Integrated Bio-Behavioral Survey among Truckers in East-West Highways

Round III -2006

Family Health International

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ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
AMDA	Association of Medical Doctors of Asia
DIC	Drop-in-Center
ELISA	Enzyme Linked Immuno Assay
FHI	Family Health International
GWP	General Welfare Pratisthan
HIV	Human Immuno-Deficiency Virus
IBBS	Integrated Bio-Behavioral Survey
ID	Identification Number
IDU	Injecting Drug Users
IEC	Information, Education and Communication
MSW	Male Sex Worker
NCASC	National Center for AIDS and STD Control
NGO	Non-Governmental Organization
NHRC	Nepal Health Research Council
NTEA	Narayani Transport Enterprises Association
OE	Outreach Educator
PE	Peer Educator
PHSC	Protection of Human Subjects Committee
RA	Research Assistant
RPR	Rapid Plasma Regain
SACTS	STD/AIDS Counseling and Training Services
SLC	School Leaving Certificate
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infections
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

EXECUTIVE SUMMARY

This study is the third round of the integrated bio-behavioral survey (IBBS) conducted among truckers in Pathlaiya, Bara district. The IBBS was carried out during the months of January and March 2006. The survey measured HIV and syphilis prevalence among truckers and variables which are associated with risk of HIV infection, such as condom use, sexual behaviors, knowledge of HIV/AIDS, reported cases of sexually transmitted infections (STI), STI treatment behaviors, exposure to HIV/AIDS messages and drug habits. This survey was also undertaken to compare the findings for condom use and sexual behavior of truckers driving on the east-west highway with findings from the previous rounds. The previous two rounds of the survey were conducted in 1999 and 2003 in Hetauda.

Study Methodology

Study Population

This cross-sectional IBBS was conducted among mobile truckers (truck drivers and their helpers), one of the sub-groups of the clients of sex workers who are at high risk for STI/HIV transmission. The eligibility criterion for recruitment into the study was: "male truck driver aged 18 years or above or their helpers aged 16 years or above, who had been driving long distance trucks on east-west highways of Nepal.

Sampling

The study was designed to sample truckers driving in along the terai highways but all the recruitments were done at Pathlaiya in Bara district of Nepal. Previous two rounds had sampled truckers from Hetauda of Makawanpur district. In the preliminary field visit it was found that the syndicate system of truckers that was in practice previously was abolished and the truckers now had no compulsion to stop at Hetauda. So Pathlaiya was purposively selected as the study site in consultation with the transport associations as high number of trucks plying through the east-west highway stop here for getting new assignments, loading/unloading goods and for night halt purposes as well. Since this was the third round of IBBS among the truckers, the sampling procedure followed in the first and the second round was adopted studying this round also. The New ERA team visited the site for observing the flow of trucks through Pathlaiya. Once the average number of trucks passing through Pathalaiya was estimated and number of days allocated for interviews calculated a tentative average number of respondents to be recruited in a day was decided. As in the first and the second rounds the sample size in this round also was 400. The truckers were recruited on the basis of systematic interval (approximately one in five), and the recruitment process continued till the required sample size was reached.

Blood Sample Collection and HIV/Syphilis Testing

For collecting blood samples required for HIV and Syphilis testing, a clinic and laboratory were set up at the study site in Pathlaiya. After administering the structured questionnaire to the truckers, 5 cc blood was taken through venous draw. Syndromic treatment was provided for STIs after examination by a health assistant. All study

participants were provided pre test counseling for HIV and STIs before blood sample collection. Blood sample collection included testing for HIV and syphilis and physical examination for STIs and syndromic treatment was provided by SACTS (STD/AIDS Counseling and Training Services).

Findings

Socio Demographic Characteristics

- The age of the truckers ranged from 17-59 years and most of them were married. Around two percent of them were illiterate.
- Fifty one percent of the truckers belonged to Brahmin/Chhetri/Thakuri ethnic group. Tibeto Burman ethnic group like Gurung, Magar, Tamang, Rai, Limbu and Newar made up 34.8% of them.
- The truckers were away from their homes for the mean duration of 17.1 days in a month. Forty six percent of the married truckers spent around 15-21 days per month away from their homes.

Sexual Behavior

- Like in 2003 a majority of 98.3% of the truckers have had sexual contact with women. Around 64% of the truckers had their first sexual encounter at the age of 15-19 years. Almost 70% of the truckers had sex with sex workers too.

- Sixty three percent of the truckers had sexual contact with more than five sex workers till the date of the interview.

- Among the 400 respondents, 176 had sex with sex workers in the year preceding the survey; out of them 43.8% had sex with 2-3 sex workers.

- Thirty-eight truckers ever had sex with sex workers in India. Twelve of them had such contact in the past year.

- Eleven of the 12 truckers who had sexual contact with sex workers in India in the past year had been consistent condom users.

- Eighty three percent of the truckers had used condom consistently with sex workers and around 63% of them with their other female friends in the past year. Use of condoms was low with wives and girl friends.

Condom Availability

- Approximately 56% of the truckers said that they could get condoms within five minutes from the nearest place. Pharmacies were the most reported places for obtaining condoms (96.4%).

- Only 13.2% truckers obtained free condoms all the time and almost 48% of them always purchased them.

- Seventy percent of the truckers who had access to free condoms said that they obtained them from NGO/health workers/volunteers.

- The most popular brand of condoms among almost 52% of the truckers was Number One condoms.

- Radio and television were the most popular information sources regarding condoms for more than 90% of the truckers. Many had been aware through billboards/signboards, newspapers/posters/pamphlets and friends/neighbor/ relatives too.

Knowledge of HIV/AIDS

- All the truckers had heard about HIV/AIDS. Radio, newspaper/magazine and television were the most important sources of information for more than 90% of them. Many had collected information on HIV/AIDS through billboard/ signboard, pamphlet/posters and friends/relatives.

- More than 80% of the truckers were aware of messages like "*HIV/AIDS Bare Aajai Dekhi Kura Garau", "Condom bata Suraksha, Youn Swasthya Ko Rakshya", Youn rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai"* and "*Ramro sangha prayog gare jokhim huna dinna, bharpardo chhu santosh dinchhu jhanjat manna hunna"*

- Approximately 97% truckers were aware of all the three- A, B and C HIV/AIDS preventive measures. Slightly more than one half (52.3%) rejected the common local misconception that mosquito bite transmitted HIV virus.

- More than three-fourths of the truckers knew that they had access to confidential HIV test facilities in their community. However, only around 27% of them had been tested.

Knowledge and Treatment of STIs

- For around 60% of the truckers STI meant HIV/AIDS and 54% of them considered ulcer or sore around genital areas as STI symptoms.

- Thirty eight of the 400 truckers had experienced at least one STI symptom in the past year.

- The truckers had mostly visited private clinics for the treatment of STIs.

HIV and Syphilis Prevalence

- HIV prevalence rate among the truckers had slightly decreased since 2003. Out of 400 truckers, one percent of them (4/400) were found to be HIV positive. In 2003, 1.8% (7/400) of the truckers were HIV positive. However this drop in HIV prevalence is not statistically significant even at 5% significance level.

- Seven out of 400 (1.8%) truckers were found to be currently infected with syphilis and 34 (8.5%) respondents had a history of syphilis. The prevalence of syphilis history and current syphilis has slightly decreased since 2003 but the decrease is not statistically significant.

Exposure to HIV/AIDS Prevention Activities

- Around 12% of the truckers had, at least once, met peer educators (PEs) and/or outreach educators (OEs) from the various HIV/AIDS related programs and only six percent of them had visited drop-in-centers (DICs) in the past year. Almost four percent each of the truckers had visited STI clinic and VCT center in the year preceding the survey.

- The truckers had met PEs/OEs mostly from Association of Medical Doctors of Asia (AMDA) and General Welfare Pratisthan (GWP). The DICs that most of the truckers had visited were also run by the same organizations. For STI services the truckers had visited private clinic and AMDA clinic and of the truckers who had visited a VCT site, they had mostly visited the VCT centers run by AMDA.

- The participation of the truckers in HIV/AIDS awareness programs/ community events was also minimal with only 15% of them reporting to have ever been part of such events. Among them, almost 14% had participated in programs conducted by AMDA.

Recommendations

- The participation of truckers in HIV/AIDS awareness and prevention programs was minimal. Since truckers driving long distance routes are more likely to be engaged in sex with multiple partners, more programs targeting this particular group should be launched on the highways.

- The truckers do not use condoms consistently with familiar partners like their girlfriends and spouses. HIV/AIDS prevention programs should focus more on the need for consistent condom use for HIV/STI infection prevention purposes with all kinds of partners.

- Free condom distribution programs for the truckers through NGO/health workers/volunteers should be expanded further as a part of HIV/AIDS awareness campaign.

- Peer and outreach education should be continued at a larger scale to cover more truckers. At the same time, more DICs, STI clinics and VCT centers should be established to facilitate convenient access of the truckers to these services. Information about the existing facilities and the services should be disseminated at a wider scale.

- IEC materials like poster/pamphlets and billboard/signboards have been quite effective in disseminating HIV/AIDS awareness information to the target group. Such activities should be continued and further extended to cover major highways.

Chapter 1: INTRODUCTION

1.1 Background

Nepal is presently experiencing a concentrated HIV epidemic with prevalence at or over 5% in certain high risk groups such as injecting drug users (IDUs) and male sex workers (MSWs). The country's vulnerability to HIV has increased because of several socio-economic factors including poverty coupled with lack of employment opportunities, large-scale migration and ten years of conflict. Sex work is rampant and trafficking of women for sex work in the brothels in Indian cities is a perennial problem.

At the end of May 2006, a cumulative total of 6,650 cases of HIV infection had been reported to the National Center for AIDS and STD Control (NCASC). Among them, 51% were clients of FSWs or patients suffering from sexually transmitted diseases (STDs), 9% were FSWs and 21% were IDUs. Although the HIV/AIDS reporting system cannot measure the prevalence rate of the infection because of underreporting and delays in reporting, it indicates which sub-populations are affected.

The first ever HIV and STI prevalence survey, which covered 16 districts in the Terai along the East-West Highway, was conducted in 1999. The survey showed that 3.9% of the FSWs and 1.5% of the truckers were HIV-positive (New ERA/SACTS/ FHI, 2000). Moreover, behavioral surveillance surveys conducted among FSWs and their clients on the east-west highway and in the Kathmandu valley revealed that the sex trade was on an increasing trend and that a greater number of younger FSWs were entering the business (New ERA/SACTS/FHI, 2003 and New ERA, 2003). A recent study showed 52% HIV infection among male IDUs in Kathmandu. Similarly, 22% of the male IDUs in Pokhara, 32% in the urban areas of Jhapa, Morang and Sunsari districts in eastern Nepal and 12% in the highway districts between Rupandehi and Kanchanpur in the western to far western region were carrying the virus (New ERA/SACTS/FHI 2005_a; 2005_b; 2005_c, and 2005_d).

Interventions targeted at different HIV/AIDS vulnerable groups have been intensified over the years. Such interventions basically aim at bringing about behavioral change. Promotion of condom use as safe sex practice is one of the chief components of these activities. The first and the second rounds of studies conducted in 1999 and 2003 (New ERA/SACTS/FHI) showed HIV prevalence of 1.5% and 1.8% among truckers. This third round of IBBS in 2006 has been undertaken to compare the current trend of condom use practices and sexual behavior of the truckers with that of previous rounds findings. The results of this survey could be used to evaluate the package of interventions, determine their combined effect in maintaining low HIV prevalence and reducing the prevalence of other STIs among the study population, and adjust interventions so that they are more effective.

1.2 Objectives of the Study

The main objectives of the study were to determine the prevalence of HIV and syphilis among truckers who drive on east-west highways and to assess their HIV/STI related risk behaviors; and to analyze trends through comparison with data obtained from previous rounds of IBBS.

The specific objective of the study was to measure the prevalence of HIV and syphilis infection, STI syndromes and behavioral correlates among the truckers:

- Measure the prevalence of HIV and syphilis infection.
- Collect syndromic information on STIs such as Genital ulcers and urethral discharges.
- Measure knowledge and treatment of STI problems; knowledge and use of condom; and exposure to available HIV/STI services.
- Collect demographic, behavioral and biological correlates of HIV and syphilis infection.

Chapter 2.0: METHODOLOGY

2.1 Study Population and Study Site

This cross-sectional integrated bio-behavioral survey (IBBS) was conducted among truckers, who are considered to be one of the high-risk sub-groups of the clients of female sex workers. Eligibility criterion used in the study was "male truck drivers aged 18 years or above or their helpers aged 16 years and above intercepted at the Pathlaiya truck stop along the Mahendra Highway.

As in the previous rounds of IBBS among truckers all the terai highway is the study area. However all the recruitments were made from Pathlaiya. Pathlaiya is located in the central region of Nepal and lies at about 55 Kms. South - East of Hetauda from where participants were recruited in previous rounds. All the trucks originating from the eastern part including the neighboring parts of India across the eastern border have to pass through Pathlaiya to reach Kathmandu or western Nepal. Almost all of them stop at least once or twice in a month at Pathlaiya for getting new assignments, loading/unloading goods and for night halt purposes as well. They arrive at the site, put their name on a list, and wait for an assignment. The recruitment site was selected taking into consideration the convenience in establishing the mobile lab and meeting the study population also. The earlier two rounds of the study were conducted in Hetauda since all these activities used to take place at Limithana, Hetauda previously and were recently shifted to Pathlaiya.

2.2 Sample Design and Sample Size

The IBBS requires meticulous and cautious sampling procedures since the surveys need to be conducted repeatedly over a period of time in order to measure changes in the prevalence rate of HIV and STIs. To allow comparison of rates over time, the 2006 survey followed the same sampling procedure used in the IBBS with truckers in Hetauda conducted in 1999 and 2003. The New ERA team visited Pathlaiya to observe the flow of trucks and locate sites where the trucks stopped for new assignments, loading/unloading goods and for night halt purposes as well at least once or twice in a month. Once the average number of trucks passing through Pathlaiya was estimated and number of days allocated for interviews calculated a tentative average number of respondents to be recruited in a day were calculated. As in the previous two rounds, sample of 400 truckers was designed to detect a change of HIV prevalence of five percent or higher (Annex 1). The truckers were recruited on the basis of systematic interval (approximately one in five), and the recruitment process continued till the required sample size was reached.

2.3 Study Process

Once the randomly selected truckers were approached they were briefed about the objectives and methodology of the study. Then informed oral and witnessed consent was obtained from each selected truckers. Informed consent form was administered by the interviewer in a private setting and witnessed by another staff to insure that the study participants understood well the questions and about the services that would be provided to them and that they were participating in the study with informed consent.

Both the interviewer and the witness were required to sign the consent form and date it. This was followed by the interview with the full consent of the study participants. The interviewer administered the standard questionnaire in a private room.

The interviewer also provided pre-test counseling for HIV/Syphilis test and answered queries and concerns of respondents regarding STI/HIV/AIDS. The health assistant asked respondents if they were currently suffering from any of the STI symptoms. They were also examined physically for any evidence of STI symptoms and in case of any such sign, they were counseled accordingly. They were provided free medicines for syndromic treatment in accordance with the "National STI Case Management Guidelines 2001". As an incentive for the participants, a simple health check up, including height and weight measurements and blood pressure check was also done. Symptomatic STI patients were given medicine on the basis of syndrome management guidelines. Blood group and blood sugar levels was also determined. The decision to offer these tests as incentives was based on the demand of the study participants in the previous survey. The study participants with high blood pressure and sugar level were counseled and referred to local clinics or doctors. After the general examinations, blood samples were obtained. A lab technician drew a venous blood sample for HIV and syphilis testing. Additionally, a one-month supply of vitamins and iron and a small gift were also provided to the truckers.

The blood samples were tested for syphilis and HIV. A laminated ID card with a unique number was also issued to each respondent. The same number was used in the questionnaire, medical records and blood specimens of the particular respondent. The names and addresses of the respondents were not recorded anywhere. All participants were informed about the date and venue where they could collect their test results. The study participants were explained that they themselves were required to collect their test results with their ID card. Participants were informed that if they lost their card the study team would not be able to identify their test results. The HIV and syphilis test results were distributed by trained HIV/STI counselors.

The study team members coordinated with various local NGOs, namely, General Welfare Pratisthan (GWP), AMDA Nepal and FPAN. The New ERA team also collaborated with the sub-health posts and Narayani Transport Enterprises Association (NTEA) for the successful and timely completion of the study.

Fieldwork for the study started on January 18, 2006 and continued up to March 5, 2006.

