IBBA ROUND 2
Process Document Format for Cluster Surveys

Name of the State: **Tamil Nadu**

Survey Group: **MSM and Aravani**

Name of the District: **Chennai, Coimbatore, Madurai, Salem**

I. Survey Groups Details

a. Specify any changes to eligibility criteria and geographic boundaries from IBBA Round I *If no changes to eligibility criteria, record 'Same as Round I' in the table.*
Fill Geographic Boundary details as 'entire district' or specify the area for which the survey is applicable. Some surveys may have conducted sampling frame development for an abbreviated part of the district. Please fill the information on these towns/talukas by either listing towns included or towns excluded (specify which is listed).

Survey District	Survey Group	Eligibility Criteria	Geographic Boundaries
Chennai	MSM	Males aged 18 years or older who exchanged (bought or sold) sex in exchange for cash (or cash/kind) with male at least once in the past one month.	Entire Chennai district
Coimbatore	MSM		Entire Coimbatore district
Salem	MSM		Entire Salem district, (excluding Yercaud)
Madurai	MSM		Entire Madurai district
All 5 districts	Aravanis	Any individual who self identifies as Hijra / Aravanai and exchanged any type of sex for cash / kind in the last one month	Same as Round 1

b. Explain reasons for changes to eligibility criteria and/or geographic boundaries from Round I, if any.

The eligibility criteria used for IBBA RII was the same as in Round I of IBBA. Similarly there were no major changes in the geographic boundaries between Round I and RII

c. Explain reasons for abbreviated Geographic Boundaries if applicable for any survey.

Same as Round1

II. Sampling Frame Development (SFD) and Sampling in Field Work (FW)

a. Fill Table Below

Survey District and Group	Period of SFD	Site Definition	Period of FW	Type of Sampling	If CCS and TLCS* used to cover a group, provide IBBA1 and IBBA2 ratios of CCS:TLCS	
					IBBA 1	IBBA 2
Chennai	11 to 28 July 09		29-08-09 to 21-09-09	TLCS	Only TLCS	Only TLCS
Coimbatore	8-Jun-09 to 27-July-09		20-08-09 to 19-09-09	"	Only TLCS	Only TLCS
Salem	5-Feb-09 to 19-Mar-09		22-03-09 to 27-05-09	"	Only TLCS	Only TLCS
Madurai	6-Feb-09 to 19-Mar-09		25-03-09 to 01-06-09	"	Only TLCS	Only TLCS
Aravani (All 5 districts)	July - 09		04-08-09 to 28-08-09	"	Only TLCS	Only TLCS

** TLCS = Time Location Cluster Sampling *CCS = Conventional Cluster Sampling*

b. Explain reasons for changes in site definition or type of sampling from IBBA Round 1.

There were no changes in site definition or type of sampling between Round I and Round II

c. Describe at least three main issues that complicated collection of SFD information (e.g. identification of sites, turnover, mobility, site timing, site size) and explain how it was overcome.

1. We did not have the updated mapping information from Avahan SLP in Tamil Nadu in time for start of IBBA SFD. They completed mapping activity in December 2008 in all the 13 Avahan districts in the state, but the data was made available to us only in June 2009, by then we had completed SFD for 2 districts. Since we did not have the mapping data, we used the old mapping information (of hotspots) from 2004 the updated mapping data from IBBA RI. These two were used as the base list of hotspots for SFD exercise. In addition, in some districts we were able to collect some local information from the NGOs on newer additional hotspots, were also included in SFD exercise.

2. Good key informants & KPs were not always available at the sites when IBBA field staff visited the sites during the mapping updation. The teams were made to go back to the sites again and collect the data on the number of MSM at hotspots and the timings of operation of the sites when KPs were available, or take help of NGO field officer to identify a KP from the area for the right information. When we reviewed collected mapping data, we found there were major differences between what KIs reported & KP provided; in these cases, repeat visits were made and we considered information obtained from KPs

3. For a majority of hotspots the peak times were mostly in the evening or late night. In some cases the mapping team was instructed to revisit during operational time to collect the correct information from key population.

4. The nature of the MSM community created challenges for mapping. They were highly mobile at sites due to police and rowdies problem; this we realized early on, so we tried to do the mapping just prior to start the main survey; this was especially an issue in Chennai district.

5. Difficult to identify MSMs in hotspots, therefore we used MSM CLOs as much as possible. It was challenging to identify key informants who were aware of MSM activity in hotspots; so collection of mapping information took time and we had to ensure availability of a MSM CLO from the local area or took help of SLP field officers / outreach workers.

