Provincial Health Directorate of Ile, Zambezia
June 2004

Pilot Community Surveillance Project

Final Evaluation Report

PROJECT HOPE/Mozambique – CHANGE Project

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Acronyms

MISAU	– Ministry of Health
OMS	– World Health Organization
US	– Health Centre
PFA	– Acute Flaccid Paralysis
TNN	– Neonatal Tetanus
HSDS	– Health Support Delivery System
VCS	– Community Health Volunteers
LC	– Community Leaders
PT	– Traditional Midwives
ACSR	– Community Agents for Reproductive Health
PF	– Family Planning
ACSI	– Community Child Health Care Agents
GM	– Mother Groups
CLSs	– Community Leaders' Council
DDS	– District Health Department
DPS	– Provincial Health Headquarters
VC	– Community Surveillance
VVC	– Community Surveillance Volunteer
PAV	– Expanded Program on Immunization
CS	– Health Councils

1. INTRODUCTION

In September 2002, Project HOPE/Mozambique initiated a planning process to implement surveillance at the community level. This process was conducted in collaboration with the Ministry of Health (MISAU) and the World Health Organization (OMS), with technical assistance from the CHANGE Project.

Disease Surveillance encourages data collection, analyses, interpretation and dissemination of information to key sectors that may need to and can take concrete action in accordance with the information received. In this respect, Surveillance aims to provide timely information that can help guide the planning and evaluation of public health interventions. However, the identification of diseases within the system is entirely dependant on sick patients showing up at health facilities. Once the patient is at the health centre, the disease can then be diagnosed, confirmed and immediately reported to the relevant referral structures (e.g. district headquarters → provincial headquarters → Ministry of Health).

The idea of introducing Surveillance activities at community level was prompted by the Polio Eradication Initiative, whose approach to tracking Acute Flaccid Paralysis (PFA) cases requires active local community participation. MISAU decided to involve the community directly in surveillance, given the limitations of diagnosing the targeted diseases using the traditional approach, where health workers wait for patients to show up at a health facility (which does not always happen). Besides PFA, MISAU decided to include a number of other similarly important diseases such as measles, neo-natal tetanus (TNN), meningitis and cholera.

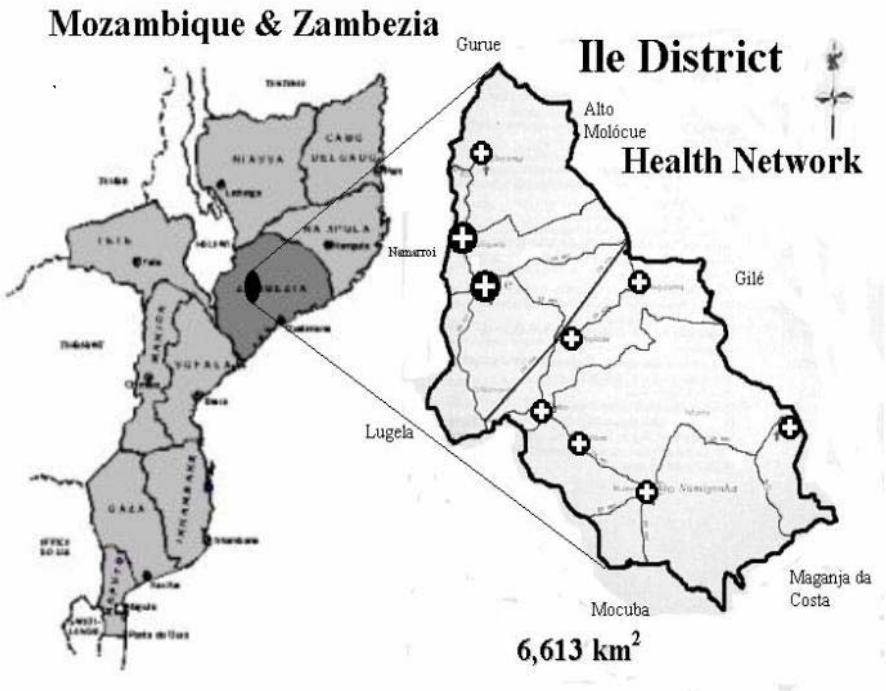
The CHANGE Project developed a package of generic guidelines and instruments to help with the implementation of the Community Surveillance project and tested them in several countries, including Zimbabwe and Malawi. In turn, Mozambique adopted the fundamentals of the approach but modified it in accordance to the country's conditions. It was decided that a pilot study would be conducted to assess program effectiveness under local conditions.

Given Project HOPE's presence in the Zambezia Province, it was proposed that the pilot study be conducted among the communities in the Ile District, where Project HOPE has been implementing health activities since 1997. The target communities

for the project were identified in collaboration with the District Health Department, and the process took into account the spread of community health programs in the area, the number of established health councils at the village level, and the number of trained community health volunteers.

Ile is one of the 16 districts within Zambezia Province and has a population of about 230.779 habitants in 3 administrative areas, namely, Mulevala, Ile Centre and Socone. The district has a limited health network comprised of 2 Health Centres (1 one in the centre of the district and 1 in Muliquela) and 7 satellite health centres. Similarly, there are only 58 health workers, which affects health service delivery and results in greater priority being placed on curative than preventive health measures. The figure below shows the location of the Zambezia Province, Ile district as well as the district health network.

