SUMMARY REPORT Behavioural Surveillance Survey in Healthy Highway Project, India

Fhi



This report is part of a series of baseline surveys conducted to monitor the impact of HIV/STI prevention programmes in five states of India: Andhra Pradesh, Gujarat, Kerala, Orissa, West Bengal and in the Healthy Highways Project. The surveys conducted include behavioural surveillance surveys (BSS), STI/HIV prevalence surveys and health care providers surveys. Together these surveys follow the methods outlined by UNAIDS/WHO for evaluation and monitoring of large scale HIV/STI prevention programmes.

Surveys in each state were implemented by a variety of research organizations, NGOs, medical colleges and laboratories, in collaboration with the respective State AIDS Control Societies. Family Health International provided technical assistance in the implementation of these surveys with funding from the UK Department for International Development.

This report was compiled in 2001

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A study Implemented by Indian Market Research Bureau (IMRB), Bangalore with technical assistance from Family Health International

Funded by UK Department for International Development

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MESSAGE

I am glad to note that the Impact Assessment Project is drawing to a close and is now ready to disseminate the findings of its work. The Impact Assessment Project, supported by DFID was carried out under the guidance of NACO and the State AIDS Control Societies in the states of Orissa, West Bengal, Kerala, Gujarat, Andhra Pradesh and among highway populations. The studies, which include behavioural surveillance surveys, STI prevalence studies and health care provider survey's, provide a mine of information for the planning, design, implementation and monitoring and evaluation of HIV/AIDS control programmes.

I must record here my appreciation for the technical support provided by the Family Health International and their constant efforts to maintain very high standards of quality. I would also like to thank NACO and the State AIDS Control Societies for their ungrudging support throughout this exercise. I hope this report will be a valuable source of information for all people working in the field of HIV/ AIDS prevention in India and the world at large.

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FOREWORD

Sexually transmitted infections (STI) and Human Immunodeficiency Virus (HIV) infection have emerged not only as important public health problems in India but also as a major developmental challenge.

A number of activities are being implemented as a part of the National AIDS Control Programme under the leadership of National AIDS Control Organization in the entire country for the prevention of HIV/STI. Activities include awareness generation, behaviour change communication, condom promotion, management of STIs including the training of health care providers etc. Activities are also directed towards monitoring and evaluation (including impact assessment) of the programme.

As a part of the Healthy Highways Project (HHP) supported by Department for International Development (DFID), several NGOs were supported for implementing HIV prevention projects among truck drivers and helpers in different parts of the country.

The Impact Assessment Project implemented in DFID supported states and in the healthy highways project was implemented under the guidance of NACO, SACS, with technical assistance of Family Health International (FHI) and funding from DFID. The project is an important step for tracking the trend of sexual behaviour (behavioural surveillance surveys), sexually transmitted infections (STI prevalence studies) among important groups and STI case management practices of health care providers [health care providers survey (HCPS)]. For the HHP, BSS was implemented by IMRB, a market research firm and HCPS was implemented by TNS MODE, another market research firm. STI prevalence studies were implemented by different NGOs (1. PREPARE in Nellore in Andhra Pradesh, 2. BPWT in Calcutta Port Trust area in West Bengal, 3. VOICE in Karnal in Haryana) implementing HHP among truckers.

All these surveys provide useful insight into the behaviour of important groups along national highways in the country, the prevalence of STI/HIV among truckers and the way STI patients are managed along the highways by the health care providers. Though information on HIV and high risk behaviour among the truckers existed, but these studies provide information generated in a systematic way from across the country, which is invaluable for monitoring the trend from a national perspective. Information on the prevalence of different STIs among truckers is unique as there is very limited information on the community prevalence of STIs not only among truckers but among Indian males as a whole.

It will be important to repeat these studies at periodic intervals to see the change in these parameters over time.

We thank DFID for providing the financial support to this project.

These reports when used in conjunction with national level BSS conducted by NACO, will be useful in drawing up evidence based response in AIDS programmes.

It is expected that these reports will also be useful for agencies and individuals involved in the fight against STI/HIV/AIDS elsewhere in the country.

Dr. P. Salil

Contents

Executive summary	1
Introduction	7
Key findings – all India analysis	13
Key findings – zonal analysis	22
Discussion	31
Annex 1: BSS indicators at a glance, baseline wave, HHP, 2000, all India analysis	33
Annex 2: BSS indicators at a glance, baseline wave, HHP, 2000, zonal analysis, truck drivers	35
Annex 3: BSS indicators at a glance, baseline wave, HHP, 2000, zonal analysis, FSWs	37

Acronyms and Abbreviations

Acquired immunodeficiency syndrome
Behavioural Surveillance Survey
Department for International Development
Equal probability
Family Health International
Female sex workers
Healthy Highways Project
Human immunodeficiency virus
Indian Market Research Bureau
Non governmental organization
Probability proportional to size
Sexually transmitted infection
Stationary workers
Truck drivers
Truck helpers
Joint United Nations Programme on HIV/AIDS
World Health Organization

Executive summary

This report is a summary of the methodology and findings of the Healthy Highways Project (HHP) HIV Risk Behaviour Surveillance Survey (BSS). This survey was part of the impact assessment of HIV prevention activities in the HHP and was conducted in the year 2000. Indian Market Research Bureau (IMRB), a leading market research agency, implemented the survey. The technical assistance was provided by Family Health International (FHI) and the funding was from Department for International Development (DFID).

The HHP-BSS intends to track trends in HIV/AIDS related knowledge, attitudes and behaviours in sub-populations associated with the trucking industry, especially those at high-risk of acquiring HIV infection. The measurements of indicators obtained in this survey served as a baseline from which future trend could be measured. The core indicators on which data was collected were (a) behaviour indicators and (b) knowledge indicators.

The secondary indicators provided information on, among others, incidence of STI symptoms, treatment-seeking behaviour and practices related to condom use. These indicators were based on those recommended by WHO/UNAIDS for large scale AIDS programmes.

The study covered four segments – truck drivers, truck helpers, stationary workers and female sex workers (FSWs) operating exclusively on highways. The Research methodology comprised of four phases: (a) exploratory qualitative phase to develop structured interview questionnaires, (b) pilot interviews to test the questionnaires and interview approaches, (c) mapping study to develop sampling frame and (d) quantitative phase to collect the data for the main study. The survey instruments were translated into regional languages after extensive field testing.

Sample size

The sample sizes for the survey were 4,811 for truck drivers, 1,504 for FSWs, 1,200 for truck helpers and 1,201 for stationary workers. The sample sizes were adequate to detect a 15% change in behaviour among these segments.

Training

The field-team members (including managers, executives, team leaders and investigators) had been extensively trained to sensitise them to issues related to collecting information on sexual behaviour of the respondents. The training programme had also focused on basic facts on STIs and HIV/AIDS, and interviewing techniques for each target segment.

Key findings – all-India analysis

Key findings of the male segments

Demographic information: The median age for truck drivers was 31 years, for truck helpers was 23 years and was 29 years for stationary workers. A total of 84% truck drivers, 37% truck helpers and 68% stationary workers were married. Twenty-three percent truck helpers, 18% truck drivers and 20% stationary workers had said that they were illiterate.