6. MSM in recent times have shown enhanced mobility and migration patterns. Moreover, clientele patterns were also changing with younger MSMs disclosing their status openly, hostels were emerging as sites, crowded areas such as sea front (beach, as in Chennai and railway tracks in Salem and Madurai) being common cruising and sexual encounter sites. Many MSMs used rented rooms or lodges for sex work and work in close coordination with Aravanis, even using their homes for having sex.
7. The Aravani / TG mapping data available had a lot of street based sties. But when these were visited, no Aravani's were found to be soliciting in the street. Rather there were homes near the given street where Aravani's practiced work from their homes. This issue had been identified during R1 and in R2 as well, during mapping updation, this was again identified and had to be addressed. An Aravani CLO was absolutely required in all the five districts to identify the street and home based locations. In some instances, like in Madurai district the home based sites were mapped as street based and the Research agency was asked to re-do the mapping to correct the information in SFD. Overall nearly 50% of the sites across districts were home based with the remaining being street based sites.

d. Describe at least 3 scenarios where it was difficult to apply sampling methodology for FW (e.g. very large sites, hostile sites, mobility, etc.) and explain how this was dealt with.

1. Since the timing of sites was largely during the evening and night time during the peak hours of MSM operation, we faced a lot of issues in getting cooperation and recruitment. This was especially a problem faced in Madurai district, where additional problems such as local festival, Koovagam festival for TGs/ MSM all took place during the survey period in the district. This was over come by extending the TLC timings before and after the time given in the sampling frame. Sometimes, appointments were also taken, where possible and appropriate.

2. The teams also faced problems with identifying the boundaries of the sites. During main field work, there were instances when the respondents were recruited from outside the boundaries of sites. Sometimes this was a problem of not having the site map, but at other times, the boundaries of the sites were not very clear and respondents shifted to locations in the vicinity of the TLC. This issue was overcome by ensuring that the field teams had their maps from SFD exercise; and when respondents were identified outside the boundaries as

shown in the map, we checked at the TLC as to whether the hotspot had actually shifted and then recruited the respondents.

3. Challenges were faced in applying sampling methodology in the large and crowded sites such as big bus stands and street based sites. The coverage area, that is the boundaries of the sites, were large and difficult to cover by one person so we had to place more than one field team member and two CLOs to cover such sites. Maintaining the count of the denominator was also difficult due to the high mobility of MSM in the sites. We segmented the sites at the time of field work and placed a minimum of two team members, one supervisor and one investigator / counter. Placing more than one CLO was difficult in many circumstances, but was done as much as possible. Recruitment and counting happened simultaneously in these segments. In most of these large sites we restricted the segments to two for ease of field work.

4. In some instances we also found that sites that were active during the SFD process were found to be dead during the field work, so these had to be listed as 0 TLCs.

e. Describe at least three main issues (not related to sampling of respondents) that complicated FW (e.g. timing, cooperation from community) and explain how this was overcome.

1. Getting the cooperation of MSM was a challenge in all the districts. Though community preparation activities were done systematically meeting with peer educators and ORW. A number of issues contributed to this:
    a. Timing of sites made it difficult for getting cooperation. Most sites were in the evening times when MSM were soliciting clients or picking up partners; We had to take appointments with respondents to come the next day; the teams had to make multiple visits to sites, and extend the timings of visiting sites, before and after TLC timing.

    b. There was information passed on in the community about the compensation was given in IBBA round I, which included Rs. 100 plus a hot pack. But in round II we only gave Rs. 100; this was thought to be inadequate and many MSM requested for the same compensation as in Round I. The only way we could overcome this was by explaining to the community that in RII we were unable to distribute hot packs or any alternatives, due to budgetary constraints. We also explained the same to the SLP NGO staff, field officers to explain to the community members, that it was still important for them to cooperate for IBBA.

    c. Since the MSM community is stigmatized, we had challenges in sites in identification of MSM at hotspots. Many times approached eligible respondents refused to being MSM. We had to always have CLOs and in some cases, CLOs familiar to the area. Having a CLO was very critical to getting cooperation of MSM at sites.

2. As was our experience in RI of IBBA, getting suitable clinic locations was a problem in all districts. It was not possible to set up clinics in government hospitals, as the CAB advised us against this during early stages.

The only feasible option was to get some rented places. In Tamil Nadu getting these involves giving a significant security advance etc.. Therefore for each district a maximum of two clinic locations were set up in the main city / town. All respondents recruited from the city / town locations were brought to these clinics. Sometimes, this involved traveling a distance of more than 10 kms to get to the clinic. This turned out to be a problem for getting cooperation of potential respondents many times. For sites which were located in rural areas, outside the main town, efforts were made to set up temporary clinics in the town. While most of the time this was possible, in some instances this was also a problem.

f. Describe strategies used to recruit respondents helped increase interest in the survey and minimize refusal rates.

We made sure that adequate community preparation activities were taken up during IBBA R2. In all the districts we met with the NGOs working in the community, the field teams as well as other project team members also met with peer educators and outreach workers and explained to them about IBBA. We took help from concerned CBO's in the districts to increase the interest of KP's in participating in IBBA survey. We sensitized about IBBA to community leaders. They helped significantly to create awareness among their communities about IBBA. During the formation of CAB and CMB in each district efforts were made to ensure key community leaders, NGO members, local official, community representatives were included, who would become spokespersons for explaining IBBA others in the district.

Recruitment of CLOs was done with the support of the NGO and MSM community in the districts. This allowed us to select CLOs who were more knowledgeable, aware of wide geographic area, were known in their community and themselves had a large network of MSMs they knew.

