

# Integrated Biological and Behavioral Surveillance (IBBS) Survey among People Who Inject Drugs in the Eastern Terai of Nepal Round VI -2015

## Brief Description of the Study

This is the sixth round of the IBBS survey conducted among People Who Inject Drugs (PWID) in Eastern Terai. In line with the objectives of the previous rounds of the IBBS, this survey was also undertaken primarily to determine trends of HIV and STIs, HIV and STI related risk behaviours, drug injecting behaviours, the level of awareness about HIV/STIs and exposure to HIV intervention programs among PWID in Eastern Terai. Moreover, this survey examined the prevalence of Hepatitis B and Hepatitis C among PWID for the first time. Fieldwork for data collection was conducted in July, 2015.

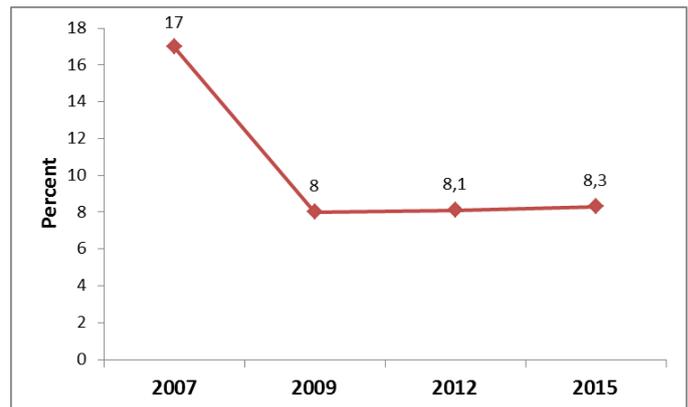
## Methods

This cross-sectional study was conducted among PWID in three districts, Jhapa, Morang and Sunsari. For the purpose of this survey, PWID was 'those current injectors aged 16 years and above who have been injecting illicit drugs for at least three months prior to the date of the survey'. Thirty clusters from the study districts were selected using probability proportionate to size (PPS) and 12 PWID were then selected using systematic random sampling technique from each selected cluster. PWID were interviewed after obtaining witnessed oral consent followed by pre-test counseling and blood sample collection for HIV, Syphilis, Hepatitis B and Hepatitis C. A structured questionnaire was used to collect background characteristics, knowledge on HIV and AIDs, drug injecting practices, sexual behavior and access to HIV services. Rapid test kits: Determine HIV 1/2 test, Uni-Gold test and Stat pack test kits were used for testing for the presence of antibodies against HIV in the serum. Syphilis was tested using Rapid Plasma Regain (RPR) and was confirmed by Treponema Pallidum Particle Agglutination (TPPA) tests. Hepatitis B surface antigen (HbsAg) was detected by Rapid kit, HBSAg test strip (serum) and Hepatitis C antibody was detected by Hepatitis C Test strep (serum). PWID received test results, with post-test counseling, syndromic treatment for STIs and treatment for syphilis based on the spot RPR screening. Data were entered in Epi-Data and analyzed using SPSS and R-Program. Ethical approval for this survey was sought from Nepal Health Research Council.

## Key Findings

### *HIV prevalence had remained stable over years*

HIV prevalence rate among PWID is 8.3 percent, ranging from 5.7 to 11.8 at a 95 percent confidence interval. HIV prevalence among PWID has decreased significantly since the third round in 2007 to 2015 (p-value <0.05). However HIV prevalence had remained stagnant in previous three rounds of the survey (2009, 2012 and 2015).



**Figure 1. Trends in HIV prevalence.**

### *Prevalence of Syphilis, Hepatitis B and Hepatitis C*

Syphilis history was found among eight (2.2%) of the PWID, while four (1.1%) were currently infected with high-titre syphilis. The prevalence of active syphilis is lower than two percent in all rounds of IBBS surveys (2007, 2009, 2012 and 2015). Less than one percent (0.8%) tested Hepatitis B positive. Nearly half of PWID (47.5 percent, 95% CI, 42 percent to 52 percent) tested Hepatitis C positive.

