GLOBAL GUIDELINES
Independent Monitoring of
Polio Supplementary Immunization Activities (SIA)

Introduction

What is independent monitoring?

Independent monitoring of SIAs is an objective measure of SIA quality that can be used to guide improvements to reach more children by enabling corrective action both during SIAs and in planning for the next rounds.
Independent monitoring does not replace supervision!

Purpose of this Guide

- To provide a technical basis for independent monitoring that can be adapted according to country needs
- To establish credible and timely SIA monitoring and results
- To assist country programmes to take corrective action in areas sampled

This guide is aimed at polio eradication programme managers who are involved in the planning and operations of supplementary immunization activities (SIA). The guide explains how to establish a system of independent and credible monitoring of SIAs that will provide reliable and timely data to monitor progress and take corrective action.

Problems to be overcome by independent monitoring

There has been recent concern over the poor quality of SIA data provided by many countries. In general countries provide data which are not independent and are derived from the following sources:

- **Administrative data** derived from tally sheets and biased by inaccurate numerators and denominators.
- **Field observation by programme supervisors** who may be biased by direct involvement in the programme.
- **Observation by international observers** who may lack important information due to unfamiliarity with the local issues

Inaccurate, especially overestimated, SIA coverage data, delayed and incomplete reports in the face of ongoing polio transmission causes complacency in striving to achieve eradication, and has raised concerns over the credibility of the programme including among GPEI funding partners.

Among the problems encountered with SIA monitoring are:

- Lack of standardization of SIA monitoring data
- Lack of national/regional/global databases

- Delays in analysis and publication of results
- Lack of use of data to improve subsequent rounds

The Context of Improved Independent Monitoring

In order to rectify the problem of unreliable and delayed SIA data, in November 2009 the ACPE recommended: *"Independent monitoring of SIAs using new guidelines should be implemented as rapidly as possible in all reinfected countries, and monitoring results should be made available within 15 days of each immunization round".*

The 2010-2012 GPEI Strategic plan provides the following text on page 14*:*

''Monitoring of SIA coverage: the gap in credible and timely SIA coverage data to assess risks and guide improvements has been a continuing constraint in both endemic and in re-infected countries. In response, in late-2009, new protocols and criteria were established to allow improved, real-time independent monitoring of SIAs, with validation through Lot Quality Assurance Sampling (LQAS) where needed (i.e. in areas of discordant epidemiologic and SIA monitoring data). From 2010, the results of independent SIA monitoring will be internationally posted within 2 weeks of each campaign. Areas identified as having <90% coverage will be immediately re-covered, with corrective measures implemented in advance of the subsequent SIA.''

The Value of Improved Independent Monitoring

- Provides an objective independent source of timely and reliable quantitative data for each campaign.
- Identifies reasons for missed children to guide future interventions specific to needs of the area.
- Identifies problems with the implementation of the campaign and guide actions for corrective measures (e.g. training of teams, supervision, etc)
- Identifies data quality problems by highlighting areas with significant discrepancies between reported administrative coverage and independent monitoring coverage.

Results to date from use of improved methods of independent monitoring

Year	***2009 Oct-Dec***		***2010 Feb-Aug***	
Regions reporting	1		3	
Total Reports	19		81	
	n	%	n	%
Independent source	14	74	66	81
Independent selection	6	32	53	65
H to H	18	95	78	96
Out of H	4	21	57	70
Completeness	8	**42**	65	**80**
Timeliness	6	**32**	70	**86**

Types of Independent Monitoring

1) **In-process monitoring during the implementation of the SIA**: independent monitors monitor performance during the SIA, in some situations they may observe the work of vaccination teams. This activity does not provide information about immunization coverage, but it can help identify problems to direct corrective measures during a SIA.

2) **End-process or post-campaign monitoring after the SIA is completed**: independent monitors visit houses or other areas to check the vaccination status of children based on finger marking (FM) and provide an independent measurement of coverage and other data such as reasons for non-vaccination.
   a) House to house monitoring: where the monitors will visit clusters of houses and assess the vaccination status of children who are available.
   b) Out of house monitoring (also known as market or street surveys): This is a quick method involving the checking the vaccination status of children in specific crowded areas.

It is recommended that all countries holding SIAs **should implement at least house to house and out of house end-process monitoring. However the two types of independent monitoring should be conducted by different people.**

What <u>cannot</u> be considered as independent monitoring

The following examples are essential and important types of monitoring, but they are supervisory rather than independent.

