

Evaluation of HIV Prevention Interventions for Female Sex Partners of Male Injecting Drug Users in Vietnam

**Results of Surveys in Hanoi, Dien Bien
and Ho Chi Minh City**

Son Phan, Phong Nguyen, Binh Kieu, Diu Nguyen, Ryan Kling, Ted Hammett

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IV. Executive summary

Female sexual partners (FSPs) of injecting drug users (IDUs) are not only at risk of being infected with HIV/AIDS by their partners, but also facilitate transmission of HIV to others due to their risky sexual behaviors and practices. To help FSPs of IDUs reduce their risks of acquiring or transmitting HIV, HIV prevention interventions were implemented in Hanoi, Dien Bien and HCMC during different timeframes and by different implementers. The FSP interventions and their evaluation began in Hanoi in 2007 and were designed and implemented by Abt Associates in partnership with the Institute for Social Development Studies (ISDS) and were funded by USAID through Pact. In 2010, the FSP project was transferred to Abt's USAID/HPI and the implementing partner shifted to the Center for Supporting Community Development Initiatives (SCDI). In 2011, the interventions in Hanoi were transferred from USAID/HPI to the Global Fund but USAID/HPI continued to do the evaluation.

Regarding Dien Bien and HCMC, the FSP interventions were carried out in Dien Bien by FHI 360 in 2011 with support from USAID, and in HCMC by the Centre for Promotion of Quality of Life in partnership with self-help groups **and** with support provided by the Global Fund in 2011.

The FSP interventions targeted HIV-negative women and included individual and group outreach activities, individual counseling, small and large group communication, pamphlet distribution, condom distribution and HIV service referral. The most common outreach method targeting FSPs of IDUs was through IDUs themselves and particularly HIV-positive IDUs.

The evaluation of the interventions was conducted in Hanoi, Dien Bien and Ho Chi Minh City (HCMC) using a series of cross-sectional surveys. A baseline and four follow-up surveys of about 200 FSPs were conducted in four districts of Hanoi between 2008 and 2012, with an additional survey of 200 FSP-IDU couples included in the 48-month survey in 2012. Baseline and 12-month follow-up surveys of 191-249 FSP-IDU couples were conducted in four districts of HCMC in 2011 and 2012, while in the city of Dien Bien Phu and two other districts of Dien Bien Province, a baseline survey of 299 FSPs was conducted in 2011 and a 12-month survey of 300 FSP-IDU couples was done in 2012. A snowball sampling strategy was applied to recruit FSP respondents including FSPs and their male IDU partners. The survey included behavioral interviews and HIV testing, with urine testing for opiates given to FSPs in the surveys in HCMC and Dien Bien and in the 36 and 48-month surveys in Hanoi. Fingerprint scanning was used to

prevent repeat participation of the study subjects in the same survey either at the same districts or different districts.

Major findings and conclusions include the following:

- FSPs are sexually active with their male IDU partners.
- IDU (<10%) and sex work (<5%) are infrequent among FSPs in Hanoi and Dien Bien, but is more prevalent in HCMC (48% and 10%).
- In Hanoi and Dien Bien, FSPs' primary risk factor is sex with IDU partners while FSPs' own drug injection and sharing of injection equipment are also important factors in HCMC, illustrating the diversity of HIV epidemics in Vietnam.
- HIV prevalence among FSPs is high in all sites: ~10% in Dien Bien, 15%-27% in Hanoi and 37% in HCMC.
- FSPs represent a very high risk population for HIV.
- Many problematic relationship characteristics persist in FSP-IDU couples. There has been some improvement in Hanoi, but most FSPs in all sites still feel that their male partners control the relationship.
- There are high rates of HIV serodiscordant/unknown status relationships; rates are higher by self-report than based on test results in couples surveys.
- Rates of previous HIV testing among FSPs have not improved over time.
- The majority of FSPs who were tested and received their results disclosed them to their IDU partners; the rate of disclosure was higher for HIV+ FSPs.
- In contrast, male IDUs rate of disclosure of HIV+ status to their FSPs was much lower: 32% (DB)-44% (Hanoi and HCMC) of FSPs of HIV+ male IDUs did not have correct knowledge of their partners' status.
- FSPs' consistent condom use with IDU partners improved over time in Hanoi but went down in Dien Bien and remained the same in HCMC.
- Level of condom use increased among HIV serodiscordant/unknown status couples in Hanoi, but went down in Dien Bien and HCMC.
- Most FSPs were exposed to interventions in Hanoi and Dien Bien, but only about 50% in HCMC reported exposure.
- Rates of ART among FSPs' male IDU partners were inconsistent across survey waves.

- Consistent condom use was significantly associated with exposure to interventions in Hanoi and Dien Bien; there was a positive but not significant relationship in HCMC; there was no statistical association between exposure to interventions and FSPs' HIV status.
- Among 68 Hanoi FSPs who appeared in more than one survey, none seroconverted to HIV.
- FSP interventions appear to have been more effective in Hanoi and Dien Bien than in HCMC in terms of reaching FSPs and increasing condom use.

Recommendations based on the evaluation results include the following: improvement of interventions among FSPs and the possibility of integrating FSP interventions with IDU interventions, and considering adding FSPs to the list of MARPs so they may have access to more comprehensive intervention packages.

- FSPs should be formally added to the list of key affected populations.
- Implementation of FSP interventions in HCMC should be evaluated to ensure that the model is being followed.
- FSP interventions should address both sexual and injecting behaviors (especially addressing IDU behavior in HCMC).
- Improve HCT services and strategies to increase mutual disclosure of HIV status within couples.
- ARV treatment as prevention should receive more emphasis in interventions.
- Consistent condom use is very difficult to achieve; interventions also need to encourage lower risk sexual practices.
- To improve sustainability and cost-effectiveness, FSP interventions should be integrated with IDU interventions and focus on couples.

V. Background

Female sexual partners (FSPs) of injecting drug users (IDUs) are not only at risk of being infected with HIV/AIDS by their partners, but also facilitate transmission of HIV to others due to their risky sexual behaviors and practices (1). Findings from our studies in Vietnam showed that HIV prevalence among IDUs is still high. The national HIV prevalence among IDUs increased from 10% in 1996 to 32% in 2002 (2). In provinces, the HIV prevalence among IDUs is about 18% in Ha Giang province, 48% in Dien Bien and about 12% in Lao Cai province (3) (4). Most IDUs are sexually active with regular partners who are wives or girlfriends. The risk of FSP spreading HIV to their sex partners is high (4). Furthermore, many IDUs reported that besides the relationship with their primary FSPs they also had sex with other sex workers and non-regular sex partners. Study results on high-risk sexual behavior among IDUs in Kenya showed that IDUs are two times more likely than non-IDUs to report having multiple sexual partners as well as multiple new sexual partners (5).

In Vietnam, FSPs of IDUs in many cities and provinces are also injecting drug users and/or have sex relationships with other partners rather than their regular sex partners or being sex workers. The findings from the follow-up survey showed that 10-18% of FSPs of IDUs in HCMC and Hanoi reported that they had sex with other partners. About 6-9% of FSPs of IDUs in HCMC and Hanoi are currently sex workers (6).

Many FSPs of IDUs do not know their or their male partners' HIV status. Several studies showed that the rate of using condoms among FSPs of IDUs is low. A study conducted in Bangkok and New York by Vanichseni and Des Jarlais showed that only 12% of FSPs in Bangkok and 20% of FSPs in New York used a condom when having sex with IDUs in the last 6 months (7). Low rate of condom use with primary FSPs among IDUs, and among FSPs as well, was found in studies in Bangladesh, Bhutan, India, Nepal and Sri Lanka (8). Consistent condom use with IDUs among FSPs in HIV discordant couples is still low in Vietnam. In Hanoi, the rate reported was about 17% and 43% among IDU positive & FSP negative and IDU negative & FSP positive couples, respectively (6).

To help FSPs of IDUs reduce their risks of acquiring or transmitting HIV, HIV prevention interventions were implemented in Hanoi, Dien Bien and HCMC during different time frames and by different implementers. The sexual partner (FSP) interventions and their evaluation that began in Hanoi in 2007 were designed and implemented by Abt Associates in partnership with the Institute for Social Development Studies (ISDS) and funded by USAID through Pact. In 2010, the FSP project was transferred to Abt's

USAID/HPI and the implementing partner shifted to the Center for Supporting Community Development Initiatives (SCDI), an offshoot of ISDS. In 2011, the interventions in Hanoi were transferred from USAID/HPI to the Global Fund but USAID/HPI continued to do the evaluation.

The FSP interventions were carried out in Dien Bien by FHI 360 in 2011 with support from USAID, and in HCMC by LIFE Center in partnership with self-help groups with support from the Global Fund in 2011.

The FSP interventions targeted HIV-negative women and included individual and group outreach activities, individual counseling, small and larger group communication, pamphlet distribution, condom distribution and HIV service referral. The most common outreach method targeting FSPs of IDUs was through IDUs themselves and particularly HIV seropositive IDUs.

To evaluate the FSP intervention programs, a baseline cross-sectional survey was conducted in Hanoi followed by four cross-sectional surveys after 12, 24, 36 and 48 months from 2008 to 2012. The surveys in Dien Bien and HCMC include baselines in 2011 and 12-month follow-ups in 2012. The results of the previous surveys showed some changes and trends in risky behavior among FSPs of IDUs.

VI. Objectives

The surveys were designed to monitor changes in risk behaviors, trends in HIV prevalence, and level of exposure to HIV/AIDS interventions for FSPs of male IDUs in 4 districts in Hanoi (Hai Ba Trung, Dong Da, Hoang Mai and Long Bien), 3 districts in Dien Bien province (Dien Bien Phu City, Dien Bien District, and Tuan Giao District), and 4 districts in HCMC (District 4, District 8, and Tan Binh and Thu Duc Districts). Findings were used to develop recommendations for improvements in the interventions.

Specific Objectives

Primary objectives:

- To estimate HIV prevalence among FSPs of male IDUs;
- To measure risk and risk reduction behaviors for HIV transmission between male IDUs and their FSPs;

Secondary objectives:

- To estimate HIV serodiscordant and seroconcordant rates among IDU-FSP couples;
- To evaluate the coverage of intervention programs for FSPs.

VII. Methodology

Study design

Baseline and follow-up cross-sectional surveys were conducted in Hanoi, Dien Bien and HCMC to identify changes in risk behavior and trends in HIV prevalence among FSPs of male IDUs. A structured questionnaire was developed to obtain the required data, including sociodemographic characteristics, sexual relationship, drug use, sexually transmitted infection, HIV/AIDS knowledge and testing, and preference of potential interventions for FSPs.

Study site and population

Study sites

The survey was conducted in Hanoi in 4 districts, the same locations where the baseline and previous follow-up surveys were conducted: Dong Da, Long Bien, Hoang Mai and Hai Ba Trung. For Dien Bien, the survey was conducted in the city of Dien Bien Phu, Dien Bien District and Tuan Giao District. In HCMC, it was conducted in District 4, District 8 and Binh Thanh and Thu Duc Districts.

Study population

The study targeted two study populations, female sexual partners (FSPs) and their male IDU partners.

a. Female sexual partners:

The main target population of the survey is the FSP who were regular sexual partners of IDUs defined as wives, cohabiting girl friends of male IDUs OR as someone having sexual intercourse with IDUs at least 1 time per week or 4 times per month in the last 6 months (for those who are not married or cohabiting with male IDUs).

The specific inclusion criteria were as follows:

- Aged 18 years old or older;
- Legally married to an IDU
OR
Cohabiting with an IDU
OR

Reported having had noncommercial sex with a specific IDU at least once per week throughout the previous 6 months. When potential FSPs arrive at survey sites, a screening process with a series of questions about their relationship with IDUs was applied to identify whether or not these subjects are truly regular sexual partners of IDUs.

- Willing to consent to participate in the study.

Those who did not meet the specific selection criteria were excluded from the surveys.

b. Injecting drug users (IDUs):

Injecting drug users are male partners of FSPs who injected a drug at least once in the 30 days prior to the survey.

Specific selection criteria for IDUs to be eligible for the study are as follows:

- Aged 18 years or older;
- Reported having injected drugs within the last 30 days;
- Have regular sexual partners (to whom they are legally married or with whom they are cohabiting and have had vaginal sex at least 4 times per month while living together for the last 6 months);
- Willing to consent to participate in the study;
- Willing to refer their regular sex partners (who meet the above inclusion criteria for FSPs of IDUs) to participate in the study.

It is important to notice that the 2012 follow-up survey applied the snowball method to recruit the main target study subjects, the FSPs of IDUs.

Table 1: Sample of single FSPs of IDUs by district in Hanoi

N	District			
	Hai Ba Trung	Dong Da	Hoang Mai	Long Bien
200	50	50	50	50

Table 2: Sample of FSPs and their IDUs by district in Hanoi, Dien Bien and HCMC

	Subject	N	District			
			Hai Ba Trung	Dong Da	Hoang Mai	Long Bien
Hanoi	FSPs	200	50	50	50	50
	IDUs	200	50	50	50	50
Dien Bien		N	Dien Bien Phu	Dien Bien	Tuan Giao	
	FSPs	300	85	115	100	
	IDUs	300	85	115	100	

HCMC		N	District 4	District 8	Binh Thanh	Thu Duc
	FSPs	249	89	98	58	04
	IDUs	249	89	98	58	04

Sampling method

The 2012 follow-up survey did not apply the RDS method with FSP-initiated or IDU-initiated recruitments, but rather used the snowball technique. The FSPs of IDUs in this survey in Hanoi were recruited by 2 sampling approaches, referral from FSPs and referral from IDUs, while in Dien Bien and HCMC only couple samples of FSPs and their IDUs were recruited using sampling strategy with referral from IDUs only. The main purpose of applying the two sampling strategies is to maintain comparability with data obtained from the previous survey waves, particularly for Hanoi.

To recruit the first 200 FSPs in Hanoi, investigators at each survey site selected 3-4 FSPs from the list of FSPs of IDUs who were currently enrolled in community intervention programs. These first “seeds” completed the survey procedure, including the screening process to meet the study subject inclusion criteria, answering the questionnaire and willingly giving 3 ml of blood for HIV testing and 10 ml of urine for opiate testing. When acting as recruiters, they were given 3 invitation coupons to find and refer potential peers to the study who have similar status and characteristics. The same study procedure which was applied to the first seed recruiters is performed again with other referred FSPs and the recruitment chain continued until the sample size reached the desired quota of 200 FSPs (Table 1).

For sampling couples of FSPs and IDUs at all sites (IDUs and FSPs who are sexual partners of IDUs), the recruitment process was started with IDUs as the “seeds”. Three to 4 IDUs at each site were initially selected by peer educators of current prevention interventions. Those who met the selection criteria for IDUs had to complete the data collection process to become recruiters and then they were given 3 invitation coupons and asked to bring their regular sexual partners to the study site and to refer other IDUs to the study. Only those who were referred by an IDU recruiter and met the selection criteria for both FSPs and IDUs were selected to be the study subjects. The referral chain continued until the desired number of couples of IDUs and their FSPs at each survey site were reached (Table 2).

It was permissible that one IDU could refer both his legally married wife and his regular sex partner to the study. Neither female sex workers nor casual partners of IDUs were eligible for participation.