### *Most of the PWID are young, unmarried, literate and imprisoned at least once:*

Majority of the PWID were below 30 years (71%) and literate (97%). Majority of PWID were from disadvantaged janajati ethnic groups (47%) and upper caste groups (26%). Nearly half of PWID (49%) were ever married, of whom the median age at first marriage was 22 years. Majority of PWID were living in home (76%) and with family (55%) and wife (35%). More than two third of the PWID (68%) had been imprisoned or detained at least once and among them, almost half (49%) been imprisoned or detained in the past year. Alcohol consumption was common among PWID (67%).

### *PWID are sexually active, had multiple sexual partners, had sex with female sex workers (FSWs)*

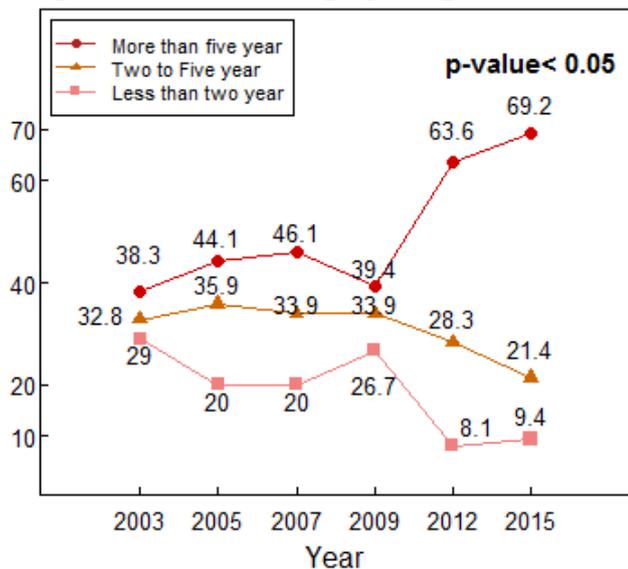
Most of the PWID (98%) reported to have had at least one sexual contact with a female partner. The median age of first sexual intercourse for PWID was 17 years. Most of PWID had sexual debut before 20 years (84%). Nearly half of PWID (49%) had multiple sexual partners in past year. About 60 percent of the PWID had regular female sex partners, 17 percent of PWID had regular FSWs and 30 percent of PWID had non regular female sex partners.

### *Duration of drug Injecting Practices is increasing*

Majority of PWID had injecting drugs more than five years and the trend is increasing significantly from 38 percent in 2003 to 69 percent in 2015 (p-value < 0.05). PWID injecting for two years to five years significantly decreased

from 33 percent in 2003 to 21 percent in 2015 ( $p < 0.05$ ). Similar patterns was found among PWID injecting less than two years as the trend decreased significantly from 29 percent in 2003 to 9 percent in 2015 ( $p < 0.05$ ).

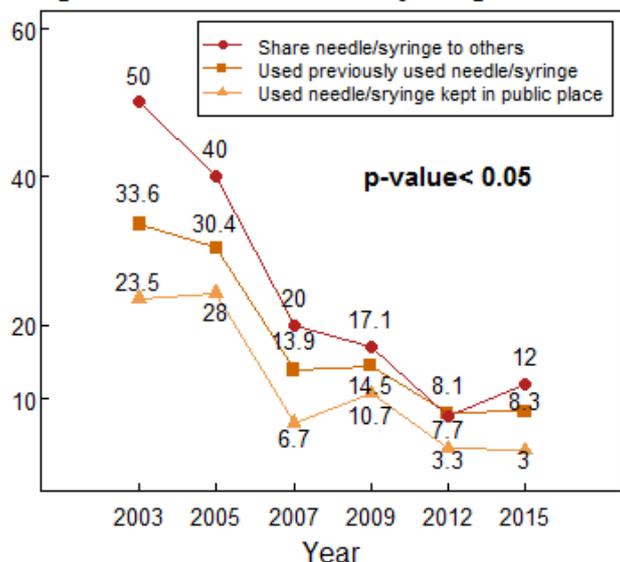
**Figure 2: Trends in drug injecting Practices**



**Unsafe Injecting behaviours of PWID is decreasing trends**

It was found that a considerable percent of PWID had avoided unsafe injecting behavior in the past week. The proportion of PWID who had unsafe injecting practice in the week preceding the survey has significantly decreased since the first round ( $p < 0.05$ ). High risk behavior such as injecting with previously used needles/syringes significantly decreased from 34 percent in 2003 to 8 percent in 2015 ( $p < 0.05$ ). Similarly the behavior of using needles/syringes kept in a public place significant decrease to 3 percent in 2015 ( $p < 0.05$ ). However, sharing needle with others increased slightly from 8 percent in 2012 to 12 percent in 2015.