Respondent's Consent

Informed consent was obtained in a private setting at the study site by study health worker/interviewer and witnessed by a second member of the study team. The purpose of the study and the activities of the study were explained in simple and understandable terms. The potential participants were informed that all information and discussions would remain confidential; their participation was voluntary; they could refuse to answer any questions; and that they were free to leave at any time of the interview. They were also informed that their participation or non-participation would in no way affect treatment that they would normally receive from the study center.

Refusal

All respondents participated voluntarily in the study. There were some truckers who refused to take part in the study. Their refusal however was also carefully documented. Refusals were recorded at two stages: (1) at the time when they were approached at different locations around Pathlaiya and (2) after their arrival at the study site, i.e., during the final stage of recruitment. Altogether 380 truckers refused to take part in the study. Among them, 367 truckers expressed their unwillingness to take part in the survey when they were approached by the study team members while 13 denied taking part in the survey after coming to the study site. Their refusals were based on various grounds; 275 of them said that they did not have time, 12 were scared of drawing blood for the test, 84 were not interested to take part in the study, 6 had already been to other Voluntary Counseling and Testing (VCT) center/clinic, and 3 were denied permission by the truck owner. Three truckers who had come for the interview did not meet the criteria set for the study participant.

2.4 Research Instrument

A quantitative research approach was adopted in the study. Since the studies conducted in 1999 and 2003 had very limited questions on HIV/AIDS and sexual behavior of the truckers many new questions were added to the structured questionnaire in 2006.

Inputs received from the field team during the mock interview sessions conducted prior to the survey were also duly considered for giving a final shape to the questionnaire. The questionnaire included questions on demographic characteristics and sexual behaviors - sexual history, use of condoms, risk perception, awareness of HIV/AIDS/STIs, incidence of STI symptoms, participation in HIV/AIDS awareness programs, and alcohol/drug using habits (Annex 2). Apart from the structured questionnaire, questions related to STI symptoms were asked to the truckers by a health professional to verify the occurrence of such symptoms in the past or during the survey. The study participants were provided syndromic treatment for STI problems and a lab technician collected blood samples for HIV/Syphilis testing. Strict confidentiality was maintained throughout the study period.

2.5 Study Personnel

The study was conducted by a team comprised of a study director, a research coordinator, a research officer, two research assistants and one field team.

The field team formed for the survey included one Research Assistant (RA), six male interviewers, one Health Assistant, one Lab Technician, one runner and one local motivator.

2.6 Recruitment and Training of Research Team

When selecting field researchers for the study, priority was given to researchers who had been involved in similar types of studies among FSWs, truckers, migrants, clients and IDUs.

A one-week intensive training was organized for all the field researchers focusing on the introduction to the study, administration of the questionnaire including characteristics of the target groups, methods of approaching them, rapport building techniques, and sharing of previous study experiences (problems and solutions). In addition, the training session also involved mock interviews, role-plays, class lectures, etc. Role-play practices were carried out assuming the actual field situation. Possible problems that could be faced while approaching the truckers and ways of overcoming such problems were discussed. The training also focused on providing a clear concept of informed consent, pre-test counseling and basic knowledge of HIV and STIs to the research team.

2.7 Implementation of the Study

The study was implemented in collaboration with SACTS. SACTS was responsible for setting up the mobile lab in the field sites, providing training to lab technicians, supervising and collecting blood samples, and conducting HIV and syphilis testing at their Kathmandu based laboratory. New ERA's responsibility was to design research methodology including the sampling method, prepare the questionnaire, distribute STI results to the study participants with post-test counseling and manage the overall clinical aspects of the study. Many local organizations also provided assistance for the successful completion of the survey.

2.8 Field Operation Procedures

Clinical Set-up

Clinics were set up at a centrally located site considering convenient access for the study population. The clinic had a lab facility for blood drawing and centrifuging the blood for separation of sera. There was a separate room for each activity, including administration of the questionnaire.

Clinical Procedures

The truckers were offered clinical examination as incentives to participate in the study. The clinical examination included simple health check up such as measurement of blood pressure, body temperature, weight, pulse, and symptomatic examination of STI with syndromic treatment. A STI symptomatic check list was filled by the health assistant as per the information provided by the truckers (Annex 3). The participants were examined physically for genital ulcer or urethral discharge. After the examination they were sent to the laboratory room where 5 cc blood was taken from the vein of arm. Those truckers with STI symptoms were also provided syndromic treatment according to the national guidelines. Other over-the- counter medicines such as para-cetamol, alkalysing agents and vitamins were also provided as necessary

Laboratory Methods

Syphilis was tested using Rapid Plasma Regain (RPR) test card manufactured by Becton Dickinson and Company, and confirmed by means of the Serodia *Treponema pallidum* particle agglutination test TPHA; Fujirebio Inc., Tokyo, Japan). TPHA positive and all samples with positive RPR were further tested for the titre of up to 64

times dilution. On the basis of titre of RPR, all the specimens with RPR/TPHA positive results were divided into two categories.

- TPHA positive with RPR-ve and RPR with Titre $\leq$ 1:8 - history of syphilis
- TPHA positive with RPR titre 1:8 or greater – Active syphilis

HIV was detected by repeat positives of two separate enzyme linked immuno assays (ELISAs), so each sample underwent up to three separate tests. If the first ELISA test showed negative result then no further test was conducted, but if the first test showed positive result then a second ELISA test was performed. If the second result too confirmed the first result then no further test was performed. But if the second result contradicted with the first then a third test was done. The final test results thus were declared positive if the test results showed +ve, -ve, +ve and negative if it gave out +ve, -ve, -ve). The proposed testing protocol is based on WHO guidelines (strategy 3) and the National VCT Guidelines of Nepal developed by the NCASC.

Storage and Transportation of Samples

Blood samples for the HIV/Syphilis test were collected from each of the study participants using a 5ml disposable syringe. Serum samples were separated from the collected blood samples and stored in the fridge in the field. Selected samples were transported to SACTS laboratory in Kathmandu every week in a cold box. The serum samples were stored at the SACTS laboratory at a temperature of -12 to -20°C.

Quality Control of Laboratory Tests

Quality control was strictly maintained throughout the process of the collection of the specimen, their handling and testing stages. All the tests were performed using internal controls. These controls were recorded with all the laboratory data. A total of 10% sample selected randomly of the total serum collected was also sent for quality control assurance to an independent Laboratory for testing for HIV and syphilis.

2.9 Coordination and Monitoring

New ERA carried out the overall coordination of the study. New ERA sub-contracted SACTS to set up the field clinic and perform the laboratory and clinical part of the study including collecting, storing and testing samples.

The Key study team member conducted frequent monitoring and supervision of the field activities. New ERA study team members visited the field once or twice a week to monitor the fieldwork and coordinated with various concerned organizations. The field research assistant was responsible on a day-to-day basis to ensure that the study was implemented according to the protocol in the field. Team meetings were held every week to plan ahead and solve any field level problems. The field research assistant reported to the project coordinator in Kathmandu by telephone whenever necessary. New ERA coordinated with FHI to send an appropriate person to the field to deal with any problems reported from the field as and when necessary. In addition, the principal investigators made periodic site visits throughout the fieldwork. The key

study team members in conjunction with other designated personnel, were responsible for the overall monitoring.

2.10 Ethical Issues

Ethical approval was obtained from the Nepal Health Research Council (NHRC), the government's ethical clearance body, which approved the protocol, consent forms and draft questionnaires and additionally from the Protection of Human Subjects Committee (PHSC) of Family Health International.

The participants involved in the in-depth interviews and sample surveys were fully informed about the nature of the study. They knew that their participation was voluntary and that they were free to refuse to answer any question or to withdraw from the interview at any time. Further, they were also briefed that such withdrawal or refusal would not affect the services they would normally receive from the study. A consent format describing the objectives of the study, the nature of the participant's involvement, the benefits and confidentiality issues was given for their reading/read out to them (Annex 4).

Since the names and addresses of the interviewed truckers were not mentioned in any record, only the ID cards that were provided to the study participants with specific number identified them. HIV test results were provided to the individual participants in strict confidence. The study team also maintained the confidentiality of the data collected through the survey.

2.11 HIV/STI Pre- and Post-Test Counseling and Follow-Up

After the collection of the blood samples all the study participants were informed about the date, location and place where they could have the test results. They were also informed that they could collect their test results only by showing the ID card bearing their study number that was provided to them by the study team. Pre and post HIV/STI test counseling were provided to the study participants. They were briefed about the importance of receiving the test result and when and where they could receive their HIV and STI results with post-test counseling. For follow-up services, the study participants were referred to nearby counseling centers. Trained HIV/STI counselors distributed the test results two weeks after blood collection (Annex 5).

The study participants had the choice to receive either the HIV result or the syphilis result or both. They were well informed during the pre-test counseling about their options.

Post test counseling and individual report dissemination was completed between February 21 to March 19, 2006. Out of the 400 truckers tested for HIV and Syphilis 105 (26.3%) turned up to receive their test results (Annex 5). Such low turn over was because many truckers had done the test prior to the survey and were not interested to know the result. Some of them had also been away on their job during report dissemination period. Test results were provided by a trained counselor in a private setting.

2.12 Control of Duplication

Every effort was made to avoid duplication or repeated interview with the same trucker. Since Pathlaiya was the only study site for truckers, there was low possibility of their repeated participation in the study. Furthermore, the local motivator hired for the study had been working for NTEA and knew most of the truckers. This also minimized the possibility of duplication. The lab technicians, who also met all the participants, were alerted to the possibility of duplicate interviews and instructed to be cautious in order to avoid this repetition.

Further, required blood for the test was taken out only from the left arm of all the participants. Such measures also lowered the possibility of repeated interview of the same trucker.

2.13 Constraints in the Field Work

Nepal *bandhs* (strikes) called during the fieldwork affected the flow of trucks making it difficult for the study team to meet the study population. Similarly, because of the imposition of curfew at certain places, the truck drivers in many instances were not ready to stop for the interview.

2.14 Data Processing and Analysis

All the completed questionnaires were thoroughly checked by the field supervisors in the field, and were brought to New ERA for further checking, coding, processing, data entry and analysis. Double data entry system was used to minimize errors in the data entry. Simple statistical tools such as mean, median, frequency and percentages were used to analyze the data. The FoxPro database program was used for data entry and the data was analyzed using the SPSS package.

Chapter 3.0: KEY FINDINGS

A total of 400 truck drivers including their helpers participated in the study. All of them were recruited from Pathlaiya, where a mobile lab was established to collect blood specimens and to administer the questionnaire. The first and the second rounds of similar studies among truckers in 1999 and 2003 were conducted at Hetauda, which lies at about 55 kms from Pathlaiya. Pathlaiya is located in the central region of Nepal. All the trucks originating from the eastern part including the neighboring parts of India across the eastern border have to pass through it and most of them stop at Pathlaiya to go to Kathmandu or western Nepal. Therefore, Pathalaiya was selected as the site for the recruitment of the study population because of frequent turnover of large number of truckers. This is the site where truckers congregate to get assignments for various trucking jobs.

Very few variables of this 2006 study could be compared with that of the previous rounds of studies conducted in 1999 and 2003 as limited behavioral and STI/HIV/AIDS related questions were used previously.

3.1 Socio-Demographic Characteristics

The socio-demographic characteristics of the truckers did not vary much from 2003 study. The truckers were almost of the same age group as reported in 2003 with their median age being 27 years, and their ages ranging from 17 to 59 years. Only few (1.7%) were illiterate (6.5% in 2003) and almost 10% more truckers than in 2003 had passed SLC. The majority of the truckers (79.3%) were married. Sixty-four of the truckers who were either unmarried or did not have their spouses with them were living with their parents. The truckers mostly belonged to Brahmin/Chhetri/Thakuri community (51%). Tibeto-Burman communities (Gurung, Magar, Tamang, Rai, Limbu and Newar) also made up 34.8% of them (Table 1).

Table 1: Socio-Demographic Characteristics of Truckers

Characteristics	2003		2006	
	N	%	N	%
Age of Respondent				
17 – 19	11	2.8	7	1.7
20 – 24	118	29.5	116	29.0
25 – 29	116	29.0	116	29.0
30 – 34	78	19.5	80	20.0
35 – 59	77	19.2	81	20.2
Mean/Median Age:		28.9/27.0		28.9/27.0
Total	**400**	**100.0**	**400**	**100.0**
Education				
Illiterate	26	6.5	7	1.7
Literate, no schooling	18	4.5	28	7.0
Grade 1 – 5	136	34.0	136	34.0
Grade 6 – 9	215	57.8	186	46.5
SLC and Above	5	1.2	43	10.7
Total	**400**	**100.0**	**400**	**100.0**
Marital Status				
Married	292	73.0	315	78.8
Divorced/Separated/ Widower	4	1.0	2	0.5
Never Married	104	26.0	83	20.7
Total	**400**	**100.0**	**400**	**100.0**

Table 1: Cont'd…

Characteristics	2003		2006	
	N	%	N	%
Ethnic/Caste Group				
Brahmin/Chhetri/Thakuri	-	-	204	51.0
Gurung,/Magar/Tamang/Newar/Rai/Limbu	-	-	139	34.8
Damai/Sarki/Kami	-	-	17	4.2
Terai Caste (Yadav/Tharu/Teli/Kusuwah/Musalman/Dhanuk/Chamar/Kanu/Paswan)	-	-	26	6.5
Others (Sanyasi, Majhi, Sunuwar, Gaine & Bhujel)	-	-	14	3.5
Total	**-**	**-**	**400**	**100.0**
Currently Living With				
Parents	-	-	64	75.3
Male Friends	-	-	9	10.6
Others (Relatives)	-	-	8	9.4
Alone	-	-	3	3.5
Female Friends	-	-	1	1.2
Total	**-**	**-**	**85**	**100.0**

Note: Blank cells in the 2003 columns indicate that no such information was collected in 2003 survey.

3.2 Mobility of the Truckers

The truckers are mobile population and their profession keeps them away from their homes and families for fairly long intervals. Forty six percent of the married truckers reported that they spent around 15-21days per month away from their families; 51.7% of them had reported so in 2003. Some (28.9%) also reported to be away from their homes for as long as 22-29 days in a month. The truckers were away from their family for the mean duration of 17.1 days in a month.

In order to know their mobility across east-west part of Nepal, the truckers were also asked if they had ever driven a truck from Butwal further west to Mahendranagar. Butwal is the next important town to the west after Narayanghat, which is the intersection from where the highway to Kathmandu branches off. Mahendranagar is situated in the far Western Terai close to the border with India. As in 2003, a majority of the truckers (87.8%) had ever driven their trucks from Butwal to Mahendranagar. Among them 52.4% had driven trucks through the route in the past year.

Among the 400 truckers, only 17% had ever driven their trucks to India. Many of them (48/68 or 70.5%) had driven their trucks to India more than three months before the survey (Table 2).

Table 2: Mobility of Truckers

Truck Driven to Different Part of Nepal and to India	2003		2006	
	N	%	N	%
Married Truckers: Days per Month Away from Family				
Up to 7 Days	19	6.5	40	12.7
8 – 14 Days	69	23.6	39	12.4
15 – 21 Days	151	51.7	145	46.0
22 – 29 Days	53	18.2	91	28.9
Mean Days Away from Family in a Month		**16.2**		**17.1**
Total	**292**	**100.0**	**315**	**100.0**
Ever Driven Truck from Butwal to Mahendranagar				
Yes	360	90.0	351	87.8
No	40	10.0	49	12.3
Total	**400**	**100.0**	**400**	**100.0**
Driven Truck from Butwal to Mahendranagar in the Past Year				
Yes	232	64.4	184	52.4
No	128	35.6	167	47.6
Total	**360**	**100.0**	**351**	**100.0**
Trucks Ever Driven to India				
Yes	30	7.5	68	17.0
No	370	92.5	332	83.0
Total	**400**	**100.0**	**400**	**100.0**
Last Time Truck Driven to India				
Last week	-	-	3	4.4
1 - 2 weeks ago	-	-	2	2.9
3 - 4 weeks ago	-	-	8	11.8
2 - 3 months ago	-	-	7	10.3
More than 3 months ago	-	-	48	70.6
Total	**-**	**-**	**68**	**100.0**

Note: Blank cells in the 2003 columns indicate that no such information was collected in 2003 survey.

3.3 Sexual Behavioral

The truckers were asked certain questions relating to their sex partners and sexual practices. The proportion of truckers who admitted ever having sexual intercourse with women (98.3%) was as high as in 2003. Among them, 63.9% had their first sexual encounter at the age of 15-19 years. Of the 393 truckers who ever had sex with women, 69.7% (86.3% in 2003) said that they had sex with a sex worker (Table 3).

