

GLOBAL POLIO ERADICATION INITIATIVE (GPEI) STATUS REPORT

APRIL 30, 2014

World Health Organization
Geneva, Switzerland

Rotary International
Evanston, Illinois USA

Centers for Disease Control and Prevention
Atlanta, Georgia USA

UNICEF
New York, New York USA

Amended 1 May



The boundaries and names shown and designations used on all maps in this document do not imply the expression of any opinion whatsoever on the part of the Global Polio Eradication Initiative spearheading partners (the World Health Organization, Rotary International, CDC or UNICEF) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

EXECUTIVE SUMMARY

This is the fourth joint report of the Global Polio Eradication Initiative (GPEI). Since the last report in September 2013, Nigeria has seen a marked decrease in the number of wild poliovirus type 1 (WPV1) cases, from 53 in 2013, to two in 2014, with only four cases in the past six months, as of 28 April. More than a year has passed without detection of wild poliovirus type 3 (WPV3) anywhere in the world. The WPV1 outbreak in the Horn of Africa appears on the verge of cessation, with the latest reported case occurring in January 2014. Despite these successes, a new outbreak in Syria has worsened the country's humanitarian crisis, has resulted in a case in Iraq, and is threatening the polio-free status of the other surrounding countries; the WPV1 outbreak in Cameroon has spread to Equatorial Guinea and risks further spread; and the WPV1 outbreak in Pakistan in areas of FATA is ongoing. Surveillance performance indicators and/or genomic sequence analysis have provided evidence of lapses in surveillance in many countries with active transmission and countries in proximity to confirmed outbreaks.

Afghanistan: Afghanistan continues to make steady improvement to its programme. For the past year, polio cases in Afghanistan occurred almost exclusively in the Eastern Region and were linked to importation from Pakistan. These importations will continue as long there is polio in Pakistan. However, they have not resulted in re-establishing persistent transmission in Afghanistan. The occurrence in December of an indigenous-lineage WPV1 case in the Southern Region after 13 months since prior detection revealed continued surveillance gaps. Circulating vaccine-derived polioviruses (cVDPVs) have not been detected in over one year. Environmental surveillance recently began at selected sites in Kandahar city and will soon be expanded to other Regions. Inaccessibility had been a relatively small problem (0.37% of the targeted population) and primarily limited to the Eastern Region, but has recently, and probably only transiently, affected the Southern Region. Although relatively small in number, the proportion of targeted children under 5 years of age missed due to refusals in the Southern Region continues to be the largest in the world. Social and cultural norms are a critical barrier preventing teams from accessing households to vaccinate newborn, sick and sleeping children.

Pakistan: For the past year, a large, uncontrolled outbreak of WPV1 and cVDPV2 continued in the Federally Administered Tribal Areas (FATA), with virus spread to many areas of Pakistan and eastern Afghanistan. Poliovirus transmission will continue in both countries until vaccination in North Waziristan can be resumed and the outbreak stopped. Violence against health workers has continued, resulting in the deaths of dozens of polio workers and security officers assigned to protect them. Since early this year, with the strong political, security and logistical backing of the government of Khyber Pakhtunkhwa (KP) province, the programme was able to deliver 7 million doses of vaccine over 12 weeks in Peshawar without any attacks on health workers. Lessons learned from this experience are being applied elsewhere in KP and in Karachi. During the low poliovirus transmission season in 2014, three national and multiple sub-national supplemental immunization activities (SIAs) were carried out to maintain immunity in accessible areas. While these areas have registered occasional cases, they have not resulted in sustained transmission. Refusals in Pakistan have been reduced by 80% in 2013; Pakistan now has the lowest rate of refusals in the world on independent monitoring. New polling data shows significant social trends in FATA, however, that point to elevated distrust in OPV, frontline workers and the programme more than any other high-risk area.

Nigeria: The programme in Nigeria has never been as coherent and effective as it is currently. The programme is well coordinated, innovative and adaptive. Programmatic improvements in Kano state since late 2013 have been particularly striking. For the past six months, WPV circulation appears to have been isolated to Kano and Borno states. Assuming the programme can maintain improvements in Kano, the major endemic polio reservoir for Nigeria in the past, the state will no longer be the source of WPV importations into West and Central Africa. Borno State continues to face substantial security challenges and has continued gaps in surveillance that it is attempting to address. While access to children has improved substantially during the past year in Borno, access continues to be limited in many areas and SIA quality remains inadequate in areas that are accessible. Overall commitment to OPV (the proportion of parents stating that OPV is a "good" or "very good" idea for their children) is over 95% overall in the Northern states but is substantially lower in Borno. Despite the overall gains,

Nigeria's programme continues to grapple with shortfalls, particularly in states such as Kaduna. A major risk on the horizon is waning political commitment during the upcoming election season.

Horn of Africa: There have been no cases in this outbreak since January 5th, suggesting that virus transmission may have been interrupted. If so, the outbreak, affecting Somalia, Kenya and Ethiopia, will have been contained within nine months of its discovery despite severe operational constraints, particularly in the South-Central Zone of Somalia. The most recent case was reported from Ethiopia, which had been slow to address programme deficiencies in its Somali Region. In December 2013, IPV was used along with OPV in an SIA in the Dadaab refugee camp area in Kenya, representing the first use of IPV in a mass campaign within the GPEI.

Central Africa: Since mid-November 2013, Cameroon has been responding to an outbreak caused by WPV1 that had been circulating undetected somewhere in the region, for up to two years. The occurrence of cases two months after outbreak confirmation and the geographic spread within Cameroon and to Equatorial Guinea show that surveillance and SIA quality improvements are needed. The programme is (in early May 2014) accelerating efforts to address these issues. In the meantime, Equatorial Guinea, with a weak immunization system and little experience with polio SIAs, has been slow to respond. However, as of mid-April 2014, the government has been very intensively engaged and at a very high level. Surveillance there, which is clearly inadequate, suggests the outbreak is already widespread within the country. Serious surveillance limitations in surrounding countries limit confidence of no further spread to date.

Syria and Iraq: Since polio cases were first discovered in Syria in mid-October 2013, the programme has mounted a regional response, coordinating efforts to boost immunity in all surrounding countries as well as Egypt, the West Bank and Gaza, while responding to the outbreak in Syria itself. Within Syria, vaccination has occurred throughout much of the country, including in contested and most opposition-controlled areas. Case counts have been low, but surveillance is clearly inadequate, although improving. The only known exportation since the discovery of the outbreak was to Iraq, where a series of SIAs was already in progress. Social and communication reasons account for over 70% of missed children on monitoring surveys in the Middle East. With so many refugees living amongst host communities and invisible to the registration system, it is difficult to target the highest risk groups with tailored information about campaigns and the vaccine. In addition, persuading these parents to prioritize OPV over other life-saving needs is a significant challenge.

Israel, the West Bank and Gaza: From August through October last year, Israel mounted a national bOPV campaign and followed with a 2nd-dose, less effective campaign limited to the south of the country. From shortly after the campaign began, environmental surveillance showed virus transmission becoming progressively more localized to communities around Bersheva, in southern Israel. Since January 2014 in Israel, bOPV has been incorporated into the routine immunization schedule, which had previously exclusively relied on IPV. In early March 2014, environmental sampling from all sites were negative for WPV1 for a single week for the first time in over a year, although a subsequent sample from the single site that tested positive throughout February tested positive again in mid-March. The last WPV1 isolated from samples collected in the West Bank and Gaza was in January 2014. The West Bank and Gaza have continued their long-standing sequential IPV-OPV immunization schedule.

Countries at Risk: From April 2013 through March 2014, 91% of the 32 countries with PV transmission during 2009–2014 met national criteria for NPAFP reporting and 72% met national criteria for stool specimen adequacy. This represents a decrease in performance compared with the previous year. Immunization status estimated from NPAFP has improved in some countries but remains inadequate in many areas.

Vaccine supply: Global supplies of both tOPV and bOPV remain constrained through the middle of 2014, after which projections show that supply will exceed demand.