MSM interviewers were included in each of the field teams in all districts. They were identified and recruited in the beginning with the help of NGOs in the district and they participated in the main training. They also helped the other team members, on talking to MSM respondents and on asking sensitive questions during the questionnaire administration.

The other strategies that we used for recruiting and increasing cooperation were:

1. Using MSM CLOs familiar to the areas where recruitment was taking place
2. Field teams were trained to take care while explaining about survey procedures and to explain what IBBA was about and its benefits without causing anxiety about drawing of blood
3. We provided lunch to all the respondents when the interview timings were in the afternoon time
4. As much as possible the location of clinics were kept close to the TLC location and we arranged for pick-up and dropped by auto & call taxi
5. We motivated respondent by explaining about the free STI treatment and referrals.

g. Explain the main reasons that individuals refused to participate in the survey. Describe at least 3 scenarios where refusal rates were especially high, explain reasons for this and how it was overcome (e.g. with certain sub-groups of sample, types of solicitation points)

Main reasons for refusal were: the period of field work, timing of sites / field work and lack of time among MSM community, distance of clinics, insufficient compensation, fear of blood drawing, or just not interested in participating.

The field work in first two districts, Madurai and Salem was conducted between end of March and May 2009. Elections were held in the state, in these districts on May 13th which caused considerable problems in getting the cooperation of the MSM community. The level of election activity in these districts was visibly high during the course of field work, and we felt that this contributed to refusals to participate in IBBA. Further the Koovagam festival, a special festival for MSM and Transgender, was held in between the survey period in another district in Tamil Nadu. So many MSM and Aravanis in the districts traveled away from the district to Villupuram for this festival. We had to halt the survey for a period of 10 days during this time and then resumed field work after the festival period ended.

There was also a problem with collection of biological samples among MSMs in all districts, wherein there was difficulty in getting sufficient blood sample for testing. In some situations, even when sufficient blood sample was collected the sample could not be used/ tested as it was lyzed or high in fat content (lipemic). The lab technicians were provided refresher training and some of them removed in these situations and the problem of inadequate or lyzed sample was reduced; but the problem of lipemic samples continued to be a challenge. In both Salem and Madurai, due to the high refusals and loss of samples due to inadequate blood or lipemic sample, re-sampling had to be done for completing the survey.

In Chennai district, getting IBBA clinics in central location was a problem. It took nearly one month to establish one IBBA clinic and second was set up during the middle of the survey. Respondents from many parts of the district had to travel considerable distance to come to the IBBA clinic (1 to 1.5 hours); this was a major reason for refusal. Cost of setting up clinics was high and there was difficulty in getting rented places. A second clinic set up in the city had to be changed within a week of it being set up, as the community members in the neighborhood had a problem with the survey being conducted there and reported to the police. Within a day of this, another clinic was set up and survey was continued. In some instances the clinic space was shared with the FSW IBBA clinic, until a new clinic location was identified.

III. Stakeholder Involvement (SI)

Stakeholders include government officials/departments, Avahan program representatives, community members, Madams, Pimps, Brokers, Advocates, SACS, NGO representatives, etc.

a. Explain at least three major concerns raised by stakeholders and describe how each was addressed.

A major concern raised by stakeholders during IBBA RII was regarding the respondent selection and recruitment in Madurai district. It was felt by the NGO field officers that some

respondents were being recruited into IBBA more than once. This message was discussed by the community members at a meeting with the Avahan SLP, TAI at a meeting and the PD TAI called FHI Coordinator raising the concern about this issue and how it would affect the results. It was also raised that due to the compensation to respondents was an incentive to participate multiple times (creating duplicate samples).

We called CAB meeting and key representatives from the community were called. During the CAB meeting the members discussed the validity of the reports. The specific allegations could not be corroborated with evidence by those who made them. This was agreed upon by the members; they agreed that it was possible that this could have been some isolated incident on a specific day or two, and was not reason to suspect the entire field work. It was recommended by CAB members to isolate the specific duplicates and to disqualify them from the survey, and to continue the survey work, putting in place better monitoring mechanisms to ensure such issues do not happen again. CAB members recognized also that the survey would not be possible without providing the minimum compensation that was being provided to respondents and recommended that we continue to provide the Rs. 100 compensation to all respondents.

The CAB and community members were assured that every effort would be taken to discard the duplicates that no particular group would be recruited in a targeted manner and strict monitoring mechanisms would be put in place to ensure there are no duplicates or repeat respondents.

Measures put in place included:

- The Research Agency was asked to step up the field monitoring by district coordinators as well as by Research associates
- IBBA team doctors were put on alert to identify any respondents coming more than once
- NIE project team members were present in the sites on a very regular basis, ensuring that protocol procedures were being followed
- Random exit interviews were done with respondents immediately after the problem was identified
- Samples from the suspected time period were analyzed and discarded from the final sample, after consulting the required experts on the validity of doing this.

Besides the above the other common concerns raised by stakeholders included: Inadequate compensation, the long distances traveled to bring respondents to IBBA clinic and issue of field technicians who had trouble drawing blood which caused pain to some respondents.

b. Describe at least three scenarios of how SI facilitated the survey.