A total of 176 truckers had sex with sex workers in the year preceding the survey (Table 4). Among them, a majority of 66.5% had met sex workers in places like hotel, restaurant, *bhatti pasal*, and the sex workers' homes (Table 3). In 2003 most of them (51.7%) had reported of such encounters with sex workers in outdoor locations as street, forest, truck and bus-parks. This is primarily because many hotels, restaurants, and teashops have started their business in the highways over the three years duration. As additional information to 2003 study, the truckers were also asked about the places where they had their last sexual act with a sex worker. Sex worker's house, truck/bus and hotel/lodges were reported as some such places by 39.2%, 29% and 20.5% of the truckers respectively. Around 55% of them had paid Rs. 101-500 to the sex worker for the last sex. The truckers had paid about Rs. 230 per visit to a sex worker in an average (Table 3).

Table 3: Sexual Behavior of Truckers

Sexual Behavior of Truckers	2003		2006	
	N	%	N	%
Ever Had Sex with a Woman				
Yes	394	98.5	393	98.3
No	6	1.5	7	1.8
Total	**400**	**100.0**	**400**	**100.0**
Age at First Sex				
11 –14	-	-	29	7.4
15 – 19	-	-	251	63.9
20 – 24	-	-	105	26.7
25 – 31	-	-	8	2.0
Mean/Median				18.2/18.0
Total	**-**	**-**	**393**	**100.0**
Ever Had Sex with a Sex Worker				
Yes	340	86.3	274	69.7
No	54	13.7	119	30.3
Total	**394**	**100.0**	**393**	**100.0**
Place Where the Last Sex Worker was Met				
Indoors (hotel, diner, *bhatti*, SW's home)	82	46.6	117	66.5
Outdoors (street, forest, truck, bus park, etc.)	91	51.7	56	31.8
Others	3	1.7	3	1.7
Total	**176**	**100.0**	**176**	**100.0**
Place Where the Truckers had Last Sex with FSW				
Sex Worker's House	-	-	69	39.2
Truck/Bus	-	-	51	29.0
Hotel/Lodge	-	-	36	20.5
Forest/Bushes/Park/Open Field	-	-	18	10.2
Other people's House	-	-	2	1.1
Total	**-**	**-**	**176**	**100.0**
Amount of Money Given to FSW for the Last Sex				
Not paid	9	5.1	0	0.0
Up to Rs. 50	54	30.7	18	10.2
Rs. 51 to Rs. 100	54	30.7	51	29.0
Rs. 101 to 500	55	31.2	96	54.5
Rs. 501 and above	4	2.3	11	6.3
Mean Rs. Paid to FSW		**138.20**		**229.24**
Total	**176**	**100.0**	**176**	**100.0**

Note: Blank cells in the 2003 columns indicate that no such information was collected in 2003 survey.

The mean number of sex workers visited by the truckers in Nepal till the survey was 23.5. Out of 400 truckers, 273 have had sexual contact with sex workers in Nepal. As high as 63% of the truckers reported having sexual contact with more than five sex workers in Nepal. A total of 176 truckers had visited sex workers in the past year, and 43.8% of them had sex with 2-3 sex workers. The truckers who had visited 4-5 and more than 5 sex workers in the past year were 14.8% and 19.3% respectively. Twenty-three of these truckers had last sex with them in less than a week prior to the survey (Table 4).

Ninety-eight (56%) truckers did not have sex with sex workers in the past month and 40 of them had one such encounter. Thirteen truckers (7.4%) also had more than six such sexual contacts in the past one-month.

A majority of the truckers (74.3%) had their last sex with their wives. Slightly more than 16% of them had been to a sex worker for the last sex (Table 4).

Table 4: Sex Practices of Truckers

Sex Practices of Truckers	2006	
	N	%
Had Sex with FSW in the Past Year		
Yes	176	64.2
No	98	35.8
Total	**274**	**100.0**
Total Number of FSWs Visited in Nepal		
1	7	2.6
2-3	42	15.4
4-5	52	19.0
>5	172	63.0
Mean/Median		**23.5/9.0**
Total	**273**	**100.0**
Number of FSWs Visited in the Past Year		
1	39	22.2
2-3	77	43.8
4-5	26	14.8
>5	34	19.3
Mean/Median		**6.4/3.0**
Total	**176**	**100.0**
Frequency of Sex with FSWs During Past One Month		
0	98	55.7
1	40	22.7
2	13	7.4
3-4	6	3.4
5-6	6	3.4
More than Six	13	7.4
Total	**176**	**100.0**
Last Sex Partner		
Wife	297	74.3
FSW	65	16.3
Girl Friend	15	3.8
Other Female Friend	14	3.5
Male Friend	1	0.3
No Sexual Intercourse in the Last 12 Months	1	0.3
Never Had Sex	7	1.8
Total	**400**	**100.0**
Last Sex with FSW		
Less than a week ago	23	13.1
1 - 2 weeks ago	31	17.6
3 - 4 weeks ago	24	13.6
2 - 3 months ago	69	39.2
More than 3 months ago	29	16.5
Total	**176**	**100.0**

Out of the 274 truckers who had sex with sex workers, thirty-eight (13.9%) ever had sex with sex workers in India. In 2003 survey only 8.8% of such truckers had reported so. Nineteen truckers had visited one sex worker in India so far, while eight of them had been to more than five such sex workers. Twelve truckers had sexual contact with sex workers in India in the past year; among them seven had visited them more than three months prior to the date of interview. Eleven of the 12 truckers who had visited a sex worker in India in the past year had used a condom during their last sex and had also been consistent condom users (Table 5).

Table 5: Sex Practices of Truckers in India

Sex Practices of Truckers	2003		2006	
	N	%	N	%
Ever Had Sex with FSWs in India				
Yes	30	8.8	38	13.9
No	310	91.2	236	86.1
Total	**340**	**100.0**	**274**	**100.0**
Total Number of FSWs Visited in India in Lifetime				
1	14	46.7	19	50.0
2-3	8	26.7	7	18.4
4-5	5	16.7	4	10.5
>5	3	10.0	8	21.1
Mean/Median		**2.7/2.0**		**7.3/1.0**
Total	**30**	**100.0**	**38**	**100.0**
Sex with FSWs in the Past Year in India				
Yes	8	26.7	12	31.6
No	22	73.3	26	68.4
Total	**30**	**100.0**	**38**	**100.0**
Condom Use with FSW during Last Sex in India				
Yes	-	-	11	91.7
No	-	-	1	8.3
Total	**-**	**-**	**12**	**100.0**
Consistent Use of Condom with FSW in the Past Year in India				
Always	6	75.0	11	91.7
Not Always	2	25.0	1	8.3
Total	**8**	**100.0**	**12**	**100.0**

3.4 Condom Use with Different Partners

As seen in Table 6 below, the truckers had different sex partners in the year preceding the survey. These partners were their wives, girlfriends, other female friends, sex workers and male partners. Condom use in the last sex with sex workers was the highest with 90% of 176 truckers reporting so. However, only 6.4% of the married truckers had used condom in their last sexual contact with their spouses. Condom use in last sex with other female friends and their girl friends was reported by 68.8% and 46.2% of the respondents. In most of these cases, the truckers themselves had suggested the use of condom (Table 6).

Table 6 also shows the pattern of condom use among the truckers according to the type of their sex partners including sex workers. The truckers had consistently used condoms mostly with sex workers and their other female friends in the past year. Among those who had sex with sex workers in the past year, 83% of the truckers had used condoms every time. Consistent condom use was reported by 62.5% of the truckers who had sex with their female friends in the past year. However, consistent use of condoms with girlfriends was 40.4% (21/52) and with wives only 2.6% (8/313). This indicates that the truckers tended to neglect using a condom when having sex with known partners. Two of the three respondents who had sexual contact with other male partners had consistently used condoms.

Unavailability of condoms was mentioned as the reason for not using them by 20 of the 30 truckers who had not been consistent condom users with sex workers in the past year. Most of the truckers also did not use a condom consistently with their wives (91.1%) and girlfriends (61.3%) because they did not consider it necessary.

Table 6: Truckers' Sex Behavior and Condom Use with Different Types of Sex Partners

Sex Behavior and Condom Use	2006									
	FSW		Wife		Girl Friend		Other Female Friend		Male Sex Partner	
	N	%	N	%	N	%	N	%	N	%
Had Sex in the Past Year with										
Yes	176	64.2	313	99.4	52	13.2	64	16.3	3	0.8
No	98	35.8	2	0.6	341	86.8	329	83.7	390	99.2
Total	**274**	**100.0**	**315**	**100.0**	**393**	**100.0**	**393**	**100.0**	**393**	**100.0**
Use of Condom During the Last Sex										
Yes	158	89.8	20	6.4	24	46.2	44	68.8	2	66.7
No	18	10.2	293	93.4	28	53.8	20	31.2	1	33.3
Total	**176**	**100.0**	**313**	**100.0**	**52**	**100.0**	**64**	**100.0**	**3**	**100.0**
Person to Suggest Condom Use During Last Sex										
Myself	132	83.5	20	100.0	18	75.0	42	95.5	1	50.0
My partner	28	16.5	0	0.0	6	25.0	2	4.5	1	50.0
Total	**158**	**100.0**	**20**	**100.0**	**24**	**100.0**	**44**	**100.0**	**2**	**100.0**
Consistent Use of Condom in the Past Year										
Every time	146	83.0	8	2.6	21	40.4	40	62.5	2	66.7
Most of the time	20	11.4	11	3.5	3	5.8	7	10.9	0	0.0
Sometimes	2	1.1	23	7.3	4	7.7	5	7.8	0	0.0
Rarely	3	1.7	37	11.8	3	5.8	4	6.3	0	0.0
Never	5	2.8	234	74.8	21	40.4	8	12.5	1	33.3
Total	**176**	**100.0**	**313**	**100.0**	**52**	**100.0**	**64**	**100.0**	**3**	**100.0**
Reason for Not Using Condom Consistently										
Not available	20	66.7	2	0.7	7	22.6	6	25.0	0	0.0
Didn't like to use it	10	33.3	19	6.2	5	16.1	6	25.0	0	0.0
Didn't think it was necessary	9	30.0	278	91.1	19	61.3	11	45.8	1	100.0
Partner Objected	0	0.0	5	1.6	5	16.1	3	12.5	0	0.0
Used Other Contraceptive	0	0.0	71	23.3	0	0.0	0	0.0	0	0.0
Wanted a child	0	0.0	12	3.9	0	0.0	0	0.0	0	0.0
Others	1	3.3	1	0.3	3	9.7	1	4.2	0	0.0
Total	**30**	*****	**305**	*****	**31**	*****	**24**	*****	**1**	*****
Frequency of Sex in the Past One Month										
0	98	55.7	13	4.2	30	57.7	44	68.8	-	-
1	40	22.7	12	3.8	9	17.3	6	9.4	-	-
2	13	7.4	24	7.7	5	9.6	3	4.7	-	-
3-4	6	3.4	52	16.6	2	3.8	6	9.4	-	-
5-6	6	3.4	41	13.1	4	7.7	3	4.7	-	-
More than 6	13	7.4	171	54.6	2	3.8	2	3.1	-	-
Mean		**1.8**		**8.8**		**1.3**		**1.0**	**-**	**-**
Total	**176**	**100.0**	**313**	**100.0**	**52**	**100.0**	**64**	**100.0**	**-**	**-**

Table 7 below show the data obtained from 2003 and 2006 studies regarding the condom use trend among the truckers with their different partners in the year before the survey. Only data available for both the studies is shown in this table. In 2006 more truckers (64.2%) than in 2003 (51.8%) had sexual contact with sex workers in Nepal in the year preceding the survey. The proportion of truckers who had sexual contact with sex workers in India during the period was 26.7% the same as reported in 2003.

A relatively higher proportion of truckers than in 2003 study had consistently used condoms with sex workers both in India and Nepal. Condom use with sex workers in Nepal had increased by 12% while it had increased by almost 16% with sex workers in India since 2003. However, condom use with familiar partners like girlfriends and spouses was still low. Almost the same proportion of truckers as reported in 2003 (2.6%) had been consistent condom users with their wives, and a slightly higher proportion than reported in 2003 (40.4%) had used condoms consistently with their girlfriends. In 1999, approximately four percent and 17% respondents had used condoms consistently during sexual contact with their wives and with their girlfriends (Table 7).

Table 7: Condom Use Trend with Different Types of Sex Partners

	1999			2003			2006		
	N	N	%	N	N	%	N	N	%
Sex in the Past Year with									
FSWs (in Nepal)	-	-	-	340	176	51.8	274	176	64.2
FSWs (in India)	-	-	-	30	8	26.7	30	8	26.7
Consistent Use of Condom in the Past Year with									
FSWs (in Nepal)	-	-	-	176	125	71.0	176	146	83.0
FSWs (in India)	-	-	-	8	6	75.0	12	11	91.1
Wife	232	9	3..9	292	8	2.7	313	8	2.6
Girl Friend	88	15	17.0	51	19	37.3	52	21	40.4

Blank cells in the 1999 columns indicate that no such information was collected in 1999 survey.

3.5 Availability of Condoms and their Brand Names

Truckers were also asked whether they usually carried condoms with them. Around 59% of them replied positively. More than half (55.5%) of the truckers said that they could get condoms within five minutes from the nearest place. Only around 13% of the truckers said that it took more than 15 minutes for them to get condoms from the nearest place.

A majority of the truckers (96.4%) reported that they could get condoms from pharmacies. The general retail stores (67.2%) and *paan* shop (61.3%) were mentioned as second in importance for obtaining condoms (Table 8).

The truckers were further asked about the mode of availability and the places from where they could obtain condoms. Around 48% of the truckers mentioned that they always purchased condoms, 13.2% of them obtained free condoms all the time and 17.3% of them obtained it both ways. Among those 120 truckers who reported obtaining free condoms all the time or occasionally, 70% said that NGO/health workers/volunteers provided free condoms for them. Health post/center and peers/friends were reported as the next important sources of free condoms by 40.8% and 24.2% of the truckers respectively.

Among 255 truckers who purchased condoms all the time or occasionally, a majority of them (94.9%) went to pharmacies to buy them. Some of them also got it from *paan* shops (27.5%) and general retail stores (23.9%) (Table 8). When asked about their opinion on the most convenient places for them to purchase condoms, almost 92% of the truckers said that pharmacies were the best places while 19.2% of them maintained that they could conveniently purchase condoms from *paan* shops (Data not shown in Table).

Table 8: Condoms Obtaining Places and Brand Name of Most Used Condom Reported by Truckers

Condom Acquisition	2006	
	N	%
Usually Carry Condoms		
Yes	235	58.7
No	158	39.5
Never had sex	7	1.7
Total	**400**	**100.0**
Time Needed to Obtain Condoms from Nearest Place		
Up to 5 minutes	218	55.5
6 – 10 minutes	91	23.2
11 – 15 minutes	27	6.9
16 – 20 minutes	21	5.3
21 and more minutes	29	7.4
Don't Know	7	1.2
Total	**393**	**100.0**
Places Where Condoms are Available		
Pharmacy	379	96.4
General Retail Store (Kirana Pasal)	264	67.2
Paan Shop	241	61.3
NGO/Health Workers/Volunteers	192	48.9
Health Post/ Health Center	139	35.4
Private Clinic	67	17.0
Hospital	66	16.8
Check Post (Nagdhunga & others)	33	8.4
Peer/Friends	26	6.6
FPAN Clinic	19	4.8
Bar/Guest House/Hotel	17	4.3
Others	13	3.4
Total	**393**	*****
Mode of Usually Obtaining Condom		
Purchase	187	47.6
Always free of cost	52	13.2
Obtain both ways	68	17.3
Condom never used	86	21.9
Total	**393**	**100.0**
Usually Obtain free Condom from		
NGO/Health workers/Volunteers	84	70.0
Health Post/Health Center	49	40.8
Peers/friends	29	24.2
Check Post (Nagdhunga & others)	16	13.3
Hospital	9	7.5
FPAN clinics	4	3.3
Others	7	5.8
Total	**120**	*****
Places of Purchasing Condom		
Pharmacy	242	94.9
Pan Shop	70	27.5
General retail store (*Kirana Pasal)*	61	23.9
Private clinic	11	4.3
Others	1	0.4
Total	**255**	*****
Brand Names of Condoms Used Most		
Number 1	207	51.8
Panther	77	19.3
Jodi	52	13.0
Dhaal	47	11.8
Kamasutra	23	5.8
Black Cobra	22	5.5
Others	8	2.0
Brands Not Known (Condom without brand)	19	4.8
Not Used in the Past Year	150	37.5
Total	**400**	*****

Note: The percentages add up to more than 100 because of multiple responses.

