

# Integrated Biological and Behavioral Surveillance (IBBS) Survey among People Who Inject Drugs (PWIDs) in Western to Far Western Terai Highway Districts of Nepal

## Round V-2016

### BRIEF DESCRIPTION

This is the fifth round of Integrated Biological and Behavioral (IBBS) survey conducted among People who Inject Drugs (PWIDs) male in 7 Terai highway districts of Western, Mid-Western and Far-Western regions of Nepal. This survey finds out the prevalence of HIV, Syphilis, Hepatitis B and Hepatitis C. The drug injecting and sexual risk behavior related to HIV and AIDS, STIs, Hepatitis B and Hepatitis C has been assessed. The knowledge of the PWIDs related to prevention of HIV and AIDS, STIs and HCV and their health care seeking behavior has also been identified. A cross-sectional two-stage sampling methods were applied to recruit sample, where 300 samples were covered in this survey. This survey was carried out during February- March 2016.

### BACKGROUND AND RATIONALE FOR IBBS SURVEY

The previous four rounds of IBBS conducted among PWIDs in 7 Terai highway districts of West to Far Western region shows a decreasing trend in HIV since 2005 to 2012. The findings of these surveys suggest that HIV infection among PWIDs in West to Far West Terai highway districts as 11.7 percent in 2005, 11 percent in 2007, 8 percent in 2009 and 5 percent in 2012. The survey has been conducted under the leadership of National Centre for AIDS and STD Control (NCASC). It has been carried out for obtaining the required strategic information to guide and monitor the national response to HIV as per the National HIV Surveillance plan.

IBBS survey is very effective in helping to understand the emerging trends in HIV and HIV-related risk behaviors among the KAP very effectively. Hence, this survey provides as a significant milestone to guide the national HIV and AIDS prevention and control program.

### METHODS

A two-stage cluster sampling process was used in this survey. This survey was carried out among the PWIDs in the 7 (Western: Rupandehi & Kapilvastu); Mid-Western: Dang, Banke & Bardiya; Far-Western: Kailali & Kanchanpur districts) Mahendra highway in Nepal. PWIDs were defined as “Male aged 16 years or above who had been injecting drugs for at least three months before the date of the survey” along the seven western districts of the Terai highway. A total 300 samples were selected from survey districts. The participation of the PWIDs in the survey was voluntary. Ethical approval was obtained from Nepal Health Research Council (NHRC). Informed consent was taken from each survey

participants before the interview and drawing of the blood sample.

Blood samples were tested using Determine HIV½ as the first test and Uni- Gold HIV½ as the second test; and STAT-PAK as a tie-breaker in case of a tie between the first two tests. Syphilis was tested using RPR. All the serum samples were tested for Hepatitis B and Hepatitis C by the WHO certified rapid test kit.

A structured and pretested tablet based questionnaire was used for the collection of IBBS survey data. The survey was supervised and regularly monitored by the expert team of NCASC, Nepal, Save the Children/Global Fund and SPMER. External quality assessment of the blood sample was done in the National Public Health Laboratory, Teku, Kathmandu.

### KEY FINDINGS

#### There has been a significant decrease in HIV prevalence among the PWIDs:

The prevalence of HIV was 2.4 percent among the surveyed PWIDs in 2016. The prevalence of HIV has been decreasing over time in the PWIDs of the 7 Terai highway districts of Western to Far Western region. There has been a significant decline in HIV prevalence over the period. ( $p < 0.001$ ).

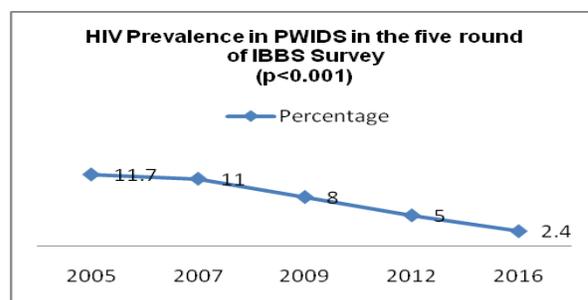


Figure 1: Trend of HIV prevalence in PWIDs

**Active Syphilis among the PWIDs:** The prevalence of Active Syphilis is low over time. Though it was 0 percent in 2007, it was found to be 1.7 percent in 2009, 1.3 percent in 2012 and has further decreased to 0.3 percent in 2016.