Picture 1: Mozambique Map – Zambezia and Ile District

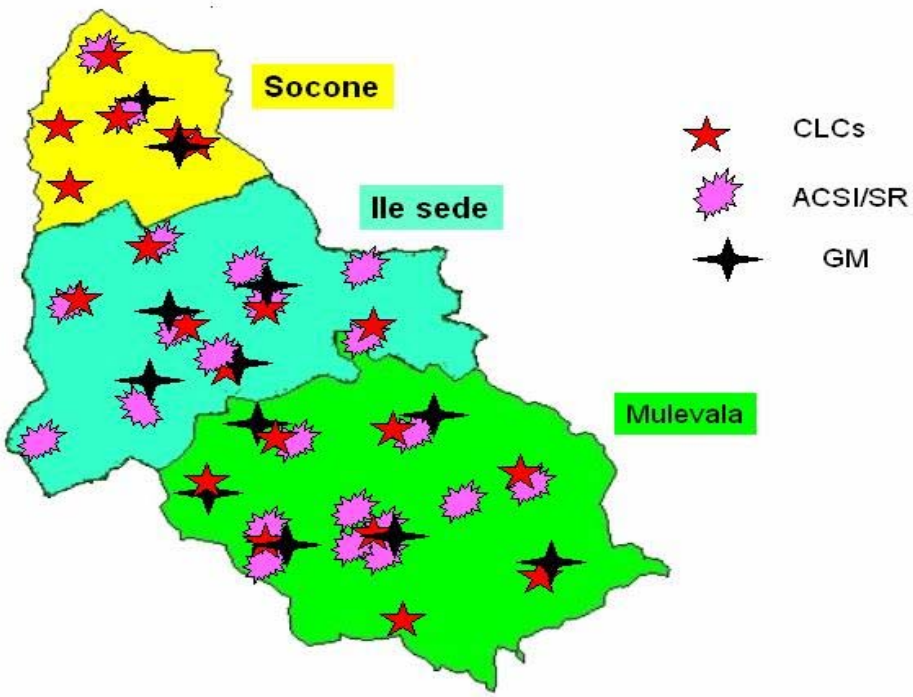


Given this minimal health care network and shortages of staff, especially with respect to preventive health care (i.e. only 2 health workers), active community involvement in preventive health programs has become a matter of urgency. Since Project HOPE began its assistance programs to the Ile District, it has trained 20

community health councils within the framework of the Heath Support Delivery System (HSDS).

In turn, these councils trained 610 Community Health Volunteers (VCS), 250 Community Leaders (LC), 31 Traditional Midwives (PT), 68 Traditional Healers, 25 Reproductive Health Agents (ACSR) and Family Planning Promoters, 7 Community Child Health Care Agents (ACSI) and 12 Mothers Groups (GM). The figure below shows Ile district and the network of community health volunteers prior to the introduction of the Community Surveillance project.

Picture 2. Ile District – Community Health Volunteers' Network



The Community Surveillance project found its initial support through the above structure and the existing network of community health volunteers. The designated areas for the pilot study were the Mulevala Administrative Area, which covers the following locations: the administrative centre in Mulevala, Jajo/ Ruge, Mucata, Nbawane and Inturo) and Socone (only in Macalissa). The principal aim of the Pilot Project was to introduce Community Surveillance, evaluate its contribution to the

effectiveness of the referral diseases and response system, and to assess the program's functioning under local conditions.

2. THE EVALUATION OBJECTIVES

The evaluation's main objective was to document the process of implementing the Pilot study of the Community Surveillance project in Ile District, Zambezia Province. It also sought to identify any positive and negative aspects of the Community Surveillance project's functioning, to assess the effectiveness of the referral system, to monitor the project's activities and make recommendations that might help improve it and permit its eventual expansion to other parts of the country.

3. THE METHODOLOGY

The evaluation process was based mainly on the feedback obtained from interviews conducted with: health worker'' who are directly involved in the project's implementation or working in the referral institutions; community health volunteers who implement the project; and members of the community who benefit from the project's activities. Other than the interviews, information was also sought, obtained and analysed from documented records kept at the Health Centres (US), District Health Department (DDS), Provincial Health Department (DPS) and from Project HOPE.

The evaluation was conducted in the two administrative areas where the Community Surveillance project is being implemented, Socone and Mulevala. In Socone, the project is being conducted in only a single locality (Macalissa), which was incorporated into the evaluation process, whereas five localities were selected in Mulevala, (namely, the administrative centre in Mulevala, Jajo, Nibwiyane, Maheli, e Mucata). The initial evaluation plan had been to conduct no less than five individual interviews with community health volunteers in each of the above-mentioned localities. However, once on the ground, the visiting team was confronted by huge numbers of eager community health volunteers wanting to share their views. In an attempt not to demoralise those who had showed up, the evaluators supplemented the individual interviews with a few group interview sessions. All group interviews began with general introductions whereby the evaluation team explained the objective of their visit, and in turn the volunteers reported on the nature of their

activities and highlighted some of the problems they face during the course of their work. It is worth noting that the group interviews sessions were unplanned and ended up creating tremendous time constraints that on some occasions limited the number of individual interviews that could be conducted in certain localities, but the sessions were invaluable and could not be ignored.

The interviews conducted at the community level (with community health volunteers and other members of the community) were carried out by 6 health professionals, all of them fluent in the local language; whereas those conducted with health workers directly involved in the project's implementation process were jointly conducted by the consultant responsible for the project's evaluation and Project HOPE's technical adviser. This pair also worked together when analysing the documented records on the Community Surveillance project and the referral system.

Annex 1 shows the questionnaires used during the data collection process.

4. THE RESULTS

In order to provide an overview of the different stages in the study of the Community Surveillance project's implementation phase, the Results have been structured as follows:

1- Introduction of the roles and responsibilities defined for all of the relevant institutions and their level of involvement in the implementation of the project;
2- Introduction of the key activities conducted during the project's preparatory stage;
3- A description of how the Community Surveillance currently operates as per the finding of the survey interviews and the records consulted.

4.1 The Roles and Responsibilities of the Participants in the Community Surveillance project

According to the documented records, the tables below show the roles that were assigned to the different participants involved in the implementation of the Community Surveillance project.

Table 1. The roles of the Institutions and participants involved in the Community Surveillance project

MINISTRY OF HEALTH – CENTRAL LEVEL	
Initial • Review of the Kit and the proposed plans for the Community Surveillance project's activity. • Participate in the process of adopting the project to the country (disease surveillance, standard responses towards disease reports, reporting procedures). • Participate in the empowerment/training of Coordinators (employees from the ministry and NGOs) • Request the cooperation from the participating districts (via direct contact or written communication).	**Continuous** • Participate in Community Surveillance activities. • Participate in the pilot project's coordination.