1. NGO field officers in SLPs, CLOs, and other community members provided support to the survey team for identifying the IBBA clinic locations in the district, MSM / Aravani interviewers and in the training aspects and even in identifying doctors for IBBA clinics. They also motivated the community to go to the referral clinics for collecting the syphilis test result provided by IBBA as a benefit to participants.

2. During community preparation and early phase of survey, the community members, NGO outreach workers provided support for helping to identify the most suitable CLOs for both MSM and Aravani surveys across the district.
3. Community members and CMB made visits frequently to clinic, sites and gave their valuable suggestions to improve the interactions with MSM/ Aravani community and in administration of questionnaire and collection of biological samples.

c. Describe at least two scenarios where SI complicated the surveys.

1. The MSM and Aravani community were very enthusiastic about IBBA, once they learned about it. Sometimes this created complications, for they had a tendency to encourage their community members to directly visit the IBBA clinic and or / recruited tried to recruit respondents voluntarily, not following the protocol for sampling. Their intention was to have their 'friends' gain the benefit of being part of IBBA to get the health check up and the referral for free syphilis screening and treatment. We had to repeatedly explain to them about the sampling procedure and why it was important to maintain the integrity of the survey results.
2. The other complication was maintaining confidentiality. The community members/ CLOs talked openly about who participated in the survey. While it was explained to them that it was to be confidential, they continued to do this, and often used this for recruiting others for the survey.

IV. Compensation

*****_Either list for all surveys in one line if same compensation given or specify for each survey if different compensation given_

Survey District	Survey Group	Specify Compensation
Chennai, Kovai, Madurai, Salem.	**MSM**	**Rs.100 per head with pick-up and drop**
All 5 districts	**Aravanis**	**Rs.100 per head with pick-up and drop**

a. Explain any concerns that had to be addressed regarding giving respondents compensation and describe how this was addressed.

b. CAB members suggested that 50% of the compensation can be paid to the respondents after interview and remaining can pay when they come to collect result. But since this would be difficult to implement it was not attempted.

c. The CAB members in the phase I districts brought up issue of making sure that the respondents were comfortable while coming for the survey to IBBA clinics. They suggested that lunch should be provided to all respondents who came during the middle of the day to participate in the survey. There suggestions were addressed and all MSM / Aravani participating in the survey during the day time were provided lunch in all districts.

V. Community Involvement (CI)

Survey District and Group	No. of CAB members	No. of CMB members	No. of CL employed
Chennai	11	18	8
Coimbatore	11	15	8
Salem	11	12	6
Madurai	10	13	7
All 5 districts	9	11	5

a. Briefly explain how members of the CMB were identified and, in general, how they operated (e.g. collection of information, reporting to staff) for the surveys.

The first step during community preparation activities was to meet with the implementing NGO project coordinators and representatives and seek their help in identifying CMB members. CMB members were all MSM & Aravanis. The IBBA team requested for suggested list of potential CMB members from different geographic areas of the district. Once the sampling was completed the IBBA team selected the CMB members from the suggested list from the geographic areas that were to be covered during the survey.

The CMB members participated in the meetings held for them and provided feedback on reports or information they had heard from the community in their respective areas about IBBA. CMB members were asked to make random visits to areas where IBBA was completed, in their neighborhoods and elicit feed back by word of mouth, to ensure that respondents had been treated properly during the course of the survey.

b. List all activities that the CL worked on.

The community liaison CLO was a key person during the field work.

1. The MSM / Aravani CLO helped with identification of eligible respondents in the solicitation sites
2. They helped the team to build rapport with the respondent and alleviated any fears the respondent had about participating in IBBA and giving blood

Wherever required the CLO also helped to clarify the survey procedures to the potential respondents in their own language.

c. Who was chosen as CL (e.g. active SW, NGO volunteers, regular partners of SW, etc)? Were NGO representatives used as CL? Did CL work on sites in the IBBA where they operate as a member of the survey group?

Active MSM & Aravanis in the community with good networks were chosen as CLO. CLOs were not always presently practicing sex work; though some CLOs were also operating as sex workers in some of the geographic areas covered during the survey.

d. Explain at least three main ways in how CL involvement helped facilitate the survey and why their involvement was important.

The Community liaison officer was the main gateway of community and they are played a very important role between survey team and community. They helped in:

1. Identification of eligible respondents
2. Assisted supervisor for recruitment of the respondents
3. Helped to identify and resolve the complicated situations.
4. To help in clinic for getting consent, in interview, blood collection, doctor examination and in referral to the NGO clinics
5. They also helped to bring the respondent from field to clinic

Their involvement was critical for getting cooperation of MSM and Aravani in the community; they greatly assisted the supervisors in approaching and recruiting the respondents and bring respondents from field sites to the IBBA clinics. The CL also explained to respondents about the referral and wherever required provided assistance to respondents to accompany them the referral clinics. In some districts the CLOs provided assistance to the field team to identify clinic locations. The CLOs also helped the field team on how to interact / talk to the respondent MSM / Aravanis during the survey

e. Explain at least three main experiences in which CL involvement complicated implementation of the surveys.