The truckers were queried about the brand names of the condoms they mostly used. Condoms available under the brand name of Number One were the most popular brand among 51.8% of them.

Sources of Knowledge of Condoms

As shown in Table 9, the radio was the most popular source of information on condoms as mentioned by 97.7% of the truckers. Television came up as the second most popular information source (93.8%). As a positive implication of the ongoing condom awareness programs, a majority of the truckers reported that they had heard of condoms from sources like billboard/signboards (86.3%), newspaper/poster/ pamphlets (85%) and friend/neighbor/relative (83.8%). A good number of them had also derived the information through NGOs (51%). Other sources of their information on condoms have been shown in Table 9.

Table 9: Sources of Knowledge of Condom as Reported by Truckers

Knowledge and Source of Knowledge of Condoms	2006	
	N=400	%
Sources of Knowledge of Condoms		
Radio	388	97.7
Television	375	93.8
Billboard/Signboard	345	86.3
Newspaper/Poster/Pamphlets	340	85.0
Friend/Neighbor/Relatives	335	83.8
Pharmacy	309	77.3
Health Post/ Health Center	218	54.5
NGOs	204	51.0
Health Worker/Volunteer	198	49.5
Hospital	177	44.3
Street Drama	161	40.3
Cinema Hall	138	34.5
Comic Book	99	24.8
Video Van	52	13.0
Community Event/Training	49	12.3
Community Workers	65	16.3
Other	6	1.5

Note: The percentages add up to more than 100 because of multiple responses.

3.6 Knowledge of HIV/AIDS

All the truckers had heard about HIV/AIDS. Most of the truckers reported that radio (96.5%), newspaper/magazine (95.8%) and television (93%) were the major sources of their information on HIV/AIDS. The ongoing HIV/AIDS prevention activities have been quite successful in reaching the truckers with HIV/AIDS awareness messages as a considerable proportion of the truckers reported that their sources of knowledge on HIV/AIDS were billboard/signboard (85.8%), pamphlet/posters (84%), friend/ relatives (83.8%). People from NGOs were reported as their sources of information on HIV/AIDS by 48.5% of the truckers (Table 10).

Table 10: Sources of Knowledge of HIV/AIDS among Truckers

Ever Heard of an Illness Called HIV/AIDS	2006	
	N=400	%
Yes	**400**	**100.0**
Sources of Knowledge of HIV/AIDS:		
Radio	386	96.5
Newspaper/Magazine	383	95.8
Television	372	93.0
Billboard/Signboard	343	85.8
Pamphlet/Poster	336	84.0
Friends/Relatives	335	83.8
People from NGOs	194	48.5
Workplace	186	46.5
Health Workers	179	44.8
Street Drama	161	40.3
Cinema Hall	136	34.0
Comic Book	96	24.0
Community Workers	67	16.8
Community Event/Training	48	12.0
Video Van	46	11.5
School/Teacher	29	7.3
Other Sources	7	1.8

Note: The percentages add up to more than 100 because of multiple responses.

Table 11 shows the extent of knowledge of **A** (abstinence from sex) **B** (being faithful to one partner or avoiding multiple sex partners) **and C** (consistent condom use or use of condom during every sex act) among the truckers for avoiding HIV/AIDS. More than 97% of the truckers were aware of each of these three major ways of avoiding HIV/AIDS. Overall, approximately 97% truckers identified all the three- AB and C as HIV/AIDS preventive measures. Additionally, 95.3% knew that a healthy looking person can be infected with HIV and 88.8% rejected that sharing of meal with an HIV infected person transmitted HIV. Slightly more than one half (52.3%) rejected the common local misconception that mosquito bite transmitted HIV virus. In total, 50.5% of the respondents (Table 11) were aware of five major indicators of HIV transmission.

Table 11: Percentage of Truckers who have Knowledge of Major Ways of Avoiding HIV/AIDS

HIV Preventive Measures	2006	
	N=400	%
A Can protect themselves through **a**bstinence from sexual contact	391	97.8
B Can protect themselves through monogamous sexual contact	394	98.5
C Can protect themselves through condom use every time during sex	393	98.3
D A healthy-looking person can be infected with HIV	381	95.3
E A person can not get the HIV virus from mosquito bite	209	52.3
F Can not get HIV by sharing a meal with an HIV infected person	355	88.8
Knowledge of all three **ABC**	387	96.8
Knowledge of all five **BCDEF**	202	50.5

Note: The Percentage add up to more than 100 because of multiple responses

The truckers were also asked if they were aware of any person infected with HIV or who had died of AIDS. A relatively large number of the truckers (263/400) replied positively. Of them, 11 truckers (4.2%) had their close relative and 40 (15.2%) of them had their close friend who had suffered from HIV/AIDS or had succumbed to it.

The truckers' understanding of HIV/AIDS and its different modes of transmission were also tested with the help of certain questions. As seen in Table 12, more than 98% of the truckers perceived that HIV could be transmitted through the transfusion of blood from an infected person to the other and using of pre-used needle/syringe. Approximately 95% said that HIV could be transmitted from an infected pregnant

woman to her unborn child and 98.3% rejected that holding an HIV infected person's hand transmitted HIV. Thirty nine percent mentioned that a woman with HIV/AIDS can transmit the virus to her new-born child during breastfeeding.

Among those 379 truckers who said that an infected mother could transmit the virus to her unborn child, 61.2% expressed their unawareness of any measure to minimize such risk. One-third of them (34.3%) said that taking medicine could be helpful (Table 12).

Table 12: Truckers' Knowledge on Ways of HIV/AIDS Transmission

Statements related to HIV/AIDS	2006	
	N=400	**%**
Know anyone who is infected with HIV or who has died of AIDS	263	65.8
Have a close relative or close friend who is infected with HIV or has died of AIDS	**n=263**	**%**
Close relative	11	4.2
Close friend	40	15.2
No relation	212	80.6
Awareness on HIV/AIDS	**N=400**	**%**
A woman with HIV/AIDS can transmit the virus to her new-born child through breastfeeding	156	39.0
Can not get HIV by holding an HIV infected person's hand	393	98.3
A person can get HIV, by using previously used needle/syringe	394	98.5
Blood transfusion from an infected person to the other transmit HIV	399	99.8
A pregnant woman infected with HIV/AIDS can transmit the virus to her unborn child	379	94.8
Ways by which a pregnant woman can reduce the risk of transmission of HIV to her unborn child	**n=379**	**%**
Take medicine	130	34.3
Follow doctor's advice	10	2.6
Can't do anything	6	1.2
Others	1	0.3
Don't Know	232	61.2

3.7 Perception on HIV Test

As additional information to 2003 study, the truckers were also asked various questions relating to HIV testing. More than three-fourths of them (78.5%) reported that it was possible for them to have a confidential HIV test in their community. However, only around 27% of the total 400 truckers had ever undertaken the test. Of them, 47 had taken up the test within the last 12 months preceding the survey while 28 had done so 1-2 years before. Others had taken up the test earlier. Among the truckers who had reportedly done the test, around 57% had taken the test of their own free will, while almost 41% of them had been either sent or advised for the test. Most of them (94.3%) had got the test results while the others had not collected them because they did not have time to collect them (Table 13).

Table 13: Perception on HIV Test

Perception of HIV Test	2006	
	N	%
Possible to Have Confidential HIV Test in the Community		
Yes	314	78.5
No	80	20.0
Don't Know	6	1.5
Total	**400**	**100.0**
Ever had an HIV test		
Yes	106	26.5
No	294	73.5
Total	**400**	**100.0**
Voluntarily underwent the HIV test or because it was required		
Voluntarily	60	56.6
Required	43	40.6
No Response	3	2.8
Total		
HIV Test Result Obtained		
Yes	100	94.3
No	6	5.7
Total	**106**	**100.0**
Reason for Not Receiving the Test Result		
Lack of time	6	100.0
Total	**6**	**100.0**
Most Recent HIV Test		
Within last 12 months	47	44.3
Between 1-2 years	28	26.4
Between 2-4 years	22	20.8
More than 4 years ago	9	8.5
Total	**106**	**100.0**

3.8 Access to FHI/Nepal Messages

From the time FHI started intervention programs to bring awareness about HIV/AIDS among high-risk groups of people; various messages regarding the use of condoms for the prevention of AIDS were aired through radio and television. Elevated hoarding boards and posters were also put up with pictorial and rhetorical messages at different places including health posts and highways. In an effort to review the coverage of such interventions, the truckers were asked about their awareness of such information. Table 14 below illustrates the FHI messages and the responses provided by the truckers regarding their awareness of the messages. The figures show that a large proportion of the truckers were aware of different messages. For example, more than 80% of the truckers were found to be aware of messages like "*HIV/AIDS Bare Aajai Dekhi Kura Garau", "Condom bata Suraksha, Youn Swasthya Ko Raksha", Youn rog ra AIDS bata bachnalai rakhnu parchha sarbatra paine condom lai*"and "*Ramro sangha prayog gare jokhim huna dinna, bharpardo chhu santosh dinchhu jhanjat manna hunna"*. Other responses are shown in Table 14.

Table 14: Seen/Heard FHI Character/Message in the Past Year by the Truckers

Heard/Seen/Read the Following Messages/Characters in Past One Year	2006	
	N=400	%
HIV/AIDS Bare Aajai Dekhi Kura Garau	335	83.8
Condom Bata Suraksha, Youn Swasthya Ko Raksha	328	82.0
Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	326	81.5
Ramro Sangha Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjat Manna Hunna	326	81.5
Jhilke Dai Chha Chhaina Condom	271	67.8
Condom Kina Ma Bhaya Hunna Ra	268	67.0
Maya Garaun Sadbhav Badaun	177	44.3
Ek Apas Ka Kura	118	29.5
Des Pardes	48	12.0
Others	4	1.0

Note: The percentages add up to more than 100 because of multiple responses.

The majority (98.8%) of the truckers reported that these messages had made them understand that the use of condom prevented transmission of AIDS, 61.3% of them also said that these messages had made them aware that use of condom prevents STIs (Table 15).

Table 15: Message Understood by Truckers

Meaning of Message to the Sex Workers as	2006	
	N=400	%
Use Condom Against AIDS	395	98.8
Use Condom Against STI	245	61.3
Use Condom for Family Planning	173	43.3
Use condom with multiple partners	4	1.0
Others	9	2.3

Note: The percentages add up to more than 100 because of multiple responses

3.9 Knowledge and Treatment of Sexually Transmitted Infections (STIs)

Those truckers who maintain sexual contact with multiple partners are at risk for sexually transmitted infection. To know the extent of the problem of STIs among the truckers and their perception towards it, they were asked about their understanding of STIs and if they had experienced any STI symptoms during the past year. For almost 60% of the truckers, STI meant HIV/AIDS. Around 54% considered ulcer or sore around genital areas as STI while 49% of them understood STI as Syphilis/ Gonorrhea.

When asked about the STI symptoms that they had experienced in the past year, 38 (9.5%) of the 400 truckers reported to have had experienced at least one symptom. Some of the reported STI symptoms were genital discharge (18), burning sensation while urinating and ulcer or sore around genital areas (16 each). For treatment purpose, they had mostly visited private clinics (10), pharmacy (5) and AMDA clinic (4). Thirteen of the truckers had also received counseling during treatment process. They were mostly counseled to consistently use a condom during sexual acts (Table 16).

Table 16: Reported STI and Treatment

Perception of STI, Reported STI Symptoms and Treatment Among Truckers	2006	
	N	%
Truckers' Understanding of STI		
HIV/AIDS	239	59.8
Ulcer or Sore Around Genital Area	214	53.5
Syphilis (*Bhiringi)*/Gonorrhea	195	48.8
White Discharge/Discharge of Pus/*Dhatu* flow	191	47.8
Burning Sensation while Urinating	83	20.8
Pain During Urination	40	10.0
Itching in genital areas	15	3.8
Don't know	17	4.3
Other	5	1.3
Total	**400**	**100.0**
Types of STI Symptoms Experienced in the Past Year		
White Discharge/Discharge of Pus	18	4.5
Burning Sensation while Urinating	16	4.0
Ulcer or Sore Around Genital Area	16	4.0
Pain During Urination	5	1.3
Other	4	1.0
Any of the Above Symptoms	38	9.5
None of the Above Symptoms	362	90.5
Total	**400.0**	*

Table 16: Cont'd

Perception of STI, Reported STI Symptoms and Treatment Among Truckers	2006	
	N	%
Treatment of STI Symptoms in the Past Year		
Private Clinic	10	26.3
Pharmacy	5	13.2
AMDA Clinic	4	10.5
Hospital	2	5.3
FPAN Clinic	1	2.6
No treatment	18	47.4
Total	**38**	*
Received Counseling During Treatment		
Yes	13	65.0
No	7	35.0
Total	**20**	**100.0**
Type of Counseling		
Was Told to use Condom	10	76.9
Was Told to reduce Number of Sex Partners	2	15.4
Others	4	30.7
Total	**13**	*

*Note: The percentages add up to more than 100 because of multiple responses.

3.10 Use of Alcohol and Drugs

A series of questions were asked regarding the use of alcohol and oral and injecting drugs by the truckers. Approximately three-fourths of the truckers reported having consumed alcohol sometimes during the past one month. Among them, 37% reported that they took alcohol on a daily basis. Others drank less frequently (Table 17). At the same time eight percent of the truckers also reported taking drugs at least once in the past month. One trucker reported that he had injected drugs but not in the past year.

Table 17: Use of Alcohol and Drugs among Truckers

Consumption of Alcohol and Drugs	2006	
	N=400	%
Consumption of Alcohol during Past One Month		
On a Daily Basis	148	37.0
Once a Week	31	7.8
2-3 times a week	81	20.3
Less than Once a Week	45	11.3
Never	95	23.8
Tried Any Types of Drugs during Past One Month		
Yes	32	8.0
No	368	92.0

*Note: The percentages add up to more than 100 because of multiple responses.

3.11 Exposure to STI and HIV/AIDS Awareness Programs

Many I/NGOs are involved in implementing STI and HIV prevention programs in different parts of the country. Questions on the exposure of the truckers on STI and HIV/AIDS awareness and prevention programs were asked to find out whether the truckers were aware of these programs and had ever used their services. STI and HIV/AIDS intervention programs are launched through peer and outreach educators (PEs and OEs) for educating the target population on HIV/AIDS/STI and its preventive measures. Therefore, the truckers were asked if they had met any of the PEs or OEs. In response, around 12% of the total 400 truckers reported that they had met or interacted with them in the last 12 months. Among those 46 respondents who had met the PEs/OEs, their meetings were mostly focused on interaction regarding modes of HIV/AIDS transmission (89.1%), STI transmission (58.7%), and use of condom (54.3%). Many truckers had reportedly met PEs/OEs from AMDA (41.3%)

and GWP (37%). However, about 39% truckers did not know the name of the organization that these PEs/OEs represented. Moreover, of the total 46 truckers who met PEs/OEs, 43.5% had met them only once and 32.6% had met them 2-3 times in the past year (Table 18).

Table 18: Meeting/Interaction of Truckers with Peer Educator/Outreach Educator

Peer Educator/Outreach Educator Visit	N	%
Met/discussed/interacted with Peer Educators (PE)/Outreach Educators (OE) in the last 12 months		
Yes	46	11.5
No	354	88.5
Total	**400**	**100.0**
Activities involved in with PE/OE		
Discussion on how HIV/AIDS is/isn't transmitted	41	89.1
Discussion on how STI is/isn't transmitted	27	58.7
Regular/non-regular use of condom	25	54.3
Demonstration on using condom correctly	21	45.7
STI treatment/cure after treatment	1	2.2
Counseling on reducing number of sex partner	2	4.3
Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs	3	6.5
Others	4	8.7
Total	**46**	*****
Organizations represented by PEs/OEs		
AMDA	19	41.3
GWP	17	37.0
Others	1	2.2
Don't Know	18	39.1
Total	**46**	*****
Number of visits to PE /OEs		
Once	20	43.5
2-3 times	15	32.6
4-6 times	5	10.9
7-12 times	4	8.7
More than 12 times	2	4.3
Total	**46**	**100.0**

*****Note: The percentages add up to more than 100 because of multiple responses.

3.12 Drop-in-Center

Drop-in-centers (DICs) are another important component of HIV prevention programs. The DICs not only provide a safe space for the target communities to socialize but are also the site for educational and counseling activities. Only six percent of the trucker had visited DIC during the past one year. During the DIC visit, the truckers reported discussing HIV transmission methods (17/24) and watching a film on HIV/AIDS (16/24). Some of them had also been there to collect condoms (7/24) to learn the correct ways of using condom (6/24) and to participate in discussions on STI transmission (5/24). Moreover, about 12% of the truckers took their friends to the DIC. Fifty percent truckers had visited DICs run by AMDA and 45.8% of them had been to DICs run by GWP. About 37% of truckers had visited different DICs 2-3 times and one third of them had been there just once in the past one year (Table 19).

