Behavourial Surveillance Survey

Maharashtra, 2009

Survey conducted by SRI-IMRB
MESSAGE

The national and State level schemes on both preventive and curative health warrants concerted and dedicated efforts over prolonged period of time to bring about any tangible change. It is therefore imperative for the State to strategize and sustain efforts towards behavior change and support people at risk in order to limit the spread of HIV.

Both Government and Non Governmental organizations have played a pivotal role in provision and standardization of health care services, especially to the vulnerable, infected and affected by HIV/AIDS. The State initiatives are monitored and assessed for their efficacy towards strengthening the services by garnering evidence on knowledge and behavior pertaining to HIV. This information is instrumental in developing key strategies for prevention and care and support programmes implemented under the aegis of Maharashtra AIDS Control Society (MSACS).

It is praiseworthy to see organizations like USAID supported Avert Society in collaboration with MSACS, Mumbai District AIDS Control Society (MDACS) and lead partners put in their efforts, thoughts and passion in developing evidence based programme. It is commendable effort on part of Avert Society in undertaking this survey to provide information to policy makers and implementers on the current knowledge and behavior level among various sub groups.

I wish them success in their endeavor.

(Suresh Shetty)
FOREWORD

In order to achieve the NACP-III goal of halting and reversing the HIV epidemic, the interventions need to be based on the evidence which is regularly updated and strengthened. Strong surveillance, research and monitoring help in refining the planning process and improving the programme implementation. Recognizing the importance of behavioral aspect of the HIV infection, NACO undertakes Behavioral Surveillance Survey (BSS) at the national level to ascertain the levels of awareness and knowledge about HIV and AIDS, understand high risk behavior patterns, attitude and practices related to HIV and AIDS.

The Behavioral Surveillance Survey (BSS) for the state of Maharashtra, undertaken in 2009, is a rich source of information. It provides a detailed understanding of the knowledge levels of the infection and related attitude and practices among different population groups including female sex workers (FSW), men having sex with men (MSM), injecting drug users (IDU), migrants, truckers, clients of sex workers, general population and youth. Maharashtra, accounts for around 20 percent of the total estimated HIV positive persons in the country, with an estimated adult HIV prevalence of 0.55 percent in 2009. I am sure that this BSS-2009, for the state of Maharashtra will provide greater insight into the programme and guide the State in better strategic planning and programming.

I compliment the Avert Team: for undertaking this extensive survey in collaboration with Maharashtra State AIDS Control Society (MSACS) and Mumbai District AIDS Control Society (MDACS). A survey of this magnitude would not have been possible without the cooperation of 29,000 respondents who participated in the study as well as the NGOs, outreach workers and peer educators who provided their network and support. This document would be a rich source of information for the state level administration for making programmatic decisions and planning implementation to achieve the NACP III goals.

With best wishes

Aradhana Johri
Message

Maharashtra has been proactive in responding to the challenge of the AIDS pandemic. And this has been possible for initiatives across the states, from both the government and the non-government organizations.

The data shows that in Maharashtra, while AIDS remains a pressing concern, more resources are being dedicated to address it. Attempts are continually being made by organizations such as USAID supported Avert Society and its partners to reach out to the groups most at risk. Their work in the priority districts in the state has been commendable and as they come close to concluding the second phase of their labour, its gains more importance and prominence than ever.

I offer my sincerest support to Avert Society and acknowledge that the findings from the study will benefit not only the community members but also the policy makers, programme planners. It will provide a direction to HIV prevention work in the State. We wish Avert Society all the best.

Jayant Kumar Banthia

Register all Births and Deaths
Message

In India, HIV prevalence is highest among most-at-risk populations (MARPs), particularly in the high prevalence states of Southern and North-East India. An estimated 5% of female sex workers (FSW) and 7.4% of men having sex with men (MSM) are infected with HIV nationally. Maharashtra is one of the high-prevalence states, with an overall HIV prevalence at 0.55% (2008). There are a number of factors that contribute to Maharashtra’s vulnerability to the HIV epidemic. It is bordered by other states that have well-established and growing HIV epidemics (Karnataka and Andhra Pradesh). There is extensive migration to and from these states, and there are major transportation routes connecting Maharashtra to them. Maharashtra is a major destination hub for migrants from various states of India. Additionally, Mumbai and several other districts have well-recognized places where sex workers operate.

The United States Agency for International Development (USAID)-funded Avert project supports the National AIDS Control Program and works in collaboration with Maharashtra State AIDS Control Society (MSACS) and Mumbai District AIDS Control Society (MDACS). The overarching goal of the Avert project is to demonstrate best practices in prevention programs for MARPs, community mobilization, and developing models in migrant and workplace interventions in five high prevalence districts.

The Behavioral Surveillance Survey (BSS), a standardized survey technique, is widely used to track behavior changes. Under the guidance of the National AIDS Control Organization (NACO) and with support from MSACS and the MDACS, the first state-wide BSS was undertaken in 2009 in Maharashtra. The survey provides estimates on knowledge, attitude and behavior indicators for MARPs and the general population in the state.

The findings from the State BSS will be instrumental for decision making and prioritizing interventions. I am immensely thankful to all the experts for their timely support and technical inputs in ensuring the quality of the survey. I appreciate the efforts taken in collecting this huge set of information and making the data available to the stakeholders. The repository of information collected through this survey will go a long way in planning and implementation of various HIV/AIDS activities by the State.

Kerry Pelzman
Director
Office of Population, Health and Nutrition
Message

Maharashtra accounts for around 20 percent of the total estimated HIV positive persons in the country. The HIV prevalence rate in the state is 0.55 percent. These numbers spark off a determined and incessant fight against HIV, till it poses a threat to healthy living of our people. Various and concerted efforts are being made by the State and all its partners in ensuring sustained efforts towards halting and reversing the epidemic.

Persistent efforts through planned interventions cause the epidemic to recede; however the outcomes of these interventions need to captured in a systematic manner. The focus of HIV/AIDS Control program being on prevention of transmission, the interventions primarily aim at fostering positive behavior change among the target groups. These behavior changes are systematically assessed using Behavioural Surveillance Survey (BSS). The BSS when undertaken for the first time forms the baseline for planning and periodic surveys aid in guiding the interventions and examine the efficacy of the programs. The State BSS is the baseline survey which provides estimations for six Administrative Divisions of the State. It indicates high levels of knowledge among the groups covered, while pointing towards the need to provide comprehensive information and promote positive behavior change.

I congratulate Avert Society for undertaking this mammoth survey which will serve not only as a baseline but also set a benchmark for more rounds of surveys that will be undertaken in future.

Ramesh Devkar
Project Director
**Message for State BSS Report**

There are multiple dimensions to the issues related to HIV/AIDS and they are reflecting differently as per the social, cultural and behavioral mindsets of the population in the different countries and in the different cities of the same country. It is really a problem of concern for the entire World in general and to India in particular. Though the epidemic of the HIV/AIDS is mainly confined in India to High Risk Groups, still it is the need of the hour to prevent its spread into the general population in order to protect the women and youths from our society to become a prey of this dreaded disease. Only the HIV virus is not responsible for spread of the infection, but the behavioral pattern of the society is equally an important contributes to its spread. The behavioral problem becomes serious when there is a migration of the young and productive males in search of livelihood to the metro cities like Mumbai and it is further agrieved if they are ignorant about the necessary information about HIV/AIDS and safe sex practices.

Therefore, to understand the driving forces behind the spread of HIV infection and to prevent its further spread, it is essential to understand the behavioral pattern and subsequent change in the behaviour of the population at risk after the interventions. The State BSS conducted by AVERT Society provides us a strong tool to address these issues at microscopic and macroscopic levels. It will also help us to make us more capable to make our fight against the HIV/AIDS more specific, more focussed and more effective.

Dr. S. S. Kudalkar  
Project Director, MDACS &  
Dy. Mun. Commissioner, MCGM
Preface

With the HIV epidemic being concentrated among the Most-at Risk population, it is imperative to focus on preventing its spread along with providing care and support services to those already infected. Behavior change aimed at promoting positive health outcomes is central to the HIV/AIDS control program. However, before designing any preventive intervention, it is essential to understand which aspects of the behaviors need to be focused upon for nurturing change among various groups and sub groups. Besides, the expediency if these interventions can be substantiated only through evidence. Behavioral Surveillance Survey is a tested and widely used scientific method for garnering significant information on knowledge and behaviors from various target groups.

Avert Society supported by United States Agency International Development (USAID) has been closely working with Maharashtra State AIDS Control Society (MSACS) & Mumbai District AIDS Control Society (MDACS) towards alleviating the impact of HIV/AIDS in Maharashtra since 2001. Besides supporting the State in HIV/AIDS control initiatives, Avert Society directly works with the Most-at Risk population (MARPs), those vulnerable and the infected and affected population in select districts of Maharashtra.

Avert Society has been conducting Behavioural Surveillance Survey in these seven select districts of Maharashtra since 2004. This initiative was extended to the entire State under NACO directives and with support from USAID, MSACS & MDACS, in 2009. Thus, for the first time the State BSS covering nine different groups at risk in 35 districts of Maharashtra was undertaken by Avert Society.

This survey covered 29220 respondents from all over the State exploring almost every major dimension concerning to their behavior and vulnerability. It provides State level evidence on the magnitude and patterns of sexual practices across various groups as well as related knowledge, decision making and attitudes. The survey has been guided by various experts and 15 percent data collection process has been validated for its accuracy. Findings from the study provide important baseline indicators against which the long term impact of programmes may be measured and will certainly go a long way in guiding policy, programs and advocacy.

I thank NACO & USAID for their support and guidance; MSACS, MDACS, and all sub partners for extending cooperation and participating in this study. I am thankful to IMRB-SRI for undertaking a large scale survey of this kind within the given time and constraints. A special thanks to Dr. Rajatshuva Adhikary, FHI for providing valuable inputs at every stage of the study.

I appreciate the efforts taken by my colleagues in the Avert Society. I also would like to thank the editors and the printers. I extend my sincere acknowledgements to all the respondents without whom this study could never have been accomplished.

Ms. Smriti Acharya
Project Director
Avert Society

Avert Society - A joint project of NACO, Govt. of Maharashtra & USAID.

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Acknowledgements

The Behavioral Surveillance Survey (BSS) for Maharashtra in 2009, one of the largest behavioral surveys in the country has been possible due to immeasurable inputs and hard work of many. We are grateful to National AIDS Control Organization (NACO), especially Director General NACO for having the faith and confidence in Avert Society to undertake this mammoth study for the State and to USAID for their support. We acknowledge the significant contribution of the Technical Resource Group members; Dr. Rajatshuvra Adhikary and all the other experts including NACO Research officials; Dr. S. Venkatesh & Dr. Yujwal.

This study could not have been possible without the timely support from Maharashtra State AIDS Control Society (MSACS), Mumbai District AIDS Control Society (MDACS) and all the sub partners/NGOs who are closely working with various target groups. We thank all the NGOs and their staff for their extensive support in data collection processes.

The efforts taken by IMRB-SRI, the research agency in successfully accomplishing the task is commendable. We also thank all the Field Investigators & Supervisors involved in data collection of BSS.

The successful completion of the survey and dissemination of its findings is largely attributable to the commitment and sheer diligence of each member of the Avert team. We would like to thank Ms. Anna Joy & Mr. T V Narayan in duly addressing various challenges faced during the course of this study and providing constant support. We appreciate the incessant efforts of the Research team; Dr. Neeta Rao, Dr. Pankaj Singh, Mr. Swapnil Pawar and Mr. Santosh Suryavanshi in accomplishing the survey and finalizing the report. The stringent monitoring by field consultants ensured the quality of the survey. We acknowledge the contribution of Ms. Arupa Shukla in providing valuable inputs for the design and layout of the report and Mr. Hemant Bhosale for facilitating the field work. We express heartfelt gratitude towards 29220 respondents who shared personal information especially on very sensitive issues without whom this study could not have been accomplished.
Behavioral Surveillance Survey (BSS) provides information on behaviors among sub populations who may be difficult to reach through traditional household surveys, but who may be at high risk of contracting or transmitting the virus. The overall aim of BSS is to inform and explain trends in HIV infection in a population, to aid in program evaluation and to devise effective strategies.

Avert Society in collaboration with Maharashtra State AIDS Control Society (MSACS) and MDACS (Mumbai District AIDS Control Society) and under the directives of National AIDS Control Organization (NACO) initiated the State BSS in 2009. This was the first round of BSS for the State and would serve as the baseline. Nine various groups were covered under the survey; four core group categories (Brothel & Non Brothel based Female Sex Workers, Men having Sex with Men, Injecting Drug Users), three bridge groups (Clients of Female Sex Workers, Truckers and Helpers & Single Male Migrants) and General population Groups. The estimations are provided for the six Administrative Divisions of the State for the Core and Bridge Groups, while for the General population groups only State estimates are provided.

The primary objectives of this state wide study were:

- To provide baseline estimates of behavioral (including care & support) indicators so as to inform programme development in the transmission of HIV/AIDS and Sexually Transmitted Infections (STI) in all the districts of Maharashtra.
- To assess the level of awareness, knowledge, attitude and behavior with regards to STD/HIV/AIDS among the target population.

The survey collected information on socio economic, knowledge, behavioral, attitudinal indicators relevant to each of the groups covered. The methodology adopted for State BSS was finalized in consultation with Technical Resource Group to arrive at State as well as Divisional estimates. Probability sampling method was used for sample selection. Different sampling strategies were employed for different target groups to ensure consistency of methodology with previous waves of Avert BSS and National BSS.
Some of the salient findings from the survey are summarized below:

**Knowledge on HIV & STI**

- The level of awareness about HIV/AIDS among all categories of High Risk Groups (HRGs) is high and relatively low among bridge groups and general population. However, among the bridge groups, clients of FSWs reported the highest level of awareness of HIV/AIDS.

- Unprotected sex as mode of HIV transmission was reported by 99 percent of female sex workers, clients to FSWs and MSM. This proportion was relatively lower among single male migrants and truck drivers and helpers. Awareness about this mode of transmission was lowest in general population and youth in comparison to all other categories.

- High proportion of respondents from GP & Youth reported vertical transmission of HIV as compared to other categories. Among the high risk groups vertical transmission was reported by marginally high proportion of MSM & IDUs as compared to female sex workers.

- Consistent condom use as a means of preventing HIV transmission was reported by higher proportion of HRG and clients of FSWs as compared to migrants, truckers. General Population and youth reported the lowest level of awareness about this mode of prevention of HIV.

- Two out of ten respondents from the bridge groups reported that they were aware of STIs. Comparatively, awareness was higher among the BBSWs followed by IDUs & NBBSWs and MSM.

**Behavior & condom usage**

- Condom use in the last sexual encounter was the highest for female sex workers. Among bridge groups, the highest proportion of condom use during the last sex with commercial partners were reported by CFSWs reported (98 percent).

- Condom use with non paying partner/regular was the highest in case of MSM when compared with other high risk groups. In case of bridge groups, truck drivers and helpers reported the lowest condom use in the last sexual encounter with non paying/regular partners.
• Consistent condom usage with commercial/ paying partners was high across all the categories. But the same was low with regular partners/ non-paying clients. Consistency of condom use with regular partner was reported highest among the MSMs and lowest among the TDHs.

• About 47.9 percent IDUs reported to have shared needle during last injection. Nearly a similar proportion of claimed to have never shared needles in the last one month.

Reported cases of STI Treatment seeking behavior

• Very low proportion of respondents from all categories reported STI symptoms. This was highest in female sex workers among the high risk groups. The proportion of respondents reporting genital discharge and ulcers was between 3 to 6 percent among the bridge groups.

• Almost one-third of those respondents reporting STI symptoms had sought treatment from qualified medical practitioners. This was highest among truckers (51 percent) and lowest among IDUs (5 percent).

HIV testing Practices

• The respondents who had ever taken an HIV test was highest among the high risk groups, followed by Bridge groups and lowest in general population category.

• Among the high risk groups, high proportion of BBSWs took HIV testing and the lowest were the injecting drug users. Voluntary testing of HIV was undertaken by more than 80 percent of MSM & BBSWs. More than 75 percent IDUs and NBBSWs reported taking voluntary HIV testing.

• Among the bridge groups, the highest proportion of respondents testing for HIV was reported by Clients to FSWs (23.4 percent).

• Voluntary testing for HIV was reported by higher proportion of respondents for all categories. In case of IDUs, GP & Youth, more than 20 percent respondents reported referrals for HIV testing.
Stigma and Discrimination

- High proportion of respondents showed positive attitude towards people living with HIV where physical contact with the infected person was not involved.
- On the other hand, a higher proportion of respondents showed unwillingness to shake hands with an HIV infected person. The proportion was higher in single male migrants, truck drivers and helpers as well as general population.

Exposure to intervention

- Exposure to Billboards & posters was high among all categories of respondents. The proportion of respondents exposed to billboards/posters was more than 80 percent for all categories.
- Proportion of respondents reporting about receiving Inter Personal communication on HIV/AIDS and condom use was high among the high risk groups as compared to bridge groups.
- Nearly half of the respondents from High risk groups (FSWs & MSM) reported to have attended campaigns/meetings on HIV/AIDS. Among them IDUs reported the lowest. The proportion was considerably low among the bridge groups.
- Free medical checkup was reported by higher proportion of brothel and non-brothel based sex workers.
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<td>Acquired Immune Deficiency Syndrome</td>
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<td>ART</td>
<td>Anti-Retroviral Treatment</td>
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<td>ASCII</td>
<td>American Standard Code for Information Interchange</td>
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<td>AV</td>
<td>Audio-Visual</td>
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<td>BBSW</td>
<td>Brothel Based Sex Worker</td>
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<td>DIC</td>
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<td>FSW BB</td>
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<td>GP</td>
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<td>HIV</td>
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<td>HSS</td>
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<td>IPE</td>
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<td>MDACS</td>
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<td>Maharashtra State AIDS Control Society</td>
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<td>MSM</td>
<td>Men who have Sex with Men</td>
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<td>MTR</td>
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<td>NBBSW</td>
<td>Non Brothel Based Sex Worker</td>
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<td>NGO</td>
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<td>NRHM</td>
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<td>OST</td>
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<td>OVC</td>
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<td>PHC</td>
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<td>PLHA</td>
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<td>RCH</td>
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<td>SCMM</td>
<td>Single Circular Male Migrants</td>
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<td>SHG</td>
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<td>SPSS</td>
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<td>STD</td>
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<td>STI</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<td>TD&amp;H</td>
<td>Truck Drivers and Helpers</td>
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<td>TRG</td>
<td>Technical Resource Group</td>
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Figure 7.9: Self reported STI symptoms in the last one year (in %)
Figure 7.10: Division wise proportion of TDH seeking treatment for STI symptoms from qualified medical practitioner (in %)
Figure 7.11: Stigma and discrimination indicators (in %)
Figure 7.12: Know person infected with HIV (in %)
Figure 7.13: Division wise ever taken HIV test (in %)
Figure 7.14: Exposure to intervention activities (in %)
Figure 7.15: Awareness & Accessibility to services (in %)
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Figure 8.2: Knowledge about correct methods of HIV/AIDS prevention (in %)
Figure 8.3: Division wise average number of female partners reported to have sexual intercourse in the past 12 months
Figure 8.4: Division wise last time condom use with regular partner, commercial partner and Non-regular partners (in %)
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Figure 8.6: Division wise proportion of migrant who have heard of STI (In %)
Figure 8.7: Self reported STI symptom by migrants in past 12 months (in %)
Figure 8.8: Division wise proportion of migrant seeking treatment for STI symptoms from qualified Medical practitioners (in %)
Figure 8.9: Stigma and discrimination indicators (in %)
Figure 8.10: Know person infected with HIV (in %)
Figure 8.11: Division wise migrants ever taken HIV test (in %)
Figure 8.12: Exposure to intervention (in %)
Figure 8.13: Awareness & Accessibility to services (in %)
Figure 8.14: awareness about various government programs and services for HIV/AIDS (in %)
Figure 9.1: Ever heard of HIV and ever heard of AIDS (in %)
Figure 9.2: Knowledge about correct modes of HIV/AIDS transmission (in %)
Figure 9.3: Knowledge about correct methods of HIV/AIDS Prevention (In %)
Figure 9.4: Knowledge that drugs can treat HIV/AIDS (in %)
Figure 9.5: Heard of female condom (in %)
Figure 9.6: Heard of STI (in %)
Figure 9.7: Self reported STI symptoms in the last 12 months (in %)
Figure 9.8: STI Treatment from qualified medical practitioner (in %)
Figure 9.9: Stigma and discrimination indicator (in %)
Figure 9.10: Ever taken HIV test (in %)
Figure 9.11: Awareness of government progress (in %)
Figure 9.12: Media as source of information dissemination on HIV/AIDS/STI (in %)
Figure 10.1: Ever heard of HIV and ever heard of AIDS (in %)
Figure 10.2: Knowledge about correct modes of HIV/AIDS transmission (in %)
Figure 10.3: Knowledge about correct methods of HIV/AIDS Prevention (in %)
Figure 10.4: Last time condom use with commercial and non-commercial partner (in %)
Figure 10.5: Consistent condom use with commercial and non-commercial partner (in %)
Figure 10.6: Self reported STI symptoms in the last 12 months (in %)
Figure 10.7: Stigma and discrimination indicators (in %)
Figure 10.8: Awareness of government progress (in %)
Figure 11.1: Heard of HIV & Heard of STI (in %)
Figure 11.2: Common Myths & Misconceptions (in %)
Figure 11.3: Awareness about HIV Testing and place for testing (in %)
Figure 11.4: Involvement in sex by FSWs in last one week (in %)
Figure 11.5: Involvement in sex by MSM in last one month (in %)
Figure 11.6: Involvement in sex by IDUs in past one year (in %)
Figure 11.7: Involvement in sex in past one year (in %)
Figure 11.8: Consistent condom use among FSWs in last one month (in %)
Figure 11.9: Consistent condom use among MSM in last one month (in %)
Figure 11.10: Consistent condom use among IDUs in past one month (in %)
Figure 11.11: Consistent Condom use - Bridge Groups (in %)
Figure 11.12: Seeking treatment for STI from Qualified Practitioner (in %)
Figure 11.13: Testing for HIV among all the Groups (in %)
Figure 11.14: Self risk perception (in %)
Figure 11.15: Exposure to Interventions (in %)
Maharashtra records 20 percent of the total estimated HIV infected persons in the country. The adult HIV prevalence rate in Maharashtra has declined from 1.08 percent in 2002 to 0.64 in 2008 (HSS, 2008). But the absolute numbers might have gone up due to the increasing population size and this is a matter of concern. Moreover, HIV prevalence among High Risk Groups is high at 11.62 percent among STD clinic attendees, 17.91 percent among FSWs and 11.8 percent among MSM (HSS, 2007). Maharashtra is one of the six high prevalent States in the country with concentrated epidemic among the High Risk Groups.

Maharashtra not only has the second highest population but also the second highest urban population in the country. It has major commercial centres which attracts large number of migrants. 80 percent of the infection spreads due to unprotected sex. Lack of knowledge about prevention and availability of services further accentuates the risk of spread of infection to various population groups. These factors make the State vulnerable to HIV with the risk of infection spreading from High Risk Groups to the General Population. Under the National AIDS Control Program, Maharashtra State AIDS Control Society (MSACS) and Mumbai District AIDS Control Society (MDACS) were set up in 1998 for effective control of HIV/AIDS in the state of Maharashtra and Mumbai city respectively. The focus of these two societies is to motivate the practice of safe sex in prevention of HIV, provide confidential testing facilities, strengthening and operationalizing STI clinics, provide care, support and treatment, ensure blood safety by strengthening and modernizing blood banks, strengthen database for better planning, emphasize integration with RCH, TB control programs and NRHM. To mitigate the spread of HIV/AIDS epidemic more effectively and provide the necessary technical support to MSACS & MDACS, Avert Society was set up under the bilateral agreement between the Government of United States and the Government of India in November 2001. The three Societies along with other partners have been working towards achieving the goal of halting and reversing the epidemic in the State.
The HIV programs in Maharashtra have expanded and evolved in order to address the dynamics of a complex, concentrated and expanding epidemic and to satisfy the needs of vulnerable groups. The assessment of impact of such HIV interventions is highly complex and multifaceted. Avert Society as one of its core strategies, promotes the use of research and epidemiological data as evidence in advocacy and decision making.

Behavioral Surveillance Survey (BSS) provides information on behaviors among sub populations who may be difficult to reach through traditional household surveys, but who may be at high risk of contracting or transmitting the virus. The overall aim of BSS is to inform and explain trends in HIV infection in a population, to aid in program evaluation and to devise effective strategies. In the State of Maharashtra, BSS was first conducted in 2001 covering only four districts. Since 2004 it is periodically undertaken in seven high prevalent districts of the State. The diverse nature of Maharashtra warrants region wise estimations of key indicators that are important for planning and monitoring activities.

Avert Society therefore in collaboration with MSACS and under NACO’s directives initiated the State BSS in November 2008. This was the first round of BSS for the State and would serve as the baseline. As seven districts of the State were covered under the regular rounds of BSS, these seven districts were excluded and of the remaining 28 districts, 24 Category ‘A’ districts were covered under the survey. These 24 ‘A’ Category districts are classified into 6 Administrative Divisions based on socio-cultural factors. In consultation with the experts from the Technical Resource Group (TRG), it was decided to provide 6 Divisional estimates for the State.

Subsequently for the purpose of NACO Mid Term Evaluation, Avert was directed to cover the remaining 11 districts, which were not covered under Phase I. The purpose of covering these 11 districts was to provide a State estimate for BSS. This report is a summation of the findings

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1 ANC prevalence more than 1 percent in any of the sites in the district in the last three years
from both Phases of BSS, Phase I covering 24 districts and Phase II covering the remaining 11 districts. The estimations are provided for the six Divisions of the State of Maharashtra.

♦ Study Objectives

The primary objectives of this state wide study were:

• To provide baseline estimates of behavioral (including care & support) indicators so as to inform programme development in the transmission of HIV/AIDS and Sexually Transmitted Infections (STI) in all the districts of Maharashtra.

• To assess the level of awareness, knowledge, attitude and behavior with regards to STD/HIV/AIDS among the target population.

♦ Key Indicators

The survey collected information on socio economic, knowledge, behavioral, attitudinal indicators relevant to each of the groups covered. In order to facilitate comparison over time and to ensure consistency across the phases of State BSS, these indicators were carefully selected. Some of the key selected indicators are listed below:

1. Knowledge Indicators

• Proportion of respondents:
  – Who heard of STIs and HIV-AIDS
  – With knowledge of HIV transmission methods
  – Reporting that HIV-AIDS can be prevented by having one uninfected faithful sex partner
  – Reporting that condoms prevent STIs
  – Reporting HIV-AIDS can be prevented through using condoms consistently with all partners during all sexual encounters
  – Who were aware that a healthy looking person could be infected with HIV
  – Reporting various sources of condoms
2. Behavioral Indicators

- Age at first paid sex among the FSWs and MSM
- Proportion of respondents:
  - Reporting heterosexual intercourse with non-regular partners during the last 12 months
  - Reporting condom use during the last sexual intercourse with a non-regular partner during the last 12 months
- Proportion of FSW reporting consistent condom usage with paying clients in the last 3 months
- Proportion of male respondents:
  - Who reported anal sexual intercourse with men during the last 12 months
  - Who reported condom use during their last anal sexual intercourse with men during the last 12 months
- Proportion of MSM:
  - Reporting commercial male partners in the last one month
  - Reporting condom use during last sex with commercial partners
  - Reporting condom use during last sex with non-commercial partners
  - Reporting that they usually insist their clients to use condoms
- Proportion of FSW & MSM reporting that they usually take decisions themselves on how much to charge from the client

3. Drug Injecting Behavior

- Proportion of injecting drug users:
  - Who reported injecting drugs 2-6 times a week in the last one month
  - Who have shared needle/syringe in the last injection
  - Who have access to sterile needles/syringes when they injected in the last month.
4. STI Prevalence and treatment seeking indicators

- Proportion of respondents (both male and female):
  - Who reported symptoms of STIs during the last 12 months
  - Who sought treatment from qualified medical practitioners for the last STI episode (within the last 12 months)
  - Reporting STI treatment in a govt. hospital/clinic during last episode

5. Risk Perception

- Proportion of respondents:
  - Who perceive that people from their community are at risk of contracting HIV
  - Who perceive that they are at the risk of contracting HIV

6. Knowledge of HIV-AIDS Program

- Proportion of respondents:
  - Who are aware that government has a program to prevent the spread of HIV from Parent to child
  - Who are aware that the government has a program to provide treatment for sexually transmitted diseases
  - Who are aware that there is a treatment now available for HIV-AIDS
  - Who know that the Government provides treatment for HIV-AIDS free of cost
  - Who are aware of the community care centers

- Key sources of information through which they came to know of the above services
7. HIV testing

• Proportion of people:
  – Who are aware of a place where people can go to get tested for HIV-AIDS
  – Who are aware that government has a program to give voluntary counseling and testing if one wants to know his/her HIV status
  – Who ever had HIV test
  – Who have ever sought voluntary testing for HIV
  – Who had HIV test in the last 12 months
  – Who have received pre and post test counseling

8. Intervention Coverage & Exposure

• Proportion of respondents:
  – Who reported interpersonal education on HIV-AIDS in the last 12 months
  – Who reported being contacted by a peer/ outreach worker in the last three months
  – Who reported visiting an STI clinic in the last six months for routine medical check-ups

• Proportion of IDU reporting:
  – Access to free sterile needles & sources for the same
  – That they received OST, and the source from where OST was obtained

• Type (free, socially marketed, fully priced) and brand of condom used at the time of last sex
9. Community Mobilization & Empowerment

- Proportion of FSWs and MSM who reported
  - To be a part of CBO/SHG currently if so in which form (member, volunteer, staff etc.)
  - Attending or participating in any of the STI/ HIV-AIDS related campaign/meeting in the last 12 months

10. Stigma and discrimination

- Proportion of respondents who:
  - Are willing to care for a relative with HIV/AIDS in own home
  - Would buy fresh vegetables from a shopkeeper who has HIV/AIDS
  - Say that a teacher who has HIV/AIDS but is not sick should be allowed to continue teaching

11. Additional Information

- Age at first sex.
- Sources of awareness about HIV-AIDS.
- Reasons for using and not using condoms.
- Alcohol intake before last sexual act
- Exposure to violence and perpetrators of violence
- If has been forced to have sex in the last 6 months
- Community Empowerment - Extent to which the community comes together in case of a problem to an individual (no one, a few, several, most, all or don’t know)
- Access to social entitlements (BPL card, voter id, Ration card etc.)
12. Profile of Respondents

- Age & Literacy
- Socio demographic characteristics
- Income & Sources
- Access to savings accounts or any other form of savings
- Possession of health/ life insurance coverage
- If owns a mobile phone
- Number of dependents
- If has any debts currently & sources of debts
- If member of any community self help groups
- Proportion of respondents who travel for sex work
- Proportion of FSWs who reported that their sex trade practices varies during festivals/seasons and mobility
- Main reasons for entry into sex trade by the FSWs
The methodology adopted for State BSS was finalized in consultation with a Technical Resource Group at the State level formed by Avert Society for Phase I and Technical Resource Group formed by NACO for Phase II. The methodology was finalized after adequate measures were taken to ensure consistency across the phases and to get reliable and precise State level estimates.