MINISTRY OF HEALTH – PROVINCIAL AND DISTRICT LEVEL	
Initial • Participate in introducing the Kit to be used by community health volunteers. • Participate in the empowerment/training of Community Health Volunteers. • Request cooperation from each health centre (via direct contact or written communication).	**Continuous** • Provide speedy and appropriate responses to reports from the Coordinators and Volunteers. • Support other preventive and operational activities initiated within the communities. • Update any new reported disease cases to the Ministry of Health's diseases' monitoring system • Indicate the symptoms and reports coming from the Community Surveillance system.

WORLD HEALTH ORGANISATION, Project HOPE, OTHER ORGANIZATIONS	
Initial • Participate in developing the Kit (i.e. diseases to be included, response guidelines for disease reports, reporting norms). • Identify Surveillance Coordinators and support their activities • Guide the health centre workers regarding Surveillance activities in the community • Participate in the empowerment/training of Coordinators.	**Continuous** • Participate in the coordination of the Community Surveillance activities. • Integrate the Community Surveillance activities into existing activities. • Expand the Community Surveillance activities to other program areas and neighbouring communities when appropriate.

COMMUNITY SURVEILLANCE COORDINATORS	
Initial • Participate in the introduction of the Kit to be used by the community health Volunteers. • Meet with local health workers to gain a deeper understanding of the process involved in local Surveillance. • Introduce the project to local communities and explain their possible roles in monitoring activities and the selection of and support for community health Volunteers. • Supervise the selection of Volunteers for the Community Surveillance. • Empower/train Volunteers in their tasks.	**Continuous** • Meet with the volunteers to strengthen their capacity, identify and solve their problems/ doubts, gather information about diseases and plan community activities. • Support the volunteers and the community in addressing or reporting the occurrence of any of the targeted diseases. • Collaborate with the community to organize activities that might help keep the volunteers motivated. • Help the Volunteers plan and hold periodic community meetings where they can report on any diagnosed disease, good hygienic practices and ways to help the community plan and make collective decisions. • Support the Volunteers and their communities in developing key preventive community health measures and share this information with other communities on an on-going basis. • Work jointly with the Volunteers and the local heath centres in ensuring that the right responses are being taken with respect to the occurrences reports.

COMMUNITY SURVEILLANCE VOLUNTEERS
Continuous • Actively participate in empowerment/training sessions. • Cooperate with the Coordinator and seek his/ her assistance if problems arise. • Look for children and adults who show symptoms of the diseases sought in the community. • Use the diseases' descriptions and other work related aides to decide whether a sick child or person is suffering from a disease that should be reported. • Complete the case report form for all detected disease cases. • Take the case report form and/or the patient to a health centre as soon as possible. • Participate in the planning and implementation of good hygienic habits in his/her community. • Actively participate in organizing and conducting collective preventive health activities.

4.2 Key activities conducted during the preparatory stage of the Community Surveillance project

➢ **Adaptation of CHANGE's Community Surveillance Kit**

This was one of the first tasks, whereby part of CHANGE's generic Surveillance Kit ("Training Guidelines for the Community Surveillance Coordinators" and a "Training Manual for the Community Health Volunteers") was modified and adapted to suit Mozambican local conditions. Part of this adaptation process implied decisions on what other diseases other than PFA to include (e.g. Measles, Neonatal Tetanus, Meningitis and Cholera) to be monitored in the program. This task was carried out in coordination with the World Health Organisation, MISAU (the Ministry of Health) and Project HOPE.

- **Training of Community Surveillance Trainers**

The following trainers were trained from the Health Department's provincial and central levels:

  - 2 trainers from the central level (1 from MISAU Epidemiology Department and another from PAV)
  - 1 from the provincial level (Epidemiology Consultant, OMS – DPS Zambezia)
  - 4 from the District Health Department - Ile district
  - 2 from Project HOPE - Ile district

- **Orientation and coordination meetings** with the Ile District Department of Health and Community leaders from the selected councils for the pilot study.

- **Development of a Community Surveillance Job Aid**

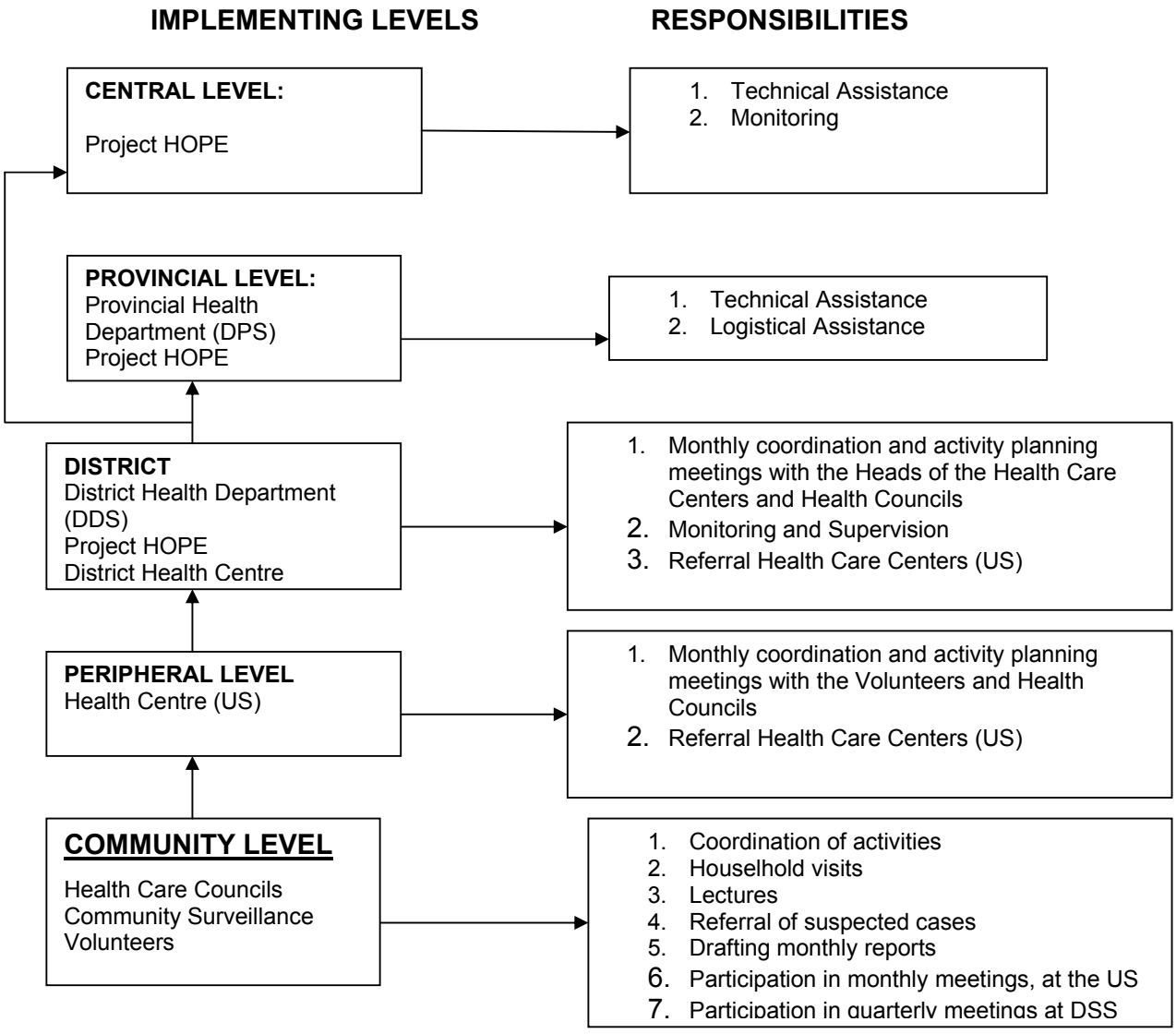
  A flip chart on Community Surveillance for community volunteers was developed and distributed (with summarized procedures on how to identify each of the 5 targeted diseases and steps to take once the cases were confirmed). The material was pre-tested in the district before an expanded distribution was embarked on. The graphic nature of the material ensured that the less literate volunteers could use it to conduct Community Surveillance activities; moreover, translating the text into Lomwe (the local language) made it easier for volunteers with difficulties in reading Portuguese to understand it.