Table 19: DIC Visiting Practices of Truckers

DIC Visiting Practices of Truckers	N	%
Visited any DIC in the last 12 months		
Yes	24	6.0
No	376	94.0
Total	**400**	**100.0**
Activities Involved in at DIC		
Participated in discussion on HIV transmission	17	70.8
Went to watch film on HIV/AIDS	16	66.7
Went to collect condoms	7	29.2
Went to learn the correct way of using condom	6	25.0
Participated in discussion on STI transmission	5	20.8
Participated in training, interaction and discussion programs on HIV/AIDS and STI	2	8.3
Took friend with me	3	12.5
Total	**24**	*****
Name of Organizations that run DIC visited		
AMDA	12	50.0
GWP	11	45.8
NRCS	1	4.2
Others	1	4.2
Don't Know	5	20.8
Total	**24**	*****
Number of DIC visit		
Once	8	33.3
2-3 times	9	37.5
4-6 times	5	20.9
More than 6 times	2	8.4
Total	**24**	**100.0**

*****Note: The percentages add up to more than 100 because of multiple responses.

3.13 STI Clinic

The primary objective of the STI clinic is to detect and provide STI treatment and counseling to the target groups. With this objective several STI clinics are established in different parts of the country and run under different organizations to cover the maximum number of target groups. The truckers were asked if they had visited any STI clinic in the past one year. Of the total 400 respondents, only 3.8% of them had visited a STI clinic in the past one year. Among 15 truckers who had visited STI clinics in the past one year, 66.7% had tested their blood for STIs, one third each were advised to use a condom in each sexual intercourse and to take complete and regular medicine, 26.7% had been suggested to reduce the number of sexual partners and one fifth (20%) were examined for STIs. A majority of truckers (46.7%) had visited private clinics. Six out of 15 truckers who had visited STI clinic in the past one year had visited STI clinic run by AMDA (Table 20).

Table 20: STI Clinic Visiting Practices of Truckers

STI Clinic Visiting Practices of Truckers	N	%
Visited any STI Clinic in the last 12 months		
Yes	15	3.8
No	385	96.2
Total	**400**	**100.0**
Activities involved in at STI Clinic		
Blood tested for STI	10	66.7
Was advised to use condom in each sexual intercourse	5	33.3
Was advised to take complete and regular medicine	5	33.3
Was suggested to reduce number of sexual partners	4	26.7
Physical examination conducted for STI identification	3	20.0
Took friend	2	13.3
Others	3	20.0
Total	**15**	*****
Name of organization that run STI Clinic Visited		
Private Clinic	7	46.7
AMDA	6	40.0
Others	1	6.7
Don't Know	2	13.3
Total	**15**	*****
Number of Visits to STI Clinics		
Once	4	26.7
2-3 times	8	53.3
4-6 times	2	13.3
More than 12 times	1	6.7
Total	**15**	**100.0**

*****Note: The percentages add up to more than 100 because of multiple responses.

3.14 VCT Centers

Voluntary Counseling and Testing (VCT) centers are established and run by different organizations to increase access of different target group to HIV test facilities and counseling services. The same proportion of the truckers who had attended STI clinic in the past one year had been to VCT centers during the period (3.8%). Most of these truckers (14/15) who had visited VCT centers in the past one year had given their blood for HIV testing. Some had been there to receive HIV test result (9/14), and six of them had also received post-test counseling. A majority of truckers (93.3%) had visited VCT centers run by AMDA. More than fifty percent (53.3%) had visited VCT centers 2-3 times (Table 21).

Table 21: VCT Center Visiting Practices of Truckers

VCT Center Visiting Practices of Truckers	N	%
Visited any VCT Center in the last 12 months		
Yes	15	3.8
No	385	96.2
Total	**400**	**100.0**
Activities Involved in at VCT Center		
Blood sample taken for HIV/AIDS test	14	93.3
Received HIV/AIDS test result	9	60.0
Received post-test counseling	6	40.0
Received pre-test counseling	4	26.7
Received counseling on using condom correctly in each sexual intercourse	4	26.7
Others	2	13.4
Total	**15**	*****
Name of the VCT Center Visited		
AMDA	14	93.3
Don't Know	1	6.7
Total	**15**	*****
Number of Visits to VCT Center		
Once	6	40.0
2-3 times	8	53.3
More than 12 times	1	6.7
Total	**15**	**100.0**

*****Note: The percentages add up to more than 100 because of multiple responses.

3.15 Participation in HIV/AIDS Awareness Program

Organizations working in the field of STI/HIV/AIDS care and support organize awareness programs involving target groups. Questions were asked with truckers if they had ever participated in such programs in the 12 months preceding the survey. About 15% truckers reported their participation in different HIV/AIDS awareness raising programs in the past 12 months. Some of the reported activities that truckers had participated in were street drama (67.8%), condom use demonstration (22%), video show (16.9%), AIDS day celebration (13.6%) and group discussions (11.9%). About fourteen percent truckers cited that AMDA conducted such activities. Other organizations like GWP, SACTS were also reported by some truckers (Table 22). A majority (45.8%) of the truckers had participated only once in HIV/AIDS awareness-raising program or community events while 35.6% truckers had participated 2-3 times in such events in the past 12 months.

Table 22: Participation in HIV/AIDS Awareness Programs of Truckers

Participation in HIV/AIDS Awareness Programs of Truckers	N	%
Ever Participated in HIV/AIDS awareness raising Program or Community Events in the last 12 months		
Yes	59	14.8
No	341	85.2
Total	**400**	**100.0**
Type of Activities Participated in		
Street drama	40	67.8
Condom use demonstrations	13	22.0
Video shows	10	16.9
AIDS Day	8	13.6
Group discussions	7	11.9
Condom Day	4	6.8
HIV/AIDS related training	4	6.8
HIV/AIDS related Workshops	2	3.4
Others	1	1.7
Total	**59**	*****
Name of the Organizations that Run Such Activities		
AMDA	8	13.6
GWP	6	10.2
SACTS	1	1.7
Others	4	6.8
Don't Know	43	72.9
Total	**59**	*****
Number of Participation		
Once	27	45.8
2-3 times	21	35.6
4-6 times	4	6.8
Did not participate within past one year	7	11.9
Total	**59**	**100.0**

*****Note: The percentages add up to more than 100 because of multiple responses.

3.16 Stigma and Discrimination

HIV/AIDS is stigmatized in Nepal, increasing the impact of HIV on People Leaving with HIV/AIDS (PLHA) and those most at risk. Moreover, HIV infected people are discriminated against. Questions about the attitude of truckers towards HIV positive people and their perception towards HIV/AIDS were included in the survey. More than 95% of the truckers were willing to take care of any of their male or female relatives with HIV if the need arose. Moreover, around 72% also mentioned that if they had a HIV positive member in the family, they would not mind talking about it to others.

Table 23: Stigma and Discrimination

Stigma and Discrimination	2006	
	N	%
Willing to take care of HIV positive male relative in her household		
Yes	388	97.0
No	12	3.0
Total	**400**	**100.0**
Willing to take care of HIV positive female relative in her household		
Yes	383	95.8
No	17	4.2
Total	**400**	**100.0**
Willing to maintain confidentiality of her HIV positive family member		
Yes	114	28.5
No	286	71.5
Total	**400**	**100.0**

3.17 HIV/STI Prevalence among Truckers

HIV prevalence among the truckers had slightly decreased since 2003 although it was not statistically significant. Among the 400 truckers who participated in the study, one percent (4/400) of them was found to be HIV positive. HIV prevalence rate was 1.8% (7/400) in 2003.

Seven out of 400 (1.8%) truckers were found to be currently infected with high titre syphilis (titre =>1:8) and 34/400 (8.5%) of them had a history of syphilis. It was found that prevalence of syphilis history, and current syphilis have slightly decreased since 2003. However, the drop in syphilis history and current syphilis prevalence is not statistically significant.

(Clinical Note: For prevalence study purpose, TPHA+RPR-ve or RPR with titre < 1:8 is regarded as history of syphilis and TPHA+ and RPR with titre higher than 1:8 are considered as having current syphilis requiring immediate treatment).

Table 24: HIV and Syphilis Prevalence among the Truckers

HIV/Syphilis Infection	2003		2006	
	N=400	%	N=400	%
HIV+ve	7	1.8	4	1.0
Syphilis history (TPHA+RPR-ve or RPR with titre < 1:8)	35	8.7	34	8.5
Current Syphilis (TPHA+ and RPR with titre higher than 1:8)	9	2..3	7	1.8

Association of Syphilis with Socio-Demographic and Behavioral Variables

Table 25 shows the association of two categories of measured syphilis – syphilis history (TPHA+ve with RPR –ve or RPR titre < 1:8), and untreated/active syphilis (TPHA+ve and RPR with titre = or > 1:8) with demographic variables such as age, marital status, education and the sexual behavior of the truckers. There is weak association between prevalence of syphilis history and educational status of the truckers and their sexual relation with sex workers. The survey found that the prevalence of syphilis history was 22.9% (8/35) among illiterate truckers or those truckers with no schooling and 7.1% (26/365) among those who had attended school. Similarly, 9.9% (27/274) of the truckers who ever had sex with a sex worker and 5.9% (7/119) of those who never had such sexual contact had history of syphilis. In 2003, none of the truckers who never had sexual contact with FSW and 10.3% (35/340) of them who had such sexual contact had syphilis history. In 1999 however,

13.6% (11/81) truckers who never had sex with FSW and 8.1% (24/295) who had sex with them had history of syphilis. There was no association between prevalence of syphilis history and trucker going to the far western section of the highway (Mahendranagar) as 7.7% (27/351) of such truckers never driving their trucks to the town and 14.3% (7/49) of those who had been there had history of syphilis. No significant association was found between untreated/current syphilis (TPHA+ve/RPR titre = or > 1:8) and demographic variables of the truckers. None of the truckers who ever had sexual contact with sex workers in India and those who were illiterate had untreated syphilis.

Table 25: Association between Syphilis and Demographic and Behavioral Variables

Variables	1999			2003			2006		
	N=400	Syphilis History n(%)	Current Syphilis n(%)	N=400	Syphilis History n(%)	Current Syphilis n(%)	N=400	Syphilis History n(%)	Current Syphilis n(%)
Age									
15-19	93	4 (4.3)	1 (1.1)	11	0 (0.0)	0 (0.0)	7	0 (0.0)	0 (0.0)
20-24	110	3 (2.7)	2 (1.8)	118	4 (3.4)	2 (1.7)	116	2 (1.7)	0 (0.0)
25-29	77	9 (11.7)	0 (0.0)	116	8 (6.9)	4 (3.4)	116	11 (9.0)	5 (4.3)
30-34	47	8 (17.0)	3 (6.4)	78	12 (15.4)	2 (2.6)	80	9 (11.3)	0 (0.0)
35-59	73	12 (16.4)	4 (5.5)	77	11 (14.3)	1 (1.3)	81	12 (14.8)	2 (2.5)
Educational Level									
Illiterate and literate with no schooling	48	13 (27.1)	1 (2.1)	44	6 (13.6)	2 (4.5)	35	8 (22.9)	0 (0.0)
Schooling (Grades 1 to 10 and above SLC)	352	23 (6.5)	9 (2.6)	356	29 (8.1)	7 (2.0)	365	26 (7.1)	7 (1.9)
Marital Status									
Married+	238	32 (13.4)	9 (3.8)	296	32 (10.8)	8 (2.7)	317	31 (9.8)	5 (1.6)
Never married	162	4 (2.5)	1 (0.6)	104	3 (2.9)	1 (1.0)	83	3 (3.6)	2 (2.4)
Ever Had Sex with a Woman									
Yes	376	35 (9.3)	10 (2.7)	394	35 (8.9)	9 (2.3)	393	34 (8.7)	7 (1.8)
No	24	1 (4.2)	0 (0.0)	6	0 (0.0)	0 (0.0)	7	0 (0.0)	0 (0.0)
Ever Had Sex with an FSW	**n=376**	%	%	**n=394**	%	%	**n=393**	%	%
Yes	295	24 (8.1)	9 (3.1)	340	35 (10.3)	9 (2.6)	274	27 (9.9)	5 (1.8)
No	81	11 (13.6)	1 (1.2)	54	0 (0.0)	0 (0.0)	119	7 (5.9)	2 (1.7)
Use of Condom During Last Sex with FSW in the Past Year	**n=250**	%	%	**n=176**	%	%	**n=176**	%	%
Yes	169	15 (8.9)	4 (2.4)	149	11 (7.4)	4 (2.7)	158	15 (9.5)	3 (1.9)
No	75	3 (4.0)	3 (4.0)	27	2 (7.4)	1 (3.7)	18	2 (11.1)	1 (5.6)
Consistent Use of Condom with FSW in the Past Year				**n=176**	%	%	**n=176**	%	%
Yes	-	-	-	125	10 (8.0)	4 (3.2)	146	14 (9.6)	3 (2.1)
No	-	-	-	51	3 (5.9)	1 (2.0)	30	3 (10.0)	1 (3.3)
Had Sex with FSW in India				**n=340**	%	%	**n=274**	%	%
Yes	-	-	-	30	2 (6.7)	0 (0.0)	38	1 (2.6)	0 (0.0)
No	-	-	-	310	33 (10.6)	9 (2.9)	236	26 (11.0)	5 (2.1)
Ever Driven Truck to Mahendranagar				N=400	%	%	N=400	%	%
Yes	-	-	-	360	34 (9.4)	9 (2.5)	351	27 (7.7)	5 (1.4)
No *	-	-	-	40	1 (2.5)	0 (0.0)	49	7 (14.3)	2 (4.1)
Driven Truck to Mahendranagar in the Past Year				**n=360**			**n=351**	%	%
Yes	-	-	-	232	21 (9.1)	4 (1.7)	184	12 (6.5)	3 (1.6)
No	-	-	-	128	13 (10.2)	5 (3.9)	167	15 (9.0)	2 (1.2)
Ever Married Truckers: Days per Month Away from Wife	**n=220**	%	%	**n=292**	%	%	**n=315**	%	%
1-14 days	69	10 (14.5)	3 (4.3)	88	11 (12.5)	0 (0.0)	79	7 (8.9)	2 (2.6)
15-30 days	151	19 (12.6)	4 (2.6)	204	21 (10.3)	8 (3.9)	236	22 (9.3)	3 (1.3)

Note: N = 400 otherwise small n denotes sub population: * Significant decrease in current syphilis p < .02: + Significant increase in TPHA p <.02 between 2003 and 2006

Prevalence of Syndromes

There was weak association between the reported STI symptoms and the clinical diagnosis/examination. During the survey, the truckers were asked whether they had any currently perceived STI symptoms. In response 22 of them reported that they were suffering from symptoms that they believed to be evidence of STIs. However of these 22 truckers only two truckers (9.1%) had history of syphilis after clinical examination while none of them had untreated syphilis. Among the 378 truckers who did not report of any STI symptoms, 7 (1.9%) had been suffering from untreated syphilis (Table 26).

Table 26: Reported STI syndromes and Measured Clinical diagnosis for Syphilis

Reported STI Symptoms	2003			2006		
	N	Syphilis History	Current Syphilis	N	Syphilis History	Current Syphilis
		n (%)	n (%)		n (%)	n (%)
White Discharge/Discharge of Pus	3	1 (33.3)	0 (0.0)	9	1 (11.1)	0 (0.0)
Pain During Urination	2	1 (50.0)	0 (0.0)	4	1 (25.0)	0 (0.0)
Burning Sensation while Urinating	5	1 (20.0)	0 (0.0)	10	1 (10.0)	0 (0.0)
Ulcer or Sore Around Genital Area	18	2 (11.1)	0 (0.0)	8	1 (12.5)	0 (0.0)
Other	0	0 (0.0)	0 (0.0)	3	0 (0.0)	0 (0.0)
Any of the above symptoms	22	2 (9.1)	0 (0.0)	22	2 (9.1)	0 (0.0)
None of the above symptoms	378	33 (8.7)	9 (2.4)	378	32 (8.5)	7 (1.9)

3.18 Association between HIV and Demographic, Behavioral Variables and STIs

Similar to 1999 and 2003 studies, there is no association between HIV and socio-demographic or risk behavior variables of the truckers. The slight differences in variables as seen in Table 27 are not statistically significant. However, some conclusion can be drawn from the table. The 2003 and 2006 studies show that married truckers who spend more than 15 days away from their wives had higher prevalence of HIV. One trucker who reported that he never had sex with a sex worker also had HIV in all the three studies. All four HIV+ truckers did not have history of syphilis or untreated syphilis. There is also no relation between HIV and educational level, use of condom in the last sex and consistent use of condom with sex workers.

