ROUND 1, 2005-06
SUMMARY REPORT - PUNJAB

INTEGRATED BIOLOGICAL & BEHAVIORAL SURVEILLANCE

NATIONAL AIDS CONTROL PROGRAM
PUNJAB AIDS CONTROL PROGRAM
CANADA – PAKISTAN HIV/AIDS SURVEILLANCE PROJECT

May 2006
2005 - 06

ROUND 1 SUMMARY REPORT - PUNJAB

LAHORE, FAISALABAD, MULTAN
1. INTRODUCTION

The findings presented in this report are part of the round one surveillance activities carried out in 03 cities of Punjab by the National AIDS control Program / Punjab AIDS control Program through its HIV/AIDS Surveillance project (HASP). The purpose of present study was to map the vulnerable population like Injecting Drug Users (IDU), Female Sex Workers (FSW), Male Sex Workers (MSW) and Eunuch Sex Workers (ESW) in Punjab. After mapping behavioral and serological data was collected for these vulnerable groups in order to monitor the epidemic in the province.

The present study was conducted in three major cities of Punjab. The city of Lahore capital of the Punjab, with a population of approximately 80 million, is the second largest city of Pakistan and occupies a central position is generally called 'The Heart of Pakistan'. Faisalabad's population is well over 30,00,000 and offers a huge agricultural market and a hub of textile production in Pakistan. It is aptly known as the Manchester of Pakistan. Multan, an ancient city lies in the center of country in south central Punjab province, just east of the River Chenab. Multan, the 'City of Pirs and Shrines' is a prosperous city of bazaars, mosques, shrines and superbly designed tombs.

2. THE MAPPING STUDY

Data was collected at two levels: Level-1 and Level-2. During L1 interviews were conducted with Secondary and Tertiary key informants to provide the locations and approximate numbers of each high risk group and at Level-2 interviews were taken from primary key informants for validation of spot of level 1, estimates and type of activity.

For the purposes of present study, Lahore, Faisalabad and Multan were divided into 40,18 and 20 zones (respectively). A geographical mapping approach was followed to gather data and understand the risk situation in a given vulnerable population. Pre-mapping exercise began on the 29 August to 5th of September, 2005. Level data was collected from 15th of September 2005 to 22nd September 2005 simultaneously at all three sites. This was followed by level-2 data collection from 25th September to first week of October in all three sites.

Monitoring was performed by the principle investigators, field coordinator and by the provincial surveillance officer and study coordinators. Data was double entered in Epi data software and analyzed by using MS-Access.
2.1 Mapping Results

- The total number of spots identified at Lahore, Faisalabad and Multan were 4047, 1905, 3330 respectively.
- High Risk Groups comprised of 71% FSWs, 13% IDUs, 10% ESWs and 6% MSWs in Lahore.
- Estimated availability of all four HRGs is about 53% IDUs, 21% FSWs, 15% ESWs and 11% MSWs in Faisalabad.
- Similarly estimated availability of all four HRGs is about 48% FSWs, 22% MSWs, 17% ESWs and 13% IDUs in Multan.

2.1.1 Injection Drug users

- A total number of 2567 with range of 1926 to 3193 IDUs at 309 spots were estimated at Lahore.
  - IDUs comprised of 13% of total HRA in Lahore.
  - Street-based IDUs were mainly found in Karim Park, (672) with 22 spots in total. Other IDUs were mainly concentrated in zone-38 named Race club, Kot lakhpat (561) with 8 spots only.
  - A total number of 4640 to 6287 IDUs at 468 spots were estimated at Faisalabad.
  - IDUs comprised of 53% of total HRA in Faisalabad.
  - Street-based IDUs were mainly found in Zone-7 i.e. Ghulam Muhammadabad with 53 spots in total with the range of 564 to 775 with a total of 669. Other IDUs were mainly concentrated in zone-3 Allama Iqbal Colony, Batala Colony, Sarfraz Colony with 26 spots ranging from 382 to 470 with total of 426 IDUs.
  - Another category which was identified among IDU in Faisalabad was of power loom workers. Seven such spots were identified with the range of 195-243.
  - A total number of 556 to 815 IDUs with total of 685 at 187 spots were estimated at Multan.
  - IDUs comprised of 13% of total HRA in Multan.
  - Street-based IDUs were mainly found in Bohar Gate ranging from 87 to 120, with 14 spots in total. Other IDUs were mainly concentrated in zone-8 named Multan Railway station, ranging from 60 to 85 with 22 spots only.

