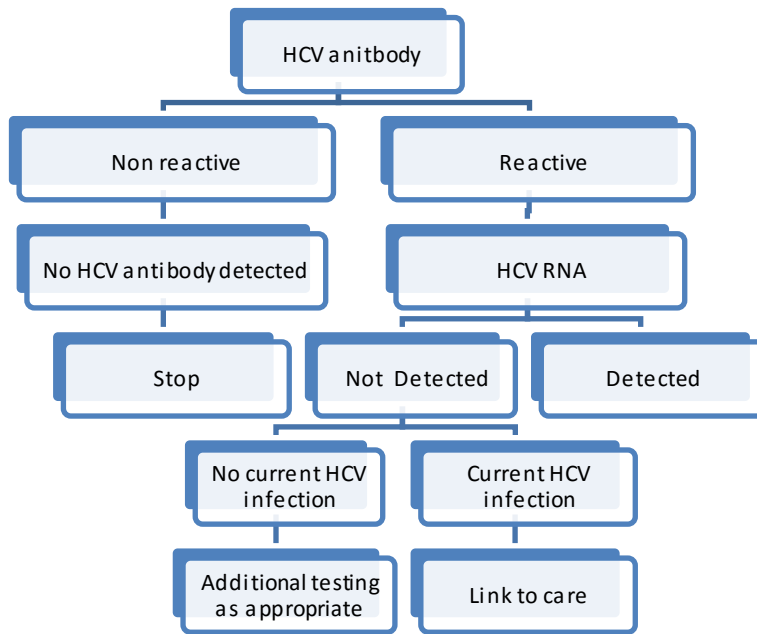


Figure 0-6: Hepatitis C (HCV) Algorithm



#### **.2.14 Precautions, Disposal Mechanism and Post Exposure Management**

Universal precautions and post exposure management were followed as per the recommendations of the Center for Disease Control (CDC, USA) and Nepal’s national guidelines. In order to minimize the possible spread of infection to clinical personnel and to the local community, a strict disposal procedure was implemented. Color-coded disposable plastic bags were inserted in a thick leak proof container with a tight seal. All materials were decontaminated by disinfecting or incinerating before disposal. Contaminated materials including specimens of bodily fluids, cotton gauze, broken glassware, and used needles were decontaminated in 0.5% Sodium Hypochlorite on a daily basis. The plastic material, papers and cotton were incinerated. The used Sodium Hypochlorite was poured down the drain or in a flush toilet.

#### **2.15 Quality Control of Laboratory Tests and External Quality Assurance Scheme**

Quality control was strictly maintained throughout the process of specimen collection, as well as during the handling and testing stages. All the tests were performed using internal controls. Built-in controls for the Rapid Diagnostic Test (RDT) and known external controls (positive and negative) for RPR and TPPA were used to ensure the validity of the tests. These controls were recorded with all of the laboratory data. For external quality control assurance, all positive, and a 10 percent sample of the negative serum collected were submitted to the NPHL to test for HIV, HBsAg, HCV and Syphilis. Aliquots of selected serum specimens were prepared in the field and sent to NPHL within a week maintaining cold chain system.

#### **2.16 Fieldwork Supervision and Monitoring**

The progress of the fieldwork was closely monitored throughout the survey period. The study team visited survey sites on an ongoing basis to monitor, supervise, and assist the field



staff. A tracking sheet was developed to document the number of interviews conducted per day at each site.

Similarly, quality of the collected data was maintained throughout the study period. The team leader and research officer were both involved in monitoring controlling quality from the initial stage of the fieldwork. They reviewed forms to ensure that: 1) the correct clusters had been surveyed; 2) the correct number of PWIDs had been interviewed; and 3) the correct administration of the questionnaires and recording had been carried out. They also checked the completed forms randomly, provided feedback, and made random revisits to ensure data quality. External monitors from NCASC, Save the Children, and IBBS consultants also monitored the field work.

### **2.17 Data management**

Estimation of the size of the study population and their distribution in the study areas was collected. Lists and maps were generated from the operational mapping exercise. Tablet based data was collected in survey. The completed questionnaires were re-checked regularly by a field researcher and field supervisor to ensure that the questionnaires were filled out properly.

The electronic data was extracted into MS Excel for verification and transferred into Statistical Package for the Social Sciences (SPSS). A number of quality check mechanisms including range checks, logical checks, and skip instructions were developed to detect the errors during the data entry stage.

To ensure confidentiality, each PWID was given a unique identity number. The numbers were coded in each questionnaire. The numbers, however, did not correspond to the names, contact numbers or addresses of the participants of the study. All entered data was kept secure in encrypted, password protected computers at the Intrepid Nepal to ensure anonymity of the participants.

### **2.18 Data analysis**

Data was analyzed using descriptive statistics and bivariate analysis. Data was analyzed using SPSS and R program for statistical analysis. Descriptive analysis of background characteristics, sexual behavior and sexual intercourse history, HIV risk related behaviors and knowledge of HIV/STIs, use and availability of condoms, knowledge of HIV and AIDS awareness programs, and drug injecting behaviors were explored. Bivariate analysis of the key indicators of HIV related risk behaviors were performed. Chi-square test values were also calculated to measure the statistical association between cross tabulated categorical variables. Trend analysis of key indicators such as HIV prevalence, sexual behavior, use of condom, and comprehensive knowledge of HIV and AIDS were also performed using Chi-square test for trends. A p value of less than 0.05 was considered as statistically significant. R program was used to create graphs.

### **2.19 Ethical Considerations**

Nepal Health Research Council (NHRC) approved the protocol of the study. The study was conducted in compliance with all human rights and ethical standards required by health researchers conducting studies in human subjects on sensitive issues, such as HIV and AIDS.

Informed consent was obtained from PWIDs prior to the interview. There may be a risk of identifying the PWIDs through their signatures if written consent was used. The informed consent was taken in the presence of a witness (community motivators or another member of the study team) who then signed the consent form. The procedure of the study was designed to protect privacy of the participants' allowing for anonymous and voluntary participation. Names and personal identifiers were not used during the collection of the required data prior to the interview, the purpose and benefit of the study was explained to each participant. They were provided with information about the risks, confidentiality, and compensation. The participants were given the opportunity to ask questions about the study and to decide whether they would like to participate in the study. During the consent process, the participants were told that they were free to refuse or decline to participate at any stage during the study. Although the risk of participating in this study was minimal, some questions could make the study subjects uncomfortable. They were clearly informed that in such a situation they were free to decline answering such questions and could also withdraw from the study at any time. Best efforts (confidential, free to withdraw from study any time) were made to minimize risks associated to study participants. During the analysis and presentation of the study findings, the names or addresses of the PWIDs were not mentioned.

## **2.20 Post Test Counseling and Distribution of Test Result**

All PWIDs (100%) who were tested obtained their individual test results. All of them, who wanted their test results and showed their ID card, were given access to their individual HIV, HBsAg HCV and syphilis test results along with post-test counseling. Posttest counseling and individual report dissemination was conducted for the PWIDs on the same day of the interview. The counseling session was provided by trained counselors and focused on high risk behaviors and other aspects related to STIs and HIV. Some participants were also referred to other health facilities for further services.

## **2.21 Limitations of the survey**

- This survey was conducted in 7 Districts in Nepal. The analysis and results presented in this report are, therefore, confined to these districts, and may not be generalized to other districts or any other parts of the country.
- There may be a possibility of biased response. Study participants are expected to provide honest responses to the survey questions asked; however, in some circumstances this assumption may be breached due to factors such as social desirability or recall bias.
- There may be possibilities that same PWIDs can participate in multiple rounds of surveillance survey because a survey conducted in the same area among the same group over time

## CHAPTER III: Findings

### 3.1 HIV, Syphilis, HCV and HBsAg Prevalence

The results are comprised of biological and behavioral components. The biological components include prevalence of HIV, Syphilis, Gonorrhea, and Chlamydia. The behavioral component consists of background characteristics, sexual behaviors, use of condom with different partners, experience of violence, knowledge of HIV, and exposure to HIV programs, drug injecting behaviors, stigma, and discrimination among PWID.

In the survey, the prevalence of HIV, HCV, HBsAg, Syphilis and different co-infections among the respondents were assessed. The study revealed an HIV prevalence of 5.3 percent among the PWIDs in Western regions of Nepal. Also, nearly a quarter of the respondents (23.7 percent) were found to be reactive to HCV. Another 2.7 percent of the respondents were found to be HBsAg reactive. Likewise, the prevalence of active syphilis among the sampled population was calculated as two percent, with a further 1.3 percent having previous history of syphilis. Furthermore, co-infection of HIV and HCV as well as HCV and HBsAg was detected in 3.7 percent and 0.7 percent of the respondents respectively. However, the prevalence of co-infections like HIV & HBsAg and HIV, HCV & HBsAg among the PWID population was found to be nil.