Table 27: Association between HIV and Demographic, Behavioral Variables and STIs

Variables	1999			2003			2006		
	N=400	HIV+	%	N=400	HIV+	%	N=400	HIV+	%
Age									
15-19	93	0	0.0	11	0	0.0	7		0.0
20-24	110	2	1.8	118	1	0.8	116	1	0.9
25-29	77	1	1.3	116	4	3.4	116	2	1.7
30-34	47	3	6.4	78	2	2.6	80	1	1.3
35-59	73	0	0.0	77	0	0.0	81	0	0.0
Educational Level									
Illiterate and literate with no schooling	48	1	2.1	44	0	0	35	0	0.0
Schooling (Grades 1 to 10 and above SLC)	352	5	1.4	356	7	2.0	365	4	1.1
Marital Status									
Married	238	4	1.7	296	5	1.7	317	3	0.9
Never married	162	2	1.2	104	2	1.9	83	1	1.2
Ever Had Sex with a Woman									
Yes	376	6	1.6	394	7	1.8	393	4	1.0
No	24	0	0.0	6	0	0	7	0	0.0
Ever Had Sex with an FSW	**n=176**			**n=394**			**n=393**		
Yes	295	5	1.7	340	6	1.8	274	3	1.1
No	81	1	1.2	54	1	1.9	119	1	0.8
Use of Condom During Last Sex with FSW in the Past Year	**n=244**			**n=176**			**n=176**		
Yes	169	2	1.2	149	3	2.0	158	3	1.9
No	75	3	4.0	27	0	0	18	0	0.0
Consistent Use of Condom with FSW in the Past Year				**n=176**			**n=176**		
Yes	-	-	-	125	3	2.4	146	3	1.8
No	-	-	-	51	0	0	30	0	0.0
Had Sex with FSW in India				**n=340**			**n=174**		
Yes	-	-	-	30	0	0	38	1	2.6
No	-	-	-	310	6	1.9	236	2	0.8
Ever Driven Truck to Mahendranagar				**N=400**			**N=400**		
Yes	-	-	-	360	7	1.9	351	3	0.9
No	-	-	-	40	0	0	49	1	2.0
Driven Truck to Mahendranagar in the Past Year				**n=360**			**n=351**		
Yes	-	-	-	232	4	1.7	184	1	0.5
No	-	-	-	128	3	2.3	167	2	1.2
Ever Married Truckers: Days per Month Away from Wife	**n=220**			**n=292**			**n=344**		
1-14 days	69	2	2.9	88	1	1.1	77	0	0.0
15-30 days	151	1	0.7	204	4	2.0	236	3	1.3
Syphilis history	**n=400**			**n=400**			**n=400**		
Positive	36	1	2.8	44	0	0.0	41	0	0.0
Negative	364	4	1.1	356	7	2.0	359	4	1.1
Current Syphilis	**n=400**			**n=400**			**n=400**		
Positive	10	1	10.0	9	0	0.0	7	0	0.0
Negative	390	4	1.0	391	7	1.8	393	4	1.1

Chapter 4.0: CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The study found that HIV prevalence rate among the truckers was 1% (4/400). Seven out of 400 (1.8%) truckers were found to be currently infected with syphilis and 34 (8.5%) respondents had a history of syphilis. The prevalence of HIV, syphilis history and current syphilis has slightly decreased since 2003 but the decrease is not statistically significant. Other findings are given below:

- The age of the truckers ranged from 17-59 years and most of them were married. Around two percent of them were illiterate.

- The truckers were away from their homes for an average of 17.1 days in a month. Forty six percent of the married truckers spent around 15-21 days per month away from their homes.

- Like in 2003 a majority of 98.3% of the truckers have had sexual contact with women. Around 64% of the truckers had their first sexual encounter at the age of 15-19 years. Almost 70% of the truckers had maintained sexual contact with sex workers too.

- Thirty-eight truckers ever had sex with sex workers in India. Twelve of them had visited them in the past year.

- Eleven of the 12 truckers who had sexual contact with sex workers in India in the past year had been consistent condom users.

- Eighty three percent of the truckers had used condoms consistently with sex workers and around 63% of them with their other female friends in the past year. Use of condoms was low with wives and girl friends.

- Only 13.2% truckers obtained free condoms all the time and 48% always purchased them.

- The most popular brand of condoms among almost 52% of the truckers was Number One condoms.

- Radio and television were the most popular information sources regarding condoms for more than 90% of the truckers. Many had been aware of them through billboards/signboards, newspapers/posters/pamphlets and friends/ neighbor/relatives.

- All the truckers had heard about HIV/AIDS. Radio, newspaper/magazine and television were the most important sources of information for more than 90% of them. Many had collected information on HIV/AIDS through billboard/ signboard, pamphlet/posters and friends/relatives.

- Approximately 97% truckers were aware of all the three- AB and C HIV/AIDS preventive measures. Slightly more than one half (52.3%) rejected the common local misconception that mosquito bite transmitted HIV virus.

- More than three-fourths of the truckers knew that they could have a confidential HIV test in their community. However, only around 27% of them had been tested.

- For approximately 60% of the truckers STI meant HIV/AIDS and 54% of them considered ulcer or sore around genital areas as STI symptoms.

- Thirty eight of the 400 truckers had experienced at least one STI symptom in the past year.

- The truckers had mostly visited private clinics for the treatment of the STIs.

- Around 12% of the truckers had, at least once, met peer/outreach educators from the various HIV/AIDS related programs and only six percent of them had visited DICs in the past year. Almost four percent each of the truckers had visited STI clinic and VCT center in the year preceding the survey.

- Of the truckers who had met peer/outreach educators, these PEs/OEs were mostly from AMDA and GWP. The DICs that most of the truckers had visited were also run by the same organizations. For STI services the truckers had visited private clinic and AMDA clinic, and of the truckers who had visited a VCT site, they had mostly visited the VCT centers run by AMDA.

- The participation of the truckers in HIV/AIDS awareness programs/ community events was also minimal with only 15% of them reporting to have ever been part of such events. Among them, almost 14% had participated in programs conducted by AMDA.

4.2 Recommendations

- The participation of truckers in HIV/AIDS awareness and prevention programs was minimal. More programs should be launched targeting this particular group on the highways. Such programs may include visits by peer educators and outreach workers for raising awareness about HIV and STI and for the promotion of condom use.

- The truckers do not use condoms consistently with familiar partners like their girlfriends and spouses. HIV/AIDS prevention programs should focus more on the need for consistent condom use for HIV/STI infection prevention purposes with all kinds of partners.

- Free condom distribution programs for the truckers through NGO/health workers/volunteers should be expanded further as a part of HIV/AIDS awareness campaign.

- Peer and outreach education should be continued at a larger scale to cover more truckers. At the same time, more DICs, STI clinics and VCT centers should be operated to facilitate convenient access to the truckers. Information about the existing facilities and the services should be disseminated at a wider scale.

- IEC materials like poster/pamphlets and billboard/signboards have been quite effective in disseminating HIV/AIDS awareness information to the target group. Such activities should be continued and further extended to cover major highways.

References

NCASC. 2005. Cumulative Data on HIV/AIDS.

New ERA/SACTS/FHI. 2003a. *Behavioral and Sero Prevalence Survey Among IDUs in Pokhara Valley*. A Report submitted to Family Health International/Nepal. Kathmandu.

New ERA/SACTS/FHI. 2003b. *Behavioral and Sero Prevalence Survey Among IDUs in Eastern Nepal*. A Report submitted to Family Health International/Nepal. Kathmandu.

New ERA/SACTS/FHI. 2000. *STD and HIV Prevalence Survey Among Female Sex Workers and Truckers on Highway Routes in the Terai, Nepal;* New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/ Nepal.

New ERA. 2003c. *Behavioral Surveillance Survey in the Highway Route of Nepal: Round No. 5,* A Report submitted to Family Health International/Nepal. Kathmandu. New ERA.

New ERA. 2003d. *Behavioral Surveillance Survey of Female Sex Workers and Clients in Kathmandu Valley: Round I,* A Report submitted to Family Health International/Nepal. Kathmandu.

New ERA/SACTS/FHI. 2002a. *HIV/STD Prevalence and Risk Factors among Migrant and Non-Migrant Males of Achham District in Far-Western Nepal*. Volume – 1, Main Report. A Report submitted to Family Health International/Nepal. Kathmandu.

New ERA/SACTS/FHI. 2002b. *Behavioral and Sero Prevalence Survey Among IDUs in Kathmandu Valley*. A Report submitted to Family Health International/ Nepal. Kathmandu.

New ERA/SACTS/FHI. 2004. *STI/HIV Prevalence and Risk Behavioral Study Among Female Sex Workers and Truckers Along the Terai Highway Routes Covering 22 Districts of Nepal;* New ERA/SACTS, Kathmandu. A Report submitted to Family Health International/Nepal.

Pokharel, B R; Aryal, S; Bhattarai, A; Pyakuryal, A; Suvedi, B K. 2000. *Situation Analysis of HIV/AIDS in Nepal,* Richoi Associates, Kathmandu. Final draft submitted to National Center for AIDS and STD Control, Kathmandu, Nepal.

Poudel KC, J Okumura, M. Jimba and I. Murakami. 2003. *Tropical Medicaine and International Health*, Vol. 8, no. 10:pp 933-939.

SACTS. 2001. *Kathmandu FSW Seroprevalence Study*. A Report submitted to Family Health International/Nepal. Kathmandu.

ANNEXES

ANNEX - 1

Basic equation used in sample design

$$n = D\left[(Z_\alpha + Z_\beta)^2 * (P_1 (1 - P_1) + P_2 (1 - P_2)) / (P_2 - P_1)^2\right]$$

n= required minimum sample size per survey round or comparison groups

D = design effect (assumed in the following equations to be the default value of 2

P_1 = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area

P_2 = the expected level of the indicator either at some future date or for the project area such that the quantity (P_2-P_1) is the size of the magnitude of change it is desired to be able to detect

Z_α = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P_2-P_1) would not have occurred by chance (α – the level of statistical significance), and

Z_β = the Z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P_1-P_2) if one actually occurred (β – statistical power).

ANNEX – 2

CONFIDENTIAL

INTEGRATED BIO - BEHAVIOUAL SURVEY (IBBS) AMONG TRUCKERS IN 22 TERAI HIGHWAY DISTRICTS
FHI/New ERA/SACTS – 2005/2006

Male Truckers Questionnaire

Namaste! My name is ……., I am here from New ERA to collect data for a research study. During this data collection, I will ask you some personal questions that will be about sexual behavior, use and promotion of condoms, STI/HIV/AIDS and drugs. We will also take your blood sample for laboratory testing. If it is determined that you have any STI symptoms, we will provide treatment free of charge. The information given by you will be strictly treated as confidential. Nobody will know whatever we talk because your name will not be mentioned in this form and collected samples. All the mentioned information will be used only for objective of the study. This survey will take about 40 to 60 minutes.

It depends on your wish to participate in this survey or not. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. But I hope, you will participate in this survey and make it success by providing correct answers of all the questions.

Would you be willing to participate?

1. Yes 2. No

Signature of Interviewer:_____ Date: 2062/____/_____

Name of interviewer: _____ Code No. of Interviewer: ☐☐☐☐☐

Date of Interview: 2062/_____/_____

Checked by the supervisor: Signature:_____ Date: 2062/_____/_____

Data Entry # 1: Clerk's name:_____ Date: 2062/_____/_____

Data Entry # 2: Clerk's name:_____ Date: 2062/_____/_____

Has someone interviewed you from New ERA with a questionnaire in last few weeks?

1. Yes 2. No (Continue Interview)

↓

When?

_____ Days ago **(STOP INTERVIEW)**

1.0 GENERAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
101	Respondent ID No.	☐☐☐☐☐☐	
101.1	Type of Respondent	Driver .....1 Helper 2	
102	Interview Starting Time Interview Completion Time	_____ _____	
103	Where were you born?	District_____ VDC/Municipality_____ Ward No. .....☐☐ Village/Tole_____	
104	Where do you live now?	Districts: _____ VDC/Municipality: _____ Ward No. .....☐☐ Village/Tole: _____	
105	Before you moved here, where did you live?	Districts: _____ VDC/Municipality: _____ Ward No. .....☐☐ Village/Tole: _____	

2.0 PERSONAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
201	How old are you?	Age .....☐☐ (write the completed years)	
202	What is your caste?	Ethnicity/Caste_____ (Specify) Code No……. ☐☐	
203	What is your educational status? **(Circle '0' if illiterate, '19' for the literate without attending the school, and write exact number of the passed grade)**	Illiterate .....0 Literate ..... 19 Grade .....☐☐ (write the grade completed)	
204	What is your present marital status?	Married.....1 Divorced/Permanently separated .....2 Widower.....3 Never married 4	 **207** **207** **207**
205	What is the approximate number of days in a month that you stay away from your wife?	Days. .....☐☐ I always stay with my family 0	
206	Are you presently living with your wife?	Yes .....1 No.....2	**208**
207	With whom are you staying currently?	With children ..... 1 With male friends .....2 With female friends .....3 Alone .....4 With parents……5 Others (Specify)_____ 96	

Q. N.	Questions and Filters	Coding Categories	Skip to
208	Have you ever driven truck in Butwal-Mahendranagar section of the Mahendra highway?	Yes .....1 No.....2	**210**
209	During the past year, have you ever driven truck in Butwal-Mahendranagar section of the Mahendra highway?	Yes .....1 No.....2	**210**
209.1	Where and how many times did you drive truck within past one year?	To / Times _____ / _____ _____ / _____ _____ / _____ _____ / _____ _____ / _____	
210	Have you ever driven truck to India?	Yes .....1 No.....2	**301**
210.1	If Yes, which place have you driven to?	Name of Places / Nearby City/ City _____ / _____ _____ / _____ _____ / _____ _____ / _____	
210.2	When was the last time you had driven truck to India? **(If it is today write"0")**	Days ago.....☐☐ Months ago .....☐☐	

3.0 INFORMATION ON SEXUAL BEHAVIOR

Q. N.	Questions and Filters	Coding Categories	Skip to
301	Have you ever had sexual intercourse with a woman before? **(If answer is 'No' Probe)**	Yes .....1 No.....2	**501**
302	How old were you at your first sexual intercourse? **(In Completed years)**	Year's old .....☐☐ Don't know/Can't recall 98	
303	Have you ever had sex with a sex worker? **(If answer is 'No' Probe)**	Yes .....1 No.....2	**403**

Sexual behavior with Female Sex Workers in Nepal

Q. N.	Questions and Filters	Coding Categories	Skip to
304	So far with about how many sex workers have you had sex in Nepal?	Number .....☐☐	
305	Have you had sex with a sex worker in the past year in Nepal?	Yes .....1 No.....2	**312**
305.1	During the past year, how many different FSWs did you have sexual intercourse with in Nepal?	Number .....☐☐	
306	In which places in Nepal have you had sex with sex workers in the past years?	**Name of Places** / **City/ Nearby City** _____ / _____ _____ / _____ _____ / _____ _____ / _____	

Q. N.	Questions and Filters	Coding Categories	Skip to
307	During the past one year when did you have the last sexual intercourse with a sex worker in Nepal? **(Write '00' if the answer is less than a week)**	Weeks ago ..... ☐☐	
308	Where did you find that last sex worker for sexual intercourse in Nepal?	Lodge/Hotel ..... 1 Eating-place (Restaurant) .....2 *Bhatti* (Liquor shop)..... 3 On the street..... 4 Forest..... 5 Others (Specify) _____96	
309	Where did you have sex with her?	Sex worker's own home ..... 1 Client's home/room .....2 Hotel/lodge ..... 3 Forest/Bush/Park ..... 4 Other private house..... 5 Truck/bus..... 6 Others (Specify) _____96	
310	How many rupees and/or other items did you pay the sex worker that time? **(Ask the money spend for sexual intercourse only)** **(Note: If there is '0' in both 'cash and gift equivalent' mention the reasons)**	Cash _____ Rs. Gift equivalent to _____Rs. Total_____Rs. Other (Specify) _____ 96	
311	In the last one months how many times did you have sexual intercourse with sex workers in Nepal?	Times ..... ☐☐	

