

Drop by Drop

The NGO Contribution to the
Polio Eradication Initiative in Angola

CORE Group Partners Project, Angola

November 2004



Polio

CORE STORIES
FROM THE FIELD

CORE

The Child Survival Collaborations and Resources Group (**CORE Group**) is a membership association of more than 35 U.S. nongovernmental organizations (NGOs) working together to improve the health and well being of children and women in developing countries through collaborative NGO action and learning. Collectively, its member organizations work in more than 140 countries, supporting health and development programs.

The **CORE Group Partners Project** supports NGOs to eradicate polio in the communities in which they work. Currently, the project supports NGO secretariats in Angola, Ethiopia, India and Nepal to carry out supplementary vaccination campaigns and surveillance, strengthen routine immunization, provide support to families with paralyzed children, and improve NGO documentation of polio interventions.

Case writing team: Odete Vieira Lopes, Maria Delfina C. Antunes M., Domingos Kussinduca, Jaime Horácio, Ester Tembo, Marcelina Gregório, Fernando Gil, Dr. António Dias, Miriam del Pliego, Henrique Lopes Silvestre, Daniel Perlman, Dulce Vieira Lopes, Manuel Matos.

Facilitator, CORE Group Case Writing and Qualitative Methods Workshop: Daniel Perlman.

Edited by Julia Ross, Communications Manager, CORE Group.

For information about the CORE Group Partners Project in Angola, contact Dr. António Dias at: corepolio@ebonet.net. For information about the case writing and qualitative methods workshop that produced this case study, contact CORE Consultant Daniel Perlman at: dperl@berkeley.edu.

For more information, please contact:

The CORE Group
300 I Street NE
Washington, DC 20002
Tel: 202.572.6330
Fax: 202.572.6481
Email: contact@coregroup.org
www.coregroup.org



This publication was made possible by support from the Bureau for Global Health, United States Agency for International Development (USAID) under Cooperative Agreement FAO-A-00-98-00030. This publication does not necessarily represent the views or opinion of USAID. It may be reproduced if credit is properly given.

Contents

Introduction	5
An Epidemic Leads to Action	7
Meeting the Challenge: Immunization	9
A Need for Surveillance	13
The Power of Partnership	17
<i>Appendix: Letter from Vice Minister of Health, Angola</i>	19

Polio

CORE STORIES
FROM THE FIELD

Acronyms

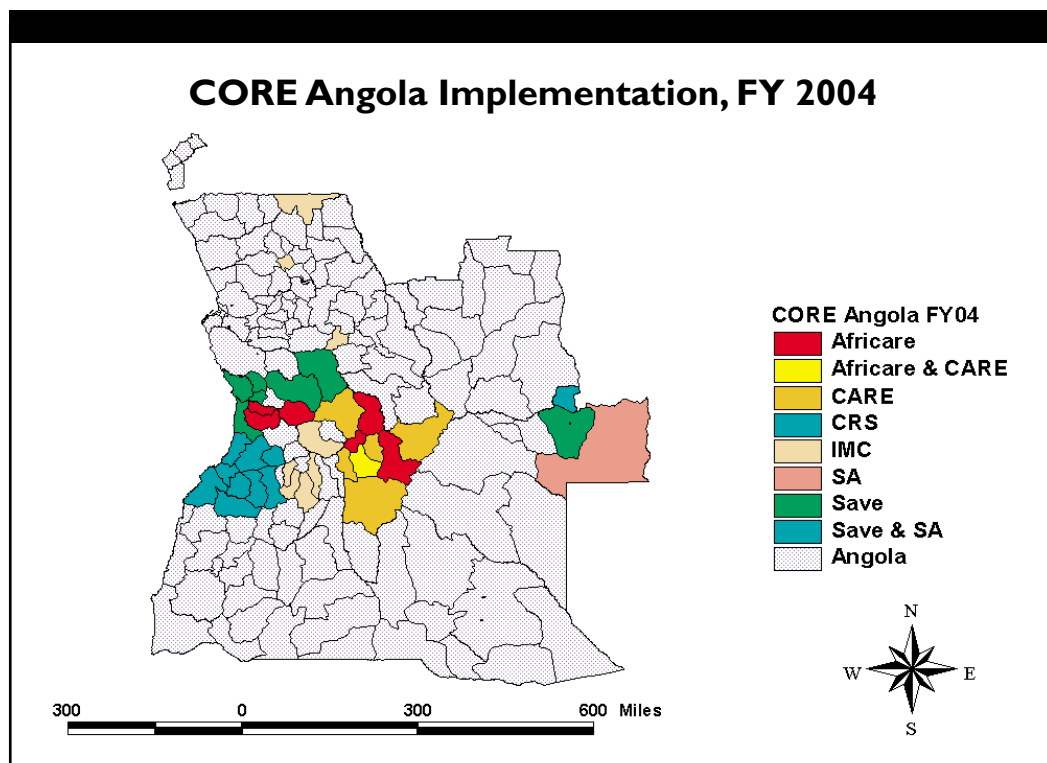
AFP	acute flaccid paralysis
CORE	Child Survival Collaborations and Resources Group
CRS	Catholic Relief Services
MPLA	People's Movement for the Liberation of Angola
NGO	nongovernmental organization
OPV	oral polio vaccine
PEI	Polio Eradication Initiative
UNICEF	United Nations Children's Fund
UNITA	National Union for the Total Independence of Angola
WHO	World Health Organization