- Monitoring done by national or international supervisors who may not have an immediate operational role in a specific district, but are nevertheless involved in the implementation in the whole country.
- Any monitoring done by staff who are directly involved in SIA operations cannot be considered as independent, though their action will be vital to improving SIA quality. This will include monitors who repeat areas that are found to be poorly covered.

Main Steps to be taken to Establish Independent Monitoring

- **Select areas to be monitored and team requirements**
- **Establish management process under WHO responsibility**
- **Recruit and train appropriate monitors**
- **Deploy independent monitors to the field**
- **Supervise their field work**
- **Collect reports, analyze and provide feedback for corrective action**
- **Consolidate reports for national, regional, global availability**

Selection of areas to be monitored

Decisions on which areas, how many areas and what target to be selected for independent monitoring should be made by polio eradication programme managers using criteria that will select areas where they are most needed.

High risk districts

Ideally all high-risk districts should be subject to independent monitoring for the SIA. However, if there is not enough information to select a suitable number of high risk districts, independent monitoring should be conducted in 50% of the total number of districts in the SIA.

Criteria for identifying High Risk districts/sub districts

The risk status of every district is a dynamic process and should be determined before the round as part of the planning process. These data can be obtained by collaboration between the MOH and WHO.

- **AFP surveillance**:
  - Recent or on-going or suspected wild poliovirus circulation, from AFP surveillance or environmental surveillance.
  - Clusters of AFP cases.
  - Recent compatible cases
  - Silent or underreporting areas
- **Immunization**:
  - Low immunization coverage (routine and/or SIA)
  - Under-performance in previous campaigns
  - Discrepancies between reported and post-campaign evaluation results of recent rounds.
- **Demographic and geographic characteristic**:

- High risk areas/populations: slums, displaced populations, refugee camps, crowed and highly populated urban area with condensed high-rise buildings, mobile communities including nomads and seasonal workers, conservative communities, areas with administrative instability, management problems or insecurity, etc.
- Border and hard to reach districts/areas.
- Area with population connection to other countries/areas where circulation of the wild virus is known or suspected.

Steps for independent monitoring team allocation (See Annex A and B)

Step 1: Calculation of total number of teams required based on size of sample of SIA target population

In this step, the total independent monitoring team requirements for the SIA will be calculated.

1. Enter the SIA target population <5 years (maybe whole country NID or partial SNID)
2. Decide on and calculate a sample size, for example 1% of the target
3. Enter the average number of children <5 likely to be found per household (possibly 2 per household)
4. Calculate the number of households that will need to be visited to achieve the sample (sample # /children per household)
5. Enter the number of households one team can visit in one day: for example one team can visit 4 areas and sample 7 households in each area = 28 households per day.
6. Calculate the number of days needed to visit all households to be sampled (number of households / number of households that one team can visit in one day = team days)
7. Enter the number of days that are allocated for post campaign monitoring (usually 2 or 3 days)
8. Calculate the number of teams required to do the monitoring of the whole sample (number of team days / number of days allocated for monitoring)

Step 2: Calculate the number of monitoring teams to be allocated to each HR district according to their SIA target population size

In this step, the total number of monitoring teams calculated in Step 1 are allocated to each high risk district based upon their individual population size.

1. Enter the name of each High Risk (HR) District

2. Enter the SIA <5 population for each district and total them up
3. Calculate the % of each HR district of the total HR districts population
4. Insert the total number of team days required from Step 1.
5. Calculate the number of teams (out of the total teams) allocated per HR district according to their % of the total HR population.

Step 3: Allocate district teams to sub-districts

In this step teams are allocated to high risk sub-districts according to their population size and density, other risk factors, accessibility and likely workload etc.

1. Using a list of sub-districts, allocate a number of district teams (from Step 2) to each sub-district using HR criteria and other local knowledge.
2. Develop a plan to distribute teams to areas of the sub-districts using a map to divide the sub-district and select starting points for area monitoring.
3. Make a workplan for each team showing which area and which day they will be expected to work to make household visits.

