



Outbreak

in the Horn of Africa

Best Practices, Lessons Learned, & Innovations

2013-2014

Polio Outbreak

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Foreword

It is undisputable that the global fight against Polio has made huge strides. Today, the poliovirus is endemic in only three countries in the world. The number of children paralyzed by polio has been slashed from over 300,000 in 1988 to a few hundred per year in the last few years.

However, it is equally true that successes made in this fight can be fragile. In April 2013, polio (with origins in West Africa) broke out in Banadir, South Central Somalia and quickly spread across borders to neighbouring Ethiopia and Kenya. It led to over 200 cases of polio, accounting for more than half of all confirmed polio cases in the world that year.



The outbreak reminded us that a singular explosive outbreak can quickly escalate. An outbreak can hit communities, countries and even a whole region, setting progress back and delaying the attainment of the long-anticipated eradication goal.

Importantly, the 2013-14 outbreak also showed us that despite a difficult context, planning and partnership are vital to arrest a multi-country polio outbreak.

The multi-country outbreak also emphasized the need to strengthen routine immunization and health systems in the region. As the push towards eradication mounts, it is vital that gains made are guarded, that decisive leadership is demonstrated, that evidence, innovations and strategies are aggressively shared.

This report, *Polio Outbreak in the Horn of Africa – Best Practices, Lessons Learned & Innovations (2013-14)*, is a bold first step. It tells a story of government leadership, of engagement and a vibrant partnership between countries and Global Polio Eradication Initiative partners.

Other lessons emerging from the Horn range from strengthening routine immunization, importance of reaching mobile and pastoralist populations, adapting to security challenges to sustaining support and momentum for critical communication interventions.

Unquestionably, the Horn of Africa outbreak experience has strengthened organisation capacity. The partners within the Global Polio Eradication Initiative hope that polio assets, knowledge, infrastructure and innovative service delivery platforms that were accumulated during the response should transition to support broader health interventions in the region.

Looking ahead, as we drive towards implementing the ambitious, yet eminently attainable Polio Eradication and Endgame Strategic Plan (2013-2018), it is evident that ensuring preparedness, partnerships, building sustainability and keeping a vigilant eye, are critical to attaining the goal of eradication.

Leila Pakkala,
Regional Director,
UNICEF Eastern and Southern Africa

This report synthesizes knowledge and experience gained from the intensive public health response to the 2013-2014 polio outbreak in the Horn of Africa; an outbreak which has persisted for the last 18 months. Somalia, Kenya, and Ethiopia were all affected by the outbreak, and the risk for transmission of the virus in Uganda, South Sudan, Sudan, Eritrea, Djibouti, and even Yemen has required Global Polio Eradication partners to develop innovative solutions to reach highly mobile and dispersed populations; to improve sensitivity of the surveillance system; to deliver millions of doses of polio vaccine in challenging circumstances; and, to create an enabling environment for multiple and repeated polio campaigns. This publication summarizes best practices, innovations, and the lessons learned that will be salient, relevant and of use to polio partners, the broader public health community, donors, media agencies, and the general public.

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Nairobi, Kenya 2014

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Executive Summary

Over the past 18 months, the Horn of Africa (HoA) has experienced an explosive polio virus outbreak which paralyzed over 200 children and young adults in Somalia, Kenya, and Ethiopia. Low routine immunization coverage across the region, porous borders and large population movements have also left under-immunized children at risk from the virus in Uganda, Sudan, South Sudan, Djibouti, Eritrea, Tanzania and Yemen.

Transmission of wild poliovirus (WPV) type 1 persists in the region. Currently, the case count stands at N=223, with 199 cases in Somalia, 14 in Kenya and 10 in Ethiopia since the start of the outbreak in April 2013. The most recent case of WPV1 was detected in Budbud village, of Hobyo district, in the Mudug region of Somalia in August 2014.

Much progress has been made with only six wild polio cases detected in 2014, but the possibility of continued transmission, and/or of the failure to detect the virus in remote pastoralist areas of Somalia and Ethiopia, have not been ruled out by polio experts. The outbreak response in the HoA (implemented in eight countries) has been complicated by difficult operational contexts in Somalia and South Sudan, and within the outbreak areas of Kenya and Ethiopia, all posing significant implementation, surveillance and polio communication challenges.

Polio eradication partners in the HoA have employed several innovative immunization and communication strategies, revealing a collage of lessons learned and best practices that merit documentation. Innovations have included: the development of a complex and functioning vaccine distribution system for the highly insecure and inaccessible areas of Somalia and South Sudan; cross-border coordination meetings and campaign synchronization; the establishment of expanded local networks of social mobilizers; and, the commissioning of research studies that have provided crucial evidence-based social data. In spite of successes though, stopping transmission has presented a steep learning curve to Global Polio Eradication Initiative (GPEI) partners who now continue to steer interventions through a diverse set of challenges, including reaching mobile populations in the most remote parts of the HoA region.

This publication is aimed at sharing innovations, best practices and lessons with the broader GPEI network, development partners, donors, media entities and the general public. While there are already a number of technical assessments of the Horn of Africa outbreak response, this report represents a first attempt to tell the story of the intense efforts undertaken by GPEI partners to reach over 160 million children in the HoA, and in relation to what remains to be done to ensure that transmission of the virus is halted once and for all.

The region still remains at risk and a sustained outbreak response in 2015 is warranted, as are continued efforts towards the strengthening of routine immunization services and coverage. The fight is not over, and the call for action will not subside until the HoA is polio-free.



EXPLOSIVE OUTBREAK

Somalia: The Epicenter of the Outbreak

On 13 May, 2013, the global health community was confronted with the alarming news of a case of wild polio (WPV) virus type 1 in Banadir, Somalia. A young girl, not even three years of age, was paralyzed near the capital, Mogadishu. After five years of maintaining polio-free status, a new outbreak was underway. Investigation into the polio-virus strain revealed that the virus had been imported from a polio endemic country in West Africa.

Somalia has seen previous importations of wild polio-viruses which have spread quickly across the region. However, an immunization crisis prior to the 2013 outbreak left 1 million children under-immunized and hence extremely vulnerable to the virus. Reduced numbers of polio campaigns, and a ban on immunization activities by non-state actors in 2009, have also contributed to population immunity gaps. Combined with insecurity and inaccessibility, these high levels of vulnerability significantly increased the risk of a prolonged outbreak in the HoA. As such, a timely and aggressive response was essential, and was subsequently initiated within four weeks of confirmation of the first wild polio case in April 2013.



One of the many families affected by the polio outbreak:

Two year old Asha Mohamed from Jariban District was the first child paralysed by polio in Somalia in 2014. When she became unable to walk, her distraught mother brought her to Galkayo, the capital of the Mudug region of Somalia. Four more cases were found within one month in the same area.

Polio Knows No Borders:

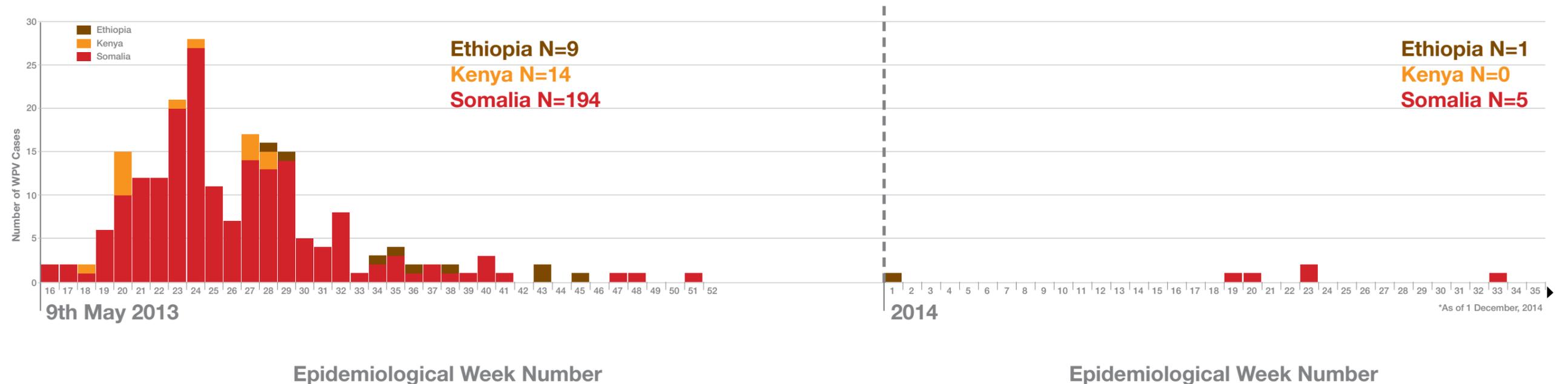
Polio Reemerges in the Horn of Africa

Just three weeks after the initial polio cases were detected in Somalia, Kenya reported its first case, across the border in the Dadaab refugee camp. Five people were paralyzed by polio, including young adults, in the northeastern part of Kenya, and before the end of 2013 a total 14 cases had been confirmed. Nairobi, Kenya's capital city and a major transit hub for the region, was also at risk due to intensive population movement. In late 2013 "traces" of the polio-virus were detected in the city's sewage; no polio cases were detected in Kenya in 2014.

Garissa County, located in the northeastern part of Kenya and less than 60 kilometers from the Somalia border, was the epicenter of Kenya's outbreak. Seven out of 14 cases were found in Dadaab, the world's largest refugee camp, where an estimated **350,000** Somali refugees live.

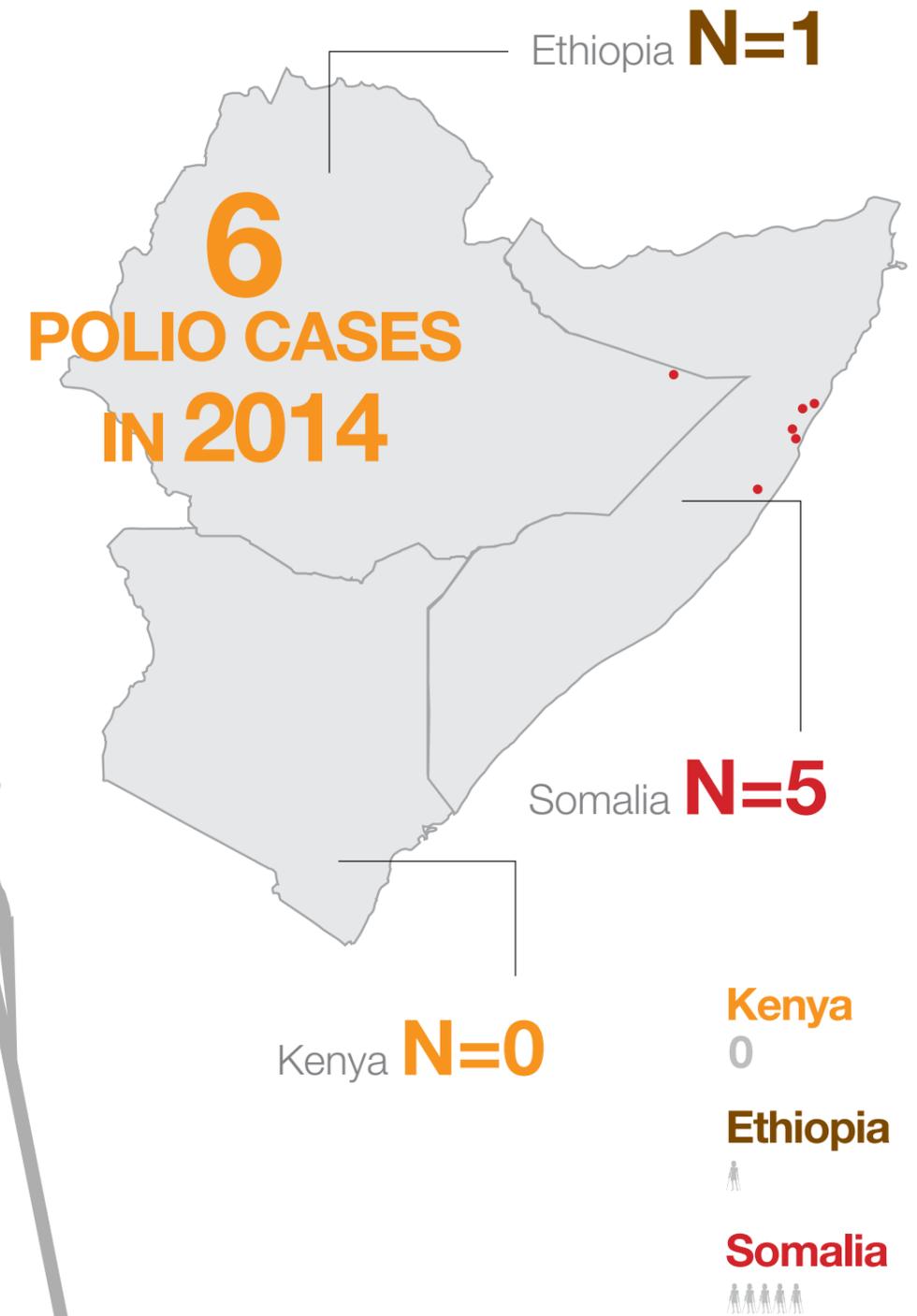
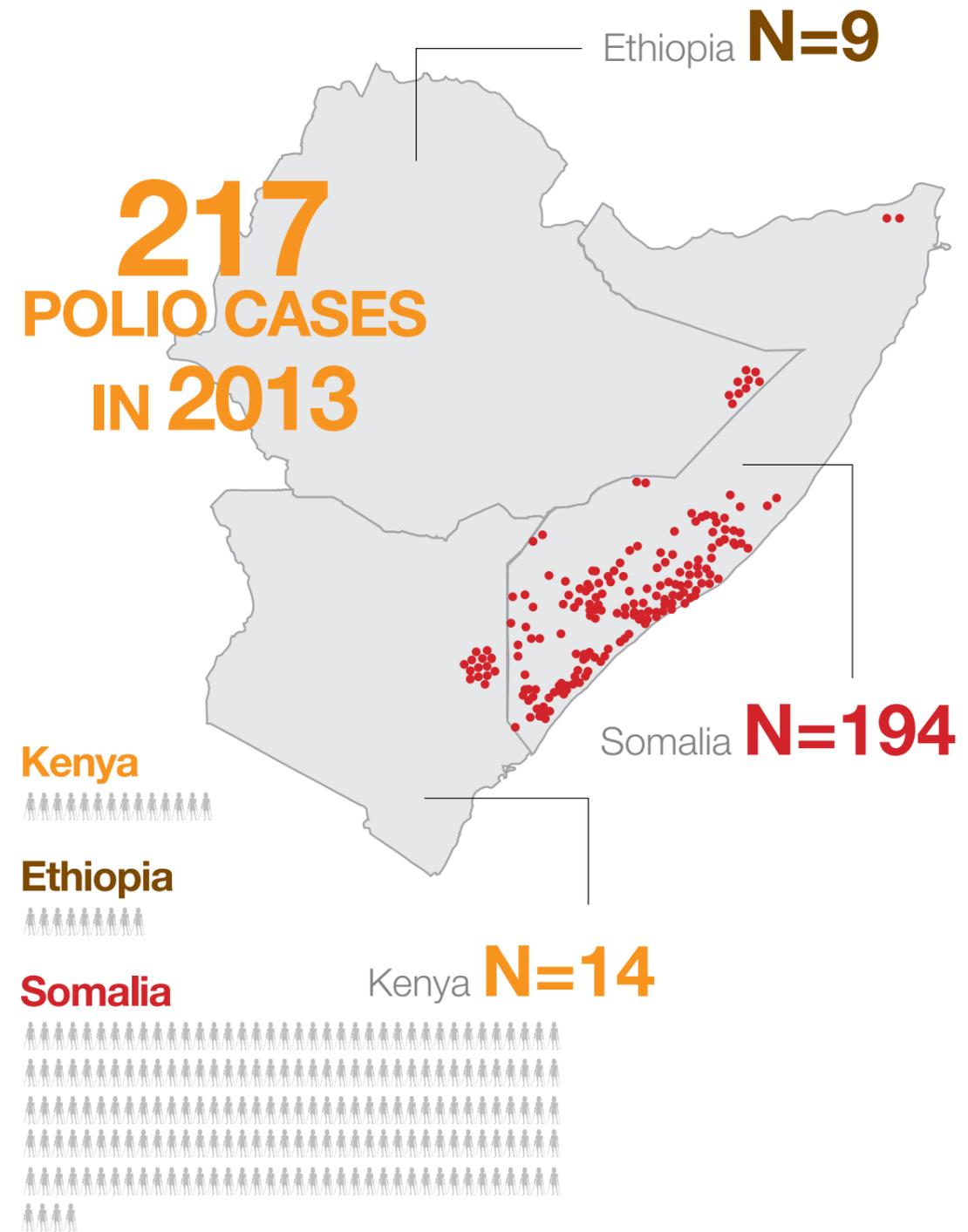
An additional nine cases were also found in Ethiopia in 2013. In both Somalia and Ethiopia, the virus spread along the border where displaced, mobile and pastoralist populations move across vast and porous borders. Later, in 2014, the virus was detected within the extensive pastoralist and arid lands of Puntland, Somalia, and within the Somali region of Ethiopia, where it currently still may be circulating.