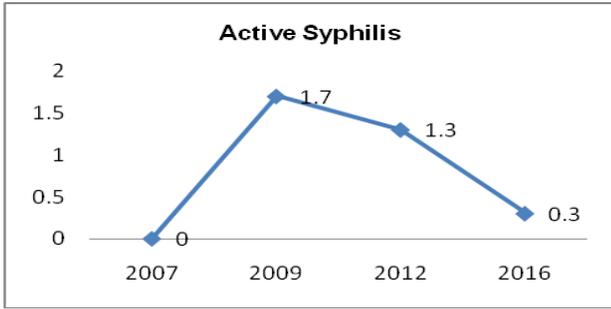


Figure 2: Trend of Active Syphilis among PWIDs

**Hepatitis C is most prevalent among the PWIDs:** It was found that Hepatitis C was most prevalent (8%). The prevalence of HIV was found to be 2.4 percent; Hepatitis B was 1.7 percent, and only 0.3 percent had Active Syphilis.

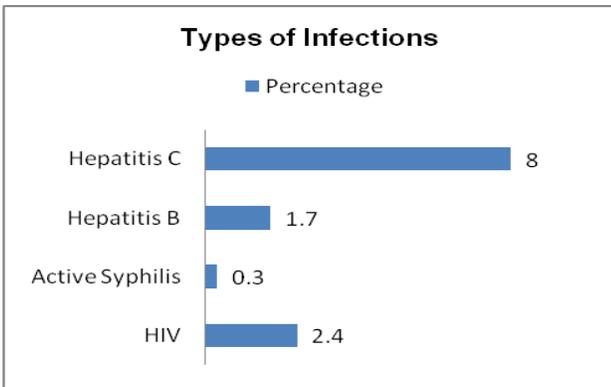


Figure 3: Types of Infections among the PWIDs

**The PWIDs are young, and they are starting to inject drugs at a younger age:** The trend of the age shows that there is an increase in the percentage of younger PWIDs. The percentage of PWIDs less than 25 years of age was 41.3 percent in 2005, 32.7 percent in 2007, 36.3 percent in 2009, 35.3 percent in 2012 and has increased to 38 percent in 2016. Similarly, the PWIDs have started to inject drugs for the first time in a younger age. The percentage of PWIDs injecting drugs for the first time at the age below 20 years was 40 percent in 2005, 38.7 percent in 2007, 46.3 percent in 2009, 41.3 percent in 2012 and has increased to 47.3 percent in 2016.

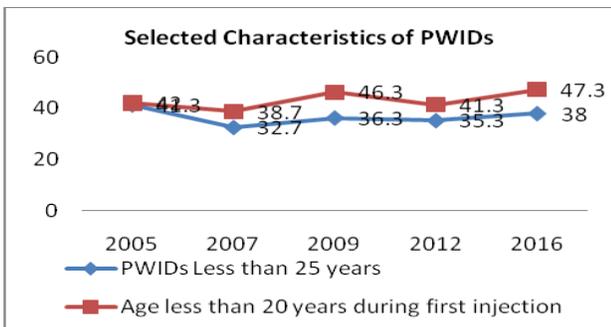


Figure 4: Selected characteristics of PWIDs

**The average duration of injecting behavior has not changed since the second round of survey:** The drug injecting practices shows that the average duration of injecting drugs among PWIDs was 4.3 years in 2005, 5.5 years in 2007, 5.9 years in 2009, 5.9 years in 2012 and 5.7 years in 2016.

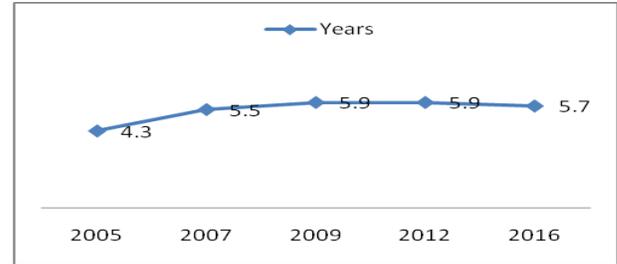


Figure 5: Average duration of injecting behavior

**It has been noted that unsafe injecting behavior has been decreasing over time:** The trend of Unsafe injecting behavior has been found to be decreasing overtime among the PWIDs. The unsafe injecting practices as using needle/syringe that was used by others, using of needle/syringe kept in public places and the percentage of needle/syringe partners have decreased overtime. The decrease in "Used needle/syringe that was used by others" is statically significant ( $p < 0.005$ ). So, the PWIDs are adopting safer injecting behavior.