2.1.2 Female Sex Workers

- Estimates of Street-based FSW (SBFSWs) in 40 different zones of Lahore were 3144 (ranging from 2666 to 3621) with total 488 spots.
The largest concentrations of SBFSWs were seen in Zone 9, Karim Park ranging from 282-371 with 22 total spots. Second largest estimates were found in Zone 28 named as Mughal Pura ranging from 159-223 with total of 28 spots.

Estimates of Home Based Female sex Worker (HBFSWs) were as 10576 ranging from (9017 to 12136) with total 1047 spots. Maximum numbers of Home Based Female sex Worker (HBFSWs) were also found in Zone 19 named Evernew Studio estimating 832 ranging from (739-925) with total 26 spots.

While SBFSWs are usually full time FSWs and get their clients from various pick up points at the street, Home based FSWs are usually part time sex workers who operate whenever required. These FSWs usually have families and are based at their own houses. The clients are acquired from mobile phones and other network members. Sex work takes place either in clients home or hotels.

The total of 448 Brothel based FSWs were identified in only one zone named as Taxali Gate.

FSWs availability of different topologies is 75% FSWs at home, 22% in streets and 3% on brothel.

Estimates of Street Based FSW (SBFSWs) in 18 different zones of Faisalabad were as 1188 ranging from (905 to 1472) with total 320 spots.

The largest concentrations of SBFSWs were seen in Zone 8, Razabad, Afghanistan, Madanpura ranging from (69-203) with 18 spots. The second largest was in Zone 9 Ghantaghar, Model Town as 124 ranging from (103-146) with total spots 28.

Estimates of Home Based Female sex Worker (HBFSWs) were as 851 ranging from (693 to 1009) with total 181 spots. Among HBFSWs highest estimate lies in Zone 6 Sher Singhwala, Gulfishan Colony with estimate 106 ranging from (87 to 185) with total 19 spots. The second highest was found in Zone 1 Jhang Rd, Nisar Colony, Ayub Colony with 94 estimates ranging from (75-113) with 23 spots.

There is no brothel based activity at Faisalabad.

FSWs availability of different topologies is 58% HBFSWs, 42% SBFSWs.

Estimates of Street based FSW (SBFSWs) in 20 different zones of Multan were as 1299 ranging from (1059 to 1538) with total 293 spots.

The largest estimate 164 was observed in Zone 19 named New Multan ranging from (138-191) with 30 total spots. The second largest estimate 145 was followed in Zone 8 named Multan Railway Station ranging from (119-170) with total 29 spots.

Estimates of Home Based Female sex Worker (HBFSWs) were as 1197 ranging from (962 to 1431) with total 240 spots. The highest estimate lies in Zone 8 named Multan Railway Station equal to 163 ranging from (138 to 187) with total 31 spots. The second highest was found in Zone 19 named New Multan equal to 125 ranging from (101-149) with 20 spots.

The total of 62 Brothel based FSWs ranging from (55-68) were identified in only two zones named as Multan Railway Station and Haram Gate.
2.1.3 Male Sex Workers

- Estimates of MSW in all zones of Lahore were 1268 in total ranging from (1023 to 1500) with total 233 spots.

- Highest estimates of 248 MSW were found in zone -9 named KarimPark/DataDarbar with total 5 spots ranging from (205-291) followed by second largest estimate of 111 ranging from (94-128) were found in zone-10 named Taxali Gate with total 6 spots.