Financing: Against the US \$5.5 billion budget for 2013–2018, the best-case funding gap for the entire period is US \$563 million. Many of the pledges made by donors at the 2013 Abu Dhabi polio summit meeting remain to be fulfilled. As of April 2014, the GPEI had cash-on-hand of US\$ 721 million against a total 2014 budget of US\$ 1.033 billion.

Table of Contents

EXECUTIVE SUMMARY	I
ACRONYMS AND ABBREVIATIONS	V
INTRODUCTION	1
COMMUNICATION AND SOCIAL MOBILIZATION	2
Expertise.....	2
Performance	2
Rehabilitating the reputation of OPV.....	4
ACCESSIBILITY AND SECURITY	5
ENDEMIC COUNTRIES	8
Afghanistan.....	8
National polio overview.....	8
Virology.....	9
Poliovirus sanctuaries and risk areas	10
Communication and social mobilization.....	14
Programme information.....	16
Performance indicators.....	20
Synopsis.....	22
Pakistan	23
National polio overview.....	23
Virology.....	24
Poliovirus sanctuaries and risk areas	25
Communication and social mobilization.....	34
Programme information.....	38
Performance indicators.....	40
Synopsis.....	42
Nigeria	43
National polio overview.....	43
Virology.....	44
Poliovirus sanctuaries and risk areas	47
Communication and social mobilization.....	53
Programme information.....	56
Performance indicators.....	59
Synopsis.....	61
NON-ENDEMIC COUNTRIES	62
Horn of Africa Outbreak	62
Somalia.....	63
Kenya.....	63
Ethiopia.....	64
Central Africa outbreak.....	64

Cameroon.....	65
Equatorial Guinea	65
Middle East outbreak	65
Syria.....	65
Iraq.....	66
Middle East outbreak Response	66
Communication and social mobilization.....	67
Other Countries/Areas with Detection of Active Poliovirus Transmission.....	69
Israel; the West Bank and Gaza	69
Countries at Risk.....	71
Countries with recent poliovirus transmission	71
Priority countries (Red List).....	73
Mitigating activities.....	74
VACCINE SUPPLY	74
STAFFING AND CAMPAIGNS IN 2013 AND 2014	77
FINANCING	82

ACRONYMS AND ABBREVIATIONS

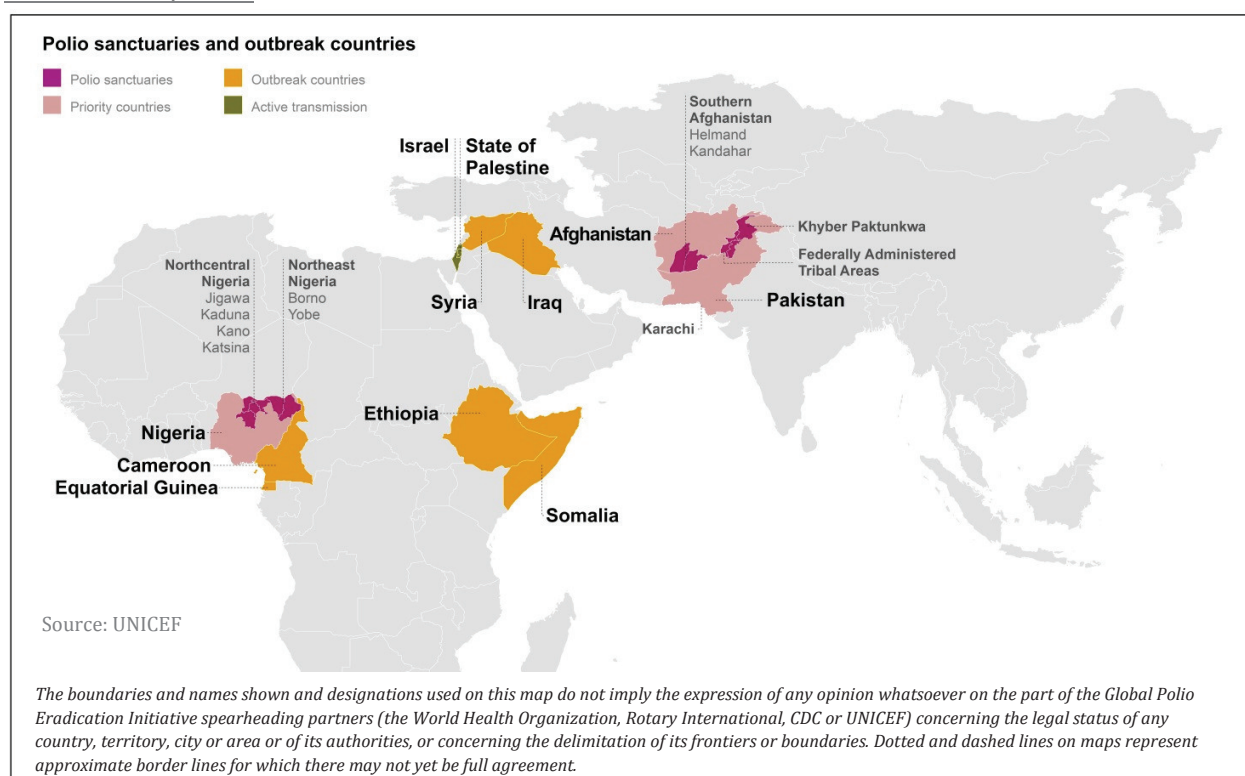
AFP	acute flaccid paralysis
AMISOM	African Union Mission to Somalia
aVDPV	ambiguous vaccine-derived poliovirus
bOPV	bivalent (types 1 and 3) oral poliovirus vaccine
CAR	Central African Republic
COMNet	Community Mobilizer Network (Pakistan)
CDC	U.S. Centers for Disease Control and Prevention
cVDPV	circulating vaccine-derived poliovirus
DRC	Democratic Republic of the Congo
EOC	Emergency Operations Centre (Nigeria)
FATA	Federally Administered Tribal Areas (Pakistan)
FCT	Federal Capital Territory (Nigeria)
GPEI	Global Polio Eradication Initiative
HOA	Horn of Africa
ICRC	International Committee of the Red Cross
KAP	knowledge, attitudes and practices
JSA	joint security approach (WHO and UNICEF)
KP	Khyber Pakhtunkhwa (Pakistan)
LGA	local government area (Nigeria)
LPD	low performing districts
LQAS	lot quality assurance sampling
MPI	major process indicator
NPAFP	non-polio acute flaccid paralysis
OPV	oral poliovirus vaccine
PTPs	permanent transit posts
RPRC	Rotary Polio Resource Centre (Pakistan)
SIA	supplementary immunization activity
tOPV	trivalent oral poliovirus vaccine
UNICEF	United Nations Children's Fund
UNSMS	United Nations Security Management System
UC	union council (Pakistan)
UPEC	Union Council Polio Eradication Committee (Pakistan)
VDPV	vaccine-derived poliovirus
WHO	World Health Organization
WPV	wild poliovirus

GPEI Partner Status Report: 30 April 2014

INTRODUCTION

This fourth GPEI Partner Report on progress towards polio eradication brings together input, analysis, and interpretation from the World Health Organization (WHO), Rotary International, the U.S. Centers for Disease Control and Prevention (CDC), and the United Nations Children's Fund (UNICEF). The report focuses on data about the key poliovirus 'sanctuaries' and risk areas in the three remaining polio-endemic countries (Afghanistan, Pakistan, and Nigeria). The report includes data about ongoing wild poliovirus (WPV) outbreaks in the Horn of Africa (HOA), Central Africa and the Middle East; the detection of WPV in environmental samples in Israel, the West Bank, and Gaza; outbreaks of circulating vaccine-derived polioviruses (cVDPVs); and an evaluation of countries at risk of importation. The report also includes indicators of progress toward the goals of the GPEI Polio Eradication and Endgame Strategic Plan 2013–2018. The WPV and cVDPV data presented represent cases confirmed as of 9 April 2014 (with noted exceptions) and with genomic sequence analysis through 15 April 2014. Analyses of WPV sanctuaries include data from acute flaccid paralysis (AFP) surveillance over the prior 12 months. For the analysis of standard surveillance and immunization indicators* by province/state for endemic countries, analyses include non-polio AFP (NPAFP) cases with onset of 1 October 2012–31 March 2013, 1 April 2013–30 September 2013 and 1 October 2013–31 March 2014. For countries at risk, analysis includes AFP cases with onset of 1 April 2013–31 March 2014. Vaccine supply, human resource, financing and key programme information are reported as of 16 April 2014.