Data collection

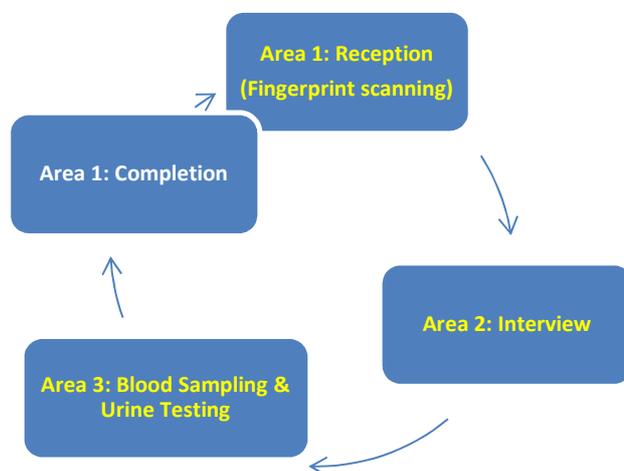


Figure 1: Data collection process at the study site

Data collection was conducted at healthcare facilities at the study site, either at the district healthcare center or the commune healthcare station, depending on their availability at the time the survey was conducted. In Hanoi, the data collection was conducted at the Community Outreach Office of Hai Ba Trung District, the Dong Da Healthcare Center in Dong Da District, the Long Bien Healthcare Center in Long Bien District, and at the Hoang Mai Healthcare Center in Hoang Mai District. For Dien Bien province, the survey sites were based at the Commune Healthcare Stations of Dien Bien Phu City, Dien Bien District and Tuan Giao District. In HCMC, the survey sites were established at Support Centers of Districts 4, 8, Binh Thanh and Thu Duc. At each survey site, the data collection process was carried out as illustrated in Figure 1. The study subjects had to visit 3 different areas; first, the reception area where the screening process and consent form signing was conducted; second, eligible subjects were interviewed by a trained interviewer; third, biological samples are taken from subjects who successfully completed the interview. After the testing, the subjects returned to the reception area to complete the administrative process.

All data collectors, including the interviewers, lab technician and study subject screeners, were trained by the study team prior to data collection. The training helped them to understand the purposes of the study as well as learn about their roles, specific tasks and responsibilities during the data collection process to ensure quality of obtained data and information from the study subjects.

All eligible FSPs had to go through face-to-face interviews with interviewers who used the structured questionnaire, and then gave a 3 ml blood sample for HIV testing and 10 ml of urine for opiate testing (in a subset of the surveys only). IDUs were interviewed using the structured questionnaire and they gave 3 ml of blood for HIV testing only.

No identification information of the study subjects, such as name, gender, age or specific address was collected. However, each participant was given an identification code consisting of 10 characteristics that represented gender, her/his father last name, her/his mother first name, and date of birth. For those who did not remember their date of birth, the default date of June 15th was used.

It is important to note that a fingerprint scan was administered in follow-up surveys to avoid repeated participation of study subjects in the same survey either in the same district or in a different district. A fingerprint scanner was used during enrollment at each survey site. This technique was applied in other studies including the evaluation of impacts of PEPFAR HIV prevention programs among IDUs in the Northwest region of Vietnam, and the feasibility of using pharmacies to provide services for IDUs in Ha Giang. In Hanoi, the fingerprint scan revealed that less than 5% of participating IDUs and FSPs tried to reparticipate in the same survey. Those who were found to be attempting reparticipation were excluded from the survey.

HIV and Opiate Testing

Along with informed consent, blood samples were collected from all participating FSPs of IDUs and IDUs who completed the interviews in Hanoi, Dien Bien and HCMC. At each survey site, a laboratory technician was in charge of blood and urine collection, and urine testing for opiates. One 3.0 ml tube of blood was collected from each participant. All blood specimens were stored in the testing room and then transported to a PAC lab at the end of each day where they were stored for later analysis.

The HIV testing procedure was conducted following the national guidelines. All blood samples were tested immediately at the survey sites using the rapid test kit (Determine – Abbott, Japan) to detect HIV infection, and then transported to the Hanoi PAC laboratory to undergo two EIA tests – Genscreen HIV ½ (Biorad, US) and Murex HIV ½ (Murex Biotech, UK) for confirmation. The laboratory at the PAC verified the HIV rapid test results performed earlier for the purpose of determining primary outcome ascertainment. The PAC laboratory tested 5% of the HIV negative samples and 10% of the HIV positive samples using testing protocol approved by the Vietnam Ministry of Health (MOH). The confirmatory test results were the final HIV test results used in the study.

For FSPs of IDUs, urine testing was conducted at the survey site. Ten ml urine samples were collected to do a rapid test which screens for traces of opiate (One step, ACON).

Data analysis

Data was computerized using Epi-data 2000 and analyzed using STATA version 10.0. Descriptive analysis employed frequencies and proportions with the tabulations of interest variables including demographics, risky behaviors, HIV prevalence and exposures to intervention services. Also, comparisons between data obtained from two sampling strategies were performed to assess differences between these approaches.

Trend analysis was performed and tested using Chi-square tests estimated from logistic regressions. In the regression, interest variables defined as dependent variables and survey waves (time) serving as independent variables were fit into models.

Logistic regressions were also applied to evaluate potential associations between condom use at last sex, consistent condom use in the 6 months prior to the survey, and participation in the HIV prevention project for FSPs of male IDUs. Odd ratios were reported after adjusting for other demographic and behavioral variables such as age, education and sexual risky behaviors.

Informed consent and ethical review

The study protocol was reviewed and approved by two IRBs, including the Ethical Committee of the Hanoi School of Public Health in Vietnam and Abt Associates' IRB.

Oral informed consent was obtained from all participants at the time of enrollment. Trained project staff explained the study purposes and procedures to the participants. They discussed the advantages and disadvantages of participating in this study. Staff members also explained the voluntary nature of the study, potential risks and benefits, alternatives to participation, confidentiality, questionnaire administration, method of laboratory test result delivery and the participants' right to refuse or withdrawal from the study at any time.

Limitations

The survey has some limitations:

- Despite the fact that two strategies were designed in an effort to obtain representative samples of the FSP population, a sampling bias still exists. Indeed, the FSP-initiated recruitment process reached only those FSPs who had participated in HIV prevention interventions, and not FSPs who had not participated in interventions. The IDU-initiated process reached FSPs of IDUs

who were current clients of OPCs and/or VCTs. Consequently, their referred FSPs were likely to have been exposed to some level of interventions. Previous follow-up surveys showed that it is difficult to reach the FSPs of community-based IDUs (*IDUs who are currently not receiving any HIV services locally OR receiving HIV services at some other location distant from their residence*) whose status as partner of an IDU OR whose personal identification has not been disclosed for the reason that they are not clients at an HIV/AIDS facility and they have not been exposed to HIV interventions.

- Overestimates of risk reduction behaviors might occur because the survey relies on self-reported information from the participants which may be subject to a social desirability bias.
- Further longitudinal analysis on individual-level changes in condom use and HIV status among FSPs in HCMC or Dien Bien could not be performed because we did not have ID numbers for baselines that used to match people across survey waves. For Hanoi, the sample sizes of matched ID numbers for a baseline and one follow-up survey were too small to do a systematic longitudinal analysis: only 68 participated in at least 2 survey waves, a baseline (24 participants) or a follow-up.

VIII. Results

1. Sociodemographic characteristics of participants

Table 3: Demographic characteristics of FSPs of IDUs in Hanoi

Characteristics	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
Age					
18-30	45.3	43.6	40.3	33.2	28.0
31-40	27.2	43.0	42.8	47.2	55.0
>40	28.6	13.4	16.9	19.6	17.0
Highest education level					
Primary school/illiterate	12.5	7.9	5.0	19.5	6.5
Secondary school	49.1	51.7	53.2	37.5	47.0
High school	36.2	37.6	37.4	34.5	41.5
College/university	2.2	2.8	4.3	8.5	5.0
Marital/living status					
Married/Cohabiting	97.4	96.2	98.2	95.0	94.5
Single	0.0	0.0	0.0	3.0	3.0
Separated/divorced/Widow	2.6	3.8	21.8	2.0	2.5
Employment status					
Unemployed	15.5	23.4	18.0	7.5	15.5
Employed/unstable job	43.1	22.7	34.2	32.5	47.5
Employed/stable job	41.4	54.0	47.8	60.0	37.0
Have children with current partner	82.3	88.0	84.9	83.0	80.5

Demographic characteristics of FSPs of male IDUs for Hanoi are presented in Table 3. No significantly major differences across survey rounds were found. Most FSPs were 18-40 years old with about 1/3 being 18 to 30 years old. Data from the 48-month survey showed that participating FSPs were older than the FSPs who participated in previous waves. The highest education attainment of most participants was either secondary school (47%) or high school (41%), and only 5% completed college/university. Regarding marital status, 95% of FSPs were currently married to or cohabiting with their primary sex partner. About 80% of FSPs have had children with their primary male sex partner. Data suggest that FSPs' living conditions remain challenging because more than a half the FSPs are either unemployed or unstably employed.

Table 4: Demographic characteristics of FSPs of IDUs in Dien Bien and HCMC

Characteristics	Dien Bien		HCMC	
	Baseline (%)	12 months (%)	Baseline (%)	12 months (%)
Age				
18-30	47.5	46.0	68.1	63.0
31-40	35.5	34.7	25.5	27.6
>40	17.1	19.3	6.4	9.5
Highest education level				
Illiterate	37.1	31.0	6.9	12.1
Primary school	28.4	30.3	34.9	29.7
Secondary school	22.7	24.7	37.0	37.8
High school	9.7	9.0	18.0	18.9
College/university	2.1	5.0	3.2	1.6
Marital/living status				
Married/Cohabiting	92.3	97.0	83.1	97.6
Single	4.4	2.7	15.9	1.6
Separated/divorced/widowed	3.3	0.3	1.1	0.8
Employment status				
Unemployed	2.7	4.7	36.0	35.7
Employed/unstable job	81.8	83.7	33.9	34.9
Employed/stable job	15.5	11.7	30.2	29.3
Have children with current partner	85.3	86.3	38.6	25.7

Table 4 presents demographic characteristics of FSPs of IDUs in Dien Bien and HCMC. There are no major differences in distribution between the baseline and 12-month follow-up survey in Dien Bien or HCMC. However, many participants (more than 60%) in HCMC were 18-30 years old while in Dien Bien less than 50% were in this age group. Less than half of the FSPs in HCMC reported that they had children with their IDU partner while the number in Dien Bien was more than 85%.

2. Sexual relationships with male IDUs and related behaviors

Findings from previous survey rounds in Hanoi found some associations between sexual relationship and HIV concordance status. There were improvements over time in some of the most dangerous relationship characteristics (anger and violence if woman requested condom use), but half of the FSPs still felt that their male IDU partner controlled their relationship and they felt trapped in their relationship; 22% of them thought that the male IDU would get angry if they asked for condom use (Table 5).

Table 5: Sexual relationship characteristics between FSPs and male IDUs in Hanoi

Characteristics (Agree/Strongly agree)	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
MFSP would get violent if I asked for condom use	19.4	18.6	6.5	3.0	4.5
MFSP would get angry if I asked for condom use	45.3	46.1	29.5	19.5	22.0
MFSP does what he wants, even I don't want him to	54.7	67.7	57.1	39.0	51.0
I feel trapped or stuck in our relationship	74.9	60.1	64.2	52.0	50.5

The sexual relationship characteristics between FSPs and male IDUs in Dien Bien and HCMC are presented in Table 6. Male IDU partners of FSPs in Dien Bien seemed to be less controlling in their relationship compared to their peers in HCMC. There were no improvements over time in the condom use issue between couples in Dien Bien and HCMC; higher rates of FSPs reported in the follow-up surveys that their male IDUs would get violent or angry when asked for condom use when having sex.

Table 6: Sexual relationship characteristics between FSPs and male IDUs in Dien Bien and HCMC

Characteristics (Agree/Strongly agree)	Dien Bien		HCMC	
	Baseline (%)	12 months (%)	Baseline (%)	12 months (%)
MFSP would get violent if I asked for condom use	3.0	9.3	1.6	5.2
MFSP would get angry if I asked for condom use	8.0	13.7	9.5	12.9
MFSP does what he wants, even I don't want him to	52.5	24.2	25.4	48.2
I feel trapped or stuck in our relationship	67.6	35.0	28.0	40.6

Table 7 presents the sexual behavior among FSPs in Hanoi, showing that most FSPs in Hanoi are sexually active with their IDU partners. About 97% of FSPs in the 48-month survey reported that they last had sex with their male IDU sex partner less than one month prior to the survey. Only 2% of respondents last had sex with their male IDU partners more than 6 months prior to the survey, far less than in the previous survey waves, particularly the baseline, in which it was about 46% (partly due to different inclusion criteria). The proportion of FSPs in Hanoi who had sex with one or more sex partners other than their IDU primary male partner in the 48-month survey was 7.5%. Very few FSPs in Hanoi, only 1.5%, reported engaging in commercial sex with male clients. It is noticeable that FSPs of IDUs in Hanoi are at risk of HIV infection primarily through their sexual relationship with their regular IDU partner.

Table 7: FSPs' Sexual behavior in Hanoi

	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
Last sex with IDU partner					
• With thin the last	25.2	51.7	73.7	56.5	97.0

month (30 days)					
• 2-6 months ago	29.1	43.5	20.9	31.0	1.0
• >= >6 months ago	45.7	4.8	5.4	12.5	2.0
Have other sex partners	8.2	11.3	9.7	9.5	7.5
Current SW	4.3	3.1	3.3	2.0	1.5

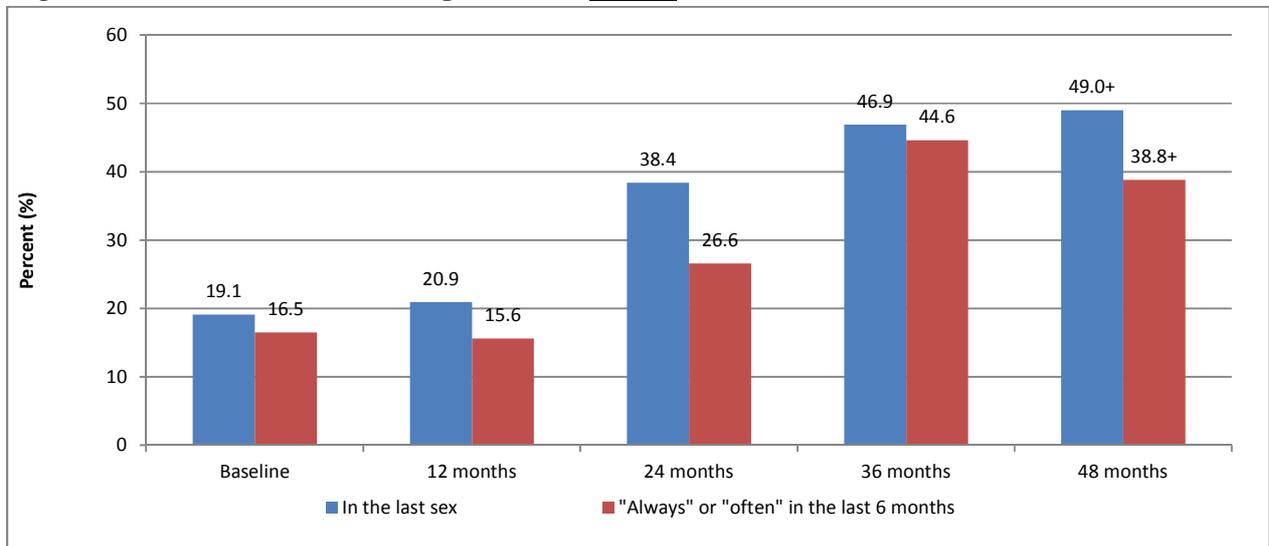
Presenting sexual behavior of FSPs in Dien Bien and HCMC, Table 8 shows that most FSPs were sexually active. More than 90% of FSPs in Dien Bien and about 97% in HCMC had sex with their male IDU partner during the month prior to the survey. Compared to FSPs in Dien Bien and Hanoi, a higher percent of FSPs in HCMC engage in sex with someone besides their primary male IDU partner, and more engage in sex work. Indeed, more than 11% of FSPs in HCMC reported that they had at least one other sex partner, and more than 10% reported involvement in commercial sex. Consequently, HCMC FSPs as a group have substantial HIV risk factors in addition to their sexual relationship with their primary IDU partner.