Ten cases of Polio were detected in the Somali Region of Ethiopia. Pastoralist communities who regularly cross the border between the two countries, suddenly found themselves in the center of Ethiopia's polio outbreak



Polio Outbreak

in the Horn of Africa



Mobile Population: In the Path of the Virus

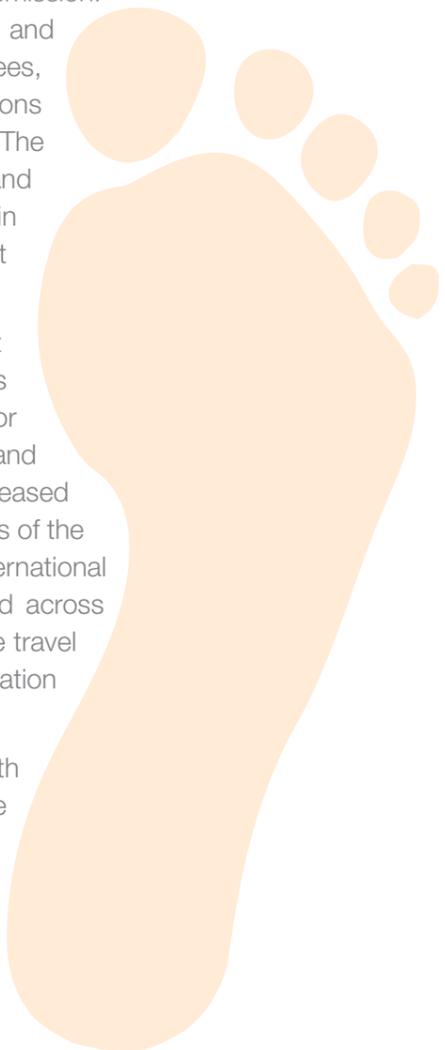
The HoA is positioned at the cross roads of major mixed-migration routes from Northern, Eastern, and Southern Africa, as well as the Middle East. For centuries, merchants have been travelling across the Gulf of Aden, along the Swahili Coast selling their goods; agriculturalists have expanded and developed the fertile highlands of Ethiopia, Kenya, Tanzania, and Uganda; and, Somali pastoralists and nomads, with their women, children and herds of animals, have been roaming across the vast semi-arid areas of the Sahel in search of water and grazing lands.

Constant movement across porous borders presents one of the most significant challenges to stopping polio virus transmission.

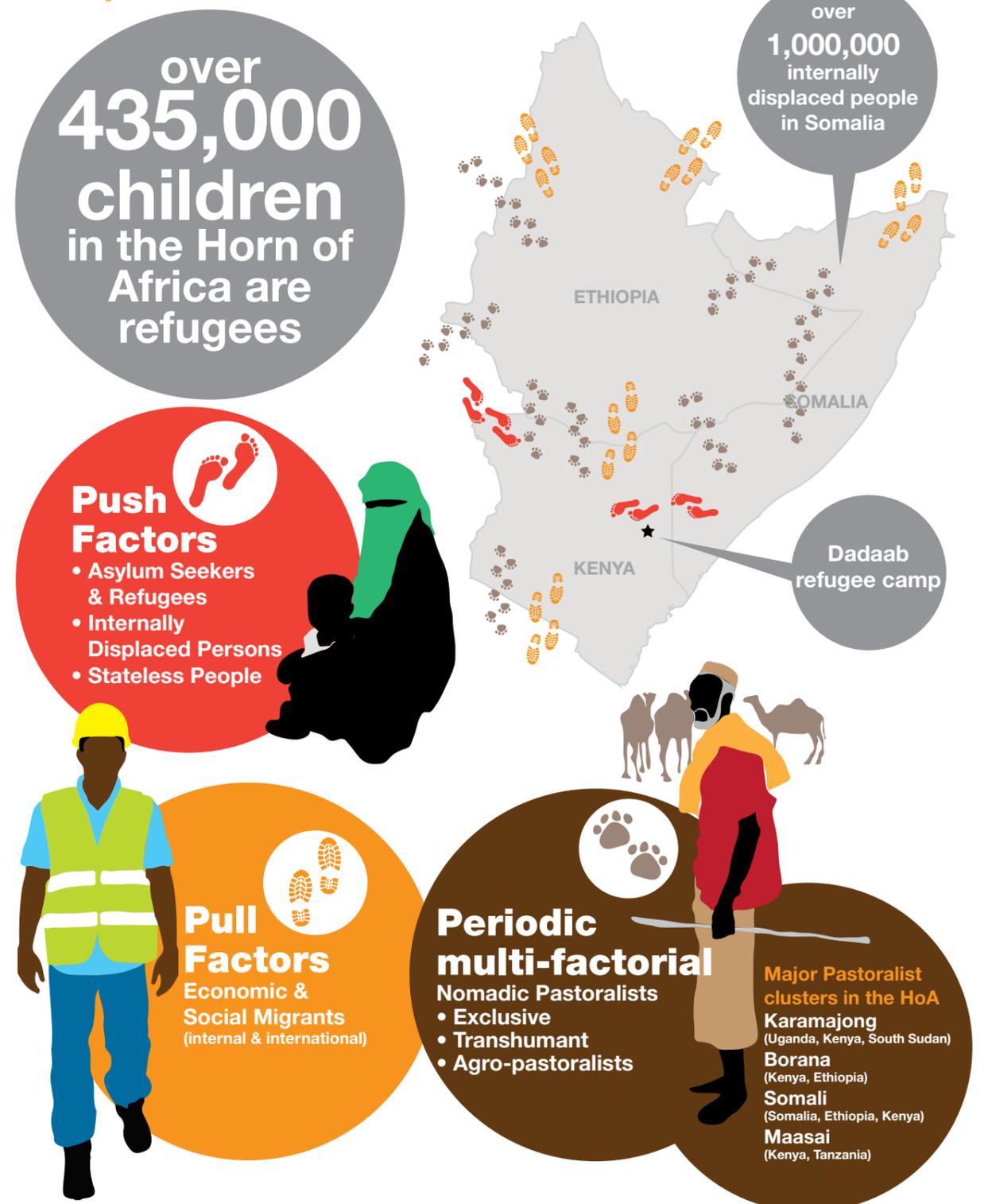
Moreover, insecurity and conflict in Somalia and South Sudan have created millions of refugees, asylum seekers and internally displaced persons (IDPs), estimated at 1.1 million in Somalia alone. The HoA has approximately nine million refugees and IDPs located across 50 camps and scattered in hundreds of informal settlements. Of these, at least 450,000 are children.

The continued movement of mobile and pastoralist populations within and across the infected areas of Somalia was, and continues to be, a major contributing factor to the spread of the virus, and the risk of ongoing transmission. Similarly, increased economic activity and opportunity in the countries of the region triggers the movement of internal and international migrants, usually from rural to urban areas, and across borders. This further fuels mixed-migration where travel routes are increasingly used by different population groups for a variety of reasons.

Ensuring that all children who are moving with their families across the vast HoA region receive multiple polio vaccinations has been a challenging task, requiring a thorough understanding of population movements at the regional and country level; focused planning to better target mobile-populations; and, greater operational flexibility in approaches to vaccination.



Migrant Population Movement



AGGRESSIVE RESPONSE

Setting the Strategy

Recognizing the looming risks of a prolonged outbreak, and the prospect of further polio transmission among unvaccinated populations in the HoA, GPEI partners devised a comprehensive six month strategy. The strategy focused on four main objectives: interrupt transmission, protect at-risk populations; maximize opportunities for immunization in the South Central Zone of Somalia; and, to protect children vulnerable to polio as a consequence of population movements.

In order to achieve key objectives, a series of intensive “house-to-house” polio campaigns were conducted. To vaccinate children crossing the borders of high risk outbreak zones, permanent transit points (PTP) were also established. The sensitivity of the surveillance system, including community based surveillance, were heightened in order to better detect the virus, analyze its path and origin, and possibly predict where it may emerge next. Further, the response greatly focused on reaching children in remote and hard-to-reach areas, including pastoralist and nomadic groups and children on the move.

Multiple vaccination campaigns were conducted in the epicenter of the outbreak. Eight SIAs, six of which also covered adults had been conducted in the Banadir region of Somalia by November 2013 and five in the North Eastern province of Kenya which also covered all age groups.

To interrupt WPV transmission in outbreak zone within 4 months

To protect populations in other areas that may be at risk due to population movement

Objective

To protect populations at high risk of WPV outbreak

To maximize opportunities for immunization in inaccessible areas of south-Central Somalia

While raising population immunity with polio campaigns, the countries established permanent vaccination points at the borders and major transit points to vaccinate children on the move.

To raise population immunity, preventive polio campaigns were conducted in accessible areas of Somalia (Puntland and Somaliland), Kenya, Ethiopia, South Sudan, Sudan, Yemen, and Uganda.

In areas of Somalia where it was not possible to hold polio campaigns, close to 300 permanent local vaccination teams were set up to maximize vaccination opportunity for children that move in and out of these areas.



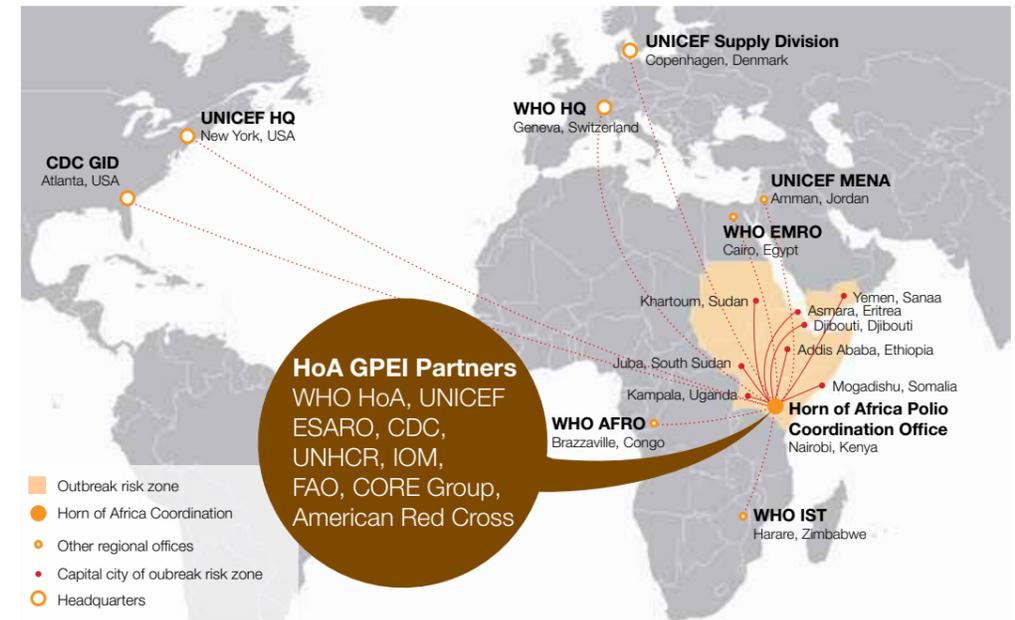
Partner Coordination: Joint Action in Accord

The ten affected countries in the outbreak zone of the HoA – Somalia, Ethiopia, Kenya, Uganda, South Sudan, Sudan, Yemen, Eritrea, Tanzania and Djibouti, are geographically divided across the areas of responsibility of WHO and UNICEF regional offices in Africa and the Middle East. There is also a strong liaison with the GPEI Headquarters in Geneva, New York, Atlanta and Copenhagen. Furthermore, Nairobi, the coordination hub for the response, is a regional base for multiple partners and NGOs that have supported polio operations, including CDC, UNHCR, FAO, IOM, CORE Group, USAID, American Red Cross, and many others. Ensuring that all partners responded to the outbreak in accord was critical.