Introduction

S

ince 1988, the Global Polio Eradication Initiative (PEI) has worked to eliminate polio – a highly infectious viral disease that can lead to paralysis, muscular atrophy, or death – from all endemic countries. By increasing the coverage of routine immunization, organizing National Immunization Days, and developing surveillance for acute flaccid paralysis (AFP), the PEI has reduced the world's incident cases by more than 99%. Between 1988 and mid-2004, the number of countries endemic for polio dropped from 125 to 6. However, the disease remains endemic in parts of Africa, the Indian subcontinent, and the Eastern Mediterranean.^{5, 11, 12}

Angola faces a unique set of barriers in its fight against polio: the still-fresh legacy of a 26-year civil war has made it difficult to develop systematic immunization and surveillance programs.⁷ After a peace agreement was signed in 2002, many displaced Angolans living behind the front lines regained access to government health facilities, but the number of health centers and vaccination posts remain insufficient to meet the needs of this population. Maintaining vigilance against polio in this kind of post-conflict environment is critical to the global eradication effort, and is especially critical for children under age three who make up the majority of polio cases in Angola and



worldwide. As Angola rebuilds and extends its public health system, forging strong collaborations with civil society will play an increasingly vital role.

The *Child Survival Collaborations and Resources Group (CORE) Partners Project/ Angola*—a coalition composed of the U.S. nongovernmental organizations (NGOs) Africare, CARE International, Catholic Relief Services (CRS), International Medical Corps, Salvation Army, and Save the Children/US—has worked since 2000 to strengthen routine immunization services, plan and monitor National Immunization Days, and carry out community-based surveillance. Strengthening the routine immunization system increases the possibility that infants will receive four doses of the oral polio vaccine (OPV) during the first year of life. National Immunization Days provide supplemental doses of OPV to children under five. CORE partners help to meet these objectives by training and supporting village health volunteers, who rally and educate their communities, and by providing vaccinators and supervisors with logistical support.

Though the project's efforts are ostensibly centered on polio eradication, they simultaneously strengthen routine immunization for other vaccine-preventable diseases and bolster the development of Angola's public health surveillance system.

This document is the result of a 10-day qualitative methods and "case story" writing workshop carried out by CORE's Angola partners in March 2004. Workshop participants sought to answer a number of questions surrounding immunization efforts that are not routinely documented by NGOs or academic journals. These questions included:

- What happens when new immunization approaches are implemented in real life, with few resources, little training, and in communities devastated by decades of war?
- What issues do on-the-ground programs encounter as they work to mobilize, inform, and support community-based efforts in regions where people face multiple, daunting problems?
- What are the key barriers, successes, and areas to scale up in an equitable and sustainable way?

Workshop participants traveled to Kwanza Sul province to interview and observe village volunteers, government officials, vaccination post staff, community members and health care providers; took field notes; and translated those notes into the journalistic-style story presented here. This document provides background on the CORE Group Partners Project's entry into Angola and describes immunization-related barriers and solutions encountered by CORE NGOs at the local level. Though the case story focuses largely on the work of Save the Children in the municipality of Gabela, much of what is reported is representative of the efforts of other CORE Group partners in other communities in Angola.

An Epidemic Leads to Action

On March 23, 1999, the Pediatric Hospital in Luanda, the capital of Angola, reported 21 cases of AFP*, the signal condition for polio. In the following two weeks, health officials detected 81 additional cases. When laboratory tests isolated the poliovirus in stool samples of a number of the patients, teams of vaccinators spread through the capital and surrounding areas, and immunized more than 600,000 children against polio. Nevertheless, the epidemic spread. The toll grew to 634 cases by the end of April. A month later, the outbreak had become one of the largest ever recorded in Africa. Before it was over, 1,083 cases were reported, 108 people died, and many more were disabled. Most of the victims were young children.^{2, 4, 10}

Conditions in Luanda were ideal for an outbreak. Angola's civil war had reignited just a few months before. Hundreds of thousands of people fled their homes and resettled in crowded settlements in the capital. Sanitation was poor and the water supply inadequate. Though Angola is richly endowed with natural resources, the war left it one of Africa's

poorest countries; basic health and education services were severely weakened. A quarter of Angola's children die before their fifth birthday, the world's highest under-five mortality rate;^{1, 9} at the time of the polio outbreak, immunization coverage was low.

Angola detected its very last case of polio less than two years after the peak of the 1999 epidemic. This dramatic reversal was achieved through a partnership of NGOs (including Rotary International and Red Cross/Angola), the Ministry of Health, and multilateral organizations like the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). "I went to Angola shortly after the outbreak," recalls David Newberry, Project Director, CORE Group Partners Project. "As many as 350,000 children had been exposed to the poliovirus during the epidemic, and were now immune. Another 600,000 children were vaccinated in the emergency mass immunization.