WPV sanctuaries in polio-endemic countries, and countries with ongoing wild poliovirus transmission, 2014

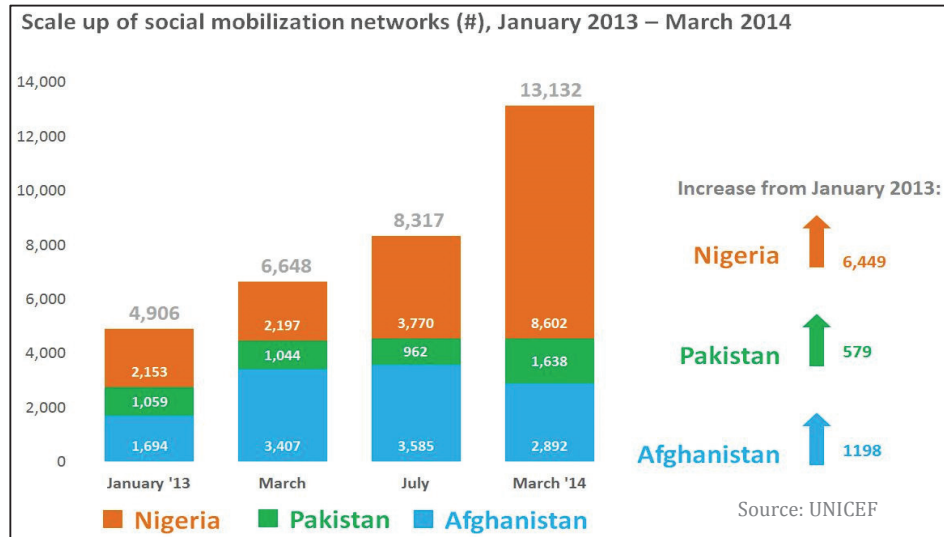


* Standard AFP surveillance performance indicators by province/state for this report include the following: 1) detection of at least two non-polio AFP (NPAFP) cases per 100,000 population aged <15 years annually and 2) adequate stool specimen collection from >80% of AFP cases (two specimens collected \geq 24 hours apart within 14 days of paralysis onset, shipped on ice or in frozen packs to a WHO-accredited laboratory, and arriving in good condition). Standard immunization performance indicators by province/state for this report are 1) <10% of children aged 6-35 months with NPAFP with an OPV dose recall history of 0 doses and 2) \geq 80% of children aged 6-35 months with NPAFP with an OPV dose recall history of 4 or more doses.

COMMUNICATION AND SOCIAL MOBILIZATION

EXPERTISE

In its May 2013 report, the Independent Monitoring Board (IMB) urged the GPEI to correct its ‘crippling under-emphasis on communications and social mobilization.’ Specifically, the IMB recommended a need to rehabilitate the reputation of OPV in places where it has fallen into disrepute, to elevate social mobilization networks to excellent performance, and to bring substantially more communications expertise to the table in the programme’s key strategic forums, including partnership, headquarters, and technical advisory groups (TAGs).



In the past year, the number of social mobilizers almost doubled in the endemic countries—from 6,648 to 13,202—working in communities most vulnerable to continued polio transmission. Using local, trusted workers, social mobilization networks were also expanded to areas inaccessible to the rest of the programme.

The surge in communications expertise has extended to national, regional and global levels. All UNICEF regional offices have at least one communications specialist dedicated to polio. The communications team in UNICEF headquarters (HQ) has grown from three core staff to eight, including a newly established communications post in WHO HQ for better integration of supply and demand strategies. This core unit in UNICEF HQ is supported by an additional team of consultants providing expertise in innovations, knowledge management, and storytelling, and bolstered by 27 institutions that have recently come on board for “long-term assistance” to GPEI. These institutions—providing worldwide expertise in research and data analysis, advertising and media, training, and innovations—are part of a global strategy to pre-position expertise that can be accessed quickly, foregoing contracting processes that impede rapid implementation. The goal is to consistently deliver a minimum ‘standard of excellence’, even in areas with limited resources and capacity on the ground. In outbreak settings, the goal is to be better prepared with pre-existing tools, and the capacity to effectively mobilize communication and social mobilization resources within 72 hours of outbreak confirmation.

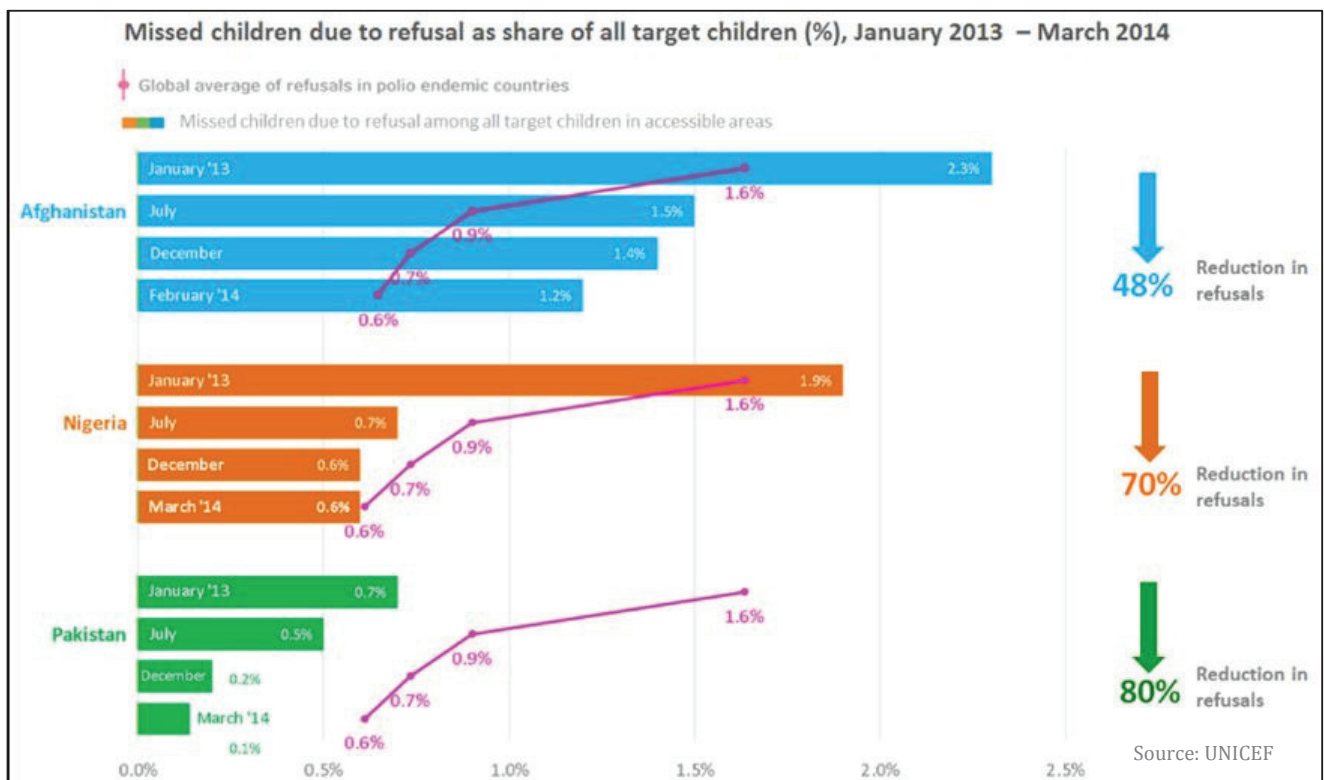
The Pakistan and Afghanistan TAGs have increased their communications membership to three experts, which has led to valuable insight and stronger oversight.