Table 8: FSPs' Sexual behaviors in Dien Bien and HCMC

	Dien Bien		HCMC	
	Baseline (%)	12 months (%)	Baseline (%)	12 months (%)
Last sex with IDU partner				
• In the last month	85.3	90.3	75.1	96.8
• In the last 2-6 months	9.0	8.7	18.0	3.2
• In the last 6 months or more	5.7	1.0	6.9	0.0
Have other sex partners	1.3	0.0	2.7	11.2
Current SW	0.3	0.0	2.1	10.4

FSPs' consistent condom use at last sex and in the last 6 months increased serially from the time of the baseline questionnaire to the survey presented 48-month later in Hanoi, indicating that more respondents are making use of condoms. Consistent condom use is defined as "always" or "often" using a condom when having sex. Figure 2 shows a trend of increasing FSP-IUD partner condom use in Hanoi. The chi-square test for trend showed a statistically significant difference. Indeed, at the time of the baseline questionnaire, about 19% of FSPs reported that they used a condom the last time they had sex and 16% reported that they were at least oftentimes using a condom with their IDU partner during the prior 6 months; these numbers were statistically significantly higher in the 48-month survey: 49% and 39%, respectively ($p < 0.001$).

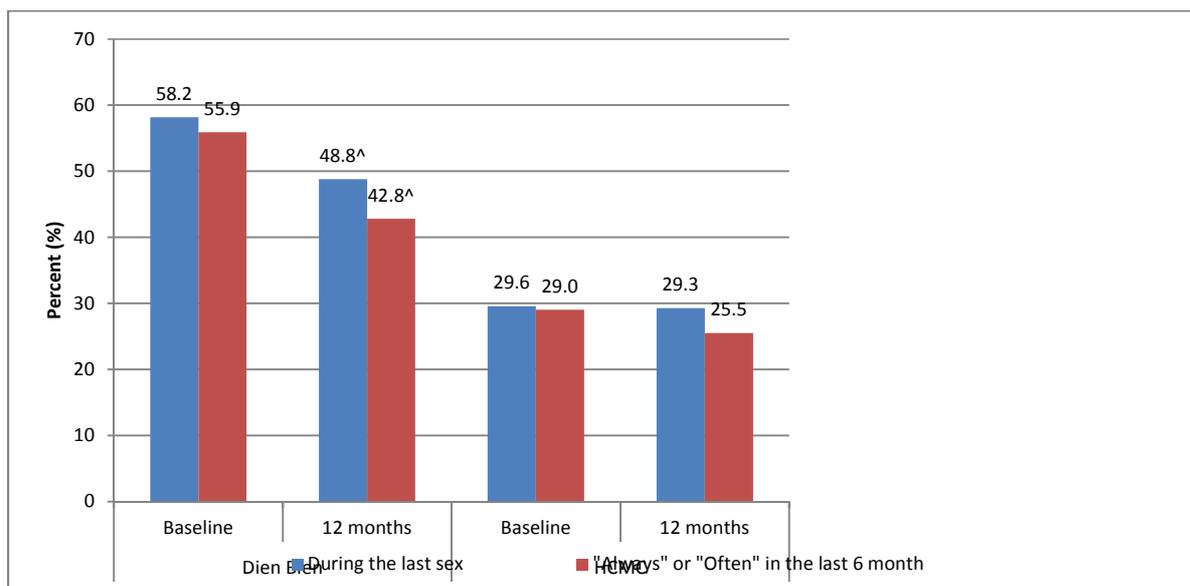
Figure 2: Condom use among FSPs in Hanoi



+ $p \leq 0.001$; $0.001 < p \leq 0.05$

Regarding condom use in Dien Bien and HCMC, Figure 3 shows the trend. There was a significant decrease over time of condom use in the last sexual encounter as well as a decrease of consistent condom use in last 6 months according to FSPs' responses in Dien Bien. Over this same period of time condom use in HCMC stayed about the same. The differences in rate of condom use by FSPs with their male IDU partners in Dien Bien when comparing the baseline and 12-month-follow-up survey were statistically significant ($p < 0.05$). No significant change in condom use was reported among FSPs in HCMC.

Figure 3: Condom use among FSPs in Dien Bien and HCMC



+ $p \leq 0.001$; $0.001 < p \leq 0.05$

Table 9: FSPs' consistent condom use* with IDUs by HIV concordance and HIV discordance in Hanoi

	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
HIV concordant					
Both (+)	13.3 (n=15)	7.7 (n=13)	25.0 (n=8)	0.0 (n=1)	41.7 (n=24)
Both (-)	15.8 (n=57)	12.9 (n=93)	30.9 (n=97)	31.8 (n=85)	30.0 (n=60)
HIV discordant					
IDU (+), FSP (-)	17.3 (n=98)	23.8 (n=84)	31.9 (n=69)	72.1 (n=43)	62.9 (n=35)
IDU (-), FSP (+)	12.5 (n=8)	0.0 (n=1)	20.0 (n=5)	0.0 (n=5)	25.0 (n=4)
Male unknown status					
FSP (-)	15.9 (n=44)	12.3 (n=73)	17.7 (n=79)	48.8 (n=41)	33.3 (n=48)
FSP (+)	22.2 (n=9)	8.3 (n=12)	20.0 (n=5)	n/a (n=0)	36.0 (n=25)

* "Always" or "often"

Table 9 presents the data on consistent condom use with IDU partners among FSPs in Hanoi by HIV status of couples, that status having been confirmed by HIV testing. At the time of the 48-month survey, a significantly larger percentage of women in an unknown status partnership (woman HIV-, man unknown) (33%) and a serodiscordant partnership (woman -, man +)(63%) reported always/often using a condom when having sex, compared to 3 out of 4 of the previous survey rounds. Despite encouraging improvement, the rate of consistent condom use is still fairly low in most of these groups.

Table 10: FSPs' consistent condom use* with IDUs by HIV concordance and HIV discordance in Dien Bien and HCMC

<i>In the last 6 months</i>	<i>Dien Bien</i>		<i>HCMC</i>	
	<i>Baseline (%)</i>	<i>12 months (%)</i>	<i>Baseline (%)</i>	<i>12 months (%)</i>
<i>HIV concordant</i>				
<i>Both (+)</i>	<i>65.0 (n=20)</i>	<i>50.0 (n=24)</i>	<i>34.8 (n=23)</i>	<i>33.3 (n=45)</i>
<i>Both (-)</i>	<i>43.8 (n=73)</i>	<i>39.4 (n=94)</i>	<i>24.4 (n=45)</i>	<i>16.9 (n=59)</i>
<i>HIV discordant</i>				
<i>IDU (+), FSP (-)</i>	<i>74.4 (n=90)</i>	<i>46.9 (n=128)</i>	<i>63.6 (n=11)</i>	<i>27.3 (n=55)</i>
<i>IDU (-), FSP (+)</i>	<i>50.0 (n=4)</i>	<i>33.3 (n=3)</i>	<i>42.1 (n=19)</i>	<i>17.6 (n=17)</i>
<i>Male, unknown status</i>				
<i>FSP (-)</i>	<i>43.2 (n=95)</i>	<i>35.6 (n=45)</i>	<i>22.0 (n=41)</i>	<i>21.4 (n=42)</i>
<i>FSP (+)</i>	<i>70.6 (n=17)</i>	<i>33.3 (n=3)</i>	<i>21.4 (n=14)</i>	<i>39.3 (n=28)</i>

Unlike the trend in Hanoi, the 12-month follow-up survey in Dien Bien revealed that at 50%, fewer FSP– with IDU(+) partners reported consistent condom use compared to the 65% of the baseline. For FSP in HCMC, the numbers in the baseline and follow-up survey, 33.3% and 34.8%, respectively, revealed little change.

The serodiscordant rates for both IDU(+) FSP(-) and IDU(-) FSP(+) couples decreased significantly between the two survey waves in Dien Bien (50% vs. 74%) and even more so in HCMC (27% vs. 64%). About 69% of FSPs in Dien Bien and about 67% of FSPs in HCMC reported that they consistently used a condom when having sex with their IDU partner whose HIV status was unknown. These numbers in Dien Bien and HCMC are similar to the number in Hanoi presented in Table 9.

3. Drug use characteristics

Table 11: Drug use and drug injection among FSPs of male IDUs in Hanoi

	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
Ever used drugs (self-reported)	16.4	9.3	12.6	10.5	10.5
Currently using drugs (confirmed by opiate test)	n/a	n/a	n/a	n/a	4.5
Currently injecting Drugs (self-reported)	6.0	3.4	1.8	0.5	2.5
Sharing needles in the last six months (self-reported)	28.57 (n=14)	20.0 (n=10)	60.0 (n=5)	0.0 (n=1)	20.0 (n=5)

Characteristics of drug use and drug injection among FSPs of IDUs in Hanoi are presented in Table 11. About 10% of the FSP participants at the time of the 48-month survey reported that they had ever used drugs, which is no change from the 36-month survey. However, only 4.5% of FSPs reported that they currently using opiates, with this being confirmed by an opiate test. About half of the opiate-using FSPs (2.5%) reported that they were IDUs. Of these FSPs, 20% reported that they shared needles/syringes with other IDUs. Needle/syringe sharing is an additional risk factor for HIV transmission.

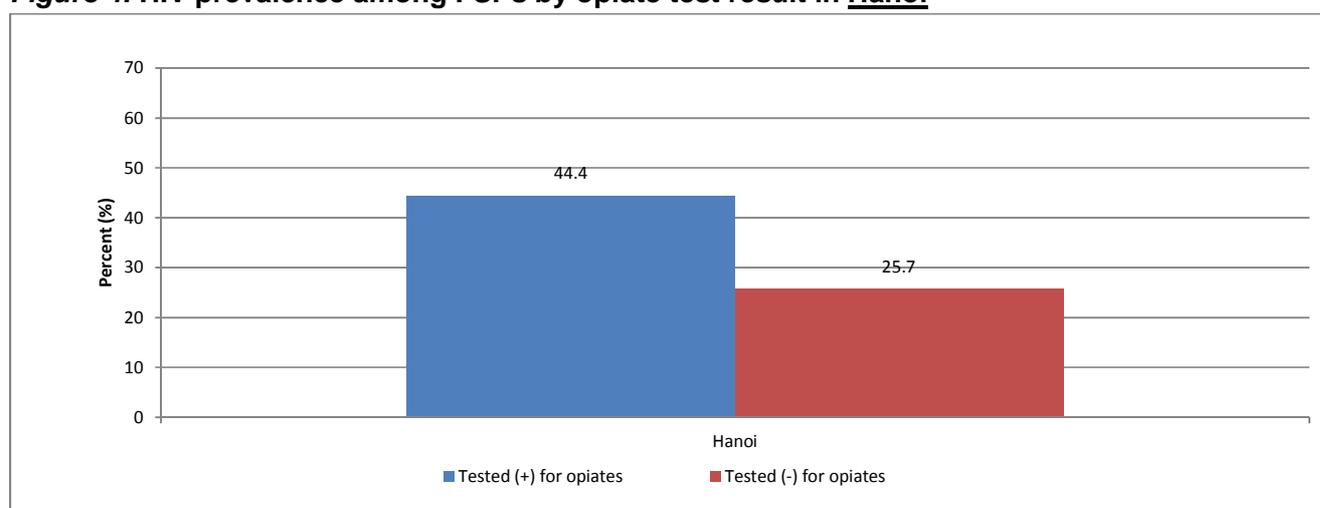
Table 12: Drug use and drug injection among FSPs of male IDUs in Dien Bien and HCMC

Dien Bien		HCMC	
Baseline (%)	12 months (%)	Baseline (%)	12 months (%)

Ever used drugs (self-reported)	3.0	4.0	57.5	62.7
Currently using drugs (confirmed by opiate test)	6.4	4.7	43.5	48.0
Currently injecting Drugs (self-reported)	1.7	2.7	33.5	36.1
Sharing needles in the last 6 months (self-reported)	40.0 (n=5)	25.0 (n=8)	50.8 (n=63)	61.1 (n=90)

Table 12 shows drug use characteristics of FSPs in Dien Bien and HCMC. Very few FSPs in Dien Bien reported that they had ever used drugs and more were confirmed as current drug users in both survey waves. Also in Dien Bien, few FSPs reported that they were currently injecting drugs at the time of either survey wave. In contrast, more than half of the FSPs in HCMC reported that they have used drugs and about 20% fewer said that they were currently using drugs, with this being confirmed by opiate testing. These rates were particularly high in 12-month follow-up survey. Also in HCMC, a very high rate of FSPs reported themselves as being IDUs in both surveys. Furthermore, more than 60% of FSPs who were IDUs shared needles/syringes with others. FSPs who are also IDUs increase their risk of HIV infection, compounding the risk incurred when having sexual relationship with a male IDU who is either HIV+ or of unknown HIV status. This might explain why HIV infection among FSPs in HCMC was higher than it was among FSPs in Dien Bien and Hanoi, as is presented later in this report.

Figure 4: HIV prevalence among FSPs by opiate test result in Hanoi



HIV prevalence was substantially higher among Hanoi FSPs who tested positive for opiates (using a urine test) than for those who tested negative. Even though the number of Hanoi FSPs who were current IDUs was very small, those who were IDUs were more likely to be HIV-positive (Figure 4). Unfortunately, it was possible for Hanoi FSPs to be tested for opiates only in the 48-month follow-up survey, not in previous survey waves.