"The war made travel between urban and rural areas dangerous. Intensified vaccination could raise levels of immunity to the point that the barrier between the rural and urban areas was sufficient to prevent further transmission of polio. Then expanded routine immunization and National Immunization days in both areas could lead to eradication. And if we could do this in Angola in the midst of a war, people would see that it could be accomplished anywhere."

Newberry believed that the coalition of NGOs that make up the CORE Group could make an important contribution to such an eradication strategy. He made an appointment



* Acute flaccid paralysis (AFP) is a non-injury related floppy paralysis that suddenly appears in the arms or legs of a child under 15 years of age.

with Dr. Jose Van-Dúnem, the Vice Minister of Health, to discuss possible collaboration with CORE partners. “It was one of those rare, blessed moments when two people each have an immediate grasp of what the other is saying,” Newberry said. “‘There’s an Interagency Coordinating Committee meeting in two hours,’ Dr. Van-Dúnem told me. ‘I’d like you to come with me and take a seat as a member of this committee.’ From that point on, it just rolled out for all of us.”

Despite the intensity of Angola’s civil war, CORE’s NGO partners were determined to carry out polio eradication efforts in hostile regions. The fact that these NGOs already had on-the-ground health, nutrition, and agriculture programs in place greatly facilitated this work. Still, intense negotiations were required at both the national and local levels. Church leaders often acted as intermediaries and arranged for the movement of supplies across the front lines.

“This was dangerous work,” Newberry said. “Some of the less disciplined UNITA* squads didn’t honor the agreements. Vaccinators were ambushed and killed. But the staff never wavered. On occasion I’d join one of the supply flights. When you’re making a landing from 25,000 feet in a tight, corkscrew circle, you appreciate the risk that others are living with every day. Their work was based on deep commitment to their vision of what Angola would be like without polio.”

“During the war, the NGOs worked in the areas of greatest need. We didn’t take sides. It didn’t matter if a community was in government or UNITA*-held territory. I coordinated Africare’s health-related activities in a UNITA-controlled part of Bie province. Both the government and UNITA understood that we were impartial. UNITA allowed flights in with vaccines, syringes, and even mini-refrigerators. We were able to implement National Immunization Days on both sides of the front lines.”

**—Dr. António Dias, Director,
Angola CORE Secretariat**

* UNITA (National Union for the Total Independence of Angola) waged a guerrilla war against the ruling People’s Movement for the Liberation of Angola (MPLA) from the time of independence from Portugal in 1975 until a peace agreement was signed in 2002. UNITA is now the country’s largest opposition political party.

Meeting the Challenge: Immunization

Efforts in Angola to increase the coverage of routine vaccination, and to administer supplemental doses of oral polio vaccine to all children younger than 5 years old, are being pursued in a context where even the most basic health infrastructure is not yet in place. Under such circumstances, ensuring that vaccines, supplies, and staff arrive when and where they are needed is a daunting challenge.

The most significant obstacles facing polio eradication and the intensification of routine immunization in Angola's Kwanza Sul province are: 1) a limited number of health facilities offering vaccination services; 2) inaccessibility of many communities; 3) a shortage of trained and committed personnel; 4) poor roads, communication and transportation options; and 5) difficulty in mobilizing communities exhausted by decades of war and poverty.

A VOICE FROM THE FIELD

The center director welcomed us warmly as we entered the municipal Maternal and Child Health center building. He was a short, agile man, likable, and easy to talk to.

"We are chronically understaffed," he said, leading us toward the pharmacy. "So we cover for one another. The obstetrics nurse is currently in family planning because the nurse there is on vacation. I'm working pharmacy because we're still short a technician. It's even worse in the rural health centers.

"Many of the people we serve are displaced. They live here, but often return to their villages to cultivate their land. When they go they take their children with them. There are a lot of unimmunized children. I've seen some that haven't had a single vaccination.

"With all these shortages, our routine immunization coverage is much lower than I'd like it to be. We don't have gas-powered refrigerators available for use in the vaccination posts. Rather than risk losing the vaccines each time the electricity goes out, [vaccinators] have to come in every morning to pick them up at the cold room [in the Maternal and Child Health Center].

"Many of our patients travel 15 to 20 km to come here for services. Since we can't go out to the communities right now, we need them to come to us to vaccinate their children. And for this to happen, we need more community mobilization, more health education, and more rural vaccination posts."