WHO Management of independent monitoring

WHO has overall responsibility for independent monitors

WHO management tasks

- recruitment – independence
- training
- plans/ logistics/deployment
- supervision
- compilation/analysis

Management Options

For most countries, independent monitoring will be managed by the WHO surveillance and monitoring team in-country who will act as the independent monitoring coordinator. The important consideration will be that the manager should be independent, experienced and not directly involved in the SIA operations. If such a person is not available, a consultant can be recruited for the task.

Alternatively, in some countries the management of independent monitoring can be out-sourced to an independent institution such as a university which will be contracted by WHO and will report to WHO.

Regardless of whether the management is done by WHO staff or out-sourced, WHO remains responsible for the quality of the work carried out by independent monitors.

Role of the national programme managers (MOH) and WHO together

Technical support

- Provide all the background information that allow the coordinator to select the areas to be monitored
- Provide maps and plans for the monitors to be able carry out the process
- Provide guidance to the monitors in the field to the areas selected
- Provide any needed information by the coordinator for writing the report
- Carry out the vaccination response to the monitoring findings as per the guidelines

Taking Action on findings of Independent Monitors

- Implement any recommendations proposed by the monitors
- Investigate the problem areas to indentify reasons for low coverage and improve operations accordingly to avoid the same issues in future rounds

Management Tasks (WHO)

- Participation in the selection of the district and sub districts to be monitored
- Estimation of the number of teams of independent monitors to be deployed (see Annex A).
- Recruitment of individual independent monitors and their supervisors
- Training the independent monitors
- Supervision of the field implementation of monitoring
- Collecting the forms from the monitors, supervise the entry of data in the computer and analyze the data
- Ensure the quality and reliability of data collection process
- Facilitate the payment of the Independent monitors

Recruitment of independent monitors (WHO)

Criteria that should be used to select candidates for independent monitoring:

- **totally independent** from the national polio eradication program and its activities.
- **some familiarity** with polio eradication and the area to be monitored
- **nationals** familiar with the culture and the language who are able to interview immunization teams, visit houses and interview mothers.
- **same ethnic group** in countries where this is an issue for communication

- **include female monitors** to facilitate entering households and interacting with mothers,
- **ensure that Independent Monitors are accepted /respected** within the community visited.

Possible sources of monitors:

- Local high education institutes
- NGOs
- School teachers
- Individuals volunteers who have been involved in the past

Terms of reference of independent monitors

1. Carry out the field monitoring activity (see section on field work)
2. Record the unvaccinated children based on finger marking
3. Complete the monitoring forms provided
4. Submit the completed forms daily to the supervisors
5. Report to the supervisors details about families refusing to be interviewed
6. Record any additional observation that may be helpful in identifying problems in the implementation of the campaign

Should independent monitors vaccinate missed children?

The additional task of vaccinating missed children may introduce a conflict of interest and bias which will reduce the independence of the work of the monitors.

Supervision of independent monitors

This should not be carried out by the vaccination team supervisors

Small Scale

The supervision of independent monitors in a relatively small area such as a city can be carried out by the independent monitoring coordinator responsible for monitoring and recruitment of the monitors

Large scale

On a larger scale it will be necessary to recruit independent supervisors or independent monitoring team leaders

Terms of reference of supervisors of independent monitors

1. Participate in the selection and training of monitors
2. Supervise the field activity of the independent monitors
3. Ensure good quality implementation of the monitoring process
4. Dealing with houses that refuse to be monitored
5. Cross check data validity from some of the areas completed by independent monitors
6. Collection of monitoring forms and assist in compilation and analysis

Making a Workplan for Independent Monitors (See Annex B)

The independent monitoring coordinator is responsible for making a workplan for independent monitors and their supervisors. The plan will be accompanied by a map and will assign each monitor to areas to be monitored each day:

The workplan will identify for each day and each team member, the sub-district, area of sub-district, starting place within sub-district, number of clusters within each sub-district, number of houses to be monitored (or teams if in-process monitoring), name of supervisor, mobile phone number of supervisor, identification of vehicle to be used to transport team to work area. It is advisable not to share the same means of transport allocated for the vaccinators and the IM group.

Training of Independent Monitors

This section describes the method and content of training of independent monitors

Timing of Training

The training should be conducted immediately prior to the SIA in order to complete the entire monitoring activity within the shortest time possible.

Trainers

- All monitors should be trained prior to each monitoring activity.
- An initial training of trainers (these may be supervisors from various levels or consultants) should be done by the independent monitoring coordinator with the assistance of WHO staff.
- Following the training of trainers, local training will be conducted by trained persons including consultants where necessary

Organization of training

A maximum of 30 trainees at one time is desirable. The method should focus on practical operational issues with exercises and role-play to ensure the participation and involvement of the participants.