Consultation with Experts

Phase I: A Technical Resource Group with representation from MSACS, MDACS, other partner agencies in the State, sub partners, experts with relevant experiences was formed by Avert Society to guide the study and provide approvals at various stages of the study. The TRG met twice; for finalization of the method and data collection tools and to review the top line findings from the study.

Phase II: A Technical Committee was formed by NACO comprising of experts from FHI, NACO & WHO which provided necessary inputs for finalizing the study group categories, domains for sample size determination and estimation, sample size calculation and data weighing methods to provide division and State estimates.

Phases of the Study with coverage details

35 districts of Maharashtra were covered under the survey in two different phases. The details of the Phases are given in the table below:

<table>
<thead>
<tr>
<th>Details</th>
<th>Phase I</th>
<th>Phase II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Districts covered</td>
<td>24 districts</td>
<td>11 districts for Core &amp; Bridge Groups and entire State for General Population Groups</td>
</tr>
<tr>
<td>Type of Districts covered</td>
<td>All ‘A’ Category districts</td>
<td>7 ‘A’ Category districts + 3 ‘C’ Category districts</td>
</tr>
<tr>
<td>Type of Groups covered under the survey</td>
<td>BB FSW, NBB FSW, MSM, IDUs</td>
<td>BB FSW, NBB FSW, MSM, IDUs</td>
</tr>
<tr>
<td>Core Groups</td>
<td>BB FSW, NBB FSW, MSM, IDUs</td>
<td>BB FSW, NBB FSW, MSM, IDUs</td>
</tr>
<tr>
<td>Bridge Groups</td>
<td>Migrants, Truckers &amp; Helpers, Clients of Sex Workers</td>
<td>Migrants</td>
</tr>
<tr>
<td>No of respondents across groups</td>
<td>11680</td>
<td>17540</td>
</tr>
</tbody>
</table>
Figure 1: Map of Maharashtra showing the districts covered in the two phases
Table 2: Division wise coverage of the districts in two Phases of the survey

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Amravati</th>
<th>Aurangabad</th>
<th>Konkan</th>
<th>Nagpur</th>
<th>Nasik</th>
<th>Pune</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>Yavatmal</td>
<td>Beed</td>
<td>Raigarh</td>
<td>Chandrapur</td>
<td>Ahmednagar</td>
<td>Kolhapur</td>
</tr>
<tr>
<td></td>
<td>Amravati</td>
<td>Latur</td>
<td>Ratnagiri</td>
<td>Gadchiroli</td>
<td>Jalgaon</td>
<td>vide</td>
</tr>
<tr>
<td></td>
<td>Buldhana</td>
<td>Parbhani</td>
<td>Wardha</td>
<td>Nagpur</td>
<td>Nagpur</td>
<td>Pune</td>
</tr>
<tr>
<td></td>
<td>Akola</td>
<td>Nanded</td>
<td>Bhandara</td>
<td>Nasik</td>
<td>Nagpur</td>
<td>Pune</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hingoli</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Osamanabad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jalna</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase II</td>
<td>Washim</td>
<td>Aurangabad</td>
<td>Mumbai &amp;</td>
<td>Nagpur</td>
<td>Nagpur</td>
<td>Satara</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mumbai Suburb</td>
<td>Gondia</td>
<td>Nagpur</td>
<td>Sangli</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thane</td>
<td>Sindhudurg</td>
<td></td>
<td>Solapur</td>
</tr>
</tbody>
</table>

The study covered all the districts in the state. The estimates have been provided for the aforementioned 6 divisions. For General Population and Youth the methodology for selection of the respondents was kept consistent with that for National BSS 2006 and State estimates have been provided instead of six Divisional estimates.

Operational Definitions of the Target Groups

Female Sex Workers (FSW) – FSWs was defined as those women who are engaged in sex and have been paid in cash at least once in the last one month.

This includes both full time sex workers and part time sex workers. In Maharashtra there are various typologies of sex workers based on their place of solicitation and nature of operation. These were classified into two broad categories for the purpose of the survey:

1. FSW – Brothel Based (FSW-BB)
2. FSW – Non-Brothel Based (FSW-NBB)

FSW-BB refers to those FSWs who operate from brothels and have engaged in sex, either full time or part-time, in return of cash by their paying clients at least once in the period of one month prior to the survey.

FSW-NBB refers to those FSWs who have sold sex at defined sex access places other than brothels. In other words, FSW-NBBs do not affiliate themselves to a permanent place of operation. They include FSWs who are street based, hotel/lodge based, highway based, dhaba based, secret home based, beauty parlour based, service beer bar based and tamasha based.
Men who have Sex with Men (MSM) – Men aged 18-49 years who have had manual, oral or anal sex with men in the past 12 months and can be identified at places of aggregation for cruising, soliciting or having sex or hanging out.

Injecting Drug Users (IDU) –Injecting Drug Users (IDUs) are defined as all men in the age group of 15-49 years, who use any addictive drugs for non medical reasons, through injections. The survey included only those IDUs who had injected drugs for a minimum period of 3 months prior to the survey.

Clients of Sex Worker (CFSW) – Any man, 18-60 years, recruited from solicitation points of FSW, that have paid for sex from a female in the last one month.

Truck Drivers and Helpers (TD&H) – Male aged above 18 years driving trucks plying across States having National permit that is associated with the present occupation for more than two years.

Male aged above 18 years assisting drivers of trucks plying across States having National permit and associated with the present occupation for at least one year.

Single Circular Male Migrants (SCMM) – Single men, unmarried or those who are married but not living with their spouse in the town of employment, within the age group of 15-49 years who go back to their native place at least once a year; generally belonging to lower economic strata of the society.

General Population (GP) – Males and females between the age group 15-49 years living in both rural and urban areas.

Youth – Males and females between the age group 15-24 years living in both rural and urban areas.
Sampling Method

Estimation of Sample Size

Sample sizes required for each population sub-group included in the study was calculated on the basis of the following factors:

1. The expected baseline value of key behavioral indicator (e.g. consistent condom usage with various partners)
2. Desirable magnitude of change that can be detected
3. Confidence Level
4. Statistical power and
5. Design effect

The following formula was used to determine the sample size for target groups for the BSS:

\[ n = D \left[ \sqrt{2P(1 - P)Z_{1-\alpha}} + \sqrt{P_1(1 - P_1) + P_2(1 - P_2)Z_{1-\beta}} \right]^2 / \Delta^2 \]

Where:

- \( D \) = Design effect,
- \( P_1 \) = the estimated proportion at the time of the survey,
- \( P_2 \) = the proportion at some future date, such that the quantity \((P_2 - P_1)\) is the size of the magnitude of change it is desired to be able to detect;
- \( P = (P_1 + P_2)/2 \)
- \( \Delta' = (P_2 - P_1)^2 \)
- \( Z_{1-\alpha} \) = the z-score corresponding to the probability 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;
- \( Z_{1-\beta} \) = the z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size \((P_2 - P_1)\) if one actually occurred.

The following table provides different target groups covered in the survey in two Phases, key variables to be measured, domains and proposed sample size.
<table>
<thead>
<tr>
<th>Sub Groups to be covered</th>
<th>Key Indicator to be measured</th>
<th>Change to be detected (percentage points)</th>
<th>Domains</th>
<th>Domain wise Sample size</th>
<th>Total Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSW – Brothel Based</td>
<td>Consistent condom use with clients in the past 1 month</td>
<td>15</td>
<td>P I - Division P II - District P I + P II - State</td>
<td>P I – 300 P II – 270</td>
<td>3690</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td>P I – 300 P II – 270</td>
<td>3690</td>
</tr>
<tr>
<td>FSW – Non-brothel Based</td>
<td>Consistent condom use with non commercial partners in the past 1 month</td>
<td>15</td>
<td>P I – 600 P II – 270</td>
<td>5490</td>
<td></td>
</tr>
<tr>
<td>MSM</td>
<td>Consistent condom use with non commercial partners in the past 1 month</td>
<td>15</td>
<td>P I - Division</td>
<td>P I – 300</td>
<td>1800</td>
</tr>
<tr>
<td>IDU</td>
<td>Consistent use of needles that no one else used in the past 1 month</td>
<td>15</td>
<td>P I – 24 districts P II – 11 districts P I + P II - State</td>
<td>P I – 300 P II – 270</td>
<td>570</td>
</tr>
<tr>
<td>Clients of FSWs</td>
<td>Consistent condom use with commercial partners in the past 1 year</td>
<td>15</td>
<td>P I - Division</td>
<td>P I – 300</td>
<td>1800</td>
</tr>
<tr>
<td>Truckers &amp; Helpers</td>
<td>Consistent condom use with commercial partners in the past 1 year</td>
<td>15</td>
<td>P I - Division</td>
<td>P I – 600</td>
<td>3600</td>
</tr>
<tr>
<td>SMM</td>
<td>Consistent condom use with commercial partners in the past 1 year</td>
<td>15</td>
<td>P I - Division P II – 11 districts P I + P II - State</td>
<td>P I – 600 P II – 970</td>
<td>4570</td>
</tr>
<tr>
<td>General Population – urban</td>
<td>Person who reported sex with a FSW at least once in past 1 year</td>
<td>20</td>
<td>-</td>
<td>P II – 1513</td>
<td>1513</td>
</tr>
<tr>
<td>General Population – rural</td>
<td></td>
<td>20</td>
<td>P II – 1624</td>
<td>1624</td>
<td></td>
</tr>
<tr>
<td>Youth – urban</td>
<td></td>
<td>20</td>
<td>P II – State</td>
<td>P II – 2472</td>
<td>2472</td>
</tr>
<tr>
<td>Youth – rural</td>
<td></td>
<td>20</td>
<td>P II – 1826</td>
<td>1826</td>
<td></td>
</tr>
<tr>
<td>Total – Maharashtra</td>
<td></td>
<td></td>
<td></td>
<td>30845</td>
<td></td>
</tr>
</tbody>
</table>

For the BSS, the following assumptions have been made regarding these parameters:

1. Design effect: This adjusts for the use of sampling designs that are not simple random methods, e.g. cluster sampling.
2. The alpha level has been set at 0.05, corresponding to 95% confidence in the observed estimates.
3. The beta level has been set at 0.20, corresponding to 80% power.

The following sample sizes were calculated for each of the phases for the categories of FSW, MSM, IDU and SCMM (Phase I and II) and GP and Youth (Phase II).
Sample Size Achieved

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Phase</th>
<th>Amravati</th>
<th>Aurangabad</th>
<th>Konkan</th>
<th>Nagpur</th>
<th>Nasik</th>
<th>Pune</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBSWs</td>
<td>I &amp; II</td>
<td>303</td>
<td>442</td>
<td>899</td>
<td>550</td>
<td>300</td>
<td>1167</td>
<td>3661</td>
</tr>
<tr>
<td>NBBSWs</td>
<td>I &amp; II</td>
<td>266</td>
<td>639</td>
<td>969</td>
<td>459</td>
<td>247</td>
<td>860</td>
<td>3440</td>
</tr>
<tr>
<td>MSM</td>
<td>I &amp; II</td>
<td>357</td>
<td>840</td>
<td>848</td>
<td>293</td>
<td>323</td>
<td>1220</td>
<td>3881</td>
</tr>
<tr>
<td>IDU</td>
<td>I &amp; II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>551</td>
<td></td>
</tr>
<tr>
<td>Bridge groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CFSWs</td>
<td>I</td>
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<td>301</td>
<td>311</td>
<td>306</td>
<td>296</td>
<td>322</td>
<td>1835</td>
</tr>
<tr>
<td>TDHs</td>
<td>I</td>
<td>603</td>
<td>601</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>3604</td>
</tr>
<tr>
<td>SCMM</td>
<td>I &amp; II</td>
<td>605</td>
<td>617</td>
<td>1161</td>
<td>702</td>
<td>688</td>
<td>822</td>
<td>4595</td>
</tr>
<tr>
<td>General population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td>II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3305</td>
</tr>
<tr>
<td>YOUTH</td>
<td>II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4298</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29220</td>
</tr>
</tbody>
</table>

The Quantitative data collection was followed by Qualitative study. Focus Group Discussions was employed for the data collection.

Sampling Design

Probability sampling method was used for sample selection. Different sampling strategies were employed for different target groups to ensure consistency of methodology with previous waves of Avert BSS and National BSS. The sampling method and its execution were finalized in consultation with the State level and National TRGs for Phase I and II, respectively.

<table>
<thead>
<tr>
<th>Method</th>
<th>FSW BB</th>
<th>FSW NBB</th>
<th>MSM</th>
<th>IDUs</th>
<th>Bridge Population</th>
<th>GP</th>
<th>Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGDs</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>2</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Target Groups

<table>
<thead>
<tr>
<th>Core Groups</th>
<th>Sampling Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSW – Brothel-based</td>
<td>Conventional three stage cluster sampling</td>
</tr>
<tr>
<td>FSW – Non-brothel based</td>
<td>Two stage Time Location Cluster sampling</td>
</tr>
<tr>
<td>MSM</td>
<td>Two stage Time Location Cluster sampling</td>
</tr>
<tr>
<td>IDU</td>
<td>Two stage Time Location Cluster sampling</td>
</tr>
<tr>
<td>Bridge Groups</td>
<td></td>
</tr>
<tr>
<td>Clients of FSWs</td>
<td>Two stage Time Location Cluster sampling</td>
</tr>
<tr>
<td>Truckers &amp; Helpers</td>
<td>Two stage Time Location Cluster sampling</td>
</tr>
<tr>
<td>SMM</td>
<td>Two stage Time Location Cluster sampling</td>
</tr>
<tr>
<td>General Population</td>
<td></td>
</tr>
<tr>
<td>General Population – Urban and Rural</td>
<td>Four stage stratified cluster sampling</td>
</tr>
<tr>
<td>Youth – Urban and Rural</td>
<td>Four stage stratified cluster sampling</td>
</tr>
</tbody>
</table>
Execution of the Sampling Plan

In order to design a probability-sampling plan, the following tasks were carried out:

- Defining Primary Sampling Units
- Developing Sampling Frame

Defining Primary Sampling Units

The PSUs were defined as ‘any site or location where respondent group members congregate’. The operational definition of primary sampling units (PSUs) for the different respondent groups is given below:

Operational Definition of PSUs for Different Respondent Groups

<table>
<thead>
<tr>
<th>S.No</th>
<th>Respondent Group</th>
<th>PSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brothel based sex workers</td>
<td>Brothels / red light areas</td>
</tr>
<tr>
<td>2</td>
<td>Non-brothel based sex workers</td>
<td>Streets, Cinema hall/ theatre, parks, transport terminus, restaurants / hotels and any other places where non-brothel based sex workers congregated for soliciting or entertaining their customers</td>
</tr>
<tr>
<td>3</td>
<td>MSM</td>
<td>Cruising sites like bus station, railway station, gardens, public toilets and other public places</td>
</tr>
<tr>
<td>4</td>
<td>IDUs</td>
<td>Foot path, railway station, bus terminus, other public places where IDUs commonly stay and cruise</td>
</tr>
<tr>
<td>5</td>
<td>Clients of Sex Workers</td>
<td>Brothels, red light areas, Streets, Cinema hall/ theatre, parks, transport terminus, restaurants / hotels and any other places where sex workers congregated for soliciting their customers</td>
</tr>
<tr>
<td>6</td>
<td>Truckers &amp; Helpers</td>
<td>Road side dhaba, refueling stations, vehicle repairing shops, loading/off loading points, truck terminus.</td>
</tr>
<tr>
<td>7</td>
<td>Single Male Migrants</td>
<td>Congregation points like tea stalls, industrial estates, labour chowks, etc.</td>
</tr>
</tbody>
</table>

In case of general population and youth the respondents were selected from households.

Developing Sampling Frames:

The most recent mapping estimate available for the State was from Synovate 2008 mapping. This along with updated estimates from Avert Society and other partner agencies were utilized to develop the sampling frame. In districts/locations where no mapping data was available rapid mapping exercise was carried out by the agency to develop a sampling frame.
**Data Collection tools**

**Quantitative Data:** Structured Interview Schedule was used to collect data from the respondents. Avert Society had experience of conducting BSS over time to generate trends of pre-determined indicators among the target groups in the past. As such consistency was maintained in the data collection tools for the state BSS. However in Phase I, 24 districts were surveyed for the first time and hence some additional questions were incorporated following a detailed discussion with the TRG members. In Phase II, NACO suggested additional indicators which were also incorporated in the Interview Schedule. Bi-lingual sets of the data collection tools were developed and used as per the convenience of the respondents.

The Interview Schedule comprised of 12 Sections covering questions on Back ground Characteristics, Sexual History and practice, Knowledge, Opinion & Attitude towards STI/HIV/AIDS, Access to Health Care services, Risk Perception, Stigma & Discrimination, Exposure to Intervention and Social Entitlements.

**Qualitative Data:** Discussion guides were used for Focus Group Discussion. These were translated in Hindi and Marathi and the Moderators and Field Investigators were trained in using the tools for conducting the FGDs. The FGDs were recorded and transcribed.

**Pre-testing the tools:** The data collection tools were pre tested to assess the flow of questions, skip patterns, the lucidity of the questions especially in the translated versions, various terminologies using colloquial terms, time taken for the interview and to explore barriers in interviewing, if any. The tools were pilot tested in Pune and the findings were shared in the TRG meeting.

The field impressions revealed entry barriers and that the Interview Schedule was lengthy, resulting in longer duration. Accordingly some questions were removed to reduce the interview duration and appropriate strategy was adopted in gaining access to the community.
Training of Field staff

The Field Investigators and Supervisors were trained and sensitized in a four days training program on various relevant subjects like:

- Concepts of Sex and Sexuality, HIV/AIDS, Sexually Transmitted Infections etc.
- Ethnographic details of the target population groups
- Work ethics
- An understanding of the key indicators, questionnaire administration
- Probing techniques: How to approach, Language, non-verbal expressions, documentation techniques, skills to handle agitated situation/respondent etc.
- Sampling techniques
- Other fieldwork protocols

Various methods were used for training and handholding of the data collectors; Presentation, Mock Session, Field visits.

Data collection

The field work for the BSS for 24 districts started in the second week of February 2009 and ended in the first week of July 2009. The data collection for the rest 11 districts started in the month of September 2009 and ended in November 2009.

Quality Assurance

The quality of data collected is vital to the success of the study in terms of its validity, reliability and utility. The quality was assured at different levels throughout the survey and beyond. Avert Society closely monitored the data collection process with the aid of external Consultants and Avert Research staff. The diagram below shows the techniques used at different levels to ensure quality.
Data Validation by Avert Society

A second level of data validation was undertaken by Avert Society by employing approximately six external Consultants at different time during Phase I and eight Consultants during Phase II. The Consultants were trained by Avert officials on the importance of the survey, the quality of data and measures to be adopted for data validation at the field level, besides the other relevant issues. The Consultants were monitored and provided with necessary guidance by the Avert Research staff. 15 percent of the data collection by the Field Investigators was validated by accompaniments, scrutiny of the Interview Schedules, spot checks and consistency checks with individual targets for each of
the method for every Consultant. Around 103 Interviews were cancelled and of those validated 11 percent were sent for corrections.

Community Advisory Board and networking with NGOs

Community Advisory Board (CAB) was formed of all the concerned NGOs and was updated about the process. The NGOs provided information to validate the mapping estimates, necessary support in reaching out to the target group members and also gave feedback on the field experiences.

Data management and analysis

Data were entered using package with in-built features for inter-record checks and intra-record checks. Double entry system was adopted to minimize errors and the data was converted in ASCII format which in turn was converted into SPSS files. Almost 10 percent of the data were further checked for consistency, routing and logical checks at the time of entry. A program designed in Quantum was used for data validation incorporating all the logic checks, ranges, filters and requisite conditions.

Data weighting

Data was weighted to arrive at the State estimates. The following steps were carried out to achieve the sample weights.

Step 1: Calculation of weights

The weights were determined by calculating the sampling probability using the Cluster Information Sheets. The following were considered for computing the weights

- Size of the Sampling Universe
- Respondents’ availability at the time of survey
- Respondents approached
- Non response rate at the site level
- Sample proportion of the site covered in the study
**Step 2: Standardization of the weight**

The weights were assigned to each sample observations that reflect its probability of selection in comparison with other sample observations. These standardized weights were used to arrive at estimates that represent the whole population from where the sample is drawn.

**Merging of Phase I and Phase II Findings**

The data collected in Phase I and Phase II for the core groups and the migrants have been merged together to present the state estimates in this report. Hence it is important to understand that the data from the earlier phase on 24 districts has been merged with the data from 11 districts covered in the later phase using certain precautionary measures (like weighing data for relevant indicators) to provide for the aggregate state estimates.

The indicators common to Phase I and II were merged to arrive at the State estimates. Additional indicators, required for NACO-MTR (Mid Term Review) were captured through additional questions incorporated in the Interview Schedule for Phase II. These indicators will be reported separately for 11 districts only(*). Data weights were applied accordingly.
Female Sex Workers
Female Sex Workers

Summary of Findings

More than 90 percent of FSWs know about correct modes of HIV transmission and methods of prevention. Knowledge about transmission from mother to child and through breast feeding is low. Across the board, FSWs’ correct and consistent condom use was more than 94 percent, except with non-paying partners. Only half of the FSWs have heard of STI. 8 to 24 percent of FSWs had at least one STI symptom in the past twelve months, of which 5 to 12 percent did not seek any treatment and around 45 percent sought from a non-qualified practitioner. Stigma, discrimination and misconceptions still persist among a small proportion of FSWs (8 to 42 percent). Almost 50 percent of the FSWs perceived themselves to be at risk of infection. 90 percent or more were aware of HIV testing and around 73 percent had ever taken an HIV test. The awareness levels are high in Pune and Konkan Division. In terms of behavior, like use of condoms, treatment seeking for STI, testing for HIV, Nashik and Pune Division lead for NBB & BB FSWs, respectively.

FSWs are one of the ‘High Risk Groups’ as concurrency of sexual partners and substantially higher prevalence of HIV among them than in the general population could result in higher transmission of HIV to the general population. Their classification as BB & NBB FSW for the purpose of BSS was based on the place of solicitation due to the difference in pattern of function which thereby affects their vulnerabilities and intervention.

A Female Sex Worker (FSW) is a woman engaged in consensual sex for money or payment in kind as her principal means of livelihood. For the purpose of study, the sex workers were categorized into: (a) FSW – Brothel Based (FSW-BB), (b) FSW – Non-Brothel Based (FSW-NBB).

FSW-BB refers to those FSWs who operate from brothels and have engaged in sex, either full time or part-time, in return of cash by their paying clients at least once in the period of one month prior to the survey.

FSW-NBB refers to those FSWs who solicit for sex at defined sex access places other than brothels. In other words, FSW-NBB do not affiliate themselves to a permanent place of operation. They include FSWs who are street based, hotel/lodge based, highway based, dhaba based, secret home based, beauty parlour based, service beer bar based and tamasha based.
The sexual partners of FSWs (both BB and NBB) for the purpose of the survey have been classified as:

(1) Paying clients
   i. Regular paying client
   ii. Occasional paying clients

(2) Non-paying partners

The paying clients are those partners with whom the FSWs have sex in exchange for money. The paying clients may further be classified into regular paying clients and occasional paying clients according to the frequency of visits to FSWs.

The non-paying partners are those partners who have sexual intercourse with FSWs, without any exchange of money. Typical examples of non-regular partners are spouse, live-in partner, pimp etc.

♦ Socio-Demographic characteristics & substance abuse

Overall 3661 Brothel Based Sex Workers (BBSWs) and 3440 Non-Brothel Based Sex workers (NBBSWs) were interviewed for BSS in the State. Majority of the sex workers, both Brothel Based (65.3 percent) and Non-Brothel Based (65.0 percent) were in the age group of 21-30 years. The proportion of BB SWs who reported to be illiterate was 37.5 percent, while 27.4 percent NBB SWs reported the same. The proportion of sex workers who attained schooling till middle level was higher for NBB SWs (52.2 percent) as compared to BB SWs (48.4 percent).

The proportion of sex workers who reported to be ever married was higher in case of Non-Brothel Based Sex Workers (54 percent) as compared to Brothel Based Sex Workers (48.1 percent). Most of sex workers had their first sexual experience when they were less than 18 years of age and around 19 years during their first paid sex*. 55.6 percent of the BB FSWs reported poor economic conditions and 24.4 percent reported trafficking as the major driving factor into sex trade. 18.4 percent of BB FSWs stated that they were deserted by their husband and hence had to resort to this profession. The proportion of NBB FSW stating poor
economic condition and trafficking as the reason for getting into sex work is 67.5 percent and 22.1 percent, respectively. Six percent of BB FSWs and ten percent of NBB FSWs reported to be in debt condition, in which majorly the money was borrowed from Madams/Pimps*. On an average the both BB & NBB FSWs have around 3 people depending on the respondents’ earning*.

About 27.6 percent Brothel Based Sex Workers reported that they ever consumed alcohol and a higher proportion of Non Brothel Based Sex Workers reported the same (34.1 percent). Among those who usually consumed alcoholic beverages, about 13.7 percent BB SWs and 13.6 percent NBB SWs reported to consume drinks containing alcohol at least once a week. Overall, about 2.2 percent BB SWs reported to have injected drug / addictive substances in the past 12 months as compared to 2.8 percent NBB SWs who reported to have ever tried injecting drugs.

In a discussion with FSW-BBs in Nagpur it was revealed that they had been in the business for 5- 8 years. Most of them were from Andhra Pradesh and cited different reasons for getting into sex trade, from marriage breakups to trafficking of women. The primary cause of being driven into sex work was poor economic conditions. In some cases, the husband (earning member) had expired, in others he had left/abandoned them.

Some FSWs reported that they had lost hope in marriage and didn't believe in the institution any more. They searched for the job but since their friends were involved in sex trade even they joined. One sex worker took up this profession as her mother too was in sex trade. A similar set of responses were reported from FSW-NBB.

“I have to take care of my children. My children are studying in a boarding school. I have opted for sex trade because it is better than begging.” - FSW-NBB, Latur
For most women entry into sex trade is seen as a point of no return. A set of complex forces ranging from personal/micro factors (such as economic stability, children's future etc.) to meso factors (such as pimp/madam, immediate peers, family/relatives) to the larger socio-political-legal system (which criminalizes prostitution) make sex work an inappropriate profession to enter, agonizing to sustain and difficult to exit.

“I had to do lot of hard work at the native village and the money I earned was too less...Being in sex work (Dhandha) I get more money with less efforts”  – FSW-NBB Pune & Raigad

However, the FSWs said that they want “respect in society”. They have to hide their identity as FSW amongst their relatives and at native village because sex work is not recognized as a legitimate profession and is often looked down upon.

“My daughters do not know what I do, when they will know they will be shocked.”  – FSW-BB, Pune

“We want to lead a respectable life. But, if we attempt to undertake any good work we are stigmatized.”  – FSW-Pune

♦ Mode of Operation

About 87.2 percent of the Brothel Based Sex Workers operated from the brothel directly, while a small proportion of BB FSWs operated through Madam/Pimps and local contacts at restaurants/bars and lodges. On the other hand, street/bar/lodges were the main point of soliciting clients reported by NBB SWs (70.6 percent) followed by railway and bus stations, cinema halls, etc. 32.5 percent of NBB SWs reported to be operating through telephone.

Most of the BB FSWs (87.5 percent) engaged in sexual activity in the brothel, while a very small proportion of 8.4 percent also engaged in sex at the clients’ residence. In case of NBB FSWs 77 percent of the respondents reported place of sexual activity as hotel, resort, lodge followed by 30.7 percent at clients’ residence. A small proportion of NBB FSW respondents reported their residence (23 percent) and open place (16.4 percent) also as common place of sexual activity.

A small proportion of 28 percent of NBB FSWs are also reported to be travelling for the purpose of sexual activity of which 45.9 percent travel once a week, while 11.6 percent travel every day. 51.8 percent BB FSWs and 47.9 percent NBB FSWs reported to have seasonal variations (including festivals) in sex practice*.
A large proportion of sex workers; 74.2 percent of BB FSWs and 75.4 percent of NBB FSWs take the decision of how much they would charge their clients; while a small proportion of 8.7 percent of BB FSWs and 4.1 percent of NBB FSWs stated that madams/pimps or brokers decided the charges. The amount charged from the customers largely depended on the type of customers. It was reported that the FSWs felt a fall in number of customers over the years, probably due to the fear of various diseases including HIV. However, they reported a surge in younger clients in recent times.