Behavioural indicators: The proportion of respondents who reported having had sex with any kind of partner (married or other partners) during the preceding year ranged between 92% among truck drivers and 64% among truck helpers. Of these, the proportion of respondents reporting high-risk behaviour (defined as having sex with a FSW, non-regular partner or male partner) was highest among truck helpers. Forty-seven percent and 25% truck helpers had said that they had sex with FSWs and non-regular partners respectively. The same responses were given respectively by 36% and 12% truck drivers.

Number of commercial sexual partners during the preceding year: The median number of commercial sexual partners was 3 among truck drivers, 2 among truck helpers and 1 among stationary workers. A total of 22% truck drivers, 28% truck helpers and 45% stationary workers had reported having had one commercial partner during the preceding year.

Number of non-regular partners during the preceding year: Of those who reported sex with non-regular partner in the preceding year, 75% truck drivers and stationary workers each and 72% truck helpers had said that they had one non-regular partner during the last 12 months.

Condom use with commercial sexual partners: Majority of the respondents in all the three male segments had said that they had used condoms at least sometimes with a commercial partner during the preceding year. A total of 43% truck drivers, 29% truck helpers and 31% stationary workers had reported having used condom during every commercial sex. The reported use of condom during the last sex was higher than the reported consistent use of condoms during the preceding year. It was 67% among truck drivers, 53% among truck helpers and 45% among stationary workers.

Condom use with non-regular partners: Fifty-one percent truck drivers and 62% truck helpers and stationary workers each had stated that they had never used condoms with a non-regular partner during the preceding year. When asked about condom use during last sex with a non-regular partner, 64% truck drivers, 71% truck helpers and 74% stationary workers had said that they had not used condoms during this sexual act.

Knowledge indicators: The study indicated that the awareness of HIV/AIDS was highest among truck drivers (95%). It was 87% among truck helpers 85% among stationary workers. Awareness of STIs was lower in all the sub-groups. It was 77% among truck drivers, 62% among truck helpers and 61% among stationary workers. A total of 71% truck drivers, 66% truck helpers and 61% stationary workers had said that consistent condom use could prevent AIDS.

Sexual health: At least 95% male respondents had said that they did not have genital ulcer or genital discharge during the preceding year.

Key findings of highway FSWs

Demographic information: The median age of FSWs at all-India level was 26 years. A total of 72% FSWs had said that they were married, and 23% were reportedly living with spouse. Fifty-nine percent FSWs had said that they were illiterate.

Behavioural indicators: The median age at first sex among FSWs was 16 years. The median age at first commercial sex was 20 years.

Type of sexual partners: The median number of sexual partners reported by the FSWs during the preceding week was 12. Twenty-five percent FSWs reported having had 7-10 different partners where as 21% had said that they had 11-15 different partners.

Reported condom use: A total of 52% FSWs had said that they had used condoms during every sex with a commercial client, 19% had reported its use almost every time while 21% had said that they had used it sometimes. A total of 76% FSWs had said that their clients had used condoms during the last sex.

Knowledge indicators: Awareness about HIV/AIDS was higher than the awareness about STIs. A total of 87% FSWs had said that they had heard about HIV/AIDS while 73% gave a similar response for STIs. A total of 82% FSWs had said that consistent condom use could prevent AIDS while 14% had said that avoiding casual sex could also prevent it.

Sexual health: Majority (87%) of the FSWs had said that they did not have either genital ulcer or discharge during the preceding year. Seven percent respondents had reported having only genital discharge while 3% respondents had stated that they had genital discharge and an equal proportion had reported symptoms of both, ulcer and discharge.

Key findings – zonal analysis

Key findings of truck drivers

Demographic information: The median age for truck drivers ranged from 30 years in West zone to 33 years in the East Zone. More than 78% truckers from all the zones had said that they were married. The proportion of illiterate truck drivers was higher in East zone (24%) and North-East zone (27%) as compared to the other zones.

Behavioural indicators: The proportion of truck drivers who reported having had sex with a commercial partner during the preceding year ranged from 22% in West zone to

50% in North zone. The corresponding figures for non-regular partners ranged from 8% in South zone to 18% in North zone. Up to 10% truck drivers in all the zones had reported sex only with commercial or non-regular partners during the same period.

Number of commercial sexual partners during the preceding year: The median number of commercial sex partners as reported by the truck drivers was highest in East zone (5) and lowest in North and West zones (2).

Number of non-regular partners during the preceding year: The proportion of truck drivers who had said that they had only one non-regular partner during the preceding year ranged from 69% in the West zone to 76% in the East zone.

Condom use with commercial sexual partners: The proportion of who never used a condom during paid sex ranged from 33% in the North-East zone to 10% in Central zone. More than half the respondents from West, South and Central zones had said that they had used condoms for each sex with FSWs. The reported condom use during the last sex with a commercial partner was least (45%) in East and North-East zones and highest (85%) in Central zone. The proportions of truck drivers who had said that they had used condoms during their last commercial sex in other zones were 75% in the North zone, 67% in the West zone and 76% in the South zone.

Condom use with non-regular partners: The proportion of truck drivers who had said that they had used condoms during every sex with the non-regular partners during the preceding year was least (8%) in North-East zone and highest (27%) in East and Central zones. Reported condom use during the last sex with a non-regular partner was 33% each in North and West zones, 43% in East zone, 31% in South zone, 53% in Central zone and 18% in North-East zone.

Knowledge indicators: Almost all (99%) respondents from West, South and Central Zones, and 97% respondents from North zone had said that they had heard about HIV. The awareness about STIs was however lower in all the regions. It ranged from 93% in Central zone to 64% in North East zone.

Key findings of highway FSWs

Demographic information: The median ages of FSWs in various zones were 28 years each in North and Central zones, 26 years each in East and West zones, 25 years in South zone and 24 years in North-East zone. The proportions of illiterate FSWs were higher in South zone (72%) and East zone (67%) as compared to other zones. It was lowest (48%) in North-East zone.

Behavioural indicators: Majority of the FSWs in all the zones reported first commercial sex between the age of 17-25 years.

Number of different sexual partners: The median number of different sexual partners during the week preceding the survey was highest (27) in South zone and lowest (8) in North-East zone.

Condom use with commercial clients: Reported condom use by FSWs for every commercial sex during the preceding week was high in West and South zones (85% and 84% respectively) as compared to other zones. It was lowest (31%) in Central zone. Reported condom use with the last client was 71% in North zone, 62% in East zone, 94% in West zone, 96% in South zone, 54% in Central zone and 77% in North-East zone.

Reported condom use with non-paying partners: The proportion of FSWs who had reported consistent condom use was highest (70%) in the West zone. Reported condom use during the last sex with a non-paying partner was also highest (75%) in West zone and lowest (16%) in Central zone.

Knowledge indicators: Awareness about HIV/AIDS was higher than that of STIs in all the zones except the East zone.

Sexual health: More than 75% FSWs in various zones had said that they did not have genital discharge or ulcer during the preceding year.

Introduction

One of the most important challenge for health professionals all over the world in recent times is the prevention and control of acquired-immune deficiency syndrome (AIDS) caused by human-immunodeficiency virus (HIV). In response to the HIV/AIDS epidemic in India, the Government of India launched its National AIDS Control Programme in 1992 with an aim to retard the spread of HIV in order to reduce morbidity, mortality, and mitigate the impact of AIDS epidemic.