The need for strong coordination became further evident as the virus spread from Somalia, across the region to Kenya and Ethiopia. In August 2013, with the support of the Bill and Melinda Gates Foundation, a HoA Polio Outbreak Coordinator was placed in the UNICEF Eastern and Southern Africa Regional Office (ESARO) to initiate and support inter-regional and country interactions. The ten affected countries established a platform to make collective decisions; synchronize activities and organize cross-border collaboration for polio campaigns; and, to develop the joint WHO/UNICEF HoA donor appeal in the fall of 2013.

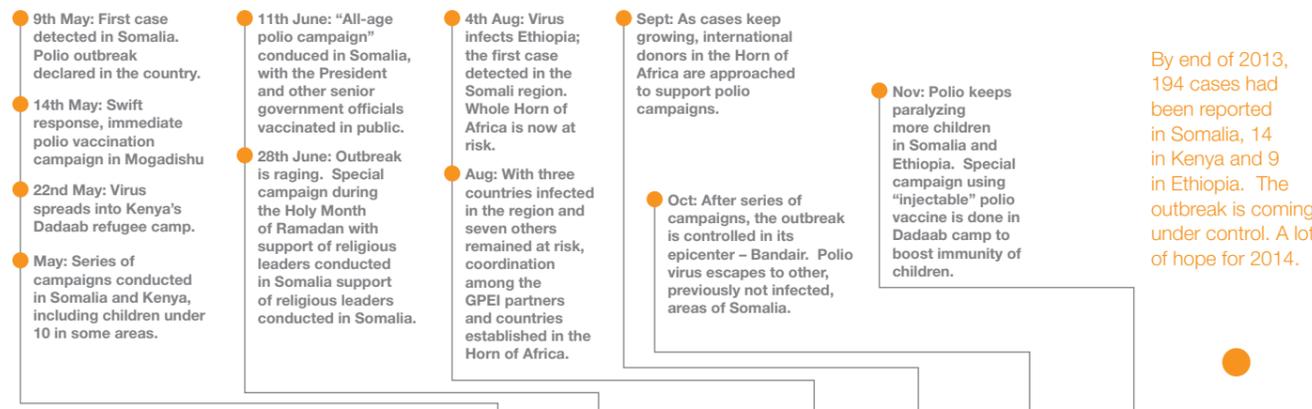
Coordination was then further strengthened with the creation of a formal structure called the Horn of Africa Polio Outbreak Coordination Office based at WHO Kenya, and currently jointly coordinated by WHO, UNICEF, and CDC polio outbreak coordinators. GPEI partners in the region continue to oversee the outbreak response through the following activities: weekly calls with affected countries; UNICEF Headquarters and UNICEF Supply Division; technical support for complex matters; quarterly country outbreak assessments; Polio Horn of Africa Technical Advisory Group (TAG) meetings; the documentation and sharing of best practices; and, regular reviews of financial resource requirements and needs. Feedback and information sharing are key components of the strengthened partnership and coordination among GPEI partners.

Partner Coordination in the Complex Horn of Africa Region

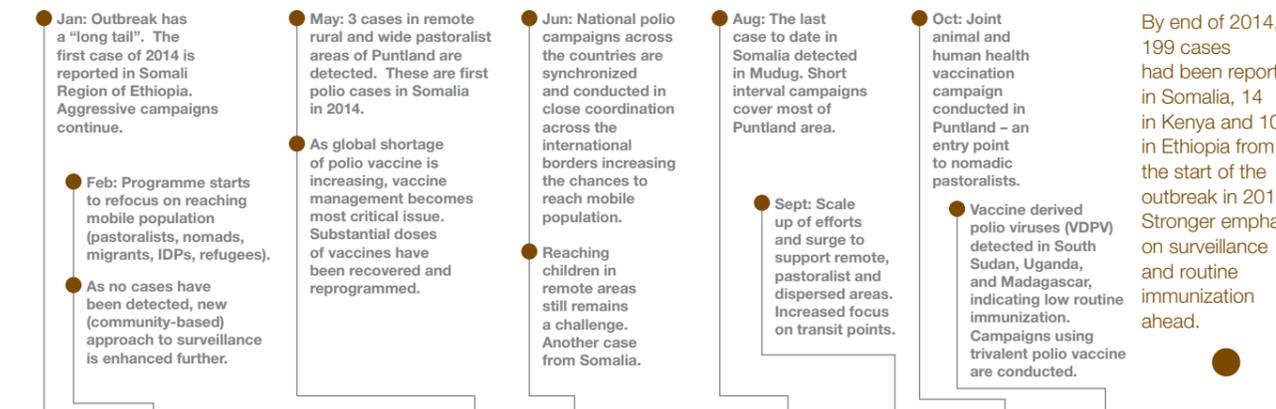
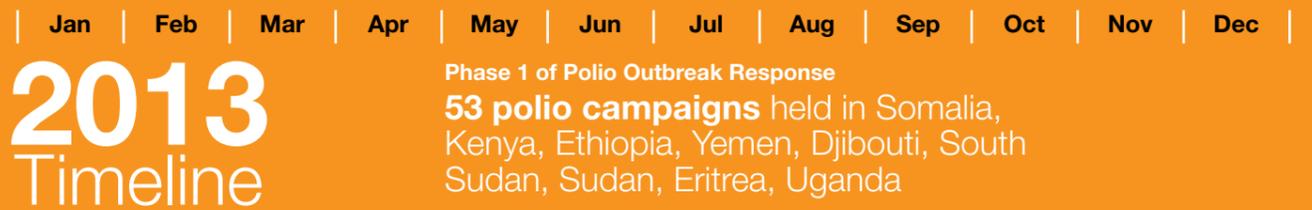


Polio Outbreak Response Coordination Levels

Country	Regional	Global
Day-to-day coordination with Governments and partners. Core function is to implement and supervise activities and ensure quality	Coordinate with regional partners, across and between different countries, including cross-border interaction, oversight and technical and surge support, campaign synchronization, funding and regional planning	Resource mobilization, technical support, development of standards and norms, global monitoring and evaluation, liaison with global donors and partners



By end of 2013, 194 cases had been reported in Somalia, 14 in Kenya and 9 in Ethiopia. The outbreak is coming under control. A lot of hope for 2014.



By end of 2014, 199 cases had been reported in Somalia, 14 in Kenya and 10 in Ethiopia from the start of the outbreak in 2013. Stronger emphasis on surveillance and routine immunization ahead.



The Horn of Africa

Springs into Action

When the news of the first case in Somalia broke, partners immediately mobilized and organized the first sub-national vaccination response campaign for Somalia. Recognizing that there were most likely many other cases yet to be discovered in Somalia and neighboring countries, emergency responses were set into motion, resulting in unprecedented multi-country coordination, and in a very short time, the rolling out of a massive public health response.

Through advocacy and partnerships with high-level national government officials, local governments, NGOs, private sector entities, mass media, and community and religious leaders, GPEI partners and national governments established the key relationships critical to stopping the virus. Working together at a global, regional and country level resulted in a timely and intensive partner response that stopped transmission quickly at the very epicenter of the outbreak in Banadir.

In neighboring Kenya in the same week that Somalia reported its initial case, a steering committee was put into place and the Kenyan government called a high-level meeting to discuss the national response. On 17 June, a case was then discovered in Dadaab refugee camp, located on the northeastern border between Kenya and Somalia. Within ten days, a campaign targeting children under five years of age was underway in the refugee camps and surrounding host communities in Garissa County.

In August, Ethiopia reported its first case in the Somali Region which shares a border with Somalia. The Government of Ethiopia established a National Command Post headed by the State Minister of Health, and shortly followed by the establishment of a sub-national Somali Region Command Post, headed by the Vice President of that region. Shortly after Ethiopia held its first campaign targeting all children under five years old.

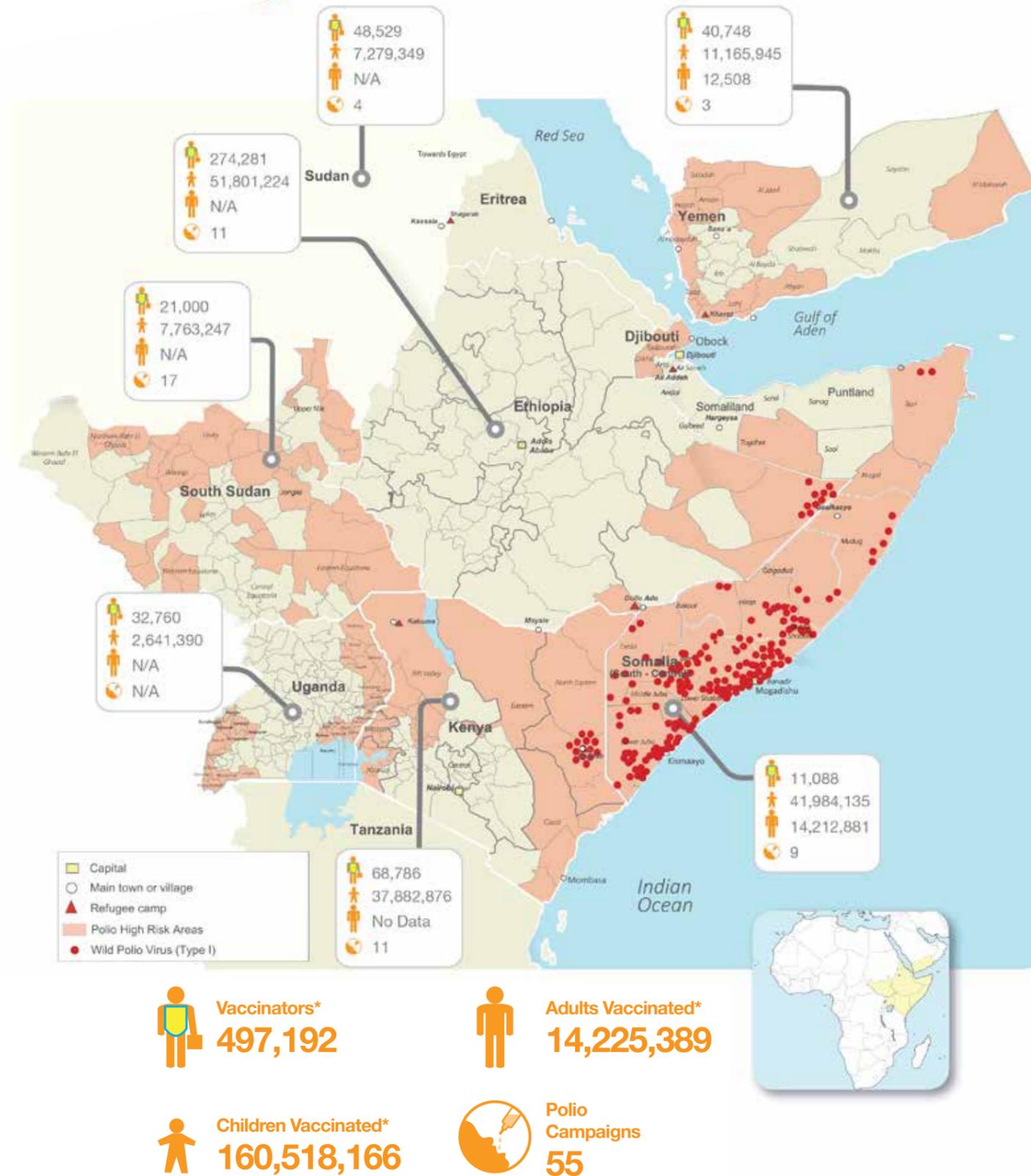
vaccinated* more than 160,000,000 children
14,000,000 adults

over 55 Polio Campaigns

engaging nearly 500,000 vaccinators*

*Cumulative figures May 2013 - August 2014, including repeated vaccination events.

Campaign Outcomes*



*Cumulative figures May 2013 - August 2014, including repeated vaccination events.

Focus on Somalia: Preventing the Worst Case Scenario

From past experiences of previous polio virus importations in the HoA, and anticipating the potential scale and spread of the outbreak, GPEI partners decided to first prioritize stopping transmission in Somalia. Years of missed vaccination in the South Central Zone and the subsequent massive immunity gap left Somalia and the entire region at risk for a prolonged outbreak. Although two hundred more cases would soon surface throughout the region, the intensive and immediate response slowed the spread of the virus and protected the most vulnerable. Three special strategies were employed:

- **Rapid Response:** When news of the case in Mogadishu broke in May 2013, a sub-national vaccination campaign was organized and implemented in just five days using all available vaccines in the country to reach children under five years of age in the outbreak areas. Within that same month, two more campaigns were conducted among all age groups. From an epidemiological perspective, speed and quality of the polio outbreak response is a critical factor in halting transmission.
- **Bivalent Polio Vaccine:** The bivalent type of oral polio vaccine – effective against both polio type I and type III – provides stronger immunity in outbreak settings than trivalent vaccine. Therefore, it was this vaccine that was immediately procured and shipped to Somalia in time for the second round of vaccinations, targeting all children under 10 years of age.
- **Expanded Age Group:** Adults and adolescents are able to carry and shed the virus, and in Somalia and Kenya the polio outbreak resulted in paralysis among both children and young adults. Subsequently, partners decided to increase the vaccination age cohort to extend protection to children under 10, and then finally to the entire population of Somalia, inclusive of all ages. Three back-to-back campaigns were carried out to ensure that those who had been missed in prior years now had improved immunity against the virus.

...intensive and immediate response slowed the spread of the virus and protected the most vulnerable.

Strengthening Surveillance: Knowing the Virus

While the polio virus causes paralysis, there are also various other causes of paralysis. A sudden onset of paralysis and a rapid progression of limb weakness associated with fever is considered as Acute Flaccid Paralysis (AFP), and may be indicative of polio infection. As such, when these symptoms present it is imperative that stool sample is taken to a laboratory to test for the polio virus. AFP cases aged <15 years are particularly of importance for surveillance of polio.