**Table 1: Biological Components**

	Mid-Western to Far Western	
	N=300	%
HIV – Positive	16	5.3
HCV – Reactive	71	23.7
HBsAg – Reactive	8	2.7
Active Syphilis	6	2.0
History Syphilis	4	1.3
Co-infection of HIV and HCV	11	3.7
Co-infection of HIV and HBsAg	0	0.0
Co-infection of HCV and HBsAg	2	0.7
Co-infection of HIV, HCV and HBsAg	0	0.0

### 3.2 Demographic Characteristics

Regarding the demographic characteristics, the mean age of the respondents was calculated to be  $29.92 \pm (8.85)$  years, with the age groups of 35 years and above (30.7 percent), 20-24 years (25.7 percent) and 25-29 years (17.7 percent) having the highest representation. As for the marital status, half of the respondents were found to have never married (50.7 percent) while a slightly lower number of the respondents were married (47.7 percent). The PWIDs' mean age at first marriage was calculated to be  $21.80 \pm (4.20)$  years, with most marriages

happening in the 20-24 years age group (42.6 percent) followed by the less than 19 years age group. At the same time, greater than two-fourths (53.7 percent) of the PWIDs were found to be living with their female sexual partner while the rest (46.3 percent) lived with their wife. Among the married PWIDs, majority of them (95.1 percent) were found to be living with their wife. Only 4.9 percent of the married PWID were housed with other sexual partner(s).

Likewise, most of the respondents were identified as having an educational background with 46.7 percent having secondary level education and 27 percent having attended SLC and above. Only 6.3 percent of the respondents were known to be illiterate. Similarly, more than half of the respondents (53 percent) belonged to upper caste/ethnic groups whereas the remaining belonged to disadvantaged (Janajati, Dalit, and non-Dalit Terai caste groups) and minority groups (religious minorities). Furthermore, 83.7 percent of the PWIDs were found to be living in the current district from birth. At the same time, 10.3 percent of the PWIDs had lived in the current district for less than or equals to five years.

**Table 2: Demographic Characteristics**

	Mid-Western to Far Western	
	N=300	%
<b>Age</b>		
16-19 Years	31	10.3
20-24 Years	77	25.7
25-29 Years	53	17.7
30-34 Years	47	15.7
35 Years and above	92	30.7
<b>Mean ± Std. Dev.</b>	<b>29.92 ± (8.85)</b>	
<b>Median (Range)</b>	<b>28 (17 – 53)</b>	
<b>Marital Status</b>		
Never married	152	50.7
Married	143	47.7
Divorce/Separated	5	1.7
<b>Education</b>		
Illiterate	19	6.3
Primary	55	18.3
Secondary	140	46.7
SLC and above	72	24.0
Literate, no schooling	14	4.7
<b>Ethnicity</b>		

	<b>Mid-Western to Far Western</b>	
	<b>N=300</b>	<b>%</b>
Dalit	30	10.0
Disadvantaged Janajatis	49	16.3
Disadvantage non-Dalit Terai caste groups	26	8.7
Religious Minorities	21	7.0
Relatively advantaged Janajatis	15	5.0
Upper caste groups	159	53.0
<b>Duration of stay in this currently living district</b>		
Since birth	251	83.7
<= 5 years	31	10.3
More than 5 years	18	6.0
<b>PWIDs living with</b>		
Living with wife	139	46.3
Living with female sexual partner	161	53.7
Family/Relatives	0	0.0
No response	0	0.0
<b>Age at first Marriage</b>	<b>N=148</b>	
<=19 Years	48	32.4
20-24 Years	63	42.6
25 Years and above	37	25.0
<b>Mean ± Std. Dev.</b>	<b>21.80 ± (4.20)</b>	
<b>Median (Range)</b>	<b>21 (12 – 35)</b>	
<b>Married PWID Living With</b>	<b>N=143</b>	
Wife	136	95.1
With Other Sexual Partner	7	4.9
Without Sexual Partner/Alone	0	0.0

### 3.3 Sexual Behaviour

Sexual history is an important indicator of risk among PWIDs. It was found that 96 percent of the PWIDs have had sexual intercourse in their lifetime. More than three-fourths of the PWIDs (77.1 percent) disclosed having their first sexual intercourse at the age of 20 years. The study also found that majority of respondents (91.4 percent) had sexual intercourse over the past 12 months. However, the number of female sexual partners over the course of 12 months revealed great differences with the number ranging from one partner to seven or more. Most of the PWIDs (58.1 percent) were found to have had sexual intercourse with a single partner, followed by PWID who had 2-3 partners (33.2 percent) for the purpose.

Besides that, a minority of PWIDs revealed having sexual intercourse with four or more partners in the past year, which points to the possibility of greater risk as well as burden of HIV and other STDs.

**Table 3: Sexual History**

	Mid-Western to Far Western	
	N	%
<b>Ever had sexual intercourse</b>		
Yes	288	96.0
No	10	3.3
Don't remember	2	0.7
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Age at first sexual intercourse</b>		
Below 20 Years	222	77.1
20 Years and above	66	22.9
<b>Total</b>	<b>288</b>	<b>100.0</b>
<b>Sexual intercourse in the past 12 months</b>		
Yes	265	91.4
No	25	8.6
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Female sexual partners in the past 12 months</b>		
1 partner	154	58.1
2–3 partners	88	33.2
4–6 partners	19	7.2
Seven and more partners	4	1.5
<b>Total</b>	<b>265</b>	<b>100.0</b>

When asked regarding their sexual behaviour with regular female sex partner, 90.7 percent of the PWIDs responded to having sex with them in the last 12 months. However, only 57.4 percent of the PWIDs answered positively with regards to the use of condom with their regular partner. This inconsistent use of condom poses a huge risk of HIV and STD transmission to both the PWID and his/her sexual partner.

**Table 4: Sexual behaviour with regular female sex partner**

	Mid-Western to Far Western	
	N	%
<b>Sex with Regular Partner in the last 12 months</b>		
Yes	263	90.7
No	27	9.3
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Use condom in the last sex with regular partner</b>		

Yes	151	57.4
No	112	42.6
<b>Total</b>	<b>263</b>	<b>100.0</b>

While assessing the sexual behavior with female sex workers, greater than three quarters of the PWIDs (77.9 percent) reported having no sexual encounter with female sex workers in the last 12 months while the remaining (22.1 percent) cited having sexual intercourse with them. Among the PWID who had sexual intercourse with Female Sex workers in the last twelve months, nearly 66 percent of them revealed having such encounters in the past one month, with 40.6 percent being involved in multiple sexual intercourse and 25 percent being involved in single sexual intercourse. Furthermore, condom use by PWIDs having sex with female sex workers was found to be high at 79.7 percent. However, the small section of PWIDs not using condoms (20.3 percent) in their sexual encounters with female sex workers underlines a high risk behaviour linked with greater chance of HIV and STD transmission. Regarding the consistent use of condoms, only 46.9 percent of the PWIDs highlighted their regular use of condoms in each sexual encounter with a female sex worker, followed by 17.2 percent PWIDs who almost always used condoms for the same. The inconsistent use or the absence of condom use prevalent in the rest (29.7 and 6.3 percent respectively) points to a serious gap in the prevention of sexually transmitted diseases among high risk groups like PWIDS and FSWs in the Western region of Nepal.

**Table 5: Sexual behaviour with female sex worker**

	Mid-Western to Far Western	
	N	%
<b>Sexual intercourse with a female sex worker in last 12 months</b>		
Yes	64	22.1
No	226	77.9
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Sex with female sex worker in the last one month</b>		
None	22	34.4
Single	16	25.0
Multiple	26	40.6
<b>Total</b>	<b>64</b>	<b>100.0</b>
<b>Use of condom in the last sex with sex worker</b>		
Yes	51	79.7
No	13	20.3
<b>Total</b>	<b>64</b>	<b>100.0</b>
<b>Used a condom with female sex workers in the past year</b>		
Every times	30	46.9

	Mid-Western to Far Western	
	N	%
Almost every-times	11	17.2
Sometimes	19	29.7
Never used	4	6.3
<b>Total</b>	<b>64</b>	<b>100.0</b>

Safe sexual behavior with nonregular sex partner is equally important for preventing the transmission of HIV/AIDS and other sexually transmitted diseases. The PWIDs enrolled in this study were asked a series of questions about their sex life with female non-regular sex partners over the last 12 months to which nearly three-fourths (71 percent) revealed having no such encounters while the remaining PWIDs (29 percent) responded positively to having such sexual encounters. At the same time, it was discovered that 77.4 percent of the PWIDs had used condom in their last sexual intercourse with a female non-regular sex worker whereas the other 22.6 percent lacked condom use in such situation. Further analysis revealed that only around one-third (34.5%) of PWIDs had used condom consistently in sexual encounters with female non-regular sex partners, closely followed by 29.8 percent PWIDs who used condom most often than not. The inconsistent use of condom prevalent in the other sexually active PWIDs signals the possibility of higher transmission of HIV/AIDS and other STDs from high risk group like PWIDs to their sexual partners.