PERFORMANCE

Globally, the number of children not vaccinated during SIAs because of caretaker refusal has been reduced by over 60% since January 2013. In Nigeria, this reduction translates to approximately 700,000 children whose parents now allow their children to be vaccinated. Pakistan has reduced its already minimal proportion

of refusals—and arguably the most chronic resisters—by over 80% during the same time period. Although relatively small in number, Afghanistan’s Southern Region continues to have the highest proportion of refusals in the world, at 1.2% of all children <5 years of age. Most parents are not opposed to the vaccine, but cultural/social norms prevent newborn, sick, and sleeping children from being vaccinated. In a few districts, the proportion of refusals has remained at 8–9 times higher than the regional average for the past year.

In Pakistan and Nigeria, there is evidence that social mobilizers contribute more broadly to coverage, even beyond reducing refusals. In Nigeria, mobilizers are responsible for reviewing the final list of missed children and ensuring they are vaccinated between campaigns. This model should be scaled up in accessible areas where the majority of children are missed because children are not home when vaccinators arrive.



The programme has demonstrated innovation and an ability to adapt quickly to new challenges and evolving situations. In Pakistan, campaigns are announced orally through cell phone audio messages in order to reach illiterate caregivers. In key areas, the voices of influential Islamic scholars echo through the phone, delivering fatwas verbally rather than through a static booklet. In Nigeria, polio messages and videos travel at high speed through Bluetooth technology, carrying the polio dialogue deeper and faster into communities and households. The programme is looking to reach health workers with these tools, to include them in the dialogue, and to track and boost their motivation. In Afghanistan, the proportion of female workers has doubled in some areas of Kandahar by changing the composition of the entire frontline workforce (vaccinators, supervisors and social mobilizers). In other areas, female social mobilizers are hired for pre-campaign work to engage mothers, and males are hired to accompany vaccination teams.

REHABILITATING THE REPUTATION OF OPV

The widespread reduction in refusals is not simply due to reluctant tolerance of the programme. Through a UNICEF-Harvard partnership to poll communities in priority countries, data from the highest risk areas of Nigeria and Pakistan showed that 98% of caregivers believe polio drops are a 'very good' or 'somewhat good' idea for their children's health. The reputation of the programme is challenged in very localized areas—most notably FATA, Pakistan and Borno, Nigeria—and go beyond a lack of confidence in OPV.

Despite higher circulation—and belief—of destructive rumours about OPV in FATA and Borno, most caregivers still make a calculated choice that accepting OPV outweighs the risks. This is a tenuous state, however, particularly given other beliefs that have the potential to challenge the programme's progress. Improving vaccinator profile and their perception by caretakers, trust in the public health system, and winning the social support of influential institutions and personalities will be essential to opening the remaining locked doors in inaccessible households and communities. It is these communities that are most critical to success now: over one million children are missed due to chronic inaccessibility in addition to chronic issues of SIA implementation.

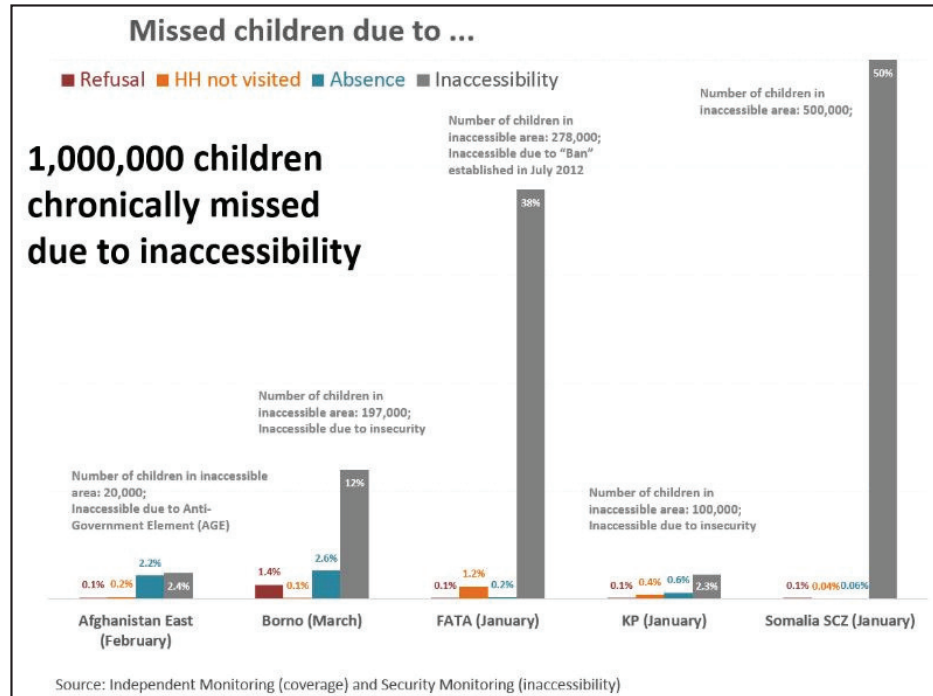
In 2014–2015, the communications programme is shifting its focus to address these emerging challenges. In 2015, success will look like the following:

1. Caregivers and community leaders have trust in and demand public health services, particularly in inaccessible or security-compromised areas.
2. Frontline workers are equipped with the skills, support, and motivation they need to vaccinate all children.
3. International, national, and community leaders, and influential social groups actively demonstrate support for public health services, particularly in inaccessible or security-compromised areas.
4. Children in accessible areas receive OPV (and IPV) each time they are offered.
5. In inaccessible or security-compromised areas, caregivers and influencers better understand the importance of routine and supplementary vaccination for children <5-years-old.

ACCESSIBILITY AND SECURITY

Inaccessibility and insecurity are critical threats to the success of the GPEI. Inaccessibility is partly due to bans on polio vaccination campaigns imposed by non-state actors in polio-affected countries. Recently, there has been a marked increase in the number of reported security incidents, including targeted, deadly attacks on health workers and security personnel. This increase is only partly due to improved reporting systems now in place. While many of the targeted attacks represent violence motivated by specific ideologies, there have also been instances of criminality and collateral damage that have been inaccurately portrayed as polio programme-related.

Reasons for missed children in selected security-compromised areas, 2014



Ongoing violence and insecurity has impeded progress in critical geographies for reasons including:

- **Security Dynamics.** The security concerns and the negative impact on the overall ability to fully deliver the campaigns by the vaccination teams as well as the capability to monitor the implementation of the programme by GPEI partners.
- **Large population movements.** Regional and internal population movement due to insecurity, natural disasters, refugees, nomads/pastoralists and weather-related events pose a serious challenge to containing further WPV spread.
- **Sub-optimal population immunity.** Somalia, for example, has the largest known reservoir of unvaccinated children in a single geographic area in the world; there are many reasons for this including weak health systems, infrastructure and low demand for immunization among communities, but insecurity is a major contributor.
- **Sub-national AFP surveillance gaps.** The ability for GPEI partners to monitor the programme and conduct surveillance, while it occurs, is hampered by inaccessibility and the subsequent restrictions imposed by the UN Security Management System (UNSMS).
- **Specific communication challenges.** Due to the difficulties in reaching inaccessible areas there are problems obtaining the data for communication strategies to ensure that the public is aware of the risks and that all stakeholders support the programme (including sub-national government institutions, media and religious leaders).