Many times the over enthusiasm of the CLOs caused problems in recruitment. In each of our districts we had issues with CLOs recruiting MSM and Aravani by calling them on the phone or asking them to come directly to the IBBA clinic. When identified these samples and sites were cancelled and not included in the final sample. To avoid this problem, random checking with respondents was done by team supervisor or NIE team members in the site. Further, CLOs were not informed ahead of time the location of field work, until the day of the survey.

Some CLOs when they were not very familiar with the area, especially in more rural areas, were fearful of approaching potential respondents for recruitment. In these situations a local person, such as other MSM or NGO member form the area, was required to support the CLO.

f. Describe at least three key issues where CAB involvement was important to the survey.

The CAB was the spokespersons for IBBA in the district and were key to clarify the doubts of community members and other local stakeholders about IBBA. They understood the importance of IBBA and encourage the community's participation in the survey.

Many times the CAB members helped the survey team to identify suitable field clinics and also IBBA doctors.

As noted above, in some districts the CAB helped to identify the appropriate solutions for trouble shooting during IBBA and to continue the field work. In some districts they also made field monitoring visits for ensuring the quality of field work.

The CAB members also encouraged the respondents for collecting their test results and going to referral clinics.

g. Describe the major feedback (at least three points) received from the CAB and how teams used in the information.

1. CAB members suggested early on that all respondents brought to the IBBA clinic during day time should be provided with lunch and this was followed by the teams.

2. The CAB members did suggest that IBBA clinics should be closer to the field sites to avoid traveling long distances for participating in the survey. It was difficult to implement this suggestion due to difficulty in setting up clinics locations. CAB members also suggested that clinic venues not be located in government hospitals and as they felt that FSWs would not be very willing to come to these venues. They suggested that clinic venues be located in residential buildings with adequate privacy.

3. Some CAB members gave feedback that respondents should be instructed at the time of survey that they should bring to the referral clinics only their own referral cards and not that of other MSM or Aravani. RPR results should be given only to the concerned respondents. Sometime reports were given from the NGO referral clinics that some FSWs were brining a bunch of referral cards for collecting test result. This issue was discussed during CAB and CMB meetings and the message was passed on to the community members that each person should bring their own referral card. During the survey as well, the team members informed the participating respondents on this issue. But nevertheless this continued to be a problem.

4. The CAB members also noted that field lab technicians should be trained well, so that they have good technique while drawing blood and not causing much pain to respondents. This was taken up seriously in some districts and field lab technicians were given refresher training or were replaced with newly trained technicians.

h. Describe the major feedback (at least three points) received from the CMB and how teams used in the information.

As described above.

VI. Venues

a. List the types of venues that were used for the survey. Specify if certain types of venues received a better response from the community and why.

The main types of IBBA clinic venues used for IBBA RII in Tamil Nadu were: Residential houses, Private hospitals, Community halls or Churches campus.

The residential places and community hall received better response from the community as they were perceived to have more privacy for the respondents.

Government hospitals are not a preferred location in the state for a number of reasons; the CAB members in the early stages (including in RI) advised the team against setting up clinics in government hospitals or PHCs, or lodges. The most preferred locations that were considered to provide adequate privacy would be rented residential buildings.

Getting rented spaces for clinic venues posed a challenge in most districts in Tamil Nadu. The main challenge faced was in terms of getting a suitable place, where owners would provide the space for the survey. Secondly, rents for residential spaces in TN, requires security deposit, which caused concerns for the RA, due to increased cost of setting up clinic locations. Further rent for residential spaces was high in all the IBBA districts and therefore, RA had difficulty finding places which were within the budget, especially in Chennai.

Spaces in community halls or churches campus were utilized in small towns, across the district, where the surveys would take place only for a few days and where it would be difficult to get any other residential space. These were paid for on a daily basis by RA; in some instances setting up such clinics were avoided by RA due to increasing cost of setting up and brought respondents long distances to the IBBA clinic set up in the main city.

b. Give the distance (minimum, maximum) from recruitment sites to the IBBA venue.

1km to 5Km in few sites could not arrange the temporary clinic maximum distance from clinic to site 40km

VIII. Referral Clinics

Survey District and Group	No. of Referral Clinics	No. of test results collected by respondents from referral clinics	Total number of test results delivered to referral clinics
Chennai (MSM)	2	207	402
Coimbatore (MSM)	1	31	402
Salem (MSM)	3	47	409
Madurai (MSM)	1	23	440
All 5 districts (Aravanis)	5	78	403

a. Describe at least two issues with the referral process for STI treatment (e.g. coordination with referral clinics/district lab, processing samples, packing results, time period, motivating the community).

1. The process of referral for STI treatment was smoothly coordinated with the implementing NGOs in each district. All those MSM and Aravanis who came to collect the results were provided treatment. Prior to start of the survey the agency in charge of setting up the STI clinical services for TAI NGOs requested that in IBBA when we provide the results, we also

provide the dilution / titer for which RPR positive / reactivity was found. This was also coordinated with the NIE State laboratory and provided in the RPR results sent to the referral clinics.