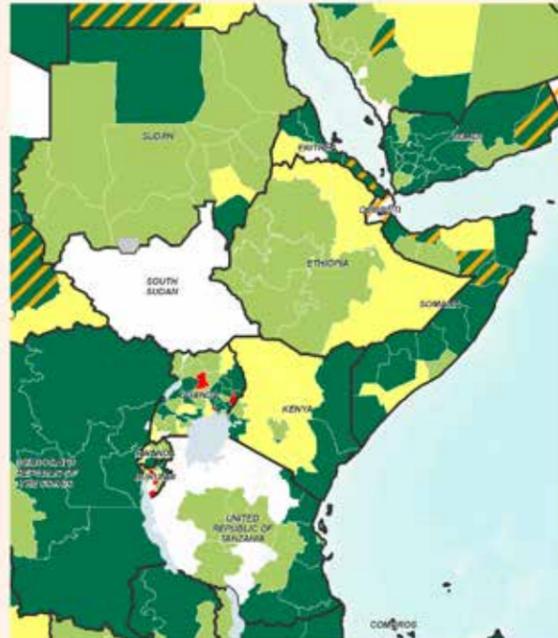
The timely detection of paralysis among children, and subsequent testing for polio, are critical steps in stopping transmission. Surveillance is relatively straightforward in countries with well-developed health systems, and where children's stool samples are routinely referred for relevant tests that exclude, or confirm polio virus. However, limited health systems infrastructure and the geographic vastness of the HoA pose major challenges to surveillance – very few facilities are dispersed over hundreds of kilometers of pastoralist land. Additionally, it is common for some people in the region to seek health advice from traditional healers and religious leaders, leading to cases of paralysis being missed. Timely identification of paralysis among children and the logistical challenges of collecting stool specimens and transporting them to a certified laboratory (there are just four in the entire HoA region) requires an “army” of surveillance officers, epidemiologists and trained community volunteers.

A high quality surveillance system ensures that all cases of AFP are reported from any given geographical area, as would normally be expected in the population (on average 2 out of 100,000 children under 15 are paralyzed a year from a variety of causes). Once the children's stool samples are collected, they must be tested in a laboratory to rule out or confirm polio as the cause of paralysis by isolating polio-virus.

Laboratory analysis then subsequently identifies the genetic strain of the virus providing an indication as to the geographical area where the virus originated, and in regard to how long it has been circulating since it was isolated. Virus strains from all polio victims are “linked” to each other by genetic information that can be tracked. This sophisticated intelligence system, along with other data, enables managers to make critical decisions in relation to how to conduct polio campaigns, within certain geographical areas, and among certain populations. Understanding the origin of the virus and its genetic footprint also helps partners to decide which type of vaccine to be used in campaigns.

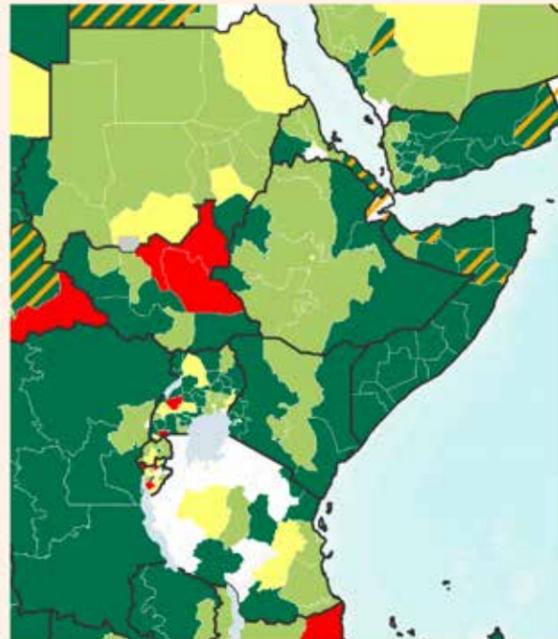
Prior to the HoA outbreak, surveillance staff were conducting regular visits to health centers and informal points of contact (including traditional birth attendants and pharmacies) in search of children with AFP symptoms. This was how the first polio case of April 2013 was “picked up” by the system.

January to June 2013

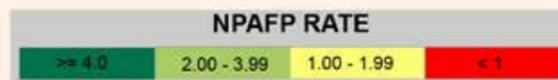


One of the ways to measure the sensitivity of the surveillance system for Polio is looking at the number of AFP cases reported in a population (excluding confirmed polio cases). A rate of 2 or more per 100,000 children under 15 years of age would be a good indicator.

January to June 2014



There has been significant progress in the Horn of Africa with majority of districts reporting two or more AFP cases (green and dark green on the map). However, conflict in South Sudan caused disruption to vaccination programme and hindered surveillance efforts in several states.



However, significant gaps in surveillance exist in the HoA. In Somalia these include: limited capacity to detect transmission in insecure and hard-to-reach areas, particularly among pastoralist communities; the limited health seeking behavior of many caregivers which can result in low or late reporting of paralysis in children; and, weak health infrastructure with limited outreach, especially outside of urban centers.

Ensuring robust capacity to detect and identify the virus as soon as it appears is critical to stopping polio outbreaks. As such; enhancing the sensitivity of surveillance systems was of key importance. The following strategies to strengthen surveillance were employed:

- Analysis and Investigation. Suspected polio cases were immediately investigated. Retroactive case searches in health facilities and informal health structures were conducted to discover cases of paralysis that may have been missed.
- Improving Laboratory Procedures and Management. Laboratory staff were trained on streamlined processes, improved handling of samples and the management of data.
- Social Profiling of Zero-Dose AFP, VDPV, and WPV Cases. Partners clarified community-level cultural and social dynamics of the affected families to inform the design of communication strategies.
- Community-Based Surveillance (CBS). Community leaders and volunteers in high-risk polio areas were trained and sensitized to identify and report any children that suddenly developed paralysis.

CBS is particularly important in the areas with few health facilities, or where health seeking in case of illness does not immediately start at the facility level.

In Somalia, community Village Polio Volunteers (VPV) actively search for AFP cases. In 2013, 16% of cases were reported by VPV, by July 2014 this had increased to 22%. In Kenya, under the Community Unit System, community health workers and community health extension workers undertake integrated disease surveillance, which includes AFP surveillance.

In Ethiopia, the CORE Group has dedicated significant resources and time to support AFP surveillance and case detection for the Ministry of Health, particularly among pastoralist and semi-pastoralist groups. Since 2008, Ethiopia implemented a CBS initiative that enlisted 6,465 volunteers trained in active case search who to this day continue to work along border areas frequented by migratory populations.

A Moving Target: Vaccinating Children in Transit

Vaccinating thousands of children travelling with their families across the HoA was critical to preventing the importation of the virus from infected areas. As such, a key strategy for reaching these children was to establish 611 permanent transit points (PTP) at known mass transit locations throughout the entire region, including at locations in Yemen and Sudan. As a result, approximately 593,000 children under 15 years of age have been vaccinated at these posts since the start of the outbreak. The majority of the 300 vaccination sites were placed at strategic points inside Somalia and along the borders with Kenya and Ethiopia. More than 306,000 children were vaccinated in Somalia alone.

Reaching Pastoralists: Joint Animal and Human Vaccination Campaign

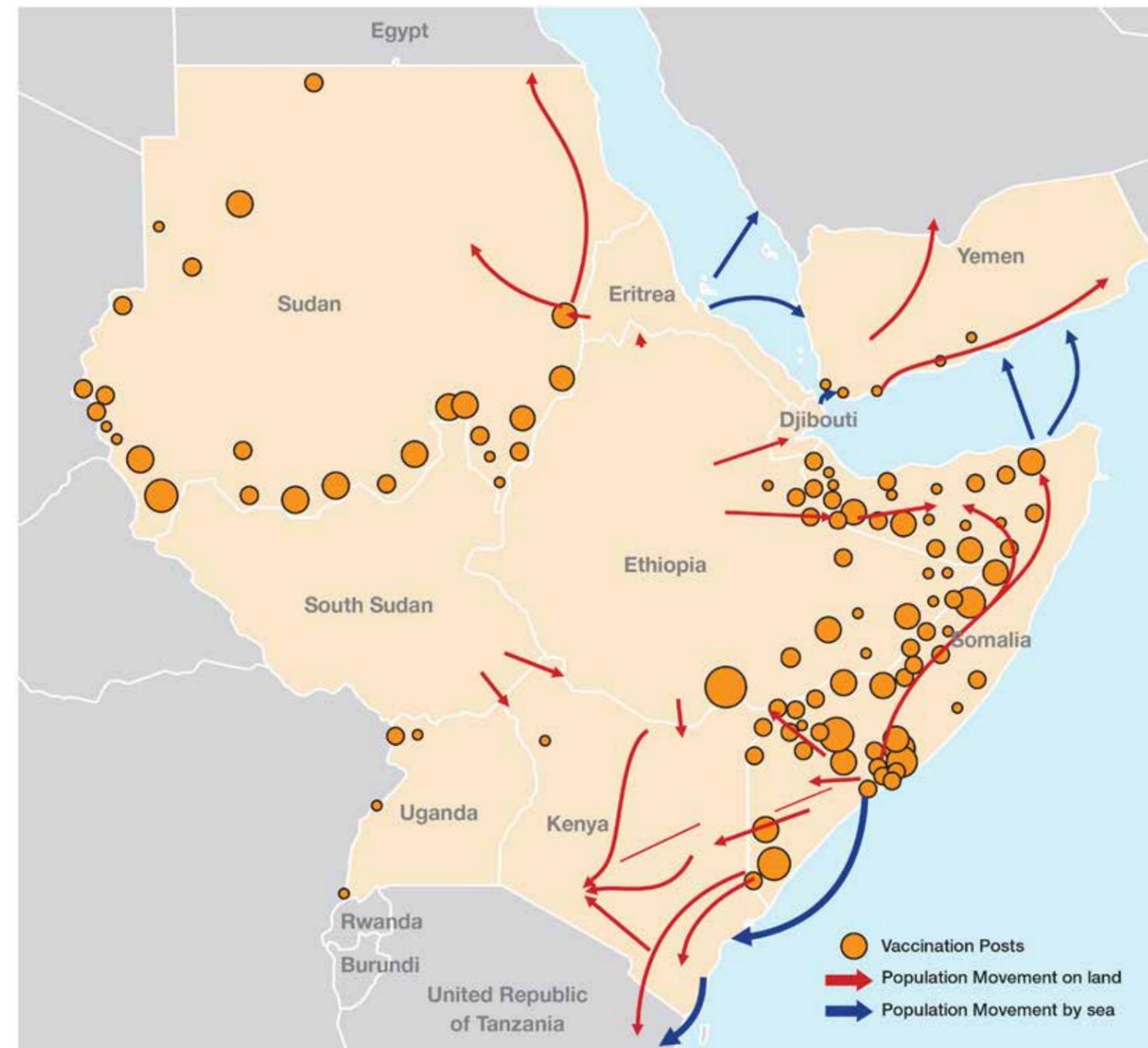
Ongoing transmission of the polio-virus among the remote and nomadic communities of Puntland highlighted the need to devise appropriate strategies to reach these populations. Pastoralists, whose lifestyle revolves around livestock, make up 26% - 30% of the population of Puntland. These communities are dependent for their livelihood on their sheep, goats, and camels, and, as such, the health of their animals, and the availability of water and grazing lands are fundamental to their wellbeing.

Animal vaccination, conducted seasonally by FAO and the Ministry of Livestock in Somalia, has been piloted as a means by which to first locate and then vaccinate nomadic pastoralist children, including those who fall under the radar of the existing health system. In October and November of 2014, polio vaccination teams collaborated with FAO resulting in the vaccination of 15,000 nomadic children under 10 years of age who also received other health services, including measles vaccination and oral rehydration salt (ORS). In addition, over 5,000 children received a dose of vitamin A.

	Transit Vaccination Points	Children Vaccinated	Cross Border Meetings
South Sudan	32	No Data	11
Uganda	6	2234	3
Kenya	7	No Data	11
Ethiopia	56	168,408	10
Somalia	300	306,978	2
Yemen	9	19,285	1
Sudan	201	95,643	1
Cumulative	611	592,548	39

Cross Border Vaccination

Horn of Africa Permanent Transit Vaccination Points Spot Map



Population Movement Overlay: Regional Mixed Migration Secretariat Horn of Africa and Yemen Mixed Migration Map

592,548 children*
vaccinated at transit points

* Cumulative figures May 2013 - August 2014

Supplying Somalia: Complex, Costly and Risky

The multi-step process of identifying the number of vaccines required to cover target populations, and the actual process of getting the vaccines on the ground in time for each campaign, has required thorough and precise planning, coordination, and flexibility.

Supplying Somalia, in particular, has proven complex, costly and risky. Insecurity, limited cold chain capacity and depleted physical infrastructure have all complicated the delivery of vaccines. In South Central Somalia the challenges are particularly acute as vaccines, which are supplied through Mogadishu, then have to be further distributed to eight cold-chain hubs across the region. Given the particular access and security challenges in South Central Somalia vaccine supply has only been possible through the use of costly airlifts using aircraft that have special on-board storage capacity to deliver small batches of vaccine. In addition, the need for numerous and repeated campaigns, necessitates frequent replenishment of the vaccine putting pressure on supply and distribution costs. Ensuring functional cold chain capacity in each of the eight vaccine supply hubs also presents additional challenges and increases costs.

From the start of the outbreak in April 2013, UNICEF has supplied 3,122,056 vials of polio vaccine to Somalia's interior, equivalent to more than 62 million doses. While only two drops of polio vaccine is given to a child during a given vaccination, this in total accounts for over 100 tons of fragile, heat-sensitive, and life-saving cargo delivered to one of the most logistically challenging destinations on the planet.