Host governments have primary responsibility to ensure the safety and security of all health workers and staff engaged in polio eradication. However, it is recognised that those individuals not covered under UNSMS but

involved in the GPEI should be incorporated into the security and operational plans; this is to not only improve their safety and security but to ensure an appropriate response to more non-traditional risks such as “reputational risk” and adverse media coverage. To that end, UNICEF and WHO view security more holistically and have developed a joint security approach (JSA) for the GPEI. The JSA is designed specifically to develop five resources for country and regional polio teams:

1. Comprehensive security capacity to improve programme planning and delivery.
2. Technical support and training to improve performance and quality of security analysis to the polio programme.
3. Surge Capacity—to provide additional security support at regional, national and sub-national levels, when required.
4. Close coordination of security analysis with external communications and “communications for development” (C4D) teams.
5. Risk Analysis—to develop and share key information products / reports.

This joint approach aims to set common definitions of inaccessibility and insecurity, standards of security analysis, and a recommended security support structure based on the country’s polio status (endemic, outbreak, high risk). The approach also aims to provide a mechanism to pre-empt possible future outbreaks as well as a means to improve oversight and accountability. The innovation in the JSA is to optimize two main areas: community acceptance and programme coordination.

Firstly, integration between security and the communications and C4D teams is underway to understand the perceptions and needs of the beneficiary communities and identify ways to gain and build acceptance, not just from the communities, but also from those who are in a position to influence the community, and those who oppose the programme. In addition to specific country-level integration between the work streams, there have been global initiatives to improve the integration between security and communications including a number of technical conferences and workshops to address the difficulties of programme delivery in high-threat areas.

Secondly, the JSA views security holistically. The JSA supports close interaction between the more traditional field security functions and the analytical capability. This includes the coordination between WHO and UNICEF security with United Nations Department of Safety and Security (UNDSS) to enable UN personnel to conduct activities safely and securely.

The approach also recognizes information sharing between GPEI partners as being of critical importance. Work is on-going to develop and fully integrate technical standards at the global, national and sub-national levels with the emphasis at the country team. It is proposed that security functions become an integral part of the polio programme, including during SIAs and in the implementation of surveillance, to mitigate threats and increase access where accessibility and security are tenuous.

To provide support to this joint approach, the Security Working Group (SWG) has been established to coordinate the security support to the GPEI in order to improve the delivery of GPEI activities in areas of high threat, insecurity and inaccessibility. The SWG will work closely with both country and regional level security officers to be able to provide technical assistance or other security-related services. The SWG reports to the Eradication Management Group (EMG) of GPEI, via the Security, Access, Advocacy Task Team.

UNICEF and WHO have identified and recruited field security advisors and security analysts who have the technical capacity to advise country programmes on protection of staff and assets while carrying out activities in high-threat environments. The concept of embedding security analysts into specific programmes is new to the UN system. The new security capacity has also assisted in conducting the regional-level analysis that is required to track cross-border issues impacting insecurity, mobile populations in areas of inaccessibility, and develop multi-country solutions.

Polio security officers and analysts, working under the leadership of the polio programme team leaders, will help the programme gain a better understanding of the security, conflict, or socio-political dynamics of the causes of inaccessibility and assist in developing multi-pronged mitigation measures. The security analysts will also work closely with communications staff to analyse the local dynamics impacting accessibility and security, then plan and implement mitigation measures to ensure acceptance of the programme. This analysis provides granular details by specifically categorising the root causes of inaccessibility, including health workers fears about entering particular geographic areas. In the first six months of 2012, for example, 13 polio high-risk districts in Afghanistan recorded, on average, 42,758 children missed due to inaccessibility; in June 2012, the Southern Region alone recorded 77,723 children missed due to inaccessibility. The analysis and the subsequent measures that were put in place as well as the concerted efforts in the Southern Region resulted by November 2013 in the reduction, to 39,000, of the total nationwide number of missed children due to inaccessibility. The following month, this number was further reduced to 22,000¹.

GPEI currently has in place security analysts in Afghanistan and Pakistan, global oversight from an analyst at HQ and the Nigeria position to be filled in the immediate future. Field security positions have largely been filled in all priority countries with permanent or temporary staff, and funding has been allocated and released to support the field security budget needs in the priority countries, including staffing and security equipment.

The support required for these analysts includes a high level of training in terms of understanding the UNSMS as well as additional, innovative methods to analyse the reasons for insecurity and inaccessibility. In addition, there is a need to provide innovations (including technology and equipment) at short notice to meet the requirements of front-line vaccination teams and other staff. Therefore, budgets have been developed for 2014 that are flexible and adaptable to meet the needs of specific country and regional contexts.

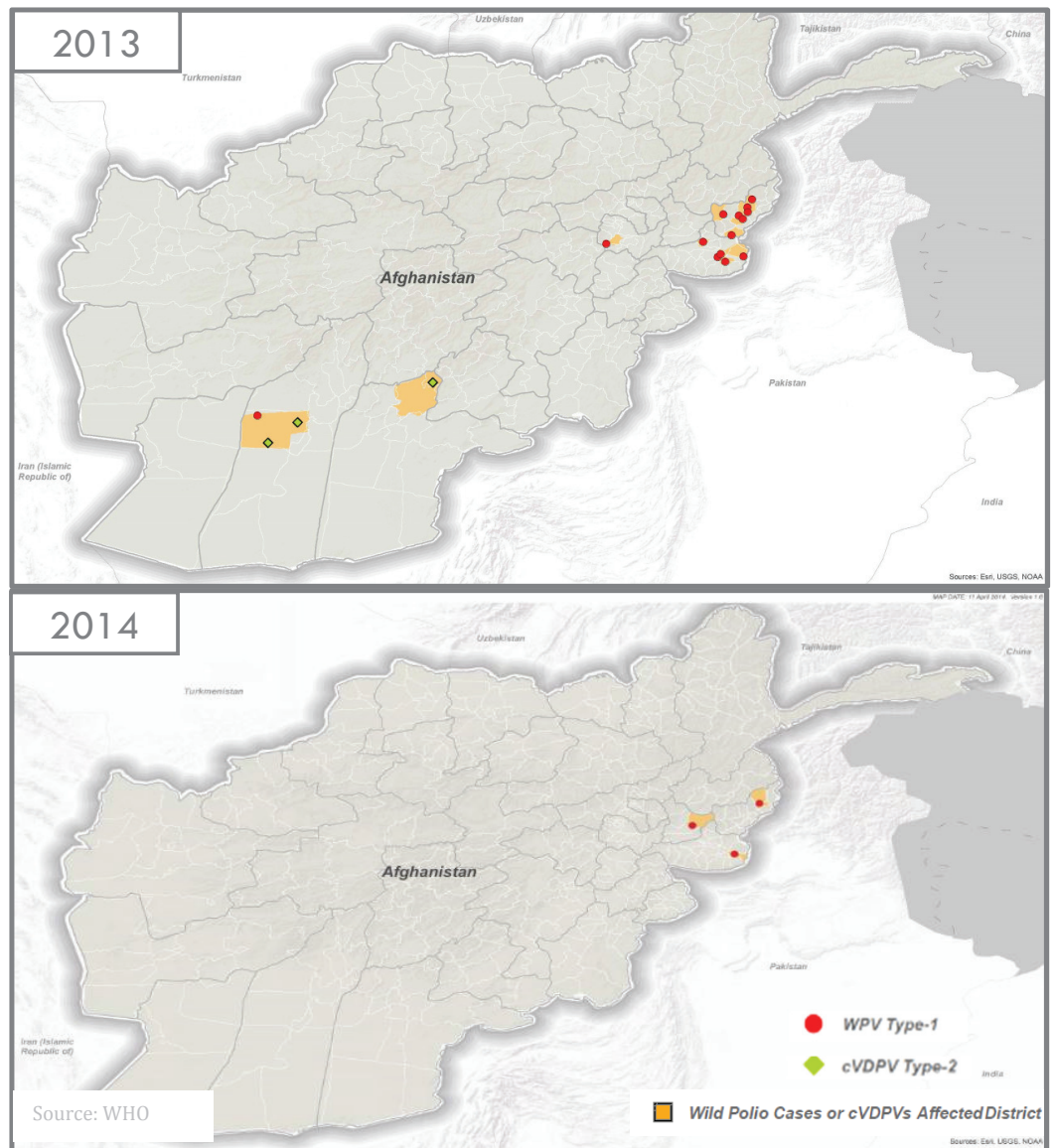
¹ There is a difference in the number of children missed due to the type and size of campaign undertaken on a monthly basis.