**Table 6: Sexual behaviour with non-regular female sex partner**

	Mid-Western to Far Western	
	N	%
<b>Sexual intercourse with a female non-regular sex partner during last 12 months</b>		
Yes	84	29.0
No	206	71.0
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Condom use in the last sex with non-regular female sex partner</b>		
Yes	65	77.4
No	19	22.6
<b>Total</b>	<b>84</b>	<b>100.0</b>
<b>Used a condom with a female non-regular partner in the past year</b>		
Every times	29	34.5
Almost every-times	25	29.8
Sometimes	19	22.6
Never used	11	13.1



<b>Total</b>	<b>84</b>	<b>100.0</b>
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Sexual behaviour is an important determinant of HIV/AIDS and STI risk among PWIDs. The PWIDs in this study were questioned regarding sexual encounters with male partners over the past one year to which only a minority (1.4 percent) responded positively. Majority (98.6 percent) of the PWID reported having no anal sex with male partners in the past 12 months. Among the PWIDs having anal sex, the use of condom during the sexual encounter was found to be absent or non-existent. The use of condoms with male sex partners ranged from sometimes to never, which represents an area of great concern as anal sex poses a significantly higher risk of HIV and STIs due to it being an unnatural behaviour.

**Table 7: Sexual behaviour with male sex partner**

	<b>Mid-Western to Far Western</b>	
	<b>N</b>	<b>%</b>
<b>Anal sex with a male partner in the past one year</b>		
Yes	4	1.4
No	286	98.6
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Anal sex with him did you use condom</b>		
Yes	0	.0
No	4	100.0
<b>Total</b>	<b>4</b>	<b>100.0</b>
<b>Used a condom during anal sex with a male partner is the past year</b>		
Every times	0	.0
Sometimes	2	50.0
Never used	2	50.0
<b>Total</b>	<b>4</b>	<b>100.0</b>

PWIDs are a high risk group for HIV and STI due to their drug taking behaviour and varied sexual interaction with multiple partners. In the past one year, the PWIDs reported regular female partners (63.1 percent) as their most recent sex partner, followed by irregular female partner (19 percent) and female sex worker (9.3 percent). The remaining PWIDs (8.6 percent) reported having no sexual intercourse in the past one year. However, the use of condom in the last sexual intercourse was underlined by only 55.8 percent of the PWIDs in Western region of Nepal. Such inconsistent use of condoms among PWID and their sexual partners indicate elevated risk of transmission of HIV/AIDS and other STIs. Thus, the use of condoms must be stressed upon and promoted extensively.

**Table 8: Last Sexual behaviour with different sex partner in the past one year**

	Mid-Western to Far Western	
	N	%
<b>Last sexual intercourse with</b>		
Female sex worker	27	9.3
Regular female partner	183	63.1
Other female friend	55	19.0
No sex in the past year	25	8.6
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Use condom in the last sexual intercourse</b>		
Yes	148	55.8
No	117	44.2
<b>Total</b>	<b>265</b>	<b>100.0</b>

### 3.4 Drug Injecting Behaviour

In this survey, the mean duration (in months) of injecting drugs by PWIDs was calculated to be  $69.23 \pm (69.17)$  months with greater than 60 months (36.3 percent), 25-60 months (27.7 percent) and 12-24 months (25.7 percent) being the most prevalent time durations. Similarly, the mean age at first injection of drugs was calculated to be  $24.60 \pm (6.58)$  years; the highly represented age-groups being 16-24 years and greater than 24 years at 55 percent and 41.7 percent respectively. This finding outlines the age-groups and user-groups that need to be specifically targeted to reduce the burden of HIV/AIDS and STI due to PWIDs.

**Table 9: Injecting History**

	Mid-Western to Far Western	
	N=300	%
<b>Duration of drug injection</b>		
Up to 11 months	31	10.3
12-24 months	77	25.7
25-60 months	83	27.7
61 + months	109	36.3
<b>Mean <math>\pm</math> Std. Dev.</b>	<b>69.23 <math>\pm</math> (69.17)</b>	
<b>Median (Range)</b>	<b>48 (4 – 360)</b>	
<b>Age at first injected</b>		
Below 16 Years	10	3.3
16 - 24 Years	165	55.0
25 Years and above	125	41.7
<b>Mean <math>\pm</math> Std. Dev.</b>	<b>24.26 <math>\pm</math> (6.58)</b>	
<b>Median (Range)</b>	<b>23 (10 – 45)</b>	

The risk of HIV/AIDS and STI varies according to the drug injecting practice being adopted by the PWIDs. In this survey, majority (92 percent) of the PWIDs responded positively regarding injecting drug in the past one month. Most of the PWIDs (88 percent) who injected drug in the last one month reportedly avoided the use of non-sterile syringe. At the same time, 12 percent of the PWIDs outlined their use of non-sterile syringe in the last month, which signifies heightened risk of HIV/AIDS and STI transmission. Regarding the frequency of injection in the last one day, more than half of the PWIDs (56.7 percent) reported doing it once, while some reported doing it twice (36 percent). Likewise, nearly three-fourths of the PWIDs (68 percent) identified their most recent use of needle/syringe as high risk behaviour whereas the remaining identified it as low risk behaviour (32 percent). Furthermore, a near majority (87.7 percent) of PWIDs in Western region of Nepal reported being alone during their last drug injection. However, there existed a small group of PWID who were found to have injected drugs in groups ranging from 1 to 5 individuals. The use of non-sterile needles/syringes and its sharing among multiple partners is a proven high risk behaviour that can lead to increased HIV and STI transmission from high risk groups to general population.

**Table 10: Injecting behaviour in the past month and last injection**

	Mid-Western to Far Western	
	N	%
<b>Inject drug in the last month</b>		
Yes	276	92.0
No	24	8.0
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Injected used and non-sterile syringe in the last month</b>		
Yes	33	12.0
No	243	88.0
<b>Total</b>	<b>276</b>	<b>100.0</b>
<b>Frequency of drug injection in the last day</b>		
Once	170	56.7
Twice	108	36.0
3 or more times	22	7.3
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Needle/syringe used; Most recent</b>		
High risk behavior	204	68.0
Low risk behavior	96	32.0
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Number of person during last injection</b>		
Alone	263	87.7
1-2 Persons	22	7.3
3-5 Persons	15	5.0
<b>Total</b>	<b>300</b>	<b>100.0</b>

In this study, majority (95.1 percent) of the PWIDs in Western region of Nepal highlighted sharing needle with their friend in the last one week. Similarly, most of the PWIDs (90 percent) responded negatively to giving away their needle in the last one week to someone else after injecting drugs whereas the remaining (10 percent) responded positively to the same question. At the same time, majority of the PWIDs underlined their non-use of pre-filled syringe (93.7 percent) and syringe after someone else had squirted drug into it from their used syringe (93.3 percent) respectively. The sharing of a cooker/vial/container, cotton/filter or rinse water was also found to be absent from majority (92 percent) of the PWIDs. Despite safe injecting behaviour in the last one week, the prevalence of a minority of PWIDs who shared needles/syringe with multiple individuals was identified. The prevention of unsafe drug injecting behaviour in minority groups should be prioritized because of the alleviated risk levels of HIV and STI transmission through such practice.

**Table 11: Injecting behaviour in the past one week**

	Mid-Western to Far Western	
	N	%
<b>Last week shared needle with</b>		
Sexual partner	1	2.4
Friend	39	95.1
Drug seller	2	4.9
Unknown person	3	7.3
Others	0	.0
<b>Total</b>	<b>41</b>	<b>100.0</b>
<b>Last week given the needle to someone after injecting</b>		
Almost/every time/sometime	30	10.0
Never	270	90.0
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>you ever inject with pre filled syringe</b>		
Yes	18	6.0
No	281	93.7
Do not know	1	0.3
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>You inject Drugs using a syringe after someone else had squirted drugs in to it from his/her used syringe</b>		
Almost/every-times/sometimes	18	6.0
Never	280	93.3
Do not know	2	0.7
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Share a cooker/ vial/container, cotton/filter, or rinse water</b>		
Almost/every-times/sometimes	20	6.6
Never	276	92.0
Do not know	3	1.0
No response	1	0.3

	Mid-Western to Far Western	
	N	%
<b>Total</b>	<b>300</b>	<b>100.0</b>

### 3.5 Comprehensive Knowledge on HIV/AIDS

The knowledge regarding ways to avoid HIV/AIDS is assessed through the ABCDEF terminology; [A] Abstinence from sexual contact, [B] Being faithful to one partner, [C] Condom use during each sexual contact, [D] A healthy-looking person can be infected with HIV, [E] A person cannot get the HIV virus from mosquito bite and [F] Sharing a meal with an HIV infected person do not transmit HIV. Analysis of data showed good knowledge among PWIDs in Western region of Nepal about the major ways of avoiding HIV/AIDS. Majority of the PWIDs demonstrated excellent knowledge regarding B, C and F of avoiding HIV/AIDS. Similarly, most of them showed good knowledge regarding A, D and E portion. Though the knowledge on certain aspects of ABCDEF is good, complete knowledge on the ABCDEF of avoiding HIV/AIDS is only satisfactory, with the overall knowledge of ABC and BCDEF standing at 74.7 and 70 percent respectively. Increased awareness and education to vulnerable groups like PWIDs should be helpful to enhance the knowledge on HIV/AIDS and other STIs.