POLIO Vaccine Planning & Delivery in Somalia

- ### Challenging
- Limited roads access
 - Unpaved airstrips (subject to weather)
 - Low-capacity cold chain storage (one month of stock only)
 - Aggressive campaign schedule
 - Need for continuous replenishment

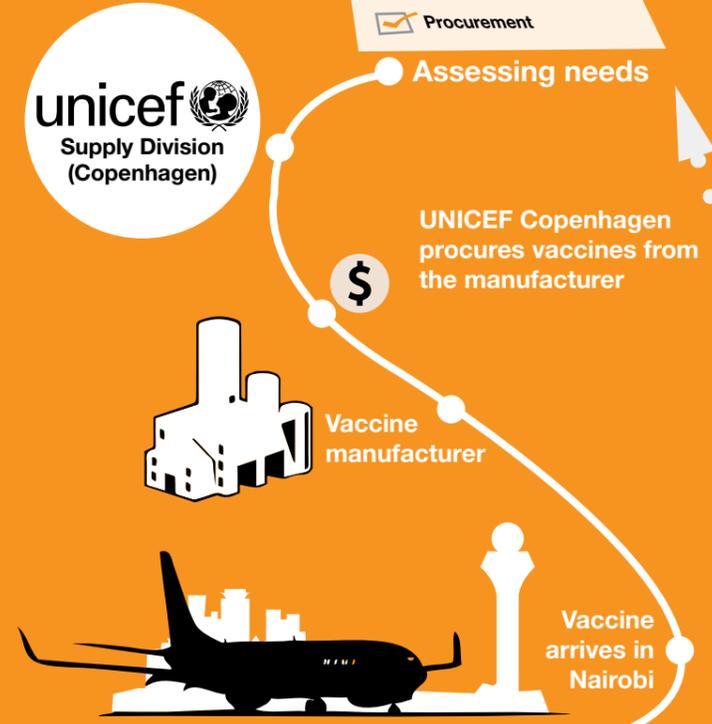
- ### Costly
- No direct international cold-chain supply to Somalia
 - Few regular commercial flights and carriers available
 - Small batch delivery due to use of small aircraft for unequipped runways
 - Multiple airlifts due to small capacity of cold rooms

- ### Risky
- Delivery by road inside South-Central Zone
 - Cargo is subject to frequent road-block checks and inspections
 - Sustaining cold chain during prolonged delivery
 - Overall challenging operation context in Somalia

10-15
chartered UNHAS
or commercial
flights required to
deliver supplies
enough for one
campaign



- Review of SIA calendar
- Identify funding needs
- Estimates of vaccines
- Procurement



upto
13
days

Import clearance, warehousing and export clearance



Vaccine dispatched from Nairobi to 8 Supply hubs in Somalia



Repeat for next round

Boosting Immunity with Inactivated Polio Vaccine (IPV)

Dadaab, the world's largest refugee camp with close to 350,000 registered Somali refugees, was the epicenter of Kenya's polio cases in 2013. Frequent cross-border movements between Kenya and Somalia and low population immunity contributed to fourteen confirmed cases of polio, seven of which originated in the Dadaab camp.



Children and young adults residing in the camp and the surrounding host communities in Garissa County were at high risk of contracting the polio-virus, and therefore were in need of maximum protection.

Since the beginning of the outbreak in Kenya in June 2013, six rounds were conducted, including one campaign targeting all ages. In addition, in order to further quickly boost the immunity of children in the outbreak zone, the Government of Kenya jointly with GPEI partners, UNHCR and NGOs on the ground conducted a combined polio campaign that included an injection of inactivated polio vaccine (widely included in routine immunization schedules in many developed countries) together with oral polio vaccine drops. It was one of the first introductions of inactivated and injectable polio vaccine in Africa demonstrating that administering the oral polio vaccine jointly with one dose of the injectable vaccine significantly boosts immunity against the virus.

Trainings for health workers and social mobilizers were also conducted to overcome challenges posed by weak health infrastructure. Intensive social mobilization activities were then conducted to sensitize communities and caregivers about this new and unknown form of polio vaccine, and the location of the fixed posts. Researching community perceptions about IPV and its combined use with the already familiar "polio drops" was a vital part in gaining information for the communication strategy and subsequent campaigns. Rates of acceptance throughout the campaigns were high, indicating that social mobilization activities, adapted to fit the varying social contexts and norms within the camps, were highly effective.

Good coordination between Kenya's Ministry of Health, UNCHR, WHO and UNICEF played a significant role in successfully carrying out the first time ever co-administered polio vaccination campaign in Kenya. **Overall, 120,000 children in the camps and host communities of Garissa County received both oral and "injectable" polio vaccine in December 2013.** Consequently, no polio-virus has since been detected in Kenya.



PUBLIC AWARENESS & DEMAND FOR POLIO VACCINE

Outbreak Communication: One Step Ahead of the Virus

Responding to Somalia's first polio case UNICEF, in coordination with GPEI partners, rapidly rolled out a comprehensive communication response. Within a matter of hours, the Government of Somalia declared an outbreak; within 48 hours, radio announcements hit the airways in Mogadishu and South Central Somalia; and, within a few days NGOs were supported to establish a social mobilization workforce to inform communities about the risks of polio and immediate and up-coming vaccination campaigns. The urgency of the communication response was critical – if the vaccination campaign was to start just four days after the confirmation of the polio case in Mogadishu, then the communication campaign had to be deployed in half that time to prepare the public for polio rounds. The initial stage of the response included intensive communication and awareness raising through use of mass communication channels. But as the outbreak expanded in scope and magnitude, communication strategies were refined and specifically adapted to target high risk groups.

- In 24 hours:** MoH held a press-conference, announcing the outbreak
- In 48 hours:** 4 FM stations started massive public service announcement coverage in Mogadishu and SCZ
- In 72 hours:** social mobilization workforce of two NGOs deployed to sensitize the communities
- In 10 days:** Comprehensive Communication 4 Development plan rolled-out in Somalia

The overarching goal of the regional communication response was to create an enabling environment for the campaigns, and positive public perceptions of the polio vaccination, thereby paving the way for repeated polio rounds across the HoA. Achieving this goal would not be easy. The scale of the outbreak presented challenges on a par with those that have been witnessed in other polio endemic countries. However, the resources and infrastructure available to address programme demands were weak, especially at the initial stages of the outbreak.

In order to work around these challenges and the complexity of tailoring communication approaches to country contexts, a multi-pronged strategy, employing advocacy, mass communication, social mobilization and media engagement was proposed. Government leaders across the HoA, with technical support from UNICEF, took the lead in organizing communication campaigns to generate public demand and wide acceptance of the repeated polio campaigns.

Employing communication strategies resulted in country level activities focused on maintaining high levels of polio awareness, an amplified perception of risks posed by the virus, sustained confidence in the polio vaccine, and the generation of positive attitudes and support for polio vaccination.

Independent monitoring data has demonstrated high levels of polio campaign awareness, especially in areas where significant social mobilization investments were made. At the country level, campaign awareness ranges between 85% and 90% across the HoA, yet, there are a number of sub-national locations where campaign awareness could be further improved, and communication gaps require additional analysis. These locations include Dolo Zone in the Somali region of Ethiopia; Dhusamareb, Hargeysa and Baidoa districts in Somalia; and, almost the entire Coastal region of Kenya.

As the outbreak response evolved, approaches to communication in support of polio eradication have also evolved to include establishing communication networks across the region; training and equipping social mobilizers; undertaking social mapping exercises to improve micro-planning; engaging community leaders and influencers to support polio vaccination campaigns; producing and broadcasting radio public service announcements; utilizing cross-border communication platform; and, engaging religious leaders as key community mobilizers. There was also a shift away from focusing exclusively on polio campaign awareness to generating stronger community support, and towards the use of tailored strategies to address specific communication challenges identified through analysis of social and campaign data. In addition, campaign messaging has shifted from a focus only on polio vaccination to include messaging on other key child health interventions, including the importance of routine immunization.

Knowing the Audience: “What’s on Their Minds?”

Understanding the audience is the key to effective communication. What do people know, hear, and feel about polio? How risky do they think it is for their children? Do they know how to prevent polio? What do they know about polio vaccination? Do they think it is safe and effective? Who is the most credible person to speak about health in the community? Getting answers to these and many other questions was needed to inform the development of communications interventions.

As a consequence of years of conflict and a general neglect of the social sectors, very little research into health seeking behavior had been undertaken in the region. To fill this gap, UNICEF commissioned a number of studies in Somalia and Ethiopia to capture the thoughts and perceptions of parents and community members about polio and vaccination.

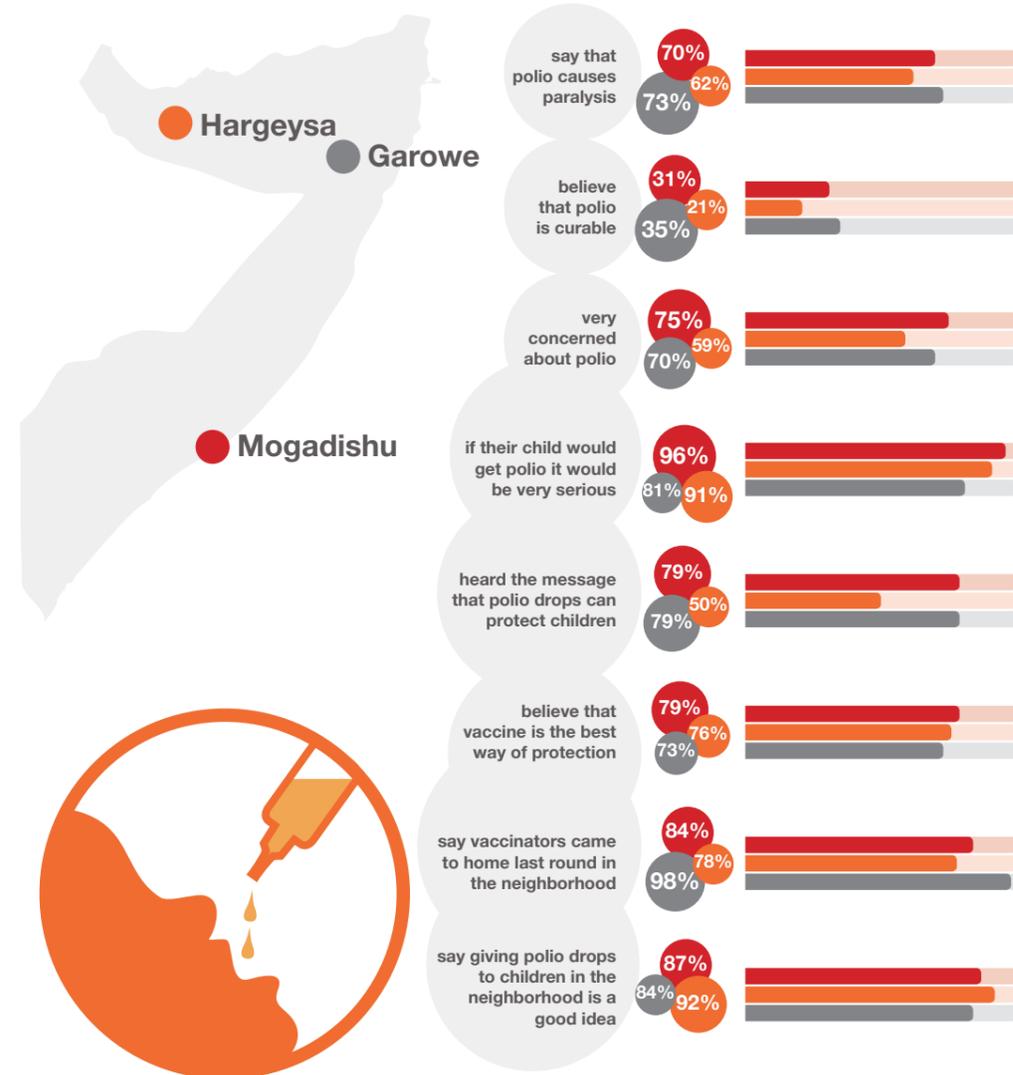
UNICEF partnered with Harvard University School of Public Health to conduct an in-depth Knowledge, Attitudes and Practice (KAP) survey in Somalia, which involved interviewing 1,360 respondents across six districts. The results of the research provided insights into caregiver awareness, and their knowledge and perceptions of polio, the polio vaccine, routine immunization and the polio programme. The study also shed light on factors that influence children’s health within the family and the community. In addition, the survey explored the potential impact of health communication interventions, and specifically how health communication could positively influence caregiver perceptions and actions.

Overall, results were encouraging and demonstrated broad public awareness and acceptance of vaccination. Findings were then used to shape messaging addressing specific issues, including, for example, false beliefs that polio is curable. More attention was given to communicating preventive information about polio, including messages that emphasize the vaccine as the only means by which to protect children from the polio-virus. Study results clearly pointed to the need to train health workers and social mobilizers at the community level, but also to the wide reach of short-wave radio stations (a highly regarded and popular source of information among Somali audiences across the HoA), and the mediums effectiveness as a means to disseminate key messages, and polio related information.

Knowledge, Attitude & Practice around Polio Vaccination



UNICEF & Harvard Opinion Research Program in Partnership with Harvard University (2014)*



In the Somali Region of Ethiopia, where all of the Ethiopia's 10 cases were detected, UNICEF partnered with Jigjiga University and Somali Regional Health Bureau to gain insight into the experiences of fourteen polio-affected "zero dose" children, who had not received a single dose of the polio vaccine. Studying the lifestyles of these families and their views on health and caregiving also proved critical to understanding how socio-cultural factors, religious influences, and the availability and accessibility of health services influence health seeking behaviors; as well as, caregiver understandings of the risks of polio, and of the importance of vaccination for children.



* January 2014

Taking Action

- High-level advocacy with the Islamic Affairs Supreme Council (IASC) in the Somali Region of Ethiopia. Over 1,000 religious leaders are now involved in social mobilization activities such as promoting the campaigns to communities at mosques and Quranic Schools.
- Twenty-four mobile health teams have been added to the region and are actively involved in efforts to vaccinate children within pastoralist communities.
- The number of health extension workers has been increased and training has been provided on interpersonal communication skills to ensure caregivers are informed about polio and routine immunization.



BBC: Short Wave, Long Reach of “Dhibcaha Noloshah”

Somali populations across the HoA have been the most affected by transmission of the polio-virus. As such, the majority of communication interventions have been focused on reaching out to Somalis inside and outside of the country.

Findings from the Harvard KAP study revealed that 88% of respondents in Puntland, 74% in South Central Somalia and 35% in Somaliland (due to high TV penetration) report radio as their primary source of information. Numerous local FM stations in Somalia are popular, although their reach is limited. Star FM in Kenya broadcasts in the Somali language and is very popular in locations bordering with Somalia and Ethiopia. The BBC Somali Service and Voice of America Somalia broadcast on shortwave, and have a long-reach across the region and almost universal credibility among the Somali population of the HoA.