- **Training of Community Surveillance Volunteers**

  A total of 209 volunteers were trained from among the existing Community Surveillance Volunteers in the areas selected for the implementation of the pilot study. Attached (in Annex 2), is the program used to train the Community Surveillance Volunteers. Ten two-day training sessions ran from July to October 2003, with an average of 20 participants per session. The training sessions were conducted by 4 district trainers (2 from the District Health Department and the other 2 from Project HOPE), who in turn had been trained by a national team. The volunteers began work on the Community Surveillance activities as soon they completed their training.

4.3 How the Community Surveillance project operates

As was mentioned earlier, the Community Surveillance project was set up with a view to make use of the existing structures created for the Health Support Delivery System program (HSDS). The figure below shows a summary of activities for the Community Surveillance project according to its implementing levels.



The following is a detailed description of the implementation process.

4.3.1 The Community Level

The health councils form part of the base structure of the community health system and help bring people together from different villages. The health councils consist of different community leaders (religious, political, natural, traditional midwives, traditional healers) and the community health volunteers. Some of the community leaders are also community health volunteers. The health councils meet periodically to analyse and plan their activities. The head of the council normally represents the volunteers at the health facilities' meetings. Besides the Council Head, the head of volunteers is responsible for collecting and producing monthly reports about any activities conducted during the course of the month.

Community Surveillance Volunteers' Network

Of the 209 volunteers trained, 208 are still active and one volunteer passed away. In an effort to obtain more information about the workings of the project, a total of 69 volunteers were interviewed. The table below shows the numbers and distribution of these volunteers per locality. All the volunteers trained for the Community Surveillance project were previously involved in different health community related activities.

Table 1. The number of Interviewed and trained Community Surveillance Volunteers, per Administrative Area and village

Administrative Area	Locality	CDMV Trained	CDMVC Interviewed	
			Individual	Group
Mulevala	Sede	24	4	5
	Nibiwiawe	32	4	0
	Jajo	22	6	0
	Mucata	24	4	12
	Mahele	32	1	24
	Inturro	15	0	0
	Namucarau	27	0	0
Socone	Macalissa	32	9	0
			28	41
Total		208	69	

How the volunteers are organized to conduct Community Surveillance

The volunteers meet at the health councils offices, plan household visits and give health talks. The frequency with which the volunteers conduct their activities varies from once a month to 3 times a week, whereby most of the respondents work twice a week, usually in the afternoon. The volunteers set their own work schedules in coordination with their health council leaders. A small group of volunteers confessed that they did not have a specific time schedule and that they carry out surveillance functions depending on their free time. Nonetheless, even when not scheduled to do so, the volunteers respond to families' requests to examine any suspected disease cases in their homes.

It was not possible to determine the frequency with which the volunteers give talks in any given village nor how often they make household visits, because this information is not recorded. However, the information collected from household visits during the evaluation process indicates that 20 out of 24 households were visited on at least one occasion by the volunteers. On the interview day, the time lag since the last household visit by a volunteer was less than 1 month in 4 households, about 1 month to 8 households, at least 2 months in 4 households and between 3 and 4 months for the 4 households.

What volunteers do during talks and Household Visits

Community Surveillance Volunteers are generally able to communicate several health education messages in talks and household visits because of their background in community health (i.e. as community health agents). In addition, the Community Surveillance materials help teach communities how to identify the signs and the symptoms of diseases such as PFA, Measles, TNN, Cholera and Meningitis and advise them to visit the nearest health centre should they suspect these in their households. During the household visits, volunteers actively seek to identify the possible cases of these diseases. Once they detected suspicious signs and symptoms of any of the 5 diseases, they advise them to take the concerned individual to the nearest health centre. The volunteers also complete a case form (in annex) that the family must produce when they arrive at the health centre.

The case form contains images similar to those found in the materials, and when reporting the illness, the volunteer ticks the image that corresponds to the suspected disease for the health centre's information.