The main reason for not travelling much for sex work was quoted to be their concern for children and the fear that something wrong might happen to them.

“I cannot leave my kids here and travel... who will take care of them, I have to take care of their food (khana peena bhi toh dekhaana hai)”

♦ Knowledge Indicators

Knowledge about Correct Modes of HIV Transmission

About 99.1 percent FSWs reported that they have heard about HIV/AIDS. The proportion was similar across all divisions. The most common source of information about HIV was reported to be from NGO staff by 71.8 percent of BB FSWs and 77.4 percent of NBB FSWs. Respondents were asked to identify the means by which HIV can be transmitted; the correct modes of transmission reported by the respondents are presented below:
A large proportion of respondents representing BB FSWs and NBB FSWs showed a high level of knowledge of unprotected sex, sharing infected needles and infected blood transfusion as common methods of HIV transmission.

The modes of transmission of HIV from infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of FSWs. The knowledge about transmission from the aforementioned modes was reported highest in Pune division (73 percent) in case of BB FSWs and in case of NBB SWs the proportion was highest in Konkan Division (79.1 percent).

The knowledge about vertical transmission is lowest in Aurangabad Division among BB FSWs & in Nasik Division among NBB FSWs.

Knowledge about Correct Methods of Prevention of HIV

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect themselves from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom use and having one faithful uninfected partner and avoid sharing needles. Though abstinence as a mode of HIV prevention is not applicable to the Sex Workers, the knowledge about the same was assessed in the interview. The proportion of respondents who reported correct modes of prevention of HIV/AIDS has been presented in the graph below:

![Figure 3.2: Knowledge about correct methods of HIV/AIDS Prevention (in %)](image)

Base: BBSWs (N=3620); NBBSWs (N=3411)
Almost all BBSWs (98.8 percent) reported to be aware that using condoms consistently every time with all partners prevents the spread of HIV. About one out of two BBSWs (42.7 percent) reported that HIV/AIDS can be prevented by abstaining from sexual intercourse which was higher in case of NBBSWs (46.5 percent).

The knowledge about correct consistent use of condom as method of prevention was lowest in Nagpur Division (93.3 percent) among BB FSWs. In case of avoiding sharing of needles as a method of prevention the lowest level was reported from Amravati Division both among BB FSWs (86.8 percent) and NBB FSWs (76 percent).

**Myths & Misconceptions about means of transmission and prevention of HIV/AIDS**

Myths and misconceptions exist in case of modes of transmission and prevention of HIV/AIDS. These need to be introduced in order to ensure adoption of correct preventive methods & foster a healthy environment, free of discrimination.

![Figure 3.3: Common misconception - FSWs- BB & NBB (in %)](chart)

The findings indicate that 33.9 percent of the FSW-BB respondents and 25.1 percent of NBB FSW thought that sharing clothes/utensils/barber’s blades with infected person causes HIV/AIDS transmission. The next frequently reported misconception of HIV/AIDS transmission was touching/ kissing an infected person. Among FSW-BB, this proportion was 24.9 percent and among FSW-NBB, this proportion was 25.3 percent.

The sex workers also reported that taking medicines/ injections and taking medicines before having sex would protect them from infection.
The myths and misconceptions related to HIV/AIDS prevention were higher among the Brothel Based Sex Workers as compared to Non-Brothel Based Sex Workers. This can be attributed to high levels of literacy among the NBB SWs as compared to BB FSWs.

The levels of misconceptions are high among BB FSWs in Aurangabad Divisions and among NBB FSWs in Amravati Divisions. The myths are more related to touch either directly (kissing infected person) or indirectly (sharing clothes, utensils, etc.) with the infected persons.

74.9 percent of BB FSWs and 68.6 percent of NBB FSWs stated that a healthy looking person can be infected with HIV.

♦ Behavioral Indicators

Behavior changes being the key to all the HIV prevention intervention among Core Groups, the behavioral indicators are vital for intervention.

Sexual behavior and Type of partners

94.2 percent of the BB FSW and 81.6 percent of the NBB FSW are sexually active for more than 15 days in a month. 97 percent of sex workers (both BB & NBB FSWs) reported to have had heterosexual intercourse with non paying partner in last one year*. The mean number of sexual partners reported by BB FSW was 13 per week while that of NBB FSWs is 10.

Only 11.9 percent of BB FSWs and 13.2 percent of NBB FSWs reported to indulge in anal sex*.

Some key aspects related to the type of sex were:

It was said that anal sex was in high demand as it resulted is more pleasure quotient for the clients. It appealed to the younger client audience.

Oral sex is also in high demand by the younger audience, usually occasional clients ask for it specially those who are married and do not get this from their wife.

“Oral sex worker gets more business. She charges more for oral sex as it gives more pleasure to men”

However anal and oral sex was not preferred by sex workers as they felt that it was not natural form of sex.

“I don’t do anal sex as well as oral sex for the many reasons. There is fear of contracting diseases. I also feel shame while performing it and moreover, I don’t really like that act of sex”

- FSW-BB, Latur

Vaginal sex was reported to be the lowest paying of all types of sex.
The data reveals that involvement of FSW-BB with occasional paying clients was high in comparison to their involvement with regular paying clients. It was reported that around half (50 percent) of the FSW-BB respondents in Maharashtra had more than 7 occasional paying clients in the last one week. The mean number of occasional paying clients as reported by FSW-BB was 9. It can be seen that on an average the BB SWs have around 1 non-paying partner in a week. This was slightly higher in case of Konkan division where the BB SWs were involved with 2 non-paying partners. It was reported by 76.5 percent of FSW-BB respondents that they did not have any non-paying partner in last one week.

The number of occasional paying clients is more than that of regular clients while on an average there are only 1.3 non paying partners of...
NBB FSWs in a week. 75.2 percent of FSW-NBB respondents reported having no non-paying partner in the last one week.

16 percent of the BB FSWs reported to have consumed alcohol during their last sexual act, while only 13 percent of NBB FSWs reported to have done so.

Condom use during last sex with sexual partners

Core group members are educated and encouraged to make correct and consistent use of condom for prevention of HIV transmission and therefore condom use during the last sexual act and consistent condom use are the key parameters for program intervention, especially behaviour change communication.

In BB FSW the condom use during the last sex is high, more than 98 percent with paying client, while it is only 54 percent with non paying partners. The high proportion of condom use with occasional paying client insinuates that faith in the partner is one of the factors that determine the use of condoms, as non paying partners are generally spouse or boy friend while the regular paying partner would also be more intimate due to constant contact. Of those who used condom during last sex, 68.2 percent used free condom, 20.2 percent used branded condom, while only 5.7 percent reported using social marketing condom.
The last time condom use among BB FSWs is lowest in Amravati Division, reported to be 40.6 percent with non paying partner and 97.7 percent with regular paying clients. The corresponding values are highest in Konkan division.

The last time condom use among NBB FSWs is high with paying clients while it is low with non paying partners (49 percent). 49.4 percent of NBB FSWs reported using free condom, 38.5 percent used branded condom, while only 9.9 percent reported using social marketing condom during their last sex*.

The last time condom use with non paying partners was lowest in Konkan Division & highest in Nashik Division for NBB FSWs.

Overall the last time condom use is marginally higher among BB FSWs as compared to NBB FSWs and lowest with non paying partners among both the categories of respondents.

**Consistent condom use**

Correct and consistent use of condom is the key behavior change for effective prevention of infection by and to the sex workers. Consistent condom use was determined by asking all those that had used condom in the past one month, the frequency with which they used condom with each type of partner. This indicator is extremely important to assess the success of behavior change interventions, to assess the extent of risk and as a baseline for devising future interventions.
The pattern of correct and consistent condom use among BB FSWs is similar to that of last time condom use, with large proportion of respondents reporting high levels of consistent condom use with paying clients and relatively lower proportion with non paying partner. As compared to 54 percent BB FSW reporting last time condom use, only 44.6 percent reported consistent condom use. The division wise pattern also mirrors that for last time condom use.

95.4 percent BB FSWs reported consistent condom use with regular paying clients, while 96.8 percent used condom consistently with occasional paying clients in last three months*
In the State of Maharashtra consistent condom use reported by NBB FSW is more than 90 percent with paying clients. The consistent condom use with non paying partner is low and lesser than last time condom use, 37.6 percent. This proportion is lowest in Konkan Division and highest in Nashik Division.

91 percent NBB FSWs reported consistent condom use with regular paying clients, while 94.5 percent used condom consistently with occasional paying clients in last three months*

Though the number of non paying partners is low, the concurrency of sexual partners with high volume of paying clients would pose risk to the all individuals involved in the sexual network, FSWs, clients and their other sexual partners. It is therefore essential to educate, motivate FSWs for condom use during all the encounters with all the partners.

Out of those indulging in anal sex 97.3 percent among BB FSWs and 80 percent among NBB FSWs reported to have used condom*.

The FSW-NBB respondents in Raigad reported that they do not provide service to the customers who insist on not using condoms; however, with their non-paying partners they do not always insist on condoms. In other words, with all the clients they used condoms, whereas with their ‘aadami’ (husband/lover/fiancé etc.), they didn't use condom because of the emotional connect.

“Some customers insist on having sex without condom and offer more money. We first explain to him the significance of using condom, if he doesn’t agree we just ask him to go.”

“Once as there was no electricity, I lit a candle and helped my customer to wear the condom. He however removed it in the dark and had sex with me without my realization.”

Some sex workers said that they prefer using condom with their non-paying partners because they are not sure about the number of sexual partners they are involved with.

“We are not sure about him. He says he goes for work but we do not know where he goes.”

The sex workers reported that they got to know about female condoms through NGOs. They felt that by using female condoms their bargaining power with the clients might improve.
Other key indicators pertaining to condom

Procurement of Condoms: The data on knowledge of places from where condom can be procured reflected that 98 percent of the BB SWs and 96.2 percent of NBB FSWs knew of place/person to procure condoms. Chemist shop was reported as the most important place of procuring condoms which was reported by 85.9 percent BB SWs and 89.1 percent NBB SWs, followed by NGO worker as reported by 79.8 percent BB SWs and 73.7 percent NBB SWs.

Possession & preference of condoms: 60.7 percent of BB FSWs and only 25.5 percent of NBB FSWs had more than 20 condoms at the time of interview. Free condoms are preferred the most by both BB (69.9 percent) & NBB FSWs (60.7 percent) followed by branded condoms; 20 percent of BB FSW and 29.8 percent of NBB FSW.

Double condom use: A substantial proportion of FSWs of more than 60 percent (66 percent – BB FSW and 62 percent – NBB FSW) reported use of double condoms.

Female condoms: 72.5 percent of the BB SWs and 72.4 percent of NBB SWs had heard about female condoms. Almost same proportion of BB & NBB FSWs i.e. 59% stated that female condoms are not affordable to them.

Out of the BB FSWs who are aware of female condom only 7.3 percent have used them, among NBB FSWs 9.8 percent reported to have ever used female condom

Decision Making in Condom Use: In case of BB FSWs the decision for condom use was made by 89.6 percent of the respondents themselves with respect to regular paying client. This was higher with occasional partners (91.2 percent) and less with non paying partners (74.6 percent). The most common reasons cited for not using condom was objection by partner, reduction in pleasure and FSWs client offering more money for not using condoms.

86.6 percent of NBB FSWs took the decision themselves to use condoms with occasional paying partners. This was lower with regular partners (84.8 percent) and further less (64.9 percent) with non paying partners.
93 percent of BB FSWs & NBB FSWs reported to have insisted the clients to use of condom*.

5.7 percent of BB FSWs and 10.2 percent of NBB FSWs reported coercive sexual exploitation in last six months. About 18.6 percent of BB FSWs and 27.6 percent of NBB FSWs reported violence in the past six months.

♦ Awareness about STIs, Reported STI Symptoms and treatment seeking behavior

The respondents were asked if they had heard of any diseases other than HIV or AIDS that could be transmitted through sexual contact. About 53 percent BB Sws reported that they had heard about STIs which was higher in proportion as compared to NBBSWs (41.3 percent).

Knowledge about STI symptoms

The proportion of BBSWs who had heard of STI was highest in Nashik division (69 percent) and lowest in Aurangabad division (33.4 percent). The proportion of NBBSWs who had heard of STI was highest in Nashik division (50.2 percent) and lowest in Amravati division (18.9 percent).

About nine out of ten (91.4 percent) FSW-BB respondents in Maharashtra reported that STI can be prevented. This proportion was lowest in Nagpur division (70.6 percent) and highest in Pune and Nashik division (98.6 percent). It was reported that 88.5 percent of FSW-NBB were aware that STI can be prevented.
55 percent of BB FSWs and 57.5 percent of NBB FSWs reported that use of condom prevents STI. About 81.9 percent of the BBSWs reported that they were aware that genital urethral discharge was STI symptom in women. The proportion about the same was lower among the NBBSWs (76.3 percent). Genital sores/ ulcers was reported by 71.6 percent BBSWs and 70.5 percent NBBSWs. A comparatively lower proportion of respondents had knowledge about symptoms of STI among men. About 72.9 percent BBSWs reported that they were aware of genital urethral discharge as symptom of STI among men and the same was reported by 64.1 percent NBBSWs.

**Experience of STI Symptoms**

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Burning pain during urination</th>
<th>Genital discharge</th>
<th>Ulcer/sore in genital area</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSW-BB</td>
<td>23.6</td>
<td>16.5</td>
<td>11.8</td>
</tr>
<tr>
<td>FSW-NBB</td>
<td>23.5</td>
<td>13.5</td>
<td>8</td>
</tr>
</tbody>
</table>

It was reported that 23.6 percent of FSW-BB had experienced burning pain during urination in one year prior to the survey. In addition, 16.5 percent of all the FSW-BB reported that they had experienced genital discharge in one year prior to the survey. Ulcer/sores in genital areas were experienced by 11.8 percent of the FSW-BB respondents. Most of the STI symptoms were reported by BB FSWs in Nashik division.

It was reported that 23.5 percent of FSW-NBB had experienced burning pain during urination in one year prior to the survey. 13.5 percent of all the FSW-NBB reported that they had experienced genital discharge in one year prior to the survey. While the former STI symptom was most
frequently reported among respondents in Nashik Division (45.5 percent), the later symptom was most frequently reported from Aurangabad (20.9 percent). Ulcer/sores in genital areas were experienced by 8 percent of respondents in the state. Nashik division had highest proportion of respondents (17.4 percent) reporting this symptom.

It is observed that though the BB FSW respondents from Nagpur and Pune Division reported high levels of STI symptoms, the consistent condom use is also high. Similar trend is observed among NBB FSW respondents. This indicates reporting bias by the SWs with respect to condom use, which needs to be further probed.

**STI treatment from qualified medical practitioner**

Of the total BB & NBB FSW reporting some STI symptom 5.1 percent and 11.5 percent did not seek any treatment, respectively. Of those who sought treatment only 37.4 percent of BB FSW & 33.9 percent of NBB FSW sought treatment from qualified medical practitioner.

The proportion of BB FSWs seeking treatment from government and private hospital/clinic is given below:

![Figure 3.12: Division wise proportion of BB FSW seeking treatment for STI symptoms from qualified medical practitioner (in %)](figures/figure3_12.png)

Base: All respondents who experienced ST; Maharashtra (N=1232), Amravati (N=63), Aurangabad (N=85), Konkan (N=227), Nagpur (N=93), Nashik (N=186), Pune (N=578)

At the State level, 37.4 percent FSW-BB reporting any STI symptom had sought treatment from a qualified medical practitioner. 24.2 percent sought treatment from government hospital/clinic while 13.2 percent from private clinic/hospital when they last experienced a STI symptom.

The highest proportion of BB FSW seeking treatment from qualified practitioners in the State are seen to be from Pune Division, with a
high proportion of 33 percent visiting government hospital/clinic. The respondent reporting to have sought treatment from qualified provider, especially from government providers is low in Konkan Division.

Figure 3.13: Division wise proportion of NBB FSW seeking treatment for STI symptoms from qualified medical practitioner (in %)

Base: All respondents who experienced STI; Maharashtra (N-1118), Amravati (N-120), Aurangabad (N-215), Konkan (N-151), Nagpur (N-167), Nashik (N-120), Pune (N-345)

Only 40 percent of the NBB FSW respondents reporting STI symptoms sought treatment from government or private hospitals/clinics. Only 18 percent sought treatment from government hospitals/clinics. This is reported to be highest in Nashik Division and lowest in Konkan Division.

Overall, the respondents seeking treatment for STI is lowest in Konkan Division among BB & NBB FSW and relatively low among NBB FSWs in Pune Division.

♦ Stigma and Discrimination

HIV infection is widely stigmatized, because of its association with sexual behaviour that may be considered socially unacceptable (such as prostitution, substance abuse etc.). Stigma and discrimination constitute one of the greatest barriers in effectively dealing with the epidemic.

A set of statements was administered to all the respondents to assess the level of discrimination among respondents.
It is observed that the attitude towards the people infected with HIV is positive only till it does not involve physical contact. High proportion of respondents exhibiting unwillingness to shake hands with HIV infected person reflects the stigmatized behavior in case of physical contact.

Both Brothel Based and Non-Brothel Based Sex Workers from Pune Division reflected positive attitude towards HIV infected person.

The low level of stigma and discrimination in Pune and Nashik Division corresponds with high levels of exposure to intervention/messages in these two divisions. Information to some extent would reduce stigma, however it does not indicate that mere provision of information could address the stigma related issues as exposure to intervention is high in other Divisions too.

It is seen that the self risk perception among FSWs is high in Nashik, Pune and Konkan Division and the levels of negative attitude with PLHIV is low in the corresponding divisions.

Further, it was reported that 11 percent of the FSW-BB were unwilling to buy fruits or vegetables from a shopkeeper or food seller if she had HIV/AIDS while same was reported by 14.3 percent NBBSWs. When asked whether a teacher infected with HIV/AIDS should teach in school, 10.2 percent of FSW-BB and 14 percent of NBB FSW stated no for the same.
When asked if they would be willing to take care of a relative who is infected with HIV/AIDS, 6.7 percent of FSW-BB reported unwilling to do so, while 9.7 percent of FSW-NBB reported unwillingness to take care of relative infected with HIV/AIDS.

![Figure 3.15: Know person infected with HIV (in %)](image)

It was reported that 29.2 percent of the BBSWs knew someone/friend/relative who was infected with HIV/AIDS compared to 32.3 percent of NBBSWs. The proportion of such respondents was highest in Pune division in case of BBSWs (46.7 percent) and NBBSWs (45 percent).

It is seen that in Pune Division the proportion of respondents reported to know any PLHIV is high and stigma related to PLHIV is also lowest in Pune Division.

♦ Risk Perception

Risk perception of the respondents were assessed by administering two questions; whether they perceived any community member to be at risk of infection and further if they perceived any risk of infection to themselves.

Risk perception for community members

50.8 percent of BB FSW felt that people like them are susceptible to HIV infection, while 48.8 percent of NBB FSWs stated the same. 26 percent of BB FSW and 28 percent of NBB FSW were confident that they were not at risk.
Self Risk perception

As compared to the risk perception for the community a very small proportion of 19.6 BB FSW and 22.6 percent of NBB FSW respondents perceived themselves to be at risk of infection. The self risk perception is high among BB FSWs in Konkan (26.3 percent) and among NBB FSW is highest in Pune Division (33.6 percent).

♦ HIV Testing

All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. Nine out of ten BBSWs reported that it was feasible for them to get HIV test done (90.4 percent), while 89.5 percent of NBB FSW reported so.

In the second phase the respondents were asked, if they knew from where they can get tested for HIV. Almost 91 percent of FSWs (both BB & NBB) reported in affirmation. The awareness about the testing site was highest in Pune Division (97.3 percent) among BB FSWs & in Aurangabad Division (97 percent) among NBB FSWs.

The respondents were asked whether they have ever taken an HIV test. The findings are given below:

![Figure 3.16: Division wise BB and NBB FSWs ever taken HIV test (in %)](image)


It was reported by 76.6 percent of the BBSWs that they had ever taken the test and a relatively lesser proportion of NBBSWs (69 percent) had taken the HIV test. 80.4 percent of the BBSWs and 76.6 percent NBB FSWs took the HIV test voluntarily. In phase II the respondents were
asked about the place where they took the HIV test. Eight out of ten respondents said that they took HIV test from government services. A large proportion of respondents (96 percent of BB FSWs and 98 percent of NBB FSWs) reported to have tested for HIV in last one year*.

The self risk perception among the BB FSWs is lowest in Nagpur and Amravati Divisions and highest in Nashik Division. Likewise the proportion of respondents testing for HIV is seen to be higher in Nashik Division and low in Nagpur Division. The high level of risk perception among NBB FSWs (27.5 percent) corresponds with large number of the respondents reporting to have tested. This indicator is lowest in Nagpur Division which is consistent with low level of self risk perception (10.8 percent).

It was reported that 92.6 percent of the FSW-BB respondents who had ever taken the HIV test, received their test results. Of those FSW-NBB who had ever taken HIV test, 90.7 percent received the test results. It was reported that out of the respondents who had ever taken the HIV test, about 85.9 percent BBSWs and 84.5 percent NBBSWs had received counseling service. Most of the sex workers (above 90 percent) who took HIV test reported to have received pre and post counseling service*.

♦ Exposure to Intervention & Community Involvement

STI/HIV/AIDS intervention programmes may take multiple forms, such as awareness campaigns through media, Inter Personal Education (IPE)
activities, free medical checkups, campaigns/meetings etc. Intervention programmes constitute a primary response to the challenge of HIV/AIDS prevention. They can broadly be classified as interventions that involve interpersonal education and campaign based programmes.

The level of exposure to various interventions seems to be equal for both the categories of sex workers, with higher exposure to Mid Media. Almost three fourth of the respondents had received some education/information through a personal contact. 34 percent of BB FSWs and 38 percent of NBB FSWs reported visiting STI clinic for routine medical checkup in last six months. 76.7 percent of BB FSWs and 81.3 percent of NBB FSWs reported to have been contacted by a peer educator in last three months*.

Most of the respondents 81 percent of BB FSWs and 77.4 percent of NBB FSWs were confident that the community members would come together in case of any crises*.

The sex workers stated that sometimes their customers give them good amount of money and the NGOs had a major role to play in this regard as the NGOs educated them about the use of condoms. The sex workers were also aware that oral sex too could lead to HIV and condom use is essential even in oral sex for prevention of transmission. They were very glad to have learnt about HIV testing from NGOs.

“Now NGOs come and explain us various things like condoms.”

“We get the check up done every month at a government dispensary. We do the HIV test also”.

“Sex without condom could lead to HIV infection even in case of oral sex if there is a wound in mouth.”
The FSWs in Yeotmal stated that good counseling was provided to them at the testing centres, even to HIV positive women. FSWs who are HIV positive continue doing business as they don’t have any other source of income.

FSWs in Latur shared their experience with the NGO stating that the NGO provided all the necessary support and cared for them “like a parent”, gave them free medicines, undertook HIV testing and if detected positive provided good counseling too.

Questions were asked to the respondents to assess the level of awareness of the sex workers about various health and HIV/AIDS related services and further if they have ever accessed them either for themselves or for someone else. Most of the BB FSWs were aware of general health services like District Hospitals (90.8 percent), Community Health Centre (61.5 percent) and Primary Health Centre (70.5 percent). Of the HIV/AIDS specific services the most known is ICTC (42.8 percent). In case of NBB FSWs only 37.9 percent are aware of ICTCs and the other health services most known are District Hospitals (89.7 percent) followed by PHC known to 72 percent.

The commonly accessed health services are District Hospitals by 80 percent of BB and NBB FSWs, while of HIV/AIDS related services the ICTCs ranks the first, 78 percent of BB FSWs and 74 percent of NBB FSWs who reported to be aware of the service have accessed it.
Awareness level for ICTC center is 42.8 percent and among the respondents who know about ICTC only 78.1 percent avail the services of ICTC. Awareness for ART center is very low indicating 20.2 percent of people aware about the ART services and 70.2 percent of respondent’s aware access the service at ART centre for ART treatment. Accessibility at OVC centre is very low (47.3 percent). The awareness level for District Hospital is high (90.8 percent) and respondents accessing the services is proportionate to the same that is 89.3 percent.

The level for ICTC awareness is 37.9 percent and 74.3 percent of NBB FSWs knowing about ICTC visited the service of ICTC centre. Level of respondents knowing about ART center is 14.9 percent of people aware about the ART services only 64.1 percent of respondent’s access the service at ART centre for ART treatment. Respondents accessing the OVC centre is low (43.8 percent) of those know about OVC. The awareness level for District Hospital is high (89.7 percent) and respondents accessing the services is 79.7 percent.

**Awareness about various government programs and services for HIV/AIDS***

The survey attempted to assess the level of awareness about various government services and programs for HIV/AIDS.
The awareness about various government programs seem to be marginally higher among NBB FSWs as compared to that among BB FSWs. The most common source of awareness for the aforementioned information was reported as NGOs by 72.5 percent of BB FSWs and 79.7 percent of NBB FSWs, followed by television as stated by 56.5 percent BB FSWs and 59.8 percent NBB FSWs.
Men who have sex with Men (MSM) is a term used to define a group comprising of people who identify themselves as men, and engage knowingly and willingly in sexual behaviour with other people who they perceive as male.

Men having sex with men are highly stigmatized and are subject to a variety of abuses and violence. The partner, who penetrates, is generally not seen as deviant and is more a part of the general population. In many parts of India there exists a clear defined distinction within MSM based upon their sexual behaviour as penetrator or receiver; Panthis and Kothis respectively. In cases where the same man acts both as the penetrator at times and as receiver at other times, is known as ‘Double Decker’.

♦ Socio-Demographic characteristics & substance abuse

Overall 3881 men who have sex with men (MSM) were interviewed for the BSS conducted in 35-districts of Maharashtra. The proportions of various age groups have more or less remained the same across the six divisions with maximum proportion in the age group of 21-30 years (66.7 percent) followed by 31-40 years (20.3 percent).
More than 68.3 percent of the respondents reported to have completed secondary school. It was also observed that respondents who had completed primary education was highest in Amravati and respondents going for higher education after that dropped significantly as compared to other divisions. It was reported that more than one out of ten respondents (14.2 percent) reported that they belonged to service class while more than one-tenth (13.9 percent) reported that they were self employed professionals. 13.7 percent of the MSM were students. Most of the MSM respondents have ration cards, but very few have Birth Certificate.

A substantial proportion of MSM (63.5 percent) interviewed were unmarried, the proportion being highest in Pune Division (74 percent) and lowest in Amravati Division (44.3 percent). More than half of the respondents (52.2 percent) reported that they had their first sexual experience when they were less than 18 years of age, which was less than the median age of their male partner (19 years). More than two third of the MSM (73.4 percent) reported that the first sexual act was ‘anal sex’ and 69.1 percent of the MSM reported ‘manual sex’. About one-fifth (14.3 percent) stated that their first sexual experience with male partner was forced. It is seen that the most common first male sexual partner is friend, followed by co-worker, relatives, neighbors, commercial partner & teachers. 71.7 percent MSM reported to be taking decision themselves on how much to charge the client. On an average the MSM respondents have around 3 dependants*.

Majority of MSM reported that they have ever consumed alcohol (98.1 percent) and 19.9 percent said that they consumed alcohol at least once a week. 0.9 percent of the MSM reported that they used injecting drugs.

Overall 44 percent of the MSM travel to other places i.e. places away from their place of residence. Very few respondents from Aurangabad Division (26.4 percent) reported to travel. Most of these respondents travel once a month (26.1 percent). In Amravati Division most of the MSM respondents (27 percent) reported travelling every fortnight. In Konkan Division though 50 percent of the respondents reported travel out station, most of them travel very rarely i.e. once in a year (47 percent) and once in 6 month (37 percent).
Some of the experiences shared by the MSM about their childhood experiences and about discovering their sexuality:

“I was in 11th standard and had good relationship with my Games teacher, till the time we had sex. I considered him as my elder brother. After we had sex our relationship developed.”

“A teacher lured me into having sex with him; I liked it 50 percent and was also frightened. I was scared; if my family knows about it what will happen.”

“My teacher knew about me. There were times when he gave signals to me and I could understand what he was doing. He said nothing will happen and I started liking it.”

“My family has accepted me. People say that I am different.”

“Even if my family does not know I have no problem. I don’t think I am doing anything different. I think we are normal.”

“When, I was young all the guys used to tease me… I used to feel bad, but I used to think that I am the only one… But when I started working I realized that there are many people like me…I do not feel bad now.”

“I was 9 years old… And there were trans-genders around me…. I started getting close to them…. I became addicted to them…. I used to wear my sister’s dress or my mother’s sarees… after my getting older when I was walking at the station….I realized that there are people like me… I went with them to a washroom… they spoke to me about MSM…After that I came to know about Hum Saaya, Hum Safar…”

The sexual preference of some MSM had altered the balance of their lives, often MSM were beaten up or deserted by their families due to their sexual behavior. The rejection and disownment from friends and family leaves them with no support system and thus emotionally imbalanced. They also face social rejection and do not get employment due to their feminine behaviour.

“We also feel that somebody should love us, take care of us and love us truly. That is not our destiny.”

“If you are weak socially you are exploited. Family also takes advantage of it.”

“When my sisters come they don’t talk to me. I feel suffocated at home.”

In the study, it was observed that the MSM depends on the social entitlements to lead their lives and consider it as a blessing.