Supervisors must attend the training and have additional sessions to train them on quality supervision and to highlight their roles and responsibilities during the activity.

Training topics

- Information about GPEI and national progress
- Purpose of the activity and their role
- Review basic components of campaign implementation
  - Target age group (< 5 years of age)
  - Vaccination teams and style of work
  - Examples of maps and workplans used by vaccinators
  - House-to-house strategy
  - Tally sheets
  - Identification, recording and follow-up of missed children

- House-marking
- Finger-marking

- Method of work for independent monitors:
  - Selection of clusters within the monitored area
  - Selection of houses within the clusters
  - Interaction with the community in the field
  - Review of tools (forms) used: exercise and examples
  - Addressing concerns, previous mistakes and handling misleading information
  - The independent monitoring workplan and how to follow it

Field work

This section will discuss both in-process and end-process independent monitoring.

It is important to recognize that any independent monitors may compromise their independence if they are involved in giving vaccinations or directly giving feedback reports to vaccination supervisors during the course of the SIA operation.

In-process monitoring

This should start on the second day of the SIA to allow the monitors to observe the actual work of the teams

Identifying the vaccination teams to be monitored

- The independent monitors should be provided with the detailed plans for the work of the teams including team itineraries by day and the supervisory schedule
- Independent monitors should select teams working in areas where problems are expected.
  - areas with high population density,
  - areas with problems in previous campaigns,
  - areas where teams or supervisors with previous weak performance are deployed
- The independent monitors should observe and interview at least 5 teams per area:

Monitoring of teams during the SIA

- After identifying which teams to be monitored, the independent monitors should move to the field to the work area of the teams selected, according to the team schedule, visiting houses already covered by teams.

- The independent monitors should use a combination of interview and direct observation in collecting data on the relevant form.
- The independent monitors should be encouraged to observe any other issues not included in the forms. For example whether all teams are deployed on time or respect of the House to House strategy
- The daily findings of the independent monitors should be made available at daily meetings which are usually held at the end of each day of the SIA. However, to maintain independence, the findings may need to be presented through the WHO supervisor.

End-process monitoring: House to house monitoring

Since house-to-house monitoring is not a statistically valid survey, a strictly random selection process is not needed, though any selection bias must be minimized.
Teams can be directed to areas where problems are expected, however a standard method of selection of households in a sub-district is used in order to reduce bias.
The coverage results obtained will be relevant to specific areas where the independent monitoring has been conducted and in which corrective action may be taken if needed.

Monitoring in a sub-district

Have been identified as a high risk district, the coordinator of the independent monitors in that district should consult with other managers, and review data to

- Select high-risk sub-districts in the district
- Assign teams to sub-districts

Teams and their expected work

One team should consist of, at minimum, one trained independent monitor plus one independent local guide. The teams will be expected to do both house to house and out of house monitoring activities in one working day.

- Independent monitoring teams will work in areas that can be selected from a map (Annex B)
- A sub-district can have one or several areas to be surveyed, depending on how many independent monitoring teams are available and the size of the sub-district
- For example: one team can monitor 4 areas of 7 households per day[1] (See Annex A)

Selecting an area to work in (See Annex B)

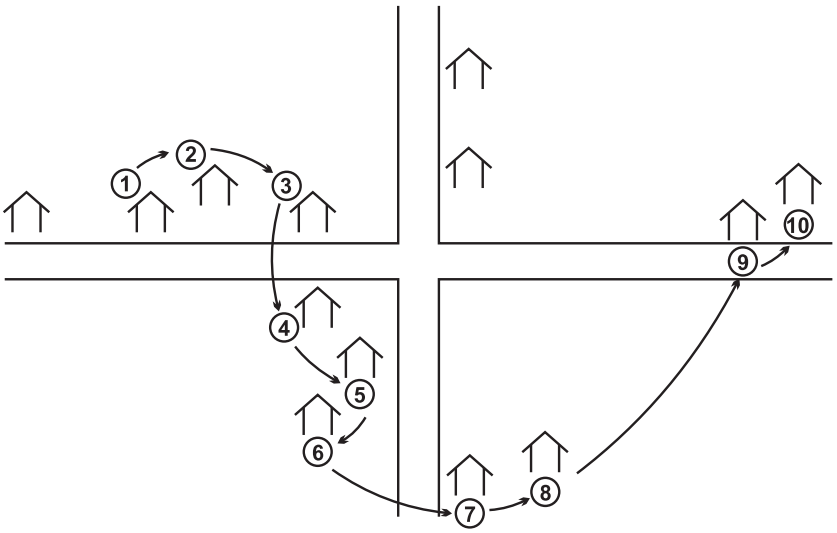
[1] In this document 4 areas of 7 households per day is used as an example only; these quantities can be adapted as needed.