Figure 5: HIV prevalence among FSPs by opiate test result in Dien Bien and HCMC

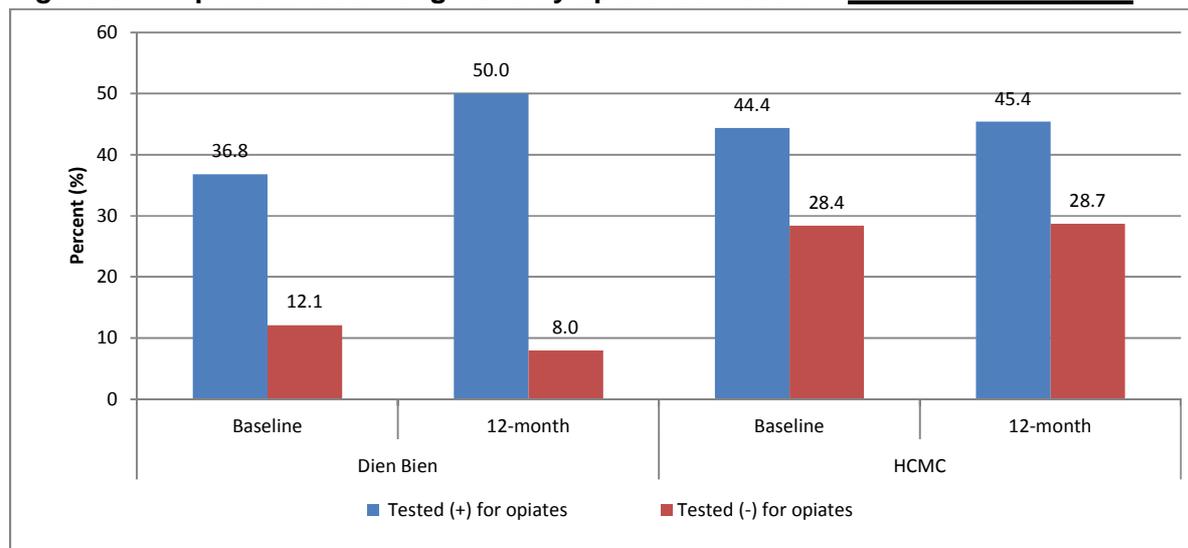


Figure 5 shows the correlation between HIV prevalence and the use of opiates (as determined by an opiate test) for FSPs in Dien Bien and HCMC. Unlike in Hanoi, FSPs in Dien Bien and HCMC were tested for opiates in both the baseline and the 12-month follow-up survey. At the time of the follow-up survey in Dien Bien, the rate of FSPs who tested positive for opiates and were HIV(+) increased compared to the baseline survey. That same 12-month survey showed that the rate of FSPs who tested negative for opiates and were HIV(-) decreased compared to the baseline survey. For HCMC, the incidence of HIV infection among FSPs who tested both positive and negative remained the same in both surveys.

4. HIV prevalence and seroconcordant status

In Hanoi, HIV prevalence among FSPs of male IDUs declined in each of the first three survey waves but then increased sharply to 27% in the 48-month survey (Table 13). We explored a variety of potential predictors including risk behaviors and contact with interventions but none of these revealed any significant association. It seems likely that the different sampling and recruiting methods applied to this follow-up survey is what accounts for this difference. In the 36-month survey, recruiters sought those who had

previously been involved with the FSP intervention which focused on HIV(-) FSPs in order to help them avoid being infected with HIV. At the time of the 48-months survey, some recruiting took place at healthcare facilities connected with OPCs which are, of course, frequented by HIV(+) people who are registered to receive their ARV treatment at the OPC. It is worth suggesting, however, that the FSPs recruited for the 48-month survey may be more representative of all FSPs than those FSPs who took part in three previous post-baseline survey waves. With this consideration, it may be that the actual HIV prevalence among FSPs in Hanoi is somewhere between the baseline 15% and the 48-month 27%.

Substantial percentages of couples are serodiscordant (woman HIV-, man HIV+) or unknown by FSP self-report although that proportion fell serially from 61% at the baseline to 43% at 48 months.

Table 13: HIV concordant and discordant status among FSPs and their partners in Hanoi*

	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
HIV prevalence	14.7	9.3	6.5	4.0	26.5
HIV concordance among FSPs who knew their partner's status					
(+) concordance	5.8	4.5	2.9	0.5	12.0
(-) concordance	26.3	32.3	36.3	49.5	30.5
HIV discordance among FSPs who knew their partner's status					
IDU(+); FSP(-)	40.7	31.3	27.0	23.0	18.0
IDU(-); FSP(+)	3.9	0.3	1.8	3.0	2.0
Male partner's HIV status unknown					
FSP (+)	3.9	4.5	1.8	0.5	12.5
FSP (-)	19.6	27.2	30.2	23.5	25.0

* : HIV status of FSP was confirmed by HIV test and HIV status of the male IDU partners was reported by their FSP

Table 14 presents the trend in HIV prevalence and HIV concordant and discordant status of FSPs and their male IDU partners in Dien Bien and HCMC. HIV prevalence among FSPs in Dien Bien seemed to be decreasing in the follow-up surveys compared to the baseline (10% vs. 14.5%), while HIV prevalence in HCMC was stable (36.7% in follow-up surveys vs. 35.3% in the baseline).

As previously noted, we were unable to do a systematic longitudinal analysis of participants who appeared in more than one survey due to missing ID numbers for baselines in HCMC and Dien Bien and resultant small cell sizes. However, it is worth reporting that in Hanoi there were no HIV seroconversions among 68 FSPs associated with at least 2 survey observations.

HIV concordance was defined as the HIV status of couples where the FSPs' HIV status was laboratory confirmed while their male partners' HIV status was self-reported by the FSPs. In Dien Bien, the HIV(+) concordant rate was rather low while this rate in HCMC was much higher. For HIV discordance, the rate for FSP(-) - IDU(+) couples was higher both in Dien Bien and HCMC in the follow-up survey than in the baseline. More than 10% of HCMC FSPs who were HIV(+) did not know their IDU partners' HIV status. This number in Dien Bien was very small.

Table 14: HIV concordant and discordant status in Dien Bien and HCMC*

	Dien Bien		HCMC	
	Baseline (%)	12 months (%)	Baseline (%)	12 months (%)
HIV prevalence	13.7	10.0	35.3	36.7
HIV concordance among FSPs who knew their partner's status				
(+) concordance	6.7	8.0	13.8	18.6
(-) concordance	24.4	32.0	28.7	23.8
HIV discordance among FSPs who knew their partner's status				

IDU (+); FSP (-)	30.1	42.7	8.4	22.2
IDU (-); FSP (+)	1.3	1.0	11.4	6.9
Male partner's HIV status unknown				
FSP (+)	5.7	1.0	10.2	11.3
FSP (-)	31.8	15.3	27.5	17.3

*: HIV status of FSP was confirmed by HIV test and HIV status of the male IDU partners was reported by their FSP

Table 15 displays HIV test results for couples in Hanoi for the 48-month follow-up survey (the HIV status of the couples was confirmed by HIV testing, not self-report). HIV discordance was much lower in couples tested at 48 month (32% based on HIV test results; 21% FSP (-) and male IDU partner (+)) than in comparable samples in all waves (based on FSPs' self-report regarding male IDU partners' HIV status), 43% discordant/unknown status at 48 months.

Table 15: HIV test result status among couples (IDUs and FSP) – Hanoi 48-month survey

<i>HIV status</i>		<i>Sex Partners</i>	
		(+)	(-)
<i>IDUs</i>	(+)	32.0%	21.0%
	(-)	11.5%	35.5%

Tables 16 and 17 present the HIV test results for couples in Dien Bien and HCMC in the 12-month follow-up survey. For Dien Bien, the HIV discordant rate among couples in the 12-month follow-up survey is much lower (25% FSP(-) and IDU(+)) than the discordant rate given by self-report of FSPs regarding their male IDU sex partner's HIV status, about 58% discordant/unknown status at 12 months.

For HCMC couples presented in Table 17, the HIV discordant rates is 39% as per the HIV test results, and about 25% FSP(-) & male IDU partner(+). It is interesting to report

that the HIV discordant rate based on the HIV test results is similar to the discordant rate given by HCMC FSP's self-report of their male IDU partner's HIV status (39.5%).

Table 16: HIV test result status among couples (IDUs and FSP) – Dien Bien, 12-month survey

HIV status		Sex Partners	
		(+)	(-)
IDUs	(+)	5.7%	24.8%
	(-)	4.4%	65.2%

Table 17: HIV test result status among couples (IDUs and FSP) – HCMC, 12-month survey

HIV status		Sex Partners	
		(+)	(-)
IDUs	(+)	22.3%	24.8%
	(-)	14.2%	38.6%

Table 18, 19 and 20 below compare FSPs' belief about their IDU partners' HIV status and the actual test results of those IDU partners. Many FSPs in all sites were misinformed or uninformed about their male partners' HIV status. This might be due to a lack of communication or poor communication between them, or misinformation given by the male IDU partners about their HIV status. Almost one-third (33%) of FSPs with HIV+ male partners in Dien Bien and 44% in Hanoi and HCMC incorrectly identified their male partners' HIV+ status.

Table 18: FSPs' belief about IDU partner's HIV status vs. actual test results: Hanoi, 48-month survey

Hanoi, 48-month survey	IDU's HIV test results

		(+)	(-)
FSP's belief re IDU HIV status	(+)	55.7%	18.1%
	(-)	17.9%	53.2%
	Don't know	26.4%	28.7%
		100%	100%

Table 19: FSPs' belief about IDU partner's HIV status vs. actual test results: Dien Bien, 12-month survey

Dien Bien, 12-month survey		IDU's HIV test results	
		(+)	(-)
FSP's belief re IDU HIV status	(+)	68.1%	43.3%
	(-)	17.6%	39.4%
	Don't know	14.3%	17.3%
		100%	100%

Table 20: FSPs' belief about IDU partners' HIV status vs. actual test results: HCMC, 12-month survey

HCMC, 12-month survey		IDU's HIV test results	
		(+)	(-)

FSP's belief re IDU HIV status	(+)	56.0%	27.5%
	(-)	25.0%	35.9%
	Don't know	19.0%	36.6%
		100%	100%

Table 21 presents FSPs' disclosure of test results by HIV status in 3 study sites. There is not much variation between survey waves within each site. However, the disclosure rate is higher among FSPs who are HIV+ than those who are HIV-.

Table 21: FSPs' disclosure of test results by HIV status

Site	Wave	Disclose Status	
		HIV (-)	HIV (+)
Dien Bien	Baseline	95.5%	93.8%
	12-month	97.4%	100.0%
HCMC	Baseline	91.5%	92.6%
	12-month	88.1%	100.0%
Hanoi	Baseline	83.3%	85.7%
	12-month	90.7%	85.7%
	24-month	84.3%	82.4%
	36-month	79.8%	100.0%
	48-month	75.6%	90.5%

Table 22 displays the HIV test results of FSPs in Hanoi. Rates of previous HIV testing done by Hanoi FSPs remained stable at 60% to about 75% across survey waves. Despite strenuous efforts, interventions were apparently unsuccessful in convincing FSPs to be tested. However, those who were tested tended to get their results and disclose them to their male partners. As indicated, disclosure of HIV+ status by male IDUs to their FSPs was much less common.

Table 22: FSPs' HIV test results in Hanoi

	Baseline (%)	12 months (%)	24 months (%)	36 months (%)	48 months (%)
Previously HIV tested	62.8	61.9	65.3	67.7	59.5
Received test result (of those tested)	82.6	91.9	95.5	90.3	96.5
Disclose HIV test result to IDU partner (of those who received result)	84.5	90.4	84.1	80.7	78.4

Table 23 presents the HIV test results of FSPs in Dien Bien and HCMC. The HIV rate at the time of the 12-month survey in Dien Bien declined compared to that in the baseline (45% vs. 64.2%). However, the rate in HCMC was 48% in both the baseline and the 12-month survey. As in Hanoi, FSP interventions in Dien Bien and HCMC seemed not to have a positive impacts in that more FSPs were not choosing to be tested for HIV. At the time of the 12-months survey in Dien Bien, fewer FSPs were tested for HIV compared to the baseline (81% vs. 96%). This number in HCMC remained unchanged, about 92% in the baseline and at 12 months. However, most FSPs who were tested tended to get their results and disclose them to their male IDU partners.

Table 23: FSPs' test result in Dien Bien and HCMC

	Dien Bien		HCMC	
	Baseline (%)	12 months (%)	Baseline (%)	12months (%)
Previously HIV tested	64.2	45.0	48.2	48.4
Received test result (of those tested)	96.3	81.2	92.9	92.2
Disclosed HIV test result to IDU partner (of those who received result)	95.2	97.8	92.4	91.5

5. Exposure to HIV prevention interventions

As previously noted, FSP interventions targeted HIV negative women and included individual and group outreach activities, individual counseling, small and large group communication, pamphlet distribution, condom distribution and HIV service referral. The most common outreach method targeting FSPs of IDUs was through IDUs themselves and particularly HIV-positive IDUs.

For this analysis, we created the variable “ever received HIV/advice/support”, defined as responding “yes” to any of the following questions on the survey: “Have you ever received any of the following HIV prevention supports?": received advice from peer educators, received advice from health workers, or participated in a club. It is important to note that we had to define this variable more broadly because a more specific question about exposure to FSP interventions was not included in the surveys used in HCMC and Dien Bien and we wanted a variable that we could employ consistently across all sites and survey waves.

Figures 8 and 9 below display exposure to interventions among FSPs of male IDUs at 3 survey sites. The exposure rates increased in Hanoi and Dien Bien to 75%-80% but remained the same at 50% in HCMC.

Figure 8: FSPs’ exposure to interventions (ever received HIV advice/support) - Hanoi

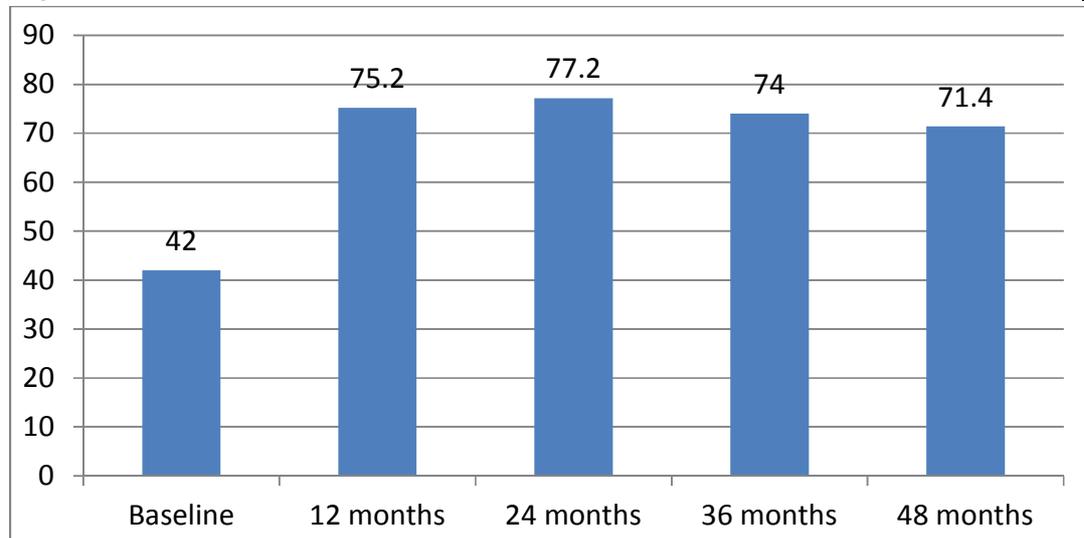


Figure 9: FSPs' exposure to interventions (ever received HIV advice/support) – Dien Bien and HCMC