“I have heard about life-insurance…If I will have some savings it will be good..... If something unpredictable happens, my family can take the money…”

“Initially the whole process used to be very cumbersome and tedious… You get a health insurance, you have do a lot of paper work and you will get after two three months… In the new scheme you just have to fill three premiums”
Knowledge about Correct Modes of Transmission of HIV

About 98.9 percent MSM reported that they have heard about HIV/AIDS. The proportion was similar across all divisions. The most common sources of information about HIV are television (72.8 percent), friends (62.4 percent) and NGOs (58.2 percent). Respondents were asked to identify the means by which HIV can be transmitted, the correct modes of transmission has been presented below:

![Knowledge about correct modes of HIV/AIDS transmission (in %)](image)

The modes of transmission of HIV through infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of MSM. But, the responses were similar across all divisions. The lowest proportion reported with respect to transmission through breast feeding was seen in Amravati and Nagpur Division.

Knowledge about Correct Methods of Prevention of HIV

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect themselves from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom use, having one faithful uninfected partner and avoid sharing needles. The proportion of
respondents who reported correct modes of prevention of HIV/AIDS has been presented in the graph below

![Graph showing knowledge about correct methods of HIV/AIDS Prevention](image)

Almost all MSM (99.6 percent) reported to be aware that using condoms consistently every time with all partners prevents the spread of HIV. About one out of two respondents (48.6 percent) reported that HIV/AIDS can be prevented by abstaining from sexual intercourse while 87 percent of the respondents reported that having one faithful uninfected partner can prevent HIV/AIDS.

**Myths & Misconceptions about means of transmission and prevention of HIV/AIDS**

![Graph showing common misconceptions among MSM](image)
At the state level, 17.9 percent of respondents who were aware of HIV or AIDS reported that HIV/AIDS may be transmitted through a mosquito bite. 14.7 percent of the respondents who were aware of HIV/AIDS also reported that a person can get HIV/AIDS by sharing a meal with someone who is infected.

With regard to misconceptions on modes of prevention, taking injections and medicines to cure the infection was reported by 30.4 percent respondents, followed by cleaning sex organs with Dettol/disinfectant (25.2 percent).

The misconceptions especially with regard to direct or indirect physical contact like kissing an infected person, sharing utensils, clothes are high in Amravati and Aurangabad Division. It was noted that, those divisions which had relatively higher proportion of respondents who have completed secondary education also had higher proportion of respondents with correct knowledge about HIV/AIDS transmission.

74.4 percent MSM reported that a healthy looking person could also be infected with HIV.

“HIV can be transmitted through unsafe sex, using the infected syringe and donating blood which is infected”

“HIV can also be transmitted if one indulges in vaginal sex with an infected person without condom”.

“It also happens to Child from mother.”

“Since the time I have heard about HIV, I have got very scared.”
44.3 percent of MSM reported to have indulged in sex with commercial male partners in past one month. The average number of commercial male partners is the highest as compared to other two types of partners. The involvement with male partners is the highest in Konkan division which includes districts like Mumbai and Thane. The average number of regular male partners and non-regular and non-commercial partners is also quite high among the MSM.

75 percent of the MSM reported to indulge in anal sex with their male partners in past one year. Almost 90 percent of MSM from Amravati Division reported anal sex, while the lowest proportion is from Nagpur Division (63.5 percent).

The proportion of MSM involved with female sexual partner is approximately 50 percent. On an average MSM reported involvement with one to two female partners. 18.2 percent of respondents stated to have consumed alcohol before their last sexual intercourse*. The risk of spreading the infection is high among these MSM as it insinuates concurrency of partners due to bisexual behavior.
Condom use during last anal sex with male partners

About 75.8 percent respondents reported to be involved with regular male partners while about 44.3 percent MSMs were involved with commercial male partners. More than one-third of the respondents (38.7 percent) reported to be involved with non-regular/non-commercial male partners. 51.7 percent reported using free condom, 29.8 percent branded and 18.6 percent socially marketed condoms during the last sex.

Out of the MSM who reported to have had sexual intercourse with regular male partners in last one month, majority (89.1 percent) reported that they used condom during last sexual intercourse with regular male partners. The proportion was highest for Nagpur division (96.5 percent) and lowest for Amravati division (76 percent).

Among those who reported to have sexual intercourse with commercial male partners in the last one month, 91.4 percent reported that they used condom during last sexual intercourse with commercial male partners. The proportion was highest for Aurangabad Division (94.5 percent) and lowest for Amravati Division (95.6 percent).

Among the respondents who reported to have had sex with non-regular/non-commercial male partners, 89.3 percent reported that they used condom during last sexual intercourse with non-regular/non-commercial male partners. The proportion was highest in Aurangabad Division (94.3 percent) and lowest in Konkan Division (81.9 percent).
Condom use during last sex with Female sexual partners

About 78.2 percent respondents reported to be involved with regular female partners while about 32.9 percent MSM were involved with commercial female partners. More than one-third of the respondents (17.5 percent) reported to be involved with non-regular/non-commercial female partners.

Among the respondents who reported to have had sex with regular female partners, 41 percent reported that they used condom during last sexual intercourse with regular female partners. The proportion was highest in Konkan division (53.5 percent) and lowest in Pune division (23.9 percent).

Out of the MSM who reported to have sexual intercourse with commercial female partners, 96.6 percent reported of using condoms last time they had sex. The proportion was highest for Nagpur Division (100 percent) and lowest for Amravati Division (91.3 percent).

Among the respondents who reported to have had sex with non-regular/non-commercial female partners, 88.9 percent reported using condoms last time they had sex. The proportion was highest for Aurangabad Division (97 percent) and lowest for Konkan Division (53.7 percent).
“We have an internal instinct of recognizing people interested in us. If he gives positive response we approach him. We do Oral, anal and body sex.”

“I think oral sex gets done easily. Oral sex is more paying because it happens easily and fast. Other people also have the notion that sluts don’t do oral sex and there is least possibility of HIV with oral sex.”

**Consistent condom use**

Consistent condom use was determined by asking all those who had used a condom in the past six months, the frequency with which they used a condom with each type of partner.

**Figure 4.7: Division wise Consistent Condom Use with male partners in past six months (in %)**

Around 79.2 percent of the respondents reported that they consistently used condoms in the last 6 months with regular male partners. Nagpur division had highest proportion of such respondents (93.1 percent) while Amravati had the lowest (44.9 percent).

Among those who were involved with commercial male partners, 85.1 percent of the respondents reported that they consistently used condoms in the last 6 months while indulging in sex with commercial male partners. Nagpur division had highest proportion of such respondents (98.1 percent) while Amravati had the lowest (51.3 percent).
77.8 percent of the respondents reported that they consistently used condoms in the last 6 months with non-regular/non-commercial male partners. Nagpur division had highest proportion of such respondents (91.3 percent) while Amravati had the lowest (43.2 percent).

![Figure 4.8: Division wise Consistent Condom Use with Female Partners in last one month (in %)](image)

Only about 26.8 percent of the respondents reported that they consistently used condoms while having sex with regular female partners. Konkan division had highest proportion of such respondents (40.6 percent) while Amravati division had the lowest (8.7 percent) proportion of respondents who reported consistent condom use.

Among those respondents who reported having sex with commercial female partners, 87 percent of the respondents reported that they consistently used condom. Nagpur division had highest proportion of such respondents (100 percent) while lowest proportion of MSM from Amravati division reported the same (62.5 percent).

Around eight out of ten respondents (81 percent) reported that they consistently used condoms while having sex with non-regular/non-commercial female partners. About 95.5 percent respondents from Aurangabad Division reported consistent condom use while Konkan Division had the lowest proportion of such respondents (31.7 percent).
Low levels of consistent condom use with female partner’s especially regular female partner’s poses a major risk of spread from infected MSM to women.

86.8 percent of MSM who indulged in sex in the past one year with non regular male partners, reported consistent condom use. The most common reasons quoted for use of condom is to protect from HIV infection & STI and to protect the partners from the same.

“There is lot of risk in multi partner.”

“We say that there should not be unsafe sex. We are scared of that. If there is steady partner we can get the pleasure in sex.”

“When I did not know about condoms, I did not use condom. When I came to know about the problems of not using condoms, I have started using condoms.”

“It very bad to know that the clients will buy beer for 50 rupees but they will not buy condom.”

“I explain to him that condom is necessary and then emotionally blackmail him and tell him about HIV.”

“I say I have full faith that you don’t have HIV, but still I ask him to use condom. If he does not listen to me, I just leave and refuse to have sex without using condom.”

Other Key Indicators pertaining to Condoms

Procurement of Condoms: Majority of MSM were aware of a place of obtaining condoms (96.2 percent). Respondents were asked about various sources from where they procure condoms. At the aggregate level, 64.1 percent of the respondents reported procuring condoms from their friends making it the most common source of procurement. Other common places of procurement of condoms as reported by respondents were Condom Vending Machine (51.2 percent), Family Planning Centre (50.9 percent), Health worker/Clinic (49.8 percent) and Bar/ Guest house/ Hotel (44.2 percent).

Decision making in condom use: With all types of male partners regular, commercial and non regular more than 70 percent of the respondent reported to have decided on use of condoms. This was followed by joint decision reported by 13.5 percent (in case of commercial partners)
to 20.7 percent (in case of regular partners) reporting to have jointly made the decision. In case of commercial partners 7.4 percent of the MSM reported that the client had taken the decision. 89 percent of MSM usually insist their partner to use condom*.

**Preference of condoms:** Free condoms are preferred by 57.4 percent of MSM, branded by 27 percent and social marketed condoms 15.6 percent of MSM.

3.7 percent of the MSM respondents reported to have coerced to have sex in the last six months and only 4.4 percent of the respondents reported any type of physical abuse.

♦ **Awareness about STI, Reported STI Symptoms and treatment seeking behaviour**

To assess the levels of awareness of STI, the respondents were asked if they had heard of any diseases other than HIV or AIDS that could be transmitted through sexual contact.

![Figure 4.9: Division wise proportion of MSM who have heard of STI (in %)](chart)

At the aggregate level, it was reported that more than one-third of respondents (37.9 percent) were aware of STI. 60.6 percent MSM respondents were aware that correct and consistent use of condom prevents STI. Nashik division reported the highest proportion of respondents (60.1 percent) who had heard about STI while Amravati division had the lowest proportion of respondents (18.2 percent) aware of STI.
Knowledge about STI symptoms

Around 93.6 percent of those who were aware of STI seemed to be aware that STI can be prevented. About 81.3 percent respondents were aware that genital urethral discharge was STI symptom in men and 69.5 percent reported the same as symptom among women. Majority of respondents, about 78.1 percent reported genital sores/ulcers as symptom of STI among men.

Experience of STI Symptom

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey.

It was reported that 12.9 percent of the respondents had experienced burning pain during urination while less than 7 percent experienced ulcers/sore in genital area. Genital discharge was reported by 5.3 percent of the respondents at the aggregate level. Nashik division had the highest proportion of respondent who reported symptoms of STI.

STI treatment from qualified medical practitioner

15.5 percent of MSM reporting STI symptoms did not seek any treatment. 35.1 percent sought from qualified medical practitioners, 16 percent from government and 19 percent from private.
At the aggregate level, more than half of the respondents (35.1 percent) reported to have received treatment from a qualified medical practitioner. Those seeking treatment from qualified practitioners was highest in Nashik Division (52 percent) and lowest in Aurangabad Division (17.5 percent).

Information was also collected on respondents who visited government hospitals/clinics for treatment of STI. At the state level, 16.1 percent of the respondents reported to have visited government hospitals for STI. While 26.5 percent of the respondents in Nashik Division reported seeking STI treatment from government hospitals, this proportion was the lowest in Aurangabad Division with 5 percent of the respondents having visited government hospital for treatment of STI.

♦ Stigma and Discrimination

![Figure 4.11: Division wise proportion of MSM seeking treatment for STI symptoms from qualified medical practitioner (in %)](image)

Base: Maharashtra (N-638), Amravati (N-67), Aurangabad (N-40), Konkan (N-66), Nagpur (N-52), Nashik (N-181), Pune (N-232)

![Figure 4.12: Stigma and Discrimination Indicators (in %)](image)

Base: All Respondents (3881)
9.1 percent of the respondents reported that they would not be willing to take necessary care of their relative/friend in their house if he/she got infected with HIV. The level of unwillingness to take necessary care of the HIV infected close friend/relative/family member was the highest in Amravati division (13.4 percent) and lowest in Nashik Division (3.7 percent).

Also, 14.8 percent of respondents mentioned that they would not be willing to buy vegetables or food items from the shopkeeper who was infected with HIV. This proportion was highest in Pune division (17.8 percent) and lowest in Nagpur division (5.5 percent).

The respondents were further asked about their opinion on whether a teacher who is infected by HIV but is not sick should be allowed to continue teaching. It was reported that 14.4 percent of the respondents were unwilling to allow the teacher to teach in school. The data revealed that almost half (48.2 percent) of the respondents would not shake hands with people infected with HIV and the proportion was highest in Konkan division (85.3 percent).

It was reported that 10.4 percent of the respondents had a close friend who was infected with HIV/AIDS. The proportion of such respondents was highest in Nashik division (15.8 percent), which may be attributable to the low negative attitude towards PLHIV.
It was reported that 12.6 percent of the respondents knew someone who was infected with HIV/AIDS. The proportion of such respondents was highest in Konkan division (27.5 percent) and lowest in Aurangabad division (2.6 percent). 74 percent of the MSM respondents stated that a HIV infected person can look healthy.

♦ Risk perception

Risk perception for community members
46 percent of MSM perceived their community members to be at risk of HIV while 24.8 percent stated that their community members do not have any risk of infection.

Self Risk perception
12.8 percent of MSM expressed their susceptibility to HIV infection. 60.6 percent of MSM were confident that they were not at risk. The self risk perception is highest among MSM in Nagpur (16 percent) and high among Pune (14.6 percent) Division.

♦ HIV Testing

The respondents were asked about their awareness of HIV testing and their test taking behavior. All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. In the second phase the respondents were asked about their awareness of places for getting HIV test done.
91.5 percent of the respondents in Phase II reported to be aware of a place where one can get a HIV test done.

54 percent of those who were aware of HIV testing reported to have tested. Nashik division had the highest proportion of respondents (67.8 percent) who reported ever taking a HIV test while Amravati division had lowest proportion of respondents (41.5 percent) reporting the same. 82.8 percent selected the government center for getting the HIV test done against the 17.2 percent preferring the private center for HIV test.

At the aggregate level, among respondents who had taken the HIV test, it was reported that 10.3 percent had taken the test because it was prescribed to them while 89.5 percent had taken it voluntarily. Proportion of respondents who had taken test voluntarily was highest in Amravati Division (97.3 percent) while it was lowest in Konkan Division (77.9 percent).

97.1 percent of the respondents who tested for HIV also reported to have collected the test results. In Konkan Division the respondents collecting the results is low, that is 92.5 percent and in remaining division it is approximately around 98 percent. 93 percent of the MSM tested stated to have received pre and post test counseling.
More than 90 percent of the MSM respondents reported having seen billboards/posters/leaflets. Almost 6 out of 10 respondents reported having exposure to IPE for HIV/AIDS, condom use and free medical check-up. 70.5 percent MSM reported to have been contacted by peer educators in past three months. 41.9 percent MSM reported to have visited STI clinic for routine medical checkup in the past six months.
Awareness level for ICTC center is 39.5 percent and among the respondents who know about ICTC only 84.9 percent avail the services of ICTC. Awareness for ART center is low indicating 25.6 percent of people aware about the ART services and 80.6 percent of respondent’s aware access the service at ART centre for ART treatment. Accessibility at OVC centre is very low (21.3 percent). The awareness level for District Hospital is high (95.2 percent) and respondents accessing the services is proportionate to the same that is 92.6 percent.

80 percent of the MSM respondents were confident that the community members would come together in case of any problem. 78.5 percent of MSM respondents are members and 20 percent are volunteers of CBO/SHG*.

MSM expect that their doctors should keep their identities secret. They preferred hospitals/clinics etc which were far from their place of residence so that people will not identify them.

‘Yes I feel it should be kept secret but they don’t. I had a problem of mul vyad I went to a doctor and thought he will not tell anyone but he brought 4 more doctors and showed them in civil hospital.”

“The doctor was very far from my place so obviously it will be a secret…”

Awareness about various government programs & services for HIV/AIDS*

Figure 4.18: Awareness about various government program and services for HIV/AIDS*

Base: All Respondents (1957)
More than three-fourth of the MSM are aware of availability of free treatment for HIV/AIDS provided by government, while the awareness about government programs to prevent parent to child transmission and government provided STD programs is known to relatively lesser proportion of the respondents.
Injecting Drug Users
n general, an Injecting Drug User refers to anybody who injects addictive drugs using needles or syringes for non-medical reasons. For the purpose of this study, only male injecting drug users in the age group of 15-49 years were covered. The survey included only those IDUs who had injected drugs for a minimum period of 3 months prior to the survey.

Overall 553 Injecting Drug Users were interviewed for the BSS conducted in 35 districts of Maharashtra conducted in two phases. The first phase covered IDUs from Aurangabad, Nashik and Pune Division and from Konkan Division in the second phase. The sample for IDUs was obtained only from select districts, namely Nanded from Aurangabad Division, Jalgaon from Nagpur Division, Pune from Pune Division and Mumbai and Thane from Konkan Division.

Very few IDU respondents reported having any social entitlements 36.4 percent reported having Voters ID card, while 26.4 percent have ration card.
Socio-Demographic characteristics & substance abuse

Majority of the IDUs (66.4 percent) covered in this study were in the age group 21–30 years. The proportion in this age group was the highest among the respondents in Pune Division (87 percent) followed by Aurangabad Division (84.3 percent) and lowest in Nashik Division (50.9 percent). About 10.9 percent of the IDUs were in the age group of less than 20 years.

More than one fifth (22.8 percent) of the IDU respondents were illiterate (including those literate but with no formal education). Majority of respondents have received education up to middle school (49.7 percent). The level of education above middle level was higher in Konkan Division (40.8 percent).

About 16.3 percent IDUs were unemployed the highest proportion being in Pune Division (27.8 percent) and lowest in the Aurangabad Division (5.7 percent). 3.9 percent of the IDU respondents reported to be in debt; with most of them borrowing from ‘Bachat gat.’ The three most common occupations among the IDUs were non-agricultural/casual labourer (23.2 percent), skilled or semi/skilled labourer in manufacturing or processing industry (20.3 percent) and business or small/medium/large shop owners (10.8 percent).

About two third (75.5 percent) of the respondents reported that they consumed non-injecting drugs. Majority (41.8 percent) of the IDUs interviewed reported that they had started taking non injecting drug in the age group of 18 – 21 years. About 14.3 percent respondents were in the age group of less than 18 years. The median age of taking non-injecting drug users was 20 years.

About 62.9 percent respondents reported injecting drugs for more than 9 months. Majority of IDUs who reported having injecting drugs for more than 9 months were from Pune Division (94.4 percent) and the lowest from Konkan Division (33.8 percent). The median age of starting injecting drugs was 23 years. About 5.6 percent IDUs reported starting injecting drugs when they were less than 18 years. This percentage was highest in Pune Division (13 percent).
Almost three fourth of all the respondents (74.0 percent) reported to have ever consumed alcohol and from among those who consumed alcohol, almost half (49.9 percent) of the respondents reported at frequency of ‘at least once a week’.

About 40.7 percent of IDUs in Maharashtra are married with highest proportion reporting from Nashik (57.9 percent) and lowest in Pune (25.9 percent)

Often due to their addiction to drugs, IDUs were deserted by their families and this resulted in their lack of attention towards family life. This rejection and disownment from friends and family leaves them with no support system and thus renders them emotionally imbalanced. The only network an IDU falls back on is the IDU network.

“I have spoilt everything due to my addiction. I had a nice wife who used to cook food and wait for me for meals. I did not realize my wife’s importance and I became such an addict. I made my wife’s life miserable. I feel like committing suicide”

“I meet my friends and ask them about the best drug and the latest weed in town. I prepare my own stuff and then I dope, which becomes my world”

Most of the IDUs instead of trying to fit into the society and the norms usually begin to live as outliers/outlaws and grow their network by introducing more people to drugs. The sense of reform and need to transform is absent.

“He will influence more people to use drugs because he thinks he has nothing to do with society and other people”

The IDUs attitude to work is not serious and is quite transient in nature. The focus of having a job is usually to generate enough income to be able to buy themselves drugs. Most of them said they are unable to retain a job for a long period of time and they resort to petty crimes to support themselves.

Some of them also work as rag pickers. There is no resolve in them to earn and save money for the future.

“No, I haven’t deserted them. They deserted me, because I used to steal money”

“There is no work for us, no earning source, no support from friends and family, we have to do something illegal to earn money. No one respects a drug addict”

“I had ration card, passport, I had driving license. But since the time I have started addiction, my wife took all the papers and went to her mother’s place”
Knowledge Indicators

Knowledge about Correct Modes of Transmission of HIV

About 96.2 percent IDUs reported that they have heard about HIV/AIDS. Universal awareness about HIV/AIDS was reported by respondents in Aurangabad and Konkan divisions. Friends and family members (74 percent) followed by NGO staff (health worker and peer educator) were the most common source of information*. The awareness levels reported in Pune Division were lower than that in other divisions (77.8 percent). Respondents were asked to identify the means by which HIV can be transmitted, the correct modes of transmission reported by them is presented below:

More than 90 percent respondents were aware that HIV can be transmitted by having unprotected sex (96.2 percent) and infected blood transfusion (91 percent). At an aggregate level more than three-fourths (76.4 percent) of respondents reported that they were aware that HIV can be transmitted from infected mother to unborn child. This awareness was lowest in Nashik Division (52.3 percent). Compared to all other modes, awareness of transmission from HIV infected mother to her new born child through breastfeeding was lowest, 52.3 percent.

Knowledge about Correct Methods of Prevention of HIV

Knowledge about correct modes of HIV Prevention was assessed by asking the respondents to identify the various modes by which they felt HIV could be prevented. The proportion of respondents who reported
96.1 percent of the respondents reported prevention by using condom during every sexual activity. Majority of the respondents reported that HIV/AIDS can be prevented by avoiding the use of shared injection needles. It must be noted that the level of awareness about the above modes of prevention of HIV/AIDS was the lowest in Pune Division as compared to other divisions.

Most of the respondents who were aware of HIV/AIDS stated family and friends as the source of information (74.2 percent) followed by NGO staff being the source of information (54 percent). The source of information was multiple, i.e. each respondent quoted one or more than one source of information.

Myths and misconceptions about means of transmission and prevention of HIV/AIDS
Many misconceptions relating to modes of HIV transmission are prevalent which includes a belief that HIV is transmitted through mosquito bites and sharing a meal with someone who is infected with HIV/AIDS. At an aggregate level 13 percent IDUs reported that mosquito bites could spread HIV. This proportion was highest in Nashik division (28.9 percent) as compared to other divisions. About 12.6 percent also reported that sharing a meal with someone who is infected, is a possible mode of transmission of HIV/AIDS. This misconception too was most prevalent in Nashik Division (27.7 percent) and least prevalent in Aurangabad Division (2.9 percent).

In addition to misconceptions relating to modes of transmission, many misconceptions regarding modes of prevention existed which included ‘taking medicine/traditional herbal concoction before having sexual relations’ which was reported by 45 percent of the IDUs. The misconception that ‘the use of dettol/disinfectant to clean sex organs’ was reported by more than one fourth (26.1 percent) of the total respondents, and this proportion was highest in Nashik division (57.9 percent). Avoiding getting mosquito bites was reported by 15.6 percent on an aggregate level and this was more common in Nashik Division (37.7 percent).

67.6 percent of IDU stated that a healthy looking person can also be infected with HIV.

♦ **Behavioural Indicators**

All the Injecting Drug Users interviewed were asked about the age at which they started using addictive drugs. About 5.6 percent reported to have started injecting drugs when they were less than 18 years, this proportion was high in Pune Division (13 percent). Almost three out of every five IDUs (59.4 percent) started injecting drugs in the age group 18 – 25 years. This proportion was high in Aurangabad division (72.9 percent) and lowest in Nashik division (47.8 percent).

The data indicates that respondents getting into the habit of non injecting drug use are very early as 18-21 years of age. 41.8 percent of the respondents get into the habit of non injecting drug use at an early age.
Frequency of injecting drugs

All the IDUs interviewed were asked about the frequency with which they injected drugs in the past one-month. 78.2 percent IDUs inject at least once in a week and this is seen to be highest in Pune Division (87 percent). About 16.2 percent respondents reported that they inject drugs 2-3 times a day and most of them (48 percent) are from Pune Division. Almost 30 percent of the IDUs reported to have injected drugs 2 to 6 times a week.

Type of drugs injected

The most common drug used for injecting was a drug cocktail with Avil, Calmpose etc. (56.0 percent). The second most frequently used drug was Brown sugar which was used by 45.2 percent of the IDUs.

In Aurangabad the main type of drug use reported was drug cocktail (90 percent) followed by brown sugar (77.1 percent). Similarly in the Nashik division, the most commonly used drug was a drug cocktail with Avil, Calmpose (81.8 percent) followed by Brown sugar (26.4 percent).

28.5 percent reported to have received OST; of which 55.6 percent had received it from NGO worker and 44.4 percent from health worker.
Avil emerged as a popular drug among the drug users and they also reported some preferred ways of taking drugs.

“I started taking Avil… With the alcohol bottle’s cap, used to put stuff and then add Avil and lemon drops… “

“You should not add anything in the brown sugar you should just dope it originally, this gives the best flavor”

“We used to do a joint of Charas… There was polythene which used to give the original flavor”

Treatment for drug use

The IDUs were asked whether they were presently undergoing some form of treatment or whether they had undergone any treatment in the past but not currently under treatment. More than three fourth (75.4 percent) of the IDUs reported to have never received any form of treatment. Only one out of ten IDUs (10.3 percent) reported to be currently under treatment and 14.2 percent respondents reported to have sought treatment in the past but not currently under treatment. About 38.1 percent respondents reported that they were under treatment 1 to 3 months ago.

All the IDUs who had either undergone treatment in the past or were currently undergoing treatment were asked to give details about the type of treatment they had received.

62.9 percent of the respondents reported treatment for abscess, followed by treatment for detoxification (35.6 percent). About one forth (25.1 percent) of the respondents reported receiving treatment in the form of drug substitution, and 23.1 percent reported receiving counseling. Maximum proportion of IDUs (90 percent) reporting treatment of abscess were from Aurangabad division followed by Pune division (88.9 percent).

Needle sharing during last injection

This is an important indicator to understand needle sharing practices. The respondents were asked whether they had shared a needle or syringe during their last injection.
At an aggregate level, 47.9 percent reported to have shared a needle during their last injection. This proportion was highest in Nashik Division (77.4 percent) and lowest in Aurangabad Division (22.9 percent).

From among the IDUs who reported to have shared a needle/syringe in the past month, 45.4 percent reported having 2-3 sharing partners. More than one fourth of the IDUs (26.7 percent) reported having only one partner.

Used needles were not preferred by some of the IDUs because of variety of reasons.

“Used needles contain germs, and therefore we always buy fresh needle, we don’t share needles. If we do so (share needles), we will be at high risk of HIV infection, hepatitis B & C, and if that needle is injected with air in our body we may die on the spot”

“It is very important that we clean the skin of the area of injection before injecting, with spirited cotton as we are scared of getting infected.”

For most of the respondents, the reasons for sharing needles are economical.

“Like when I have drug and no money for buying injection, not available at outlet and cannot control due to physical pain will use some other person’s needle”
Frequency of sharing needles in the past one month

47.3 percent of the respondents stated to have never shared needles in past one month. The respondents reporting to have never shared needles in the past month was highest in Aurangabad (74.3 percent) Division and lowest in Nashik Division (11.9 percent).

5.6 percent IDUs reported to share needles ‘every time’. Frequency of sharing ‘every time’ was reported only from Konkan Division (10.7 percent) and Nashik Division (1.9 percent).

Most of the respondents reported sharing the needles with friends (84.7 percent), followed by co-workers and professional injectors. 26.7 percent of the respondents reported to have shared it with only one partner, while 73.2 percent have reported sharing it with more than 2 partners. It therefore suggests a high vulnerability of spread of infection among colleagues and friends.

Access to New and Unused Needles

The respondents were asked whether they could obtain new and unused needle when required and also if they were aware of a place where needles could be obtained. The following graph shows the access based on these two indicators.

![Figure 5.5: Division wise access to new and unused needles (in %)](https://example.com/image)

89.1 percent stated that they can access new and unused needles, and a slightly higher proportion of respondents (95 percent) reported to be
aware of a place from where they could obtain new unused needles. Pharmacist (80.5 percent), drug dealer (38.2 percent) and friends (33.1 percent) were reported to be the most common sources for procuring needle & syringes. 51.3 percent of the IDUs reported to be aware of sources of free condoms.

There seems to be a marginal difference in those who are aware of places to obtain new needles and those who can access them. This difference is the highest in Konkan Division.

♦ Sexual Behavior and Types of partners

Majority of the respondents (56.6%) reported that their age at first sex was between 18-21 years; median age being 19.5 years. Four out of five (80%) respondents in Aurangabad Division reported that their age at first sex was between 18-21 years. This proportion was high across all divisions.

79.3 percent respondents reported to have ever had sex in their lifetime. The IDUs reported that they have regular, commercial as well as non-regular sexual partners.

Average number of partners

79.9 percent of the respondents reported to have indulged in sex at least once in the past year. About 48.3 percent respondents reported that they had sex with a commercial partner and 19.3 percent respondents reported to have sex with their non-regular partner at least once in the year prior to the survey. 10.8 percent of IDU reported to have had sexual relation with male partner in the past one year.