2. One issue that was recurrent was that some MSM and Aravani sent their referral cards through other MSM / community members to collect test result. This issue was reported from a number of NGO referral clinics. On these occasions the individuals were informed that they had come themselves with their referral cards for getting the syphilis test result and treatment if found positive.

IX. Transportation of Specimen

a. **Briefly describe the process of transporting the samples from <u>field sites to district lab</u>** *(who was responsible, frequency, storage at field site, type of transportation, timing, use of local freezers for gel packs, etc.)*

Transportation of samples to the district lab was carried out by designated personnel of the Research agency on a day to day basis. Samples were transported in thermocol boxes with frozen gel packs (provided from the district lab prior to the start of each day's field activity).

1. Generally lab technician, Venue supervisor or District coordinator transported samples
2. Samples were transported at the end of the day or when survey was completed
3. Efforts were taken to maintain the gel backs 4'c to 8'c
4. All efforts were taken to reach the district lab as earlier possible (Auto, Bus, Two wheeler and call taxi.

b. Describe at least 4 issues that arose during collection and processing of samples at the field sites (e.g. labels, electricity, space, lack of gel packs, documentation, stock maintenance) and how this was dealt with.

1. Instances of improper filling up of lab submission forms – feedback provided to supervisor and Lab tech for rectification and adherence.
2. Instances of improper storage of blood after collection (either left on bench for long duration - >30mins or abruptly keeping blood in cool box prior coagulation leading to haemolysis in some instances. The technician and supervisor were informed and re-emphasized on proper sample handling and storage.
3. Instances of erroneous labeling – supervisor/ District coordinator were informed and mismatched labels substituted with correct labels. In case of USTT, there were a few instances of labels being affixed over the 'window' making it difficult for the technician to accept the sample as complete – those labels were removed and fresh label (of same PID) affixed.
4. There were issues regarding management of logistics, with material sent to one clinic being used at another clinic. The field supervisor/ coordinator were instructed to avoid such practices unless in case of emergency.

Some times the blood collection time was not noted in sample collection format. At times samples were kept in open temperature for more than one hour; and sometime the same

serial number label pasted in two samples. These were all mistakes rectified then and there through proper instruction to the field technician as well as IBBA clinic supervisor.

c. Describe at least 3 main issues that arose during transportation of specimen from field to district lab (e.g. coordination, safety, timing) and how this was addressed.

1. Owing to use of public transportation, there was delay in sample delivery at the district lab especially during night.
2. There were some instances of lack of coordination between district and field personnel with respect to timely pickup of thermocol boxes at the start of the day's survey and at time of sample submission at the end of the day's survey.
3. Bio-waste transportation not done properly (with 2-3 day old leaking waste bags being transported to district lab) – The field technician and supervisor were informed and asked to discard urine containers properly closed into the autoclave bags and all waste to be transported to district lab on daily basis.
4. Some times the blood samples were transported in late night so that the messenger met police enquiry; at these time they showed their ID card and explained the IBBA project which took care of the issue.

d. Fill table below based on information on the lab submission form

Survey District and Group	**No. of thermacol boxes where cold chain not maintained**	**Total number of thermacol boxes transported to district lab**
Madurai		
MSM	0 (5)*	51
Aravanis	0	8
Salem		
MSM	0	39
Aravanis	0	4
Chennai		
MSM	0	22
Aravanis	0	27
Coimbatore		
MSM	0	31
Aravanis	0	3
Dharmapuri		
Aravanis	0	3

* The numbers in parenthesis represent boxes where the thermometer reading were $>8^0$C. However all these boxes had gel packs in frozen state and samples were transported in cold chain. The erroneous readings could be attributed to instances of improper placement of thermometers/ delay in reading thermometer after opening the box/ faulty thermometer.

e. Briefly describe the process of transporting samples from the district to the state laboratory (who was responsible, frequency, storage of samples, type of transportation, timing, coordination).

All samples collected at the end of the day's survey was checked by the supervisor and packed by the technician. The sample boxes are carried by a designated messenger (from Research agency) on the same day and handed over to the technician at the district lab along with submission forms and indents. Though ideally samples were required to be transported in a vehicle (auto/taxi) to ensure safety and timely transportation, they were mostly carried using a public transportation system. There were some instances of lack of proper coordination (due to lack of timely communication) between district staff and messenger regarding timing of handing over/ receipt of samples at the district lab.

f. Describe at least 2 main issues that arose during transportation of specimen from field to district lab (e.g. coordination, saety, timing) and how this was addressed.

The following are the issues regarding sample transportation from district to state lab

Shipment of samples from the district labs were done in a coordinated manner by a messenger (designated by NIE) in cold chain. But there were instances of submission forms being sent without proper and legible filling up, samples not arranged in sequential manner in the cryoboxes etc. These were promptly intimated to the concerned district lab technician for rectification and adherence. There were a few instances of samples being rejected at the state lab as they were lipemic/lyzed. The district lab technicians were instructed not to test lipemic/lyzed samples and to treat such samples as not-satisfactory.