- Identify the sub-district and its boundaries on a map
- If the sub-district is to have more than one area, identify the areas of the sub-district to be monitored, for example: by street name or name of some other locality.
- Go to the apparent geographical centre of the area within the sub-district which has been selected for area monitoring
- Choose a direction to go from the centre by spinning a bottle or use some other means of selecting a direction

Selecting households in a cluster

- Walk to the *first house in the selected direction* and proceed with monitoring; this is the start of the cluster.
- Only households with at least one child under 5 years of age (including visiting children) are included
- When finished in the first household (or if there is no child under 5) go to the nearest household and monitor there
- Continue to the nearest household each time a household has been selected and monitored
- Continue until 7 households with children under 5 years have been monitored
- When the 7 households are completed, the team moves to the next cluster, which may be another locality in the same sub-district, or a new sub-district according to the monitoring plan.

Diagram to show how to proceed to select households in an area



How to proceed when reaching the boundary of the sub-district

If the monitor reaches the boundary of a sub-district (such as a street) without yet covering 7 households then the monitor should choose a new direction in which to walk, select the nearest household in that direction and proceed again as above within the same area.

Recording work within an area (See Form Annex C)

The independent monitor should ensure that a clear and correct address of each area is written on the forms.
Houses can be marked by the independent monitor in a way different from the vaccination teams marking to allow the supervisors to cross check some of the houses

Visiting and monitoring in a household

1. The independent monitoring team should introduce themselves, and tell the household that they are checking on the performance of the vaccination campaign in the areas by selecting a few houses and that this house has been selected.
2. If the household has no children aged under 5 years the family will be thanked and the team proceeds to the next household.
3. If the household has children aged under 5 (including visiting children) ask to interview the mother.
    - ask to see the available children aged under 5 to check finger marking yes or no
    - if there is no finger marking ask if the child has received OPV, and if not ask the reasons why not.
4. If there is a least one child under 5 years in the household but the occupants refuse to allow an interview this information should be recorded and shared with the independent monitor supervisor. Such a household will not contribute to the 7 households in the area, and the team should proceed to the next household.

What should independent monitors do for unvaccinated children?

Unvaccinated children should be recorded by name and address and the information submitted to the programme manager to vaccinate later. However, under some circumstances, for programmatic reasons, such as difficulties access, it may be desirable to take advantage of the contact to vaccinate unvaccinated children. Such a decision should be part of the planning process; managers of independent monitors should be aware that their direct involvement in immunization activities may introduce a bias or reduce the quality of work.

End-process monitoring: Out of house monitoring

Out of house monitoring, also known as market or street surveys, can give a more representative estimate of SIA performance because children from many different areas will be mixed together in a concentrated area.

Selecting an out of house site in the sub-district

Select a big market or a busy street, and move around checking finger marks and asking reasons why a child is not vaccinated if a parent is available.

Working at the out-of-house site

- Monitors should be prepared to check 50 to 120 children under 5 years of age if possible, depending on the density of population. This may require a duration of a few hours.
- The monitoring team should politely address each family and introduce themselves.
- The team will ask if the child is vaccinated or not and check for the finger marking
- If the child is not marked/immunized the team should ask parents for their address and record it as a possible missed area

Role of supervisors in independent monitoring field work

Supervisors should remain in contact with independent monitors through mobile phones, radio or other means throughout the duration of the monitoring work. They should have the use of vehicles as required.

- Supervisors or coordinators of independent monitors are responsible for ensuring that the independent monitors are able to travel to their sub districts and move from one cluster to another as required
- visit independent monitors in the field to check on the quality of work.
- Ensure that forms are correctly filled and submitted on time (immediately after completion).
- Observe team performance and provide adequate feedback with corrective measures as necessary
- Forward observations and forms to the team leader
- Arrange team debriefing with WHO at the end of each day

Reporting:

All independent monitoring data must be checked and forwarded to the central level within the country within 1 week of the completion of the SIA. The data will then be shared with the WHO regional level.