The mean number of regular partners in past 1 year was reported to be one, commercial partners were 3 and non-regular non-commercial partners were 2.

Condom use during last sex with sexual partners

The graph below gives the last time condom use with regular, commercial and non-regular/non-commercial partners.
It was reported that about 38.2 percent IDUs who were involved with a regular partner in the last 12 months used a condom in the last sexual intercourse with female regular partner. In Konkan division, it was reported that nearly half (51.1 percent) of the respondents (who had sex with a regular partner in the last 12 months) had used a condom during their last sexual intercourse. In contrast, the last time condom use reported by respondents in Aurangabad Division was 7.9 percent.

95.9 percent of the respondents who had sex with a commercial partner in the last 12 months used a condom in the last sexual intercourse. It may be noted that in Aurangabad Division (which reported relatively low condom use with regular partners) the reported last time condom use with commercial partners was 100 percent.

Around four-fifths (81.3 percent) of the respondents had used condom during the last time they had sex with non-regular partners. In the last sex, among those who have used condom 63 percent used free and 35.7 percent used social marketed condoms.

**Consistent Condom Use**

Consistent condom use was determined by asking all those that had used a condom in the past one month, the frequency with which they used a condom respectively for each type of partner.
It was reported that 37.3 percent of respondents who had had sex with their regular partners in the last one month had used condoms every time with their regular partners. It should be pointed out that no respondent in Aurangabad Division reported using a condom consistently during sex with their regular partners.

For commercial partners, 83.6 percent of the respondents who had had sex with their commercial partners consistently used condoms every time with their commercial partners. The consistent condom usage with commercial partner was relatively lower in Konkan Division (75.4 percent). About 97.3 percent IDUs in Nashik Division reported consistent condom use.

77.3 percent of respondent’s indulging in sex with non regular partners reported condom use every time they had sex in the past one month. About 89.8 percent IDUs in Nashik Division reported consistent condom use with non-regular partners. Most of the IDU respondents reported to have used the condom in order to protect themselves from HIV & STI*.

**Other Key Indicators pertaining to condoms**

**Procurement of condoms:** 83 percent reported to be aware of the source for procuring condom. About 27.7 percent respondents reported that they obtained condoms from Friends, followed by condom vending machine which was reported by 22.7 percent respondents. Among the other sources for procuring condoms were sexual partners (18.9 percent), Hospital (13.7 percent), and Chemist shop (11.7 percent).
Decision making for condom use: In case of IDUs the decision for condom use was made by 71.3 percent of the respondents themselves with respect to regular paying partners. This was lower in commercial sex partner (55.2 percent) and highest in Non-Regular partner (82.5 percent).

Preference of Condom: Most of the IDU respondents prefer free condoms (83.4 percent), followed by social marketing condoms (68.4 percent).

♦ Awareness about STIs, Reported STI Symptoms and treatment seeking behavior

42.5 percent of the IDU respondents reported to have heard of STIs. The awareness levels reported in Pune Division were very low as compared to other divisions where only 5.6 percent of the IDUs reported to be aware of STIs. Awareness about STIs was highest among IDUs from Aurangabad Division (65.7 percent) followed by Nashik Division (61 percent).

93 percent of the IDUs who had heard of STIs reported that they can be prevented. Half of the respondents (54.7 percent) reported that they were aware about genital urethral discharge as STI symptom among women and about 52.1 percent reported genital sores/ ulcers as symptom of STI among women. In case of knowledge about STI symptoms in men
genital urethral discharge was reported by 63.2 percent, followed by genital sores/ ulcers (61.2 percent).

Experience of STI Symptoms

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey. Following table gives the proportion of IDUs who have experienced these STI symptoms:

<table>
<thead>
<tr>
<th>STI Symptom</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genital discharge</td>
<td>0.5%</td>
</tr>
<tr>
<td>Genital sore/ ulcer</td>
<td>4.4%</td>
</tr>
<tr>
<td>Burning pain during urination</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

Respondents were probed for having experienced genital discharge, genital sore/ulcer or burning pain during urination in the past year. The most commonly experienced STI symptom was burning pain during urination, experienced by 12.1 percent at an aggregate level. A relatively large proportion of IDUs in Nashik division (37.7 percent) reported experiencing this symptom of STI. Genital sores/ulcers were reported by 4.4 percent and only 0.5 percent reported experiencing genital discharge. Out of all the respondents suffering from the above symptoms, about 47.8 percent reported that they experienced genital ulcer/ sore most recently followed by burning pain during urination (38.3 percent).

STI treatment from qualified medical practitioner

The respondents experiencing any STI symptom were enquired about the treatment they sought for the same, 88.1 percent reported to have taken no treatment at all during their last STI experience. About 4.8
percent had sought treatment from a qualified medical practitioner. 2.4 percent reported visiting a government hospital/clinic in case of experience of any STI symptoms.

♦ Stigma and Discrimination

HIV infection is widely stigmatized, because of its association with sexual behaviour and the illegality of the substance abuse in the case of injecting drug users. HIV/AIDS patients are discriminated, and stigma and discrimination constitute one of the greatest barriers in effectively dealing with the epidemic.

A set of statements was administered to all the respondents to assess the level of discrimination among respondents.

![Figure 5.10: Stigma and discrimination indicator (%)](image)

IDUs exhibited discrimination towards the infected more in terms of physical contact. However willingness to take care of them was high. The stigma related indicators are seen to be low in Aurangabad Division and high in Konkan Division. As the numbers (base) are small, these need to be interpreted with caution.
It was reported that 11.1 percent of the respondents knew someone who was infected with HIV/AIDS. Nearly half of the respondents had a close relative who was infected with HIV/AIDS. This proportion was highest among the respondents of Aurangabad Division (98.6 percent) followed by Pune Division (87 percent).

♦ Risk Perception

39.3 percent IDU respondents stated that people like them are at risk of contracting HIV. Self risk perception is 13.2 percent. A substantial proportion of IDUs, 55.5 percent were confident that they were not at risk. The self risk perception among IDUs is high in Aurangabad Division (20 percent) and low in Pune Division (9.3 percent). In Konkan Division from where most of the sample respondents were collected, 23.8 percent reported that they do not perceive themselves being at risk of infection.

23.7 percent perceive themselves to be at risk because of their injecting behavior.

♦ HIV Testing

All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. Eight out of ten respondents (80.3 percent) reported that it was possible for them to take a confidential HIV test. In the second phase, the IDUs from Konkan
region were asked whether they were aware of a place from where they could get an HIV test. More than three fourth (75.3 percent) of the IDUs were aware of a place for testing HIV*.

From among the IDUs who were aware of a place for HIV testing, 85.3 percent identified District Hospitals as a place for testing. Integrated Counseling and Testing Centres (ICTC) were identified by 6.6 percent of the respondents and 3.8 percent identified Drop-In- Centres as a place for HIV testing.

Further, all respondents were asked if they had ever taken a HIV test. This question was administered carefully without asking the respondent for their HIV test results.

![Figure 5.12: Division wise ever taken HIV test (in %)](image)

More than one-third of the IDUs (34.2 percent) reported to have ever taken a HIV test. Pune Division had the highest proportion of respondents (33.3 percent) who had ever taken an HIV test while Nashik Division had lowest proportion of respondents (19.5 percent) reporting the same. 12.2 percent of the IDUs got themselves tested only once in the last one year, while 20.1 percent got tested twice. A proportion of 24.2 percent IDUs got tested four times.
Of those who tested for HIV, 78.2 percent did so voluntarily. In Aurangabad and Nashik Division all the testing were voluntary. 92.3 percent of the IDUs got themselves tested in Government testing centres*. 88.5 percent of those tested reported to have received their test result.

94.9 percent reported to have received counseling at the time of testing. 91.4 percent reported to have got counseled before testing, while 88.7 received post test counseling*.

♦ Exposure to Intervention and Community involvement

The IDUs were separately asked about their exposure to various means of interventions in the past year. They were asked about both interpersonal exposure as well as their exposure to government campaigns and programmes. Following table presents data on the exposure of IDUs to the various interpersonal intervention activities:
Majority of the IDUs (84.6 percent) were exposed to billboards/poster/leaflets at an aggregate level. About 44.4 percent of the respondents reported that they had received interpersonal education on HIV/AIDS. The proportion of such respondents was lowest in Aurangabad division (4.3 percent) and highest in Konkan division (54.5 percent).

Receiving interpersonal education on condom use was reported by almost one third (31 percent) of the IDUs. However, only 2.9 percent from Aurangabad had received interpersonal education on condom use, which is very low compared to the other divisions.

More than one fourth (26.5 percent) of the respondents had attended/participated in STI/HIV/AIDS related meeting in last 12 months at an aggregate level. However participation by IDUs in STI/HIV/AIDS related meetings was low in Aurangabad (8.6 percent) and Nashik (9.4 percent) Divisions. In general it was observed that IDUs in Aurangabad Division seemed to have lower exposure to intervention activities. 34.9 percent IDUs reported to have been contacted by peer educator in past six months*.

27.7 percent IDUs reported to have visited the STI clinic for routine medical checkup*. 24.8 percent stated that the community members would come together in case of any problem*.

♦ Awareness & Accessibility to services

Questions were asked to the respondents to assess the level of awareness of the sex workers about various health and HIV/AIDS related services and further if they have ever accessed them either for themselves or someone else. Most of the IDUs were aware of general health services like District Hospitals (93.1 percent) and Primary Health Centre (56.3 percent). Of the HIV/AIDS specific services the most known is ICTC (16.3 percent).
The awareness about government programs seems to be relatively low among IDU with only 34 percent being aware of free treatment. The most common source of information about these programs are family and friends (86 percent) and NGO (42.4 percent).
The HIV epidemic in India is concentrated, with the infection gradually spreading from Core Group to general population. The clients of sex workers act as conduit transmitting the infection to their spouses and other sex workers or male sexual partners. These clients are from general population and the most vital group causing spread of infection to the general populace. This category encompasses all the clients of sex workers including the other bridge groups targeted under various interventions like truck drivers, migrants seeking sex from commercial sex workers.

Overall 1835 clients to FSWs were interviewed for the BSS conducted in Phase I which was conducted in 24 districts of Maharashtra. For the purpose of data collection, the CFSWs present at the site where FSWs were interviewed were included. This included both brothels as well as non-brothel areas like lodges, bars, highway, dhabas etc.

♦ Socio-Demographic characteristics & substance abuse

At an aggregate level, mean age was 27.3 years. A fairly large proportion (65 percent) of the respondents were in the age group of 21-30 years. Konkan division has the highest number of CFSWs who are less than 20 years (17.4 percent).
The Client of Sex Workers interviewed under the survey represent various occupation types; 17.9 percent were factory workers, 12 percent petty shop owners, 11.4 percent contribution workers and 10.5 were students. About 50 percent of the respondents reported to be ever married. Nasik and Aurangabad Divisions had the highest proportion of respondents who were ever married; 59.7 percent and 57.1 percent, respectively.

The survey sought to gauge the highest level of education attained by the respondents. The findings reveal that at an aggregate level, 85.1 percent of the respondents had attained education at least up to middle school level of education or more. Education levels among respondents in Pune (93.2 percent) and Nagpur Divisions (89.6 percent) were reported to be the highest.

37.1 percent of the respondents reported that they were living with their spouse. 37.7 percent of the respondents across all the divisions were staying with their family / relatives. In Nagpur Division, about 46.7 percent of the respondents reported that they stayed with their family / relatives, which was highest across all divisions.

At the aggregate level, 45.7 percent of the respondents consumed alcohol. Alcohol consumption was highest among CFSWs in Pune Division (57.8 percent). 83.6 percent of the respondents who were less than 20 years of age did not consume alcohol. Alcohol consumption was the highest among the respondents in the age group of 31-40 years (67.4 percent) and 41–50 years (67.6 percent).

Among the respondents who consumed alcohol, 72.4 percent of the respondents revealed that they consume alcohol at least twice a month. This frequency was highest in Konkan division where 86.6 percent of the respondents reported consuming alcohol at least twice a month.

10.5 percent of the respondents had ever used injected drugs /narcotics. This proportion was highest in the Nagpur Division. Of the respondents who have used injected drugs / narcotics at least once in their life time, only 3.6 percent have used them during the past one year. The use of injected drugs during the past one year was highest (11.5%) among the respondents in Aurangabad Division. Though the proportion of respondents who have ever used injected drugs is highest (31.7%) in
Nagpur, only 1 percent among these respondents have used injected drugs during the past one year.

♦ Knowledge Indicators

Knowledge about Correct Modes of Transmission of HIV

About 98.5 percent CFSWs reported that they have heard about HIV/AIDS. The proportion of respondents who had heard of HIV was the highest in Nashik Division as well as Konkan Division. Respondents were asked to identify the means by which HIV can be transmitted; the proportion of respondents reporting correct modes of transmission has been presented below:

![Figure 6.1: Knowledge about correct modes of HIV/AIDS transmission (in %)](image)

The modes of transmission of HIV from infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of clients to FSWs, 62.6 percent and 57.7 percent, respectively. But, the responses were similar across all divisions.

Knowledge about Correct Methods of Prevention of HIV

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect themselves from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom use, having one faithful uninfected partner and avoid sharing needles. The proportion of respondents who reported correct modes of prevention of HIV/AIDS has been presented in the graph below:
Almost all CFSWs (99.7 percent) reported to be aware that using condoms consistently every time with all partners prevents the spread of HIV. About 40.2 percent respondents reported that HIV/AIDS can be prevented by abstaining from sexual intercourse while more than three fourth of the respondents (89.8 percent) reported that having one faithful uninfected partner can prevent HIV/AIDS.

Myths & Misconceptions about means of transmission and prevention of HIV/AIDS
56.2 percent respondents reported that HIV/AIDS can be transmitted through sharing clothes/utensils/barber’s blades with infected person and 23.2 percent of respondents who were aware of HIV/AIDS reported that HIV/AIDS may be transmitted through mosquito bite if the mosquito has drawn blood from an HIV/AIDS infected person.

As far as misconceptions relating to modes of prevention are concerned, taking injections and medicines was reported by 27.8 percent respondents followed by those who reported taking medicine/traditional herbal concoction before having sexual relations.

**Reporting that a healthy looking person can be infected by HIV/AIDS**

The respondents were asked if a healthy looking person can be affected by HIV/AIDS. 35 percent of the respondents reported that a healthy looking person cannot be infected. This misconception was highest in the Konkan Division (51.3 percent).

"Mosquitoes can spread HIV"
"Reusing used blades for shaving can spread HIV"
"HIV can be transmitted through sharing food with infected people”
"A woman cannot contract AIDS till 15 years of age”

During the course of the group discussion, it was seen that certain clients believe that oral sex contains no risk of HIV transmission. This could pose a risky situation and enhance the likelihood of transmission of HIV depending upon the frequency of oral sex-

"Clients normally ask for oral sex. There is no risk of HIV transmission through oral sex”

Some respondents also spoke about how hygiene and cleanliness have a role to play in preventing the transmission of HIV from an infected person to another-

"We should maintain hygiene”
"The private parts should be cleansed thoroughly to prevent transmission of HIV”
Behavioural Indicators

Sexual behavior and Type of partners

From the table above, it can be seen that average number of commercial female partners is the highest as compared to other two types of partners. The involvement with female commercial partners is the highest in Konkan division followed by Nagpur Division and Pune Division. The average number of regular female partners and non-regular and non-commercial female partners is similar among the respondents across all divisions.

At an aggregate level, about 68.3 percent respondents reported that they have ever heard of MSM bahaviour. From among them about 4.3 percent reported that they had sexual encounter with men in the past 1 year. About 79.6 percent respondents reported that they had anal sex with male sexual partner.

Condom use during last sex with sexual partners
At an aggregate level about 98.4 percent CFSWs reported that they used condom in the last sexual encounter with female commercial partners. This proportion was comparatively lower in case of non-commercial and non-regular partners (73.6 percent). About 22.4 percent of the respondents reported that they used condom with regular partner last time they had sexual intercourse.

The proportion of condom use in the last sexual encounter with commercial female partners was reported to be highest in Konkan division (100 percent) and the lowest in Nagpur (93.7 percent). In spite of reporting the highest condom use with commercial partners, condom use with non-regular, non-commercial partners and regular partners was very low in Konkan division. Condom use in the last sexual encounter with non-regular non-commercial partners was highest in Pune Division (87.9 percent). The proportion of CFSWs who reported to use condom in the last sexual encounter with their regular partners was the highest in Nasik (45.7 percent) and the lowest in Pune Divisions (4.3 percent) Division.

Consistent condom use

Consistent condom use was determined by asking all those who had used a condom in the past twelve months, the frequency with which they used a condom respectively for each type of partner. Those that reported to use condom ‘every time’ were considered for this indicator.
At an aggregate level about 89.8 percent CFSWs reported that they used condom consistently every time they had sex with female commercial partners. This proportion was comparatively lower in case of non-commercial and non-regular partners (66.1 percent). Only 12.5 percent of the respondents reported using condom consistently with regular partner.

The proportion of consistent condom use with commercial female partners was reported to be highest in Konkan division (99.7 percent) and the lowest in Pune Division (81.8 percent). It must be noted that last time condom use was lowest in Nagpur division (93.7 percent). About 85.3 percent respondents in Nashik reported that they used condom consistently every time they had sex with non-commercial non-regular partners. The proportion of CFSWs who reported using condom consistently with their regular partners was the highest in Nashik (33 percent) and the lowest in Pune (2.2 percent) Divisions. These findings are consistent with the last time condom use behavior of the clients of Female Sex Workers.

There seems to be some understanding that having unprotected sex can lead to the spread of Sexually Transmitted Infections

"Using condoms can prevent STIs"

However, there were certain myths that were seen to be associated with the usage of the condoms, especially use of double condoms was prevalent among the respondents.

"Using two condoms can protect me better from HIV"

"Best way to prevent STIs is to use two condoms"

"If one condom were to tear, having another on would help"

"When I came to know about AIDS I started using 3 condoms at a time"
Condom use largely depends on the type of partner:

“I have sex with my wife without a condom”

“She has faith in me”

“I have faith in her and she also has faith in me”

Moreover, condom usage also seems to depend on the type of sex that the respondents are indulging in. If its anal sex, they don’t believe it is necessary to use a condom-

“I don’t think condom is required for anal sex. When I have vaginal sex I use condom”

It was noted that under the influence of alcohol, people become less likely to use condoms than they would otherwise be-

At the same time, it was also observed that clients could be ready to have sex without a condom if the Female Sex Worker doesn’t object to it. In such cases, usage of condoms becomes a function of feasibility and convenience-

“If she is ready to have sex without a condom I would do it”

Consistent condom usage can also be deterred by the perception of not being able to derive as much fun from sex as one would be able to otherwise-

“I feel hot and I sweat. I get irritated. Condom just makes it last longer which prolongs the irritation”

“When I go to the FSWs they ask me to put on the condom. I tell them I won’t feel any pleasure with the condom on”

Other key Indicators pertaining to Condoms

Procurement of Condoms: Respondents were asked whether they were aware about places from where one can procure condoms. 99.4 percent reported that they were aware of the source of condoms. 76.4 percent of the respondents reported procuring condom from chemist shop followed by their sexual partner (42 percent). The proportion of respondents who reported to procure condoms from a chemist shop was the highest in Pune Division (89.7 percent) followed by Konkan Division (86.1 percent).

Decision making in condom use: 51.4 percent of the respondents reported to have taken the decision of using condom with commercial partners and in case of regular partners 61.4 percent reported so. 57 percent of Clients reported making the decision for condom use with non paying partner.
It was stated by the clients of FSWs that at times, they pay about Rs. 10/- extra for using condoms. This might in the long run deter them from consistent condom usage—

“We have to pay Rs. 10 extra for using a condom”

A few respondents seem concerned that the condoms that are available at the brothels are of low quality. This might lead them to use multiple condoms at once, with the idea that they will thus be able to enhance the protection—

Moreover, apart from the condoms available at the brothels, ‘free condoms’ in general are perceived to be risky for usage—

“I doubt the quality (of the free condoms). There is a risk of tearing. If the condom is good there is no tension”

“Government condoms are thin. They tear very fast”

“Government condoms have a foul smell. There is no guarantee that it will not tear”

Awareness about STIs, Reported STI symptoms and treatment seeking behaviour

At the aggregate level, it was reported that less than one-third of respondents (20.7 percent) were aware of STI. The respondents from Nashik Division reported the highest (41.7 percent) among those who had heard about STI while Amravati had the lowest proportion of respondents (10.7 percent) aware of STI.
Experience of STI Symptom

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey. Following table gives the proportion of CFSWs who have experienced these STI symptoms:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Proportion (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genital discharge</td>
<td>20.7</td>
</tr>
<tr>
<td>Genital ulcer/sore</td>
<td>5.3</td>
</tr>
<tr>
<td>Burning pain during urination</td>
<td>20.7</td>
</tr>
</tbody>
</table>

It was reported that 20.7 percent of the respondents had experienced burning pain during urination while about 5.3 percent experienced ulcers/sore in genital area and genital discharge. The self reported symptoms of STI in the past 12 months were reported by highest proportion of respondents in Nashik Division (genital discharge: 11.5 percent, genital ulcer/sore: 21.4 percent, burning pain during urination: 37.6 percent).

STI treatment from qualified medical practitioner

Those who reported STI symptoms were further asked if they sought any treatment from anywhere or had resorted to home remedies or self treatment. 1.4 percent of CFSWs reported to have sought home remedies, 3.6 sought treatments from elsewhere, while 85.8 percent did not take any treatment. The following graph illustrates the proportion of respondents who sought treatment for STI from a qualified medical practitioner and those that visited government hospital/clinic for treatment:
Only 9 percent of respondents reporting STI in the last one year visited a qualified medical practitioner for treatment. Four percent of the respondents visited Government hospital/clinic while a marginally higher proportion (5 percent) visited private hospital/clinic. None of the respondents from Aurangabad Division visited private hospital/clinic. The respondents visiting the qualified practitioner was comparatively high in Nasik (23.7 percent), 17.3 percent visited private hospital/clinic and only 6.4 percent visited government hospital/clinic

♦ Stigma and Discrimination
At the aggregate level, 16.2 percent of the respondents reported that they would not be willing to take necessary care of their relative/friend in their house if s/he got infected with HIV. Also, 20.8 percent of respondents mentioned that they would not be willing to buy vegetables or food items from the shopkeeper who was infected with HIV. This proportion was highest in Konkan division (45.7 percent) and lowest in Nagpur (7.2 percent).

The respondents were further asked their opinion on whether a teacher who is infected by HIV but is not sick should be allowed to continue teaching. It was reported that 17.5 percent of the respondents were unwilling to allow the teacher to teach in school. The proportion of respondents who reported that they would be unwilling to shake hands with HIV infected person was about 46 percent, which reflects that stigma is high in case of physical contact with infected.

2.5 percent of the respondents reported that their close relative is infected with HIV while 7.6 percent CFSWs close friend are infected. The proportion of such respondents who had a close friend infected with HIV was highest in Amravati Division (10.7 percent) and lowest in Aurangabad Division (5 percent).

♦ **Risk Perception:**

The study assessed the perceived level of risk among the respondents about contracting HIV/AIDS. Two specific questions were asked in this
regard. The first question was the risk they perceived about people like them contracting HIV/AIDS and the risk they perceived about themselves contracting HIV/AIDS.

The response to the former question was captured on a four point scale, with responses ranging from very high, moderate, low and no chance.

**Risk perception for community members**

At an aggregate level, 21.4 percent of the respondents reported that people like them are at a high to moderate risk of contracting HIV/AIDS. 48.9 percent of the respondents felt that they do not have any risk of contracting the infection. Respondents in Aurangabad Division perceived the highest levels (34.9%) of high to moderate risk of people like them contacting HIV/AIDS. 71.3 percent of the respondents in Amravati Division informed that there was no chance of people like them contracting HIV/AIDS.

**Self Risk Perception**

The proportion of respondents perceiving risk to self was low across all centres. Only 5.3 percent of the respondents perceived themselves to be at the risk of infection. Respondents in Nashik Division reported highest (16.9%) levels of self risk perception and those from Nagpur and Pune Divisions reported the lowest levels of self risk perception at 1.3 percent and 2.5 percent, respectively.

All respondents were asked about the reasons for their self risk perception of contracting HIV/AIDS. The key reasons given for perceiving risk were that the condom tears during the intercourse, having multiple partners and not using/avoiding the use of condoms.

**♦ HIV Testing**

The respondents were asked about their awareness of HIV testing and their test taking behavior. All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. In the second phase the respondents were asked if they know of any place from where they could get tested for HIV.
78.7 percent CFSWs reported that it was possible for someone like them to get an HIV test. This proportion was highest among the respondents from Nashik and Pune Division (90 percent) and the lowest in Konkan division (60.1 percent).

23.4 percent respondents reported that they had ever taken an HIV test. This proportion was the highest in Nasik Division (49.8 percent) and the lowest in Nagpur Division (14.4 percent). Out of those respondents who had ever taken an HIV test, about 87.9 percent took a voluntary test for HIV and in case of 10 percent respondents, HIV test was prescribed to them. The proportion of CFSWs who voluntarily took the HIV test was highest in Amravati Division (93.3 percent). About 18.2 percent respondents from Nagpur Division reported that they had taken an HIV test because it was prescribed to them.

97.4 percent of the respondents who had ever taken an HIV test reported that they had collected results of their HIV test. 71.1 percent respondents reported that they had received counseling when they went for HIV test. This proportion was highest in Amravati and Konkan divisions (95.6 percent).
A large proportion of the respondents (88.8 percent) reported that they had seen billboards/posters/leaflets on STI/HIV/AIDS. At the aggregate level, more than one-third (31.6 percent) of the respondents reported that they had received interpersonal education on HIV/AIDS. About 29.4 percent respondents received interpersonal communication on condom use. Also 11.8 percent of the respondents had attended/participated in STI/HIV/AIDS related meeting in last 12 months. In case of information received through mass media or IPC, Pune Division ranked high while in case of respondents having received medical check up or personally participated in STI/HIV related meeting, Nasik Division ranked high. Overall exposure to intervention seemed low in Amravati Division.

**Awareness and Accessibility of Services**

The respondents were asked if they were aware of certain HIV/AIDS related services and if they had ever accessed them.
Most of the client respondents were aware of District Hospital (93 percent) followed by Primary Health centre (66 percent) and Community Health Centre (48 percent). With regard to HIV/AIDS specific services only 14.5 percent of the respondents knew about ICTC and 13.2 percent about OVC. A very large proportion of those reporting to be aware of services also reported to have accessed these services.
Summary of Findings

Truck drivers and helpers stay away from home for about 8 months. Knowledge about HIV prevention and transmission is fairly good, except for knowledge about mother to child and breastfeeding as possible modes of transmission. The truck drivers and helpers indulge in sex with more number of sex workers as compared to non-commercial or regular partners. More than 90 percent of those indulging in sex with commercial partners use condoms consistently, except in Aurangabad and Nagpur Division. The proportion of Truck Drivers and Helpers heard of STI is very low (21.7 percent) and lesser proportion of 5 to 17 percent among them reported any of STI symptoms in the past one year. 51 percent got treated from qualified medical practitioner. Stigma, discrimination and misconceptions exist in almost one-fourth of them. Out of 70 percent Truck Drivers and Helpers who were aware of testing for HIV, 18.3 percent got tested. This is in line with low self-risk perception, with only 3 percent perceiving themselves to be at risk.

Truck drivers and helpers because of the nature of their work remain away from their families and home towns for long periods of time. Peer pressure, boredom of travelling and availability of sex at various halt points incites them into high risk behavior. This category was included under the survey to assess the extent of risk that the truck drivers and helpers indulge in.

Overall 3604 truck drivers and helpers were interviewed for the BSS conducted in Phase I which covered 24 districts of Maharashtra.

♦ Socio-Demographic characteristics & substance abuse

About 67.5 percent of the respondents reported to be ever married. Aurangabad and Pune divisions reported the highest number of respondents who were ever married, 75.4 percent and 75.8 percent, respectively.

At an aggregate level, 92.3 percent of the respondents had attained education at least up to middle school level or more. Education levels among respondents in Nashik (95.6 percent) and Konkan (95.7 percent) were reported to be the highest.
98.4 percent of the respondents could speak Hindi across all divisions. One fourth of all respondents were from Maharashtra. On an average the truckers reported to have been in the profession for 7 years. The truckers reported to be staying away from home for an average of about 8 to 9 months. 30.4 percent of the truckers & helpers reported to take halt for having sex and 36.5 percent for alcohol consumption.

At an aggregate level, 44.9 percent of the respondents consumed alcohol. Alcohol consumption was highest among truckers in Pune Division (54.8 percent). 90.7 percent of the respondents who were less than 20 years of age did not consume alcohol. Alcohol consumption was the highest among the respondents in the age group of 31-40 years, with 59.4 percent of the respondents reporting alcohol consumption. The mean age of initiation into alcohol is about 20 years. The reported use of drugs was very low, with only 1 percent of all respondents reporting having injected drugs in the last one year.

About 14.6 percent of the respondents covered in the survey, reported to have never had sexual intercourse with a female partner. The highest proportion of truckers who never had a sexual intercourse was reported from Amravati Division (27.5 percent) and lowest in Pune Division (4.5 percent). Among those who ever had a female partner, the mean age at which they were involved in sexual behavior was 20.7 years. There were no significant differences across various divisions.

Knowledge Indicators

Knowledge about Correct Modes of Transmission of HIV

About 95.5 percent TDH reported that they have heard about HIV/AIDS. The levels of knowledge were the lowest in Nagpur division, 10 percent of the respondents had never heard of HIV/AIDS. The proportion of respondents who had heard of HIV/AIDS was the highest in Pune and Konkan division. Respondents were asked to identify the means by which HIV can be transmitted, the correct modes of transmission has been presented below:
The modes of transmission of HIV from infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of truck drivers and helpers, 59.4 percent and 57.9 percent, respectively. The responses were similar across all divisions.