X. Laboratories

Survey District and Group	Name of District Lab
Chennai (MSM & Aravani)	ICMR
Coimbatore (MSM & Aravani)	PSG Hospital
Salem (MSM & Aravani)	Directorate of Public Health
Madurai (MSM & Aravani)	Directorate of Public Health
Dharmapuri (Aravani)	SKS Hospital

a. Explain any problems that arose with regards to lab supplies or equipment.

Logistics supplied for round II were of satisfactory quality. However there were issues with certain material (leftover from Round I) such as gloves, alcohol swab etc. due to deterioration of quality and expiry. Due to malfunctioning of centrifuges, new centrifuges were provided for round II. Even with the new centrifuges there were instances of breakdown and difficulty in getting them repaired.

b. Based on laboratory quality assessment report, list at least three main issues.

All districts had performed well in the EQAS & Proficiency testing.

XI. Data Confidentiality and Management
Briefly describe data confidentiality and management procedure from field staff to state level.

Prior to initiating field work, all study team personnel signed a confidentiality undertaking with the field agency. The regular staff of the Field Agency also signed an undertaking to adhere to the policies on maintaining confidentiality in the data collected during IBBA. All study staff including investigators, supervisors, community liaison officers, district coordinators and other project staff were trained on data security and confidentiality regarding handling of data collected from study participants. The training should clearly laid out who should have access to what study materials/data collection forms and how they should be stored and transported to maintain confidentiality – as per the Operational Guidelines for data specimen safety.

Data from sampling frame development fieldwork, i.e. available mapping data on locations where survey population members could be found were strictly maintained by designated persons at research agency, ICMR Institutes and FHI. No paper or electronic copies of these data were maintained by field team staff after they are turned into the central team. These data were only be shared with designated persons involved in sampling frame development at ICMR Institutes and FHI.

A detailed field plan describing the location, the timing, and the number of people to be recruited from each cluster was developed and given in soft copy to the Research Agency head and Field coordinator. In the field these plans were maintained by only by the team supervisor and not distributed to team members. The team supervisor was responsible for keeping the field plan in a secured place where other team members do not have access to it, until the time of field work.

In no circumstance was any field level information shared or given to any unauthorized individual. In no circumstance was any data stored, opened reviewed and modified on public computers such as computers in internet cafes, or computers which have common access to authorized and unauthorized persons.

After conducting each interview, the filled questionnaires and consent forms were considered confidential documents and were to be maintained in a locked private place, such as IBBA clinic. Questionnaires are to be kept separate from consent forms. These forms were to be kept in closed envelopes, marked confidential and are kept in the possession of the team supervisor until they are transported centrally. Instructions were given that filled questionnaire and consent forms should not be shown to, shared with, or given to anybody except the team leader.

On a weekly basis filled questionnaires and consent forms were bundled and safely transported by a to the State RA office. One designated team member personally carried the questionnaires and consent forms to the State office. Completed questionnaires and signed consent forms should be delivered to only designated person in the State RA and not anyone else.

Data entry was conducted only by the designated trained data entry technicians at Research Agency under the supervision of the data entry manager. Data should be entered in designated computers and access to the computers should be limited to only data entry technicians and data entry manager. The questionnaires were transported to state ICMR Institute at regular intervals, at the completion of data entry for each group, the questionnaires, consent forms and the soft copy of the data set was personally carried to the ICMR Institute by a designated and responsible person from Research agency. The questionnaires and consent forms were delivered only to a designated person responsible for the task at ICMR Institute, the data manager. The designated person checked the number of questionnaires, consent forms and soft copy data upon receipt. After receiving the acknowledgement from the ICMR Institute, the Research Agency was asked to delete the data set from the computer and to keep the soft copy of data set in CD as security backup.

At ICMR institute maintained all questionnaires and the soft copy of the data were kept in a designated locked cabinet. The cabinet was locked at all times and access to the key limited to concerned staff only. The consent forms were kept in a different shelf or drawer in the same locked cabinet as the questionnaires. The second data entry at ICMR Institute was be done only by a designated trained data entry technician under the supervision of state data manager.

Data was entered in designated computers and access to these computers was limited to the data entry technician and data manager (the computer should not be used for other purpose and should be password protected). The database should be backed up daily at the end of the day and should also be stored in a locked place. After second data entry, hard copy of the questionnaires and consent forms were stored under lock and key in secured place (free from moist, water, pest and rats) for long-term storage.

After entering the laboratory results, the dataset will be considered a complete dataset. Routine backup of the dataset should be ensured by the data manager. One copy of the complete dataset should be kept at the ICMR Institute as a security backup. Only the Principle Investigator from the ICMR Institute have access to the backup dataset for the state.

As much as possible Confidentiality was maintained strictly at all levels from the IBBA clinic to the State ICMR Offices.

In the field, while field teams were instructed to store the survey forms separately from consent forms in the IBBA clinic in a locked storage space, there were breaches in following this, identified by the monitoring teams, and were corrected in an ongoing manner throughout the survey period to ensure this aspect of the protocol.

Sometimes the field teams were found to be storing the survey forms in their hotel rooms where they were staying and instructions were provided to avoid this practice.