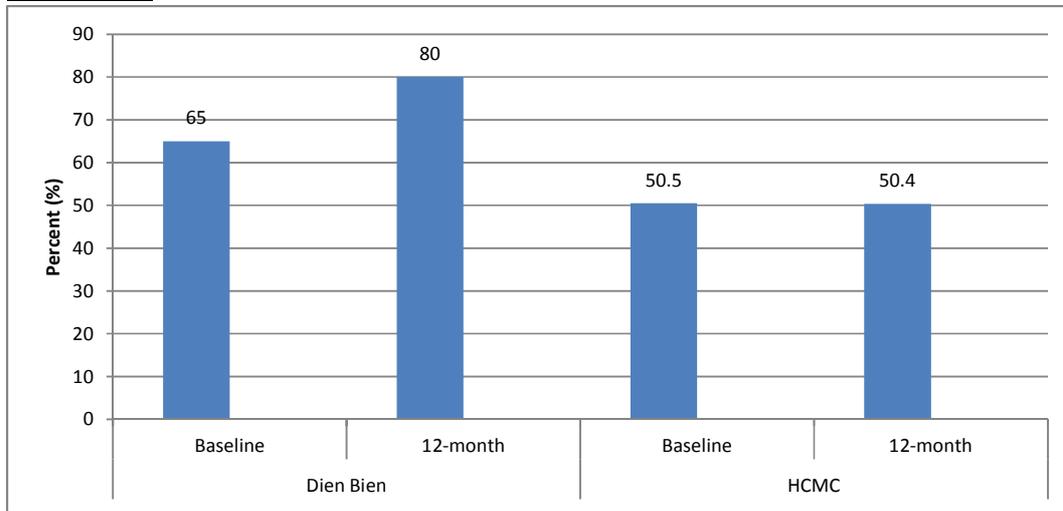
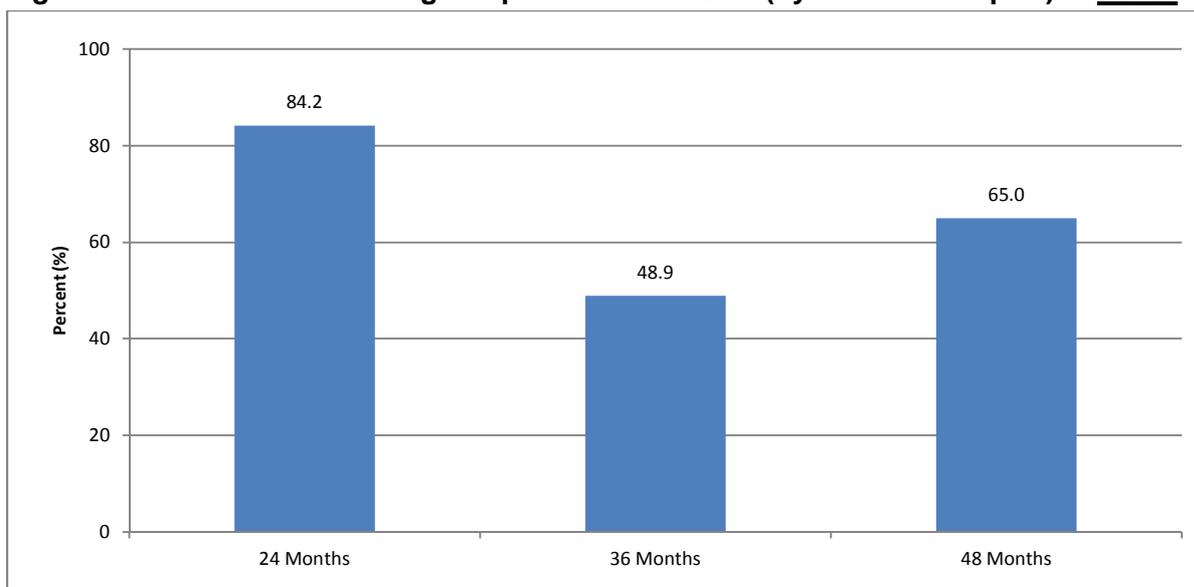


Figure 6: ARV treatment among HIV positive male IDUs (by FSPs' self-report) in Hanoi



Note: Question not asked in baseline or 12-month survey, because these were prior to implementation of ARV program in Hanoi.

Figures 6 and 7 show ARV treatment among male IDU partners of FSP (by FSP self-report). In Hanoi and HCMC, the percentage went down over time. By contrast, in Dien Bien, a larger share of HIV(+) IDUs were on treatment at the time of the 12-month survey than at the time of the baseline survey (98% vs. 73%). These results may raise questions about the effectiveness of interventions among IDUs and FSPs in terms of HIV testing and referral to treatment.

Figure 7: ARV treatment among HIV positive male IDUs (by FSPs' self-report) in Dien Bien and HCMC

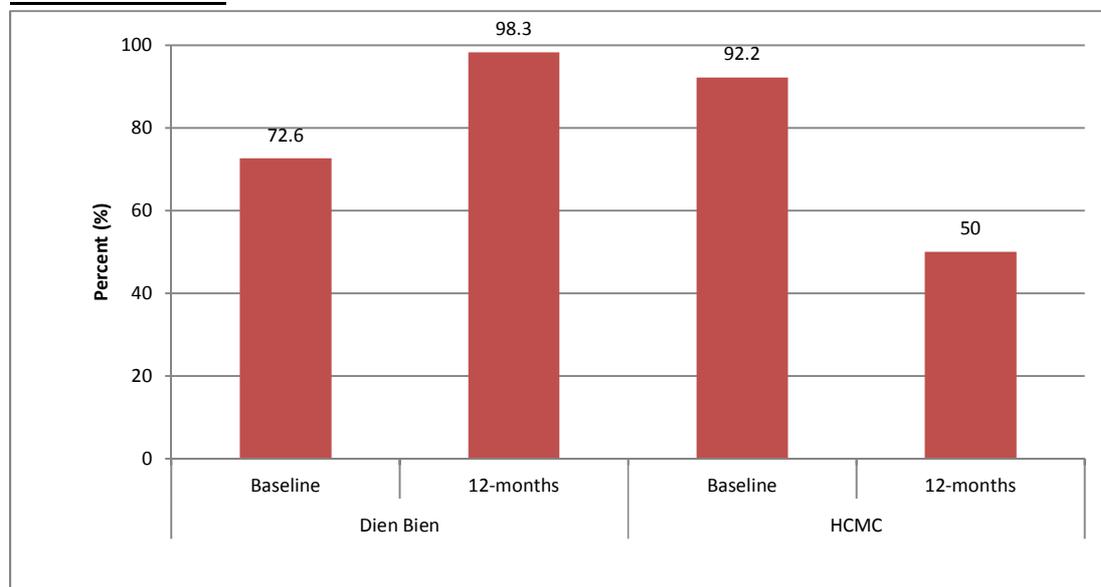


Table 24 shows ARV treatment among male IDU partners of FSPs by test result. We have only the test results at 12 months for HCMC and Dien Bien and at 48 months for Hanoi. However, these show higher rates of treatment for male IDU partners by test result than by FSPs' self-report of their partners' status.

Table 24: ARV treatment among HIV-positive male IDUs (by test result)

Site	Wave	HIV (+) on ARV treatment
Dien Bien	12 months	100.0%
HCMC	12 months	66.1%
Hanoi	48 months	83.1%

6. Associations between exposure to interventions and drug use and sexual behavior, and between HIV infection and sexual behavior among FSPs

To further explore the association between condom use and participation in HIV prevention interventions among FSPs, a logistic regression analysis was performed. Odd ratios were reported after adjusting for other factors including demographic and

behavioral variables. The logistic regression results are shown in Tables 25-27 for Hanoi, Dien Bien and HCMC, respectively.

Table 25: Condom use by exposure to interventions (ever received HIV advice/support): Hanoi

Measure of Condom Use	Not Exposed	Exposed	p-value (Chi-square test)*
Used condom at last sex	23.7%	38.0%	<0.001
Used condom always or often in past 6 months	15.9%	31.9%	<0.001

*Data pooled across all 5 survey waves.

Table 25 shows that those FSPs who received advice are more likely to use a condom at last sex than those FSPs who did not receive or be exposed to interventions. The logistic regression analysis reflects this with OR = 1.647, 95% CI 1.206 – 2.248, $p < 0.001$. For condom use always/often in the past 6 months, it is likely that those FSPs received advice tend to use condom more than two times compared to unexposed FSPs (OR = 2.293; 95% CI 1.617 – 3.252, $p < 0.001$).

The relationship between exposure to HIV prevention interventions and consistent condom use is significant among FSPs in Hanoi. We must note the possibility of selection bias influencing these results – both through selection in the interventions and in the evaluation as mentioned earlier.

Table 26: Condom use by exposure to interventions (ever received HIV advice/support): Dien Bien

Measure of Condom Use	Not Exposed	Exposed	p-value (Chi-square test)*
Used condom at last sex	39.7%	58.5%	<0.001

Used condom always or often in the past 6 months	34.7%	53.5%	<0.001
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*Data pooled across both survey waves

For Dien Bien, condom use is more likely among FSPs who are being exposed to interventions (Table 27). The logistic regression results also show that it seems that FSPs who received advice are more likely to use a condom at last sex (OR = 2.480; 95% CI 1.587 – 3.876, $p < 0.001$). Regarding condom use always/often in the past 6 months, consistent condom use seemed to be twice as likely among FSPs who were exposed to interventions than among FSPs who were not exposed to intervention (OR = 2.527; 95% CI 1.605 – 3.978, $p < 0.001$). The association between condom use in the last sex and consistent condom use in the last 6 months and exposure to intervention among FSPs in Dien Bien is statistically significant.

Table 27: Condom use influenced by exposure to interventions (ever received HIV advice/support): HCMC

Measure of Condom Use	Not Exposed	Exposed	p-value (Chi-square test)*
Used condom at last sex	27.9%	31.4%	0.4287
Used condom always or often in the past 6 months	23.9%	30.3%	0.1451

*Data pooled across both survey waves

For HCMC, Table 27 shows the association between exposure to interventions and condom use. Similar to Hanoi and Dien Bien, condom use seemed to be more common among FSPs who received advice/were exposed to intervention than those who did not. The logistic regression analysis also proved this. It is likely that FSPs who received advice are more likely to use a condom at last sex (OR = 1.185; 95% CI 0.768 – 1.829, $p = 0.4287$) as well as use a condom consistently in the last 6 months before the survey (OR = 1.381; 95% CI 0.882 – 2.163, $p = 0.1451$). However, unlike the associations in Hanoi and Dien Bien, no statistically significant association was found between condom use/consistent condom use and exposure to intervention among HCMC FSPs.

We performed similar regression analyses with HIV status as the dependent variable but found no association between exposure to interventions and HIV status.

IX. References

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X. Appendix

QUESTIONNAIRE FOR PRIMARY SEXUAL PARTNERS OF INJECTING DRUG USERS IN THE COMMUNITY

001 SITES

Long Bien	01	Dien Bien Phu	05	District 4	08
Hai Ba Trung	02	Tuan Giao	06	District 8	09
Hoang Mai	03	Dien Bien	07	Binh Thanh	10
Dong Da	04			Thu Duc	11

002 INTERVIEWER CODE _____

003 INTRODUCED BY _____

003 DATE OF INTERVIEW: __/ __/ 201...

INTERVIEWER : _____

SIGNED by SUPERVISOR: _____

Date: __/ __/ 201...

Identification Code of the interviewee:

_	_	_	_	_ _	_ _	_ _
0	1	2	3	4	5	6

0. **Interview's gender**, Male: M; Female: F

First letter of **interviewee's name**

First letter of **interviewee's father name**

First letter of **interviewee's mother name**

Date of interviewee's birthday

Month of interviewee's birthday

Year of interviewee's birthday

SECTION 1: BACKGROUND CHARACTERISTICS

No.	Questions	Coding of answers	Skip to
Q101	In what year were you born?	Year _ _ _ _ Don't remember 9999	

Q102	Where were you born?	Record detail province name:	
Q103	What is your highest level of education? Read out the possible answers and circle one.	Illiterate 1 Primary school (Grade 1-5) 2 Secondary school (Grade 6-9) 3 High school (Grade 10 – 12) 4 Vocational college, college, university (>12) 5	
Q 104	What is your usual occupation? [Probe: What kind of work do you do most of the time? Record verbatim and then code]	Free labor 1 Stay home doing housework 2 Service worker/provider 3 White collar staff member 4 Unemployed/looking for work 5 Run personal business 6 Other (detail)7 _____	
Q104b	What is your average monthly income?	_____ VND Don't remember/no answer 99	
Q105	Currently , with whom are you living? Read out the possible answers. Multiple answers possible.	Alone 1 With family 2 With relatives 3 With friends 4 With sex partner/husband 5 No fixed address (unsettled) 6 With sex partner/husband and his family 7 Others (Specify) 8 _____	
Q106	Where are you currently residing?	Ward/Commune _____ District _____ Province _____	
Q107	What is your current marital status? (Choose only 1 answer and check the logic with question C105)	Single 1 Have husband or live with a partner 2 Separated/Divorced 3 Widow 4	

SECTION 2: SEXUAL RELATIONSHIP
WITH THE IDU WHO REFERED HER TO THIS SURVEY

This section will ask information about the IDU who referred the woman to this survey (PFSP).

No.	Questions	Coding of answers	Skip to
Q200	Who is the man that referred you here for this survey? - Husband: The person to whom you are legally married - Cohabiting partner: The person with whom you are living in the same house/apartment, but not your husband - Regular sex partner: A person who is not your husband and not your cohabitant, but is a person with whom you have been having sex at least one time per week during the last 6 months	Husband 1 Cohabiting partner 2 Regular sex partner 3	
Q201	When was your PFSP born?	Year _____ Don't remember, don't know 99	
Q202	Do you usually live together in the same house? Check with QC200, only ask this question if C200 # 2	Yes 1 No 2	
Q203	Where does your PFSP usually live?	Ward/Commune _____ District _____ Province _____	
Q204	Do you provide money for his drug use?	Yes 1 No 2	
Q205	Has your PFSP had other sexual partners since you have been together?	Yes 1 No 2 Don't know 3	
Q206	How many days has it been since you last had sexual intercourse with your PFSP?	Less than 30 days 1 More than 30 days but less than 6 months 2 More than 6 months 3	2→ Q208 3→ END
Q207	a. In the last month, how many times did you have sexual intercourse with your partner?	Number of times __ __ Don't remember/ no answer 99	
	b. In the last month, how many times did you and your PFSP use a condom?	Number of times __ __ Don't remember/ no answer 99	
Q208	<i>The last time that you had sex with your partner, did you use</i>	Yes 1 No 2	→ Q210

	condom?	Don't remember 3	→ Q211
Q209	Who suggested condom use that time?	Me 1 My partner 2 Joint decision 3	→ Q211 → Q211 → Q211
Q210	Why didn't you and your PFSP use a condom that time? Circle all appropriate responses	Y N Not available 1 2 Too expensive 1 2 Partner objected 1 2 I don't like them 1 2 Used contraceptive pill 1 2 Didn't think it was necessary 1 2 Didn't think of it 1 2 Other(detail) 1 2 _____	
Q211	Please select the only one choice among these options. One choice selected only.	I am not even thinking of using condoms with my primary sexual partners 1 I intend to start using condoms in the next 6 months 2 I am using condoms inconsistently but I intend to start using condoms consistently in the next 30 days 3 I have been using condoms consistently for 1-5 months 4 I have been using condoms consistently for the last 6 months 5	
Q 212	How often have you used a condom with your PFSP in the past 6 months?	Always 1 Often 2 Half of the time 3 Rarely 4 Never 5	
Q213	Are you willing to pay for condoms?	Yes 1 No 2	
Q214	Do you think that your PFSP <u>is an IDU?</u>	Yes 1 No 2 Don't know 3	
Q215	Do you think that your PFSP <u>is infected with HIV?</u>	Yes 1 No 2 Don't know 3	→ Q217 → Q217
Q216	If he is infected with HIV, is he on treatment?	Yes 1 No 1	
Q217	Do you have children with your PFSP?	Yes 1 No 2	
Q218	How many children have you had with this partner?	_ children	
Q218b	How many of these children are ≤ 17 years old?	_ children	
Q219	Do you think your relationship will	Yes 1	

	break up as the result of his/her addiction?	No 2 Don't know 3	
Power Relationship dynamics (adapted from Pulerwitz et al 2000) <i>Each of the following items is scored on a 4-point Likert scale, where 1 _ Strongly Agree, 2 _ Agree, 3 _ Disagree, and 4 _ Strongly Disagree.</i>			
Q220	If I asked my partner to use a condom, he would get violent.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q221	If I asked my partner to use a condom, he would get angry.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q222	Most of the time, we do what my partner wants to do.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q223	My partner won't let me wear certain things.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q224	When my partner and I are together, I'm pretty quiet.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q225	My partner has more say than I do about important decisions that affect us.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q226	My partner tells me who I can spend time with.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q227	If I asked my partner to use a condom, he would think I'm having sex with other people.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q228	I feel trapped or stuck in our relationship.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q229	My partner does what he wants, even if I do not want him to.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	