**Table 12: Knowledge of major ways of avoiding HIV/AIDS**

	Mid-Western to Far Western	
	N=300	%
[A] Abstinence from sexual contact	244	81.3
[B] Being faithful to one partner	270	90.0
[C] Condom use during each sexual contact	290	96.7
[D] A healthy-looking person can be infected with HIV	257	85.7
[E] A person cannot get the HIV virus from mosquito bite	259	86.3
[F] Sharing a meal with an HIV infected person do not transmit HIV	293	97.7
<b>Knowledge of all three ABC</b>	224	74.7
<b>Knowledge of all five BCDEF</b>	210	70.0

### 3.6 Knowledge about Hepatitis C (HCV)

HCV is a deadly form of Hepatitis which can be transferred from one person to another through sexual contact or by the exchange of infected body fluids through practices like injecting drugs and sharing of non-sterile syringes/needles. The unsafe practices of PWIDs make them vulnerable to this disease. When asked about HCV, 71.3 percent of PWIDs responded positively about having heard about it. At the same time, only 69.6 percent of PWID who had heard about HCV, reported HCV as sexually transmissible and preventable by regular use of condoms. Besides that, the transmission of HCV through sharing of needles

and tattooing was also outlined by 82.7 percent and 67.3 percent of the PWID respectively. However, the knowledge level of PWIDs on HCV was found to decrease when moving towards topics like co-infection of HCV and HIV, medical and herbal remedies of HCV. Thus, it is vital that PWIDs are given access to information about the risk factors associated with HCV, its co-infection and possible cures/remedy to prevent its transmission to unsuspecting population.

**Table 13: Knowledge of HCV**

	Mid-Western to Far Western	
	N	%
<b>heard about Hepatitis C</b>		
Yes	214	71.3
No	86	28.7
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Hepatitis C be transmitted through sex</b>		
Yes	149	69.6
No	38	17.8
Do not know	27	12.6
<b>Total</b>	<b>214</b>	<b>100.0</b>
<b>Condoms protect you against hepatitis C</b>		
Yes	149	69.6
No	40	18.7
Do not know	25	11.7
<b>Total</b>	<b>214</b>	<b>100.0</b>
<b>Hepatitis C only occur if you have HIV</b>		
Yes	114	53.3
No	60	28.0
Do not know	40	18.7
<b>Total</b>	<b>214</b>	<b>100.0</b>
<b>Hepatitis C be transmitted by sharing needles</b>		
Yes	177	82.7
No	13	6.1
Do not know	24	11.2
<b>Total</b>	<b>214</b>	<b>100.0</b>
<b>Hepatitis C be transmitted through tattooing</b>		
Yes	144	67.3
No	44	20.6
Do not know	26	12.1
<b>Total</b>	<b>214</b>	<b>100.0</b>

	Mid-Western to Far Western	
	N	%
<b>Medical treatment for hepatitis C</b>		
Yes	141	65.9
No	55	25.7
Do not know	18	8.4
<b>Total</b>	<b>214</b>	<b>100.0</b>
<b>Herbal remedies cure hepatitis C</b>		
Yes	41	19.2
No	148	69.2
Do not know	25	11.7
<b>Total</b>	<b>214</b>	<b>100.0</b>

### 3.7 Exposure in HIV awareness Program

As one of the high risk groups of HIV and STD transmission, various programs targeting PWIDs and their partners have been implemented in Nepal. This survey also looked into the exposure of PWIDs to such programs in the Western region of Nepal. It was found that 56.0 percent of the enrolled PWIDs had discussed/interacted with PE/OE/CM/CE while 63.3 percent of them had visited outreach centers (DIC/IC/CC). However, the percentage of PWIDs visiting STI clinic and HTC was found to be lagging behind. Only 11.7 percent and 22.3 percent of the target group reported visiting STI clinics and HIV testing and counseling centers respectively. Such low program coverage can be attributed to a variety of factors which needs to be identified and acted upon with immediate effect.

**Table 14: Program exposure in the past 12 months**

	Mid-Western to Far Western	
	N=300	%
Discussed with PE/OE/CM/CE	168	56.0
Visited to outreach center (DIC/IC/CC)	190	63.3
Visited any STI clinic	35	11.7
Visited any HTC	67	22.3

### 3.8 Knowledge about PMTCT

This study also analyzed the knowledge of PWIDs regarding Prevention of Mother to Child Transmission services for pregnant women (PMTCT), which revealed a significant gap in this regard. 12 percent of PWID reported having heard about PMTCT for pregnant women while only 10.7 percent of them had idea about the provision of PMTCT services for

pregnant women. This highlights the urgent need for appropriate interventions directed towards increasing the awareness, quality and coverage of PMTCT services in Nepal.

**Table 15: Knowledge of PMTCT**

	Mid-Western to Far Western	
	N=300	%
Ever heard about (PMTCT) for pregnant women	36	12.0
Pregnant women can get PMTCT services	32	10.7

### 3.9 Knowledge about ART and CHBC

ART and CHBC are an integral part of the HIV/AIDS and STI management program in Nepal. However, this survey has unearthed huge gaps in knowledge among PWIDs regarding such services. Out of the total enrolled PWIDs, only 36 percent had heard about ART services while an even lower percentage (28 percent) of PWIDs knew about the site from where the HIV positive individuals could get the ART services. In addition to that, only 14.3 percent PWIDs had heard about viral load testing service for HIV positive individuals. Similarly, a lowly 12.3 percent of PWIDs were aware or had information regarding the site from where HIV positive individuals could get viral load testing services. Without proper promotion and information of the services on offer, targeted groups like PWIDs will fail to benefit, which can further elevate the HIV/AIDS and STI epidemic.

**Table 16: Knowledge about ART and CHBC (multiple choices)**

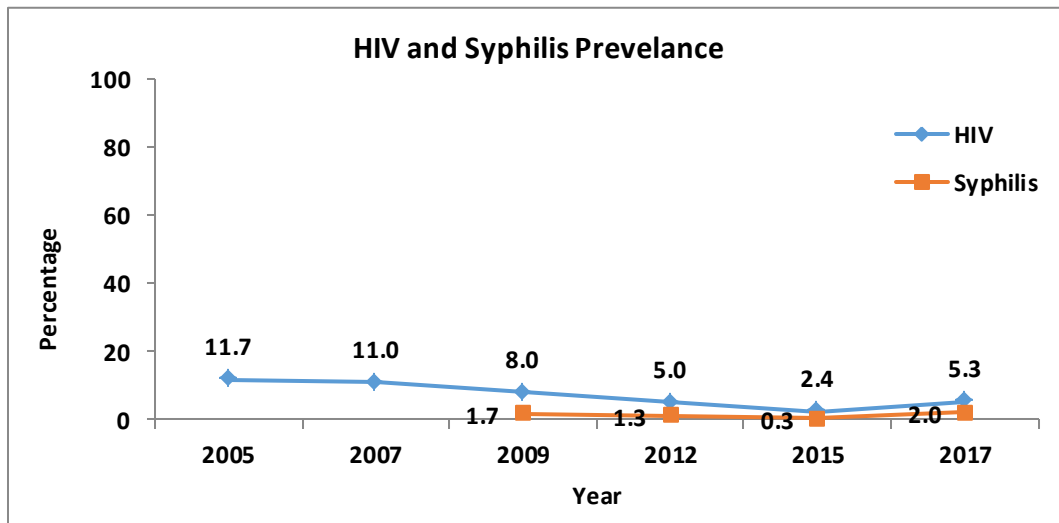
	Mid-Western to Far Western	
	N=300	%
Heard about (ART) services for HIV positive individuals	108	36.0
From where HIV positive individuals can get ART services	84	28.0
Heard of viral load testing services for HIV positive individuals	43	14.3
HIV positive individuals can get viral load testing services	37	12.3
Heard of any (CHBC)services that are provided for HIV positive people	76	25.3