ENDEMIC COUNTRIES

AFGHANISTAN NATIONAL POLIO OVERVIEW

The number of WPV type 1 (WPV1) cases in Afghanistan decreased from 37 in 2012 to 14 in 2013; only one endemic WPV1 case was detected in the Southern Region, all the other cases occurred in the Eastern Region following importations from Pakistan. Three cases have been reported to date in 2014. There have been no cVDPV cases since 13 March 2013. Most of the cases of cVDPV2 detected between October 2012 and March 2013 were genetically linked with 2009 & 2010 circulation, while the last two cases from Nad Ali District in Helmand were linked across the border with cVDPV2 cases in Pakistan. SIAs in Afghanistan have primarily used bivalent (types 1 and 3) oral poliovirus vaccine (bOPV) during the reporting period. Three SIAs in 2013 used tOPV, including the two national immunization days (NIDs). Eleven short-interval additional dose (SIAD) SIAs were conducted in 2013, including the low performing districts (LPDs) of the Southern Region. Lot quality assurance sampling (LQAS) surveys were introduced to more accurately assess SIA quality. "Permanent polio teams", which provide OPV to children on a continual basis, started to use tOPV in March 2013 focused primarily in the Southern Region.

WPV and cVDPV cases, Afghanistan, 2013 and 2014 to date

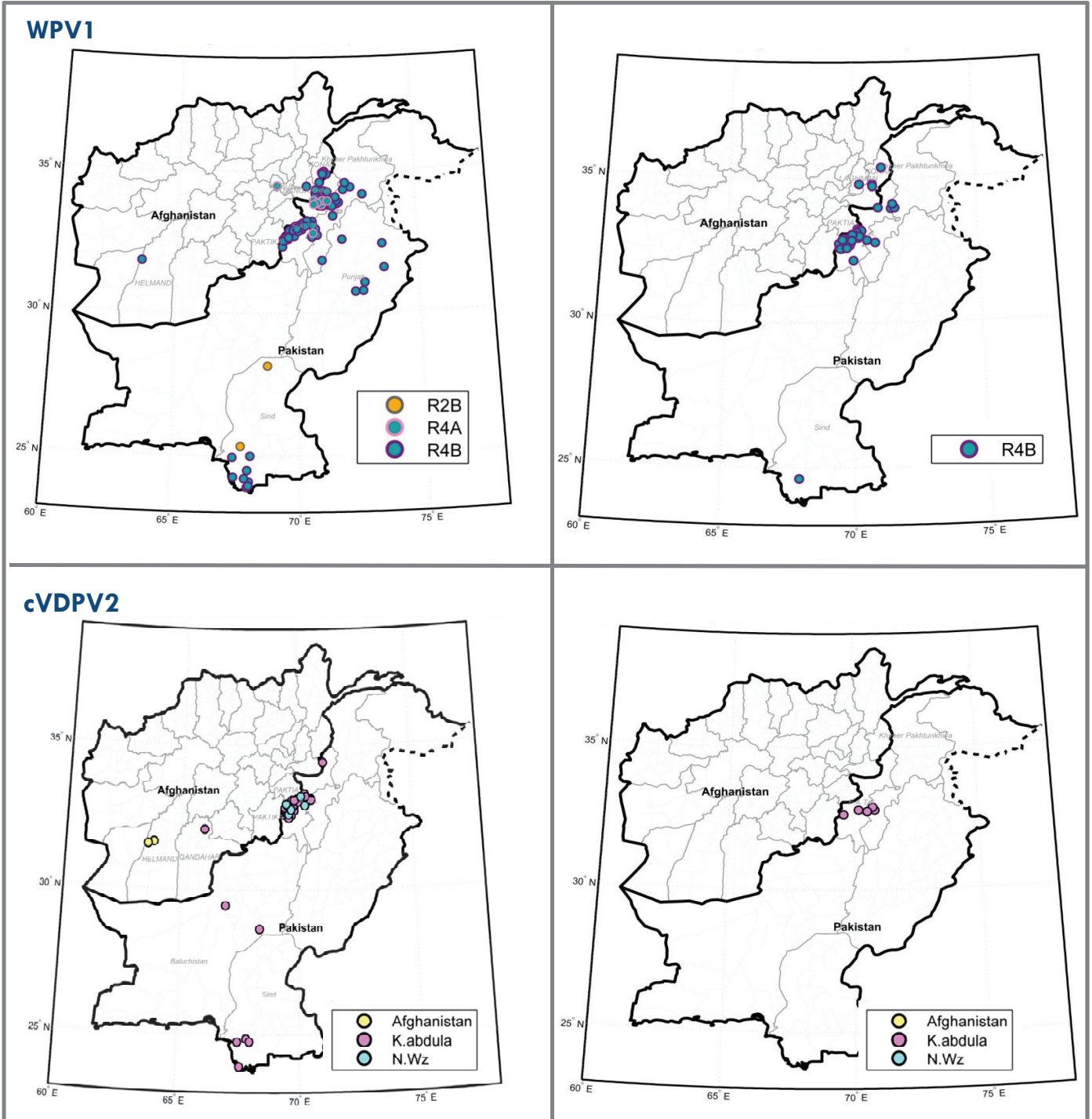


VIROLOGY

Wild poliovirus type 1 (WPV1) by genetic cluster and circulating vaccine-derived poliovirus type 2 (cVDPV2) by emergence, Afghanistan & Pakistan, 2013 and 2014 to date*

2013

2014



Source: CDC

* Data as of 15 April 2014.

WPV1 viruses from two genetic clusters (R4A and R4B) were isolated during April 2013 through March 2014. One virus was detected in Southern Afghanistan (R4B cluster), representing local transmission. The other WPV cases were related to WPV importation from Pakistan, particularly Khyber Pakhtunkhwa (KP). Four WPV in Afghanistan during the 12-month period had less-than-expected genetic linkage to other viruses from Afghanistan or Pakistan, indicating surveillance gaps in either Afghanistan or Pakistan. These orphan viruses were detected in four separate locations, including Kabul. The percentage of WPV1 orphan isolates (AFP) declined from 27% in 2010 to 7% in 2011 and has increased to 11% in 2013 and 50% in 2014 to date. Six environmental sites, in Kandahar, Helmand, and Nangarhar Provinces, were added in late 2013/early 2014 and to date have detected no WPV or VDPV.

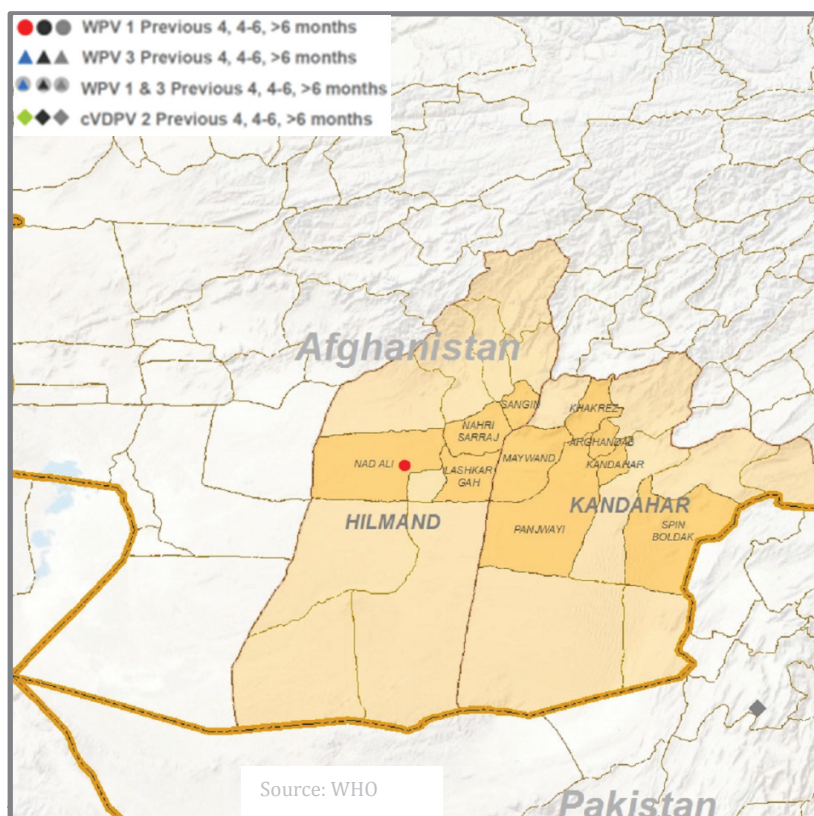
No cVDPVs were detected during the April 2013 to March 2014 time period. However, isolation of VDPV from an immunodeficient patient in November 2013 needs close monitoring and follow-up. The last known emergence of cVDPV2 in Afghanistan was in 2012, with one case with two positive non-household contacts.