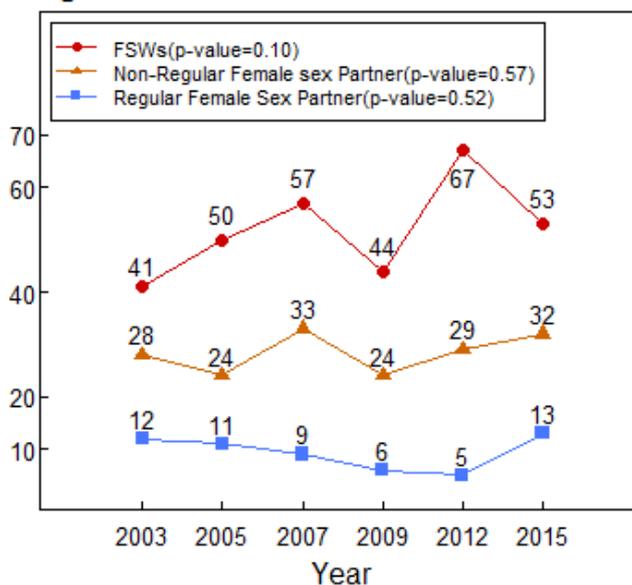
**Figure 3: Trends of Unsafe Injecting Behaviours**



**Consistent condom use with regular and non-regular female sex partners is low**

Mainly PWID sex partners can be classified as regular female sex partners, non-regular female sex partners and female sex workers. The lowest use of consistent condom use was reported with regular female sex partners (wives/live in partners) in all rounds of IBBS. Similarly consistent condom use with non regular female sex partners also increased from 28 percent in 2003 to 32 percent in 2015. However, consistent use of condom with FSWs has drop down from 67 percent in 2012 to 53 percent in 2015.

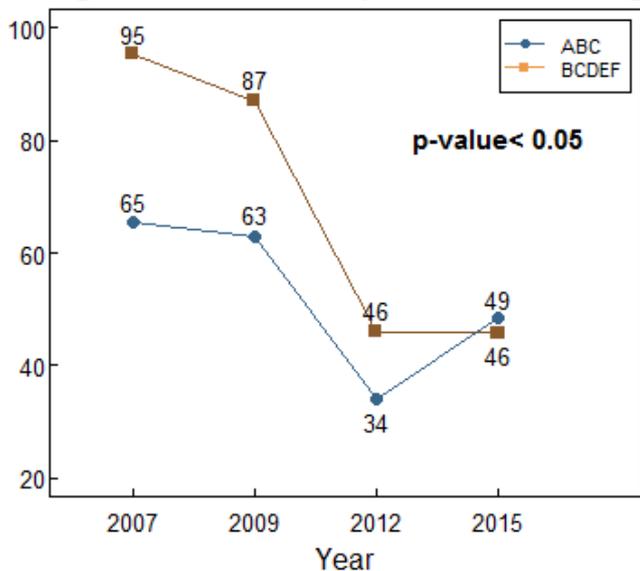
**Figure 4: Trends of Consistent Condom Use**



**Comprehensive knowledge on HIV decreased**

Comprehensive knowledge is measured by proper knowledge on abstinence (A), being faithful (B) and consistent and correct condom use for infection prevention (C) and on three misconceptions related to food sharing (D), mosquito bite (E) and infection on healthy looking person (F). The percent of PWID who were aware of all three ABC significantly decreased from 95 percent in 2007 to 46 percent in 2015 ( $p < 0.05$ ). Similarly, comprehensive knowledge about HIV and AIDS (BCDEF) was also decreased from 65 percent in 2007 to 49 percent in 2015 ( $p < 0.05$ ). However, the comprehensive knowledge was increased slightly from 34 percent in 2012 to 49 percent in 2015.