Knowledge about Correct Methods of Prevention of HIV

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect themselves from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom use and having one faithful uninfected partner and avoid sharing needles. The proportion of respondents who reported correct modes of prevention of HIV/AIDS has been presented in the graph below:

Figure 7.1: Knowledge about correct modes of HIV/AIDS transmission (in %)

<table>
<thead>
<tr>
<th>Mode of Transmission</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unprotected sex</td>
<td>54.4</td>
</tr>
<tr>
<td>Sharing infected needles</td>
<td>85.2</td>
</tr>
<tr>
<td>Infected blood transfusion</td>
<td>88.9</td>
</tr>
<tr>
<td>Mother to child</td>
<td>59.4</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>57.9</td>
</tr>
</tbody>
</table>

Base: All Respondents (N=3604)

Figure 7.2: Knowledge about correct methods of HIV/AIDS Prevention (In %)

<table>
<thead>
<tr>
<th>Prevention Measure</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence</td>
<td>43.8</td>
</tr>
<tr>
<td>CCCU - Correct and consistent condom use</td>
<td>94.6</td>
</tr>
<tr>
<td>Faithful uninfected partner</td>
<td>87.4</td>
</tr>
<tr>
<td>Avoid shared needles</td>
<td>88.1</td>
</tr>
</tbody>
</table>

Base: All Respondents (N=3604)
Almost all TDHs (94.6 percent) reported to be aware that using condoms consistently every time with all partners prevents the spread of HIV. 43.8 percent respondents reported that HIV/AIDS can be prevented by abstaining from sexual intercourse while more than four out of five respondents (87.4 percent) reported that having one faithful uninfected partner can prevent HIV/AIDS. The awareness about the means of preventing HIV/AIDS was highest in Pune division but the proportion reporting avoiding sex as means of preventing HIV/AIDS was comparatively less (36.7 percent).

**Myths & Misconceptions about means of transmission and prevention of HIV/AIDS**

![Figure 7.3: Common misconception - TD & H (In %)](image)

At the state level, about 41.2 percent respondents reported that HIV/AIDS can be transmitted through sharing clothes/ utensils/barber’s blades with infected person and 22.5 percent of respondents who were aware of HIV/AIDS reported that HIV/AIDS may be transmitted through mosquito bite if the mosquito has drawn blood from an HIV/AIDS infected person.

As far as misconceptions relating to modes of prevention are concerned, taking injections and medicines was reported by 30.4 percent respondents followed by those who reported taking medicine/ traditional herbal concoction before having sexual relations.
Reporting that a healthy looking person can be infected by HIV/AIDS

The respondents were further asked if a healthy looking person can be affected by HIV/AIDS. 32.1 percent of the respondents reported that a healthy looking person cannot be HIV/AIDS infected. This misconception was highest in the Pune division where in 55.3 percent of the respondents reported that a healthy looking person cannot be HIV/AIDS infected.

One of the respondents stated that the vulnerability of men and women for getting AIDS differs. They also said that they have sex only with healthy looking sex workers which represent the high level of misconceptions.

“Since women menstruate they don’t get AIDS fast”

♦ Behavioural Indicators

Sexual behaviour and type of partners

About 14.6 percent respondents reported that they never had sexual intercourse with a woman. From all those who had sex with female partners, about 1.6 percent respondents said that they didn’t have sex in the past 12 months.

The average number of commercial female partners is the highest as compared to other two types of partners. The involvement with female commercial partners is the highest in Amravati and Nashik division.
The average number of regular female partners and non-regular and non-commercial female partners is similar among the respondents.

![Division wise average number of male partners who ever had sexual intercourse with male partner in past 12 months](image)

About 3.2 percent respondents reported that they ever had sex with male partners. The median age at first sexual encounter with male partners was reported as 19.7 years. About 82.1 percent respondents reported that they were involved in anal sex and 41 percent reported that they were involved in manual sex.

In case of Nashik and Pune division, the truckers reported sexual involvement with non-commercial non-regular partners. On an average the respondents reported that they have 3 commercial male partners and about 1 non-commercial partner.

Of all the respondents under this category, 6.5 percent reported to ever have indulged in anal sex.

**Condom use during last sex with sexual partner**

Last time condom use was assessed by asking all those respondents who had sex in the past one month whether they had used a condom with each type of partner viz; Regular, commercial and non-regular non-commercial partners. The graph below gives the last time condom use with different types of female partners.
At an aggregate level about 97.1 percent truck drivers and helpers (TDHs) reported that they used condom in the last sexual encounter with female commercial partners. This proportion was comparatively lower in case of non-commercial and non-regular partners (61.7 percent). About 15.1 percent of the respondents reported that they used condom with regular partner last time they had sexual intercourse.

The proportion of condom use in the last sexual encounter with commercial female partners was reported to be highest in Pune Division (99.6 percent) and the lowest in Nagpur Division (83.6 percent).

About 69.9 percent respondents in Aurangabad division reported that they used condom last time they had sex with non-commercial non-regular partners. The proportion of TDHs who reported to use condom in the last sexual encounter with their regular partners was the highest in Nashik Division (21.5 percent) and the lowest in Amravati Division (5.8 percent). In the last anal sex only 69.5 percent reported to have used condom.

Some truckers expressed that if 2-3 condoms were not used, the risk of HIV infection is high as single condoms tend to tear off

“Sex Worker put condom and we put another condom with the fear of AIDS”

“We wear one or more condoms because if it tears it would create a problem”
Consistent condom use

Consistent condom use was determined by asking all those who had used a condom in the past twelve months, the frequency with which they used a condom respectively for each type of partner. The response of ‘every time’ condom use was considered for this indicator.

92.4 percent TDHs reported that they used condom every time they had sex with female commercial partners. This proportion was comparatively lower in case of non-commercial and non-regular partners (50.1 percent).

About 7.5 percent of the respondents reported that they used condom consistently over last one month with regular partner.

The proportion of consistent condom use with commercial female partners was reported to be highest in Konkan division (98.8 percent) and the lowest in Nagpur division (71.4 percent). It must be noted that last time condom use was lowest in Nagpur division (83.6 percent).

About 64.3 percent respondents in Pune division reported that they used condom consistently every time they had sex with non-commercial non-regular partners. The proportion of TDHs who reported using condom consistently with their regular partners was the highest in Nashik division (12.4 percent) and the lowest in Amravati division (1.2 percent).
The reasons for correct and consistent condom use were stated to be protective measure against HIV & STI

“I don’t indulge in sex without condom”

“We are scared of diseases”

“If they(Female Sex Workers) don’t have condoms and we also don’t have condoms, we don’t indulge in sex”

Other Key indicators pertaining to condom

Procurements of condom: About 96 percent reported that they were aware about any place from where they can obtain condoms. At the aggregate level, 34.1 percent of the respondents reported procuring condom from chemist shop followed by their sexual partner (26.3 percent). The proportion of respondents who reported to procure condoms from a chemist shop was the highest in Pune division (47.9 percent) followed by Aurangabad division (41.3 percent).

Decision making in condom use: During last sexual encounter with regular partner 65 percent of the Truckers & Helpers stated to have taken the decision for condom use, while with commercial sex workers and non regular partner 55.3 percent and 39.3 percent reported to have decided themselves, respectively.

Awareness about STIs, reported STI symptoms and treatment seeking behavior

To assess the levels of awareness of STI, the respondents were asked if they had heard of any diseases other than HIV or AIDS that could be transmitted through sexual contact. The data pertaining to same is given below in graph:

Figure 7.8: Division wise proportion TDH heard of STI (In %)
At the aggregate level, it was reported that less than one-third of respondents (21.7 percent) were aware of STI. Nashik reported the highest proportion of respondents (39.7 percent) who had heard about STI while Amravati division had the lowest proportion of respondents (13.4 percent) aware of STI.

**Experience of STI Symptoms**

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey. Following table gives the proportion of TDHs who have experienced these STI symptoms:

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genital discharge</td>
<td>4.9</td>
</tr>
<tr>
<td>Genital sore/ulcer</td>
<td>6.4</td>
</tr>
<tr>
<td>Burning pain during urination</td>
<td>16.9</td>
</tr>
</tbody>
</table>

It was reported that 16.9 percent of the respondents had experienced burning pain during urination while less than 7 percent experienced ulcers/sore in genital area. Genital discharge was reported by 4.9 percent of the respondents in the state. Nashik Division had the highest proportion of respondent who reported symptoms of STI.

Some of the terms used to describe STIs are

- “Heat” (Garmi)
- “Boils” (Phunsi/Phoda)
- “Pus, there is swelling”
- “The skin gets removed. It gets weak”
- “One gets boils in mouth. He would feel dull. He would feel sick”
- “The person gets sick. He cannot walk. He has dysentery”
- “One gets heat from inside”
**STI treatment from qualified medical practitioner**

The following graph illustrates the proportion of respondents who sought treatment for STI from a qualified medical practitioner and those that visited government hospital/clinic for treatment.

At aggregate level 51 percent of the respondents sought treatment from qualified medical practitioner; 27.3 percent visited government hospital/clinic and 23.7 percent visited private hospital/clinic. Respondents seeking health services from qualified medical practitioner is highest in Nashik Division (71.9 percent) out of this 46.5 percent visited government hospital/clinic and 25.4 percent visited private hospital/clinic.

Some of the common notions with respect to STI care were expressed as:

“At least he can walk. The disease stays in control. It stays on level”

“Govt hospital cure dead people also. There is no cure of this disease in private hospitals. They give tablet which is called Amritvani”
21.1 percent of the respondents reported that they would not be willing to take necessary care of their relative/friend in their house if he/she got infected with HIV. 24.6 percent of respondents mentioned that they would not be willing to buy vegetables or food items from the shopkeeper who was infected with HIV. This proportion was highest in Konkan division (40.3 percent) and lowest in Nashik division (11.3 percent).

The respondents were further asked about their opinion on whether a teacher who is infected by HIV but is not sick should be allowed to continue teaching. It was reported that 20.9 percent of the respondents were unwilling to allow the teacher to teach in school. 21.9 percent of the respondents would not shake hands with people infected with HIV. The proportion of respondents who were unwilling to shake hands with HIV infected people was highest in Amravati division (25.4 percent).
2 percent of the respondents reported that their close relative is infected with HIV and about 8 percent TDHs reported that their close friend was infected with HIV. The proportion of such respondents who had a close friend infected with HIV was highest in Amravati division (12.9 percent) and lowest in Konkan Division (0.7 percent).

♦ Risk Perception

**Self risk perception**

The proportion of risk perceived to self was low across all centres. Only 3.1 percent of the respondents reported to perceive risk to themselves of contracting HIV/AIDS. Aurangabad Division reported highest levels of risk (7.5 percent). While Pune and Nagpur Division reported the lowest levels of self risk perception 1.0 percent and 0.8 percent, respectively.

All respondents were asked the reasons why they perceived risk of contracting HIV/AIDS. The primary reasons given for perceiving risk were that the condom tears at times during sex, and having multiple partners puts them at risk of contracting HIV/AIDS.

**HIV Testing**

The respondents were asked about their awareness of HIV testing and their test taking behavior. All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. In the second phase the respondents were asked about their awareness of places for getting HIV test done.

At the aggregate level, about 69.9 percent TDHs reported that it was possible for someone like them to get an HIV test. This proportion was highest among the respondents of Pune division (86.7 percent) and the lowest in Konkan division (54.8 percent).
At the aggregate level, about 18.3 percent respondents reported that they had ever taken an HIV test. Out of those respondents who had ever taken an HIV test about 76.8 percent took a voluntary test for HIV and in case of 14.3 percent respondents, HIV test was suggested to them. The proportion of TDH who voluntarily took the HIV test was highest in Aurangabad division (87.3 percent).

A large proportion of 95.9 percent of the respondents who had ever taken an HIV test reported that they had collected results of their HIV test. About 68.4 percent respondents reported that they had received counseling when they went for HIV test. This proportion was highest in Nashik Division (90.8 percent), followed by Konkan division (78.2 percent).

**Exposure to Intervention Programme**

Intervention programmes constitute a primary response to the challenge of HIV/AIDS prevention. They can broadly be classified as interventions that involve interpersonal education and campaign based programmes.
90.1 percent Truck drivers and helpers reported that they had seen billboards/posters/leaflets on STI/HIV/AIDS. At the aggregate level, more than one-third (29.4 percent) of the respondents reported that they had received interpersonal education on HIV/AIDS. The proportion of such respondents was lowest in Aurangabad Division (21.6 percent) and highest in Pune division (39 percent). About 30.7 percent respondents received interpersonal communication on condom use. Also 8.7 percent of the respondents had attended/participated in STI/HIV/AIDS related meeting in last 12 months.

**Awareness & Accessibility to Services**

![Figure 7.15: Awareness & Accessibility to services (in %)](image)

<table>
<thead>
<tr>
<th>Service</th>
<th>Awareness</th>
<th>Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICTC</td>
<td>16.2</td>
<td>11.0</td>
</tr>
<tr>
<td>ART</td>
<td>6.9</td>
<td>4.1</td>
</tr>
<tr>
<td>DNC</td>
<td>7.4</td>
<td>5.6</td>
</tr>
<tr>
<td>CTC</td>
<td>8.8</td>
<td>6.0</td>
</tr>
<tr>
<td>DH</td>
<td>92.0</td>
<td>84.2</td>
</tr>
<tr>
<td>CHC</td>
<td>53.1</td>
<td>41.3</td>
</tr>
<tr>
<td>PHC</td>
<td>73.1</td>
<td>59.8</td>
</tr>
<tr>
<td>CHC</td>
<td>9.7</td>
<td>22.8</td>
</tr>
</tbody>
</table>

Base: All Respondents (N=3604)

Like in all other preceding categories, most of the truckers reported to be aware of District Hospital (92 percent) followed by PHC (73.1 percent) and CHC (53.1 percent). 16.2 percent of the respondents knew about ICTC while 11 percent out of them have accessed these services.
Single Circular Male Migrants
A migrant worker is defined by Census of India as one who is not born in the place where he or she is working. For the purpose of study, we covered only the single male migrants. They are a part of the migrant labour force of the town and could be skilled, unskilled or petty traders. They could be employed in occupations like construction workers, factory workers, petty traders, hotel workers, rickshaw pullers, auto drivers, etc.

Migrants due to displacement, mobility and exposure to new environment are vulnerable to HIV infection. Their vulnerability poses a risk to the epidemic as infected migrant population act as bridge between the Core Groups or High Risk Population and General Population. Hence they are recognized as one of the important groups to be covered under BSS.

State estimates for Migrants were collected from Maharashtra State in two phases. Overall 4595 single male migrants were interviewed and information was garnered on their socio demographic characteristics, knowledge, behavior and attitudinal attributes.
Due to mobile status of the migrants they were probed on possession of social entitlements. Almost 41 percent migrants reported to have voters ID card.

**Socio-Demographic characteristics & substance abuse**

Most of the migrants interviewed are in the age group of 30 years and less (76.3 percent) followed by 31-40 years. More than half (50.9 percent) of the respondents were married and the median age at marriage was 21 years. The median age at first sex was 19.4 years and majority of respondents (84 percent) reported that they had first sex in the age group of 18-25 years and was found to be same across all divisions with minor variations.

About 46.2 percent of the respondents reported to have attained education up to middle level and 32.2 percent completed secondary school. It was also observed that respondents who had completed education up to middle level was highest in Aurangabad division (52.1 percent) and respondents going for higher education after that dropped significantly as compared to other divisions. More than half of the respondents (56.8 percent) reported that they were employed as industry worker and other types of industries, while 19.1 percent worked as construction workers. In Aurangabad Division proportion of respondents working as construction labourers was relatively lower than other divisions, while in Pune Division it was significantly higher. 37.3 percent of the migrants reported to have got employed in the destination place with the help of friends and relatives, while 22.2 percent of them got employed through contractors.

Most of the migrants are from Bihar (18.9 percent) followed by Uttar Pradesh (18 percent), other districts of Maharashtra (16 percent) and Madhya Pradesh (12 percent). This information aids in devising source destination intervention for migrants. Most of the migrants from UP were interviewed in Konkan Division and maximum migrants from Bihar are found in Aurangabad Division. As per the definition, only those migrants who return to their native place at least once a year were considered. The findings show that most of them (47.7 percent) visit their native at least once in six months.
It was reported that after consuming alcohol, 59.5 percent of the respondents were less likely to take precaution before having sex. In Amravati division 69 percent of the respondents reported this, while only 39.4 percent of the respondents in Aurangabad reported the same.

44.3 percent of migrants reported that they are more likely to indulge in sexual activities under the influence of alcohol which they otherwise would not do when sober. As noted earlier, out of all the respondents who reported taking injecting drugs in the past one year, only 10.7 respondents reported sharing needles while taking these drugs.

Currently Living with

97.1 percent of the single male migrants travel alone (i.e. without their wives) in Maharashtra. Information was collected from the single circular male migrants about their current living partners as this is one of the most important factors determining the vulnerability of the migrants to high risk behaviour.

More than half (55 percent) of the respondents were living with their co-workers/students. The proportion was highest in Nashik where 70.3 percent of the respondents stayed with their co-workers while it was lowest in Konkan (44.7 percent). Also, Aurangabad was the only division where proportion of people living with their sexual partners (17.3 percent) was higher than proportion of people living alone (14.6 percent).

More than one third of the respondents (36.9 percent) reported that they have ever consumed alcohol while about 42.2 percent respondents reported that they consumed alcohol 2-3 times a month. About 10.7 percent respondents reported that they injected drugs in the past one year. The respondents were inquired for their past time activities; 41 percent admitted to have watched blue films some time, 21 percent had attended late night parties.

When questioned about leisure activities some migrants stated that their place of work is too far from residence leaving them with no time for recreation, while some reported to be spending time with friends, drinking, watching movies, going to FSWs
Knowledge Indicators

Knowledge about Correct Modes of Transmission of HIV

More than 91 percent of the respondents reported that they have heard about HIV/AIDS. The proportion was highest in Konkan division where about 98.5 percent reported that they have heard about HIV/AIDS. Respondents were asked to identify the means by which HIV can be transmitted, the correct modes of transmission has been presented below:

![Figure 8.1: Knowledge about correct modes of HIV/AIDS transmission (in %)](image)

The modes of transmission of HIV from infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of male migrants. Konkan, Pune and Nashik divisions had relatively higher number of respondents who were aware of correct modes of HIV/AIDS transmission like having unprotected sex, sharing needles. Higher proportion of respondents in Nagpur Division were aware about transmission of HIV infection to unborn child about through breastfeeding.

Knowledge about Correct Methods of Prevention of HIV

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom usage and having one faithful uninfected partner and avoid sharing needles. The proportion of respondents who reported correct modes of prevention of HIV/AIDS has been presented in the graph below:
92.3 percent of the respondents reported that consistent use of condoms with all partners prevents HIV/AIDS. 86 percent respondents also reported that having one faithful uninfected partner can prevent HIV/AIDS. Abstinence from sex was reported by 44.5 percent of the respondents as the method of preventing HIV/AIDS. 86.4 percent of the migrants reported HIV transmission could be prevented by avoiding the use of shared injection needles.

It was observed that the respondents were very clear about the means of preventing HIV/AIDS like consistent condom use; avoid use of shared needles, and having one faithful partner, while some felt that kissing and physical proximity could also spread HIV.

“I will not contract HIV by using condoms”

“I should have single partner”

“The child can get infected through infected mother”

“Pregnant woman should be tested for HIV such that the transmission of infection to the child can be prevented”

“One should take proper precautions while taking or giving blood”

“A new syringe & needle should be used every time”

“HIV infected person should not kiss anyone, so as to prevent its spread”

“If someone else has it and if you will go near him, you can also have it…”
Myths & Misconceptions about means of transmission of HIV/AIDS

At the aggregate level, 20.1 percent of the respondents reported that HIV/AIDS can be transmitted through mosquito bites while 13.1 percent of the respondents reported that sharing of meal with a person infected with HIV/AIDS can lead to transmission of HIV/AIDS. Konkan division had the least proportion of respondents with misconceptions about transmission of HIV/AIDS.

Some of the precautionary measures stated by the Migrant respondents are taking medicines/injections (30.9 percent) and avoiding the use of clothes of infected persons (27.3 percent).

60.4 percent respondents stated that a healthy looking person can also be infected with HIV.

♦ Behavioural Indicators

Sexual behaviour and type of partner

The respondents were asked if their friends involved in light physical relationship or sexual activities. 25 percent of the respondents stated that they knew some friends involving in light physical relationship and about 33 percent mentioned that they knew of friends who indulged in sexual activities. 76.2 percent of migrants reported to have been sexually active in past one year.

It was reported by almost 2 out of 5 (39.5 percent) migrants that they had sex with commercial female partners in the last 12 months. The proportion of such respondents was highest in Pune (77.4 percent) and lowest in Amravati (18.5 percent).
The average number of commercial female partners is highest as compared to the other two types of partners. The involvement with female partners is highest in Nashik and Pune division as compared to other divisions.

It was reported that more than half (52.9 percent) of respondents had sex with regular female partners in the last 12 months. The proportion of these respondents was highest in Konkan (60.3 percent) and lowest in Nashik (46.8 percent) Division.

12.1 percent migrants had sex with non-regular/non-commercial female partners in the last 12 months. The proportion of these respondents was highest in Pune (17 percent) and lowest in Konkan (9.3 percent).

**Influence of alcohol/drug use on sexual behaviour**

Respondents were asked about their behaviour after consuming alcohol and the findings are mentioned in the table given below:

Out of all the respondents who consumed alcohol, 36.4 percent reported that after consuming alcohol they had sex with someone with whom they would not have sex otherwise normally and 35.5 percent reported that they did not use a condom while having sex under the influence of alcohol. These indicators were highest in Pune Division.
Condom use during last sex with sexual partners

Those who reported to have had sex in past 12 month were questioned on use of condom during last sex.

Out of the migrants who reported to have sexual intercourse with commercial female partners in the last 12 months, 96.5 percent reported that they used condom during last sexual intercourse. The proportion was highest for Nashik Division (98.2 percent) and lowest for Amravati Division (92.9 percent).

Among the respondents who reported to have had sex with non-regular/non-commercial partners, majority (58 percent) reported that they used condom during last sexual intercourse. The proportion was highest for Nashik Division (73.6 percent) and lowest for Nagpur Division (37.3 percent).

It was reported that nearly one out of five (20.9%) of the respondents had used a condom with their regular partners during last sexual intercourse. This proportion of condom use in the last sexual encounter...
was the lowest as compared to other types of partners. The proportion was highest for Nagpur division (31.9 percent) and lowest for Amravati division (11.1 percent). This behavior puts the regular partners at a high risk of contracting HIV/AIDS.

**Consistent condom use**

Consistent condom use was determined by asking all those that had used a condom in the past twelve months, the frequency with which they used a condom with each type of partner. Those that reported to use condom ‘every time’ were considered for this indicator.

89 percent of the migrant respondents reported that they consistently used condoms in the last 12 months while having sex with commercial female partners. Pune division had highest proportion of such respondents (95.3 percent) while Nagpur division had the lowest (65.5 percent).

43.1 percent of the respondents reported that they consistently used condoms in the last 12 months while having sex with non-regular/non-commercial female partners. Nashik division had highest proportion of such respondents (61.5 percent) while Nagpur division had the lowest (28.9 percent).

The consistency of condom use is the lowest with regular partners which mainly included the spouse of the respondent (10.5 percent).
The consistency of respondents was reported highest among the respondents of Nagpur division (22.5 percent) and the lowest in Amravati division (4.9 percent).

Some of the reasons quoted by migrants for using condoms were:

“Use of condoms gives security and helps in Family planning”

“If I use Condom I won’t get Genital disease”

Low level of consistent condom use with regular partner is largely attributed to trust on the partner and religion.

“If she is the life partner then there is no risk to have sex without using condom.”

“If she is our GF then she will not have sex with anyone else and we usually know her background so we have faith on her.”

“We don’t use condom at home. For me this condom is a loss. It can come out as well and if it will get in my wife then what will I do.”

“In Muslim religion it is not allowed it is ‘haram’ for us because you are barring the kid to be born.”

“I don’t get physical satisfaction and happiness if I use condoms”

Sexual encounter with men

Majority of respondents (72.5 percent) reported that they have heard of men having sex with men. Out of these, only 6 percent respondents reported that they have themselves indulged in sex with other men in the past 12 months. About 97 percent of the respondents reported that they had anal sex with their male sexual partner in the last one year. The mean number of non-commercial partners was 2.3 and commercial partner was 1.67. The respondents who indulge in anal sex with their male partners in the last 12 months were asked about condom use in the last sexual encounter. About 63.2 percent of the respondents reported that they had used condom in the last sexual encounter. About 59.6 percent of the respondents reported that they consistently used condom in the past year with their male partners.
Other key indicators pertaining to condom

Procurement of Condoms: About 96.1 percent of the respondents in Maharashtra reported that they were aware of places from where they can obtain male condoms. About 33.9 percent of the respondents reported procuring condom from a chemist shop making it the most common place of procurement, followed by sexual partners (17.9 percent), hospitals (10.2 percent) etc.

Chemist shops were reported to be main source of condoms in all the six divisions. Majority of the migrants preferred branded condoms.

Decision making about condom use: In case of sexual encounter with female regular partner, 64.6 percent migrant respondents reported to have made the decision on use of condom, while with commercial sex partners and non paying partner, 47.5 percent and 54.1 percent, reported to have taken the decision, respectively.

Reasons for use of condoms: The commonest reason for condom use was to protect themselves from HIV/AIDS as reported by 63.2 percent of the respondents.

Preference for condoms: 69 percent preferred branded condoms, followed by demand for free condom by 14.4 percent respondents and 8 percent using socially marketed condoms.

“We have sex with the contracted women and the best way is to use two condoms.”

“Free condoms have some powder kind of thing on it and they are also very delicate. Hence, you need to use two at a time”

“I took it (free condoms) in my hand it had some powder and is very thick.”

“Private condoms are of good quality, they show in TV and I believe”
Awareness about STIs, reported STI symptoms and treatment seeking behaviour

To assess the levels of awareness of STIs, the respondents were asked if they had heard of any diseases other than HIV or AIDS that could be transmitted through sexual contact. The data pertaining to same is given below in graph.

At the aggregate level, it was reported that close to a quarter of respondents (24.1 percent) were aware of STI. In Pune division highest proportion of respondents reported (40.8 percent) that they had heard about STI while Aurangabad division had the lowest proportion of respondents (14.2 percent) who had heard of STI.

From among those who had heard about STI, 84.4 percent reported that STI can be prevented. The proportion was highest among the respondents of Pune division (95.3 percent), followed by Konkan division (89.7 percent).

Experience of STI Symptom

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the past one year. The self reported STI symptoms have been presented below:
It was reported that 14.8 percent of the respondents had experienced burning pain during urination while less than 5 percent experienced ulcers/sore in genital area. At the aggregate level, genital discharge was reported by 3.4 percent of the respondents, Pune division had the highest proportion of respondents who reported symptoms of STI.

**STI treatment from qualified medical practitioner**

Of 854 migrants reporting any STI symptom, 44.7 percent did not seek any care, 55.3 percent sought treatment of which 34.2 percent sought medical care from qualified medical practitioners.

The proportion was the highest in Pune division (59 percent) and lowest in Aurangabad division (4.5 percent).
The preference for private health care providers for STI treatment are made over factors like process of treatment, amount of time taken to treat the patients.

“Both Govt and Private doctors have good knowledge about the disease. But if we do not have money we can tell the private doctor to adjust and we can give less money to them.”

“People generally tell that government doctor do not provide good treatment”

“Private doctors give proper treatment and also in less time”

“Government doctors do not have much time and have many patients”

“There is no difference in treatment procedure in private & government services”

“We can share our personal details with our family doctor/private doctor.”

“Government doctors are very lazy and do not talk properly as compared to private doctors”

“It is most convenient to seek services from Govt. doctors. But the only problem is that the prescribed medicines are not available there. If Govt. supplies all these things then the patients need not go to the private hospitals.

“Private hospitals are just money-making machines... for an ailment which requires treatment for 4 days..., Private Doctors will stretch it for 10 days…. If medicines are available... govt. hospitals are the best ones...”

♦ Stigma and Discrimination

Figure 8.9: Stigma and discrimination indicators (in %)

Base: All Respondents (4595)
At the aggregate level, 23.9 percent of the total respondents mentioned that they would not be willing to buy vegetables or food items from the shopkeeper who was infected with HIV. This proportion was highest in Aurangabad division (34.5 percent) and lowest in Pune division (17.0 percent).

About 29.1 percent respondents reported that they are unwilling to take necessary care of their close friend/relative/family members in case they are infected with HIV virus. The percentage was highest in Nagpur division (50 percent) and the lowest in Pune Division (17.8 percent).

The data revealed that 77.0 percent of the respondents would not shake hands with people infected with HIV. Aurangabad division had the lowest number of respondents (68.9 percent) who were unwilling to shake hands with a HIV infected people.

Around 3.6 percent of Migrant respondents reported that they knew someone who had been infected by HIV/AIDS and about 2.3 percent respondents reported that their close relative is infected with HIV/AIDS. About 6 percent respondents reported that they knew a close friend who was infected with HIV/AIDS.

♦ Risk Perception

17.5 percent of the migrants stated that other members of their community are at risk of infection, while 52.2 percent of the respondents felt that they have no chance of contracting HIV.
4.9 percent of migrants expressed their susceptibility to HIV infection. 76.3 percent of migrants were confident that they were not at risk. The self risk perception is high among migrants in Konkan (7.4 percent) and Pune (8.7 percent) Division

Findings from the qualitative study

From the qualitative study, it emerged that people usually associate their own vulnerability to HIV/AIDS with their sexual behavior, and the other modes of transmission of HIV was not considered while they make a decision on whether they need to get tested for HIV or not. They also have fear of contracting HIV and think that PLHIV do not live a good life.