## CHAPTER IV: Comparative Analysis of Key Indicators

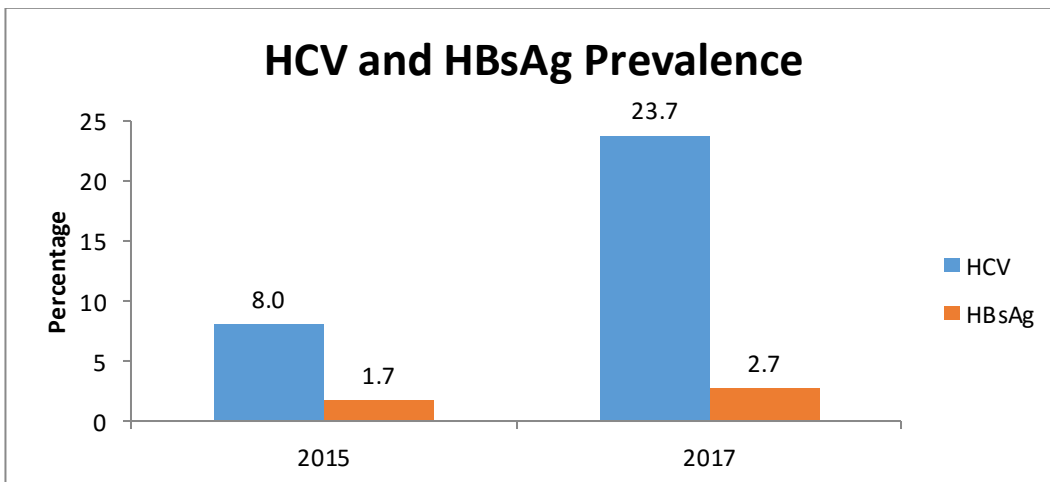
### 4.1 HIV and Syphilis Prevalence

The figure below shows the trends of HIV and Syphilis prevalence among PWID from 2007 to 2017. HIV prevalence among PWID has significantly decreased since the first round in 2005 to 2015. But in 2017, it had increased to 5.3 percent from 2.4 percent in 2015. Likewise the prevalence of active syphilis has increased from previous round of IBBS survey (0.3 percent in 2015 to 2 percent in 2017).



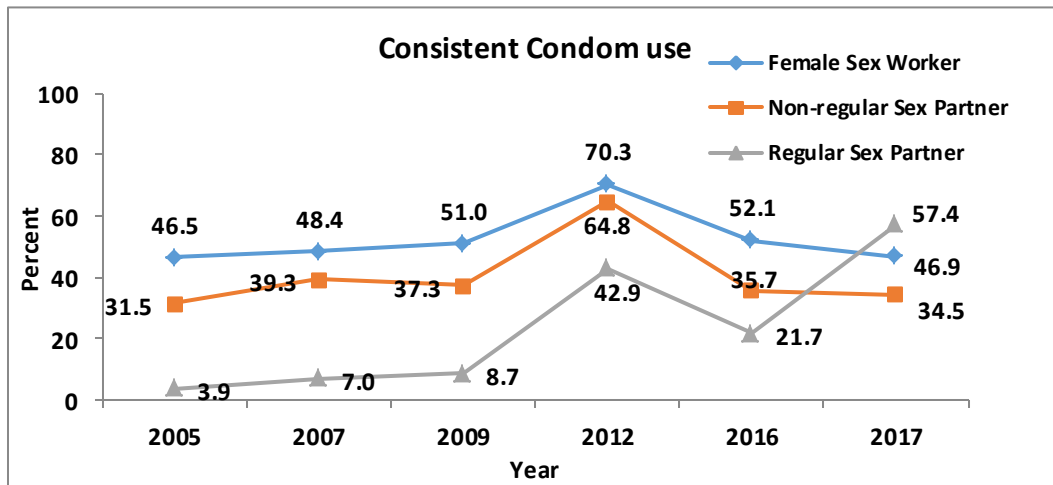
### 4.2 HCV and HBsAg Prevalence

In the figure below, it shows both HCV and HBsAg prevalence. HCV prevalence among PWID had increased significantly from 8.0 percent in 2015 to 23.7 percent in 2017 from 47.5 percent in 2015. Similarly, HBsAg prevalence also increases to 2.7 percent in 2017 from 1.7 percent in 2015.



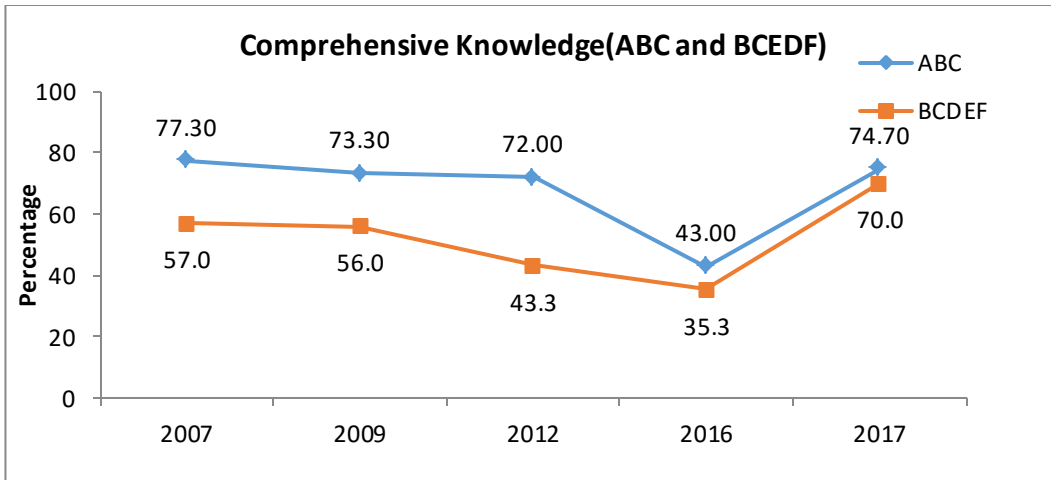
### 4.3 Consistent Condom Use with different Sex partners

In the figure below, it shows the trend of consistent condom with different partners, regular female sex partners, non-regular female sex partners and female sex workers(FSW). Consistent condom use with regular sex partners had increased to 57.4 percent 2017 from previous rounds of IBBS survey (3.9 percent in 2005,7 percent in 2007, 8.7 percent in 2009, 42.9 percent in 2012 and 21.7 percent in 2016). Similarly, consistent condom use with non-regular female partners decreased slightly from 35.7 percent in 2016 to 34.5 percent in 2017. Consistent use of condom with FSWs had also decreased from 52.1 percent in 2016 to 46.9 percent in 2017.



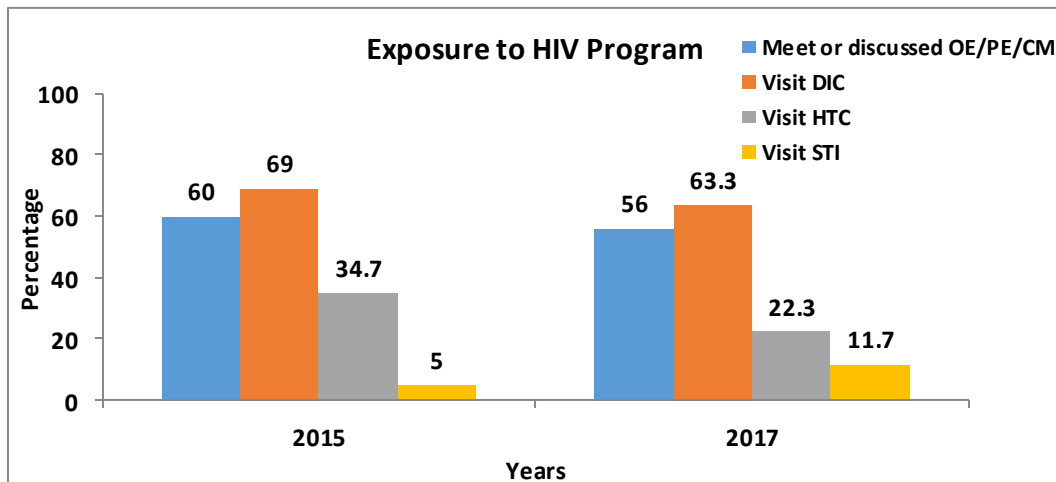
### 4.4 Comprehensive Knowledge among PWID

Figure below reveals the trend of Comprehensive Knowledge on HIV and AIDS among PWID. The percent of PWID who were aware of all three ABC increased from 43 percent in 2016 to 74.7 percent in 2017. Similarly, comprehensive knowledge about HIV and AIDS (BCDEF) was also increased from 35.3 percent in 2016 to 70 percent in 2017.