Sexual behavior with Female Sex Workers in India

Q. N.	Questions and Filters	Coding Categories	Skip to
312	Have you ever had sex with sex workers in India?	Yes .....1 No.....2	 **401**
313	About how many sex workers have you had sex with in India in your lifetime?	Numbers ..... ☐☐	
314	Did you have sexual intercourse with sex workers in India in the past year?	Yes .....1 No.....2	 **401**
314.1	Where?	Name of Places City/ Nearby City _____ _____ _____ _____ _____ _____ _____ _____	
314.2	When did you have had the last sexual Intercourse with sex workers in India? **(Write '00' if the answer is less than 7 days)**	Weeks ago ..... ☐☐	

4.0 Use of Condom with Sex Partners
Note: If No responses in Q.305 and Q314 Go to Q403

Condom Use with Sex Worker

Q. N.	Questions and Filters	Coding Categories	Skip to
401	Did you use a condom when you had the last sexual intercourse with a sex worker?	Yes .....1 No.....2	 **401.2**
401.1	Who suggested condom use that time?	Myself .....1 My Partner .....2 Don't know 98	**402** **402** **402**
401.2	Why didn't you use a condom that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
402	How often did you use condoms while visiting sex workers in the last 12 months?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5	**402.2**
402.1	Why didn't you use condom always? **(Multiple answers. DO NOT READ the possible answers)**	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
	(Note: If there is 'No' in Q314 Go to 403)		
402.2	Did you use a condom when you had last sexual intercourse with a sex worker in India?	Yes .....1 No.....2	
402.3	In the past year, how often did you use condom with sex worker in India?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5	

Condom Use with Wife

Q. N.	Questions and Filters	Coding Categories	Skip to
403	During the past one-year have you had sexual intercourse with your wife?	Yes .....1 No.....2	 **407**
404	How many times did you have sexual intercourse with your wife over the last 30 days? **(If there is none sexual intercourse with wife in last 30 days write"00")**	Number of time .....☐☐ Don't know 98	
405	The last time you had sex with your wife did you use condom?	Yes .....1 No.....2	 **405.2**

Q. N.	Questions and Filters	Coding Categories	Skip to
405.1	Who suggested condom use that time?	Myself .....1 My Partner .....2 Don't know 98	**406** **406** **406**
405.2	Why didn't you use a condom that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
406	How often did you use condoms with your wife over the last 12 months?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5	**407**
406.1	Why didn't you use condom always? **(Multiple answers. DO NOT READ the possible answers)**	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	

Condom Use with Girl Friend

Q. N.	Questions and Filters	Coding Categories	Skip to
407	During the past 12 months have you had sexual intercourse with your girl friend?	Yes .....1 No.....2	 **411**
408	How many times did you have sexual intercourse with your girl friend over the last 30 days? **(If there is none sexual intercourse with girl friend in last 30 days write"00")**	Number of times .....☐☐ Don't know..... 98	
409	The last time you had sex with your girl friend did you use condom?	Yes .....1 No.....2	 **409.2**
409.1	Who suggested condom use at that time?	Myself .....1 My Partner .....2 Don't know 98	**410** **410** **410**
409.2	Why didn't you use a condom at that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
410	How often did you use condoms with your girl friend over the last 12 months?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5	**411**

Q. N.	Questions and Filters	Coding Categories	Skip to
410.1	Why didn't you use condom always? **(Multiple answers. DO NOT READ the possible answers)**	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like them .....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	

Condom Use with Other female Friend

Q. N.	Questions and Filters	Coding Categories	Skip to
411	During the past one-year, did you have sexual intercourse with your other female friends?	Yes .....1 No.....2	 **415**
412	How many times did you have sexual intercourse with your other female friends over the last 30 days? **(If there is none sexual intercourse with female friend in last 30 days write"00")**	Number of time .....☐☐ Don't know..... 98	
413	The last time you had sex with your other female friends did you use condom?	Yes .....1 No.....2	 **413.2**
413.1	Who suggested condom use that time?	Myself .....1 My Partner .....2 Don't know 98	**414** **414** **414**
413.2	Why didn't you use a condom that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
414	How often did you use condoms with your other female friend over the last 12 months?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5	**415**
414.1	Why you did not use condom always? **(Multiple answers. DO NOT READ the possible answers)**	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	

Use of Condom with Male Partner

Q. N.	Questions and Filters	Coding Categories	Skip to
415	In last 12 months did you have anal sex with male partner?	Yes……..1 No…….2	 **419**
416	In past 30 days how many times did you have anal sex with male partner? **(If there is none sexual intercourse with male friend in last 30 days write"00")**	Number of time .....☐☐ Don't know 98	
417	The last time you had sex with your male friend did you use condom?	Yes .....1 No.....2	 **417.2**
417.1	Who suggested condom use at that time?	Myself .....1 My Partner .....2 Don't know 98	**418** **418** **418**
417.2	Why didn't you use a condom that time?	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
418	How often did you use condoms with your male friend over the last 12 months?	All of the time .....1 Most of the time .....2 Some of the time .....3 Rarely .....4 Never.....5	**419**
418.1	Why you did not use condom always? **(Multiple answers. DO NOT READ the possible answers)**	Not available.....1 Too expensive.....2 Partner objected .....3 I didn't like to use it.....4 Didn't think it was necessary..5 Didn't think of it.....6 Other (Specify) _____ 96 Don't know 98	
419	With whom did you have the last sexual intercourse?	FSW .....1 Wife……...2 Other female friend…….....3 Lover/female friend……..4 Male friend…….. ..5 No sexual intercourse in last 12 months……..6 Never had sexual intercourse.....7 Others (Specify)_____.96	

Condom Accessibility

Q. N.	Questions and Filters	Coding Categories	Skip to
420	Do you usually carry condoms with you?	Yes .....1 No.....2	 **421**
420.1	At this moment, how many condoms do you have at-hand with you? **(Observe and write)**	Number ..... ☐☐	
421	Which places or persons do you know from where/whom you can obtain condoms? **(Multiple answers. DO NOT READ the possible answers)**	Health Post/ Health Center.....1 Pharmacy .....2 General retail store (Kirana Pasal) .....3 Private Clinic .....4 Paan shop.....5 Hospital .....6 FPAN Clinic .....7 Peer/Friends.....8 NGO/Health Workers/Volunteers.....9 Guest House/Hotel..... 10 Other (Specify) _____96 Don't know 98	
421.1	How long does it take for you to get condom from your work place or home?	Minute…….. ☐☐	
442	How do you usually obtain condoms? **(Buy, obtain free of cost or both ways)**	I get it free of cost .....1 I buy.....2 Both .....3 Never used condom 4	 **423** **501**
422.1	From where do you usually get free condoms? **(Multiple answers. DO NOT READ the possible answers).**	Health Post/ Health Center ....1 Hospital .....2 FPAN Clinic .....3 Peer/Friends.....4 During Community Programme .....5 NGO/Health Workers/ Volunteers.....6 Other (Specify) _____96	
422.2	Which would be the most convenient place/s for you to get free condoms? **(Multiple answers. DO NOT READ the possible answers)**	Health Post/ Health Center ....1 Hospital .....2 FPAN Clinic .....3 Peer/Friends.....4 During Community Programme .....5 NGO/Health Workers/ Volunteers.....6 Other (Specify) _____96	
	(Note: If response is '1' in Q 422, Go to Q 501)		
423	Where do you usually buy condoms? **(Multiple answers. DO NOT READ the possible answers)**	Pharmacy .....1 General retail store (Kirana Pasal) .....2 Private clinic .....3 Paan Shop .....4 Other (Specify) _____96	

Q. N.	Questions and Filters	Coding Categories	Skip to
423.1	What would be the most convenient place for you to buy a condom? **(Multiple answers. DO NOT READ the possible answers)**	Pharmacy .....1 General retail store (Kirana Pasal) .....2 Private clinic .....3 Paan Shop .....4 Other (Specify) _____96	

5.0 HIV/AIDS AWARENESS

Q. N.	Questions and Filters	Coding Categories		Skip to
501	Have you ever heard of HIV/AIDS?	Yes .....1 No.....2		 **601**
502	Of the following sources of information, from which sources have you heard about HIV/AIDS within the past one year? **(Multiple answers. READ THE FOLLOWING LIST)**			
	Sources of Information	**Yes**	**No**	
	1. Radio	1	2	
	2. Television	1	2	
	3. Newspapers/Magazines	1	2	
	4. Pamphlets/Posters	1	2	
	5. Health Workers	1	2	
	6. School/Teachers	1	2	
	7. Friends/Relatives	1	2	
	8. Work Place	1	2	
	9. People from NGO	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify) _____	1	2	

Knowledge, Opinion and Attitude on HIV/AIDS

Q. N.	Questions and Filters	Coding Categories	Skip to
503	Do you know anyone who is infected with HIV or who has died of AIDS?	Yes .....1 No.....2	 **505**
504	Do you have a close relative or close friend who is infected with HIV or has died of AIDS?	Yes, a close relative .....1 Yes, a close friend.....2 No.....3	
505	Can people protect themselves from HIV by keeping sexual contact with only one uninfected faithful sex partner?	Yes .....1 No.....2 Don't know 98	
506	Can people protect themselves from HIV, virus-causing AIDS, by using condom correctly in each sexual contact?	Yes .....1 No.....2 Don't know 98	

Q. N.	Questions and Filters	Coding Categories	Skip to
507	Do you think a healthy-looking person can be infected with HIV?	Yes .....1 No.....2 Don't know..... 98	
508	Can a person get the HIV virus from mosquito bites?	Yes .....1 No.....2 Don't know..... 98	
509	Can a person get HIV by sharing a meal with an HIV infected person?	Yes .....1 No.....2 Don't know..... 98	
510	Can a pregnant woman infected with HIV/AIDS transmit the virus to her unborn child?	Yes .....1 No.....2 Don't know..... 98	 **512** **512**
511	What can a pregnant woman do to reduce the risk of transmission of HIV to her unborn child?	Take Medication .....1 Other (Specify)_____96 Don't know..... 98	
512	Can a woman with HIV/AIDS transmit the virus to her newborn child through breastfeeding?	Yes .....1 No.....2 Don't know..... 98	
513	Can people protect themselves from HIV virus by abstaining from sexual intercourse?	Yes .....1 No.....2 Don't know..... 98	
514	Can a person get HIV by holding an HIV infected person's hand?	Yes .....1 No.....2 Don't know..... 98	
515	Can a person get HIV, by using previously used needle/syringe?	Yes .....1 No.....2 Don't know..... 98	
516	Can blood transfusion from an infected person to the other transmit HIV?	Yes .....1 No.....2 Don't know..... 98	
517	Is it possible in your community for someone to have a confidential HIV test?	Yes .....1 No.....2 Don't know..... 98	
518	I don't want to know the result, but have you ever had an HIV test?	Yes .....1 No.....2	 **801**
519	Did you voluntarily undergo the HIV test or because it was required?	Voluntarily .....1 Required.....2 No Response 99	
520	Please do not tell me the result, but did you find out the result of your test?	Yes .....1 No.....2	
521	Why did you not receive the test result?	Sure of not being infected.....1 Afraid of result.....2 Felt unnecessary.....3 Forgot it .....4 Other (Specify)_____….96	
522	When did you have your most recent HIV test?	Within the past year .....1 Between 1-2 years.....2 Between 2-4 years.....3 More than 4 years ago.....4	

6.0 PROMOTION OF CONDOM

Q. N.	Questions and Filters	Coding Categories		Skip to
601	In the past one-year have you seen, read or heard any advertisements about condoms from the following sources? (**READ THE FOLLOWING LIST**)			
	Sources of Information	**Yes**	**No**	
	1. Radio	1	2	
	2. TV	1	2	
	3. Pharmacy	1	2	
	4. Health Post/ Health Center	1	2	
	5. Hospital	1	2	
	6. Health Workers/Volunteers	1	2	
	7. Friends/Neighbors	1	2	
	8. NGOs	1	2	
	9. Newspapers/Posters	1	2	
	10. Video Van	1	2	
	11. Street Drama	1	2	
	12. Cinema Hall	1	2	
	13. Community Event/Training	1	2	
	14. Bill Board/Sign Board	1	2	
	15. Comic Book	1	2	
	16. Community Workers	1	2	
	96. Others (Specify) _____	1	2	
602	What message did you get from the advertisement? (Multiple answers. **DO NOT READ** the possible answers)	Condoms should be used to avoid HIV/AIDS .....1 Condoms should be used to avoid STI .....2 Condoms should be used for family planning, other family planning messages .....3 Other (Specify) _____ 96		
603	In the past one-year, have you ever seen, heard or read following messages?			
	Messages/Characters	**Yes**	**No**	
	1. Jhilke Dai Chha Chhaina Condom	1	2	
	2. Condom Kina Ma Bhaya Hunna Ra	1	2	
	3. Youn Rog Ra AIDS Bata Bachnalai Rakhnu Parchha Sarbatra Paine Condom Lai	1	2	
	4. Ramro Sanga Prayog Gare Jokhim Huna Dinna Bharpardo Chhu Santosh Dinchhu Jhanjhat Manna Hunna	1	2	
	5. Condom Bata Surakchhya, Youn Swasthya Ko Rakchhya AIDS Ra Younrog Bata Bachna Sadhai Condom Ko Prayog Garau	1	2	
	6. HIV/AIDS Bare Aajai Dekhee Kura Garau	1	2	
	7. Ek Apas Ka Kura	1	2	
	8. Maya Garaun Sadbhav Badaun	1	2	
	9. Des Pardes	1	2	
	96. Others (Specify)_____	1	2	

Q. N.	Questions and Filters	Coding Categories	Skip to
603.1	Besides above messages have you seen, heard or read any other messages?	Yes .....1 No……..2	**604**
603.2	What are they?	_____ _____ _____	
604	During the past one-year what brand of condoms did you use most of the time? **(Record first three)**	_____ .....1 _____ .....2 _____ 3	
605	Have you met or discussed or interacted with Peer Educators (PE) and /or Outreach Educators (OE) in the last 12 months?	Yes .....1 No.....2 No response..... 99	**609**
606	When you met/discussed/interacted with PE or OE in what kind of activities were you involved? **(Multiple answers. DO NOT READ the possible answers)**	Discussion on how HIV/AIDS is/isn't transmitted.....1 Discussion on how STI is/isn't transmitted…….....2 Regular/non-regular use of condom…… ..3 Demonstration on using condom correctly…….....4 STI treatment/cure after treatment……..5 Counseling on reducing number of sex partner… .....6 Training on HIV and STI, Condom day, AIDS day, participation in discussions and interaction programs…… .....7 Others (Specify)_____ 96	
607	Do you know from which organization were they? **(Multiple answers. DO NOT READ the possible answers)**	AMDA BCI/STI .....1 GWP.....2 Trinetra .....3 WATCH.....4 ICH.....5 NSARC .....6 NRCS .....7 INF/Paluwa .....8 Siddhartha Club .....9 CAC ..... 10 SACTS ..... 11 NFCC ..... 12 NAPN..... 13 SPARSHA..... 14 Others (Specify) _____. 96 Don't know 98	
608	How many times have you been visited by PE and/or OE in the last 12 months?	Once .....1 2-3 times.....2 4-6 times .....3 7-12 times .....4 More than 12 times 5	

Q. N.	Questions and Filters	Coding Categories	Skip to
609	Have you visited or been to any drop in center (DIC) in the last 12 months?	Yes .....1 No.....2	 **613**
610	When you went to the DIC, in which activities did you take part?	Went to collect condoms..... 1 Went to learn the correct way of using condom. ..... 2 Went to watch film on HIV/AIDS.. ..... 3 Participated in discussion on HIV transmission…..... 4 Participated in discussion on STI transmission…..... 5 Participated in training, interaction and discussion programs on HIV/AIDS and STI……..... 6 Went to collect IEC materials..... 7 Went for STI treatment……8 Took friend with me……... 9 Other (Specify)_____ 96	
611	Do you know which organizations run those DICs? **(Multiple answers. DO NOT READ the possible answers)**	AMDA .....1 GWP.....2 Trinetra .....3 WATCH.....4 ICH.....5 NSARC .....6 NRCS .....7 INF/Paluwa .....8 Siddhartha Club .....9 CAC ..... 10 SACTS ..... 11 NFCC ..... 12 NAPN..... 13 SPARSHA..... 14 Others (Specify) _____ . 96 Don't know 98	
612	How many times have you visited DICs in the last 12 months?	Once .....1 2-3 times.....2 4-6 times .....3 7-12 times .....4 More than 12 times 5	
613	Have you visited any STI clinic in the last 12 months?	Yes .....1 No.....2	 **617**