Volunteers' ability to identify disease cases

During conversations with the volunteers, each was shown pictures from the surveillance flip chart and asked to name of each of the five targeted diseases and to provide a description of how they can be recognized (i.e. the signs and the symptoms). The table below shows, the results obtained after evaluating the answer given by the volunteers.

Table 2. Volunteers who made accurate description of the 5 target VC

	Correct Answer		Wrong answer	Total
PFA	13 (50%)		13 (50%)	26
Measles	23 (85,2%)		4 (14,8%)	27
Neonatal Tetanus	5 (23,8%)	12 (57,1%)	4 (19,1%)	21
Cholera	25 (100%)		0	25
Meningitis	12 (57,1%)		9 (42,9%)	21

The definitions considered correct for each of the diseases were as follows:

- PFA – sudden loss of movements of one limb or more, turning fragile (weak);
- Measles – fever and skin eruption;
- TNN – newborn (until 28 days) who stops sucking and develops stiffness and muscular spasms; (the reference to 1 month of age was considered correct, given the difficulty of explaining the 28 days with the community context);
- Cholera – several episodes of watery diarrhoea;
- Meningitis – Fever and stiffness of neck. (mention of stiffened nape and headaches was also considered correct).

These were the basic definitions (the same as those found in the material handed out to the volunteers) considered to be correct answers. It was noticed that most of the volunteers added several symptoms and signs in order to describe the diseases, especially Measles and Cholera.

With respect to Measles, many volunteers mentioned additional signs such as fever, conjunctivitis (red eyes), ulcers and a cough. Those who stated wrong answers only said that children developed pimples around their bodies.

For cholera, many volunteers mentioned diarrhoea and said that “the excrements look like rice water” or that “the excrements smell like fish.” Others pointed out that disease can kill in less than 24 hours. Many of the volunteers actually associated vomiting and diarrhoea with cholera, perhaps because the image in their material depicts someone with both signs, as shown below.

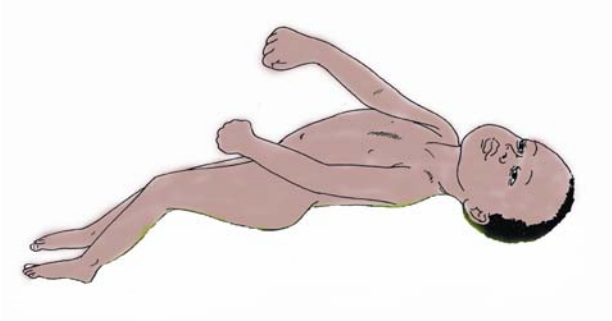
Picture 2. Illustration of a patient with cholera

In terms of PFA, almost all the volunteers mentioned paralysis as a sign but most of them failed to mention its seriousness and the fact that it starts suddenly. On the other hand, some volunteers did point the effect it has on the limbs (“a thin limb” or slim legs”) in conformity with the definition (below) provided in their material (depictions of a child with thin lower limbs). This description makes it difficult to report incidents of the suspected disease, especially if the volunteers expect to see signs in order to report the case. None of the volunteers referred to the target age group for PFA (children under 15 years old).

Figure 3. Illustrates the PFA case

For neonatal tetanus, only 5 volunteers mentioned the target age group (i.e. less than 28 days or 1 month old) together with symptoms such as muscle spasms, a general loss of appetite, etc, as important factors in their description of the disease. 12 of the volunteers accurately described the signs and symptoms of the disease but failed to indicate age range at which diagnoses must be done. As was the case with PFA, the image used to illustrate this disease can mislead the volunteer into not detecting the TNN. But, most volunteers did use the expressions such as “arched position” or “the whole body in an arched position” or “bent back” to define TNN cases. While some tried to describe the disease with more signs and symptoms, others only defined it using descriptions of what they saw in the image below.

Image 4. Illustration of a TNN Case



With respect to Meningitis, almost all volunteers who described it accurately also spoke about the violent cephalalgy as a typical symptom. Almost all the volunteers referred to the stiffness on the nape as a Meningitis sign. However, those who said that this was the disease’s only symptom were classified as having a wrong answer. Some volunteers described Meningitis cases as those where the patient feels “feels pain in the forehead” or “pain in the face” – without mentioning any other symptom. Again, this seems to be a result of how the volunteer understands the image

depicted in the material without associating it with additional information given in training.

Image 5. Illustration of Meningitis case (Publication Image)

The difficulties that these volunteers' have describing/identifying the signs and symptoms of this disease can have implications in their ability to communicate this information to their community. As was the case with the volunteers, most of community respondents also identified this disease using the same in the same image depictions presented in the material. Though they had no problems describing Measles and Cholera, they did face difficulties identifying PFA and Meningitis.

Referral of the identified cases

According to the Community Surveillance Volunteers, different techniques are used to refer the identified cases; this normally depends on the circumstances or context in each household, for example, once the family is made aware of the illness and a case form completed, does:

- the family agree to visit the health centre and take the patient themselves;
- the family agree to visit the health centre but only do so if escorted by the volunteer;
- the family refuse to visit the health centre or does it lack the means to do so. In these cases, the volunteer normally takes the case form to the health centre and informs the person in charge about the case in question;
- the family refuse to visit the health centre (US). The volunteer keeps the case form and hands it over to the heath centre representatives during the monthly meetings;

- the family refuses to visit the health centre or does not have the means to do so. The volunteer gives the case form to the head of the volunteers, who then records it in the monthly report and passes it over to the health centre (US) representatives at the monthly meetings.

The volunteers advise people with all sorts of illnesses to visit the health centres, but if someone shows signs of one the 5 targeted in the Community Surveillance project the volunteers have to complete a case form and report each case. Besides reporting on these diseases, the community volunteer also records the births and deaths that occur in the community (see the Monthly Summary Card).

Most of the interviewed volunteers said they had reported at least one case of the 5 suspected diseases. In most cases they learnt about the disease during their household visits or through the patient's relatives or other members of the community. The table below shows the number of volunteers who claim to have reported the diseases to health centres and the community members who say they contracted one of these 5 diseases this year.