The monitoring coordinator is responsible for the collection of the forms from the monitors, arrangements for entering the data in the computer and analyzing the data.

The following information should be provided by WHO from end-process monitoring

- Profile of Independent monitors used in each districts monitored
    - Districts covered by Independent Monitoring

- % coverage by Finger Marking (FM) for <5 year children
- % coverage by FM for <1 year children
- % of all clusters that are poorly covered
- % of sub districts that are poorly covered
- % of districts that are poorly covered
- Reason for no vaccination % distribution
- % of houses marked
- % of houses marked correctly
- % heard about the campaign before it started
- Source of information on SIA % distribution: eg posters, media health worker communication etc

Using independent monitoring findings to take corrective action

Note: the GPEI Strategic Plan 2010 - 2012 states the following on page 14:

'Areas identified as having <90% coverage by independent monitoring will be immediately re-covered with corrective measures implemented in advance of the subsequent SIA.'

1. Programmatic Corrective Action

Countries can choose to take action with corrective measures if they consider some high risk areas have been poorly covered.

Immediate corrective action: repeat SIA poorly covered areas
Options for taking immediate corrective measures will include repeating the SIA in local areas where performance is poor. However, the decisions must be made at the national level since they may require the use of additional resources.
Repeating = vaccination teams should go back to the field, check all the houses in specified areas and vaccinate any unvaccinated children

Medium-term corrective action: improved microplanning and correcting SIA team operations for next round. Even if the results do not indicate the need to repeat an area there may be a need to make improvements to plans and team operations in time for the next round.
Such an area should be considered as high-risk for the next SIA

2. Use of Independent Monitoring Data for Programme Direction

Note: The GPEI Strategic Plan 2010-2012 states the following on page 34:

'A goal of internationally posting on the WHO website all monitoring data within 10 to 14 days of each SIA has been established to enable mid-course corrections ahead of subsequent SIAs. In areas where independent monitoring data are discordant with surveillance and other programmatic data, LQAS will be conducted to validate more definitively the level of coverage that is being achieved.'

The quality of Independent Monitoring itself must be closely evaluated. Countries will be requested to provide Independent Monitoring data to the global database, the quality of which can then be classified into 3 categories, with 3 corresponding actions (see box below).

INDEPENDENT MONITORING DATA QUALITY	COUNTRY RESPONSE
Group 1. Countries report IM coverage > 90% and which have stopped polio virus transmission for at least 6 months with good surveillance indicators	Group 1: No specific action required for IM
Group 2. Countries reporting IM coverage < 90% with persistent polio virus transmission	Group 2: Countries should provide regular updates on the implementation of the recommendations implemented after each SIA to improve quality, according to IM findings
Group 3. Countries reporting IM coverage > 90% with persistent polio virus transmission	Group 3: If countries continue to provide incompatible IM data after consecutive SIA rounds, verification will be conducted by Lot Quality Assurance surveys, followed by introduction of further corrective measures for subsequent SIAs.

Lot Quality Assurance Surveys (LQAS)

In 2011-12, all areas with discordant epidemiological and programmatic data will institute LQAS.

'Discordant data' may be defined as countries who have conducted at least four immunization activities, report >90% coverage, and transmission continues (India excepted). These surveys will be conducted by external teams and will provide a rapid assessment of coverage.

Decisions on conducting LQAS will be taken in consultation between regional and global GPEI partners.
LQAS originated in the manufacturing industry for quality control purposes, where a random batch of goods is selected and approved/rejected dependent on a pre-determined criteria.
In the polio context, the population is divided into a complete set of non-overlapping lots, in which a sample of individuals is randomly selected. The status of each individual is checked, and as soon as the number of unvaccinated individuals within the lot reach the agreed threshold for rejection, the selection process can stop.
This technique is extremely time and cost-effective because as soon as the required information is obtained, the data collection is interrupted.