More than 75% HIV infections in India are reported to be due to sexual transmission. This is why groups at higher risk of getting sexually transmitted infections (STIs) were considered to be at higher risk of contracting HIV infection also. One of the high-risk groups identified for health promotion interventions was truck drivers and helpers, especially those travelling on trucks having national or inter-state permits.

The Department for International Development (DFID) has been supporting Healthy Highways Project (HHP) along the national highways since 1996. This project has been implemented by various non-governmental organizations (NGOs) all over the country. The HHP was mainly implemented in various major halt points where at least fifty trucks were parked at any time of the day or night. The project components included (a) behavioural change communication (BCC), (b) STI treatment and referral, (c) counselling STI patients and (d) condom promotion.

Behavioural Surveillance Surveys (BSS)

The BSS is a monitoring and evaluation tool designed to track trends in HIV/AIDS related knowledge, attitudes and behaviours in sub-populations at particular risk of HIV infection. The BSS findings provide indicators of success or failure of prevention activities, highlight persistent problem areas, identify appropriate intervention target populations,

identify specific behaviours in need of change, function as a policy and advocacy tool and supply comparative data concerning behavioural risks.

The Healthy Highways Project Behavioural Surveillance Survey (HHP-BSS) was conducted by Indian Market Research Bureau (IMRB), which is a leading market research agency, and was identified through a competitive bidding process. The data collection of the survey was completed during February – June 2000.

Objective

The objective of the HHP BSS is to provide repeated measures of behavioural indicators for observing trends in high-risk behaviours in key target groups in the areas covered under the project. The key target groups are truck drivers, truck helpers, stationary workers and highway female sex workers. The first round of BSS serves as a benchmark, and provides baseline measurements of risk behaviours.

Target segments

The study covered the following four segments, which were known to practice high-risk behaviour:

- a. *Truck drivers*, who were aged 18 years or more, had 2 or more years of experience as a truck driver, and whose truck had a national or an interstate permit;
- b. *Truck helpers*, who were aged less than 50 years, had been a truck helper for at least one year on a truck with national or interstate permit;
- c. *Stationary workers*, who were aged 18 49 years, worker for 6 months or more, in a service outlet providing services to truck drivers, e.g., dhaba worker, mechanic, loading worker, etc.; and
- d. *Highway Female Sex Worker (FSWs)*, who was aged 18 years or more and had been doing sex work on the highways for at least six months.

Methodology

The four phases of the methodology included (a) exploratory qualitative phase, (b) pilot interviews, (c) mapping study to develop sampling frame and (d) quantitative phase.

Exploratory qualitative phase: Since an all-India BSS for the HHP was being conducted for the first time, an exploratory qualitative phase was necessary to (a) collect information that would aid development of a structured questionnaire, (b) identify sensitive issues among various target groups and (c) identify methods that would help access and interview the target groups. A total of 56 in-depth interviews including 18 with truck drivers, 24 with FSWs and 14 with stationary workers were conducted in 12 centres across the country. Lessons learned from the exploratory phase were used for developing the protocol.

Pilot interviews: Draft questionnaires were tested during the pilot phase. The main purpose of this phase was to test whether the questions and their language were uniformly understood by the respondents and the interviewers. The pilot phase had also helped standardize ways to approach each target group and to prepare implementation plans. A total of 620 interviews in the four target segments were conducted during the pilot phase.

Mapping study: The existing database on trucking halt points on major national highways was considered to be incomplete and therefore a decision was taken to update it. More than 350 interviews were conducted with truck drivers from various parts of the country to obtain the list of halt points on each highway. This data was collated and cross-checked by an independent consultant.

Quantitative phase: The halt points to be covered in the survey were selected by probability proportional to size (PPS) sampling method. Sampling frames were prepared for truck drivers and FSWs for each of the six zones and PPS sampling was done within each zone. An all-India sampling frame was used for truck helpers and stationary workers. The cluster size was fixed at 20 for male target groups and 10 for FSWs.

The survey instruments were translated into regional languages after extensive field testing.

Indicators

Behavioural surveillance consists of repeated cross-sectional surveys in selected population groups, which provide measurements on certain indicators. These indicators were based on those recommended by WHO/UNAIDS for large scale/national AIDS programmes. In the baseline wave in HHP BSS, data were collected on two main indicators including

(a) behaviour indicators and (b) knowledge indicators. In addition, there were secondary indicators such as incidence of STI symptoms, treatment-seeking behaviour, practices related to condom use. The list of main indicators and the total responses for each are given in the Annex.

The measurements of the core indicators provided information on the proportion of the total respondents who had reported a particular behaviour or knowledge.

Sample size

The targeted sample sizes for the different groups were as given in Table 1. The sample sizes achieved were 4,811 for truck drivers, 1,504 for FSWs, 1,200 for truck helpers and 1,201 for stationary workers.

The key assumption in arriving at the sample size was the proportion engaging in highrisk behaviour and the percentage of change that it would be able to detect over time. In other words, it was the proportion engaging in unprotected sex with a non-regular partner per year in each group. The estimated proportion of high-risk behaviour in the target segments was 25% among truck helpers and stationary workers each, 35% among truck drivers and 100% among FSWs. The sample size was adequate to detect a 15% change of behaviour among these segments.

Issues in behavioural data collection –Validity of self reported data on sexual behaviour

Many questions had been raised about the validity of self-reported data on sexual behaviour. Growing experience in collecting data on sexual behaviour had indicated that the extent to which people answered questions openly and truthfully depended on factors such as the setting of the question, privacy and confidentiality, attitudes and profile of the interviewer, etc. While it is not possible to validate data on sexual practices by direct observation, it is possible to triangulate them with data from other sources to see if the picture presented is consistent and credible. Still, some misreporting of risk behaviour could occur and true levels of risk might well be under or over reported.

	Table	1: Sample size for various target groups	
	Target Group	Specific definition and location	Sample size
1.	Truckers - South	Men aged 18-49 working as drivers of trucks	800
		along Southern region highways	
2.	FSWs - South	Women who had reportedly sold sex in the past	250
		year along trucking routes in the Southern region	l
3.	Truckers - North	Men aged 18-49 working as drivers of trucks	800
		along Northern region highways	
4.	FSWs - North	Women who reportedly sold sex in the past year	250
		along trucking routes in the Northern region	
5.	Truckers - Central	Men aged 18-49 working as drivers of trucks	800
		along Central region highways	
6.	FSWs - Central	Women who reportedly sold sex in the past year	250
		along trucking routes in the Central region	
7.	Truckers - East	Men aged 18-49 working as drivers of trucks	800
		along Eastern region highways	
8.	FSWs - East	Women who reportedly sold sex in the past year	250
		along trucking routes in the Eastern region	
9.	Truckers -	Men aged 18-49 working as drivers of trucks	800
	North East	along Eastern region highways	
10.	FSWs - North East	Women who reportedly sold sex in the past year	250
		along trucking routes in the North Eastern region	
11.	Truckers - West	Men aged 18-49 working as drivers of trucks	800
		along Western region highways	
12.	FSWs - West	Women who reportedly sold sex in the past year	250
		along trucking routes in the Western region	
13.	Trucker helpers	Males aged 15-49 working as helpers in trucks	1200
	(from all 6 regions)	e	
14.	Male stationary	Males aged 18-49 working as stationary workers	1200
	workers (from	at halting points in the six regions	
	all 6 regions)		
	Total		8700

However, for those tracking the HIV epidemic, the trends in risk behaviours are of greater concern than the exact level of risk behaviour at any given point of time. Even when there is misreporting, repeat behavioural surveys have indicated changes in trends over a period of time, provided the magnitude or direction of misreporting did not change significantly.