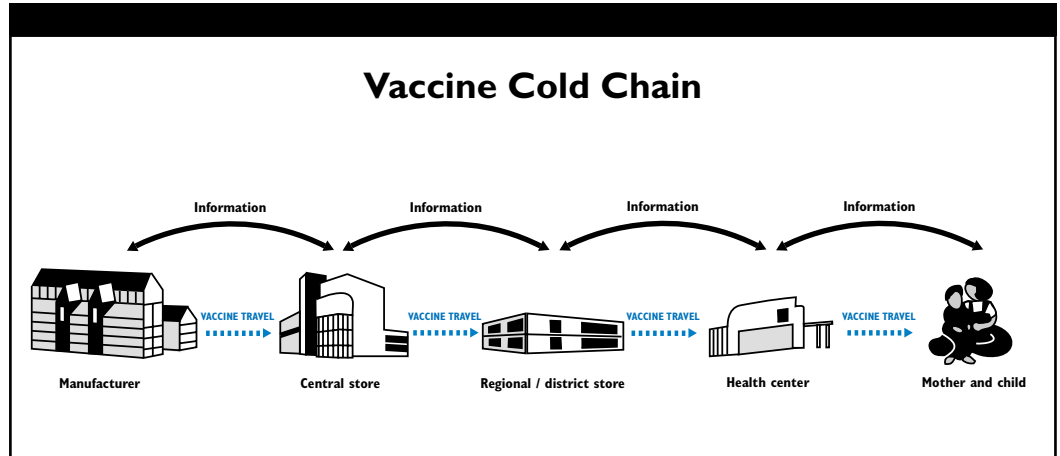
—From the field notes of a case author

For a child to be immunized in the village of Assango, a "cold chain" needs to be maintained in which the vaccine travels from the foreign manufacturer to the capital city of Luanda, to the provincial storage center, then to the Gabela municipal cold house, and from there to the vaccination post nearest Assango. An integrated network of staff, vehicles, storage equipment, and program procedures is needed to manage the ongoing tasks of temperature monitoring, vaccine stock management, equipment maintenance, and transportation of people and vaccines.

Chronic lack of transportation is one of the problems most frequently cited by vaccinators, health facility personnel, cold chain technicians, and village volunteers. Vaccinators who work in posts close to the municipal cold house can retrieve vaccines by foot, bicycle, or public transportation. Those who work farther away face greater constraints. "We certainly don't lack problems in our work," a vaccinator told the case study group, "but transportation is one of the biggest. It can be demoralizing for us to have to suspend our work while waiting for a vehicle to become available."

“I honestly don’t know what we would do without Save the Children. We have seven vaccination posts to supply. We’ve placed our two best refrigerators in the most distant posts, which cuts down on the number of deliveries needed. Still, transportation is the great bottleneck in our system. Save the Children transports vaccines from the provincial storage center to the municipal cold house, and then from the municipality to the most distant health centers and vaccination posts. They also provide vehicles for supervisory visits and the transport of important information. Before, when our motorcycle still worked, I had to drive as far as the road conditions would permit, and then walk the rest of the way. Also, when new equipment arrives, [Save the Children] teaches us how to use it.”

—Municipal Supervisor,
Expanded Immunization
Program



2003 Immunization Essentials: A Practical Field Guide. Washington, DC: USAID Office of Health, Infectious Diseases, and Nutrition

The Angolan Ministry of Health has reactivated many outreach teams and mobile units in Kwanza Sul province to intensify routine immunization. Outreach teams are composed of vaccination post employees; they visit nearby communities seeking mothers and children who failed to show up for vaccination. Mobile units travel to more remote communities that otherwise have no access to vaccination.

In early 2004, 18 technicians were trained to staff the town of Gabela’s reactivated outreach teams and mobile units. One of the new mobile units soon began vaccinating in several remote communities. The team never returned to administer the second dose; there was no funding available to rent vehicles and pay drivers. At another post the outreach team was poorly screened and soon disintegrated due to a lack of committed personnel. The men began to drink on the job while the woman grew frustrated and returned home to take care of their children.

Another dilemma NGOs face is how to mobilize communities to participate in polio eradication when residents face other, arguably more daunting, problems. One of the mobile teams working outside of Gabela had to suspend the second phase of its immunization program due to weak community support. After carrying cold boxes on their heads to one village, team members were disappointed to find that local leaders had made no arrangements for their lodging or meals.

NGOs Fill the Breach

Parents are more likely to bring their children in when they are confident that vaccinations will be available, but transportation difficulties frequently cause supply ruptures. CORE Group partners facilitate the regular supply of vaccines, perishable materials, and fuel to health facilities in the regions they serve. This task is more complex than it might at first appear. The NGO must purchase, maintain, and repair vehicles; plan and schedule vaccine deliveries; and hire and train fleet managers, mechanics, and drivers. Save the Children’s Food for Public Works program also repairs key roads and bridges. This accelerates the implementation of public health programming and provides community members with better access to outside markets.

As the civil war in Angola came to a close, many people living behind the front lines were reachable once again. Last year, Save the Children helped the Ministry of Health reopen four vaccination posts in Gabela and assisted in retraining the staff. Africare trained

VACCINATION BARRIERS CITED BY PARENTS, HEALTH WORKERS—KWANZA SUL PROVINCE

- Long distances to vaccine posts
- Expense of public transport
- Vaccine shortages and stock-outs
- Long waits at vaccine posts
- Confusion about when to return for follow-up vaccinations
- Belief that vaccinations aren't safe or effective
- Misplaced vaccination cards when families move between settlements

vaccinators for health centers and mobile teams in Sele, Kibala, and Waku Kungo. CORE Group partners have also trained volunteers in the operation of new equipment for the cold chain. Strengthening routine immunization requires still more vaccinators, equipment, and vaccination posts.