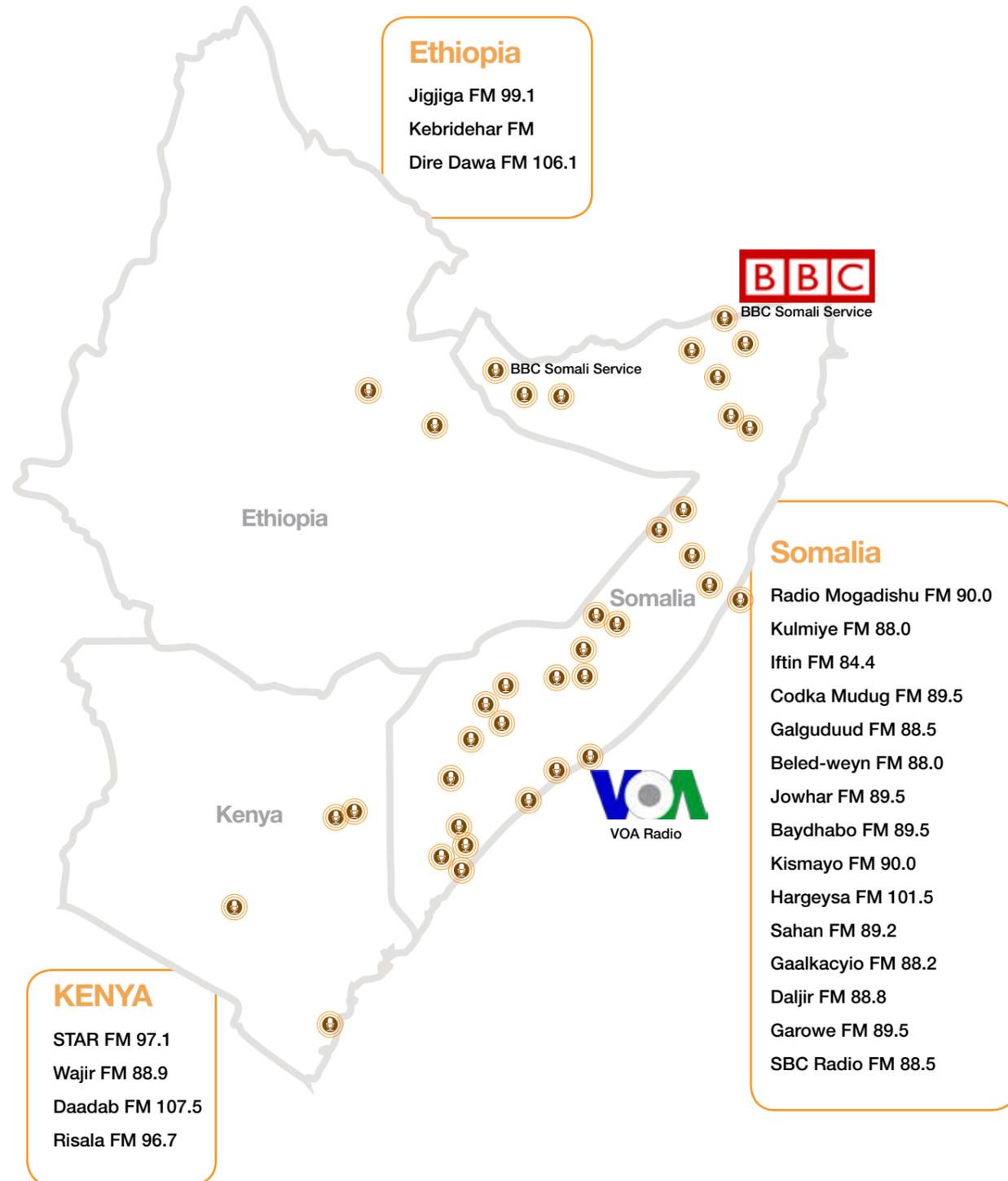
Recognizing the power of radio, and its potential to reach populations across borders, UNICEF Somalia partnered with BBC Media Action to develop the series “Dhibcaha Noloshah” or “Drops for Life”. On 7 February 2014, the BBC aired its first hour long episode “What is Polio?” broadcast in the Somali language and reaching Somali listeners in Somalia and in the Somali regions of Ethiopia and northern Kenya.

Episode content was informed by focus group discussions with caregivers that revealed some of the most common concerns about polio and the polio vaccine. The Harvard Study also revealed pockets of mistrust among some Somali populations, often caused by spurious rumors including, for example, that the polio vaccine causes sterility. In addition, misconceptions about OPV also lead some caregivers to believe that illness caused from the polio virus is a result of the ‘evil eye’ and, as such, it can only be treated with traditional means, not preventive medicine. Drawing on these findings, the ‘Drops for Life’ episode aimed to inform vulnerable populations about the efficacy of the vaccine, and dispel myths at the root of the mistrust.

“The most interesting one (episode) is the story of religious man telling people that polio was existing during our Prophet’s (peace and mercy be upon him) era and also telling people that our religion accepts treatment and vaccination, so this will be encouragement of people who have misconceptions about vaccination. Like those who believe that this is not acceptable in our religion.” Grandmother, Listener, Hargeisa



Polio Programming on Somali Language Radio Stations in the Horn of Africa



BBC Somalia Service (out of Hargeysa) and Voice of America Somalia (out of Mogadishu) broadcast both on FM and SW - short waves, reaching audiences wide across the Horn of Africa region in Somalia, Ethiopia and Kenya. Number of local FM stations re-broadcast their content

Every 3rd parent in Mogadishu* that was aware of polio campaign found out about it from the radio

83%
of respondents in Galkayo* said that they get news from the radio

* 2014 Polio KAP Study, UNICEF/HORP in Partnership with Harvard University

The educational content and entertaining format of these radio programmes engendered discussion and audience engagement on a range of sensitive issues. Phase II of the project, launched in January 2015, focuses on linkages with routine immunization, and other key child health messages.

The Voice of America Somalia, supported by the United States Center for Disease Control, also rolled out news content and educational and entertainment-framed content to build awareness, and to stimulate discussions on polio related issues across the HoA. Moving beyond intensive, campaign-focused, public service announcements these interventions generated a deeper level of public discourse on immunization, and helped to amplify the prominence of health issues in the media.

INNOVATIONS AND BEST PRACTICES IN COMMUNICATION

Countries affected by the polio outbreak in the HoA faced a set of unique communication challenges – for example, reaching remote and mobile populations and ensuring that religious beliefs did not become a barrier to vaccine acceptance. In each country, a cadre of social mobilizers was trained to engage the community and raise awareness about polio and vaccination. However, strategizing on the most effective way to reach mobile nomadic and pastoralist population's required critical thinking, and the initiation of new approaches to outreach.

In particular, communicating with mobile populations required adapting messages to the social and cultural contexts of nomadic and pastoralist populations. Insecurity and conflict in some parts of Somalia and South Sudan also demanded new and creative ways to engage with communities. Finding innovative ways to engage religious leaders as polio mobilizers was also deemed critical to an effective communication response.

Reaching out to Pastoralists in the Ethiopia's Somali Region

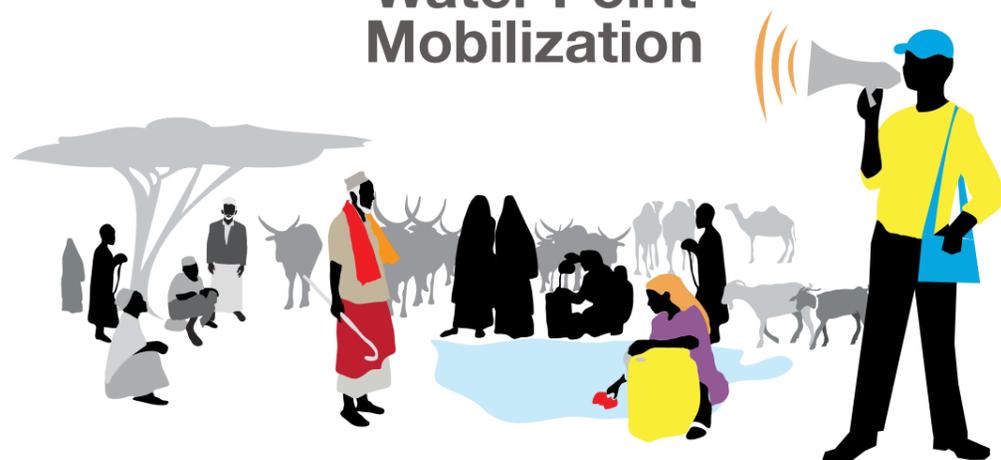
Pastoralist communities in the HoA have been especially affected by the polio outbreak. Almost 90 % of the population in the Somali Region of Ethiopia are pastoralists, and as such a first critical step towards reaching these populations has been to better understand their lifestyle, patterns of movement and the flows of communication within particular clans. Adapting communication approaches and tailoring social mobilization activities to the social and cultural context of pastoral communities continues to be the only way of providing health information services to these populations.

House-to-house approaches to vaccination proved extremely challenging given the vast distances, and the constant population movement. Recognizing the need to focus on mobile populations, including pastoralists, GPEI partners in the HoA embarked on the challenging task of: a) better understanding these groups, their movement patterns, seasonality, and their scope of migration; b) designing flexible country-based strategies and action plans to consistently target and reach mobile populations; and, c) develop innovative and culturally sensitive strategies to communicate key polio related messages to these populations.

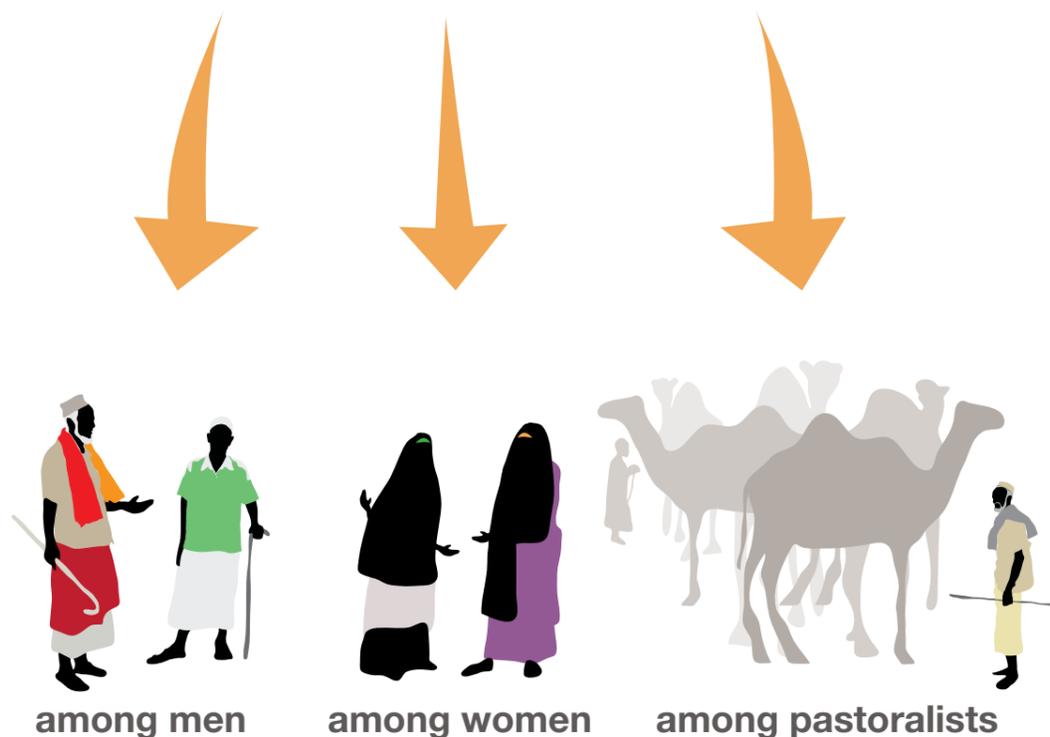
Innovations and Best Practices



Water Point Mobilization



spreading of information into the pastoralist community



Campaign after campaign, children from pastoralist communities were being missed due to logistical challenges and a lack of campaign awareness among nomadic and mobile populations. Realizing these constraints, strategies to pinpoint key gathering places, and the holders and transmitters of information, were developed.

Livestock trading and searching for water are principle drivers of population movement among nomadic and pastoralist populations. To ensure their survival, pastoralist populations ensure, as best they can, that their livestock are kept healthy, and that water is available for human, and livestock consumption. Livestock are the main source of income for pastoralist communities and cattle markets in various town centers are not only business and trading hubs, but also social gatherings where news and information are spread. There is a strong tradition of oral communication among Somali populations, and information is most commonly spread by word of mouth. The dissemination of important messages and information is usually initiated and brokered by clan leaders and other community members of influence, including religious leaders and key cattle market traders. As such, prominent community figures such as these were engaged to communicate polio related messages. Cattle buyers and sellers from rural areas then conveyed these message back their communities.

Water sources are also locations where social mobilization, and vaccination, can take place, and clan leaders – the key link between vaccination teams and pastoralist communities – were mobilized to communicate and discuss key polio and health related messages at water points.



Clan leader at a water source in the Dollo Zone, Ethiopia.



When the livestock have been adequately watered and business is finished, the men come together to have tea either in town or under the shade of an acacia tree to talk about community issues and news.



Caregivers come to the water points 2-3 times per month. Social mobilization has increased in these areas and the level of awareness about polio is on the rise.

Other culturally sensitive strategies have included the “Dawn to Dusk Strategy” which was designed to ensure that pastoralist children responsible for herding cattle are not missed. Mobile Health Teams were also put into place to provide essential health services, including immunization to mobile and remote populations.

Dawn to Dusk Strategy - Quranic Schools

In pastoralist communities, children are tasked with part of the responsibility for taking care of family livestock. This means that the children are often not at home when the vaccinators come by with the polio vaccine. In order to make sure that these children are not missed, the polio team implemented the “Dawn to Dusk” strategy, which brings vaccinators to Quranic schools where they know children will be in attendance. Vaccinators come throughout the day to ensure children who attend both in the morning and in the afternoon receive vaccination.



Mobile Health Teams

Twenty-four mobile health teams have been operating in the Somali region of Ethiopia to reach pastoralist and remote populations. Teams work 5-6 days a week in selected operational sites on a fixed schedule, and with the support of local social mobilizers who continuously inform the target community of the arrival of vaccinators. They reach over 1,000 clients per month, of whom, over 40% are children under the age of five years. Mobile Health Teams have played a significant role promoting and facilitating both polio campaigns and the uptake of routine immunization services among hard to reach populations.