To ensure maximum validity, the survey was implemented with high levels of quality control. This included intensive sensitisation and training of the interviewers, provision of a setting conducive to privacy during interview, assuring and maintaining confidentiality so that the respondents felt comfortable.

Training

The field-team members (including managers, executives, team leaders and investigators) had received extensive training to sensitise them to issues related to collecting information on sexual behaviour of the respondents. The training programme had also focused on basic facts on STIs and HIV/AIDS, and interviewing techniques for each target segment. The training was carried out by experienced trainers and facilitators from NGOs who had extensive field experience in working with truck drivers and highway female sex workers. The field managers and executives were trained in a 3-days centralized training workshop, whereas the field team leaders and investigators were trained in various field centers of IMRB.

Key findings – all India analysis

Sampling for truck helpers and stationary workers was done on all-India basis while sampling for truck drivers and FSWs was done for each zone. This section details cumulative findings of all the sub-group of respondents related to demographic information, behavioural indicators and knowledge indicators at all India level.

Key findings of the male segments

Demographic information

Age profile: A total of 46% truck drivers were in the age group of 21-30 years while 22% were in the age group of 31-35 years. The median age for truck drivers was 31 years. Truck helpers were from relatively younger age groups. Thirty-eight percent of them were aged 18-20 years while 40% were in the age group of 21-25 years. The median age of truck helpers was 23 years. Majority of the stationary workers (53%) were in the age group of 21-30 years. Their median age was 29 years.

Marital status: Eighty-four percent truck drivers, 37% truck helpers and 68% stationary workers had said that they were married.

State of origin: Truck drivers from Uttar Pradesh comprised the maximum number of respondents (16%). Ten percent truck drivers were from Bihar and Andhra Pradesh each, 9% were from Madhya Pradesh, 8% were from Maharashtra and 7% were from Punjab and West Bengal each. The remaining 33% truckers were from the other states of India.

Literacy: Twenty-three percent truck helpers, 18% truck drivers and 20% stationary workers had said that they were illiterate. Thirty-six percent truck drivers, 35% truck helpers and 33% stationary workers had reportedly completed Class X examination.

Behavioural indicators

The proportion of respondents who reported having had sex with any kind of partner (married or other partners) during the preceding year was highest among truck drivers (92.4% of 4,811 respondents) and least among truck helpers (64.4% of 1,200 respondents). A total of 77.3% of the 1,201 stationary workers had said that they had sex during the same period.

Type of sexual partners

Of the respondents who had reported having had sex during the preceding 12 months, the proportion of respondents reporting high-risk behaviour (defined as having sex with a FSW, non-regular partner or male partner) was highest among truck helpers. Forty-seven percent and 25% truck helpers had said that they had sex with FSWs and non-regular partners respectively. The corresponding figures were 36% and 12% for truck drivers and 19% and 13% among stationary workers (Table 2).

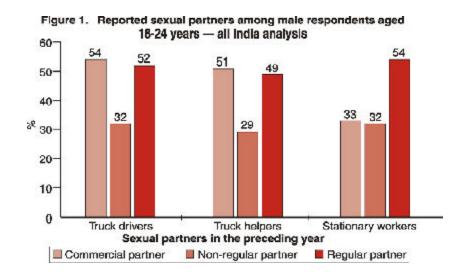
Table 2: Type of sexual partners reported by male respondents – allIndia analysis							
Sexual partner in the % respondents in the male segments							
last 12 months	Truck drivers Truck helpers Stationary workers						
	(n = 4445) $(n = 773)$ $(n = 928)$						
Commercial partner	36	47	19				
Non-regular partner*	12	25	13				
Regular partner	89 60 86						

* A non-regular partner is defined as a sexual partner that the respondents are not married to, have never lived with and do not pay.

Two percent truck drivers and truck helpers each and one percent stationary workers had reported having had male sexual partners during the year before the survey.

Analysis of high-risk behaviour among the sub-groups in the male segments in various age groups had indicated that such behaviour was highest among respondents aged 18-24 years. In this age group, 54% truck drivers, 51% truck helpers and 33% stationary workers had reported sex with FSWs. Thirty-two percent truck drivers and stationary

workers each and, 29% truck helpers in the same age group had said that they had sex with non-regular partners (Figure 1).



Number of commercial sexual partners during the preceding year: The median numbers of commercial sexual partners were 3 among truck drivers, 2 among truck helpers and 1 among stationary workers. A total of 22% truck drivers, 28% truck helpers and 45% stationary workers had reported having had one commercial partner during the preceding year. Twenty percent truck drivers, 15% truck helpers and 4% stationary workers had said that they had 6-10 different sexual partners during the same period (Table 3).

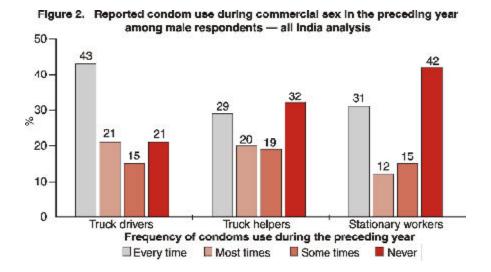
Table 3: Reported number of commercial sexual partners during the preceding year among male respondents – all India analysis								
No. of commercial	No. of commercial % respondents in the male segments							
sex partners	Truck drivers	Truck helpers	Stationary workers					
	(n = 1612)	(n = 1612) $(n = 367)$ $(n = 180)$						
1	22	28	45					
2-3	31	32	34					
4-5	15	16	13					
6-10	20	15	4					
11-20	8	5	3					
More than 20	4	3	1					

Key findings - all India analysis

Number of non-regular partners during the preceding year: Seventy-five percent truck drivers and stationary workers each and 72% truck helpers had said that they had one non-regular partner during the last 12 months. A total of 17% truck drivers, 22% truck helpers and 20% stationary workers had reported having had 2-3 different non-regular partners during the same period while the remaining respondents had stated that they had more than 3 such partners. A total of 40-52% respondents from the three male segments had said that their frequency of sex with non-regular partner during the preceding month ranged from one to three encounters.

Condom use with commercial sexual partners

Majority of the respondents in all the three male segments had said that they had used condoms at least sometimes with a commercial partner during the preceding year. A total of 43% truck drivers, 29% truck helpers and 31% stationary workers had reported having used condom during every commercial sex. The proportion of respondents who had said that they had never used a condom was highest among stationary workers (42%) and lowest among truck drivers (21%) as shown in Figure 2.



The reported use of condom during the last sex was higher than the reported consistent use of condoms during the preceding year. It was 67% among truck drivers, 53% among truck helpers and 45% among stationary workers.