#### 4.5 Exposure to HIV Program

Figure below shows the trend of exposure to HIV programs among PWID in two rounds of IBBS survey. It was found that PWID who interacted with an outreach educator (OE) or peer educator (PE) or community motivators (CM) decreased from 60 percent in 2015 to 56 percent in 2017. PWID visiting drop-in-centers (DICs) had also decreased from 69 percent in 2015 to 63.3 percent in 2017. Moreover, PWID visiting HTC centers had decreased to 22.3 percent in 2017 from previous rounds of survey (34.7 percent in 2015). PWID visiting STI clinics had increased to 11.7 percent in 2017 from 5 percent in 2015.



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# ANNEX

## Questionnaire

### Integrated Biological and Behavioral Surveillance Survey among People Who Inject Drugs (PWIDs)

**Operational definition of PWIDs:**

“Current male drug injectors aged 16 years or above who had been injecting drugs for non-medical purposes for at least three months prior to the date of the survey”

Interviewer Name: \_\_\_\_\_

Code Interviewer: \_\_\_\_\_

Date Interview: \_\_\_\_/\_\_\_\_/2072

Checked by the supervisor: Signature: \_\_\_\_\_ Date: /\_\_\_\_/2073

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

1. Yes



2. No (continue interview)

When?

\_\_\_\_\_ Days ago (make sure that it was interviewed by.....and -close the interview)

002. Respondent's ID#:

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002.1 How long you have been injecting drugs?

Years   Months

**(NOTE: AFOREMENTIONED QUESTIONS ARE THE SCREENING QUESTIONS. 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 District: \_\_\_\_\_

003.2 VDC/Municipality: \_\_\_\_\_

**1.0 BACKGROUND OF RESPONDENT**

Q.N.	Question	Coding Categories	Skip to
101	Where are you living now? <b>(Write current place of residence)</b>	District: _____	
101.1	How long have you been living continuously at the same address? <b>(Write 995 if less than one month)</b>	Month..... <input type="text"/> <input type="text"/> <input type="text"/> Always (since birth).....0 Others (Specify).....96	
102	How old are you?	Age..... <input type="text"/> <input type="text"/> <b>(write th-completed years)</b>	
103	What is your educational status? <b>(Circle '0' if illiterate, '19' for the literate without attending the school, and write exact number of the passed grade)</b>	Illiterate..... 0 Literate.....19 <input type="text"/> <input type="text"/> Grade..... <input type="text"/> <input type="text"/> <b>(write th-completed grade)</b> <input type="text"/> <input type="text"/>	
104	What is your caste? <b>(Specify Caste)</b>	Caste _____ Code No..... <input type="text"/> <input type="text"/>	→
105	What is your current marital status?	Never married.....1 Married .....2 Divorced/Permanently separated..3 Widow.....4	→ 106

105.1	How old were you when you first got married?	Age..... <input type="text"/> <input type="text"/> <b>(writethecompletedyears)</b>	
106	Which of the following best describes your current living situation?  (Selectonly one option)	Homeless on the street.....1 Living in own home.....2 Living in a residential hotel.....3 Rented apartment.....4 Rented room.....5 Other(specify) .....96	
107	With whom you are living now?	Living with wife.....1 Living with female sexual partner.....2 Living without sexual partner.....3 Family.....4 Others(Specify).....96 No response.....99	
107.1	How many dependents are there in your family?	Number: ..... <input type="text"/> <input type="text"/>	
108	During the past one-month how often have you had drinks containing alcohol?  <b>(Suchasbeer,local beeretc.)</b>	Everyday .....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	Skipto
201	How long have you been using drugs?  <b>(Drug means medicine not used for treatment purpose rather used for Intoxication)</b>	Year..... <input type="text"/> <input type="text"/> Months..... <input type="text"/> <input type="text"/>	
202	How old were you when you first injected drugs?  <b>(Include self-injection or injection by another)</b>	Years..... <input type="text"/> <input type="text"/> <b>(write the completed years)</b>	
203	How long have you been injecting drugs?  <b>(Include self-injection or injection by</b>	Years..... <input type="text"/> <input type="text"/> Months..... <input type="text"/> <input type="text"/>	
203.1	Have you injected drugs in the last month?	Yes.....1 No.....2 →	204

203.2	If Yes, have you used non-sterile syringe/needle at any time in the last month?	Yes.....1 No.....2							
203.3	Have you used non-sterile injecting equipment at any time in the last month?	Yes.....1 No.....2							
204	Which of the following types of drugs have you used and/or injected in the past one-week?(Read the list, multiple answer possible)								
		<b>Used in Last-Week</b>		<b>Injected in Last-Week</b>					
		<b>YES</b>	<b>NO</b>	<b>DK</b>	<b>NR</b>	<b>YES</b>	<b>NO</b>	<b>DK</b>	<b>NR</b>
	1. Tidigestic/Noorphine/Nufine/Lupegesic					1	2	98	99
	2. Brown Sugar/White Sugar	1	2	98	99	1	2	98	99
	3. Nitrosun/Nitrovate	1	2	98	99	1	2	98	99
	4. Ganja/Chares	1	2	98	99				
	5. Phensydyl+Corex	1	2	98	99				
	6. Calmpose/Diazepam/Velium 10	1	2	98	99	1	2	98	99
	7. Codeine	1	2	98	99	1	2	98	99
	8. Phenergan/Stagon	1	2	98	99	1	2	98	99
	9. Cocaine/Cracks	1	2	98	99				
	10. Proxygin/Proxyvon	1	2	98	99	1	2	98	99
	11. Effidin	1	2	98	99	1	2	98	99
	12. Lysergic Acid Dithylamide (LSD)	1	2	98	99				
	13. Avil/Algic	1	2	98	99	1	2	98	99
	14. Amphetamine/Yava	1	2	98	99	1	2	98	99
	96. Others (Specify)	1	2	98	99	1	2	98	99
204.0.1	Have you used these drugs in combination form?	Yes.....1 No.....2 No response.....99		204.1					
204.0.2	If yes, how many drugs has been used?	<input type="text"/> (numbers)							
204.0.3	What are the most frequently combination that is used?	.....(Specify)							
204.1	In the last month, did you switch from one drug to another?	Yes.....1 No.....2							

Q.N.	Question	Coding Categories	Skipto
204.1.1	If yes, which drug?	From _____ drug To _____ drug	



204.1.2	What is the reason for switching?	To decrease Tidigesic.....1 Costly.....2 Difficult to find drugs.....3 Others.....96	
205	How many times did you inject drugs yesterday?	Times..... <input type="text"/> <input type="text"/> → Not injected.....0	207
206	Would you like to tell me why you did not inject yesterday?	Due to lack of Money.....1 Want to quit slowly.....2 Had taken Ganja.....3 Had taken Brown Sugar.....4 Had injected previous day.....5 Had taken alcohol.....6 Did not find Drugs.....7 Was under police custody.....8 Had taken Nitrosun.....9 Was Sick.....10 Had taken other drugs.....11 Was busy in household activity...12 Others (Specify).....96	
207	How many days ago did you inject?	Days ago..... <input type="text"/> <input type="text"/>	
208	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	
209	(Ask whether the respondent was ever arrested or not then ask the following questions)  Have you ever been imprisoned or detained for any reason?	Yes.....1 No.....2 → Noreponse.....99	210
209.1	In the past year, have you ever been imprisoned or detained for any reason?	Yes.....1 No.....2 → Noreponse.....99	210

209.2	In the past year, have you ever been imprisoned for drug-related reason?	Yes.....1 No.....2 Noreponse.....99	210
209.3	In the past year, how many times have you been imprisoned for drug-related reason?	Times..... <input type="text"/> <input type="text"/>	
209.4	Have you ever injected drugs while in prison?	Yes.....1 No.....2 Noreponse.....99	
210	How often you cross the border (Indo-Nepal) to buy and use the illicit drugs in the past 12 months?	Always.....1 Most of the time.....2 Sometimes.....3 Never.....4 Don't Know.....98 No response.....99	

### 3.0 NEEDLE SHARING BEHAVIORS

Q.N.	Question	Coding Categories	Skipto
301	Think about the times, you have injected drugs Yesterday/last day. How many times did you inject drugs on that day?  <b>(Fill the number from answer to Q.205 and verify by asking the respondent)</b>	Times..... <input type="text"/> <input type="text"/>	
302	The last time you injected, how did you get that syringe/needle?  <b>(Public place means places other than the PWIDs 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 after he use.....2 I picked it up from a public place which was left there by others.....3 I picked it up from a public place which was left there by myself.....4 I used a new needle/syringe given by NGO staff/volunteer..... ...5 <b>(write the name of Organization)</b> I used a needle/syringe which I purchased.....6 I reused my own needle/syringe.....7 My friend gave new needle/syringe.....8 Others (Specify).....96 Don't know .....98 No	