1. 17 WPV1 cases were detected in the past 12 months; all except one, the only endemic case in the Southern Region, were in the Eastern Region bordering Pakistan, in four provinces.
2. Although the numbers of cases have declined, the proportion of orphan viruses has increased involving separate geographic locations.
3. No cVDPVs were detected during this time period.

POLIOVIRUS SANCTUARIES AND RISK AREAS

SOUTHERN SANCTUARY

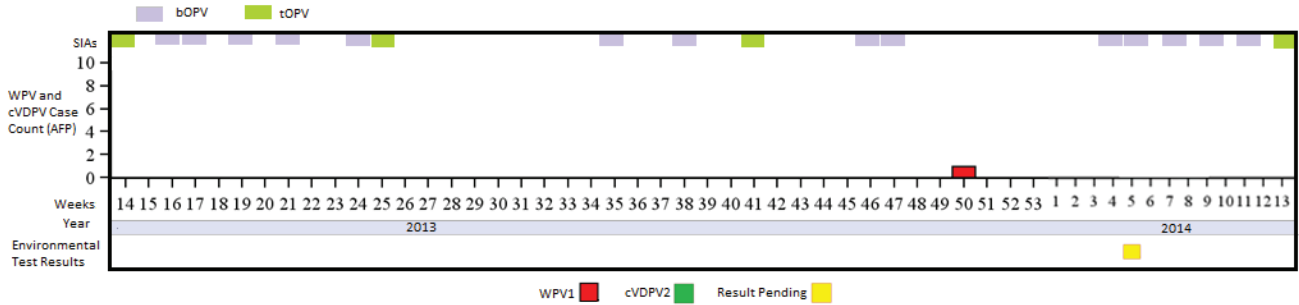
WPV and cVDPV cases, 9 April 2013 to 8 April 2014



Afghanistan has one WPV sanctuary, Helmand and Kandahar Provinces, which previously were the main reservoir of endemic WPV transmission. Within that area, the country has 11 designated Low Performing Districts (LPDs) because of inaccessibility, confirmation of endemic circulation in the previous two years, weak or declining SIA quality, low level of awareness of SIAs, and a disproportionately high percentage of young children with non-polio AFP (NPAFP) who have never received OPV.

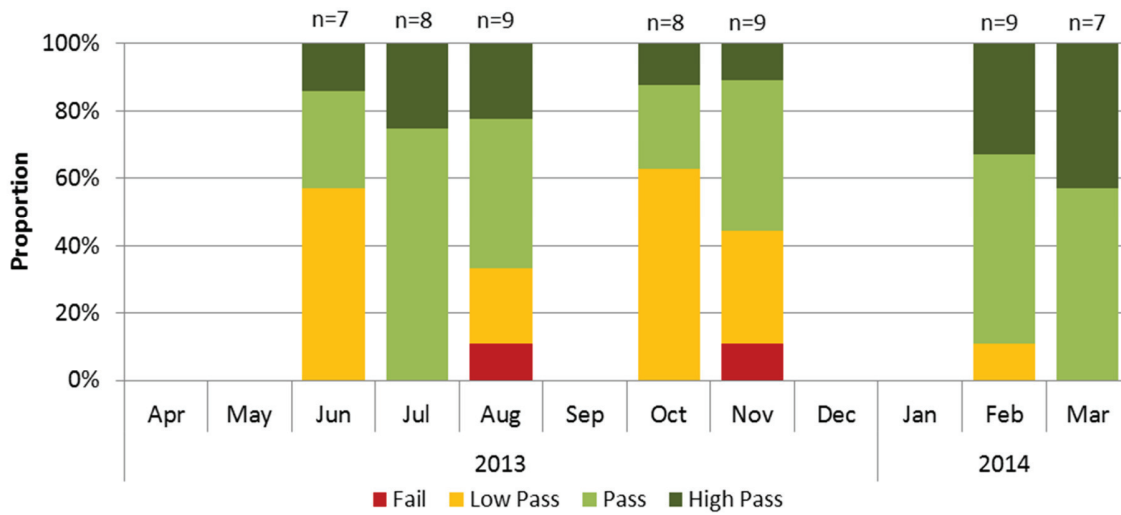
Notes regarding Afghanistan's LQAS survey results (see next page): Decision rules of 0–3, 4–8, 9–19 and 20–60 for sample sizes of 60 provide a reasonable assessment of SIA quality at 90% (**High Pass**), 80% (**Pass**) and 60% (**Low**) thresholds (or **Fail** if below) for programmatic purposes under the assumption of moderate variability in cluster-level results. These surveys do not allow accurate statements about vaccination coverage.

WPV and cVDPV cases by week of onset, Southern Sanctuary (Helmand and Kandahar Provinces), Afghanistan, April 2013–March 2014*



Source: CDC

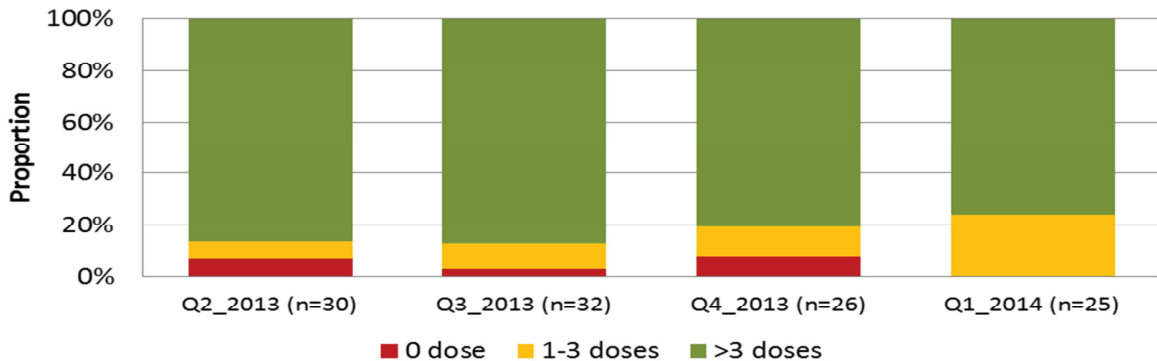
LQAS survey results by SIA, Southern Sanctuary (Helmand and Kandahar Provinces, Afghanistan)



Note: The “n=” numbers shown above each month represent the number of districts for which data are available.

LQAS data from June, July, and August 2013, and February 2014 were only available from the 11 low performing districts. Data from October and November 2013 include all available data from Kandahar and Helmand. LQAS data from March 2014 include all available data from Kandahar; LQAS was not conducted in Helmand.

Proportion of NPAFP cases 6-35 months, by OPV status, Southern Sanctuary, Afghanistan



* Data as of 15 April 2014.