Q230	I am more committed to our relationship than my partner is.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q231	When my partner and I disagree, he gets his way most of the time.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q232	My partner gets more out of our relationship than I do.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q233	My partner always wants to know where I am.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	
Q234	My partner might be having sex with someone else.	Strongly Agree 1 Agree 2 Disagree 3 Strongly Disagree 4	

SECTION 3: OVERAL STATUS OF SEXUAL RELATIONSHIP

Q301	<p>Who is the man giving you the invitation coupon to this survey?</p> <p>Read all options and circle one answer only</p> <p>- Husband: The person to whom you are legally married</p> <p>- Cohabiting partner: The person with whom you are living in the same house/apartment, but who is not your husband</p> <p>- Regular sex partner: A person who is not your husband and not your cohabiting partner but who is a person with whom you have had sex at least one time per week during the last 6 months</p> <p>- Casual sex partner: A person who is not your husband and not your cohabiting partner but who is a person with whom you have sex less than 4 times per month</p>	<p>Husband 1 Cohabiting partner 2 Regular sex partner 3 Casual sex partner 4 Other 5</p> <p>Please specify _____</p>	
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Q302	During the last 6 months, how many sex partners have you had? “Sex partners” includes husbands, cohabiting partners, regular partners and casual partners	302.1 __ __ Husband 302.2 __ __ Cohabiting partner 302.3 __ __ Regular sex partner 302.4 __ __ Casual sex partner	
Q303	Ask if 302.2 = 0 , With whom are you cohabiting?	With husband 1 With regular partner 2 With casual partner 3	
Q304	What is your current marital status?	Single 1 Married 2 Separated/ Divorced 3 Widowed 4	Q401 Q305 Q306 Q307
Q305	In what month and year did you get married?	Year __ __ __ __ Record full number of year, for Example 1998, 1999 Month __ __ Don't remember 99	Then skip to Q401
Q306	When did you last divorce/separate?	Year __ __ __ __ Record full number of year, for Example 1998, 1999 Month __ __ Don't remember 99	Then skip to Q401
Q307	When did your husband die?	Year __ __ __ __ Record full number of year, for Example 1998, 1999 Month __ __ Don't remember 99	

SECTION 4- SEXUAL RELATIONSHIP WITH OTHER SEXUAL PARTNERS

Please provide information on other sexual partners, people in addition to your IDU partner above:

No	Questions	Spouse/Sex partner	Skip to
Q401	Apart from the IDU partner who referred you to this survey and was mentioned in section 2, during the last 6 months, have you had any other sex partners?	Yes 1 No 2	→ Q501
Q402	Who are they? Exclude the IDU partner above. Read all options and circle all answers	402.1 __ __ Husband 402.2 __ __ Cohabiting partner 402.3 __ __ Regular sex partner 402.4 __ __ Casual sex partner	
HUSBAND			
Ask this section if 402.1 ≥ 1			
Q403	During the last month that you were involved with your		

	husband , how many times did you have sexual intercourse with him?	Number of times Don't remember, no answer 99	
	How many times did you use a condom when you had sexual intercourse with him?	Number of times Don't remember, no answer 99	
<u>Condom use during the most recent 6 months that you were involved with your husband</u>			
Q404	During the last 6 months , how often did you use a condom with your husband?	Always 1 #2 should be 'Usually' or 'Most of the time' Often 2 Half the time 3 Rarely 4 Never 5	
Q405	The last time you had sex with your husband, did you use a condom?	Yes 1 No 2 Don't remember 3	→ Q406 → Q407
Q406	If used, who suggested condom use that time?	Me 1 My partner 2 Joint decision 3	
Q407	If not used, why didn't you and your husband use a condom that time? Circle all appropriate responses	Not available 1 Too expensive 2 Partner objected 3 Don't like them 4 Used contraceptive pill 5 Didn't think it was necessary 6 Didn't think of it 7 Other _____ _____	
Q408	How many days has it been since you had sexual intercourse with your husband?	Less than 30 days 1 More than 30 days but less than 6 months 2 More than 6 months 3	
Q409	Do you think that your husband is an IDU?	Yes 1 No 2 Don't know 3	
Q410	Do you think that your husband is infected with HIV?	Yes 1 No 2 Don't know 3	
Q411	Do you have children with your husband?	Yes 1 No 2	
Q411b	How many of these children are ≤ 17 years old?	_ _ children	
<u>COHABITING PARTNER</u> Ask this section if 402.2 ≥ 0			

Q412	During the last month that you were involved with your cohabiting partner , how many times did you two have sexual intercourse?	Number of times Don't remember, no answer 99	
	How many times in the last month did you and your cohabiting partner use a condom?	Number of times Don't remember, no answer 99	
<u>Condom use in most recent 6 months that you were involved with your current cohabiting partner</u>			
Q413	During the last 6 months , how often did you use a condom with your FSP?	Always 1 Often 2 Half of the time 3 Rarely 4 Never 5	
Q414	The last time you had sex with your cohabiting partner, did you use a condom?	Yes 1 No 2 Don't remember 3	→ Q416 → Q417
Q415	If used, who suggested condom use that time?	Me 1 My partner 2 Joint decision 3	
Q416	If not used, why didn't you and your cohabiting partner use a condom that time? Circle all appropriate responses	Not available 1 Too expensive 2 Partner objected 3 Don't like them 4 Used contraceptive pill 5 Didn't think it was necessary 6 Didn't think of it 7 Other _____ _____	
Q417	How many days has it been since you had your last sexual intercourse with your cohabiting partner?	Less than 30 days 1 More than 30 days but less than 6 months 2 More than 6 months 3	
Q418	Do you think that your cohabiting partner is an IDU?	Yes 1 No 2 Don't know 3	
Q419	Do you think that your cohabiting partner is infected with HIV?	Yes 1 No 2 Don't know 3	
Q420	Do you have children with him?	Yes 1 No 2	
Q420b	How many of these children are ≤ 17 years old?	_ _ children	

REGULAR SEX PARTNER			
Ask this section if 402.3 ≥ 0			
Q421	During the last month that you were involved with your regular sex partner , how many times did you have sexual intercourse with him?	Number of times Don't remember, no answer	99
	How many times did you use a condom when you had sexual intercourse with him?	Number of times Don't remember, no answer	99
Condom use in most recent 6 months that you were involved with this FSP			
Q422	During the last 6 months , how often did you use a condom with your regular sex partner?	Always 1 . Often 2 Half the time 3 Rarely 4 Never 5	
Q423	The last time you had sex with your regular sex partner, did you use a condom?	Yes 1 No 2 Don't remember 3	→ Q425 → Q426
Q424	If used, who suggested condom use that time?	Myself 1 My partner 2 Joint decision 3	
Q425	If not used, why didn't you and your regular sex partner use a condom that time? Circle all appropriate responses	Not available 1 Too expensive 2 Partner objected 3 Don't like them 4 Used contraceptive pill 5 Didn't think it was necessary 6 Didn't think of it 7 Other _____	
Q426	How many days has it been since you last had sexual intercourse with this regular sex partner?	Less than 30 days 1 More than 30 days but less than 6 months 2 More than 6 months 3	
Q427	Do you think that this regular sex partner is an IDU?	Yes 1 No 2 Don't know 3	
Q428	Do you think that this regular sex partner is infected with HIV?	Yes 1 No 2 Don't know 3	
Q429	Do you have children with him?	Yes 1 No 2	
Q429b	How many of these children are ≤ 17 years old?	____ children	

SECTION 5: ABOUT COMMERCIAL SEX

No.	Questions	Coding of answers	Skip to
Q501	Have you ever received money for sex?	Yes 1 No 2	→Q601
Q502	Are you currently involved in sex work?	Yes 1 No 2	→Q601
Q503	Why did you get involved in sex work? Do not read list. Just probe for more responses. Circle all appropriate responses	Yes No Earn money for myself 1 2 Unlucky in love 1 2 Peer pressure 1 2 Earn money for family 1 2 Other (Detail) 1 2 _____	
Q504	During the most recent 6 months that you were involved in sex work , how many clients did you have sexual intercourse with?	Number of clients in the past 6 month [][] Don't remember 99	
Q505	During those 6 months, how often did you use a condom with clients?	Always 1 Often 2 Half the time 3 Rarely 4 Never 5	
Q506	The last time you had sex with a client, did you use a condom?	Yes 1 No 2 Don't remember/No response 3	→Q508
Q507		Myself 1 My client 2 Joint decision 3	
Q508	Why didn't you and your client use a condom that time? Do not read list. Just probe for more responses. Circle all appropriate responses	Not available 1 2 Likes that person 1 2 Client objected 1 2 Don't like them 1 2 Used contraceptive pill 1 2 Didn't think it was necessary 1 2 Second condom was not available 1 2 Take revenge 1 2 Client paid more money 1 2 No need - we share syringes 1 2 Trust client 1 2 Allergic to condom 1 2 Other(detail) 1 2 _____	

SECTION 6- ABOUT DRUG USE

No.	Questions	Coding of answers	Skip to
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Q601	Have you ever used illegal drugs (narcotics, opiates)?	Yes 1 No 2	→ Q701																												
Q602	In what year did you start using drugs?	Year _ _ _ _ _ Describe (Exp: 1998, 1999...) Don't remember 99																													
Q603	Which of the following drugs have you used? Read list Circle all appropriate answers	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Opium</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Heroin</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Ecstasy</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Amphetamine</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Anti-anxiety (Pipolphen, Seduxen, Novocain, Diazepam ...)</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Others (detail) _____</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	DK	Opium	1	2	3	Heroin	1	2	3	Ecstasy	1	2	3	Amphetamine	1	2	3	Anti-anxiety (Pipolphen, Seduxen, Novocain, Diazepam ...)	1	2	3	Others (detail) _____				DK: Don't know
	Yes	No	DK																												
Opium	1	2	3																												
Heroin	1	2	3																												
Ecstasy	1	2	3																												
Amphetamine	1	2	3																												
Anti-anxiety (Pipolphen, Seduxen, Novocain, Diazepam ...)	1	2	3																												
Others (detail) _____																															
Q604	Have you ever injected illegal drugs?	Yes 1 No 2 Don't remember 99	→ Q613 → Q613																												
Q605	In what year did you start injecting drugs?	Year _ _ _ _ _ Describe (Exp: 1998, 1999...) Don't remember 99																													
Q606	During the most recent 6 months that you injected drugs, how often have you injected drugs?	Don't Inject 1 About once a day 2 2-3 times a day 3 4 times a day or more 4 4-6 times a week 5 2-3 times a week 6 About once a week 7 1-3 times a month 8 Less than once a month 9	→ Q613																												
Q607	During those 6 months, how often have you used a needle/syringe that had previously been used by someone else?	Always 1 Most of the time 2 Half of the time 3 Occasionally 4 Never 5																													
Q608	During those 6 months, how often have you given a needle/syringe that you already used to someone else?	Always 1 Most of the time 2 Half of the time 3 Occasionally 4 Never 5																													

Q609	During those 6 months , how often have you shared drug solutions?	Always 1 Most of the time 2 Half of the time 3 Occasionally 4 Never 5	
Q610	During those 6 months , how often have you shared other injection equipment?	Always 1 Most of the time 2 Half of the time 3 Occasionally 4 Never 5	
Q611	Did you ever inject drugs with your PFSP or another FSP?	PFSP 1 Other FSP 2 No 00	→ Q 513
Q612	Did you ever share any injection equipment with your PFSP or another FSP?	PFSP 1 Other FSP 2 No 00	
Q613	Do you tell your PFSP or another FSP that you inject drugs?	PFSP 1 Other FSP 2 No 00	

SECTION 7: STIS (SEXUALLY TRANSMITTED INFECTIONS) AND HEPATITIS

No.	Questions	Coding of answers	Skip to																																	
Q701	During the last 6 months, has a doctor or other health professionals told you that you have a STD or hepatitis?	Yes 1 No 2	→Q703																																	
Q702	Have you been diagnosed with one of these illnesses in the last 6 months? Mark all that apply	<table> <tr> <td></td> <td>Y</td> <td>N</td> </tr> <tr> <td>Syphilis (<i>syph, the pox, lues</i>)</td> <td>1</td> <td>2</td> </tr> <tr> <td>Trichomoniasis (<i>trich</i>)</td> <td>1</td> <td>2</td> </tr> <tr> <td>Hepatitis B (HBV)</td> <td>1</td> <td>2</td> </tr> <tr> <td>Gonorrhea (<i>GC, clap, drip</i>)</td> <td>1</td> <td>2</td> </tr> <tr> <td>HPV</td> <td></td> <td></td> </tr> <tr> <td>Hepatitis C (HCV)</td> <td>1</td> <td>2</td> </tr> <tr> <td>Chlamydia</td> <td>1</td> <td>2</td> </tr> <tr> <td>Genital herpes (HSV)</td> <td>1</td> <td>2</td> </tr> <tr> <td>Others (Specify)</td> <td>1</td> <td>2</td> </tr> <tr> <td>_____</td> <td>1</td> <td>2</td> </tr> </table>		Y	N	Syphilis (<i>syph, the pox, lues</i>)	1	2	Trichomoniasis (<i>trich</i>)	1	2	Hepatitis B (HBV)	1	2	Gonorrhea (<i>GC, clap, drip</i>)	1	2	HPV			Hepatitis C (HCV)	1	2	Chlamydia	1	2	Genital herpes (HSV)	1	2	Others (Specify)	1	2	_____	1	2	
	Y	N																																		
Syphilis (<i>syph, the pox, lues</i>)	1	2																																		
Trichomoniasis (<i>trich</i>)	1	2																																		
Hepatitis B (HBV)	1	2																																		
Gonorrhea (<i>GC, clap, drip</i>)	1	2																																		
HPV																																				
Hepatitis C (HCV)	1	2																																		
Chlamydia	1	2																																		
Genital herpes (HSV)	1	2																																		
Others (Specify)	1	2																																		
_____	1	2																																		
Q703	Are you willing to pay for a STI	Yes 1																																		

check up and treatment?	No 2
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SECTION 8: HIV/AIDS KNOWLEDGE AND TESTING