- No further subtypes among MSWs were seen.

- Estimates of MSW in all 18 zones of Faisalabad were estimated as1070 in total ranging from (853 to 1288) with total 178 spots.

- Highest estimates amounted to be 165 ranging from 122-195 were found to be in zone 10 Agri Univ, Islamnagar, Mai Di Chugi with total 24 spots followed by second largest estimate zone-7 Ghulam Muhammaddabad in which estimate was 148 in total ranging from (122 to 173) with total 21 spots.

- No further subtypes among MSWs were seen.

- Estimates of MSW in all 20 zones of Multan were 1136 in total ranging from (858 to 1414) with total 335 spots. Highest estimates of 120 ranging from (95-144) were found in zone -5 named Shershah Road with total 29 spots followed by second largest estimate in zone-11 named Harm Gate (east) with number 119 ranging from (92-146) with total 32 spots.

2.1.4 Eunuch Sex Workers / Hijras

- The total estimates of ESW in Lahore were 1928 ranging from (1655-2185) at 245 spots of all zones. The highest estimate of ESW were found in zone 10 named Taxali Gate with 498 ranging from (435 to 560) with 21 spots in zone 10 followed by second largest estimate in zone 1 at location named Shahdra Town North equal to 205 ranging from (177-233) with total 10 spots.

- Total estimates of ESW in 18 zones of Faisalabad are 1514 ranging from (1282 to 1746) at 195 spots. The highest ESW were found in zone 14 Gulistan Colony, Farooqabad with estimates of 192 ranging (171 to 212) with 11 Spots followed by second largest in zone 6 Sher Singh Wala, Gulfishan Colony with estimates 164 ranging from (138-190) in 25 spots.

- Total estimates of ESW in 20 zones of Multan are 890 ranging from (668 to 1112) in total 264 spots. The highest ESW were found in zone 11 named Haram Gate (east) equal to 115 ranging from (91 to 139) with 27 spots followed by second largest estimate in zone 5 named Shershah Road equal to 80 ranging from (59-100) with 22 spots.

2.1.5 Salient Features

The number of IDUs is highest at Faisalabad and lowest at Multan. There are no brothel based FSWs in Faisalabad. All other High Risk Groups are highest in Lahore.
Table 1: Distribution of High Risk Groups in Lahore, Faisalabad and Multan

<table>
<thead>
<tr>
<th></th>
<th>IDUs</th>
<th>FSWs</th>
<th>ESWs</th>
<th>MSWs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lahore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Spots</td>
<td>309</td>
<td>1542</td>
<td>245</td>
<td>233</td>
<td>2329</td>
</tr>
<tr>
<td>Minimum</td>
<td>1926</td>
<td>12066</td>
<td>1655</td>
<td>1023</td>
<td>16670</td>
</tr>
<tr>
<td>Maximum</td>
<td>3193</td>
<td>16270</td>
<td>2185</td>
<td>1500</td>
<td>23148</td>
</tr>
<tr>
<td>Average (% of HRGs)</td>
<td>2560 (12.8)</td>
<td>14168 (71.08)</td>
<td>1920 (9.63)</td>
<td>1262 (6.33)</td>
<td>19931</td>
</tr>
<tr>
<td>Faisalabad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Spots</td>
<td>461</td>
<td>501</td>
<td>195</td>
<td>178</td>
<td>1335</td>
</tr>
<tr>
<td>Minimum</td>
<td>4445</td>
<td>1598</td>
<td>1282</td>
<td>853</td>
<td>8178</td>
</tr>
<tr>
<td>Maximum</td>
<td>6044</td>
<td>2481</td>
<td>1746</td>
<td>1288</td>
<td>11559</td>
</tr>
<tr>
<td>Average (% of HRGs)</td>
<td>5244 (53.14)</td>
<td>2040 (21.67)</td>
<td>1514 (15.34)</td>
<td>1070 (10.84)</td>
<td>9868</td>
</tr>
<tr>
<td>Multan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Spots</td>
<td>187</td>
<td>536</td>
<td>264</td>
<td>335</td>
<td>1322</td>
</tr>
<tr>
<td>Minimum</td>
<td>556</td>
<td>2076</td>
<td>668</td>
<td>858</td>
<td>4158</td>
</tr>
<tr>
<td>Maximum</td>
<td>815</td>
<td>3037</td>
<td>1112</td>
<td>1414</td>
<td>6378</td>
</tr>
<tr>
<td>Average (% of HRGs)</td>
<td>685 (13.51)</td>
<td>2557 (50.45)</td>
<td>690 (13.61)</td>
<td>1136 (22.41)</td>
<td>5068</td>
</tr>
</tbody>
</table>