CORE's polio eradication initiative is not a stand-alone program; member NGOs have integrated their polio work with other types of development programs under way throughout Angola. In Bie province, for exam-

ple, Africare supported community-based agriculture. "Africare trained villagers to be outreach workers," explained Dr. António Dias. "They taught people in their communities how to cultivate new crop varieties, effectively use fertilizers, and rehabilitate the land. So when we began to participate in polio eradication, we asked these volunteers to help us. Now, when they talk to the community about pest control or irrigation they also pass on information about polio."

Approximately 6,000 CORE community volunteers participate in National Immunization Days. During planning sessions they advise local health center staff on the best times and places for immunization activities. Several days before a vaccination team arrives, volunteers "go to the river where the women wash clothes, to the rocks where they pound corn flour, and out to the fields" to get the word out about the time, place, and importance of immunizations.

On the actual immunization day, they work in various capacities. Some of the volunteers serve as vaccinators, carefully tilting back each boy's or girl's head while two drops of oral vaccine are squeezed into the child's open mouth. Other volunteers work as mobilizers, quality control monitor registrars, and data collectors. They reassure parents, answer their questions, and make sure the children are served in the order in which they arrived.

"Each immunization encounter is an opportunity to educate, to explain, to answer questions, to motivate," said one administrator. "If this is done well, it will encourage people to take their children in for routine immunization." The volunteers support routine immunization by checking cards during house visits to see if any vaccinations are due. However, this activity is often constrained by a lack of vaccination cards and lapses in notation by overworked vaccinators.

A One-Year Learning Curve

CORE Group partners work together to avoid duplication of efforts, ensure consistency within their polio eradication activities, and facilitate communication with the Ministry of Health. It was difficult at first for some of the members to shed their organizational identity. Each organization had its own goals and assigned working areas; each had its own mission.

"It was hard to overcome these barriers," explained David Newberry. "But with time we started to learn how to work with one another. You could see the breakdown in competition. I visited one of the program areas during the first National Immunization Day. It was a disaster. The vaccine wasn't there. The food for the teams wasn't there. The vehicles weren't there. The staff and volunteers staggered in over a 3-hour period.

I returned to the same location a year later. I arrived at 7:00 a.m. Everyone was there. The

HEAR YE! HEAR YE! PEOPLE OF GUNGO

CORE Group partners have trained 6,000 community volunteers, many of whom were recruited from existing partner programs in agriculture, nutrition, and child survival. The volunteers educate parents about the symptoms and signs of major childhood diseases, often by organizing dramas, which have been particularly effective. “When the drumming begins, everyone and his brother comes,” one volunteer said. “This way we can let people know about polio, measles, and tetanus in a way that they enjoy.”



“Hear Ye! Hear Ye! People of Gungo,” a man calls out to the audience as the drama begins in a village outside of Gabela. “The polio eradication campaign comes to Gungo tomorrow!” he continues, imitating a health volunteer spreading word of a National Immunization Day. “Be waiting with your children in the morning.”

Two women walk onto the area under a mango tree that is serving as a stage. “Isn’t that the medicine that can kill our children?” one asks the other.

“No. Just the opposite. It will protect them from polio.” The first woman shakes her head doubtfully. The next morning she avoids the line of parents waiting to immunize their children and goes off to work in her fields with her young boy. Time passes and the boy comes down with polio. The village volunteer visits her house and sends the boy to the hospital. “Hasn’t he been vaccinated?” asks the doctor as he examines the boy. “No, says the mother. “I was afraid it would harm him.” The doctor looks up angrily at the mother. “Well now one of his legs is paralyzed because you didn’t have him vaccinated.” There is great weeping and wailing from the chorus.

The man playing the health worker steps forward and reminds the audience, “People of Gungo. The polio eradication campaign comes to Gungo tomorrow! Be waiting with your children in the morning.”

lunches were packed. The vaccines were packed. The vehicles were ready. There was a supervisor waiting at every key location. At the end of the day, each vial was counted and compared to the tally sheets. Quality control was carried out to perfection. I’d never seen anything so well-organized. The difference in one year was incredible.”

Problem Solving and Teamwork

At the CORE Partners Project quarterly forum in Angola, six member NGOs meet to share successes and solve problems they encounter in the field. Representatives from the Ministry of Health, UNICEF, WHO, and other organizations are also invited. The forum opens with partners reviewing their work from the preceding quarter. The group utilizes the range of expertise amongst its members to find solutions to problems that have been identified.

At one such meeting, a Save the Children representative spoke about vaccine supply problems they were encountering. Representatives from Catholic Relief Services (CRS) in Benguela responded that they overcame similar difficulties by monitoring stock inventories at the municipal cold house and health centers, and notifying the provincial storage center when stocks were low. In turn, a CRS project officer described difficulties CRS was having getting Ministry personnel to accompany its team on site visits. “You need to let them know in advance,” advised an outreach worker from CARE. “You can’t just stop by their office and say you’re on your way to a site visit and would they like to join you. We sit down with the surveillance supervisor once a month to plan our community visits with them.”