Before the polio outbreak, the need for social mobilization was not well understood in the Somali Region of Ethiopia. Knowledge among caregivers of appropriate health seeking behavior for children's health was minimal, and routine immunization coverage rates were the poorest in the country. In a region where families rely heavily on clan ties and have strong religious values, trust among local communities is vital to daily life. Therefore, training local community leaders who speak the local language, and know the residents and the culture of the region, has been an important step. Not only to educate the community about polio and routine immunization, but also to improve awareness around other key health interventions, including sanitation and nutrition.

When the outbreak commenced the Government of Ethiopia, with support from UNICEF, developed a communication strategy to increase demand for polio immunization and improve community understanding of the importance of immunization. Training local volunteers on polio prevention, routine immunization and how to appropriately convey information through interpersonal communication was critical, as was advocacy and engagement with religious and clan leaders to mobilize pastoralist and nomadic populations who may otherwise be resistant to vaccination.



Religious Leaders in the Fight against Polio

Given the importance of religion to Somali culture, religious leaders have significant influence at the community level. Therefore, as in many other polio-affected countries, getting the buy-in and support of these key figures has been essential to polio eradication efforts across the HoA.

Islamic Affairs Supreme Council (IASC)

In 2013, the Regional Health Bureau of the Somali Region of Ethiopia signed a memorandum of understanding with the IASC, a non-profit, elected body of religious leaders who work to improve the standard of living in their communities. The partnership includes collaborative efforts to stop the transmission of polio, and to inform and educate the community on how to prevent polio and avail themselves of immunization services.

The IASC contributed to the outbreak response through campaign oriented social mobilization activities that targeted public forums prior to campaigns commencing. Activities, included campaign launch ceremonies, press briefings, radio and television talk shows, and the announcements of campaign dates at mosques. The IASC also helped to develop messages for religious leaders and Quranic school teachers, and worked with communities where refusals were evident to convince caregivers of the need for vaccination.

A prominent scholar in the Somali Region, Sheikh Ahmed Aabi, in an interview with Radio Fana, encouraged the community to support polio eradication efforts and routine immunization. The interview was widely acclaimed by the community, and many sheikhs subsequently became involved in the fight against polio.



Sheikh Ahmed Aabi (Cabinet Member - IASC), speech on commitment to mobilize the parents, care givers and community at large on Polio SIA through IASC network

The Hajj: Holy Pilgrimage as an Opportunity Encourage Vaccine Acceptance in Somalia

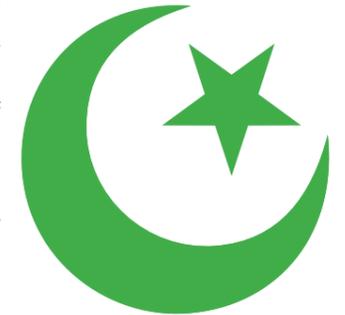
The annual Hajj, which welcomes over three million Muslims to the holy city of Mecca, presented an ideal opportunity to counter refusals founded in religious values, and to promote vaccine acceptance. Refusals have been minimal at around 1 % but even at these low levels they must be treated as a potentially serious obstacle to sustained vaccination efforts.

Hajjis, or those who take the holy pilgrimage, are revered in Somalia society. Therefore, showcasing their participation in public media spots proved to be an important channel of influence. UNICEF Somalia used the event of the Hajj as an opportunity for national advocacy. Campaigns coincided with the launching of the Hajj in September 2013 and special polio PSAs were aired on radio and television, in addition to coverage in the print media before the October, November and December rounds. PSA's included images of male and female pilgrims being administered OPV as a condition to their entry into the country to participate in the Hajj. Saudi Arabia's regulation that all persons entering for the Haj from polio-affected countries must be vaccinated was a key messages to the community. Pilgrims were also asked to pray for the eradication of polio during their holy journey.



Campaigns during the Holy Month of Ramadan

In 2013 the holy month of Ramadan took place from 8 July to 7 August. Given the emergency outbreak situation, it was determined that conducting campaigns during Ramadan was critical to stopping the spread of the virus and protecting high risk populations. However, in order to respect the tradition of fasting, GPEI partners worked with the Somalia Ministry of Justice to garner the support of religious leaders to encourage families to accept OPV during this time. 96% of children and adults in Somalia were vaccinated during Ramadan.



Raising Awareness on the Front Lines: Polio in Emergencies

In December 2013, conflict erupted in the recently independent South Sudan, resulting in the loss of thousands of lives and the displacement of over two million people.

As such, GPEI partners faced – and continue to face – immense operational challenges, including staff evacuations and the suspension of immunization campaigns due to insecurity. Service delivery has also been severely compromised and there are growing concern over continued transmission.

Despite the challenges, GPEI partners have continued to work in high risk communities. Through rapid response missions, UNICEF strengthened social mobilization efforts by improving the capacity of front line health workers and restoring community networks. Community volunteers have been trained on essential life-saving practices, and on how to plan and implement social mobilization activities for integrated vaccination campaigns (e.g. OPV, Measles, Abendazole and Vitamin A). Social mobilization activities have also helped to orient community leaders and caregivers about polio prevention and routine immunization. To further support social mobilization efforts, UNICEF piloted “Communications for Development in a Box”, a response kit that includes megaphones, batteries, T-shirts, a solar radio, flip charts and information and education materials.



A local social mobilizer informs the community of Leer about the upcoming polio campaign.

Somalia: Engaging Local NGOs

South Central Somalia is largely restricted to “outsiders”, including humanitarian organizations. In order to work in this complex context, partners developed strategies to reach communities in insecure areas by engaging local NGOs already providing services to people.

Developing these partnerships was key to social mobilization and vaccine delivery in insecure environments. UNICEF began working with 25 local NGOs to implement communication activities on the ground. Replicating successful approaches employed in the India Eradication Program, two staff from each NGO were trained on social mobilization and polio prevention.

The benefits from this partnership were two-fold: working with these groups improved available information on community needs; and, created opportunities for vaccination.

“Mtoto Kwa Mtoto” - Child to Child: Each One Reach Ten

When the Kenyan government learned of the outbreak, they were committed to engaging stakeholders in the community to stop transmission. Community participation was key to raising awareness and reducing the number of missed children. This also included active young members of the community, who were engaged as volunteers and tasked with protecting the children in their communities from polio. Two innovative programmes, Mtoto Kwa Mtoto, piloted in Nairobi, and a Youth Mobilization Strategy, piloted in Turkana, involved engaging young people as community mobilizers to promote vaccination against the polio virus.

The Mtoto Kwa Mtoto programme (Child to Child), piloted in Kenya in November 2013 gave 1900 students from the Langata District in Nairobi the chance to do just that, and to be a part of polio eradication history.

Fourteen confirmed cases in 2013 put the entire country on high alert. In order to prevent further spread of the virus, the Kenyan Ministry of Health strove to vaccinate every child in every house. The involvement of all stakeholders in the community was seen as crucial to achieving this objective, and engaging teachers and school children in social mobilization was considered the most effective way to reach communities and raise awareness in relation on polio prevention.

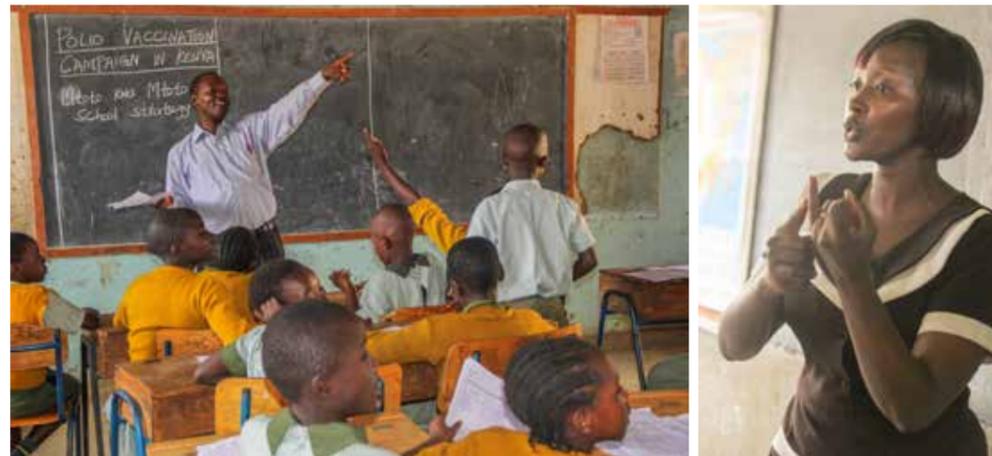
The objective of Mtoto Kwa Mtoto was to engage school children to disseminate key messages on polio to their families and neighbors, to identify missed children, and to take action to ensure that children under five years of age are vaccinated.

Training for Action

The enthusiastic participation of the students resulted in 15,700 children under five years old being registered and vaccinated. In addition, 384 missed children were identified by the pupils, and were reported to teachers who then relayed the information to vaccination team supervisors. Educators involved in the initiative also increased their knowledge about the polio virus, and now have acquired the skills and knowledge to train other teachers in the areas where the pilot is replicated. UNICEF has since collaborated further with the Kenyan ministries of Health and Education, and expanded the Mtoto kwa Mtoto initiative to Garissa County, the center of Kenya’s outbreak.



Teachers from various schools in Nairobi County were introduced and trained on the “Mtoto Kwa mtoto school strategy”



Teachers trained participating students on key messages about polio and how to sensitize and inform the community. They also demonstrated how to verify whether children had been vaccinated through checking finger markings, and through the filling out of registration forms.



Students from various primary schools in Nairobi County are trained before going out into their neighborhoods to inform communities about polio and upcoming campaigns.

Young Voices Mobilizing the Communities against Polio



A group of young men sit together on a mat made from papyrus leaf underneath the shade of the house of the village chief. They speak casually among themselves in their native Turkana language about news from their villages, and about various tasks that need to be done. The Chief arrives and sits on a small stool as David, Peter and Milton turn their attention to him, listening intently to his words.

The three young men have been volunteering as youth mobilizers for polio since the youth mobilization strategy was piloted in April 2014. Since that time they have opened up a new dialogue and built trust between themselves and the Chief. Trust is everything in the community of Napetet, and as such undertaking effective social mobilization in support of immunization in an area where distrust of western medicine has been prevalent requires earning the respect and trust of the Chief.

Although northern Kenya has been polio free since 2009, the threat of a new outbreak remains a real possibility. Given the vulnerability of the region and the past history of virus transmission, UNICEF and WHO have been working closely with the County Ministry of Health to develop innovative ways to mobilize and inform communities.

“For me to see my brothers and sisters affected by polio doesn't give me a good picture. I am happy when I see them with the use of both legs.” Peter, 22

Youth Mobilization Strategy in Action

Reaching communities in Turkana is always a challenge. Remote populations, mobile populations and traditional modes of communication all present obstacles to social mobilization in these communities. Given these difficulties, UNICEF, in partnership with the County Ministry of Health devised a strategy to expand the reach of mobilization activities through engaging a group of young people with energy and desire to be a positive force in their communities.



The Abaraza is the most important public platform for communication in the village, where information is passed and questions are asked. Village chiefs use this forum to inform the community about upcoming polio campaigns. Pictured (Top), a public health officer talks to the community about polio prevention. Pictured (bottom), a Turkana woman asks questions about her child's health.



A large majority of youth in Turkana are unemployed and are not always engaged actively with the community. Volunteerism is also a relatively new concept and as such, providing the opportunity for young people to participate in voluntary activities was viewed as a means by which to give them an effective voice, and sense of purpose. Before initiating the programme, potential participants were surveyed and selected based on their enthusiasm for participating in something that will benefit their communities. The energy and enthusiasm of participants and their desire to bring positive health outcomes to their villages has brought great success to the programme.

First tested in November 2013 in the Turkana Central sub-county, 31 young people participated in the programme resulting in the vaccination of 1,073 children. Building on the success of the first campaign, in April 2014, 57 young people were trained by the County Health Management Team with technical support from UNICEF and WHO on social mobilization and the basics of the polio virus and prevention. Their task was three fold: 1) house to house registration of all children under the age of five in their villages and talking to the caregivers of these children about polio and the importance of vaccination prior to the campaign; 2) monitoring and checking the finger markings of the children they had previously registered after the vaccination teams have passed through; and, 3) informing the village chiefs and elders about children who had missed vaccination in order that vaccination teams could return to vaccinate the missed children. During the pilot phase, 7,831 children were registered, and 132 missed children were identified and subsequently vaccinated.



“There was a time when the community doubted the messages and there was resistance to the youth, but in time, through the involvement of the chief and village elders, they have realized that the youth can help them.
Selena, Village Elder

In May 2014, the programme was expanded to all seven sub-counties. UNICEF continues to work with the Ministry of Health to train more young people as social mobilizers, and to use their skills to educate communities about routine immunization. The response from village chiefs, elders, community members and the young people themselves has been overwhelmingly positive; and, has opened up the channels of communication and trust needed to keep Turkana's children protected from polio.

As for the young people themselves, they have viewed this initiative as an opportunity to gain more skills, while at the same time participating in something positive for the community. However, it will be important in the future to think of ways to keep them engaged and also to create future employment opportunities so capacity and skills are fully utilized. For now though, they are happy to be a part of an effort that can keep the children and families in their communities healthy. When asked why he does this work, David, 21 years of age, who joined the programme a year previous replied: “I have the heart and am willing to do this for my community. In the future, I would like to train other young people so that they can also contribute to the health of the community.”

Mobile Technology: Mapping Awareness and Sharing Knowledge

Mobile phone coverage and usage has been on the rise in Africa since the early 2000s. With an ever-increasing number of mobile phone users, even in the most remote areas, mobile phones have proven a useful tool for spreading information about campaigns. To date, more than thirty three million texts have been sent to inform communities about campaign dates in Ethiopia, Kenya, Uganda, South Sudan and Somalia. Mobile phones have also proven useful as a means of communication, education and for data collection to gauge coverage and awareness.