3. Integrated Behavioral & Biological Surveillance

The methodology adopted for the IBBS (integrated biological & behavioral surveillance) was the same in all three cities. The main objectives of the study were biological testing for HIV and to analyze the behavior of the four high-risk groups (FSWs, MSWs, ESWs and ID users) toward their sexual life and knowledge about the sexually transmitted diseases and HIV/AIDS. Pre-designed, ethically approved questionnaire was administered after taking informed consent for the behavior study and dried blood technique was used for taking blood.

3.1 Sample Size & Methodology

Antecedent mapping findings provided a list of hotspots and sampling frame. Subjects were recruited from these spots by employing different sampling techniques. Sample size in each city is given below.

Table 2. Sample Size and Sampling Technique used for each group

<table>
<thead>
<tr>
<th>Group</th>
<th>Lahore</th>
<th>Faisalabad</th>
<th>Multan</th>
<th>Sampling Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDU Street/home</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>Time Location Cluster Sampling (TLC S)</td>
</tr>
<tr>
<td>FSW Total</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>Systematic Random at Lahore</td>
</tr>
<tr>
<td>• Brothel</td>
<td>100</td>
<td>Nil</td>
<td>14</td>
<td>Take all in Multan</td>
</tr>
<tr>
<td>• Street</td>
<td>150</td>
<td>230</td>
<td>188</td>
<td>TLC S</td>
</tr>
<tr>
<td>• KK/Home</td>
<td>250</td>
<td>170</td>
<td>198</td>
<td>RDS</td>
</tr>
<tr>
<td>MSW</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>RDS</td>
</tr>
<tr>
<td>ESW</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>TLC S</td>
</tr>
</tbody>
</table>
### 3.2 SUMMARY FINDINGS

#### 3.2.1 Injection drug users

- Among IDUs in Lahore 100 (25%) were 31-35 years old. In Faisalabad 109 (27%) were 26-30 years old and in Multan 140 (35%) were 26-30 years.

- Marital status varied in three cities as in Lahore 181 (45.3%) IDUs were unmarried and 182 (45.5%) were married. In Faisalabad 162 (40.5%) were unmarried where as 233 (58.3%) were married and in Multan 210 (52.5%) were unmarried where as 125 (31.3%) were married.

- Time as an IDU was five or more years, in Lahore 212 (53.0%). In Faisalabad up to five years was the predominant time period 222 (55.5%) and in Multan 159 (39.8%) are IDUs for 3-4 years.

- Last injection with a new syringe was reported by 373 (93.3%) IDUs in Lahore while 27 (6.8%) informed that they did not use a new syringe in their last injection. In Faisalabad 309 (77.3%) IDUs informed that they used a new syringe for an injection where as 91 (22.8%) reported not using a new syringe in their last injection and in Multan new syringe was used for injection by 210 (52.5%) and 188 (47.0%) used an old one.

- Sexual activity with wife or another woman in the past month was reported by 199 (52.0%) IDUs and condom use in the last sexual act was reported by 77.0 (38.7%) respondents in Lahore. In Faisalabad 135 (48.0%) IDUs informed that they were involved in sexual activity where as condom use was reported by 50 (37.0%) respondents and in Multan 130 (84.7%) IDUs involved in sexual activity where as condom use was reported by 23 (20.4%).