Table 3. Occurrence of suspected cases of the 5 diseases in the communities and their reporting by the volunteers

	Volunteers who claimed to have reported the cases:	Members of the community who contracted one of 5 diseases:
PFA	4	0
Measles	14	10
TNN	2	0
Cholera	10	7
Meningitis	2	1

With respect to the cases reported by the community, 10 came to the volunteers' attention because they coincided with the household visits; 6 because the family ask someone to inform the volunteers; and 2 through the church. In each case the volunteers directed the patients to the health centres. There were 2 suspected Cholera cases, where the families were also advised to administer oral rehydration.

Very few volunteers got any feedback regarding the cases they reported. However, those who did get feedback were told that all the Measles cases were genuine cases, the Cholera cases were in fact only diarrhoea cases, and that 2 of the PFA cases were awaiting confirmation from the Provincial and District Health Departments who were studying the cases.

Community Perceptions of the Community Surveillance Program

A total of 24 community members were interviewed, of whom 6 were from the administrative post of Socone and 18 from Mulevala. All the respondents (20 women and 4 men) lived in the selected areas for over a year. Except for one person, everyone had heard about the project. It is perhaps worth pointing out that both Project HOPE and the District Health Department run other community health related activities in the Ile District under the Health Support Delivery System (HSDS) project framework, and they use trained volunteers to conduct their Community Surveillance activities. Given this background, the information provided by the community in these interviews should not be looked at as though it is only specific to the Community Surveillance project since it may encompass other community health activities.

Some of the community respondents (16), said that they had heard about the Community Surveillance project via the volunteers during their household visits, talks, meetings and at church. In most cases the respondents said that they know the name of at least 1 volunteer. Only 2 people said did not remember the names of the volunteers with whom they worked.

According to the respondents, the Community Surveillance Volunteers' activities are very important and provide the following benefits to the community:

- They teach people about good hygiene practices and encourage patients to visit health centres;
- They teach people how to prevent diseases and direct patients to the health centres;
- They teach people how to cool body temperatures, prevent diarrhoea and conduct oral rehydration at home;
- They help reduce the death rates in the community;

- The volunteers help control the spread of certain diseases and take patients to the health centres;
- The volunteers look out for serious diseases in the community;
- The volunteers help look after children, talk about vaccination programs and teach the community how to prepare nutritional porridge;
- They advise people about delivering a child at the health centre or using a traditional midwife if the maternity ward is distant;
- They help prevent diseases by teaching the community how to build toilets and hand-washing stations.

The above responses show the variety of community activities that these volunteers undertake besides Community Surveillance. On the other hand, the respondents thought the program beneficial because it teaches them about diseases and how to approach the health centres when they are or a relative is ill.

4.3.2 The Peripheral Health Centres

The Mulevala and Socone health centres were visited and interviews conducted with the health workers responsible for the Community Surveillance project. In Socone, the nurse in charge of the health centre was absent so the substitute nurse and midwife responsible for the maternity ward were interviewed.

Health workers in both referral health centres (Mulevala and Socone) reported that malaria, diarrhoea and IRAs posed the biggest health threats to the communities. In Mulevala, the nurse pointed out that intestinal parasites, tuberculosis, leprosy and measles as other threatening diseases. With respect to the Community Surveillance project's objectives, these are seen as disease detection and referral. As a result, the health workers generalize the diseases they deal with, as these are not limited to the Community Surveillance project's set. Similarly, their responsibilities include many other volunteer duties like health education, perhaps because there is no clear definition of their volunteers' roles. When it comes to their role, this is seen as that of a link between the community and the district. They address the disease cases referred to them by the community, confirm the diagnosis, and report the results to the district or make decisions locally when this is necessary.

Monthly meetings with the Volunteers

Health workers at Mulevala and Socone referral health centres hold monthly meetings at which volunteers have an opportunity to present their reports, discuss problems and reported disease cases as well as ways to correct wrong diagnoses. The reports presented at these meetings are eventually compiled into a document that is then sent to the district. However, the results of the inspection visits at these referral health centres revealed only a limited number of monthly meeting reports. Only two reports were found in Socone, and the others are reported to have been sent to the district. Similarly, in Muelavala, the nurse informed the inspection team that the reports had been compiled by Project HOPE staff and sent to the district.

Supervision

The health workers at these referral health centres do not supervise the volunteers. They claim that lack of transport in their areas makes it difficult for them to visit community and work with the volunteers. When volunteers inform the health workers about reported disease cases in their localities, these staff request assistance from the district via radio. As such, the present functioning of the supervisory system of volunteers seems to be run entirely from the district, with little involvement from the health workers responsible for running the referral health centres. In effect, this means that any interventions made by the Errego health centre in Ile (the only referral hospital in the district) are minimal due to its staff's heavy workload. The result of all of this has been that the supervisory responsibilities have fallen on Project Hope's staff, who are also responsible for training the Community Surveillance Volunteers, completing case reports, and writing any follow-up reports of the cases detected.

4.3.3 The District Level

The Ile District Department of Health hosts the Community Surveillance project's pilot study and is jointly responsible for its coordination and execution with Project HOPE.

Training

The training of Community Surveillance Volunteers is conducted by district teams composed of staff from Project HOPE and the District Health Department. The respondents from both Project HOPE and the District Health Department raised some issues about the training that are worth mentioning, namely:

- The need to improve the quality and pre-testing of images used in the Community Surveillance publication (especially images related to Polio, Tetanus and Meningitis);
- The need to make timely provision of all training materials;
- The need to provide refresher courses for the volunteers, given the short initial training;
- The need to assign a specific staff member to work with Community Surveillance Volunteer training.

Monthly and quarterly meetings at the district level

These meetings are attended by the entire District Health Department management staff (e.g. the district health director and all heads of district programs and sectors), the heads of the referral health centres and representatives of the Health Councils. According to the health council reports at the Ile District Health Department, the volunteers have developed a systemized method of reporting their monthly/quarterly activities and presenting any problems they encountered during the course of their duties. While this system exists, it is worth mentioning that these reports do not specifically deal with the type of activities conducted within the context of the Community Surveillance project. This type of Community Surveillance information is only available from Project HOPE's district team's monthly summaries and reports.