“No haven’t been to HIV testing, but I think I should since I go to different places (Female Sex Workers)”

“I haven’t taken the test for HIV because; I’m not involved in any relation”

“They cannot tell other people what happened to them. They are not able to live properly and die peacefully.”

♦ HIV Testing

The respondents were asked about their awareness of HIV testing and their test taking behavior.

All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. Almost two-third (66.7 percent) of the respondents reported that it was possible for them to take a confidential HIV test.

Figure 8.11: Division wise migrants ever taken HIV test (in %)
The respondents were also asked about whether they had ever tested for HIV. At an aggregate level, 13 percent reported having ever taken a HIV test. The respondents were further asked whether their testing for HIV was a prescribed or a voluntary exercise. At the aggregate level, among respondents who had taken the HIV test, it was reported that 13.7 percent had taken the test because it was prescribed to them while 77.8 percent had taken it voluntarily.

Counseling received before testing for HIV was reported by 67.4 percent which reduced to 60.1 percent post test counseling.

♦ Exposure to Intervention Programme

Majority of respondents (83.9 percent) reported that they had seen billboards/posters/leaflets on STI/HIV/AIDS. At the aggregate level, 18.5 percent of the respondents reported that they had received interpersonal education on HIV/AIDS. The proportion of such respondents was lowest in Aurangabad (9.0 percent) and highest in Nagpur (26.2 percent). Also 6.9 percent of the respondents had attended/participated in STI/HIV/AIDS related meeting in last 12 months. It was observed that male migrants in Pune division have had maximum exposure (13.7 percent) to intervention programmes in last 12 months.

4.7 percent visited STI clinics in past six months for routine medical checkups.
The respondents were asked questions on their awareness about basic government services (both related to HIV care and others like PHC, CHC; etc). Further they were asked if they had ever accessed any of these services. Most of the migrants seem to know District Hospital (76.8 percent) followed by PHC (61.5 percent). Care & treatment services are least known to migrants like ART (4.5 percent), DIC (5.1 percent) and CCC (5.2 percent). The level of accessibility corresponds to the levels of awareness with a marginal difference between them.

![Figure 8.13: Awareness & Accessibility to services (in %)](image)

**Base: All Respondents (4595)**

**Figure 8.14: Awareness about various government programs and services for HIV/AIDS**

The survey attempted to assess the level of awareness about various government services and programs for HIV/AIDS.

![Figure 8.14: Awareness about various government programs and services for HIV/AIDS (in %)](image)

**Base: All Respondents (982)**
The awareness about various government programs seems to be nearly 50 percent across the programmes. Amongst all the programmes respondents aware of free treatment on HIV/AIDS was highest with 56.8 percent reporting that they are aware.
General Population
General Population

Summary of Findings

‘AIDS’ is more commonly known term among general population than ‘HIV’ as 90 percent have heard of AIDS, while only 86.8 percent have heard of HIV. More than 80 percent of GP are aware of various modes of transmission including from mother to child, except through breastfeeding which is reported by 69 percent of GP. These two modes of transmission are reported by higher proportion of females. Prevention through abstinence and being faithful is reported by higher proportion of GP. The knowledge levels are high in urban areas and among males. A very small proportion of married men reported to have indulged in sex with non regular partner in the past 12 months, while more than 60 percent of unmarried men had indulged in sex. 72 percent among the unmarried men used condom every time with commercial sex workers and only 48.4 percent used condom consistently with non commercial partners. Only 34.7 percent of GP have heard of STI and not more than 2 percent have ever had any STI symptom. Among those who ever experienced any symptom, 45 percent sought treatment from qualified practitioner, while 5.5 percent did not seek any treatment. The preference for private clinic is more among GP for STI treatment. More than 67 percent of the GP perceive no risk of HIV infection to them, which is more (72 percent) among females. This could be attributed to low levels of unsafe sex practice and low level of awareness among females. 41.4 percent of GP are aware of HIV testing and only 10 percent among them have ever tested.

General Population is a passive recipient of HIV/AIDS because of its relatively lesser involvement with high risk groups. This category of respondents was covered in Phase II of Behavioural Surveillance Survey in Maharashtra under the Midterm Review conducted by NACO. Clients of Sex Workers belong to the general population group and are at high risk of infection due to their sexual behavior. By indulging in sex with sex workers and further with regular partners; either spouse, live-in partners or girl friends the risk of transmission to the women and children from general population is further exacerbated. Besides under general population men and women who indulge in high risk sexual behavior but are not captured under the High Risk Group members either due to the covertness of their practices or limitation in the definition, could also be covered. However as sexual behaviours and preferences were expected to be different in rural and urban areas, this category was further classified into sub groups i.e. from rural and urban areas.
This category was included because in the recent times it has been found that the risk of HIV transmission is higher in sexual relationships with multiple partners and without the use of condoms.

Most of the respondents 74 percent possessed ration card. More proportion of rural respondents reported to be having ration card (80 percent) as compared to urban population (67.2 percent). Almost same proportion of Male & Female respondents reported having ration card in urban areas, only 35 percent respondents had pass book.

The variation among men and women respondents is high with 41 percent men and merely 29 percent women having pass book. 42 percent respondents reported to possess the BPL cards and mere 5 percent had Antodaya card.

♦ Socio-Demographic characteristics & substance abuse

In total, 3355 males and females in the age group of 15-49 years living in both rural and urban areas were interviewed for the BSS conducted in 35 districts of Maharashtra. The maximum proportion of respondents i.e. 41.7 percent were in the age group of 19-29 years, followed by 30.3 percent respondents in 30-39 years.

It was reported that nearly two-fifths (41.3 percent) of all the respondents had completed their higher education or above. The proportion of such respondents in urban areas was 49.1 percent and in rural areas was 34.7 percent.

It was reported that 14.5 percent of all literate respondents were currently studying. 5.5 percent of all the respondents were unemployed. There were a greater proportion of unemployed women (8.6 percent) as compared to unemployed men (2.4 percent).

Most of the men in urban areas reported to be employed with government or private firm, while in rural areas serve as cultivators or agricultural laborers. However female respondents from rural areas reported to be working as agricultural laborers/cultivators and some being employed in organizations. Most of the urban female respondents are in service.

16.8 percent of the total respondents reported to have ever consumed alcohol. 44.3 percent consumed at least once a week while a small proportion of 9.9 percent consumed every day. Only 10.2% males
reported to consume alcohol, while none among the female respondents reported alcohol consumption.

The alcohol consumption is higher in rural respondents (79 percent) as compared to urban respondents (78.8 percent).

72.2 percent of all the respondents reported that they were currently married and 96.4 percent of them reported to be living with their spouse. In case of 6.3 percent of the respondents their spouse were staying elsewhere, primarily due to work. It was reported that 69.2 percent of the male respondents were currently married and 75.2 percent of the female respondents were currently married.

♦ **Knowledge Indicators**

Though the interventions are focused on core group members, information on HIV, transmission & prevention are disseminated through various medium to the larger population. This indicator is therefore important to understand the reach of these messages to the general population.

![Figure 9.1: Ever heard of HIV and ever heard of AIDS (in %)](image)

It was reported by 86.8 percent of the respondents that they had ever heard of HIV and by 90 percent of the respondents that they were aware about AIDS. In urban areas, the awareness level of HIV was 92.1 percent and in rural areas it was 82.5 percent. About 91.3 percent respondents reported that they are aware about HIV and AIDS both. The proportion of male respondents who had heard about AIDS was 89.4 percent and 90.6 percent female respondents had heard about it.
The awareness of HIV and AIDS among the respondents was higher in urban areas (90.6%). This difference was statistically significant. In addition, it was also noted that the awareness levels of HIV and AIDS among males (86.5%) was higher than that in females (84.6%). The difference was statistically significant, suggesting that the difference was not due to chance/survey error.

It was reported that approximately three out of every ten (31.4%) respondents reported that they had firsthand knowledge of HIV/AIDS. The proportion of urban respondents aware of HIV/AIDS (38.2%) was relatively higher than respondents from rural areas (25.8%).

Knowledge about Correct Modes of Transmission of HIV

Respondents were asked to identify the means, by which HIV can be transmitted,

The level of awareness about modes of transmission through unprotected sex, infected blood and sharing infected needles were lower in females as compared to males. However knowledge about vertical transmission were reported by more females as compared to men.

The modes of transmission of HIV from infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of respondents. But, the responses were higher in urban areas as compared to rural areas.
Most of the respondents (more than 90 percent) reported to be aware of unprotected sex, blood transfusion & infected needles as modes of transmission.

**Awareness of HIV/AIDS prevention**

Knowledge of prevention message are key to adoption of necessary precautions and safeguarding oneself from getting infected. The survey assessed the knowledge levels of respondents about HIV/AIDS prevention. All respondents who were aware of HIV or AIDS were asked if they thought that HIV/AIDS could be prevented.

Overall 69 percent respondents stated that HIV can be prevented. This proportion is higher among males (70.5 percent) as compared to females (68.4 percent).

General Population in rural areas is less aware (62.9 percent) of preventive methods as compared to those in urban areas (76.7 percent). The levels of awareness among men and women are almost the same in both rural and urban areas.

85 percent of the general population respondents reported to have heard of condoms and 67.1 percent have seen them.

**Knowledge about Correct Methods of Prevention of HIV**

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect themselves from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom use, having one faithful uninfected partner and by avoiding sharing of needles. The proportion of respondents who reported correct modes of prevention of HIV/AIDS has been presented in the graph below:
Myths & Misconceptions about means of transmission of HIV/AIDS

Nearly two in five respondents (39.9%) who were aware of HIV or AIDS reported that HIV/AIDS may be transmitted through a mosquito. This proportion was relatively higher among women who were aware of HIV/AIDS, than in men. Approximately one-fourth (23.9%) of respondents

“*If you want to be safe from HIV infection, you should use condom. It is important to protect yourself from HIV infection; condom can also be used to avoid pregnancy*”

“One should not donate his blood without confirming that it is uninfected. Contaminated blood should be avoided”

“*Use new needles for injections every time. Use condoms. Test the blood for infections before using it for transfusions*”

“*People use condoms so that they do not fall prey to HIV and other venereal diseases*”

“*HIV does not spread through a simple touch. One should not use contaminated needles and infected blood should not be given. It should be checked for HIV*”

A high proportion of respondents almost 80 percent reported abstinence as method of prevention. Over all, more men reported preventive methods as compared to women and likewise the proportion for all the modes was higher in urban respondents.
who were aware of HIV/AIDS also reported that a person can get HIV/AIDS by sharing a meal with someone who is infected.

The misconception among women seems to be relatively more than that among men. More number of respondents both among males, females & rural and urban regions reported that mosquito bites can transmit HIV

17.5 percent of the respondents stated that a healthy looking person cannot transmit HIV.

“Consumption of oral contraceptive pills were considered as one of the methods to prevent transmission of HIV.”

“New diseases are emerging which like AIDS can be transmitted from one person to another. So it (contraceptive pills) is required”

Awareness of HIV/AIDS treatment

In addition, all respondents who were aware of HIV/AIDS were also asked if they were aware that drugs can help treat people with HIV/AIDS.

It was reported that 44.1 percent of the respondents aware of HIV/AIDS were aware that there are drugs which can help treat people who have HIV/AIDS. The awareness levels of such respondents were relatively higher among females (45.3%), in comparison to male (42.9%).
Overall the awareness about HIV/AIDS treatment is greater in urban Maharashtra, especially among urban women.

It was reported that 55.4 percent of the respondents (aware of HIV or AIDS) reported that they knew that treatment for HIV/AIDS is now available.

Further, it was reported that 15.7 percent of the respondents (aware of HIV or AIDS) had heard of Anti-Retroviral Treatment (ART). In addition, respondents who were aware of HIV or AIDS were asked if they had ever heard of Community Care Centers, where HIV positive people are provided care, nutritional and psychological support and treatment for infections. One-fourth (25.6 %) of the respondents aware of HIV or AIDS reported that they were aware of Community Care Centers. The awareness levels among male respondents (31 %) were relatively higher than that in female respondents (20.3%)

**Heard of female condom**

All respondents who were aware of condoms were asked, if they had ever heard of a female condoms. The following graph presents the awareness levels of female condoms:

![Figure 9.5: Heard of female condom (in%)](image)

It was reported that one-fourth (25.4%) of respondents who were aware of condoms had heard about female condoms.

Only 20.3 percent female were aware of female condoms as compared to 29.8 percent male.
> **Behavioural Indicators**

**Sexual behaviour and Type of partners**

About 13.2 percent respondents who were currently married reported that they had sexual encounter with non-regular partner before marriage. About 2 percent currently married respondents reported that they had sexual encounter in the past 12 months. About 64.3 percent respondents who were currently unmarried reported that they had sexual intercourse in the past 12 months. It was reported that 3.1 percent of the men who were aware of MSM had indulged with men partners in sexual activities at least once. This proportion of respondents was relatively higher in urban areas as compared to reported proportions from rural areas.

**Condom use during last sex with sexual partners**

Last time condom use was assessed by asking all respondents who had sex in the past twelve months whether they had used a condom with each type of partner during the last sexual encounter.

It was reported that nearly two out of five (43.2%) of the respondents had ever used a condom with their spouse. This proportion was relatively higher in urban areas (55%) in comparison to rural areas (34.6%). Further, it was also reported that the primary reason for using condom was to avoid pregnancy (89.9%).

About 77.3 percent respondents who were currently unmarried reported that they used condom in the last sexual encounter with commercial partner. 69.4 percent of those unmarried male respondents who have had sex with non commercial partners in the last 12 months, reported to have used condom during the last sex.

**Consistent condom use**

Consistent condom use was determined by asking all those that had used a condom in the past twelve months, the frequency with which they used a condom with each type of partner. Those who reported to use condom ‘every time’ were considered for this indicator.

At an aggregate level about 50 percent respondents who were currently married and who were involved with commercial partner reported that
they used condom consistently. This proportion was lower in case of non-commercial partner, wherein the proportion of respondents reporting consistent condom use was 39.3 percent. Among the currently unmarried respondents, 72.7 percent respondents reported that they used condom consistently with commercial partners, but the proportion was less for non-commercial partners (48.4 percent).

**Other Key Indicators pertaining to condom**

**Procurement of Condoms:** The proportion of respondents who were aware of condoms was 85 percent. 86.7 percent of these respondents reported pharmacy or a medical shop as the most common place of procurement. The other common places in the top 5 places of procurement of condoms are as follows; Clinic/Hospital (79.1%), Family planning centre/ Clinic (69.5%), Condom bank / Vending machine (39.4%) and Sexual partner (33.2%)

The male respondents aware about source of condoms is higher than that reported by females. All differences between males and females were statistically significant. The respondents who procure a condom were asked to report the time it would take them to obtain a condom from the source to their house. The respondents were asked to imagine a mode of transport that they have most access to and likely to use the same for the purpose. It was revealed that the mean time taken to obtain a condom was 15 minutes.

**Reasons of Condom use:** Respondents who were aware of condoms were asked about the reasons for condom use. The three most frequent reasons for using a condom were avoiding pregnancy or family planning method (70.5%), HIV/ AIDS control (58.2%), STI prevention (28.2%).

**Preference of Condoms by Brand:** 56.8 percent prefer branded condoms, while 14.1 percent prefer free and only 6.3 percent preferred socially marketed condoms.
Awareness about STIs, Reported STI Symptoms and treatment seeking behaviour

To assess the levels of awareness about STI, the respondents were asked if they had heard of any diseases other than HIV or AIDS that could be transmitted through sexual contact.

It may be noted that awareness levels of STI in urban areas (43%) is high. The difference in awareness levels in urban areas in comparison to rural areas was statistically significant. It was also reported that STI awareness among males (42.6%) was higher in comparison to females (26.9%). This difference too was statistically significant.

It was reported that 78.1% of the respondents who were aware of STI agreed that a person suffering from STI has a high chance of HIV/AIDS exposure.
The respondents were also probed on their awareness about the symptoms of STI in men and women. The top three symptoms in men which were identified by the respondents are Burning/Pain while urinating (28.2 percent), Genital discharge (21.6 percent), Lower Abdominal Pain (21.4 percent).

The Symptoms in women as reported by GP respondents are Burning/Pain while urinating (25.8 percent), Genital discharge (24.2 percent), Lower Abdominal Pain (19 percent). 81.5 percent of the respondents reported that condom use can prevent STI.

**Experience of STI Symptom**

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey. Following table gives the proportion of respondents who have experienced these STI symptoms:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Maharashtra</th>
<th>Male</th>
<th>Female</th>
<th>Urban</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genital discharge</td>
<td>1.9</td>
<td>1.4</td>
<td>1.7</td>
<td>1.5</td>
<td>2.2</td>
<td>2.6</td>
<td>3.3</td>
<td>3.4</td>
<td>3.4</td>
<td>1.9</td>
<td>0.3</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Ulcer/sore in genital area</td>
<td>0.9</td>
<td>0.7</td>
<td>0.9</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

It was reported that 1.8% of all the respondents had a genital discharge (thick yellowish/greenish discharge) with foul smell from their penis/vagina in the one year prior to the survey. This STI symptom was reported to be present most in urban females (3%). In addition, 1.4% of all the respondents reported that they had an ulcer or sore in their genital area in past one year. This STI symptom was reported to be present most in urban males (2.2%).
Swelling of the abdomen was stated as a ‘problem in the sexual life’, along with excessive white discharge.

“I was suffering from problem (sexual) of excessive white discharge & had swelling on my abdomen”

“Flow of white discharge, itching on genital parts”

**STI treatment from qualified medical practitioner**

The following graph illustrates the proportion of respondents who sought treatment for STI from a qualified medical practitioner

![Figure 9.8: STI Treatment from qualified medical practitioner (in %)](image)

At the aggregate level, it was reported that 65.9 percent of the respondents who reported any STI symptom had visited a Government Hospital/clinic. Respondents visiting the private hospital/clinic are 25.2 percent. Among Both male & female respondents as well as in rural & urban areas there seems to be a clear picture for government hospital/clinic as compared to private clinic.

Respondents who reported visiting a private or government hospital the last time they experienced STI symptom, were asked questions to ascertain the experience of medical treatment at the hospitals.

It was reported that 36.4 percent of the eligible respondents (who reported visiting private or government centre for STI treatment) were fully satisfied, 39.4 percent were somewhat satisfied and 9.1 percent were not satisfied with the quality of services.
It was reported that 39.4 percent of the respondents were physically examined by a doctor or paramedical staff. The proportion of respondents who were physically examined for STI in government or private hospitals was relatively higher among females than in males.

One third (33.3%) of the respondents reported that they were given any counseling when they last visited a hospital for STI treatment. It was reported that 37.5 percent of the eligible male respondents had received counseling services as compared to 29.4 percent reported among the eligible female respondents.

Since consistent condom use is an important measure to prevent STI, the study assessed the proportion of eligible respondents who received counseling on use of condoms. It was also reported that 33.3 percent of the respondents received counseling or correct condom use.

If a person is infected with STI, all the sex partners are also at the risk of contracting STI. About one-fourth (24.2%) of the eligible respondents were asked by the doctor to bring their partner for treatment or advice.

Doctors from government hospitals are considered more honest, and the treatments and processes are considered more credible vis-à-vis those of private hospitals-

“Government people are more honest”

“They (government doctors) are honest and work properly”

“Yes we have to pay more fees in private hospitals as compared to government hospitals”

Government hospitals were also stated as being less expensive. However the respondents had concerns about confidentiality being maintained at government hospitals.

“Government (doctors) will disclose it if the family members ask but the Private doctor will not tell anyone. He will avoid telling people”

“Govt. doctors take a longer time for treatment as compared to private doctors but the treatment they suggest is more or less the same”

“In private hospitals there are more facilities. In a govt. hospital there is queue and one has to wait for a longer duration and undergo a lengthy procedure for getting treatment”

“Govt. hospital in this village is too far for us to walk there”
**Stigma and Discrimination**

HIV infection is widely stigmatized, because of its association with sexual behaviour that may be considered socially unacceptable (such as prostitution, substance abuse etc.). Stigma and discrimination constitute one of the greatest barriers in effectively dealing with the epidemic.

A set of statements were administered to all respondents to assess the attitude of respondents towards PLHA. The indicators and corresponding proportion presented in the following table illustrate the stigma and discrimination against PLHA.

<table>
<thead>
<tr>
<th>Unwillingness to share food with HIV/AIDS patient</th>
<th>Unwillingness to take care of relative with HIV/AIDS</th>
<th>Unwillingness to buy vegetables/fruit from shopkeeper/food seller who has HIV/AIDS</th>
<th>Unwillingness to allow male teacher with HIV/AIDS (but not sick) to teach in school</th>
<th>Unwillingness to allow female teacher with HIV/AIDS (but not sick) to teach in school</th>
<th>Unwillingness to shake hands with HIV/AIDS patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>Urban</td>
<td>Rural</td>
<td>Maharashtra</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>32.5</td>
<td>37.9</td>
<td>27.9</td>
<td>28.2</td>
<td>29.2</td>
<td>23.8</td>
</tr>
<tr>
<td>14.7</td>
<td>13.8</td>
<td>15.7</td>
<td>26.1</td>
<td>28.5</td>
<td>32.1</td>
</tr>
<tr>
<td>29.2</td>
<td>29.5</td>
<td>31.9</td>
<td>28.2</td>
<td>29.1</td>
<td>31.5</td>
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<tr>
<td>23.8</td>
<td>29.3</td>
<td>31.8</td>
<td>26.7</td>
<td>28.6</td>
<td>28.3</td>
</tr>
<tr>
<td>32.1</td>
<td>32.1</td>
<td>31.9</td>
<td>29.6</td>
<td>29.5</td>
<td>31.9</td>
</tr>
<tr>
<td>53.2</td>
<td>56.3</td>
<td>56.3</td>
<td>55.8</td>
<td>56.3</td>
<td>56.3</td>
</tr>
</tbody>
</table>

*Base: Maharashtra (3063), Urban (N-1447), Rural (N-1616)*

It was reported that more than three in ten (32.5%) of all respondents reported that they would be unwilling to share food with HIV/AIDS patient. It was noted earlier that sharing food with PLHA transmits HIV virus is a misconception prevalent among respondents and therefore, it might be a reason for a negative attitude towards PLHA. Further, it was reported that 28.2 percent of the respondents were unwilling to buy fruits or vegetables from a shopkeeper or food seller if s/he had HIV/AIDS.

Except for the indicator on unwilling to shake hand with HIV positive patient, in case of all the other indicators more proportion of respondents from rural area reported in affirmation as compared to those in urban areas. This suggests that respondents in rural areas might be relatively more sensitive to PLHA than respondents in urban areas. A similar
conclusion may be drawn comparing data for all male respondents with all female respondents. Female respondents are more likely to discriminate against PLHA than male respondents.

18.4 percent of the respondents stated that they are more likely to keep the HIV positive person in isolation.

Stigma hounds those infected with both STI and HIV/AIDS. In the course of the group discussion, stigma emerged against people who are suffering from/are taking treatment for STI-

“We used to keep away from him (patient of a STI). We thought we may contract it. This happened because he is not a good person and I try to keep good company so I avoided him”

Stigma also affects how a patient of HIV/AIDS is treated by even his/her family members or close relatives-

“An infected person’s family may hate him since he has done something which is wrong or they may think that they can spend a lot of money to cure the disease. We feel sympathetic towards a child who is infected and people will try to help him, monetarily or otherwise”

“People will not go near him. His life will get affected; he will possibly tell his friends only and may not be able to tell everyone”

Other statements conveying how ‘society’ would react to a HIV positive person were also made. They tend to demonstrate stigma more than anything else-

“Society will think that the person who is infected was not loyal to one partner or might not have used safety measures”

“Society generally fails to help the infected person because they think it is like a punishment, and infected person should pay for his crime. They think that because of that one infected person it may spread to other people”

Know person infected with HIV

It was reported that around one-fourth (26.4%) of respondents who were aware of HIV/AIDS were aware of someone who is infected with HIV/AIDS. This proportion was higher in urban areas (31.6%), in comparison to rural areas (21.8%). The same set of respondents was further asked if they knew someone who has died of HIV/AIDS. It was reported that 27.6 percent of the respondents who were aware of HIV/AIDS knew someone who had died of HIV/AIDS.
It was reported that approximately three out of every ten (31.4%) respondents reported that they had firsthand knowledge of HIV/AIDS. The proportion of urban respondents aware of HIV/AIDS incidence (38.2%) was relatively higher than respondents reporting in rural areas (25.8%).

♦ Risk Perception

Risk Perception for community members

All the respondents were asked the risk they perceived about people like them contracting HIV/AIDS. The responses were coded on a four point scale ranging from very high to moderate to low to no chance.

It was reported that a majority (67.9%) of the respondents thought that people like them did not have any chance of contracting HIV/AIDS. This proportion was reported to be highest among rural females (78.6%). 4 percent of urban male reported to perceive people like them at risk of infection.

Among currently married respondents, the proportion who thought that it was not possible for people like them to contract HIV/AIDS was 69.6 percent. This proportion was reported to be relatively lower (63.7%) among unmarried respondents. Since the individual bases for deserted, divorced and widow/widower respondents are low and it is not possible to make any statistical comparisons, the three categories have been clubbed. The respondents from this resultant new category (comprising of deserted, divorced and widow/widower respondents) reported that 58.9 percent of them did not think that people like them have any chance of contracting HIV/AIDS. It may be concluded that respondents who are currently married perceive people like them to be at least risk in comparison to unmarried and deserted/divorced/widow/widower respondents.

Self Risk Perception

The respondents were also asked if they perceived themselves to be at the risk of contracting HIV/AIDS.
It was reported that 3.1 percent of all the respondents perceived that they were at the risk of contracting HIV/AIDS. The proportion of male respondents perceiving themselves at the risk of HIV/AIDS was 2.7 percent and that of females was 3.5 percent. In urban areas, this proportion was 4 percent and in rural areas the proportion was 2.3 percent. The category of respondents that reported highest self-risk was urban females (5 percent).

♦ **HIV Testing**

In BSS 2009, slightly more than four out of ten respondents (41.4 percent) reported that they were aware of any HIV testing facility. 52 percent of the respondents in urban areas and 32.6 percent of respondents in rural areas reported awareness of HIV testing in their respective areas.

All respondents were asked if it was possible for them to get a confidential test done to find out if they were infected with HIV. Almost half (48.6 percent) of all the respondents reported that it was possible for them to take a confidential HIV test.

Almost every one in ten (9.6 percent) of all the respondents reported having ever taken a HIV test. It was reported that 5.7 percent of the male respondents had ever taken the test, in comparison to 13.5 percent of female respondents. The difference was statistically significant*.

The respondents who had taken the test were asked if they had taken the HIV test voluntarily or if it was prescribed to them.
67.4 percent of General Population respondents who got tested were prescribed to the same. It may be noted that females were more likely to take a HIV test because it was required/prescribed to them than males. It was reported that three-fourths (75%) of the male respondents who had taken the HIV test took it voluntarily. Further, it was also reported that a majority (83.5%) of the respondents who had taken the test also collected the test results.

♦ Exposure to Intervention Programme

All respondents were asked if they were approached in the past one year by any individual for IPE. It was reported that 5.4 percent of all the respondents had received IPE on STI/HIV/AIDS prevention. It was reported that urban females represented the category of respondents which had highest exposure (9.2%) to IPE on STI/HIV/AIDS.

In addition, it may be noted that IPE on condom use was 5.1 percent, which was relatively lower than the IPE on STI/HIV/AIDS. It was also reported that 5.8 percent of male respondent had received IPE on condom use in comparison to 4.5 percent of female respondents. The individuals who assisted in spreading IPE were friends, peers, spouse, other family members, government doctor, village health worker/nurse from government hospital or clinic. It should be noted that respondents in urban areas reported to be relatively more exposed to IPE than respondents in rural areas. The differences were statistically significant.

All respondents who were aware of STI/HIV/AIDS were asked if they had ever attended a campaign or meeting on STI/HIV/AIDS. It was reported that 7.2 percent of the respondents aware of STI/HIV/AIDS had attended or participated in a campaign or meeting on the same. Further, it was reported by 5.4 percent of the respondents that they were ever approached by anyone in past one year to educate them on spread of STI/HIV/AIDS.

“We get information on the TV. Also doctors tell us about it and there are some awareness camps that are undertaken in our village”
Awareness of Government Programmes

The following table presents awareness levels among respondents about various government programmes:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Percent</th>
<th>Maharashtra (3255)</th>
<th>Male (1680)</th>
<th>Female (1675)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme for free HIV/AIDS treatment</td>
<td>62.5</td>
<td>48.1</td>
<td>51.7</td>
<td>47.9</td>
</tr>
<tr>
<td>Counseling and confidential testing</td>
<td>44.4</td>
<td>44.4</td>
<td>44.8</td>
<td>43.9</td>
</tr>
<tr>
<td>Programme for STI treatment</td>
<td>54.5</td>
<td>49.6</td>
<td>39.5</td>
<td>44.8</td>
</tr>
<tr>
<td>Programme to prevent Parent to Child Transmission</td>
<td>61.1</td>
<td>61.1</td>
<td>61.1</td>
<td>61.1</td>
</tr>
</tbody>
</table>

It was reported that 62.5 percent of all the respondents were aware of the government programme for free HIV/AIDS treatment. This proportion was reported to be relatively higher among urban respondents in comparison to rural respondents.

Approximately half (48.1%) of all the respondents reported that they were aware that the government provides counseling and confidential testing if one wants to know their HIV status. The proportion of awareness levels for this government programme was highest among urban males and lowest among rural females.