- Sexual act with a hijra in Lahore in the past month was reported by 86 (21.5%) IDUs and 20 (23.3%) used a condom while 58 (14.5%) informed that they used a lubricant in the same act. Sexual activity with a hijra in Faisalabad was informed by 29 (7.3%) IDUs and 3 (10.3%) used a condom where as 15 (3.8%) reported using a lubricant in the last act and in Multan Sexual activity with a hijra was informed by 79 (19.8%) IDUs and 7 (8.9%) used a condom where as 47 (11.8%) reported using a lubricant in the last act.

- Sharing of syringes and transmission risk of HIV was correctly identified by 262 (72.8%) IDUs in Lahore, 248 (81.8 %) in Faisalabad and 94 (39.8%) in Multan.
Among IDUs during past one month 182 (35.5%) at Lahore, 356 (91.5%) at Faisalabad and 344 (86%) at Multan used already “used” syringe for injection purpose. However, 27 (6.8%) IDUs at Lahore, 91 (22.8%) at Faisalabad and 188 (47%) at Multan reported that they used old syringe during last injection. Among those who shared 41 (21.8%) at Lahore, 86 (50.6%) at Faisalabad and 141 (41.1%) at Multan passed on either the equipment or syringe to another IDU for injection.

### 3.2.2 Female Sex workers

- The average age of FSWs in Lahore was 28 years, Faisalabad 27 years and 25 years in Multan.
- Punjabi 93% was the predominant ethnicity in Lahore and Faisalabad 81.3% however in Multan, Saraiki speaking were 44.5% followed by Punjabi speaking FSWs 38.3%.
- In Lahore average monthly income of all sub types of FSWs was Rs. 8514, in Faisalabad average monthly income was Rs. 4900 and in Multan Rs. 1425.
- Number of years as an FSW varied. In Lahore 37.7% street and Home Based FSWs had been in sex work for more than five years time. In Faisalabad, street based 59.6% and home based 48.8% FSWs reported 1-5 years in sex work. In Multan, street based reported 1-5 years 53.7% and Home based 76.8% and at brothel 100% FSWs were in this profession for more than 5 years.
- For seeking clients, 51.8% of FSWs in Lahore, 42.0% in Faisalabad and in Multan 56.9% relied on pimp, aunty and guru a while in Multan 49.5% of street based FSWs seek clients by roaming.
- An average of 30 and above client per day was reported by 194 (48.5%) FSWs of Lahore, 10-19 clients per day at Faisalabad was reported by 167 (41.8%), where as in Multan 30 and above clients per month was reported by 320 (80.0%)
- Full time sex workers in Lahore, Faisalabad and Multan were 80%, 75% and 79.3% respectively
- In Lahore 272 (68.0%) reported condom use in last vaginal sex followed by 74 (18.5%) and 139 (34.8%) for Faisalabad and Multan respectively.
- Knowledge regarding HIV/AIDS transmission varied. For example when asked that “healthy looking person can carry HIV virus” was correctly replied by 45.0% in Lahore while 34.9% in Faisalabad and 38.7% in Multan.
- For the same question 49.6% Home Based FSWs in Lahore gave correct responses compared to 25.8% in Faisalabad and 47.6% in Multan and 66.7% brothel based FSWs correctly responded in Lahore compared to 44.4% in Multan.
### 3.2.3 Male Sex workers