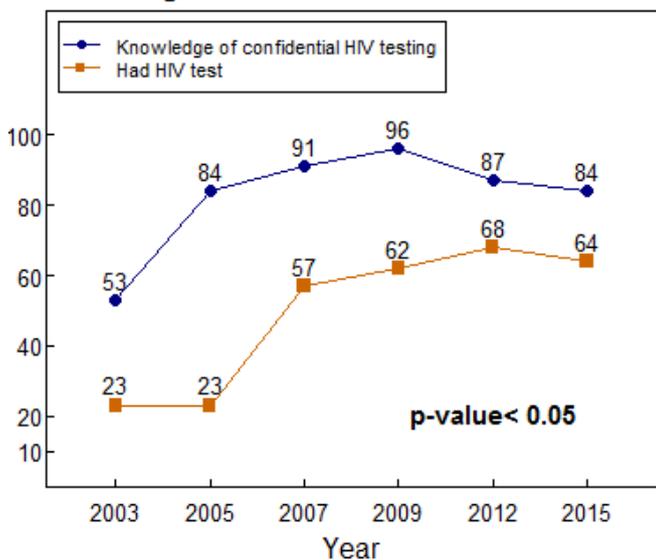
**Figure 5: Trends of Comprehensive Knowledge**



**Knowledge of confidential HIV testing facilities has decreased:**

Knowledge of a confidential HIV testing facility in their community had increased from 53 percent in 2003 to 96 percent in 2009; however, the knowledge had decreased in recent three rounds of IBBS surveys from 96 percent in 2009 to 84 percent in 2015 (p-value <0.05). PWID who ever had HIV test significantly increased from 23 percent in 2003 to 68 percent in 2012 and drop to 64 percent in 2015 (p-value <0.05).

**Figure 6: Trends of Knowledge on Confidential HIV testing and had HIV test**

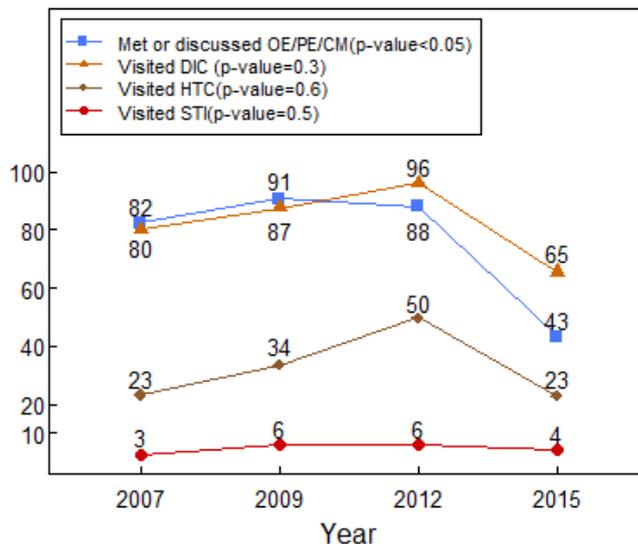


**Exposure to HIV program declined:**

It was found that PWID who interacted with an outreach educator (OE) or peer educator (PE) or community motivators (CM) significantly decreased from 82% in 2007 to 43% in 2015 (p-value <0.05). PWID visiting drop-in-centers (DICs) has decreased from 80% in 2007 to 65% in 2015. Moreover, PWID visiting HTC centers increased from 23 percent in 2007 to 50 percent in 2012, but drop to 23

percent in 2015. PWID visiting STI clinics remained very low (3% in 2007, 6% in 2009, 6% in 2012 and 4% in 2015) in all rounds of IBBS surveys.