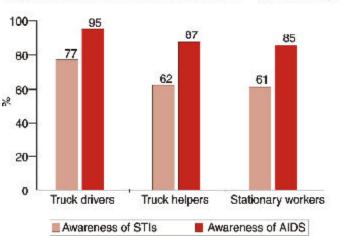
Condom use with non-regular partners

The proportion of respondents who had said that they had never used condoms with a non-regular partner during the preceding year was higher than those who had reported such high-risk behaviour with commercial partners. Fifty-one percent truck drivers and 62 % truck helpers and stationary workers each had stated that they had never used condoms with a non-regular partner during the preceding year.

When asked about condom use during last sex with a non-regular partner, 64% truck drivers, 71% truck helpers and 74% stationary workers had said that they had not used condoms during this sexual act.

Knowledge indicators

The study indicated that the awareness of HIV/AIDS was highest among truck drivers (95%). It was 87% among truck helpers and 85% among stationary workers. Awareness of STIs was lower in all the sub-groups. It was 77% among truck drivers, 62% among truck helpers and 61% among stationary workers (Figure 3).





Awareness about ways of prevention of HIV/AIDS was however lower. A total of 71% truck drivers, 66% truck helpers and 61% stationary workers had said that consistent condom

use could prevent AIDS while 42% truck drivers, 36% truck helpers and 43% stationary workers had said that avoiding casual sex could prevent AIDS.

Other findings

A total of 11% truck drivers, 6% truck helpers and 4% stationary workers had said that they were approached by NGO staff for awareness on AIDS prevention during the preceding year.

Sexual health

At least 95% male respondents had said that they did not have genital ulcer or genital discharge during the preceding year. Two percent truck drivers and truck helpers each had reported having had genital discharge and genital ulcer each while 1% had said that they had both the symptoms. Only 1% stationary workers had said that they either had genital discharge, or genital ulcer of both these symptoms.

Among the male respondents who had reported genital discharge or genital ulcer, 29% truck drivers, 26% truck helpers and 15% stationary workers had said that they had taken treatment at a government facility, whereas 24%, 17% and 33% truck drivers, truck helpers and stationary workers respectively had reported to have taken treatment at a private clinic or hospital. Thirty-four percent truck drivers, 51% truck helpers and 28% stationary workers had said that they had taken medicines directly from a pharmacy.

Alcohol and drug use

A total of 56% truck drivers had said that they had consumed alcohol during the preceding month, of which 17% of them had reported daily alcohol consumption.

Key findings of highway FSWs

Demographic information

Age profile: The median age of FSWs at all-India level was 26 years. Thirty percent of them were aged 21-25 years while 33% of them were in the age group of 26-30 years.

Marital status: A total of 72% FSWs had said that they were married, and 23% were reportedly living with spouse and 6% were living with other sexual partner. Twenty-four percent FSWs had said that they were neither married nor living with a sexual partner.

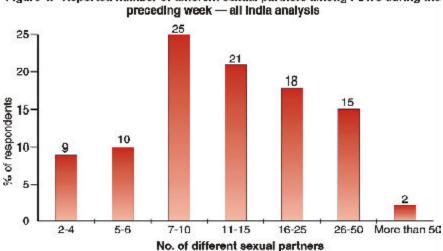
Literacy status: Fifty-nine percent FSWs had said that they were illiterate while 28% had stated that they had studied up to Class V.

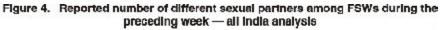
Behavioural indicators

The median age at first sex among FSWs was 16 years. A total of 49% of them had said that they had their first sex between 14-16 years while 37% had said that it was between 17-20 years. The median age at first commercial sex was 20 years. A total of 39% and 32% of the FSWs had said that their first commercial sex was in the age group of 17-20 years and 21-25 years respectively.

Type of sexual partners

The median number of sexual partners reported by the FSWs during the preceding week was 12. Twenty-five percent FSWs reported having had 7-10 different partners where as 21% had said that they had 11-15 different partners. A total of 35% of them had reported having more than 15 different partners during the preceding week (Figure 4).





Among the paying partners during the preceding week, 90% FSWs had said that they had sex with truck drivers, 55% had reported having truck helpers as clients while 47% of them had said that their clients included mechanics and other stationary workers. Thirty-four percent FSWs had said that they also had sex with non-paying partners during the same week. Such partners were mainly spouses and also included live-in partners, police, dhaba workers, truck drivers and stationary workers.

Reported condom use

When asked about the condom use with a paying client during the preceding month, 52% FSWs had said that they had used it every time, 19% had reported its use almost every time while 21% had said that they had used it sometimes (Figure 5).

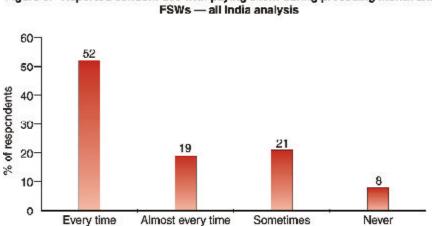


Figure 5. Reported condom use with paying client during preceding month among

Just as among male respondents, the proportion of FSWs reporting condom use during the last sex was higher than consistent condom use during the preceding month. A total of 76% had said that their clients had used condoms during the last sex.

Knowledge indicators

Awareness about HIV/AIDS was higher than the awareness about STIs. A total of 87% FSWs had said that they had heard about HIV/AIDS while 73% gave a similar response for STIs.

A total of 82% FSWs had said that consistent condom use could prevent AIDS while 14% had said that avoiding casual sex could also prevent it.

Other findings

Twenty-three percent FSWs had said that they were approached by a NGO staff for awareness on AIDS prevention during the preceding year.

Sexual health

Majority (87%) of the FSWs had said that they did not have either genital ulcer or discharge during the preceding year. Seven percent respondents had reported having only genital ulcer while 3% respondents had stated that they had genital discharge and an equal proportion had reported symptoms of both, ulcer and discharge.

Of the FSWs who had reported symptoms of STIs, 27% had said that they had taken treatment at government facility while 30% had reported having been treated at a private hospital. A total of 25% of them had stated that they had taken medicines from a pharmacy.

Twenty-two percent FSWs had said that they had undergone blood test for HIV. About 75% of the FSWs who had undergone the test had said that they had done so voluntarily.

Alcohol and drug use

A total of 45% FSWs had said that they had consumed alcohol during the month preceding the survey. Fourteen percent of them had said that they had consumed it every day while 18% had said that they consumed it at least once a week.

Key findings – zonal analysis

The BSS in the Healthy Highways Project was done on highways in six zones of India. The sampling for truck drivers and FSWs was done separately for each of these zones. This section compares the key findings of truck drivers and FSWs in each zone. The respective zones included different states as shown in Table 4.

	Table 4: Definition of zones in the HHP BSS
Zone	Highway stretches in the states of:
North	Punjab, Rajasthan, Haryana, Uttar Pradesh and Delhi.
Central	Madhya Pradesh
East	West Bengal, Bihar and Orissa
West	Maharashtra (including those connected to Bombay) and Gujarat
South ¹	Kerala, Andhra Pradesh and Karnataka.
North-East	Assam and other North-Eastern States

Key findings of truck drivers

Demographic information

Age profile: The median ages of truck drivers ranged from 30 years in West zone to 33 years in the East Zone. About 46% to 59% truck drivers in the six zones were in the age group of 26-35 years.

Marital status: More than 78% truckers from all the zones had said that they were married.

¹The fourth state of Southern India, Tamil Nadu, was not covered in the study because truckers from Tamil Nadu have already been extensively studied through separate Tamil Nadu HIV Risk Behaviour Surveillance Surveys conducted by AIDS Prevention and Control Project (APAC).