- Average age of MSWs in Lahore and Faisalabad was 25 years at Lahore, 22 years in Faisalabad and Multan.
- In Lahore majority 105 (52.5%) were uneducated and 50 (25.0%) had attended primary school. In Faisalabad 40 (20.0%) were uneducated where as 49(24.6%) had attended primary school. In Multan 59 (29.5%) had not attended any school and 73(36.5%) had gone through primary school.
- Punjabi 183 (91.5%) was predominant language in Lahore where as in Faisalabad 100% spoke Punjabi. In Multan Saraiki 72 (36.0%) and Urdu 69 (34.5%) were the predominant ethnicities.
- Marital status in the three cities varied. Majority of MSWs in Lahore 147 (73.5%) were unmarried where as 48 (24.0%) were married. Major proportion of MSW in Faisalabad were unmarried 177 (88.5%) however 22 (11%) also reported being married. In Multan 146 (73.0%) were unmarried while 43 (21.5%) reported being married at the time of interview.
- In Lahore average monthly income of MSWs was Rs. 4515, Rs. 3256 in Faisalabad and in Multan it was Rs. 2942.
- Average number of years as an MSW was reported to be 5 and above years in Lahore by 122 (61.0%) respondents, 98 (49%) in Faisalabad and 99 (49.5%) years in Multan.
- In Lahore & Faisalabad average number of clients in a day by MSWs were reported to be 1-2 by 47 (23.5%) respondents and by 169 (84.5%) respondents in Multan.
- Condom use in last sexual act was reported by 43 (21.5%) and lubricant use by 99 (49.5%) MSWs in Lahore. In Faisalabad 44 (22.0%) reported condom use and 190 (95%) informed that they used a lubricant in last sexual act. In Multan condom use was reported by 52 (26.0%) and lubricant use was reported by 129 (64.5%).

### 3.2.4 Eunuch Sex workers (Hijra)

- Average age of ESWs in Lahore was 26 years, 27 in Faisalabad and 23 in Multan.
- The proportion of uneducated ESWs was highest in Lahore 120 (60%) and lowest in Multan 76 (38.0%).
- The average years for which they have been operating as ESWs were lowest in Multan (8 years) and highest in Lahore (11 years). On the other hand, age of first sexual intercourse was lowest in Faisalabad (14 years).
- Majority of hijras reported seeking clients on their own and roaming around on the street. In Lahore majority of clients 128 (64.0%) came through guru, at Faisalabad high proportion of clients preferred going to nightclubs and bars.
127 (63.5%) came through referral of old clients and in Multan predominantly 54.4% by roaming around. ESWs from all three cities reported an average of 1-2 clients per day.

- Although proportion of ESWs reported using condom was higher in Faisalabad 58 (29.0%) than in Lahore 6 (3.0%) and Multan 3 (1.5%) the data on possession of condom at the time of interview was comparable in the three cities. However, it is worth mentioning here that the use of lubricant while having sex was higher in Faisalabad 158 (79.0%) and Lahore 147 (73.5%) and the least in Multan 93 (46.5%).

**Table 3: A comparison of behaviors and practices among HRGs in Lahore, Faisalabad and Multan**

<table>
<thead>
<tr>
<th></th>
<th>Lahore</th>
<th>Faisalabad</th>
<th>Multan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FSWs</td>
<td>MSWs</td>
<td>ESWs</td>
</tr>
<tr>
<td>Average Age in Years</td>
<td>34</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Married (%)</td>
<td>45.5</td>
<td>24.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Per Month Income Pk Rs</td>
<td>3000</td>
<td>3500</td>
<td>3500</td>
</tr>
<tr>
<td>&gt; 20 Clients/month</td>
<td>60.8</td>
<td>3.5</td>
<td>22.0</td>
</tr>
<tr>
<td>Condom Use on last vaginal sex %</td>
<td>68.0</td>
<td>18.5</td>
<td>34.8</td>
</tr>
<tr>
<td>Condom Use on last anal sex %</td>
<td>54.2</td>
<td>16.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Condom Use on last oral sex %</td>
<td>21.2</td>
<td>12.9</td>
<td>5.6</td>
</tr>
<tr>
<td>Top 03 sources of condom</td>
<td>General Store 49.3</td>
<td>General Store 15.0</td>
<td>G. Store 15.0</td>
</tr>
<tr>
<td>Know of Sex Intercourse as a route of HIV transmission</td>
<td>92.6</td>
<td>67.7</td>
<td>78.2</td>
</tr>
<tr>
<td>Condoms protect against HIV</td>
<td>77.2</td>
<td>40.2</td>
<td>39.6</td>
</tr>
<tr>
<td>Know about STIs</td>
<td>85.5</td>
<td>45.5</td>
<td>62.5</td>
</tr>
<tr>
<td>Condoms protect against STIs</td>
<td>49.5</td>
<td>46.6</td>
<td>28.8</td>
</tr>
<tr>
<td>Suffered from STIs (6 months)</td>
<td>26.0</td>
<td>5.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Arrest (last 6 months)</td>
<td>14.5</td>
<td>18.0</td>
<td>13.5</td>
</tr>
</tbody>
</table>
3.3 Summary Results of Biological Surveillance