Seemingly intractable problems can be resolved quickly with such collaboration. For example, CORE Group members submitted a bundled proposal to the Japanese Embassy for equipment and supplies. The agency responded with a \$91,000 grant, but the award was made on short notice, with little time allowed to acquire the necessary equipment. To resolve time and financing conflicts among CORE partners, CARE offered to buy the necessary commodities and distribute them among all partners. “Fifteen minutes later one of the group was on his way to the airport to receive the check from the Japanese donor with the problem solved,” a member of the CORE team recounted.

A Need for Surveillance

S

urveillance for AFP is a crucial component of the eradication initiative. AFP is a floppy paralysis that suddenly appears in the arms or legs of a child under 15 years of age. It is the signal condition for polio. When cases are detected, stool samples are sent to the laboratory to test for poliovirus. A region is certified as polio-free when all or most of the expected number of AFP cases are detected, and no wild poliovirus is isolated from stool samples for a period of three years.

Hospitals and health centers report cases of AFP and other infectious diseases such as measles, whooping cough, and malaria to Ministry of Health officials. The reporting of diseases that bring patients to the health center or hospital is known as passive surveillance. The problem with such surveillance in countries like Angola is that parents do not always bring their sick children to a health facility. Due to limited household resources, poor road conditions, an insufficient number of rural health centers, and a host of other reasons, parents may instead treat their child with medication from a local shop or consult a traditional healer. Thus, cases of AFP might not be detected by the surveillance system—a requirement for evidence of polio-free status.

Active surveillance requires visiting health facilities and individual communities, often on a door-to-door basis. Adequate transportation and efficient communications ensure timely visits to collect stool samples and facilitate information flow between health facility staff and the investigation team. These conditions do not exist in Angola, where poor roads and communications, inadequate record keeping, and insufficient numbers of trained staff can create significant constraints on traditional methods of disease surveillance.

In such settings, local community volunteers can supplement facility-based surveillance by finding and reporting cases of AFP (and other diseases) that otherwise might go undetected. Community-based surveillance can be an effective form of active surveillance. A well-organized network of volunteers can greatly increase the chances of collecting viable stool samples and can make the response to an outbreak more rapid and effective.^{3, 6, 8}

From Housework to Home Visits

Save the Children recruits, trains, and supervises a corps of community health volunteers in and around Gabela municipality. These volunteers educate parents about the importance of immediately referring suspected AFP cases to them. They also make regular home visits to look for AFP, underweight children, and infectious diseases such as measles, whooping cough, and malaria. “I visit people’s homes from about 6:00 to 7:00,” one woman told the case study group. “The rest of the time I spend doing housework, working in the fields, and taking care of my children.”

When a volunteer finds a possible case of AFP—or one of the vaccine-preventable diseases covered by the national expanded program on immunization—he or she

“People tell us whose child is sick and what their symptoms are. They know exactly what’s happening. When you have someone in your neighborhood with AFP, measles, tetanus, or whooping cough, you surely don’t forget.”

—A village health volunteer

“If there is a case of AFP in any of our communities, we will find it. We have the highest rates of case detection in the regions we work in.”

—Dr. António Dias, Director, Angola CORE Secretariat

CARE began collaborating with traditional healers and soon the number of AFP cases detected in Luanda began rising. After CARE staff shared this experience in the CORE Group quarterly forum, a number of partners took up the practice.

immediately informs the nearest health post or health worker. Volunteers also notify the local CORE NGO. The information is relayed to the municipal surveillance officer, who examines the child to see if he or she has AFP. If a positive case is identified, two stool samples are taken 24 hours apart.

The CORE Group NGO often helps transport stool samples from the field to the provincial capital and/or national capital. “I recently found a case of AFP,” one health volunteer recounted. “I had the mother bring the child in. The health workers examined the child and sent stool samples to the laboratory. A few days later the supervisor from the EPI office and Save the Children showed up here in the village to check on the child. Thankfully, it turned out not to be polio.” Save the Children staff review volunteers’ case report sheets, tally surveillance figures, and work with the municipal director of surveillance to integrate this information into the Ministry of Health’s monthly epidemiological reports.

The municipal surveillance officer and a representative from the local CORE Group partner meet monthly with volunteers. Each volunteer reports on how many house visits he or she made, the number of cases of targeted diseases detected, the number of children whose vaccination cards indicate an incomplete immunization series, and other relevant activities. In turn, the surveillance officer and NGO representative relay laboratory results and diagnoses of possible AFP cases. However, this process can break down when the national level fails to inform the provincial level or the case remains pending for an extended amount of time.