State of origin: Truck drivers from Uttar Pradesh formed the largest proportion (32%) in the North whereas in the East zone, 37% truck drivers were from Bihar and 22% were from West Bengal. Similarly, in the West zone, 32% truck drivers were from Maharashtra while in the Central zone, 38% truck drivers were from Madhya Pradesh and 25% were from Uttar Pradesh. A total of 27% truck drivers in North-East zone were from Assam.

Literacy status: The proportion of illiterate truck drivers was higher in East zone (24%) and North-East zone (27%) as compared to the other zones.

Behavioural indicators

The proportion of respondents who reported having sex with any kind of partner (married or otherwise) during the preceding 12 months ranged from 84% in West zone to 99% in Central zones. The proportion of truck drivers who had reported ever having sex was higher than the proportion of those who were married. For example, almost all the truck drivers in the Central zone had reportedly had sex while 88% of them had said that they were married.

Type of sexual partners

The proportion of truck drivers who reported having had sex with a commercial partner ranged from 22% in West zone to 50% in North zone. The corresponding figures for non-regular partners ranged from 8% in the South zone to 18% in the North zone (Table 5). Five percent truck drivers from North zone, 4% in East zone and 3% in Central zone had said that they had sex with male partners during the same period.

Table 5: Type of sexua	al partners	report	ed by t	ruck dri	vers in va	rious zones
Type of sexual partners	f sexual partners % of respondents among truck drivers in various zones					
	North	East	West	South	Central	North-East
Commercial partners	50	28	22	24	49	42
Non-regular partners	18	9	9	8	15	13
Regular partners	88	89	87	92	88	88

The proportion of truck drivers who reported having had sex with regular partners only during the preceding year was highest in West zone (71%) and lowest in North zone (42%). Sixty-five percent truck drivers in East zone, 70% in South zone, 43% in Central zone and 53% in North-East zone had given similar response. Up to 10% truck drivers in all the zones had said that they had sex with commercial or non-regular partners only during the same period.

Number of commercial sexual partners during the preceding year: The median number of commercial sex partners as reported by the truck drivers was highest in East zone (5) and lowest in North and West zones (2). Majority of the truck drivers who had said that they had sex with FSWs during the preceding year had said that they had up to 5 different partners. Thirty-seven percent truck drivers in North zone had reported having had only one commercial partner during the same period. Twenty-six percent truck drivers from South zone had stated that they had 6-10 different partners, which was higher than the proportion of truck drivers from other zones (Table 6).

Table 6: Number of different commercial sex partners among truck drivers							
	in various zones						
No. of different	No. of different % of respondents among truck drivers in various zones						
commercial sex partners	North	East	West	South	Central	North-East	
1	37	12	24	13	17	19	
2-3	25	19	31	28	28	39	
4-5	13	17	10	12	17	18	
6-10	12	23	18	26	25	20	
11-20	5	17	10	11	10	2	
More than 20	2	12	7	10	21	1	

Number of non-regular partners during the preceding year: The proportion of truck drivers who had said that they had only one non-regular partner during the preceding year ranged from 69% in the West zone to 76% in the East zone. Up to 15% of them in each region had reported having more than three different non-regular partners.

Condom use with commercial sexual partners

Of the truck drivers who had reported having sex with a FSWs during the preceding year, the proportion of who never used a condom ranged from 33% in the North-East zone to 10% in Central zone. More than half the respondents from West, South and Central zones had said that they had used condoms for each sex with FSWs (Table 7).

Table 7: Reported condom use during commercial sex in the precedingyear among truck drivers from various zones							
Frequency of condom % of respondents among truck drivers in various zones							
use during last year	North East West South Central North-East						
Every time	46	27	52	59	58	18	
Most times	27	12	5	11	25	26	
Some times	11	32	19	8	7	23	
Never	16	29	22	21	10	33	

The reported condom use during the last sex with a commercial partner was higher than the proportion who had said that they had used condoms during every sex with a FSWs in the preceding year. It was least (45%) in East and North-East zones and highest (85%) in Central zone. The proportions of truck drivers who had said that they had used condoms during their last commercial sex in other zones were 75% in the North, 67% in the West and 76% in the South.

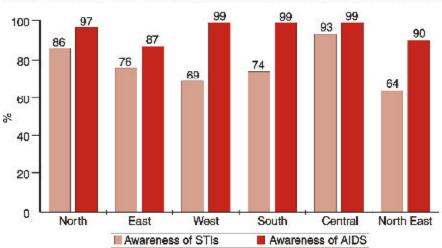
Condom use with non-regular partners

The proportion of truck drivers who had said that they had used condoms during every sex with the non-regular partners during the preceding year was least (8%) in North-East zone and highest (27%) in East and Central zones. The proportion of respondents who had said that they had never used condoms during sex with non-regular partners in the preceding year ranged from 40% in Central zone to 58% in South zone. Fifty-seven percent truck drivers from North-East zone had also given a similar response.

Reported condom use during the last sex with a non-regular partner was 33% each in North and West zones, 43% in East zone, 31% in South zone, 53% in Central zone and 18% in North-East zone.

Knowledge indicators

Almost all (99%) respondents from West, South and Central Zones, and 97% respondents from North zone had said that they had heard about HIV. The awareness about STIs was however lower in all the regions. It ranged from 93% in Central zone to 64% in North East zone (Figure 6).





The knowledge that consistent condom use prevented HIV infection was lower in East (54%) and North-East zones (50%) as compared to other regions. It was highest in Central zone (86%).

Other findings

Alcohol and drug use

The proportion of truck drivers who had said that they had consumed alcohol during the month before the survey was highest in North-East zone (79%) and least in South zone (40%). Daily consumption of alcohol was reported by 35% truck drives in North-East zone, 20% in East zone, 18% in North zone, 15% in Central zone, 9% in West zone and 5% in South zone.

Key findings of highway FSWs

Demographic information

Age profile: The median ages of FSWs in various zones were 28 years each in North and Central zones, 26 years each in East and West zones, 25 years in South zone and 24 years in North-East zone. More than 56% FSWs from various zones were in the age group of 21-30 years.

Marital status: The proportion of FSWs who had said that they were married was higher than those who had said that they were living with spouse or a sexual partner. For example, 85% FSWs in Central zone had stated that they were married but 46% of them were living with spouse or sexual partner at the time of the survey. Similarly, 63% FSWs in North-East zone were reported to be married but only 16% of them had said that they were living with either a spouse or a sexual partner.

Literacy status: The proportion of illiterate FSWs was higher in South zone (72%) and East zone (67%) as compared to other zones. It was lowest (48%) in North-East zone.

Behavioural indicators

Sexual history

The median ages at first sex among FSWs were 16 years each in North, West and Central zones and 15 years each in East, South and North-East zones. The median ages at first commercial sex were 21 years each in North and South zones, 18 years in East zone, 20 years each in West and North-East zones and 23 years in Central zone. Majority of the FSWs had reported first commercial sex between the age of 17-25 years (Table 8).

Number of different sexual partners

The median number of different sexual partners during the week before the survey was highest (27) in South zone and lowest (8) in North-East zone. In the South zone, 50% FSWs had said that they had more than 25 different sexual partners during the same week while 44% of them in North-East zone had reported 7-10 sexual partners (Table 9).