No.	Questions	Coding of answers	Skip to
Q801	Have you ever heard of HIV/AIDS (or SIDA)?	Yes 1 No 2	→Q807
Q802	Can a person protect themselves from HIV infection?	Yes 1 No 2	→Q804
Q803	How can a person protect themselves from HIV infection? Don't read, just ask: "Are there any other ways?" Circle all appropriate answers	Use condoms Have fewer sexual partners Be faithful to 1 partner No promiscuous sexual activities Have fewer SPs Fewer risky sexual activities Be sure that HIV+ partner is on treatment and adherence Sexual Abstinence Do not share needles/syringes Do not share drug solutions Do not share other injection equipment Other (describe)	Yes No 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
Q804	With your current behaviors, do you think that you are at risk of HIV infection?	Yes 1 No 2 Don't know 3	→Q806 →Q807
Q805	Why do you think you are at risk of HIV infection? Don't read, just probe for other responses. Circle all appropriate response	Y N Have multiple sexual partners 1 2 Don't use condoms 1 2 Inject Drugs 1 2 Have received blood transfusion 1 2 Other (describe) 1 2 _____	
Q806	Why do you think that you are not at risk of HIV infection? Don't read, just probe for other responses. Circle all appropriate response	Use condoms 1 2 Do not inject drugs 1 2 Have not received blood transfusion 1 2 Other (describe) 1 2 _____	
Q807	Have you ever had an HIV test?	Yes 1 No 2	→Q808
	Why have you not gone for an HIV test?	Inconvenient time Too busy Clinic is too far	2 2 2

	Don't read out. Ask "Is there any other reason?" Circle all appropriate choices.	No means of transportation Don't know where the clinic is Don't think it is necessary Afraid of husband/partner(s) I am scared of knowing I am positive I am afraid of getting medical tests Other (specify) _____	2 2 2 2 2 2 2
Q808	How many times have you gone for a test?	_ _ _ times Don't remember 99	
Q809	In what circumstances did you decide to go for a test:	Return from O6 center 1 Begin a new love 2 During pregnancy 3 Advice from SP 4 After having sex with sex worker 5 After sharing needle/syringe with someone 6 Don't trust my SP 7 Both of us want it before marriage 8 Others (Specify) 9	
Q810	For your last HIV test, did you voluntarily go for the HIV test or were you required to have the test?	Voluntary 1 Required 2 Don't know 3	
Q811	After the last HIV test, did you find out the result of your test?	Yes 1 No 2	
Q812	Did you tell your sexual partner what the result was?	Yes 1 No 2	
Q813	Are you willing to pay for HIV tests?	Yes 1 No 2	
Q814	Have you ever received the following HIV prevention supports? Read out the list Circle all appropriate answers Multiple answers are possible	Received condoms Received needles/syringes Received leaflets Received advice from fellow drug users Received advice from peer educators Received advice from health workers Received advice from mass organization workers Participated in a club Referred to STD examination and treatment Other (describe)	Yes No 2 2 2 2 2 2 1 2 1 2 1 2 1 2
Q815	Have you ever received couples counseling?	Yes 1 No 2 Don't know/don't remember 99	

Q816	Would you like to receive couples counseling?	Yes 1 No 2	
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SECTION 9: EVALUATION SEXUAL PARTNER PROJECT IMPACT
(Use this section only with participants in Hanoi)

No.	Questions	Coding of answers	Skip to
Q901	Have you ever been contacted by Sexual Partner Project?	Yes 1 No 2	→End
Q902	When were you first contacted by Sexual Partner Project?	Month _ _ Year _ _ Don't remember 99	
Q903	How many times were you contacted in the last three months?	_ _ times Don't remember 99	
Q904	Were you contacted by the same peer educator?	Yes 1 No 2	
Q905	Have you ever visited your district project office?	Yes 1 No 2	→Q908
Q906	When did you first visit your district project office, in which month and year?	Month _ _ Year _ _ Don't remember 99	
Q907	How many times have you visited your district project office in the last three months?	_ _ times Don't remember 99	
Q908	Have you ever called your district project office?	Yes 1 No 2	→Q911
Q909	When did you first call your district project office, in which month and year?	Month _ _ Year _ _ Don't remember 99	
Q910	How many times have you called your district project office in the last three months?	_ _ times Don't remember 99	
Q911	Have you gone to a monthly clients' meeting?	Yes 1 No 2	→Q913
	How many meetings have you attended?	Number of meetings _ _ Don't remember, no answer 99	
Q912	If No, why not? Don't read out. Ask "Is there any other reason?" Circle all appropriate choices. Completed, skip to Q817	Y N Conflicted with work time 1 2 Busy with family care 1 2 Blocked by husband 1 2 Blocked by family (except for husband) 1 2 No means of transportation 1 2 Meeting place is inconvenient 1 2 I did not want to go 1 2 Other (specify)1 2 _____	

				→Q917
Q913	Do the topics at the monthly clients' meeting meet your needs?	Yes 1 No 2		→Q915
Q914	If No, why not?	Y N I get that information from other sources 1 2 The topics are repeated and so its boring 1 2 Other (specify) 1 2		
Q915	Could the monthly clients' meetings be improved to entice you to go?	Yes 1 No 2		→ Q917
Q916	If No, why not? Don't read out. Ask "Is there any other reason?" Circle all appropriate choices.	C K The facilitator talked too much 1 2 There are so many clients that there is no chance for discussion 1 2 Uninteresting 1 2 No/not enough games 1 2 Other (specify) 1 2		
Q917	To what degree are you satisfied with the project peer educator? Suggestion: Use a 1-10 scale	Totally satisfied (100%) 1 Satisfied (80%) 2 Fairly Satisfied (60%) 3 Not satisfied (40%) 4 Totally unsatisfied (20%) 5		
Q918	In what way has the project peer educator helped you?	Mother/Daughter-in-law difficulty Family member difficulty (not mother-in-law, husband) Husband's drug addiction Husband's drug addiction rehab at home Husband's drug addiction rehab at center Sex with husband Family-based violence Children related issues Health of you and your beloved	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	Y N

		HIV/AIDS information VCT referrals STI information STI diagnosis referrals Issues related to neighbors, local authorities or unions Other (specify)	1 2 1 2 1 2 1 2 1 2 1 2 1 2
Q919	Did you really go in for VCT service after the peer educator(s) referred you to VCT clinic?	Yes 1 No 2	→Q920
	Why didn't you go to the VCT clinic that time? Don't read out. Ask "Is there any other reason?" Circle all appropriate choices.	Inconvenient time Too busy Clinic is too far No means of transportation Don't know where the clinic is Don't think it is necessary Afraid of husband/partner(s) I last went for VCT less than 3 months ago I last went for VCT less than 6 months ago I went for VCT for many times I was scared that I might be positive I am afraid of getting medical tests Other (specify)	1 2 1 2 1 2
Q920	Did you really go in for STI service after the peer educator(s) referred you to STI clinic?	Yes 1 No 2	→Q921
	Why didn't you go to the STI clinic that time? Don't read out. Ask "Is there any other reason?" Circle all appropriate choices.	Inconvenient time Too busy Clinic is too far No means of transportation Don't know where the clinic is Don't think it is necessary Afraid of husband/partner(s) I went in for an STI check up many times I was scared that I might learn that I am STI infected I am afraid of getting STI check ups Other (specify)	1 2 1 2
Q921	Are you satisfied with the services below:	Q813.a - Individual counseling by peer educator(s) Yes 1 No, 2 If no, why not Q813.b- VCT referrals Yes 1 No, 2 If no, why not	

	<p>.....</p> <p>Q813.c- STI diagnosis and treatment referrals</p> <p>Yes 1</p> <p>No, 2</p> <p>If no, why not</p> <p>.....</p> <p>Q813.d- Condom and lubricant distribution</p> <p>Yes 1</p> <p>No, 2</p> <p>If no, why not</p> <p>.....</p>	
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For participants in Hanoi, END THE INTERVIEW here and thank the participant.

SECTION 10: POTENTIAL INTERVENTION STRATEGIES

(Ask questions from this section only to participants in Ho Chi Minh City and Dien Bien)

Q1001	<p>Have you ever received any of these HIV prevention supports?</p> <p>Read out the list Circle all appropriate answers Multiple answers are possible</p>	<p>Received condoms</p> <p>Received needles/syringes</p> <p>Received leaflets</p> <p>Received advice from fellow drug users</p> <p>Received advice from peer educators</p> <p>Received advice from health workers</p> <p>Received advice from mass organization workers</p> <p>Participated in a club</p> <p>Referred to STD examination and treatment</p> <p>Other (specify)</p> <p>.....</p>	<p>Yes No</p> <p>1 2</p>
Q1002	<p>What type of HIV prevention support would you like to receive in the future?</p> <p>Read out the list Circle all appropriate answers Multiple answers are possible</p>	<p>To receive condoms</p> <p>To receive syringes and needles</p> <p>To receive leaflets</p> <p>Advice from fellow drug users</p> <p>Advice from peer educators</p> <p>Advice from health workers</p> <p>Advice from mass organization workers</p> <p>Participation in a club</p> <p>To be referred to STD examination and treatment</p> <p>Other (specify)</p> <p>.....</p>	<p>Yes No</p> <p>1 2</p>
Q1003	<p>Have you ever been contacted by anyone who talked to you about HIV prevention support?</p>	<p>Yes 1</p> <p>No 2</p>	
Q1004	<p>Who would you prefer contact you to talk to you about HIV prevention support, a man or a woman?</p>	<p>Woman 1</p> <p>Man 2</p>	
Q1005	<p>Would you prefer to talk to someone the same age as you or someone of a different age</p>	<p>Same age 1</p> <p>Different age 2</p>	

	about HIV prevention and support?		
Q1006	In what manner would you prefer to be contacted?	Direct contact 1 Through male partner 2 Through local community program 3 Through mass organization 4 Through peer outreach program 5 Other (specify) 6 (Please Specify _____)	
Q1007	Have you ever taken part in HIV prevention activities?	Yes 1 No 2	
Q1008	Would you be willing to take part in HIV prevention activities?	Yes 1 No 2	
Q1009	Do you have any suggestions that might help us design better HIV prevention services for you?	<i>Please Specify</i> _____ _____ _____	

Thank the respondent and end the interview.

QUESTIONNAIRE FOR MALE INJECTING DRUG USERS

001. STUDY IDENTIFICATION NUMBER |Place the ID here |

002. STUDY CENTER: _____

003. STUDY PROCESS:

Completed 1
 Only completed the questionnaire 2
 Only completed the testing 3
 Other (Specify) 4

004. INTERVIEW DATE: ___/___/___

INTERVIEWER: Signature _____ Date ___/___/___

SUPERVISOR: Signature _____ Date ___/___/___

SECTION 1: BACKGROUND

No.	Questions	Coding answers	Skip	
C10 1	In what month and year were you born?	Month _ _ Don't remember 99 Year _ _ _ _ Don't remember 9999		
C10 2	What is the highest level of education you have finished? Read out the possible answers and circle one	Illiterate 1 Primary school (Grade 1-5) 2 Secondary school (Grade 6-9) 3 High school (Grade 10 – 12) 4 College, university (>12) 5		
C10 3	Where do you now live? <i>(write the name of the district if in HCMC, otherwise write the name of the province)</i>	_____		
C10 4	With whom are you now living? Read out list. Circle all possible answers.		Yes	No
		Alone	1	2
		With wife/girlfriend	1	2
		With parents	1	2
		With relatives	1	2
		With friends	1	2
		No fixed address (unsettled)	1	2
	Other (specify) _____			
C10 5	What is your current marital status? <u>Circle one answer only</u> <i>(Cross-check with question C104)</i>	Single 1 Married or cohabiting with a woman 2 Married or cohabiting with a man 3 Separated or divorced 4 Widower 5		
C10 6	Currently , what kind of work do you do to earn money to support yourself?	Farmer 1 Government employee 2 Entertainment employee 3 Sales 4		

No.	Questions	Coding answers	Skip
	What kind of work do you do most of the time? Interviewer writes down the answer below then circles the answer. _____	Business person 5 Student 6 Freelance (e.g. “xe om”) 7 Illegal activities (gambler, drug trafficker...) 8 Currently unemployed 9 Other (specify)..... 10	
C107	During the last 12 months, about how much money have you made per month? Explain: income from all sources	_____, _____, _____ VND Don't remember/No response 99	

SECTION 2: SEXUAL RELATIONSHIP WITH THE FIRST PARTNER WHO RECEIVED THE COUPON

No	Question	Coding answers	Skip
C201	Who is the woman that you give the invitation coupon to this survey? - Wife: The one to whom you are legally married - Cohabiting partner: The one with whom you are living in the same house/apartment, but not your wife - Regular sex partner: A person who is not a wife and not your cohabiting partner, but is a person with whom you have had sex at least once a week throughout the last 6 months	Wife 1 Cohabiting partner 2 Regular partner 3	2→C204 3→C204
C202	Do you live together in the same house? Cross-check with question C104	Yes 1 No 2	
C203	In what year did you get married?	_____ _____	
C204	Do you have children with her?	Yes 1 No 2	→C206
C205	How many of these children are ≤ 18 years old?	_____ children	
C206	During the last month, how many times have you had sexual intercourse with your FPSP?	Number of times _____ Don't remember, no answer 99 (If there is no sexual intercourse, write 99)	If the number >0, move to 208
C207	If you did not have sexual intercourse with this partner in the past month, when was the last time you did have sexual intercourse with this partner?	More than one month ago but less than 6 months ago 1 More than 6 months ago 2	1→C209 2 →C209

No	Question	Coding answers	Skip
C208	Since you've known this person, how many times have you used a condom when you had sexual intercourse with this person?	Number of times _ _ Don't remember/no answer 99	
C209	<i>The last time you had sex with your partner, did you use a condom?</i>	Yes 1 No 2 Don't remember 3	→C211 →C212
C210	Why didn't you and your partner use a condom the last time you had sex? CIRCLE ALL APPROPRIATE RESPONSES <i>Then move to question 212</i>	Not available	Y 1 N 2
		Too expensive	1 2
		Partner objected	1 2
		I don't like them	1 2
		Used contraceptive pill	1 2
		Didn't think it was necessary	1 2
		Didn't think of it	1 2
C211	Who suggested condom use that time?	Me 1 My partner 2 Joint decision 3	
C212	How often did you use a condom when you had sex with this partner <i>in the past 6 months?</i>	Always 1 Often 2 Half of the time 3 Rarely 4 Never 5	
C213	Please select the only one choice among these options. One choice selected only.	I am not even thinking of using condom	1
		I intend to start using condoms in the next 6 months	2
		I am using condoms inconsistently but intend to start using condoms consistently in the next 30 days	3
		I have been using condoms consistently for 1-5 months	4
		I have been using condoms consistently for the last 6 months	5
		Other (specify).....	6
C214	If there no free condoms are provided, are you willing to pay for condoms?	Yes 1 No 2	
C215	Currently, is your sex partner using drugs?	Yes 1 No 2 Don't know 3	2→C217 3→C217
C216	Do you think that your sex partner is <i>injecting drugs?</i>	Yes 1 No 2 Don't know 3	
C217	Does he/she provide money for your	Yes 1	

No	Question	Coding answers	Skip
	drug use?	No 2	
C218	Do you think your partner <u>is infected with HIV</u> ?	Yes 1 No 2 Don't know 3	2→C220 3 →C220
C219	If she is infected with HIV, is she on ARV treatment?	Yes 1 No 2	
<i>Interviewer can explain that "In the next part, I would like to ask some questions related to your relationship with your main sexual partner. Please just tell me what you think.)</i>			
C220	If I asked my partner to use a condom, she would get violent	Strongly Agree 1 Agree 2 Disagree 3	
C221	If I asked my partner to use a condom, she would get angry	Strongly Agree 1 Agree 2 Disagree 3	
C222	Most of the time we do what my partner wants to do	Strongly Agree 1 Agree 2 Disagree 3	
C223	My partner won't let me wear certain things	Strongly Agree 1 Agree 2 Disagree 3	
C224	When my partner and I are together, I'm pretty quiet.	Strongly Agree 1 Agree 2 Disagree 3	
C225	My partner has a stronger voice than I do about important decisions that affect us.	Strongly Agree 1 Agree 2 Disagree 3	
C226	My partner tells me who I can spend time with	Strongly Agree 1 Agree 2 Disagree 3	
C227	If I asked my partner to use a condom, she would think I'm having sex with other people.	Strongly Agree 1 Agree 2 Disagree 3	
C228	I feel trapped or stuck in my relationship.	Strongly Agree 1 Agree 2 Disagree 3	