Annex A

Step 1: Example of calculation of total number of teams required based on size of sample of SIA target population

1. SIA target population <5	2.% of SIA target for monitoring sample"	3. average # children <5 per house	4. # house holds	5. # house holds per team per day	6. # team days	7. Duration of post campaign monitoring # days	8. Total # teams required to monitor the whole sample
2,000,000	20000	2	10000	28	357	2	179

STEP ONE: CALCULATE THE TOTAL NUMBER OF MONITORING TEAMS NEEDED ACCORDING TO THE SAMPLE SIZE

Enter only yellow cells:

1. **Enter** the SIA target population <5 yrs
2. Calculate % of the SIA target as a monitoring sample **1%**
3. **Enter** the average number of children <5 per house
4. Calculate the number of households that need to be visited to achieve the sample
5. **Enter** the number of households one team can visit in one day (e.g. 4 x areas of 7 houses)
6. Calculate the number of days needed to visit all households
7. **Enter** the number of days allocated to post campaign monitoring
8. Calculate the number of teams required to do the monitoring

Assumptions (which can be changed)

1% sample of SIA target is to be taken
7 houses per area are monitored
one independent monitoring team to monitor 4 areas of 7 houses per day
1 Team: 1 independent Monitor and 1 guide

Step 2: Example of calculation the Number of Monitoring Teams to be allocated to each High Risk district

STEP TWO: CALCULATE THE NUMBER OF MONITORING TEAMS TO BE ALLOCATED TO EACH HIGH RISK DISTRICT

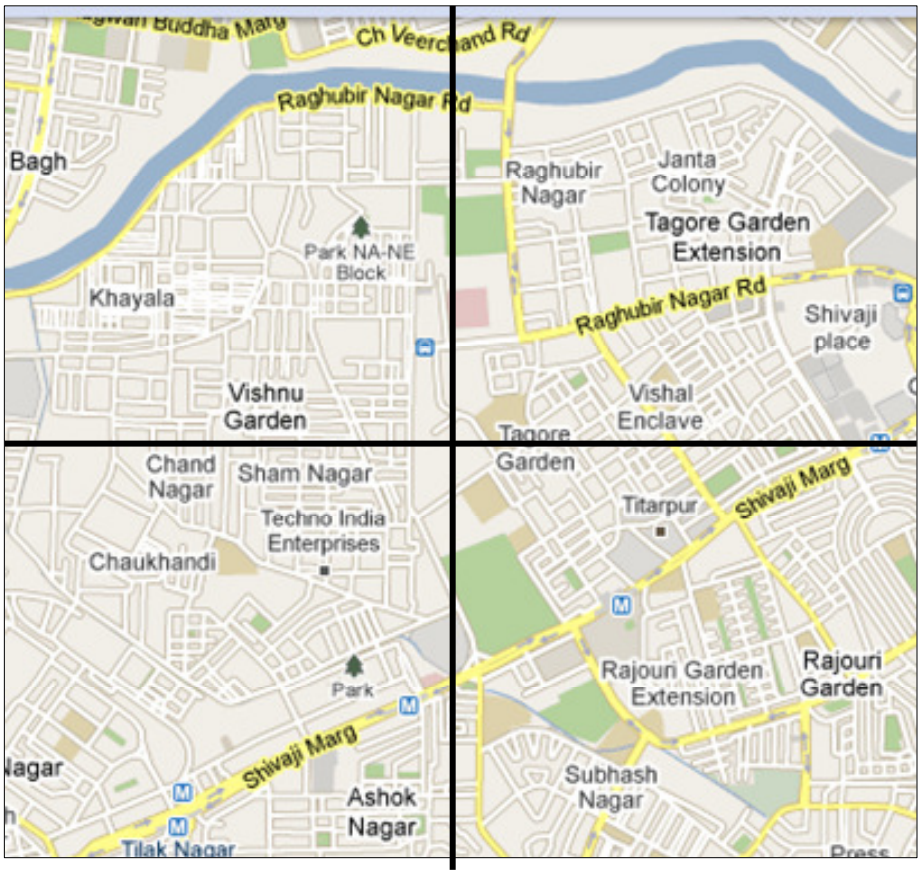
Enter only yellow cells:

HR districts in SIA	Popn <5 in each HR district	% of total HR target in each district	8. Total # teams required to monitor the whole sample	Teams per HR district
A	100,000	10%	179	18
B	95,000	9%	179	17
C	120,000	12%	179	21
D	130,000	13%	179	23
E	120,000	12%	179	21
F	130,000	13%	179	23
G	150,000	15%	179	27
H	160,000	16%	179	28
TOTAL	1,005,000	100%	179	179