Sexual history	% of respondents among FSWs in various zones								
	North	East	West	South	Central	North-East			
Age at first sex									
Below 14 years	4	11	6	25	5	15			
14-16 years	53	53	39	42	56	49			
17-20 years	41	33	53	30	38	33			
21 years or more	2	3	2	3	1	3			
Age at first commercial sex									
Up to 16 years	12	21	10	9	2	12			
17-20 years	35	48	50	35	29	38			
21-25 years	30	19	30	34	40	37			
26-30 years	15	11	9	14	23	9			
31 years or more	8	1	1	6	6	4			

Table 8: Age at first sex and first commercial sex among FSWs in various zones

Type of sexual partners

At least 95% of the paying sexual partners among FSWs in all zones except West zone were reported to be truck drivers. In the West zone, 62% FSWs had said that their commercial sex partners included truck drivers. More than 55% of such clients in all zones except West zone were said to be truck helpers.

Table 9: Reported number of different sexual partners amongFSWs in various zones during the last week										
No. of sex partners	No. of sex partners % of respondents among FSWs in various zones									
in the last week	North	East	West	South	Central	North East				
2-4	13	11	2	1	5	19				
5-6	18	12	2	4	9	15				
7-10	30	18	15	8	30	44				
11-15	22	25	23	10	31	13				
16-25	13	20	33	24	16	6				
More than 25	2	13	23	50	8	2				

The number of FSWs who reported having sex with non-commercial partners (including husband, live-in sexual partner, and other non-regular non-paying partners) was high in North zone (51%) and Central zone (54%) as compared to those in other zones.

Reported condom use

Condom use with commercial clients: Reported condom use by FSWs for every commercial sex during the preceding week was high in West and South zones (85% and 84% respectively) as compared to other zones. It was lowest (31%) in Central zone (Table 10).

Table 10: Reported condom use with paying client duringpreceding month among FSWs in various zones										
Condom use during % of respondents among FSWs in various zones										
commercial sex	North	North East West South Central North Eas								
Every time	35	37	85	84	31	41				
Almost every time	29	14	6	14	20	33				
Sometimes	24	35	7	2	34	24				
Never	12	14	2	0	15	2				

Reported condom use with the last client was 71% in North zone, 62% in East zone, 94% in West zone, 96% in South zone, 54% in Central zone and 77% in North-East zone. This survey indicated that the zones where the reported number of different commercial sexual partners was high (South and West zones), the reported condom use was also higher than in other zones. Similarly, the number of different partners reported during the last week was lower in Central, East and North-East zones, where the reported condom use was also low.

Reported condom use with non-paying partners: Seventy percent FSWs in West zone had said that they had used condoms during every sex with a non-paying partner during the preceding year. The proportion of FSWs giving the same response in other zones was lower. For example, only 6% FSWs from North and Central zones, and 14% FSWs in East zone had reported consistent condom use during sex with non-paying partners in the same period. Seventy-four percent FSWs in Central zone had said that they had never used a condom during sex with non-paying partner in the last year. Reported condom use

during the last sex with a non-paying partner was also highest (75%) in West zone and lowest (16%) in Central zone.

Knowledge indicators

Awareness about HIV/AIDS was higher than that of STIs in most zones except the East zone. For example, all the FSWs in the South zone had said that they had heard about AIDS, while only 77% had said that they also knew about STIs. Similarly, 90% FSWs in West zone knew about AIDS as compared to 62% who knew about STIs (Table 11).

Table 11: Awareness about STIs/HIV/AIDS among FSWs in various zones									
Awareness about	% of	respond	lents amo	ong FSWs	in various z	zones			
commercial sex	North	East	West	South	Central	North East			
STIs	85	72	62	77	78	64			
HIV/AIDS	91	73	90	100	83	82			

The knowledge that consistent condom use prevented HIV infection ranged from 60% FSWs in North-East zone to 95% in West zone.

Other findings

Only 2% FSWs in the Central zone had said that they were approached by NGO staff for awareness regarding HIV/AIDS prevention during the preceding year. The same responses were given by 17% FSWs in North zone, 39% in East zone, 32% in West zone, 24% in South zone and 22% in North-East zone.

Sexual health

More than 75% FSWs in various zones had said that they did not have genital discharge or ulcer during the preceding year. The proportion of respondents reporting vaginal discharge was highest (16%) in North-East zone and lowest (1%) in North zone.

The proportion of FSWs who had said that they had HIV test ranged from 6% in Central zone to 42% in West zone.

Discussion

The findings of this survey contributed to the baseline measurements of behaviour and knowledge indicators among truck drivers and helpers, stationary workers and FSWs operating on the national highways, against which trends could be tracked over time. The results of this wave of the BSS also provided useful and actionable information regarding HIV related risk behaviours and knowledge prevalent at that point of time among these groups. Some of the key information are discussed below.

- The results of the baseline wave of the BSS estimated that the proportion of truck drivers, on an all India basis, reporting sexual intercourse with a female sex worker was 33.5%. On a regional basis, more truck drivers in Central and North reported sex with both regular and commercial partners than in other zones.
- The study showed that the proportion of truck helpers reporting sexual intercourse with a female sex worker was 30.5% and for stationary workers, it was 15%. Thus, mobile populations reported more risky behaviour than the non-mobile populations.
- An analysis by age showed that more truck drivers and truck helpers in the 18 to 24 year age group reported sex with a FSW. Also, in all three categories of males, of those reporting sex with any non-regular partner, a large majority was below 30 years of age.
- Proportions of all three male segments reporting sex with female sex workers were higher than the proportions reporting sex with non-regular non-commercial partners.
- Reported consistent condom use with FSWs was higher among all three male segments as compared to consistent condom use during sex with a non-regular

partner. For example, 43% truck drivers, 29% truck helpers and 31% stationary workers had reported consistent use of condoms during sex with a FSW. The corresponding figures for a non-regular partner were 20%, 17% and 15% respectively.

- The proportion of truck drivers reporting consistent condom use with FSWs was lower in east and North-East zones (27% and 18% respectively) and higher in South and Central zones (59% and 58% respectively).
- ➤ The reported condom use during last commercial sex was higher than the reported rate of consistent condom use in all segments. For example, 52% FSWs had said that they practiced consistent condom use with commercial clients, while 76% of them had stated that they had used it during the last sex. Similarly, 43% truck drivers and 29% truck helpers had said that they used condoms for every sex with commercial partner, 67% and 53% of them respectively had reported condom use during last sex with such partner.
- Truck Drivers reported more condom use in sex with FSWs in West, Central and South than in East and North East zones. A total of 45% each of truck drivers in the East and North East zones had said that they had used condoms during their last sex with FSWs, whereas 85% truck drivers in Central zone, 76% of them in South zone and 75% in North zone had reported the same practice.
- On a number of parameters, FSWs reported safer behaviours in South and West zones compared to FSWs from other zones. For instance, consistent condom use was reported by 85% FSWs in West and 85% in South zone as compared to 35% in North, 37% in East, 31% in Central and 41% in North-East zones.
- Just as for consistent condom use, the reported condom use during last sex by the clients of FSWs was higher in the South and West zones (96% and 94% respectively). It was least in Central zone (54%).