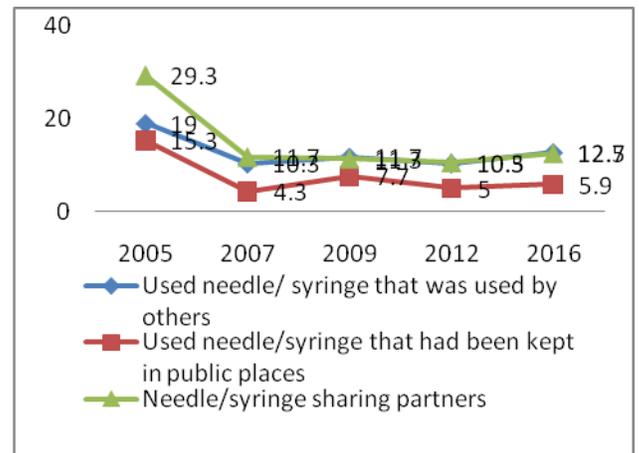


Figure 6: Unsafe Injecting behavior

**The consistent condom use with various sex partners have decreased:** The trend of consistent condom use among regular partners shows to be 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 and the finding is statically significant ( $p < 0.001$ )

The trend of consistent condom use in non-regular partner shows it to be 31.5 percent in 2005, 39.3 percent

in 2007, 37.3 percent in 2009, 64.8 percent in 2012 and 35.7 percent in 2016; and the finding is statically significant ( $p < 0.001$ ).

With FSWS, the consistent condom use was 46.5 percent in 2005, 48.4 percent in 2007, 51 percent in 2009, 70.3 percent in 2012 and 52.1 percent in 2016. The finding is statistically significant with a p-value  $< 0.005$ .

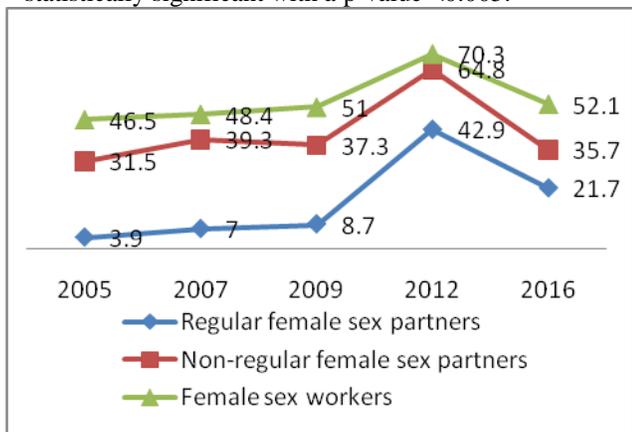


Figure 7: Consistent condom uses with different sex partners

**The comprehensive knowledge about HIV has been decreasing overtime:** Knowledge of ABC (measures to prevent HIV) was 77.3 percent in 2007 and has been gradually decreasing to 77.3 percent in 2009, 72 percent in 2012 and 43 percent in 2016. Similarly, the knowledge of BCDEF has been decreasing over time. It was 57 percent in 2007, 56 percent in 2009, 43.3 percent in 2012 and has further decreased to 35.3 percent in 2016.

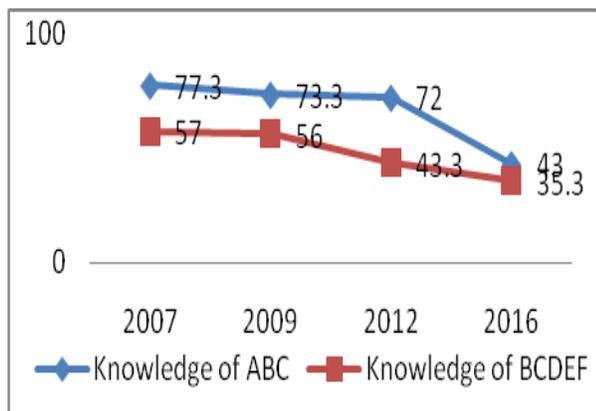


Figure 8: Comprehensive knowledge of HIV

**Knowledge of Confidential HIV testing facility in the community has been decreasing but there is a progressive increase in number of PWIDs who have ever tested for HIV:** The knowledge regarding Confidential HIV testing facility in community was 74.3 percent in 2005, 95 percent in 2007, 94 percent in 2009, 86.7 percent in 2012 and has further decreased to 79 percent in 2016.

On the contrary, the number of PWIDs who had ever tested for HIV had been increasing. It was 30.4 percent in 2004, 46 percent in 2007, 62.7 percent in 2009, 59.7 percent in 2012 and further increased to 67 percent in 2016