South Sudan: Using Mobiles to Map Campaign Awareness and Coverage



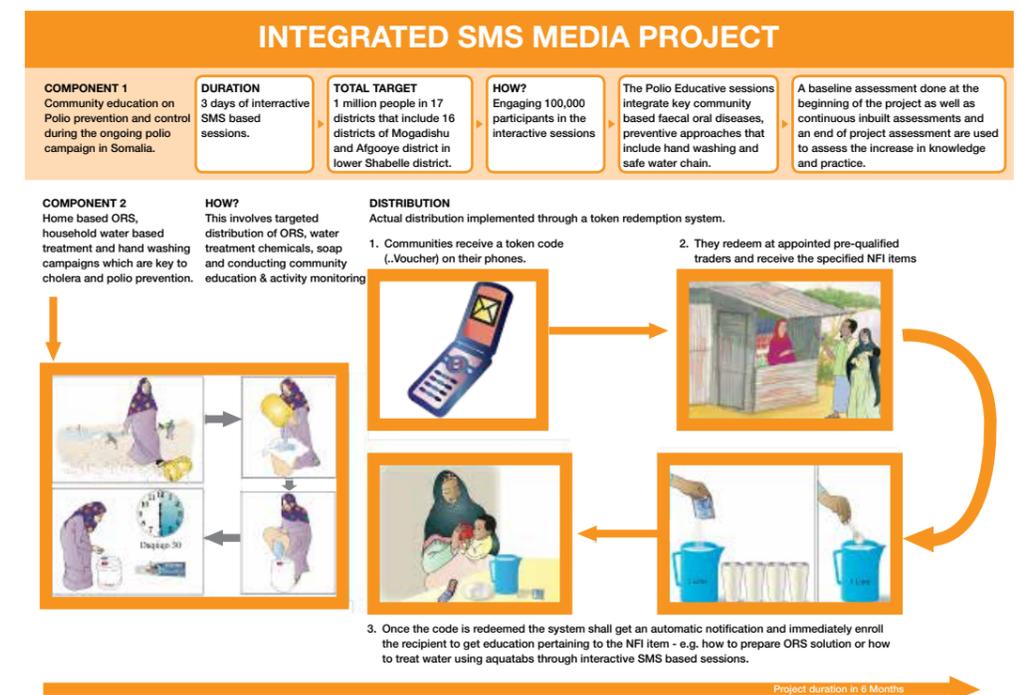
In partnership with UNICEF, and ahead of the November 2013 campaign, the South Sudan Red Cross trained 52 volunteers on the use of a mobile application to conduct household surveys and map immunization coverage using GPS coordinates to identify where the surveys had taken place in order to flag missed children and to identify high risk areas.

Following the campaign, Red Cross volunteers returned to the field, using the mobile apps to survey levels of campaign awareness and immunization coverage.

After social mobilization activities were conducted mapping surveys showed that immunization coverage increased by 10.4%, awareness by 7%, and that the percentage of payams that reported less than 90% coverage decreased by almost 22%. Pre-campaign community education and awareness of polio campaigns significantly increases immunization coverage during campaigns.

Use of mobile technology provides an opportunity for real-time monitoring and reporting of the campaign results. This approach also allows for immediate corrective actions to be taken when problems are identified.

Somalia: Integrated SMS Media Project



72 % of Somalis report having a mobile phone. Using mobile messaging to send out educational messages about polio and other key health interventions provides opportunities to share information that helps keep communities healthy and informed. UNICEF also piloted an Integrated SMS Media Project in partnership with Oxfam where 1 million people were targeted in 17 districts for 3 days of an interactive SMS session.

As an oral-fecal disease, the connection between polio and ensuring adequate sanitation and clean water is critical, and as such this initiative was viewed as an opportunity to integrate the two issues concurrently. 100,000 participants were engaged in interactive sessions that involved a series of questions about hand washing, sanitation and safe water storage. The participants went through a series of questions that were sent in a multiple choice format. If the question was answered incorrectly, the recipient was sent back the correct answer in order to ensure that the educational message was received.

The objective was for the respondent to go through all of the questions and once they had completed they would receive a voucher that could be redeemed at pre-qualified traders. With this voucher, they would receive non-food items related to WASH such as Geri cans, oral rehydration salts, water treatment tablets, basins and soap. Once the voucher was redeemed, information on how to treat water and to mix ORS is then sent back through the SMS system to the participant. The final session of educational messages focused on polio prevention and its links to water and sanitation. A baseline assessment was conducted and preliminary findings will be shared later in 2014.

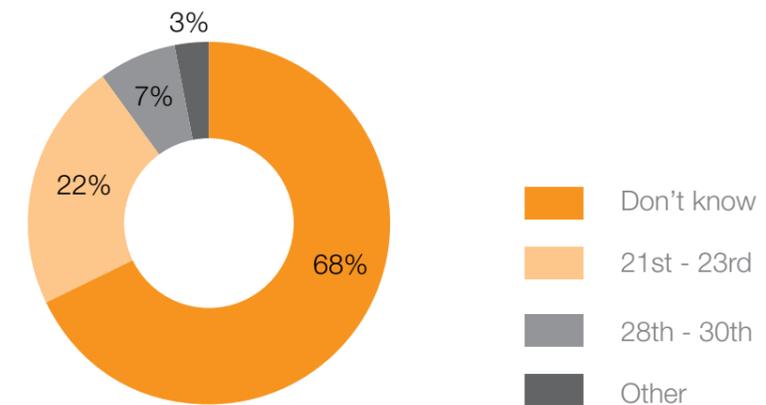
U-Report: Using Mobile Phone Innovations to Raise Awareness in Uganda

Radio has been one of the most effective means of informing communities about upcoming campaigns as it is the most frequently used mediums to access news across the region, particularly in remote areas,. Gathering data on the reach of radio, and in relation to the level message absorption within the community, is critical for developing and redirecting mass media communication strategies.

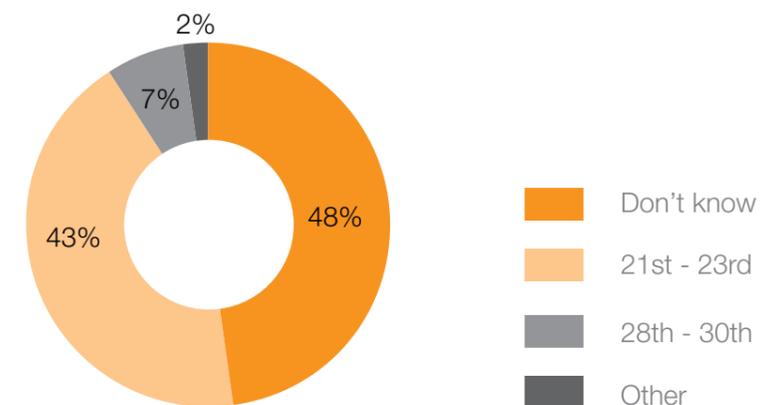
In May 2011, UNICEF Uganda launched an innovative mobile application known as U-Report and aimed at giving Uganda's youth a voice. Research conducted prior to the launch of U-Report showed that 48% of the target population had access to mobile phones. Two years after inception, over 250,000 young people have joined the programme and are actively participating in the free SMS-based platform.

Combining the power of radio and mobile phones as tools of communication, UNICEF Uganda's polio team utilized the U-Report platform to create awareness and mobilize communities around polio, as well as measure the impact of communication channels used to raise awareness. Radio spots announcing campaign dates were aired in 37 high risk districts throughout the country. In order to measure the impact of these radio spots, UNICEF sent out a poll using U-Report 3 days after the first spot was aired.

Within 24 hours, 3,555 responses came in with 68% unsure about the exact campaign dates; 22 % with the correct dates; and, 7% with incorrect information.



Six days later, an identical poll was sent out. Results from this poll showed a 20% increase in awareness among respondents, and a 21% increase in respondents who identified correct campaign dates. While it is not possible to assess what percentage of information was spread by word of mouth, the increase in knowledge around campaign dates has demonstrated both the effectiveness of radio spots, and of using mobile polling to measure impact.





MAINTAINING THE MOMENTUM

“The Horn of Africa outbreak is not over. There is a real risk of more cases, and of further international spread.”

Independent Monitoring Board (IMB)

The most recent case of wild polio reported in the Mudug Region of Puntland, Somalia in August 2014, has been a stark reminder for partners that the outbreak is not over. Although the massive and intense response mounted across the region has significantly slowed down the spread of the virus, the detection of just one case demonstrates that the entire region remains at risk.

Therefore, maintaining the momentum of the outbreak response will be critical. After a year and a half of continued transmission, campaign fatigue, and perhaps waning donor interest (as a consequence of competing international priorities and the reduced caseload), all present challenges. Ongoing efforts to improve campaign quality and the closure of surveillance gaps are critical to ending the outbreak. While enthusiasm and support for repeated campaigns among caregivers shows no sign of diminishing, social mobilization and awareness raising must be improved and carried out with the same frequency and intensity to keep families open to, and informed about, the importance of repeated rounds, and of seeking routine immunization services. Future outbreak preparedness will also be essential to maintaining polio free status in the region.

Several key factors will be critical to ending transmission:

Reaching the Nomadic Populations in Ethiopia, Kenya and Somalia: Taking services to mobile communities – in place of relying on the traditional house to house campaigns – will be essential for keeping awareness levels, and demand for the vaccine, high. This will require a more comprehensive understanding of health seeking behaviors and of communication dynamics within pastoralist populations. While strategies are in place, a scale up of implementation is required. Moreover, prioritizing outreach to clan leaders – the key to spreading information and locating nomadic groups – must be prioritized. Encouraging community participation within pastoralist populations will also be critical to sustaining their support, as well as demand for the polio vaccine and routine immunization services.

Maintaining a Strong Surveillance System: Gaps in surveillance remain a persistent challenge. While key measures have been put in place to improve surveillance throughout the region, further strengthening will require building capacity for active case searches, stool collection and reporting. Increased social mobilization efforts will also be required to raise awareness at the community in relation to how to recognize and report cases of paralysis. Quarterly assessments in outbreak countries have also emphasized recommendations to governments to strengthen and maintain an effective laboratory network with the capacity to analyze all potential cases.

Campaign Quality Improvement: Close to 500,000 vaccinators throughout the HoA have now been trained, and actively participate in vaccination campaigns. Campaign quality still remains an obstacle to reaching all children in some areas and as such micro-planning processes must be further strengthened and improved, particularly in areas with remote and mobile populations. Moreover, ensuring that community volunteers remain motivated and willing to support campaigns is critical.

Sustained Social Mobilization: Refusals in the region remain at less than 1% but positive public momentum should not be taken for granted. So far, close to 100,000 social mobilizers have been trained, and are actively participating in mobilization activities prior to, and during, campaigns. The GPEI Technical Advisory Group and outbreak assessments have consistently recommended that the quality of the social mobilization workforce be improved through reinforced training and tools; stronger supervision and management in the field; and the engagement of social mobilizers in micro-planning to better support and prioritize planning for social mobilization activities.

Continued Donor Interest: It is critical that partners remain mindful that the outbreak is not over, and that the ongoing potential for transmission throughout the region could compromise global eradication efforts. As such, continued donor support will be required to ensure immunity through ending transmission, and by strengthening the coverage and quality of routine immunization services.

Continued Support of Governments, Community Leaders and GPEI Partners: The support of governments in the HoA region has been a key pillar of the outbreak response. Figures and influential voices within the community have also enabled GPEI partners to operate in extremely challenging and insecure environments, and to reach the seemingly unreachable. Coordination and an openness to assessments recommendations on how to stop transmission have been essential to the successful implementation of various outbreak strategies. Without this type of support, activities cannot be sustained.

Scaling up Routine Immunization: The polio outbreak has been instrumental in bringing routine immunization to the center stage, particularly with regard to areas where routine immunization services are not available. However, messaging for routine immunization has also been in some ways masked by intensive and repeated polio campaigns. Moving ahead, stronger linkages between polio eradication efforts

and the strengthening of routine immunization must be found. Polio assets are being used to strengthen routine immunization, and an assessment will need to be done to gauge the effectiveness of efforts to date in Ethiopia, Kenya, Somalia. Moreover, the effective use of communication and social mobilization will be critical to ongoing demand generation. Also critical will be ensuring functioning cold chain systems, particularly in remote areas; sufficient vaccines stocks; and, the availability of trained and qualified health extension workers to provide outreach services.

On 9 May 2013, the news of the first polio case stirred the region to action. While there has been much progress, undetected transmission may still be occurring in remote areas of the HoA. We are now at a most critical juncture in the outbreak response and as such governments in the region, and all polio partners, must work to continue to prioritize polio eradication while also recognizing that further efforts to strengthen routine immunization will be critical to ensuring sustainability, and that the HoA remains polio free.



Acknowledgements

The rapid and multi-country response to the Polio outbreak in the Horn of Africa would have been impossible without support and commitment of donors and development partners in particular Bill and Melinda Gates Foundation, Rotary International, National Philanthropic Trust, UNICEF National Committees; the United States Center for Disease Control; the Crown Prince of Abu Dhabi; the European Union and its agencies; KfW; the United Kingdom Department for Foreign and International Development; the Canadian Government Department of Foreign Affairs, Trade and Development; the Australian Government Department of Foreign Affairs, Trade and Development; the Government of Japan; the United States Agency for International Development; the United States Fund for UNICEF and the United Nations Office for the Coordination of Humanitarian Affairs, the United Nations Food and Agricultural Organization, and many others. The critical and ongoing support partners in the Horn of Africa have provided to polio eradication efforts, and the strengthening of routine immunization to prevent future outbreaks, is duly acknowledged and recognized.

This report is the result of collaboration by GPEI partners in the HoA, and the Middle East regional and country offices. We would like to acknowledge the contribution and technical inputs of many of our colleagues and partners:

Sam Okiror, Sara Lowther, Subroto Mukherjee, Robert Davis, Bram Frouws, Christopher Horwood, Raoul Kamadjeu, James McQueen Patterson, Shalini Rozario, Almaz Merdekios, Bukhari Shikh Aden, Sahardid Mohamud, Peter Okoth, Leila Abrar, Anirban Chatterjee, Dhananjay Gupta, Saumya Anand, Julianne Birungi, Chaudhary Mohd Parvez Alam, Joanna Nikulin, Anu Puri, Ranganai Matema, Sheeba Afghani, Eva Kabwongera, Sahar Hegazi, Anindya Bose, Luwei Pearson, Ndeye Fatou Ndiaye, SM Moazzem Hossain, Fazal Ather and many other colleagues and partners from the Ministries of Health, UNICEF, WHO, the United States Center for Disease Control (CDC), CORE Group, UNHCR, FAO, IOM, Red Cross, and other organizations.

This report was produced by UNICEF Eastern and Southern Africa Regional Office on behalf of the Global Polio Eradication partners in the Horn of Africa.

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every last child