3.3.1 Lahore
Out of 400 IDUs at Lahore 14 (3.7%) were tested positive. The results of Biological testing are provided in the figure below.

![HIV status among HRGs in Lahore 2005-06](image)

3.3.2 Faisalabad
The results of Biological testing are provided in the Fig below. 13% of the total IDUs tested were HIV +ve (screened through ELISA and confirmed by Western Blot). Among other HRGs, HIV infection was seen in ESWs. 0.5% of ESW (01 out of 200) were found to be infected with HIV.

![HIV status among HRGs in Faisalabad 2005-06](image)

3.3.3 Multan
Only one IDU was tested positive at Multan.
4. **Comparison with previous studies**

So far many studies with the High risk groups have been conducted in Lahore. Nai Zindagi have conducted a mapping study of IDUs using the same tools in Lahore and Faisalabad in June 2005 in which 1754 -2110 IDU were identified in Lahore and 2400-2500 in Faisalabad. The results of present study at Lahore are quite comparable to the same. In Faisalabad, there could be some seasonal effects as the results of present study revealed more number in Faisalabad. In the present study HIV positive in Lahore there are 3.7% and at Faisalabad 13% which are again comparable with Nai Zindagi Study. Arjumand and Associates have conducted a mapping study of IDUs in Faisalabad in 2003. In the same study the number of IDUs reported are 2000, which is about 3000 lesser than this study. The reason for the same may be the time interval between two studies and the mapping technique adapted as in the present study the city was divided into 18 zones and the fieldwork was more extensive. All the spots were validated in this study. In case of FSWs, the results revealed that there are more than 2000 FSWs which is 1800 lesser than the number in Arjumand & Associates study and the number of ESWs and MSWs are higher than the results mentioned. The reason for the same again might be the mapping techniques used in this study.

Technical Alliance for Social Change conducted a behavioral mapping study in Lahore and Multan and according to the results of the same there are about 29000 FSWs in Lahore and 7200 in Multan which is on the higher side as compared to present study (14000 at Lahore and 2600 at Multan). Again there is difference of methodology in the present study. The cities were divided into smaller zones as compared to the shown in the TASC study and the time interval is also an important reason as that study was conducted in 2002.

Shivanda Khan and Tahir khilji conducted a study for mapping of MSM in 2002 and identified a total of 3000 MSM and 25000 zananas (ESWs), which is quite high, a number. In our study we have concentrated on MSWs and the number is quite comparable with the aforementioned study. The reason of the variation in the results could be the methodology adapted for present study and the time interval between two studies.

5. **Policy Implications**

Based on the results of the HIV test in Faisalabad (13.8% positive) and the number of IDUs, there is dire need to initiate some service delivery programmes on war footing basis in Faisalabad. In Lahore the positive cases in IDUs is increasing (3.3%). There are many different programmes running in the Provincial Metropolis including service delivery package, harm reduction and new syringes provision for the IDUs. Theses services are to be geared up and mass awareness programmes should be enhanced. As the IDUs have reported of having sex with commercial sex workers, therefore awareness programmes should be initiated for the female sex workers. In Multan though the magnitude is very low as one case of IDU has been detected but it is better to initiate the service delivery package should be initiated.

HRGs.