**Figure 7: Trends of Exposure to HIV Program**



**Program Implications and Recommendations:**

- HIV prevalence had remained stable over years, suggesting a public health concern. *Intensified and focused program is needed incorporating government and I/NGOs to reduce the burden of HIV in the study districts. Further research is also needed to explore the factors for steady trend of HIV prevalence.*
- Nearly half of PWID were suffering from Hepatitis C. *Special attention is needed to reduce the transmission of Hepatitis C through education, improved awareness of risks and access programs.*
- PWID had started injecting drugs in their youth and adolescence. Most PWID were less than 25 years of age when they first injected drugs. *This indicates that young groups should be reached with HIV, Hepatitis B, Hepatitis C and STI programs and education. Specific program activities that target school children, college students, youths, and adolescents should be designed to impart HIV and AIDS, Hepatitis B, Hepatitis C awareness, injecting behaviours and sex education.*
- Although high risk behaviors of PWID had decrease in recent years, there are some PWID having high-risk behaviors. *Behavioral change and safe injecting and sexual practices through wider mobilization of PEs/OEs should be promoted.*
- Pre-marital sexual relationship was common among PWID. The median age at first sexual intercourse among PWID was 17 years and majority of PWID had sexual intercourse before 20 years. *Messages on delayed sexual debut should be incorporated and promoted among PWID.*
- PWID are sexually active, have multiple sexual partners are more engaged in risky sexual behaviors. *Safer sex behaviors including being faithful to their sexual partners, partner reduction, consistent and*

correct use of condom should be promoted and disseminated among PWID. Strategic behavioral communication materials on safer sex behaviors should be available where PWID most frequently assembled.

- Practice of visiting FSWs exists among PWID and among them there are some PWID who never used condom with FSWs. Hence, awareness on risk and preventive measures of HIV along with promotion of consistent condom use especially with FSWs needs to be strengthened among PWID.
- Consistent condom use with regular female sex partners is low. Consistent condom use is also found lower among PWID while having sex with non regular female sex partners. This may increase vulnerability for HIV and STI transmission. Program should focus on the consistent condom use with wives, girlfriends and female partners.
- Comprehensive knowledge on HIV significantly decreased from previous rounds of IBBS surveys from 2003 to 2015. Therefore, comprehensive knowledge should be promoted through multiple channels. Radio and TV were the frequently reported and preferred sources for HIV and AIDs and condom. This suggests that message should be continuously promoted through these channels.
- The practice of seeking STI treatment among PWID is not common. Treatment seeking behaviors should be promoted among those PWID who engaged in risky sexual behaviors. Information of government and NGO health facilities providing STI treatment services should be promoted.
- Exposure to structured HIV program (peer education, DICs, HTC/STI clinics etc.) found to be declined from previous round of IBBS surveys. Targeted interventions with the provision of peer and outreach education, HTC/STI clinic including care and support will help increase the exposure to HIV and AIDs program among PWID.
- Exposure to OST services is low. Availability and awareness on OST services should be provided among community.
- Knowledge on ART services, PMTCT services, CHBC services is considerably low among PWID. This calls for scaling up HIV and AIDS education and awareness programs incorporating these services.

Selected Key Indicators	Total (N=360) (%)
HIV	8.3
Active Syphilis	1.1
Syphilis History	2.2
Hepatitis B	0.8
Hepatitis C	47.5
Median age (range 16-50 years)	25
Literate	96.7
Ever Married	49.2
Consumed alcohol everyday	13.1
Ever been imprisonment	68.1
Mean Duration of Injecting Drugs (SD)	75 (56)
Median age of first drug Injection (11-41 years)	19
People injecting more than once every day	31.0
Shared needle in the past week	71.4
Used non sterile syringe/needle in past month	12.6
Used non sterile injecting equipment in past month	11.1
Premarital sex (n=183)	96.0
Consistent condom use with regular female sex partners in the past year (n=210)	13.3
Consistent condom use with FSW in the past year (n=64)	53.1
Consistent condom use with non-regular female sex partner in past year (n=106)	32.1
Knowledge of all three indicators: ABC	45.8
Knowledge of all five indicators: BCDEF	48.6
Ever had HIV test	64.1
Met/Interacted with PE/OE/CM	43.3
Visited DIC	65.3
Visited STI Center	4.2
Visited HTC Center	22.8
Received OST Services	22.5
Needle obtained from needle exchange program	53.3

### Key Indicators

**For more information, please contact –  
National Center for AIDS and STD Control  
Teku, Kathmandu  
Tel: +977 1 4258219, 4261653  
Fax: +977 1 4215149  
url: [www.ncasc.gov.np](http://www.ncasc.gov.np)**