Annex 1: BSS indicators at a glance, Baseline wave, HHP, 2000

All - India level

Sampla siza (N)	TD 4811	TH 1200	SW 1201
Sample size (N)	%	%	%
Knowledge of HIV Prevention Methods			
Consistent condom use	71	66	61
Mutual monogamy between HIV negative partners	6	4	6
Abstinence from sex	7	6	4
Respondents who had sex during the last 12 months (N1)	4445	773	928
Respondents who had sex with non regular, non commercial partners in the past 12 months (N2)	532	192	119
Had sex with non regular, non commercial partners in the past 12 months (% of N2)	11.9	24.8	12.8
Median number of non regular, non commercial partners in the past 12 months	1	1	1
Condom use at last sex with non regular, non commercial partner (% of N2)	36	29	26
Consistent condom use with non regular, non commercial partner in the past 12 months (% of N2)	20	17	15
C.I. of 95%	16.5-	11.8-	8.6-
	23.3	22.5	21.5
Respondents who had commercial sex in the past 12 months (N3)	1612	367	180
Had commercial sex in the past 12 months (% of N1)	36.2	47.4	19.3
Median number of commercial partners in the past	3	2	1
12 months			
Condom use at last sex with commercial partner (% of N3)	67	53	45
Consistent condom use with commercial partner in the past 12 months (% of N3)	43	29	31
C.I. of 95%	40.5- 45.4	24.2- 33.5	24.3- 37.8

	TD	TH	SW
Sample size (N)	4811	1200	1201
	%	%	%
Respondents who had anal sex with male partner	91	19	17
in the past 12 months (N4)			
Had anal sex with male partner in the past 12 months	2	2	1
(% of N1)			
Average number of anal sex partners in the past 12 months	1.7	1.6	1.2
Condom use at last anal sex with male partner (% of N4)	26	15	17
Consistent condom use with male partner during anal sex	15.3	5.2	5.8
in the past 12 months (% of N4)			
C.I. of 95%	7.9-	-4.7-	-5.3-
	22.8	15.3	17.1
Incidence of genital discharge/ulcer in the past 12 months			
Suffered from discharge from genitals or ulcers in genitals	5	5	3
in the past 12 months (% of N)			
Suffered from discharge from genitals or ulcers in genitals	5	5	3

TD - Truck driver, TH - Truck helper, SW - Stationary worker, FSWs - female sex worker

Annex 2: BSS indicators at a glance, Baseline wave, HHP, 2000

Zonal analysis – Truck drivers

Sample Size (N)	All India 4811 %	N 800 %	S 802 %	E 820 %	W 800 %	C 800 %	NE 789 %
Knowledge of HIV Prevention							
Methods							
Consistent condom use	71	80	77	54	72	86	50
Mutual monogamy between HIV negative partners	6	5	10	6	5	4	3
Abstinence from sex	7	8	6	7	7	9	6
Respondents who had sex during the last 12 months (N1)	4445	781	714	744	670	794	742
Respondents who had sex with nor regular, non commercial partner.		140	59	63	60	115	95
in the past 12 months (N2)							
Had sex with non regular, non commercial partners in the past 12 months (% of N1)	11.9	18	8	9	9	15	13
Median number of non regular, non commercial partners in the past 12 months	1	1	1	1	1	1	1
Condom use at last sex with nor regular, non commercial partner (% of N2)	n- 36	33	31	43	33	53	18
Consistent condom use with non regular, non commercial partner in the past 12 months (% of N2)	20	18	22	27	20	27	8
C.I. of 95%	16.5- 23.3	11.5- 24.2	11.4- 32.6	16.0- 37.9	9.8- 30.1	18.8- 35.1	2.8- 14.0

	All India	N	S	Е	W	С	NE
Sample Size (N)	4811	IN 800	802	Е 820	800	800	NE 789
Sample Size (14)	%	%	%	%	%	%	%
Respondents who had commer-	1612	387	168	208	144	391	314
cial sex in the past 12 months (N							
Had commercial sex in the	36.2	50	24	28	22	49	42
past 12 months (% of N1)							
Median number of commercial	3	2	4	5	2	3	3
partners in the past 12 months							
Condom use at last sex with	67	75	76	45	67	85	45
commercial partner (% of N3)							
Consistent condom use with	43	46	59	27	52	58	18
commercial partner in the							
past 12 months (% of N3)							
C.I. of 95%	40.5-	41.0-	51.4-	20.9-	43.9-	53.1-	14.3-
	45.4	50.9	66.3	32.9	60.2	62.9	22.9
Incidence of genital discharge/							
ulcer in the past 12 months							
Suffered from genital discharge	5	3	1.8	3.4	5.3	3	13.6
ulcers in the past 12 months							
(% of N)							

N - North zone, S - South zone, E - East zone, W - West zone, C - Central zone, NE - North-East zone

Annex 3: BSS indicators at a glance, Baseline wave, HHP, 2000

Zonal analysis — Female sex workers

	All India	N	S	Е	W	С	NE
Sample Size (N)	1504	248	251	251	252	250	252
	%	%	%	%	%	%	%
Knowledge that consistent	82	81	94	80	95	77	60
condom use prevents HIV infec	tion						
Median number of partners in	12	9	27	12	18	11	8
the past one week							
FSWs having sex with a paying	1481	245	244	250	246	248	248
partner in the past one week (N2))						
Had sex with paying partner	98.4	98.7	97.2	99.6	97.6	99.2	98.4
in past one week (% of N)							
Condom use at last sex with	76	71	96	62	94	54	77
paying partner (% of N2)							
Consistent condom use with	52	35	84	37	85	31	41
paying partner in the past							
12 months (% of N2)							
C.I of 95%	49.5-	29.1-	79.4-		80.5-	25.3-	35.0
	54.6	41.1	88.6	43.2	89.4	36.8	47.2
FSWs who had sex with a	506	126	38	91	60	135	56
non paying partner in the							
past one week (N3)							
Had sex with a non-paying	33.6	50.8	15.1	36.2	23.8	54	22.2
partner in the last week							
Condom use at last sex with	34	31	53	26	75	16	32
a non paying partner (% of N2)							
Consistent condom use with a	19	6	36	14	70	6	20
non paying partner in the							
past 12 months (% of N2)							
C.I. of 95%	15.5-	1.9-	21.5-	,	58.4-	1.9-	9.2-
	22.3	9.9	52.1	21.4	81.6	9.9	30.1

Sample Size (N)	All India	N	S	E	W	C	NE
	<i>1504</i>	248	251	251	252	250	252
	%	%	%	%	%	%	%
Incidence of genital discha ulcer in the past 12 month Suffered from genital dis or ulcers in the past 12 months (% of N)	ns	6	11	18	13	9	23

N - North zone, S - South zone, E - East zone, W - West zone, C - Central zone, NE - North-East zone

Some definitions

- Regular partner: Spouse or cohabiting partner
- Commercial sexual partner: Partner with whom respondent had sex in exchange for money or payment in kind.
- Non regular partner: Non spousal/cohabiting, non commercial partner
- For all male groups, the above are considered to be female partners; for female groups, they are considered to be male. Indicators related to anal sex by male respondent groups with male partners have also been measured.
- For the purposes of this survey, sex is defined as either vaginal or anal sex.
- Consistent condom use is defined as condom used every time.