It should also be noted that 44.6 percent of the respondents were aware of the government programme for STI treatment.

Role of Media

Besides IPE, media also plays an important role in information dissemination that can help spread awareness to prevent HIV/AIDS. The various types of media are mass media, Audio-Visual (AV) media and written media. Mass media was defined as radio and TV. AV media included cinema hall, public announcement and drama/skits / street plays /puppet shows. Written media was defined as newspaper
or magazine, hoarding/placard/poster/billboard/wall writing, electronic board and handbills/pamphlets/booklets.

**Media as a source of information dissemination on HIV/AIDS/STI**

The following table presents the proportion of respondents who reported that they came to know about HIV/AIDS/STI through media:

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Maharashtra</th>
<th>Total Male</th>
<th>Total Female</th>
<th>Urban Male</th>
<th>Urban Female</th>
<th>Rural Male</th>
<th>Rural Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass media</td>
<td>81.8%</td>
<td>81.5%</td>
<td>81.6%</td>
<td>86.1%</td>
<td>84.1%</td>
<td>86.5%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Written media</td>
<td>54.5%</td>
<td>54.6%</td>
<td>54.2%</td>
<td>51.6%</td>
<td>51.6%</td>
<td>51.7%</td>
<td>51.8%</td>
</tr>
<tr>
<td>AV media</td>
<td>17.7%</td>
<td>17.6%</td>
<td>17.2%</td>
<td>17.7%</td>
<td>16.8%</td>
<td>17.6%</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

*Base: Maharashtra (N-3355), Male (N-1511), Female (N-1844), Urban (N-1680), Rural (N-1675)*

82 percent of the respondents reported to have got information about HIV/AIDS from Mass media, Mass media was the most popular medium of information both in rural and urban areas.

74 percent of those who knew about condoms reported to have received information through mass media. More proportion of males (78.2 percent) received information through mass media as compared to females (70.9 percent)

**Media as a source of information dissemination on blood donation**

It was reported that 42.7 percent of all the respondents had come across campaigns on voluntary blood donation. 14.5 percent of the respondents reported to have donated blood. The proportion of male respondents (19.3%) reporting that they donate blood was relatively higher than the proportion of female respondents (9.6%) who donate blood.
The respondents who had come across campaigns on voluntary blood
donations or had donated blood in the last one year were asked the
sources of their knowledge of such services.

At the aggregate level, it was reported that 83.4 percent of the
respondents who had either donated blood or come across a blood
donation campaign were aware of the blood donation service through
mass media. The proportion of such respondents reporting awareness
from written media was 53.2 percent and from AV media was 24.4
percent. It should be noted that non-media sources (such as friends or
colleagues or relatives or neighbors or any IPE) exerted relatively more
influence, in comparison with AV media sources, but was less in reach
in comparison to mass media and written media.
Summary of Findings

Most of the youth have heard of HIV and AIDS, both in rural and urban areas. The knowledge about modes of transmission through infected needles and infected blood transfusion is more than 90 percent. 81 percent youth are aware of transmission through unprotected sex and around 75 percent youth stated that abstinence and remaining faithful to one partner can prevent HIV spread. A small proportion of 14 percent of youth ever had sex, which is minuscule in case of females (4 percent). Youth especially males indulge in sexual activity more with non commercial partners and the consistent condom use with these partners is 40 percent. 30 percent of the youth have heard of STI and around 1.5 percent among them has experienced any one of the symptoms in past twelve months. A very high proportion of 76 percent youth did not respond to the question on treatment seeking for STI and more than 67 percent youth did not perceive themselves to be at risk of infection. Stigma, discrimination and misconceptions prevail in this group, with 35 percent youth still believing that mosquito bites can spread HIV.

Most new infections are in young people and modest changes in behavior in this age group may have a significant impact on the epidemic.

Youth for the purpose of this study has been defined as all unmarried males and females between the age group 15-24 years living in both rural and urban areas. The earlier round of BSS in 2006 included married respondents within this age group, however for this round only unmarried youth have been considered. The surveyed respondents were covered at the level of the state. The category of youth is further divided into rural and urban youth.

Socio demographic characteristics

Overall 4298 youth were interviewed and a more or less equal proportion of men and women were covered. At an aggregate level the age of majority of the respondents in urban and rural areas and across the sexes was between 18-20 years, although in case of urban males majority of the respondents were in the age group of 21 to 24 years. At the aggregate level, the mean age of the respondents was about 19 years.
Around one fourth of the youth interviewed had received education up to secondary school; nearly 12 percent had completed their graduation. This proportion was relatively higher in urban areas (15.4 percent) compared to rural areas (7 percent). It was reported that about two-fifths (39.8 percent) of all the respondents had completed their education up to higher secondary. The proportion of such respondents in urban areas was 41.8 percent and was 37.1 percent in rural areas. Among the literate respondents, 63.2 percent reported that they were currently studying/pursuing education and around 13.8 percent were unemployed. There were a greater proportion of unemployed women (21.6 percent) as compared to unemployed men.

With regard to the occupation profile, it was reported that the common occupations were service (private/government) reported by 5.9 percent at an aggregate level, and agricultural labour or cultivator reported by 6.3 percent. In rural areas, the most common occupation reported was agricultural labourers/cultivators (13.5 percent) and in urban areas about 7.6 percent respondents were employed (7.6 percent). About one fourth of the respondents reported that they had the habit of saving.

Knowledge Indicators

Heard of HIV/AIDS

The respondents were asked if they had heard about HIV and AIDS and if these two were different.
It was reported that 91.3 percent of the respondents had ever heard of HIV. In urban areas, the awareness level of HIV was 93.1 percent and in rural areas it was 88.9 percent. This difference was statistically significant.

The awareness level of AIDS among all respondents was 93.3 percent. In urban areas, it was reported that 95 percent of the respondents had ever heard about AIDS, as compared to 91 percent in the rural areas. This difference was statistically significant. The proportion of male respondents who had heard about AIDS was 93.7 percent and in female respondents it was 92.9 percent.

More number of respondents have heard of AIDS than HIV

At the aggregate level, the awareness levels of HIV and AIDS was 90.9 percent in 2009. The awareness of HIV and AIDS among the respondents was higher in urban areas (92.9 percent) in comparison to that in rural areas (88.1 percent). In addition, it was also noted that the awareness levels of HIV and AIDS among males (94.4 percent) was higher than that in females (91 percent).

**Awareness of HIV/AIDS prevention**

The survey assessed the knowledge levels of respondents about HIV/AIDS prevention. All respondents who were aware of HIV or AIDS were asked if they thought that HIV/AIDS could be prevented. The following table presents the responses:

It was reported that 70 percent of all respondents who were aware of HIV/AIDS were aware that it can be prevented. The knowledge level of urban respondents was relatively higher (73.4 percent) as compared to that of the rural respondents (65.2 percent). Comparatively, more males (72.2 percent) were aware that HIV/AIDS could be prevented than females (67.5 percent).

**Awareness about HIV treatment**

It was reported that 43.3 percent of the respondents were aware of drugs for treatment of HIV/AIDS is available. The awareness levels of such respondents were relatively higher among urban youth (46.9 percent), as compared to rural youth (38.3 percent).
Two-fifths (39.8 percent) of the respondents aware of HIV/AIDS reported that they were aware that treatment for HIV might be required even without symptoms. Greater proportion of male youth respondents in affirmation.

From among those who were aware of HIV/AIDS, it was reported that 19.7 percent had ever heard of Anti-Retroviral Treatment (ART). The proportion of urban youth (22.4 percent) who were aware about ART was higher compared to youth from rural areas (15.9 percent). In addition, more males (24.9 percent) were aware of ART as compared to females (14 percent).

In addition, respondents who were aware of HIV/AIDS were asked if they had ever heard of community care centers, where HIV positive people are provided care, nutritional and psychological support and treatment for infections. One-fourth (25 percent) of the respondents aware of HIV/AIDS or STI reported that they were aware of community care centers. The awareness levels among male respondents (31.3 percent) were relatively higher than that in female respondents (18.1 percent)

Knowledge about Correct Modes of Transmission of HIV

The awareness about HIV and AIDS was 93.3 percent among youth. The awareness of HIV and AIDS among the respondents was higher in urban areas (95 percent) in comparison to that in rural areas (91 percent). In addition, it was also noted that the awareness levels of HIV and AIDS among males (93.7 percent) was slightly higher than in females (92.9 percent).

![Figure 10.2: Knowledge about correct modes of HIV/AIDS transmission (in %)](Base: All Respondants (N-4032)
The modes of transmission of HIV from infected mother to her unborn child and through breastfeeding were reported by a relatively lower proportion of respondents. However, these two methods of HIV transmission was known to higher proportion of female youth both in rural and urban areas. The awareness that HIV spreads through sexual contact was higher among males (86.4 percent) as compared to females (75.8 percent) and relatively more in urban areas (83.4 percent) as compared to rural areas (78.5 percent).

**Knowledge about Correct Methods of Prevention of HIV**

Knowledge about correct modes of prevention of HIV is an important indicator because it explains how one can protect themselves from getting infected with HIV/AIDS by using preventive measures like abstaining from sex, consistent condom use, having one faithful uninfected partner and avoid sharing needles.

More than three-fifth (68.8 percent) of all the respondents were aware that correct and consistent condom use with all partners was a means of preventing the spread of HIV. More than three fourth (76.2 percent) also reported abstaining from sex as a means of prevention. Similarly, 74.8 percent were aware that having one faithful, uninfected partner was a means of prevention. This proportion was higher among the male youth (82 percent) as compared to females (66.8 percent). The difference in the awareness levels with respect to modes of prevention in urban & rural areas is marginal with urban youth reporting higher level of awareness.
Myths & Misconceptions about means of transmission and prevention of HIV/AIDS

Perceptions regarding incorrect modes of HIV/AIDS transmission act as a barrier to prevent universal comprehensive knowledge about HIV/AIDS. Nearly two in five respondents (34.7 percent) who were aware of HIV or AIDS reported that HIV/AIDS may be transmitted through a mosquito bite if the mosquito has drawn blood from an HIV/AIDS infected person. This misconception was relatively higher among females and was highest among rural women (42.7 percent). Approximately one-fifth (19.5 percent) of respondents who were aware of HIV/AIDS also reported that a person can get HIV/AIDS by sharing a meal with someone who is infected.

Higher proportion of females from rural & urban areas reported sharing meals could transmit virus.

♦ Behavioural Indicators

Sexual behavior and Type of partners

Only 14 percent of the respondents ever had sex, 4 percent female and 22 percent males. 71 percent among them reported to indulge in sexual activity in the past 12 months. The youth indulging in sexual activity is more in rural area (78.9 percent) as compared to urban area (67.2 percent)

Condom use during last sex with sexual partners

Last time condom use was assessed with each type of partner.

Figure 10.4: Last time condom use with commercial and non-commercial partner (in %)

<table>
<thead>
<tr>
<th>Percent</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>88.6</td>
<td>87.1</td>
<td>91.5</td>
<td>90.5</td>
<td>50</td>
<td>59.2</td>
</tr>
<tr>
<td>Male</td>
<td>87.1</td>
<td>73.1</td>
<td>70.5</td>
<td>73.1</td>
<td>50</td>
<td>59.2</td>
</tr>
<tr>
<td>Female</td>
<td>87.1</td>
<td>73.1</td>
<td>70.5</td>
<td>73.1</td>
<td>50</td>
<td>59.2</td>
</tr>
</tbody>
</table>

Commercial partner | Non-commercial partner
It was reported that more than eight out of ten (88.6 percent) of the respondents had used a condom with their commercial partners during last sexual intercourse. The proportion of respondents reporting condom use in the last sexual encounter was lower for those involved with non-commercial partners. The proportion of last time condom use reported by urban youth with commercial partners was lower than that by rural youth. However in case of condom use with non commercial partners, it was high in urban areas.

**Consistent condom use**

The respondents were asked about the frequency of condom use in the past 12 months. The youth reporting ‘every time’ were considered for consistent condom use.

It was reported that 70.5 percent of the respondents had consistently used condoms in the last 12 months with commercial partners. Comparatively, consistent condom use with non-commercial partners was at lower level at 39.7 percent. Like last time condom use, the consistent condom use was also reported more with commercial partners in rural areas and with non commercial partners in urban areas. Lesser proportion of female youth reported consistent condom use by their partners.

**Other key indicators pertaining to condom**

**Procurement of Condoms:** In order to assess the awareness levels of condoms, all the respondents were asked if they had ever heard of or
seen a condom, 83.4 percent were aware of condoms and 77.9 percent of the respondents reported procuring condom from a pharmacy or a medial shop making it the most common place of procurement. The other common places for procuring condoms are Clinic/Hospital (71.3 percent), Family planning centre/ Clinic (58.1 percent), Condom bank / Vending machine (44.3 percent), and Sexual partner (27 percent).

On further analysis based on residential status, it was observed that access to condoms is lower in rural areas as compared to urban areas.

♦ Awareness about STIs, Reported STI Symptoms and treatment seeking behavior

To assess the levels of awareness of STI, the respondents were asked if they had heard of any diseases other than HIV or AIDS that could be transmitted through sexual contact. The data pertaining to same is given below in graph:

At an aggregate level, 30.2 percent of the respondents were aware of sexually transmitted diseases. Male youth were more aware of STIs (36.6 percent) as compared to female youth (23.2 percent).

About 28.4 percent respondents reported that they were aware that burning pain during urination was one of the symptoms of STI among women. About 16.5 percent respondents reported that they were aware of genital discharge as STI symptom among women. Similar trends were found in case of symptoms of STI among men, where about 31.6 percent respondents reported burning pain during urination as one of the known symptoms.

Experience of STI Symptom

All respondents were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain in the one year prior to the survey. Following table gives the proportion of youth who have experienced these STI symptoms:
It was reported that 1.6 percent of all the respondents had foul smelling genital discharge (thick yellowish/greenish discharge) in the one year prior to the survey. This STI symptom was reported to be present most in urban females (2.6 percent) as compared to other sub categories differentiated on the basis of gender and place of residence. Further, 0.9 percent of all the respondents reported that they had an ulcer or sore in their genital area in one year prior to the survey. About 2.3 percent of rural male respondents reported the same.

**STI treatment from qualified medical practitioner**

All respondents who had reported any STI symptom were asked the nature of treatment they sought when they last experienced a STI symptom. Since the base is low, a detailed analysis was not done. More than three out of four did not give a response. Around 17.2 percent reported going to a private clinic and 13.8 percent reported going to a government hospital. Around 3.4 percent reported not seeking any treatment during their last episode of STI.
Some female respondents preferred Government facilities because of availability of nurses or lady doctors, while male respondents preferred private hospitals because of better quality of treatment.

“Primary health care centre because nurse are there and also doctors are ladies.”

“Nurses in private hospital give more attention as compared to nurses in govt. hospitals. Private Doctors are more careful than govt. doctors.”

“Primary Health care centers distribute medicines to those mothers who have HIV and are pregnant and if its given to kids they will be prevented from HIV.”

♦ Stigma and Discrimination

HIV infection is widely stigmatized, because of its association with sexual behaviour that may be considered socially unacceptable (such as prostitution, substance abuse etc.). Stigma and discrimination constitute one of the greatest barriers in effectively dealing with the epidemic.

A set of statements was administered to all the respondents to assess the level of discrimination among respondents. Following table represents the respondent’s opinion on their unwillingness to interact with a HIV infected person under different circumstances:

![Figure 10.7: Stigma and discrimination indicators (in %)](image-url)
About 20.6 percent youth reported that community will allow HIV/AIDS patients to stay in the village. The unwillingness to take care of HIV infected family member/relative / friend at home was reported by 11.9 percent. Nearly one third (27.6 percent) of all respondents reported that they would be unwilling to share food with HIV/AIDS patient. It was noted earlier that sharing food with PLHA transmits HIV virus is a misconception prevalent among respondents which was reported by 19.5 percent respondents and therefore, it might be a reason for a negative attitude towards PLHA. Further, it was reported that 22.8 percent of the respondents were unwilling to buy fruits or vegetables from a shopkeeper or food seller if she or he had HIV/AIDS.

It is believed that the PLHIV needs to be given necessary care but at the same time the society also shows stigmatized behaviour towards the PLHIV.

“I will not behave like will not touch or will not eat in his plate, because touching and eating together or washing his clothes will not infect me.”

“The society will not let a PLHIV live peacefully, which in turn will affect him/her and may even abet them to commit suicide.”

“We avoid proximity to such people as they may infect us too.”

“Very few people may help such positive people, may be 1 in 100.”

♦ Risk Perception

Risk Perception for community members

All the respondents were asked the risk they perceived about people like them contracting HIV/AIDS. The responses were coded on a four point scale ranging from very high to moderate to low to no chance.

It was reported that a majority (67.5%) of the respondents thought that people like them did not have any chance of contracting HIV/AIDS. This proportion was reported to be highest among rural male youth (73.2 %). 2.4 percent of urban male youth reported to perceive people like them at risk of infection.
**Self Risk Perception**

The respondents were also asked if they perceived themselves to be at the risk of contracting HIV/AIDS.

It was reported that 2.2 percent of all the respondents perceived that they were at the risk of contracting HIV/AIDS. The proportion of male youth respondents perceiving themselves at the risk of HIV/AIDS was 2.7 percent and that of female youth was 1.6 percent. In urban areas, this proportion was 2.9 percent and in rural areas the proportion was 1.2 percent. The category of respondents that reported highest self-risk was urban male youth (3.5 percent). This corresponds with those perceiving others like them to be at risk of infection.

**HIV Testing**

The respondents were asked about their awareness of HIV testing and their test taking behavior. The respondents who were aware of testing were asked if it was possible for them to take a HIV test and further probed to know if they had ever taken the test and their experience regarding the same.

In BSS 2009, close to four out of ten respondents (40.5 percent) reported that they were aware of any HIV testing facility. The proportion was higher among the male respondents (47.8 percent) as compared to female respondents (32.5 percent). Around half (50.6 percent) reported that it was possible for them to take a confidential HIV test. A higher proportion of male youth (60.4 percent) reported about the possibility of taking a test as compared to female youth (39.8 percent).

This question was administered carefully without asking the respondent for their HIV test results. About 2.5 percent of all the respondents reported having ever taken a HIV test. It was reported that 3.7 percent of the male respondents had ever taken the test, in comparison to 1.3 percent of female respondents.

Majority of respondents reported that they visited Government hospital for HIV testing (69.7 percent), followed by private hospital which was reported by 17.4 percent and 11.9 percent respondents reported that test was taken at NGO centres.
The respondents who had taken the test were asked if they had taken the HIV test voluntarily or whether they were referred. At the aggregate level, among respondents who had ever taken the HIV test, it was reported that 65.1 percent had taken the test voluntarily and about 28.4 percent respondents reported that they were referred. It may be noted that less proportion of female respondents (50 percent) took voluntary HIV test as compared to male respondents (69.9 percent).

Further, it was also reported that a majority (77.1 percent) of the respondents who reported to have ever taken a HIV test also reported to know their test results. A higher proportion of rural male respondents (82.1 percent) reported that they got to know about their HIV test result as compared to rural females (64.3 percent).

**Exposure to Intervention Programme**

Inter Personal Education (IPE) are of two types, namely IPE on STI/HIV/AIDS prevention and IPE on use of condoms to prevent STI/HIV/AIDS. All respondents were asked if they were approached in the past one year by any individual for IPE. It was reported that 6.1 percent of all the respondents had received IPE on STI/HIV/AIDS prevention. Urban males represented the category of respondents which had highest exposure (7.3 percent) to IPE on STI/HIV/AIDS. The exposure to IPE on STI/HIV/AIDS was comparatively lower in rural areas (4.9 percent) as compared to urban areas (7 percent).

In addition, it may be noted that IPE on condom use, that use of condoms is the means to prevent HIV/AIDS/STIs was reported by 5.5 percent, which was relatively lower than the IPE on HIV/AIDS/STIs. It was also reported that 7.8 percent of male respondent had received IPE on condom use in comparison to 3.0 percent of female respondents. A comparatively higher proportion of urban males reported to have received IPE on condom use (8.9 percent).

It was reported that 69.3 percent of all the respondents who were educated on HIV/AIDS/STIs were aware of the government programme for free HIV/AIDS treatment. This proportion was reported to be relatively higher among urban respondents (71.3 percent) in comparison to rural respondents (66.5 percent). About 9.2 percent respondents reported that they have attended / participated in campaign / meetings on STI/HIV/AIDS.
Awareness of Government Programmes

The following table presents awareness levels among respondents about various government programmes:

![Figure 10.8: Awareness of government progress (in %)](image)

It was reported that 69.3 percent of all the respondents were aware of the government programme for free HIV/AIDS treatment. This proportion was reported to be relatively higher among urban respondents in comparison to rural respondents.

Approximately half (51.1 percent) of all the respondents reported that they were aware that the government provides counseling and confidential testing if one wants to know one’s HIV status. The proportion of awareness levels for this government programme was highest among urban males and lowest among urban females.

It should also be noted that 55.5 percent of the respondents were aware of the government programme for STI treatment.

50.1 percent of respondents were aware of the government programme to prevent transmission of HIV/AIDS.
The Behavioral Surveillance Survey for Maharashtra in 2009 covered four Core Group population (FSW BB, FSW NBB, MSM and IDU), three Bridge Group population (CFSWs, TDH and SCMM) and two General population groups (GP & Youth). Some of the key questions were kept consistent allowing comparison across the groups, while some were customized to elicit responses pertinent to the group. This chapter attempts to provide a snapshot view of key Indicators across the groups.

Knowledge Indicators

Knowledge of HIV & STI

The questions assessing the knowledge of HIV among the respondent groups ranged from general ones like ‘Have heard of HIV/STI’, to more specific like ‘Different modes of transmission’, ‘Methods of prevention’, ‘Symptoms of STI in men/women.’

More than 90 percent of respondents across all the groups have heard of HIV, the lowest being among youth group. This does not indicate complete knowledge about HIV, its modes of transmission and prevention as these indicators are at lower levels and show little variations across the groups. Moreover the respondents stating ‘have heard of STI’ is comparatively lower for each of the groups, especially bridge groups.
The knowledge on mode of transmission from mother to child and through breastfeeding is less among all the groups. However these two indicators are comparatively higher among GP groups. Likewise abstinence as method of prevention is reported by higher proportion of GP & Youth, while correct and consistent condom use and avoiding sharing of needles is reported by more proportion of Core Group respondents.

The knowledge of unprotected sex as mode of transmission and prevention by using correct and consistent condom during every encounter is marginally low among SCMM 92 percent and further low among GP and Youth. Further there is a gap between these two indicators among the GP groups, thereby indicating that though knowledge about transmission through unsafe sex exists, it is not correlated to preventive measure of using condoms at every sexual encounter.

Myths & Misconceptions

Various myths and misconception persist among people. The various mode of transmission were recorded and incorrect ones were classified as myths and misconceptions. The three topmost misconceptions stated by respondents across the groups are presented below:

The above graph indicates that among the core groups and Migrants, the misconceptions are less and the knowledge levels are also more. The incorrect information about HIV transmission is highest among Clients of FSWs.
Interventions need focus on providing comprehensive knowledge about modes of transmission and prevention to all groups and address the myths and misconceptions adequately. Information on STIs and their importance with relation to HIV should be simplified and disseminated using effective strategy.

**Awareness about HIV Testing and place for testing**

Various interventions aim at identifying high risk segment among each of the target population and motivating them to test for HIV. The respondents were asked if they were aware about HIV testing and the place where testing is done.

![Figure 11.3: Awareness about HIV Testing and place for testing (in %)](image)

The knowledge about HIV testing is relatively high in the Core groups and Clients of FSW. However the gap between the awareness of testing and place of testing is evident, which gets wider among IDUs and all the Bridge groups.

In case of anyone wanting to get tested, they need to have knowledge about the testing Centres and hence spreading the information about the same is imperative for increase in service uptake.

♦ **Behavior Indicators**

The survey covered various behavioral aspects; type and number of sexual partners, frequency of sexual encounter and condom use, treatment seeking behavior for STI and HIV test taken.
Involvement in sex with various types of partners among Core Groups

Each of the target groups indulge in sex with various types of partners. For the purpose of survey, the broad classification was made on the basis of financial transaction and frequency of sexual activity with the partners. The frequency was also used to determine the reference period for indulgence in sex with various types of partners. Accordingly the reference period for SWs is one week, MSM is one month and IDUs is one year.

**Figure 11.4: Involvement in sex by FSWs in last one week (in %)**

**Figure 11.5: Involvement in sex by MSM in last one month (in %)**

*Base: N=3881*
As seen above, the FSWs indulge in sex more with occasional paying clients, while the sexual behavior among MSM & IDUs is not dominated by commercial partners. However, in case of SWs the sexual involvement with non paying partners is also quite significant.

**Involvement in sex with various types of partners among Bridge Groups**

The bridge groups are so called as they form a route of transmission between the Core Group and general population by indulging in sex with both commercial and non commercial partners. The common sexual partners of the bridge group population are Commercial in which sex is purchased, Non Commercial but occasional in which sexual indulgence is mutual involving no financial transaction and Regular partner who could be spouse or girl friend.
Though more than 45 percent of the bridge group population indulges in sex with CSWs (except for CFSWs), more than 50 percent also indulge in sex with their regular partners.

**Correct and consistent condom use among Core Groups**

The knowledge among Core Group population about consistent condom use as method of prevention and unsafe sex as one of the mode of transmission is high. Direct and indirect questions were asked to elicit whether the respondents put this knowledge into practice by using condom every time they have sex.

![Figure 11.8: Consistent condom use among FSWs in last one month (in %)](chart1)

![Figure 11.9: Consistent condom use among MSM in last one month (in %)](chart2)
Though the correct and consistent condom use is high with commercial partners, it is low with non paying partners (who are regular partners) among FSWs and regular partners among MSM & IDUs.

Correct and consistent condom use by Bridge Groups

The knowledge among bridge groups about use of condoms is high and their indulgence in sex is high with both commercial and regular partners.

The correct and consistent condom use is almost 90 percent and above with commercial partners. However despite high levels of indulgence with regular partners the consistent condom use is low with them,
thereby posing threat of spread of infection from commercial to regular partners in case the Bridge Group population gets infected.

*This indicates the need to foster behavior change encouraging use of condoms during every encounter, irrespective of the type of partner.*

**Seeking treatment from Qualified Practitioner for STI**

The level of awareness about STI is low among all the groups, especially the bridge and general population groups. STI symptoms have been reported by a marginal proportion of respondents. Though the base is small, in order to assess treatment seeking behavior for STI, the proportion of those who sought treatment from qualified practitioner is presented here:

The highest proportion of respondents seeking treatment from Qualified Practitioners is Truck Driver & Helpers. This could be attributed to availability of STI clinics at various truck terminals.

*As the awareness levels are low, both information and access to service needs to be improved.*
Testing for HIV among all the Groups

The knowledge about HIV testing is high among Core Groups and moderate among Bridge Groups as seen above. The respondents who were aware of HIV test were asked if they had ever taken the test.

The testing pattern is not consistent with the knowledge levels as relatively high proportions of Bridge Group population are aware of testing. The low levels of HIV testing by Bridge Groups could be due to varied level of risk perception.

Attitudinal Indicators

Attitude is both dependent and independent of knowledge and behavior. The survey tried to capture few attitudinal indicators like risk perception. The extent to which respondents perceive themselves to be at risk of HIV infection is presented below:
NBB FSWs perceive themselves to be at risk of HIV infection the most as compared to any other groups. This could be attributed to their high level of knowledge about modes of transmission and methods of prevention, due to which they realize that they are at risk of infection. Moreover the consistent condom use with various partners is marginally less than that among BB FSWs. However this is not reflected in HIV testing behavior as more proportion of BB FSWs test for HIV than NBB FSWs.

Moderate levels of awareness and use of condoms may have influenced self risk perception among MSM & IDUs leading to very few of them testing for HIV. The extremely low levels of self risk perception among the bridge groups compounded with their high risk taking behavior could affect the dynamics of epidemic of HIV.

**Exposure to Interventions**

Information on HIV/AIDS is disseminated through various mediums targeted at various groups. Only two indicators of having received any information on HIV/STI/AIDS through billboards/posters/leaflets and having attended any meeting/program/campaign on HIV/STI/AIDS have been considered for comparison across groups.

![Figure 11.15: Exposure to Interventions (in %)](image)

Large proportions of Core and Bridge Group members have received information on STI/HIV/AIDS from posters/billboards/leaflets. Very few bridge group members reported to have attended any meetings or campaigns. The levels of exposure to interventions commensurate with the knowledge levels among bridge group population.
Recommendations

- In spite of the high level of awareness on HIV/AIDS, a high proportion of respondents have reported misconceptions with regard to the means of transmission and mode of prevention. As such the programmes undertaken in this direction should focus on reducing misconceptions on HIV/AIDS.
- There is a need for greater intervention to impart knowledge on the correct modes of HIV/AIDS transmission (with special emphasis on the vertical transmission and from infected mother to her new born child through breast feeding).
- Knowledge and treatment seeking behavior with regard to STIs needs to be improved for all categories.
- There is a need to address the stigma & discrimination especially physical contact with infected person.
- Though last time condom use is high, the consistent use of condom during every sexual encounter is reportedly lower among all the groups. In order to reduce and reverse the HIV/AIDS epidemic, it is important that consistent condom use is practiced with all partners.
- The most common medium of information about STI/HIV/AIDS is through billboards/hoardings/posters/leaflets. It is therefore essential to make extensive use of this medium and strengthen interpersonal communication.
- Campaigns/meetings on STI/HIV/AIDS should be leveraged to reach out to various target groups with correct and appropriate messages, especially targeting various misconceptions and stigma & discrimination.