Recruiting Traditional Healers and Women

Local village leaders choose health volunteers; they come from all walks of life (farmers, teachers, religious leaders, traditional healers, and birth attendants) and all levels of formal education. Traditional healers, birth attendants, and religious leaders have proved excellent health volunteers in Angola. Even when they can’t spare the time to become full participants, their status and roles in the community often make them desirable collaborators. In the village of Salinas, for example, the traditional birth attendant helps the clinic nurse bring women in for their tetanus vaccinations. She also reports cases of vaccine-preventable diseases she encounters in her practice.

CARE began collaborating with traditional healers after interviewing parents in Luanda about their health care-seeking behaviors. The great majority of mothers said they would take their child to a traditional healer for inexplicable health problems such as a sudden paralysis. In the first months of polio surveillance in Luanda, not a single case of AFP was discovered. Soon after involving traditional healers in the effort, the number of AFP cases detected began rising.

After CARE shared this experience in the CORE Group quarterly forum, a number of partners took up the practice. An herb shop owner who collaborates closely with CRS



recently referred a child with AFP to the CRS program officer. Another herb shop owner in Kwanza Sul immediately informed Save the Children when a child was brought to him with AFP in his legs. When traditional healers are treated with respect, trained appropriately, and assured that their prestige and business are not at risk, they can become extremely effective partners in surveillance.

Other enthusiastic community volunteers have included youth and women. When Save the Children first started recruiting its volunteers, the staff asked communities to select young people with some academic training. “The young people were dynamic,” a staff member said. “They walked long distances and took initiative. They dedicated themselves to this work. But when peace was restored and the schools reopened, the young people left their communities to continue with their education. This forced us to rethink our recruiting strategy. We realized that if we adapted our teaching methods, the volunteers would not necessarily have to know how to read and write as long as they were motivated and respected by their community.”

In addition, Save the Children started recruiting more women. The work of caring for a sick child is considered by many in Kwanza Sul to be the mother’s responsibility. This cultural pattern has been reinforced by the loss of so many men during the war and the labor migration of a number of others. “The women are well qualified for this work,” said a Save the Children staff member. “They have a deep understanding of family life. They are the ones who worry about food, health, and education. Now, as health volunteers, some are worrying about this for all children in the community.” Many women are already overwhelmed with their workload, however, and see the position of community volunteer as an additional burden they just can’t take on.

A Focus on Training

The Angolan Ministry of Health and Save the Children train the volunteers to identify AFP, measles, and other vaccine-preventable diseases. The signs and symptoms of each disease are introduced through photographs and drawings, and field practice is emphasized. After completing training, volunteers begin to search for target diseases under the supervision of Save the Children staff.

“When we first began, we saw lots of children with severe diarrhea,” said one volunteer. “Some were so dehydrated and malnourished that their arms and legs became limp. At first I wondered if this might be AFP. But Delfina Antunes [of Save the Children] showed us that diarrhea and malnutrition caused this.” Such supervision is especially important in the cases of diseases that are less common to an area.

Supervision and upgrading of skills are essential components of community-based surveillance. Volunteers regularly attend refresher courses during which they review illness definitions, community mobilization strategies, and case reporting. Site visits from a supervisor provide much-needed feedback and show the volunteers the value of the information they are collecting. They also increase morale. “It helps a lot when Delfina [Antunes] visits. People stop looking at us like we’re nuts, and see the importance of the work we are doing.”

The community-based surveillance programs supported by CORE Group partners have proved to be a valuable complement to facility-based reporting. They benefit both the communities and the health system and have improved collaboration between the two. Volunteers have expressed satisfaction in being able to serve their communities. However, there are many competing demands on their time. The dropout rate in some communities is a concern. “I have a wife and four children,” one man told the CORE case study group,

“and have received nothing from this health work except a T-shirt. I don’t know how long I can keep on doing this.”

When surveillance leads to a quick response—“mop-up” immunization, follow-up visits, assistance to children disabled in the outbreak, or health education focusing on the reported problem—people become increasingly likely to participate and to have their children vaccinated. Conversely, people will quickly lose interest if there is no response and no relevant feedback to the community about the information gathered.

It is important that surveillance officers report back to volunteers on the disease patterns their work has helped uncover. Volunteers can then share this information with their communities. “When this happens, people become aware of situations that they didn’t identify before,” says an epidemiologist working with the CORE Group. “They’re not just looking at the neighbor on the right or the neighbor across the street. They’re thinking about a composite of the whole community. They are more aware of what is involved in detecting, tracking, and reporting illness. In the process, the national surveillance system itself becomes more reliable, more complete. That’s something that money can’t buy.”

The Power of Partnership

I

n 1999, Angola was a country of concern for the global polio eradication initiative. Yet, by 2001, Angola detected its last case of polio. This remarkable achievement is a testament to the power of partnership: WHO and UNICEF provided technical assistance, scientific guidance, and unwavering support. The Ministry of Health forged national policy and mobilized administrative will for its implementation. CORE Group partner NGOs, along with Rotary International and the Red Cross/Angola, contributed strong skills in capacity building, logistics, and social mobilization. NGOs worked in areas with the greatest need and highest risk, many of which were not served by the public health system. CORE members earned the trust of communities, as well as local and district officials.