No	Question	Coding answers	Skip
C229	My partner does what she wants, even if I do not want her to.	Strongly Agree 1 Agree 2 Disagree 3	
C230	I am more committed to our relationship than my partner is.	Strongly Agree 1 Agree 2 Disagree 3	
C231	When my partner and I disagree, she gets her way most of the time.	Strongly Agree 1 Agree 2 Disagree 3	
C232	My partner gets more out of our relationship than I do.	Strongly Agree 1 Agree 2 Disagree 3	
C233	My partner always wants to know where I am.	Strongly Agree 1 Agree 2 Disagree 3	
C234	My partner might be having sex with someone else.	Strongly Agree 1 Agree 2 Disagree 3	

SECTION 3: SEXUAL HISTORY – NUMBERS AND TYPES OF SEXUAL PARTNERS

No	Question	Coding answer	Skip
C301	During the last 6 months , apart from the partners above, have you had any other sex partners?	Yes 1 No 2	→ C401
C302	<p>If Yes, who are they? Read all options and circle all appropriate answers.</p> <p>- Casual partner: A person who is not your wife, not your cohabiting partner, but who is someone with whom you have been having sex less than 4 times per month during the last 6 months.</p> <p>- Female sex worker: A female with whom you have sex in exchange for money or goods</p> <p>- Male sex partner: A male with whom you have anal sex</p>	<p>302.1 – Casual partner __ __ Do not remember 99</p> <p>302.2 – Female sex worker __ __ Do not remember 99</p> <p>302.3 – Male partner __ __ Do not remember 99</p>	

SECTION 3.1 SEXUAL RELATIONSHIP WITH CASUAL PARTNER

Ask only if the answer 302.1 ≥ 1 or selecting "do not remember" in the question C302

No	Question	Coding answer	Skip
C303	During the last month , how many times have you had vaginal or anal sex with your casual partner?	Number of times __ __ Don't remember 99	
C304	<p>In the last 12 months, the last time you had sex with a casual partner, did you use a condom?</p> <p>Read out: please think about this question for a while in order to give us the most correct answer. Your answer will be kept confidential</p>	Yes 1 No 2 Don't remember 3	→C306 →C306
C305	If a condom was used , who suggested using the condom that time?	Me 1 My partner 2 Joint decision 3	
C306	During the last 12 months , how often have you used a condom with your casual partners?	Always 1 Most of the time 2 Half of the time 3 Occasionally 4 Never 5	
C307	Why do you use a condom when you have sex with a casual partner?		Y N
		Contraception	1 2
		Disease prevention	1 2
		Hygiene	1 2
		To make sexual intercourse last longer	1 2
Other (specify).....	1 2		

No	Question	Coding answer	Skip
C308	Do know if any of your casual partners has injected drugs in the last 12 months?	Yes 1 No 2 Don't know 3	

SECTION 3.2. SEXUAL RELATIONSHIP WITH FEMALE SEX WORKER

Ask only if the answer 302.2 ≥ 1 or selecting "do not remember" in the question C302

No	Question	Coding answer	Skip
C309	<i>During this last month,</i> how many times have you had vaginal or anal sex with a female sex worker?	Number of times __ __ Don't remember 99	
C310	<i>Considering just the last 12 months,</i> did you use a condom the last time you had sex with a female sex worker? <i>Read out: please think about this question for a while in order to give us the most correct answer. Your answer will be kept confidential</i>	Yes 1 No 2 Don't remember 9	→C312 →C312
C311	<i>If a condom was used,</i> who suggested that a condom be used that time?	Me 1 My partner 2 Joint decision 3	
C312	<i>During the last 12 months,</i> how often have you used a condom when having sex with a female sex worker?	Always 1 Most of the time 2 Half of the time 3 Occasionally 4 Never 5	
C313	What are your reasons for using a condom when you have sex with female sex workers?		Y N
		Contraception	1 2
		Disease prevention	1 2
		Hygiene	1 2
		To make sexual intercourse last longer	1 2
	Other (specify).....	1 2	
C314	<i>In the last 12 months,</i> do you think you've had sex with a partner who is a female sex worker and has injected drugs?	Yes 1 No 2 Don't know 3	

SECTION 3.3 SEXUAL RELATIONSHIP WITH MALE PARTNER

Ask only if the answer 302.3 ≥ 1 or selecting "do not remember" in the question C302

No	Question	Coding answer	Skip
C315	<i>During the last month,</i> how many times have you had anal sex with a male partner?	Number of times __ __ Don't remember 99	
C316	<i>During the last 12 months,</i> how many times have you had anal sex with a male partner?	Number of times __ __ __ Don't remember 99	
C317	The last time you had sex with a male partner, did you use a condom? <i>Read out: please think about this</i>	Yes 1 No 2 Don't remember 3	→C319

No	Question	Coding answer	Skip	
	<i>question for a while in order to give us the most correct answer. Your answer will be kept confidential</i>		→C319	
C318	<i>If a condom was used, who suggested that a condom be used that time?</i>	Me 1 My partner 2 Joint decision 3		
C319	<i>During the last 12 months, how often have you used a condom with a male partner?</i>	Always 1 Most of the time 2 Occasionally 3 Never 4		
C320	What are your reasons for using a condom when you have sex with a male partner?		Y	N
		Disease prevention	1	2
		Hygiene	1	2
		To make sexual intercourse last longer	1	2
	Other (specify).....	1	2	
C321	<i>During the last 12 months, do you think you have had sex with a female sex worker who has injected drugs?</i>	Yes 1 No 2 Don't know 3		
C322	<i>During the last 12 months, have you ever been paid to have anal sex with a male partner?</i>	Yes 1 No 2		

SECTION 4: DRUG USE

No	Question	Coding answers	Skip			
C401	In what month and year did you start using drugs?	Month _ _ Don't remember 99 Year _ _ _ _ Don't remember 9999				
C402	In what month and year did you start injecting drugs?	Month _ _ Don't remember 99 Year _ _ _ _ Don't remember 9999				
C403	Which of the following drugs have you used? <i>Read list Circle all appropriate answers</i> If the interviewee answers "never used" then do not ask about use in the last month.		Ever used		Last month	
			Y	N	Y	N
		Opium	1	2	1	2
		Heroin	1	2	1	2
		marijuana, tài mã, bồ đã, cỏ	1	2	1	2
		Ecstasy, love,	1	2	1	2
		ice, methamphetamine	1	2	1	2
		Inhaled glue	1	2	1	2
		Ketamine, ke	1	2	1	2
		Nấm thần	1	2	1	2
Cocaine	1	2	1	2		

No	Question	Coding answers	Skip
		Anxiety control medicine (Seduxen, Novocain, diazepam)	1 2 1 2
		Other (specify).....	1 2 1 2
C404	Which of following drugs have you injected? Read list Circle all appropriate answers If the interviewee answers “never used” then do not ask about use in the last month’.	Opium	1 2 1 2
		Heroin	1 2 1 2
		marijuana, tài mã, bồ đà, Not possible cỏ	1 2 1 2
		Ecstasy	1 2 1 2
		Estacy, ice, methamphetamine, love...	1 2 1 2
		Possible?? glue	1 2 1 2
		Ketamine, ke	1 2 1 2
		Nấm thần	1 2 1 2
		Cocaine	1 2 1 2
		Anxiety control medicine (Seduxen, Novocain, diazepam..)	1 2 1 2
		Other (specify).....	1 2 1 2
C405	During the last month , how often have you injected drugs? Probe for response. Circle only one response	≥ 4 times/day 1 2-3 times a day 2 1 time/day 3 < 1 time/day 4 Don't know/no response99	
C406	During the last week , how many times did you go to a place where IDUs inject drugs or gather?	_ _ _ times Don't remember 99	
C407	During the last month , where have you usually gotten your needles/syringes? Circle one response only	Pharmacy 1 Healthcare establishment 2 Drug seller 3 Fellow drug user 4 Outreach health workers 5 Peer educators 6 Drop in center, drug education event 7 Other (specify).....8	

SECTION 5 : NEEDLE SHARING BEHAVIOURS

No	Question	Coding answer	Skip
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No	Question	Coding answer	Skip
C501	When you injected, have you ever shared a needle/syringe with anyone else? (Shared means you used a needle/syringe that had previously been used by someone, or you gave a needle/syringe that you had already used to someone else)	Yes 1 No 2	2→C504
C502	During the last 6 months , when you injected, how often did you use a needle/syringe that had previously been used by someone else or, how often did you give a needle/syringe that you already used to someone else?	Always 1 Most of the time 2 Occasionally 3 Never 4 No response 9	→C504
C503	During the last 6 months , with whom have you shared a needle/syringe? Read list and circle all appropriate answers	Husband/boyfriend	Y 1 N 2
		Wife/girlfriend	1 2
		Female sex worker	1 2
		Someone who paid me/who I paid for sex	1 2
		Other sexual partner	1 2
		Other Injecting drug user	1 2
		Drug smuggler/seller	1 2
Others (specify)	1 2		
C504	During the last 6 months , when you injected, how often did you share drugs from the same container with someone else? <i>Share means using drugs from the same container</i>	Always 1 Most of the time 2 Occasionally 3 Never 4	→C506
C505	During the last 6 months , with whom did you share drugs/drugs from the same container? <i>Sharing means using drugs from the same container</i> Circle all appropriate answers	Wife/girlfriend	Y 1 N 2
		Female sex worker	1 2
		Someone who I paid for sex	1 2
		Other sexual partner	1 2
		Other Injecting drug user	1 2
		Drug smuggler/seller	1 2
Other (specify)	1 2		
C506	During the last month , how often have you given a needle/syringe that you had already used to someone else?	Always 1 Most of the time 2 Occasionally 3 Never 4	
C507	During the last month , how often have you used a needle/syringe that had previously been used by someone else?	Most of the time 2 Occasionally 3 Never 4 Always 1	4→C601

No	Question	Coding answer	Skip
C508	<i>During the last month</i> , how often did you clean the needle/syringe that had <i>previously been used</i> by someone else before you used it again?	Always 1 Most of the time 2 Occasionally 3 Never 4 No response 9	

SECTION 6: INTERVENTION ACCESS AND TESTING HISTORY

No	Question	Coding Answers	Skip
C601	How many times have you been in a drug rehabilitation (06) centre?	Number of times [__] Don't remember/not sure 99 Never been in an 06 centre 00	00→C605
C602	When you <i>last</i> participated in a drug rehabilitation (06) program, how did you get admitted to the program? <i>Do not read responses. Mark one response only</i>	Forced by local authority 1 Sent by the family 2 Self-referred 3 Other (specify)4	
C603	<i>During that stay in the 06 Center</i> , what was the total period of time you were in the center?	months[___] Don't remember 99	
C604	In what month and year were you <i>last released</i> from a 06 Centre?	Month [___] Year [____]	
C605	<i>During the last 12 months</i> , have you received free needles/syringes?	Yes 1 No 2	
C606	<i>During the last 6 months</i> , have you received free needles/syringes?	Yes 1 No 2	→C608
C607	<i>If yes</i> , how many times in the last 6 months?	[___] times Don't remember 999	
C608	<i>During the last 12 months</i> , have you received free or cheap condoms?	Yes 1 No 2	
C609	<i>During the last 6 months</i> , have you received free or cheap condoms?	Yes 1 No 2	→C611
C610	<i>If Yes</i> , how many times <i>in the last 6 months</i> ?	[___] times Don't remember 999	
C611	<i>During the last 12 months</i> , has anyone talked to you about safe injection?	Yes 1 No 2	→C614
C612	<i>During the last 6 months</i> , has anyone talked to you about safe injection?	Yes 1 No 2	→C614
C613	<i>If Yes</i> , how many times <i>in the last 6 months</i> ?	[___] times Don't remember 999	
C614	<i>During the last 12 months</i> , has anyone talked to you about safe sex?	Yes 1 No 2	→C617
C615	<i>During the last 6 months</i> , has anyone talked to you about safe sex?	Yes 1 No 2	→C617

No	Question	Coding Answers	Skip
C616	If Yes , how many times in the last 6 months ?	[_][_][_] times Don't remember 999	
C617	During the last 12 months , have you received information or materials on safe sex directed at people who inject drugs?	Yes 1 No 2	
C618	During the last 6 months , have you received information or materials on safe sex directed at people who inject drugs?	Yes 1 No 2	→C620
C619	If Yes , how many times in the last 6 months ?	[_][_][_] times Don't remember 999	
C620	Have you ever had an HIV test?	Yes 1 No 2	1→C622
C621	Why have you not gotten an HIV test? Don't read it out. Ask "Is there any other reason?" Circle all indicated choices. Then move to question C729		C K
		Inconvenient time	1 2
		Too busy	1 2
		Clinic is too far away	1 2
		No means of transportation	1 2
		Don't know where the clinic is	1 2
		Don't think it is necessary	1 2
		Afraid of wife/partner(s)	1 2
		I was scared of knowing that I am positive	1 2
I am afraid of getting medical tests	1 2		
Others (specify)			
C622	How many times have you gone for a test?	[_][_][_] times Don't remember 99	
C623	Why did you decide to go get an HIV test?		Y N
		Returned from 06 centre 1	1 2
		Begin a new love 2	1 2
		Advice from FSP 3	1 2
		Had sex with sex worker 4	1 2
		Shared syringe with someone 5	1 2
		Don't trust my FSP 6	1 2
		Both of us want to be tested before marriage 7	1 2
Other (specify) 8	1 2		
C624	When was the last time you had an HIV test?	Last year 1 More than one year ago 2 Don't remember 9	
C625	When you had your last HIV test, did you do it voluntarily or were you required to have the test?	Voluntary 1 Required 2 Don't know 3	
C626	After that last time that you got an HIV test, did you find out what the result of your test was?	Yes 1 No 2	2→C629
C627	In that last HIV test, what was the test result?	Positive 1 Negative 2 Unidentified 99	
C628	Did you tell your sexual partners what you HIV test result was?	Yes 1 No 2	

No	Question	Coding Answers	Skip	
C629	Did you encourage your partner to go get an HIV test?	Yes 1 No 2		
C630	Have you and your partner experienced couples counseling? <i>(couples counseling occurs when an intimate couple together receive advice/counseling from a trained therapist/counselor)</i>	Yes 1 No 2 Don't know 9		
C631	If the HIV test is not free, are you willing to pay for the HIV test?	Yes 1 No 2		
C632	Have you ever received the following HIV prevention supports? Read out the list. Circle all appropriate answers		Y	N
		Received condoms	1	2
		Received needles/syringes	1	2
		Received leaflets	1	2
		Received advice from fellow drug users	1	2
		Received advice from peer educators	1	2
		Received advice from health workers	1	2
		Received advice from mass organization workers	1	2
		Participated in a club	1	2
		Referred to STD examination and treatment	1	2
Other (specify)	1	2		

The Interview is completed here. Thank you very much for your help and time. Is there anything you want to discuss with us? Please go to the next room for counseling and to begin the testing procedure!