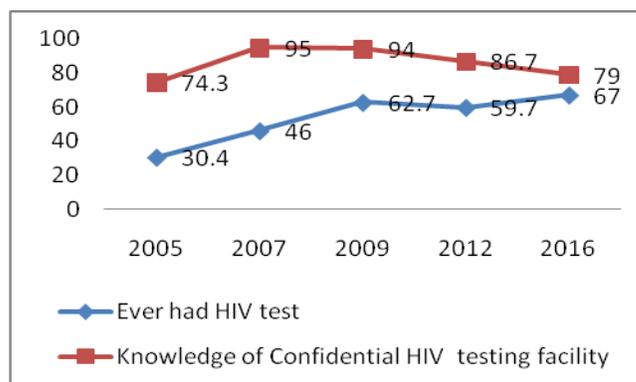


Figure 9: Knowledge of Confidential HIV testing facility in the community

**The overall knowledge of HCV Infection is not adequate:** Less than half (43.7%) of the PWIDs replied that Hepatitis C could be transmitted through sex and the same percentage (43.7%) believed use of condoms during sex could protect against Hepatitis C. About three out of four PWIDs (68.3%) knew that hepatitis C could be transmitted by sharing needles and 55.7 percent were aware that hepatitis C could be transmitted through tattooing. Over Three out of five (59.7%) knew that there was medical treatment for Hepatitis C while 17 percent believed that herbal remedies would cure hepatitis C.

**The participation in various programs over the past 12 months has not changed:** There has been a slight decrease in meeting with PE/OEs. The percentage of PWIDs visiting DIC has not changed. The percentage of PWIDs visiting the HTC in the last 12 months was 34.7 percent in 2016. It is seen that the PWIDs visit the STI Clinics the least.

#### Program Implications and recommendations

**Implication:** There has been an increase in the younger age group of people, below 20 years, starting to inject drugs. During this survey almost half (47.3%) of the PWIDs began to inject below the age of 20 years.

**Recommendation:** It is recommended to develop a curriculum for harm reduction of drug injecting practices at the secondary level of education; meanwhile education interventions should be designed in a way that can be understandable among PWIDs with no formal education.

**Implication:** Majority of PWIDs (95.7%) had had their first sexual contact before the survey and among them 85.7 percent of the PWIDs was of age below 20 years.

**Recommendation:** Programs targeting the group below 20 years (IEC materials, free assess of a condom) should be made more efficient.

**Implication:** The consistent use of condom had been progressively increasing over time, but there has been a decrease in consistent condom use during the sex with all types of sex partners during this survey.

**Recommendation:** The ongoing effort has to be kept on. New programs for safer sex should be made more assessable to the PWIDs and their sex partners.

**Implication:** It was found that majority (90.7%) of the PWIDs having STI symptoms had not sought medical attention and their participation was considered to be very low (5%) in STI Clinics.

**Recommendation:** With the ongoing efforts on, new programs and strategies should be designed and implemented to make the PWIDs more aware about the location, facilities available in STI Clinics, HTC; so that they able to receive better care.

**Implication:** There has been a decrease in the practice of harmful injecting behavior, and the availability of free syringe/needle is right.

**Recommendation:** The ongoing efforts by various partners have to be ongoing and newer and better strategies have to be developed to improve it further.

**Implication:** There has been a slight decrease in meeting with PE/OEs during this survey and visit to STI Clinics is persistently poor.

**Recommendation:** Plans should be made in two regards; about ways to increase the PWIDs participation to these facilities more easily and to further improve the service catering ability of these establishments.

**Implication:** The prevalence of Hepatitis C was found to be 8 percent while the knowledge regarding the prevention of Hepatitis C is poor.

**Recommendation:** This calls for an immediate attention at the national level. National level programs and strategies should be formed and disseminated to lower level authorities to explore further the reasons for the problem, and develop effective programs to control the HCV infection.

#### Key Indicators

Prevalence	%
HIV	2.3
Syphilis history	1.7
Active syphilis	0.3
HCV	1.7
HBV	8
HIV among those injecting for less than a year	0
<b>Duration of injection and injecting behavior</b>	
Turnover: median duration of injecting drugs	5.7 years
Aged <20 years	47.3
People injecting more than once every day (in the past week)	19
People injecting every day (in the past week)	24.3
Shared needle in the past week	12.7
Shared injecting equipment in the past week	76.4
<b>Sexual behavior</b>	

Currently married	48.3
STI symptoms experienced in the past year	16
Unprotected sex with FSWs in the past year	47.9
Unprotected sex with casual partners in the past year	64.3
Unprotected sex with regular partner in the past year	78.3
<b>Knowledge of HIV and STI</b>	
Ever heard of HIV	99.3
Comprehensive knowledge	43
Know that HIV is transmitted through stained needles	94.3
Know people living with HIV/AIDS or died	66.3
<b>Uptake of HIV and STI services</b>	
Needles obtained from needle exchange program in the last injection	42
Received HIV test in the past 12 months and received results	66
Met/discussed/interacted with PE or OE in the last 12 months	60
Visited a DIC in the last 12 months	69
Visited any STI clinic in the last 12 months	5
Visited HTC Center in the last 12 months	34.7

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