This heterogeneous collection of NGOs, government agencies, and bilateral and multi-lateral organizations worked closely together to determine coverage rates, and then build infrastructure for the intensification of immunization and disease surveillance. A highly effective partnership resulted—one that laid the groundwork for future collaborative public health initiatives in Angola and one that represents an effective approach that can be replicated in other countries.

“Many national immunization programs are not cutting the mustard. There’s a huge failure of partnership. The multilateral organizations want to do it one way; the bilateral agencies another. Each PVO has its own strategy, and of course, the Ministry of Health has its agenda. Everybody looks at each other as the enemy. Our only real enemies are the poliovirus, the measles virus, the tetanus bacteria, and other vaccine-preventable pathogens.”

—A longtime PEI observer

References Cited

1. Agadjaniana, Victor and Ndola Prata
2003 Civil War And Child Health:
Regional and Ethnic Dimensions of
Child Immunization and Malnutrition
in Angola *Social Science & Medicine*
56 (2003) 2515–2527
2. CDC
1999 Outbreak of Poliomyelitis—
Angola. *MMWR* 1999; 48:327-9.
3. CHANGE Project
2001 Handbook for Community
Surveillance Coordinators to Support
Community Participation in Detection
and Prevention of Polio and Other
Diseases. Washington, D.C.: The
CHANGE Project
4. Gaspar M, Morais A, Brumana L,
Stella AA.
2000 Outbreak of poliomyelitis in
Angola. *The Journal of Infectious
Diseases*; 181: 1776–79.
5. Global Polio Eradication Initiative.
2004 Polio Eradication.
<http://www.polioeradication.org/>
6. Ndiaye SM, Quick L, Sanda O,
Niandou S.
2003 The Value of Community
Participation in Disease Surveillance:
A Case Study from Niger. *Health
Promot Int.* June 18(2):89–98.
7. Tangermann R, Hull HF, Jafari H, et al.
2000 Eradication of poliomyelitis in
countries affected by conflict. *Bull
World Health Organ*; 78: 330–38.
8. USAID
2003 Immunization Essentials: A
Practical Field Guide. Washington,
D.C.: USAID Office of Health,
Infectious Diseases, and Nutrition
9. UNICEF
2004 The State of the World's
Children. New York: UNICEF
10. Valente F, Otten M, Balbina F, et al.
2000 Massive Outbreak of Poliomyelitis
Caused by Type-3 Wild Poliovirus in
Angola in 1999. *Bull World Health
Organ*; 78: 339–46.
11. World Health Organization
2000 Global Polio Eradication
Initiative: Strategic Plan 2001–2005.
New York: WHO Department of
Vaccines & Biologicals
12. World Health Organization
2004 The Global Polio Eradication
Initiative. [http://www.who.int/
mediacentre/factsheets/fs114/en](http://www.who.int/mediacentre/factsheets/fs114/en)



**Republic of Angola
The Ministry of Health
Office of the Vice Minister of Health**

Informative notice on the contribution of the CORE Group in Angola

The Expanded Program of Immunization (EPI) in Angola was created in 1979, with the main objective of protecting children against seven vaccine-preventable diseases through the vaccination of children under one year old as a primary target group and women of reproductive age.

Just as with other health programs, EPI suffered a negative impact of the war that devastated the country during almost three decades. Consequently, vast areas of the country were inaccessible.

The impact was reflected not only in the destruction of health infrastructures and equipment but also through various disease outbreaks. Thus, the involvement of different partners was necessary to minimize needs in some areas of health.

In this context, the CORE Group, a consortium of American NGOs, has been supporting the Government in the polio eradication program in Angola. It must be highlighted that, for the first time in Angola, different international NGOs joined the Government to implement a specific program in a coordinated manner. This initiative without precedent must be praised because thanks to the combined efforts of all partners, polio is under control in Angola.

During approximately three years of joint work, the CORE Group accomplished the following activities:

- Established effective partnerships with the Ministry of Health at national, provincial and municipal levels.
- The Secretariat of the CORE Group participates in the Interagency Coordination Committee (ICC), to facilitate communication between NGOs and Ministry of the Health.

- The Secretariat of the CORE Group coordinates with others partners, such as WHO and UNICEF to monitor the quality of National Immunizations Days (NIDs).
- Participates in the EPI National Technical Commission.
- The consortium NGO field staff participated in the National Methodological Workshop (EPI, Surveillance, Nutrition and Social mobilization).
- Support disabled children paralyzed by polio, giving them wheel chairs and crutches and where there are no schools, collaborates with Ministry of Education to integrated them into the educational system.
- Support families of polio victims to integrate them in to other NGO projects.
- More than 6,000 volunteers work in the active search of AFP cases and others EPI target diseases, help in the notification of the AFP cases and transportation of stool samples. These volunteers go to the most critical areas (borders, villages, areas of resettlement and refugees areas). They work with traditional leaders, churches, schools and other local partners. They participate in the supplementary immunization activities against polio.

As a result of this partnership, we are confident that we will eradicate polio in Angola.

—Office of the Vice Minister of Health, Luanda, 25th August 2004