XII. Adverse Events (AE)

Survey District/Group	No. of AE	Describe each event in one sentence *
Nil	Nil	Nil

*Be brief as the reader can refer to the AE reports for more detail

There were no adverse events reported.

XIII. Intervention

Survey District and Group	Intervention Partners
Chennai (MSM & Aravanis)	TNSACS
Coimbatore (MSM & Aravanis)	Avahan SLP- TAI
Madurai (MSM & Aravanis)	Avahan SLP- TAI and TNSACS
Salem (MSM & Aravanis)	Avahan SLP- TAI
Dharmapuri (Aravanis)	Avahan SLP- TAI

a. Briefly describe the strategy and core elements of the main interventions. If this is different by donor, describe both separately. Include information on if the intervention covers the entire district/portion of district and which groups are covered by each intervention. A one page summary of the project strategy provided by the organization can also be attached instead.

Tamil Nadu AIDS Initiative (TAI) is the main implementer in the IBBA districts with the financial support of "Avahan", The Bill and Melinda Gates Foundation. TAI is part of Voluntary Health Service (VHS), a nodal agency in Tamil Nadu, has a rich tradition of service to the community and working on HIV/ AIDS in Tamil Nadu.

Tamil Nadu AIDS Initiative was launched with the objective of scaling up and increasing the coverage of HIV / AIDS prevention with sex workers and MSM in Tamil Nadu. The five-year project started on April 1, 2004. TAI implements a community-driven STD / HIV / AIDS prevention program in 11 districts in the state. The project addresses male and female sex workers in these priority districts. Male sex workers include Aravani Penngal and Kothis (transgender) besides Double-deckers. The initial target of 34,500 sex workers has now expanded to nearly 50,000 male and female sex workers.

The project goal is to reduce the spread of STD / HIV / AIDS in 13 districts in Tamil Nadu, among female and male sex workers. The objectives of the project include
Reduce the burden of sexually transmitted diseases among male and female sex workers and as well as their clients.

- Address the issues of vulnerability among sex workers.
- Focus on enhancing the quality of life, giving self confidence, developing high self esteem and empowering them to take control of their lives.
- Empower the key population to avoid unsafe sex through effective condom negotiation, and skills to manage power structures.
- Increase the health seeking behavior with regard to general health, hygiene and STD-treatment

In two of the IBBA districts, TAI – AVAHAN SLP is the only intervention for MSM and Aravanis. IN Chennai and Madurai the scenario is a bit different. While Chennai is covered by TNSACS, there are few NGOs actually implementing interventions. There are other groups such as Sahodaran, THA etc, funded through other sources that conduct interventions is some areas of Chennai. While TAI is not officially an intervention in Chennai, many of the MSM and Aravanis community participate in the TAI program and access the TAI clinics which are located in the bordering district, Thiruvalluvar, on the North West corner of the district of Chennai. In Madurai district, the program was handed over to TNSACS and in particular the MSM program was created into a CBO, with community members fully implementing the intervention.

b. List the main differences in the partners, strategy/core elements between Round 1 and 2.

The main changes in the intervention since Round I, is that two of the IBBA districts were in the process of transitioning over to TNSACS.

Chennai district interventions were handed over to TNSACS in 2008. TAI started providing services to the high risk groups only from locations in Thiruvalluvar District, which is bordering district to Chennai. It is to be noted that many of high risk group members, travel to Thiruvalluvar district to avail of the TAI program services.

b. List the main differences in the partners, strategy/core elements between Round 1 and 2.

Besides the changed reported above, there were no other changes in the partners, core elements or strategies of the program.

XIV. Size Estimation

Survey District and Group	Size Estimation Methods
Nil	**Nil**

a. Describe strength and weakness of using exposure information as a multiplier. Give specific survey level information if the strengths/weaknesses vary.

In three of the four districts, Coimbatore, Madurai and Salem, Avahan program is the only intervention, and therefore using the exposure information will provide data for the entire district. The Avahan intervention, TAI branding is very good in all the districts and therefore, the exposure information can be used reliably in TN for estimation size of risk group.

In Chennai, Avahan is not the only intervention and using exposure information for size estimation is not recommended, as data from other NGOs CMIS are not available.

b. Unique Object Method:

Survey District and Group	Total number of objects distributed	Weighted proportion of objects reported received in IBBA2
Nil	**Nil**	**Nil**

c. Who distributed the object, which object was distributed and specify time period that it was distributed?

NIL

d. Describe strength and weakness of implementing the unique object method.

NIL

XV. Community Environment

a. Briefly describe any characteristics of the population that have changed from Round I to Round 2 (e.g. change in typology)

There were no major changes in the population of MSM and Aravani between R1 and R2.

b. Describe any other contextual/environmental factors, which would help understand the data (e.g. legal issues, weather, delays in FW, NGO resistance, differences in context between Round I and II).

General points

The contextual scenario in Tamil Nadu and in particular IBBA districts has been through some changes over the last few years, between RI and RII. This includes a change in the political climate in some districts such as Madurai, changes in interventions, i.e. handing over / transitioning of the Avahan program in Chennai and Madurai to State AIDS Control Society.