The District Health Department is also responsible for supervising the field activities. The department has community health staff, specifically assigned to the Ile district, who work with Project HOPE and supervise the volunteers' field activities. But, like their colleagues in the referral health centres, they too have many time constraints and a huge workload that make it difficult to monitor the volunteers' activities closely and on a regular basis.

Given that a special follow-up is required of each reported disease case irrespective of its seriousness, the district health centre acts as the only referral centre for the

entire district and through which all reported community-level disease cases are channelled via the peripheral referral health centres (e.g. for suspected cases of PFA, for clinical confirmation, for gathering stool samples or for rehabilitation).

4.3.4 The Provincial Level

Operating at this level are the Provincial Health Department and Project HOPE, which provide technical assistance for the project's implementation in the district. With respect to monitoring epidemics and the spread of transmissible diseases, the Provincial Health Department's assistance covers all districts, including Ile.

Based on the information obtained from the Provincial Health Department, it recognizes the value of the Community Surveillance project, especially with respect to the reporting of PFA cases, which started when Community health volunteers started to implement their activities.

5. PROJECT ACTIVITY MONITORING

Project HOPE's staff was responsible for monitoring most of the project's activities, and compiling quarterly reports.

Picture 4. Case reports of the 5 diseases, births and deaths reported by Community Surveillance Volunteers during the last quarter of 2003 and the first of quarter of 2004.

Village			Suspected Cases:											
	Births		PFA		MEASLES		TNN		CHOLERA		MENING		Deaths	
	03	04	03	04	03	04	03	04	03	04	03	04	03	04
Mul. Sede	9	55	0	0	0	0	1	0	0	0	0	0	0	6
Nibiwiawe	71	42	0	0	6	10	0	0	0	0	0	0	0	9
Jajo	17	101	0	0	0	0	0	0	0	0	0	0	2	5
Mucata	38	72	1	0	48	23	0	0	0	23	0	0	0	22
Mahele	14	60	1	1	32	0	0	0	2	0	0	0	0	7
Inturro	9	17	0	0	31	0	0	0	2	0	0	0	7	3
Namucarau	26	68	1	0	3	0	1	3	0	0	0	0	0	24
Macalissa	82	127	0	0	25	0	0	0	0	0	0	0	8	33
TOTAL	**266**	**542**	**3**	**1**	**145**	**33**	**2**	**3**	**4**	**23**	**0**	**0**	**17**	**109**

The existing records of the disease cases reported by the Community Surveillance Volunteers cover a period of two quarters - corresponding to the period since these monitoring activities began. The figures exclude any information from the current quarter, as this period has not yet ended. As can be seen from the table above, the births and deaths figures recorded in the Volunteer's second quarter underwent a significant surge. On the other hand, the Volunteers reported 4 suspected cases of PFA, a very important event given that no suspected cases of this disease had been reported in the 3 quarters prior to the launch of the Community Surveillance project. Other than the suspected cases reported by the Volunteers, another two cases were reported from external consultations at the District Health Centre.

The follow-up reports of the cases reported by the volunteers indicate that:

- All the suspected PFA, cases were first reported to the health centres, then to the district health centre and finally to the District Health Department, which is currently following the cases with the epidemics department staff from the Provincial Health Department.
- A little over half the reported Measles cases (96/188) were confirmed as true cases of the disease at the health centres; however, it is worth pointing out that a considerable number of these cases were reported by the Volunteers through the completion of report forms and not necessarily by the individuals concerned presenting themselves at the health centres, so it is difficult to ascertain whether these were in fact Measles cases or not.
- There was only a single confirmed case of TNN, but this patient passed away soon after arriving at the health centres. The other cases turned out to be malaria patients who recovered once the relevant treatment was administered to them.
- None of the suspected Cholera cases turned out to be true. Upon examination, it was concluded that the patients were diarrhoea cases, not Cholera ones.

The quarterly reports obtained from the Weekly Epidemiology Bulletins in Ile District show that there were 116 reported cases of Measles and 3 of PFA (at a time of a Measles outbreak in several districts of the province) in the fourth quarter of 2003; and 11 reported cases of Measles and 1 of PFA during the first quarter of 2004

(there are 2 reported cases of PFA that do not appear in the Provincial Health Departments' records). There were no reported incidents of the other diseases (namely, TNN, Cholera and Meningitis) during the other 2 quarters.

6. Conclusions and Recommendations

Based on our analysis of the proposed activities for the Community Surveillance pilot study (as presented on pages 6 and 7) and the reported field realities (as presented on page 9), we conclude that most of the activities were in fact conducted as initially planned. Its seems generally agreed (by the communities, volunteers, health staff at the different levels) that the project has been beneficial, given that it produced measurable results such as the reporting of PFA and the referral of suspected disease cases (e.g. Measles, TNN and Cholera) the health centres.

Next, we are going to highlight the key factors that contributed for the success of the project and point out aspects that could be improved in order to obtain even better results.

6.1 Positive aspects that contributed to the project's success

- Coordination and Partners' Involvement – MISAU, the World Health Organisation and Project HOPE were involved actively from the project's inception and participated in: the project's needs definition process, the material modification and adaptation and implementation of the activities. Similarly, there was also a lot of community involvement through their leaders (and also direct community participation) from the beginning of the project and throughout implementation. According to the volunteers, there were incidents when some sections of the community resisted the idea but over time a trusting relationship was developed once the Community Surveillance Volunteers' got underway.
- Adaptation of the generic Community Surveillance Kit for the country – This adaptation process helped make the Kit materials more useful to local Community Surveillance needs. The extensive involvement of the different participants (at the institutional level) in the adaptation and preparation of materials was crucial ensuring the production of the final materials.