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 syringe/needle?	No of person:..... <input type="text"/> <input type="text"/> Injected alone.....95	
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Q.N.	Question	Coding Categories	Skipto
307	In the past one-week, did you ever share needles and syring		
	<b>Readout list. Multiple answers possible</b>	<b>Yes</b> <b>No</b> <b>DK</b> <b>NR</b>	
	1. Your usual sexual partner	1    2    98    99	
	2. A sexual partner who you did not know	1    2    98    99	
	3. A friend	1    2    98    99	
	4. A drug seller	1    2    98    99	
	5. Unknown Person	1    2    98    99	
	96. Other (Specify) _____	1    2	
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? <b>(By that I mean a syringe that was filled with you witnessing it)</b>	Yes.....1 No.....2 Don't know .....98 No response.....99	

Q.N.	Que	Coding Categories	Skipto
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?  <b>(Front-loading/back-</b>	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 riser/sewer?	Every times.....1 Almost every-times.....2 Sometimes.....3 Never.....4 Don't know.....98 No response.....99	
312.1	In the past one year have you switched from sharing to non-sharing practice?	Yes.....1 No.....2	
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
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 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 <b>(write the name of Organization) Steal from legitimate source (hospital./pharmacy).....12</b> Buy on streets.....13  Other (Specify) .....96	
315.1	Are you satisfied from the new syringe?	Very satisfy.....1 Satisfy.....2 Average.....3 Unsatisfied.....4 Very unsatisfied.....5	
316	What do you usually do with your used needle/syringe?	Disposed .....1 Gave to friend.....2 Kept/carry safely for another use.....3 Hide in public places .....4 Threw anywhere (please specify).....5 Others (specify).....96 Don't know .....98	

Q.N.	Question	Coding Categories	Skipto
317	In the past one-year, did you ever inject drug in another city/district (or another country)?	Yes.....1 No.....2 Don't remember.....9 8 No response.....9	
318	Are you currently undertreatment (or receiving help) or have you ever received treatment (or help) because of your drug use?	Currently undertreatment.....1 Was in treatment but not now.....2 Have never received treatment.....3 No response.....99	320
319	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	
320	In the last 12 months, have any of an outreach worker, a peer educator or a staff from a needle exchange program given you a new needle/syringe?	Yes ..... 1 No ..... 2 Don't remember..... 98 No response ..... 99	

#### 4.0 SEXUAL HISTORY

Q.N.	Question	Coding Categories	Skipto
401	How old were you at your first sexual intercourse?	Years old ..... <input type="text"/> <input type="text"/> <i>(Write completed years)</i> Never had sexual intercourse..... 0 Don't know.....98 No response.....99	601

Q.N.	Question	Coding Categories	Skipto
402	Have you had sexual intercourse in the last 12 months?	Yes.....1 No.....2 No response.....99	
403	In total, how many different female sexual partners have you had sex in the last 12 months?	Number..... <input type="text"/> <input type="text"/>	

403.1	How many were female "regular partners"?  <b>(Your wife or live-in sexual partners)</b>	Number..... <input type="text"/> <input type="text"/> Don't know.....98 No response.....99	
403.2	How many were female "sex worker"?	Number..... <input type="text"/> <input type="text"/>	
403.3	How many were female "non-regular partners"?  <b>(Sexual partners, you are not married to an</b>	Number..... <input type="text"/> <input type="text"/>	
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
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
404.2	With how many different male partners have you had anal/oral 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/oral 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 anal/oral sex with male sex partner in the past 12 months	Every Times.....1 Almost Every Times.....2 Sometimes.....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 if necessary you may need to ask 403.1 once again and correct the response)

Q.N.	Question	Coding Categories	Skipto
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501.	Did you have sex with female regular partner (wife or live-in partner) during last 12 months?	Yes.....1 No.....2	→ 502
501.2	The last time you had sex with a female regular partner, did you or your partner use a condom?	Yes.....1 No.....2 Don't know.....98 No response.....99	→ 501.4 501.4

Q.N.	Question	Coding Categories	Skip to
501.3	Why did not you or 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	
501.4	Did your female regular partner also inject drugs?	Yes.....1 No.....2 Don't know.....98 No response.....99	
501.5	Have you ever had an anal sex with your female regular partners?	Yes.....1 No.....2 Don't know.....98 No response.....99	
501.6	The last time you had an anal-sex with a female regular partner, did you or your partner use a condom?	Yes.....1 No.....2 Don't know.....98 No response.....99	502
501.7	How often have you used a condom in an anal-sex with female regular partners in the past 12 months?	Everytime.....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?  <b>(Check 403.2 and circle the response of Q.</b>	Yes.....1 No.....2	→ 503

502.1	Think about the female sex worker that you have had sex in the past one-month.  In total how many female sex workers you had sex in exchange for money or drugs?	Number ..... <input type="text"/> Don't know .....98 No response .....99	
502.2	With how many sex workers you had sex in last month by paying them money or drugs?	No ..... <input type="text"/>  Don't know .....98 No response .....99	

Q.N.	Question	Coding Categories	Skipto
502.3	The last time you had sex with a female sex worker did you or your partner use a condom?	Yes .....1 No .....2 Don't know .....98 No response .....99	502.5 502.5
502.4	Why did not you or 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 injected drugs?	Yes .....1 No .....2 Don't know .....98 No response .....99	
502.7	Have you ever had an anal sex with your female sex workers?	Yes .....1 No .....2 Don't know .....98 No response .....99	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.....9 8 No response.....99	

Q.N.	Question	Coding Categories	Skipto
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.)</b>	Yes.....1 No.....2	504
503.2	The last time you had sex with a female non-regular partner did you or your partner use a condom?	Yes.....1 No.....2	503.4 503.4
503.3	Why did not you or your partner use a condom that time?  <b>(Don't tread the possible answers, multi ple 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-time.....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 injected drugs?	Yes.....1 No.....2 Don't know.....98 No response.....99	
503.6	Have you ever had an anal sex with your female non-regular partners?	Yes.....1 No.....2 Don't know.....98 No response.....99	504

503.7	The last time you had an anal sex with a female non-regular partner, did you and your partner use a condom?	Yes.....1 No.....2 Don't know.....98 No response.....99	
503.8	How often have you used a condom in an anal sex with a female non-regular partner in the past year?	Every time.....1 Almost every time.....2 Sometimes.....3 Never used.....4 Don't know.....98 No response.....99	
504	Have you had an anal sex with a male partner in the past one year?  <b>(See the response in Q.404.1 and circle Q.</b>	Yes.....1 No.....2	→ 505

Q.N.	Question	Coding Categories	Skipto
504.2	The last time you had an anal sex with him; did you use a condom?  <b>(Check answer in Qno 404.3)</b>	Yes.....1 No.....2 Don't know.....98 No response.....99	→ 504.4 504.4
504.3	Why didn't you use a condom at that time?  <b>(Don't tread possible answer, multiple answers possible)</b>	Not available.....1 Too expensive.....2 Partner objected.....3 Don't like.....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 during an anal sex with a male partner in the past year? <b>(Check Qno.404.4)</b>	Every time.....1 Almost every time.....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 an anal sex also injected drugs?	Yes.....1 No.....2 Don't know.....98 No response.....99	

Q.N.	Question	Coding Categories	Skipto
507	Withwhomdidyouhavethelastsexual intercourse?	FSW.....1 Regularpartner.....2 <b>(Wifeorliveinsexualpartner)</b> Otherfemalefriend.....3 Malefriend.....4 Didnothavesexualcontactin thepastyear.....5 Don'tknow.....98 Noresponse.....99	→ 601
508	Didyouusecondominthelast sexualintercourse?	Yes.....1 No.....2	

**6.0 USEANDAVAILABILITYOFCONDOM**

*(CheckresponsesinQ.N.404.3,404.4,501.2,501.4,501.7,501.8,502.3,502.5,502.8,502.9,503.2, 503.4,503.7,503.8,504.4,505.1,506,508 andcircleresponsesinQ.601&602andProbeiftheresponseiscontradictory)*

601	Haveyoueverusedacondom?	Yes.....1 No.....2	
602	Doyouknowofany placeorpersonfromwhich youcan obtain condom?	Yes.....1 No.....2 Noresponse.....99	} 701

603	From which place or people, can you obtain condoms?  <b>(Multiple answer possible. Don't tread the list but probe)</b>	Shop.....1 Pharmacy.....2 Clinic.....3 Hospital.....4 Family planning center.....5 Bar/Guesthouse/Hotel.....6 Healthworker.....7 Peer Educator/Outreach doctor.....8 Friend.....9 PanPasal.....10 Others (Specify).....96 No response.....99	
603.1	Did any organization give you condom in the last 12 months?	Yes, free of cost.....1 Yes, by taking money.....2 No.....3	
604	Do you usually carry condom with you?	Yes.....1  No.....2	