Q. N.	Questions and Filters	Coding Categories	Skip to
614	When you visited or been to any STI clinic in what activities were you involved? **(Multiple answers. DO NOT READ the possible answers)**	Blood tested for STI……..1 Physical examination conducted for STI identification…….....2 Was advised to use condom in each sexual intercourse…….....3 Was advised to take complete and regular medicine…… .....4 Was suggested to reduce number of sexual partners…….. ...5 Took friend with me ……. ....6 Other (Specify)_____96	
615	Do you know which organizations run those STI clinics? **(Multiple answers. DO NOT READ the possible answers)**	AMDA /STI .....1 NSARC .....2 NRCS .....3 INF/Paluwa .....4 Siddhartha Club .....5 SACTS .....6 NFCC .....7 WATCH…….8 Others (Specify)_____ …96 Don't know 98	
616	How many times have you visited STI clinic in the last 12 months?	Once .....1 2-3 times.....2 4-6 times .....3 7-12 times .....4 More than 12 times 5	
617	Have you visited any Voluntary Counseling and Testing (VCT) centers in the last 12 months?	Yes .....1 No.....2	621
618	When you visited or been to any VCT center in what activity were you involved? **(Multiple answers. DO NOT READ the possible answers)**	Received pre-HIV/AIDS test counseling.. .....1 Blood sample taken for HIV/AIDS test……..……2 Received post HIV/AIDS test counseling .....3 Got information on HIV/AIDS window period…….4 Received HIV/AIDS test result5 Received counseling on using condom correctly in each sexual intercourse…… .....6 Took a friend with me……7 Other (Specify)_____96	

Q. N.	Questions and Filters	Coding Categories	Skip to
619	Do you know which organizations run those VCT centers? **(Multiple answers. DO NOT READ the possible answers)**	AMDA /STI .....1 NSARC .....2 NRCS .....3 INF/Paluwa .....4 Siddhartha Club .....5 SACTS .....6 NFCC .....7 WATCH…….8 Others (Specify) _____ 96 Don't know 98	
620	How many times have you visited VCT center in the last 12 months?	Once .....1 2-3 times.....2 4-6 times .....3 7-12 times .....4 More than 12 times 5	
621	Have you ever participated in or involved with HIV/AIDS awareness raising or community events in the last 12 months?	Yes .....1 No.....2	**701**
622	In what activities have you participated in such HIV/AIDS awareness raising events or community events? **(Multiple answers. DO NOT READ the possible answers)**	Street drama .....1 AIDS Day .....2 Condom Day .....3 Video Shows .....4 Group discussions .....5 Talk programs .....6 HIV/AIDS related training ..7 HIV/AIDS related Workshops8 Condom use demonstrations .9 Others (Specify) _____ 96	
623	Do you know which organizations organized those activities? **(Multiple answers. DO NOT READ the possible answers)**	AMDA .....1 GWP…….. ....2 TRINETRA .....3 WATCH……. ....4 ICH……. ....5 NSARC……..... 6 NRCS .....7 INF/Paluwa .....8 Siddhartha Club .....9 CAC…….. ...10 SACTS .....11 NFCC .....12 NAPN……... 13 Sparsa…… ...14 Others (Specify) _____96 Don't know 98	
624	How many times have you participated in such activities in the last 12 months?	Once .....1 2-3 times.....2 4-6 times .....3 7-12 times .....4 More than 12 times 5	

7.0 STI (SEXUALLY TRANSMITTED INFECTION)

Q. N.	Questions and Filters	Coding Categories		Skip to
701	Which diseases do you understand by STI? **(Multiple answers. DO NOT READ the possible answers)**	White Discharge/Discharge of Pus/*Dhatu* flow .....1 Pain during urination .....2 Burning Sensation while Urinating .....3 Ulcer or sore around genital……4 Syphilis (*Bhiringi)/*Gonorrhea5 HIV/AIDS……..6 Other (Specify) _____96 Don't know……..98		
702	Do you currently have any of the following symptoms?			
	Symptoms	**Yes**	**No**	
	1. White Discharge/Discharge of Pus	1	2	
	2. Pain during urination	1	2	
	3. Burning Sensation while Urinating	1	2	
	4. Ulcer or sore around genital area	1	2	
	96.Others (Specify) _____	1	2	
	(If answer is "No" to all in the Q. No. 702 Go to Q. 710)			
703	Have you gone through medical treatment for any of these symptoms?	Yes .....1 No.....2		**710**
703.1	If yes, for how long did you wait to go for the treatment? **(Write '00' if less than a week)**	Week ..... ☐☐		
704	Where did you go for the treatment? **(Multiple answers. DO NOT READ the possible answers)**	Private Clinic .....1 AMDA Clinic .....2 FPAN Clinic .....3 Health Post/ Health Center.....4 Hospital .....5 Pharmacy .....6 Self Treatment (Specify)____7 Others (Specify) _____96		
705	For which symptoms did you get treatment? **Specify the treatment.**			
	Symptoms	**Treatment**		
	1. White Discharge/Discharge of Pus			
	2. Pain during urination			
	3. Burning Sensation while Urinating			
	4. Ulcer or sore around genital area			
	96.Others (Specify) _____			
706	Did you receive a prescription for medicine?	Yes .....1 No.....2		**709**
707	Did you obtain the medicine prescribed?	Yes I obtained all of it .....1 I obtained some but not all....2 I obtained none 3		**709** **709**
708	Did you take all of the medicine prescribed?	Yes .....1 No.....2		**709**

Q. N.	Questions and Filters	Coding Categories		Skip to
708.1	If not, why did you not take all of the medicine prescribed?	Forgot to take .....1 Felt cured .....2 Medicine did not work properly .....3 Others (Specify)_____ 96		
709	How much did you pay for medicine you took? **[If not paid mention the reasons]**	Rs. _____ Reason _____		
710	Did you have any of the following symptoms in the past year?			
	Symptoms	**Yes**	**No**	
	1. White Discharge/Discharge of Pus	1	2	
	2. Pain during urination	1	2	
	3. Burning Sensation while Urinating	1	2	
	4. Ulcer or sore around genital area	1	2	
	96.Others (Specify) _____	1	2	
	(If answer is "No" to all in Q. No. 710, Go to Q. No. 801)			
711	Have you gone through medical treatment for any of these symptoms in the past year?			
	Symptoms	**Yes**	**No**	
	1. White Discharge/Discharge of Pus	1	2	
	2. Pain during urination	1	2	
	3. Burning Sensation while Urinating	1	2	
	4. Ulcer or sore around genital area	1	2	
	96.Others (Specify) _____	1	2	
	(If answer is "No" to all in Q. No. 711, Go to Q. No. 801)			
712	Where did you go for the treatment? **(Multiple answers. Do not read the possible answers).**	Private Clinic .....1 AMDA Clinic .....2 FPAN Clinic .....3 Health Post/ Health Center.....4 Hospital .....5 Pharmacy .....6 Self Treatment (Specify)____7 Others (Specify) _____96		
713	Did anyone from the place where you went for treatment counsel you about how to avoid the problem?	Yes .....1 No.....2		**801**
713.1	What did she/he tell you? **(Multiple answers, DONOT READ the possible answers given below)**	Told me to use condom .....1 Told me to reduce number of sexual partners .....2 Others (Specify) _____96		

8.0 USE OF DRUGS AND INJECTION

Q. N.	Questions and Filters	Coding Categories	Skip to
801	During the last 30 days how often have you had drinks containing alcohol?	Everyday .....1 2-3 times a week .....2 At least once a week .....3 Less than once in a week .....4 Never……..5 Don't know..... 98	

Q. N.	Questions and Filters	Coding Categories	Skip to
802	Some people take different types of drugs. Have you also tried any of those drugs in the past 30 days? **(Ganja, Bhang, Nitroson, Nitrovet E.)**	Yes .....1 No.....2 Don't know 98	
803	Some people inject drugs using a syringe. Have you ever-injected drugs? **(Do not count drugs injected for medical purpose or treatment of an illness)**	Yes .....1 No.....2 Don't know 98	**901** **901**
804	Have you injected drugs in last 12 months? **(Drugs injected for medical purposes or treatment of an illness do not count)**	Yes .....1 No.....2 Don't know 98	**901** **901**
805	Are you currently injecting drugs?	Yes .....1 No.....2	**901**
806	Think about the last time you injected drugs. Did you use a needle or syringe that had previously been used by someone else?	Yes .....1 No.....2 Don't know 98	
807	Think about the time you injected drugs during the past one month. How often was it with a needle or syringe that had previously been used by someone else?	Every Time .....1 Almost Every Time.....2 Sometimes .....3 Never.....4 Don't Know..... 98	
808	Usually how do you obtain a syringe/needle?	My friend/relative give it to me after use.....1 Unknown person give it to me2 I pick it up from a public place used and left by others .....3 I pick it up from a public place where I leave my syringes ...4 I use a new needle/syringe given by NGO/volunteer.....5 I purchase a new needle/ syringe.....6 Others (Specify) _____96	

9.0 STIGMA AND DISCRIMINATION

Q. N.	Questions and Filters	Coding Categories	Skip to
901	If a male relative of yours gets HIV, would you be willing to take care of him in your household?	Yes .....1 No.....2 Don't know 98	
902	If a female relative of yours gets HIV, would you be willing to take care of him in your household?	Yes .....1 No.....2 Don't know 98	
903	If a member of your family gets HIV, would you want it to remain a secret?	Yes .....1 No.....2 Don't know 98	

ꕥ Thank You. ꕥ

ANNEX - 3

CONFIDENTIAL

INTEGRATED BIO-BEHAVIORAL SURVEY AMONG FEMALE SEX WORKERS, TRUCKERS AND MALE LABOR MIGRANTS IN SELECTED SITES IN NEPAL
FHI/New ERA – 2006

Clinical/Lab Checklist for (Truckers)

Respondent ID Number: | | | | | | | Date: 2062/_____/_____

Name of Clinician: _____

Name of Lab Technician: _____

(A) Clinical Information

Age of respondent: _____
Weight : _____Kg.
B.P. : _____mm of Hg.
Pulse : _____
Temperature : _____º F
Blood Group : _____
Albumin : _____
Sugar : _____

(B) Specimen collection

	Yes	No
Pre test counseled	1	2
Blood Collected for HIV and syphilis	1	2
Date & place for post-test result given	1	2
Condom Given	1	2
Vitamins Given	1	2
Gift Given	1	2
IEC materials given	1	2

1.0 <u>Syndromic Treatment Information</u>

101. Did you have discharge from your penis or burning sensation when you urinate in the past one month?

1. Yes 2. No

[If yes, give treatment for gonorrhea and chlamydia]

102. Did you have sore or ulcer around your genitals in the past one month?

1. Yes 2. No

[If yes, give time for follow-up visit]

ANNEX - 4

Family Health International (FHI), Nepal
Consent Form for Truckers

Title: Integrated Bio-behavioral survey (IBBS) among female sex workers in Kathmandu Valley, Pokhara Valley and 22 terai highway districts; IBBS among truckers along the terai highway districts; and IBBS among labor migrants in 10 districts in the Western and Far Western Sectors of Nepal.

Sponsor: Family Health International, Nepal and USAID, Nepal
Principal Investigator: Asha Basnyat, Country Director
Address: Family Health International/Nepal, GPO BOX 8803, Gairidhara Kathmandu, Nepal, Email: asha@fhi.org.np

Introduction to Research
We are asking you to take part in research to collect information on knowledge of HIV/STIs, HIV/STI related risk behaviors, STI treatment practices and to measure the prevalence of HIV and syphilis among the populations like you. We want to be sure you understand the purpose and your responsibilities in the research before you decide if you want to be in it. If you decide to be in this research, we will ask you to sign this paper (or make your mark in front of a witness). If you want to keep a copy of this paper, we will give it to you. Please ask us to explain any words or information that you may not understand.

General Information about the Research
Study participants will be selected randomly. In total 400 truckers will be selected for interview from Hetaunda. We will ask you some questions and then ask you to provide blood sample. We will draw 7-10 ml blood by 10 ml disposable syringe from your vein. If it is determined that you have any symptoms that are consistent with an STI, we will provide treatment free of charge. The diagnosis and treatment of this type of disease will be done on the basis of National STI Case Management Guidelines. If you agree to participate in this research we would like to convince you that your name will not be taken in any parts of the research.

You are free to decide if you want to be in this research. If you decide not to participate, your decision will not affect the health care you would normally receive at this place.

Your Part in the Research
If you agree to be in the research, you will be asked some questions regarding your age and education. We will also ask you some questions about your travel, the history of your sexual behavior and symptoms of sexually transmitted diseases.

We will explain you what the laboratory tests are performed and what treatment and care is available to you. Then we will collect your blood sample.

Your name will neither be recorded on blood sample nor in the questionnaire. All the questionnaire and samples will be labeled with a code number. Syphilis and HIV will be examined from your blood sample. Syphilis and HIV test will be done in Kathmandu by SACTS if you wish we could provide you syphilis and HIV test results about a month after the completion of the fieldwork. Your part in the research will last approximately one hour.

Possible Risks
The risk of participating in this study is the minor discomfort due to bleeding bruising during blood drawing. Some of the questions we ask might put you in trouble or make you feel uncomfortable to answer them. You are free not to answer such questions and also to withdraw yourself from

participating the research process at any time you like to do so. You might feel some mental stress after getting your test results. But you will get proper pre and post test counseling on HIV and STI through a qualified counselor.

Possible Benefits
You will be provided with free treatment, if currently you have any STI symptoms. You will be given lab test results of syphilis and HIV and made aware of how STI/HIV is transmitted and how it can be prevented and controlled. You will also be provided with information on safe sex. The information we obtain from this research will help us plan and formulate strategies to control and prevent further spread of AIDS and other sexually transmitted diseases.

If You Decide Not to Be in the Research
You are free to decide if you want to be in this research. Your decision will not affect in any way in the health services you have been seeking now and you would normally receive.

Confidentiality
We will protect information collected about you and you taking part in this research to the best of our ability. We will not use your name in any reports. Someone from FHI might want to ask you questions about being in the research, but you do not have to answer them. A court of law could order medical records shown to other people, but that is unlikely.

Payment
We will not pay you for your participation but you will be given small gift, condom and some reading materials about HIV/AIDS and STI as compensation for your participation in the research. Moreover, we will provide you local transportation or reimburse local transportation cost when you come to the study center for interview and for providing biological sample.

Leaving the Research
You may leave the research at any time. If you do, it will not change the healthcare you normally receive from the study clinic.

If You Have a Questions about the Study
If you have any questions about the research, call
Asha Basnyat, Family Health International (FHI), Gairidhara, Kathmandu, Phone Number: 01-4427540.
Siddhartha Man Tuladhar, New ERA, Kalopool, Kathmandu, Nepal, Phone: 01-4413603.
*Laxmi Bilas Acharya***,** Family Health International (FHI), Gairidhara, Kathmandu, Phone: 01-4427540.

Research Related Injuries
If you are sick or have a health problem due to your participation in this research, you will not have to pay for visits to see the research clinic staff. If you need more help, we will refer you to other clinics, where you may have to pay.

Your Rights as a Participant
This research has been reviewed and approved by the Institutional Review Board of Family Health International and Nepal Health Research Council (NHRC). If you have any questions about how you are being treated by the study or your rights as a participant you may contact

Asha Basnyat, Family Health International (FHI), Gairidhara, Kathmandu, Nepal, Phone Number: 01-4427540 OR Mr. David Borasky, Protection of Human Subjects Committee, PO Box 13950, Research Triangle Park, NC 27709, USA, phone number: [International Access Code]-1-919-405-1445, e-mail: dborasky@fhi.org.

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research titled "Integrated Bio-behavioral survey (IBBS) among female sex workers in Kathmandu Valley, Pokhara Valley and 22 terai highway districts; IBBS among truckers along the terai highway districts; and IBBS among labor migrants in 10 districts in the Western and Far Western Sectors of Nepal" has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

_____ _____

Signature or mark of volunteer Date

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

_____ _____

Signature of witness Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____ _____

Signature of Person Who Obtained Consent Date

ANNEX - 5

Dates and Places of Counseling Performed to Truckers

Name of Site	Date of Counseling	Total No. of Study Participants	Study Year	Attended in Post-test Counseling		
				Total Counseled	With HIV	With Syphilis
Hetauda	August 26 to September 30, 2003	400	2003	80	0	6
Pathlaiya	February 21 to March 19, 2006	400	2006	105	0	3

Family Health International
Nepal Country Office
PO Box 8803, Gopal Bhawan, Anamika Galli, Baluwatar Kathmandu, Nepal
Tel: 977-1-4437173, Fax: 977-1-4417475
E-mail: fhinepal@fhi.org.np, Web: www.fhi.org