- The Community and Volunteers' Motivation – While its true that the volunteers complained about the challenges of the job, insufficient material (exercise books, pens, pencils, etc), the long walking distances and no incentives to support their work efforts, they were unanimous in showing their willingness to continue working on the Community Surveillance project for an indeterminate period of time. Therefore, expressions such as "I will continue to work until the project ends" seem to reflect the low visibility of the District Health Department and Health Centres within these communities and the public's association of the volunteer activities with Project HOPE. Some people enjoy being volunteers because they learn new benefits, (e.g. "now I know how to prevent my family from contracting certain diseases, and I know what to do when they get sick.")
- Integration of Volunteer-reported cases to National Health Information System – Once a suspected disease case reported by the Community Health Volunteers is diagnosed and confirmed, it becomes integrated into the monitoring system, which implies integration and confirmation at the district level before being reported to the next referral levels (i.e. Provincial Health Department and the Ministry of Health. In cases involving PFA, the procedure is the same as that for cases identified at the health centre level.

6.2. Community Volunteer aspects that need improvement

- **The Involvement of MISAU's partners** – While these were actively involved at all levels at project inception, this involvement almost became non-existent during implementation. MISAU's lack of involvement during this stage had some repercussions, for example, the health staff at periphery health centres failed to supervise the volunteers' activities and limited their role to a passive participation in the monthly meetings, in spite of their initial commitments that this would be their area of responsibility. The involvement of the periphery health centres in the supervision process is indispensable and further attempts at integrating them into the community supervision plans must be undertaken.
- **Volunteer training** – The course was too short (only 2 days), as is evident from the incomplete definitions of the 5 targeted diseases. A proposed measure to improve the quality of disease detection in all reported cases is

that the training period be extended by at least one day. In the event that the Community Surveillance project is expanded to other parts of the country, we strongly recommend that all the training material (e.g. the training manuals, job aids and any other relevant resources) be made available to the volunteers during the training sessions in order to aid their understanding. The following changes are also recommended:

a) The PFA Image – Instead of showing thin lower limbs (atrophied), the limbs should be average sized and perhaps show that one or both are fragile thus making it difficult for the child to move around. Given the graphic difficulty of showing severe paralysis prior to its symptoms the training should rather emphasis the "fragile" and "sudden appearance" aspects of the illness. It is important to mention that muscle atrophy appears only in later stages of the illness when monitoring the disease no longer serves any purposes (although these patients can benefit from physical rehabilitation where such services are available).
b) TNN – Place less emphasis on the arched image of the child (it less frequent in new born babes). Keep the spasms picture. Consider additional a drawing with the sardonic smile and the child's inability to suckle. Consider changing the message from "child within 28 days of birth", to "child at one month of age," given that counting 28 days might prove to be difficult in these communities.
c) Cholera – Most volunteers described this disease as "diarrhoea and frequent vomiting per day." Perhaps the vomit aspect should be removed from the image, because it leads to the error of assuming that both symptoms must occur simultaneously.
d) Meningitis – Given that the main message is the stiffness of the nape, perhaps the patient's hand should be holding the nape and not the neck or the forehead as appears in the material.

It should also be made clear to both trainers and the trainees that the images are only there to assist their understanding of the material and that they should not neglect additional information taught in training.

- **Keeping Activity Records** – There is a need to improve the recording of the Community Surveillance Volunteers' activities and to establish feedback

mechanisms so as to value the work conducted by the volunteers. Ideally the volunteers must have durable work material that can adequately store the recorded information (bound case forms and some means of keeping copies of all their reported cases). Similarly, the referral health centres must have appropriate archives to store and record all reported disease cases.

- **Feedback** – At the periphery, the respondents complained about a general lack of feedback. The volunteers have little information about the "state of affairs" of the program they are implementing. They complained that during supervisory visits and in the meetings held at the health centres and District Health Department, the topics commonly discussed are related to other issues and rarely is anything revealed about the progress or (failures) of this project. Some volunteers pointed out that they would like to hear something about their project on the community radio.

7. Sustainability of the Community Surveillance Project

7.1 Costs

As has already been pointed out, the Community Surveillance Project in Ile district was implemented in conjunction with already existing structures within the Health Support Delivery System (HSDS). Given that a significant amount of the project's costs are shared with the HSDS program, it difficult to estimate the exact nature of the field costs. For example, the training sessions were organised so that 2 days were dedicated to the Community Surveillance project and another 3 for refresher courses on other heath topics; similarly, the entire supervisory structure at the central, provincial and local levels in the district is a shared one between the Health HSDS and the Community Surveillance project.

7.2 MISAU Involvement with the Community Volunteers

As has already been pointed out, MISAU has had minimal involvement in project implementation. The volunteers claim that they will continue their monitoring activities until the project ends, which seems to suggest that they associate the project with Project HOPE. There is a danger that this project might come to a halt or slow down significantly if people mistakenly conclude that this project has ended the day Project HOPE stops funding its other operations in the district. Presently, the project needs urgent support for sustaining supervision and monitoring.

7.3 Support from the health system

In the interviews, both volunteers and community members complained about the lack of medication in the health centres. The volunteers gave embarrassing accounts of trying to mobilize families to visit the health centres and being rebuked because these centres have no medication to treat the illness or because health workers have in the past sent them home because there were no supplies.

Besides the general lack of medicines at these health centres, people also complained about the long waiting periods in queues, the bad service, the inappropriate closing times of health centre and maternity wards in Mulevala on weekends. The communities complained that there are no services for pregnant women and other patients on weekends.

The evaluation team became aware of the cyclical nature of the supplies deficiencies within the district's health centres. It is common for these centres to be faced with stock shortages in the last 10 to 15 days of each month. Despite the fact that these supplies are sometimes available at the District Health Centre, there seems to be an unspoken rule that supplies are only delivered during the first few days of the month.

The evaluation team witnessed a crisis situation whereby the entire district had run out of vaccines, and despite efforts to resolve the problem, 4 days went by before the District Health Department was able to obtain vaccines from Mocuba's Regional Vaccine Warehouse. Problems within the ordering system almost jeopardised the normal operation of the local health centre.

The issues presented here reveal the urgent need to not only work in solving the problems at the community level but also to adequately support and address the management and skills deficiencies that exist within the structures at the health center and the District Health Department. A failure to resolve these matters might result in poor responses to the community's health needs, which might in the medium and long term result in their becoming disillusioned with the system and eventually withdrawing their support for the community health volunteers.