1. **Enter** by name all High Risk districts
2. **Enter** the <5 population in each of the HR districts
3. Calculate the proportion of each HR district of the total HR population
4. Automatically insert the number of team days required from STEP One
5. Calculate the number of teams needed per HR district

Annex B:
Using a sub-district map and workplan for area identification and sampling

1. Begin by how many teams will be required to work in a sub-district, based upon available teams calculated in Steps 1 and 2 (Annex A)
2. Allocate teams (by number and name) to the sub-district.
3. Use maps to identify the areas to be sampled and the starting point for area sampling
   - Take a map of the sub-district and divide it into 4 quadrants, each quadrant represents an area to be sampled.
   - **Locate the centre of each quadrant as the starting point** for one area to be sampled. Local knowledge can help identify a 'landmark' at the centre of the quadrant.



   - After the team has moved to the centre of a quadrant they select a random direction in which to go in order to sample at least 7 houses for one area. When that area is finished move to the centre of the next quadrant until all 4 areas are completed

EXAMPLE OF A DAILY WORKPLAN FOR ONE INDEPENDENT MONITORING TEAM FOR TWO DAYS

TEAM NUMBER---- TEAM MEMBER _____ GUIDE _____		AREA 1 7 HOUSEHOLDS STARTING POINT	AREA 2 7 HOUSEHOLDS STARTING POINT	AREA 3 7 HOUSEHOLDS STARTING POINT	AREA 4 7 HOUSEHOLDS STARTING POINT	SUPERVISOR NAME AND PHONE NUMBER	TIME STARTED	*TIME ENDED*
7 Sept Day 1 am House to house	Sub-district Servette	Bank	School	Church	Shoe shop	Pedro 079 345 6789		
7 Sept Day 1 pm Out of house	*Servette market 150 children*							
8 Sept Day 2 am House to house	Sub-distinct Charmilles	School	Butcher shop	Water tower	Telephone shop	Gustavo 077 654 3210		
8 Sept Day 2 pm Out of house	*Charmilles bus station 150 children*							

For each team for each day, 4 areas of at least 7 houses are to be monitored (house to house) in the morning, and 150 children are to be surveyed in public areas (out of house) in the afternoon

ANNEX C: EXAMPLE OF A FORM TO BE USED FOR HOUSEHOLD MONITORING

COUNTRY **AREA #**_____

POLIO SIA INDEPENDENT MONITORING/EVALUATION FORM (IN HOUSE MONITORING)

Region/Province: _____ Date of monitoring: _____

District: _____ Name/Number of vaccination teams: _____

Sub-district: _____ Name of monitor: _____

Village: _____ Profile of the Independent Monitor (Education Institute, NGO, other, Please Specify)_____

In each area, visit at least 7 households and check if households were visited by vaccinators and if every child under five years old was vaccinated (marked). Use a new form for each area

			Order of households visited										TOTAL
	VARIABLES		1	2	3	4	5	6	7	8	9	10	
A	Was the household visited by the vaccinators?												
B	Was the house marked by the vaccinators?												
C	Was the house correctly marked?												
D	Number of under 5 years old children checked in the household	0-11 months											
		12-59 months											
		Total											
E	Number of children under 5 years vaccinated and marked	0-11 months											
		12-59 months											
		Total											
F	Number of children under 5 years not marked (D-E)	Total											
F	Reasons why children were not vaccinated (one reason only per child not marked)	1 - Absent											
		2 - Refusal											
		3 - House not visited											
		4 - House not re-visited											
		5 - Child visiting the house											
		6 - Omission by vaccinator											
		7 - Other (to be specified)											
G	If Refusal, what reason for refusal (one reason only)	1 - Religious beliefs											
		2 - Child sick											
		3 - I am not the one who decides											
		4 - Vaccine is dangerous											
		5 - No response											
		6 - Other (to be specified)											
I	Was the parent informed about the campaign before the vaccinators' visit (Yes/No)												
J	How did they get information about the current polio campaign?	1 - Radio											
		2 - Town/public criers											
		3 - Religious/traditional leaders											
		4 - Vaccinators/health workers											
		5 - Social mobilization											
		6 - TV											
		7 - Community based organization											
K	Name of area not or poorly vaccinated by vaccinators												

Reporting mechanisms and milestones