## 7.0 KNOWLEDGE AND TREATMENT OF STIs

Q.N.	Question	Coding Categories	Skip to
701	Have you ever heard of diseases that can be transmitted through sexual intercourse?	Yes.....1 No.....2	704
702	Can you describe any symptoms of STIs in women?  <b>(Do not read possible answers, multiple answers possible.)</b>	Lower 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?  <b>(Do not read possible answers, multiple answer possible)</b>	Genital discharge.....1 Burning pain on urination.....2 Genital ulcers/sore blister.....3 Swelling in groin area.....4 Others (Specify).....96 Don't know.....9 8 No response.....99	
704	Have you had genital discharge/burning urination during the last 12 months?	Yes.....1 No.....2 Don't know.....98 No response.....9 9	705

704.1	Currently, do you have 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
705.1	Currently, do you have genital ulcer/sore blister?	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 Never had such symptoms.....4 Others (Specify).....96	

**8.0 KNOWLEDGE, OPINIONS AND ATTITUDES ON HIV**

Q.N.	Question	Coding Categories	Skipto
801	Have you ever heard of HIV or the disease called AIDS? <b>(Probe if the response is No)</b>	Yes.....1 No.....2 No response.....99	
802	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes.....1 No.....2 No response.....99	804
803	Do you have a 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	

Q.N.	Question	Coding Categories	Skipto
804	Can a person protect himself/herself from HIV, the virus that causes AIDS, by using a condom correctly during each sexual act?	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 only 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 injects drugs protect himself/herself from HIV, the virus that causes AIDS, by switching to non-injecting drugs? <b>(Oral or inhaled drugs)</b>	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
812	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child? <b>(Do not read the possible answers, multiple answer possible)</b>	Took medication (Antiretroviral)..1 Others (Specify).....96 Don't know.....98 No response.....99	
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 hands with an infected person?	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 have a confidential HIV test? <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	
814.1	Do you know where to go for HIV test?	Yes.....1 No.....2	

Q.N.	Question	Coding Categories	Skip to
815	Have you ever had an HIV test?	Yes..... 1 No.....2 No response.....99	901
816	Did you voluntarily take up the HIV test, or were you required to have the test?	Voluntary.....1 Required.....2 No response.....99	
817	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 48 months.....4 Don't know.....98 No response.....99	
817.1	How many times have you undergone for HIV test within the last 12 months?	..... Times	
818	Did you find out the result of your HIV test?	Yes.....1 No.....2 No response.....99	818.1 901
818.1	What was the result of your last test?	Positive.....1 Negative.....2 Uncertain.....3 Result not received.....4 Don't know.....98 No response.....99	901 819 901
818.2	Did you go to HTC for HIV care once you knew you were HIV positive?	Went.....1 Did not go.....2 Don't know.....98 No response.....99	

818.3	Why didn't you go to HTC for HIV care even after knowing you were HIV positive?	Felt I was healthy.....1 Others might know.....2 Had to pay.....3 Bad attitude of healthcare provider..4 Long waiting time/Could not manage with Clinic opening time.....5 Others (Specify).....96 Don't know.....98 No response.....99	
819	Why did you not receive the test result?	Sure of not being infected.....1 1 Afraid of result.....2 2 Felt unnecessary.....3 3 Forgot it.....4 4 Others (Specify) .....96	→

## 9.0 KNOWLEDGE OF HEPATITIS C

I am going to ask you to answer some questions about your general knowledge of Hepatitis C.

Q.N.	Questions	Response categories	Skip to
900	Have you heard about Hepatitis C?	Yes .....1 No .....2	→ 1001
901	Can Hepatitis C be transmitted through sex?	Yes .....1 No .....2 Don't know .....98	
902	Can Condoms protect you against hepatitis C?	Yes .....1 No .....2 Don't know .....98	
903	Can Hepatitis C only occur if you have HIV?	Yes .....1 No .....2 Don't know .....98	
904	Can Hepatitis C be transmitted by sharing needles?	Yes .....1 No .....2 Don't know .....98	
905	Can Hepatitis C be transmitted through tattooing?	Yes .....1 No .....2 Don't know .....98	
906	Is there a medical treatment for hepatitis C?	Yes .....1 No .....2 Don't know .....98	



907	Can herbal remedies cure hepatitis C?	Yes .....1 No .....2 Don't know .....98	
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**10. KNOWLEDGE AND PARTICIPATION IN STI AND HIV PROGRAMS**

Q.N.	Question	CodingCategories	Skipto
1001	Have you met or discussed or interacted with Peer Educators (PE) or Outreach Educators (OE) or Community Mobilizers (CM) or	Yes.....1 ...1 No.....2	→ 1004
1002	What activities did these PE or OE involve you in when you met them?  <b>(Multiple answers. DONOT READ the possible answers)</b>	Discussion on how HIV/AIDS is/isn't transmitted.....1 ...1 Discussion on how STI is/isn't transmitted.....2 .....2 Discussion on safe injecting behavior.....5	

Q.N.	Question	CodingCategories	Skipto
1003	How many times have these PE, OE, CM and/or CE met you in the last 12 months?	Once .....1 2-3 times.....2 4-6 times.....3 7-12 times.....4 More than 12 times.....5	
1004	Have you visited or been to any outreach center (DIC, IC or CC) in the last 12 months? Drop-In Center (DIC), Information Center (IC), Co	Yes.....1 No.....2	→ 1008
1005	What did you do when you went to the outreach center (DIC, IC or CC) in the 12 last months?  <b>(Multiple answers. DONOT READ the possible answers)</b>	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	

1007	How many times have you visited outreach centers (DIC, ICorCC) in the last 12 months?	Once ..... 1 2-3 times..... 2 4-6 times..... 3 7-12 times..... 4 More than 12 times..... 5	
1008	Have you visited any STI clinic in the last 12 months?	Yes..... 1 No..... 2	→ 1011

1009	What did you do when you visited such STI clinic?  <b>(Multiple answers. DONOT READ the possible answers given below)</b>	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	
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1010	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	
1011	Have you visited any HTC (HIV testing and counselling center)?  Testing (VCT) centers in the last 12 months?	Yes.....1 No.....2	→ 1014
1012	What did you do when you visited such HTCs?  <b>(Multiple answers. DONOT READ the possible answers)</b>	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	

Q.N.	Question	Coding Categories	Skip to
1013	For how many times have you visited HTC 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	
1013.1	Have you ever enrolled into any Opioid substitution Therapy (OST): Methadone and Buprenorphine?	Yes.....1 No.....2 Don't Know.....98 No response .....99	} 1014
1013.2	Have you received any Opioid substitution Therapy (OST) in the past 12 months?	Yes.....1 No.....2 Don't Know.....98 No response .....99	} 1014
1013.3	Which service have you received?	Methadone .....1 Buprenorphine.....2	

1013. 4	Are you still in therapy?	Yes.....1 No.....2 Don't know.....98 No response .....99	} 1014
1013. 5	What amount have you been receiving per day?	Methadone .....ml Or Buprenorphine ..... mg.	
1013. 6	How long have you been in this therapy?	..... Years ..... Months	
1014	Have you ever heard about prevention of mother to child transmission services (PMTCT) for pregnant women?	Yes.....1 No.....2 Don't know.....98 No response .....99	} 1015
1014. 1	Do you know from where pregnant women can get PMTCT services?	Yes.....1 No.....2 Don't know.....98 No response .....99	} 1015
1015	Have you ever heard about anti-retroviral therapy (ART) services for HIV positive individuals?	Yes.....1 No.....2 Don't Know.....98 No response .....99	} 1016
1015. 1	Do you know from where HIV positive individuals can get ART services?	Yes..... ...1 No..... ...2 Don't know	} 1016
1016	Have you heard of viral load testing services for HIV positive individuals?	Yes.....1 No.....2 Don't know .....98 No response .....99	} 1017
1016. 1	Do you know from where HIV positive individuals can get viral load testing services?	Yes.....1 No.....2 Don't know .....98 No response .....99	} 1017
1017	Have you heard of any Community Home Based Care(CHBC)services that are provided for HIV positive people?	Yes.....1 No.....2	

## 11. STIGMAANDDISCRIMINATION

Q.N.	Question	Coding Categories	Skip
1101	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	
1102	If a female relative of yours gets HIV, would you be willing to take care of her in your house hold?	Yes.....1 No.....2 Don't know.....98	
1103	If a member of your family gets HIV, would you want to keep it a secret?	Yes.....1 No.....2 Don't know.....98	
1104	If you knew a shop keeper or food seller had HIV, would you buy food from him/her?	Yes.....1 No.....2 Don't know.....98 No response.....99	
1105	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	
1106	If one of your colleagues has HIV but he/she is not very sick, Do you think he/she should be allowed to continue working?	Yes.....1 No.....2 Don't know.....98 No response.....99	
1107	Do you think children living with HIV should be able to attend School with children who are HIV negative?	Yes.....1 No.....2 Don't know.....98 No response.....99	