EASTERN RISK AREA

WPV and cVDPV cases, 9 April 2013 to 8 April 2014

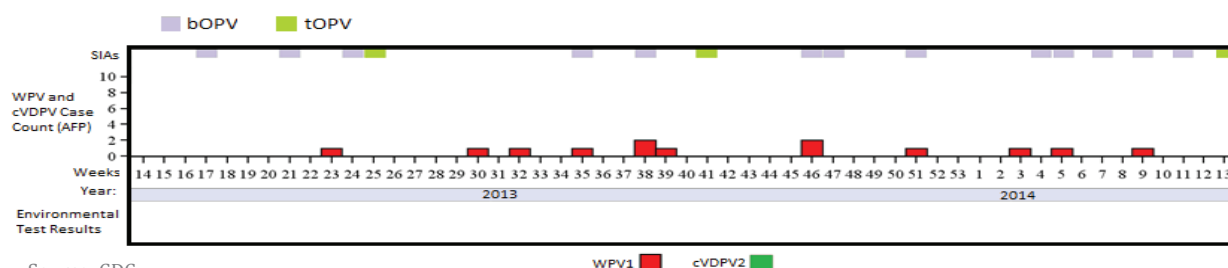


- WPV 1 Previous 4, 4-6, >6 months
- ▲▲ WPV 3 Previous 4, 4-6, >6 months
- ▲ WPV 1 & 3 Previous 4, 4-6, >6 months
- ◆◆ cVDPV 2 Previous 4, 4-6, >6 months

Source: WHO

WPV from Pakistan has been imported into the Eastern Region of Afghanistan during 2012–2014. In turn, the four provinces Nangarhar, Kunar, Laghman and Nuristan have been designated as the “Eastern Risk Area.” Additionally, six districts in the area have been designated as LPDs.

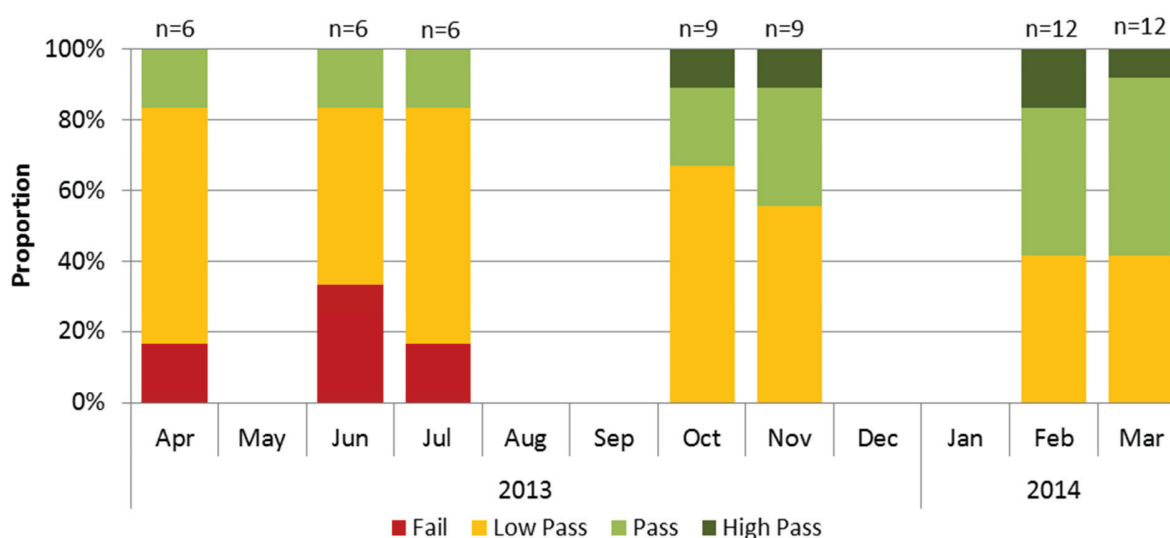
WPV and cVDPV cases by week of onset in the Eastern risk area (Kunar, Nangarhar, Laghman and Nuristan Provinces), Afghanistan April 2013–March 2014*



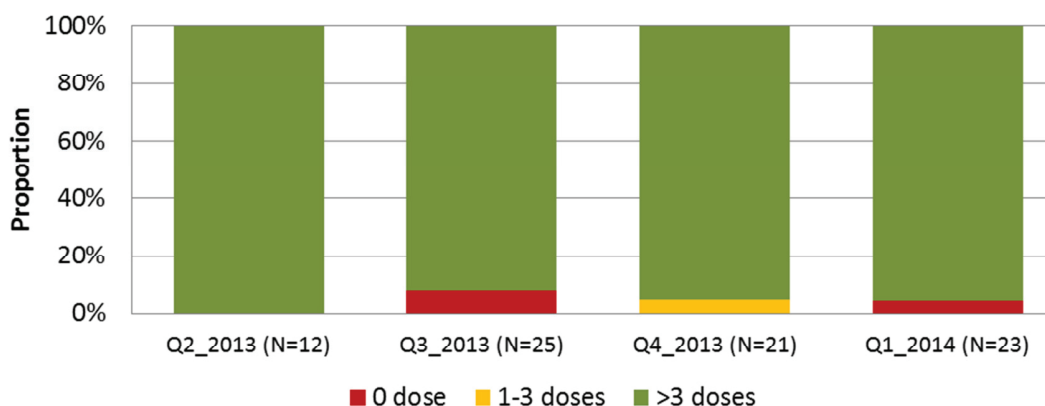
Source: CDC

LQAS survey results by SIA in the Eastern risk area (Kunar, Nangarhar, Laghman and Nuristan Provinces)

Note: The “n=” numbers shown above each bar month represent the number of districts for which data are available.



Proportion of NPAFP cases 6-35 months, by OPV status, in the Eastern risk area



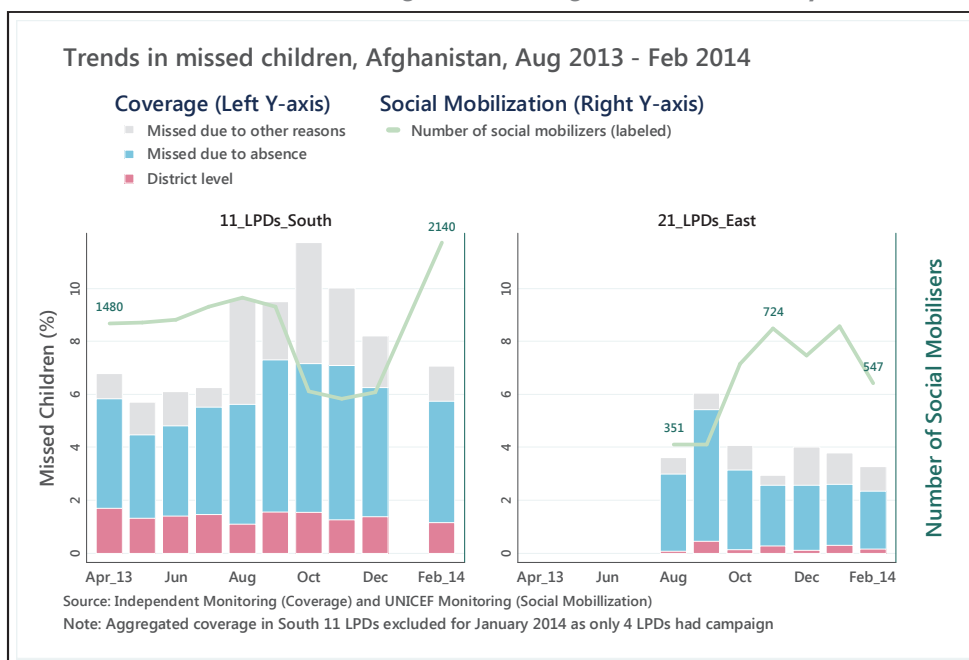
* Data as of 15 April 2014.

COMMUNICATION AND SOCIAL MOBILIZATION

PERFORMANCE

Although the nearly 3,000-strong Immunization Communication Network (ICN) has made progress to reduce refusals in Afghanistan, improvement has not been as dramatic or swift as in the other endemic countries, despite an overall increase of over 1,000 mobilizers since January 2013 and enhanced management capacity in the last quarter. Although relatively small in

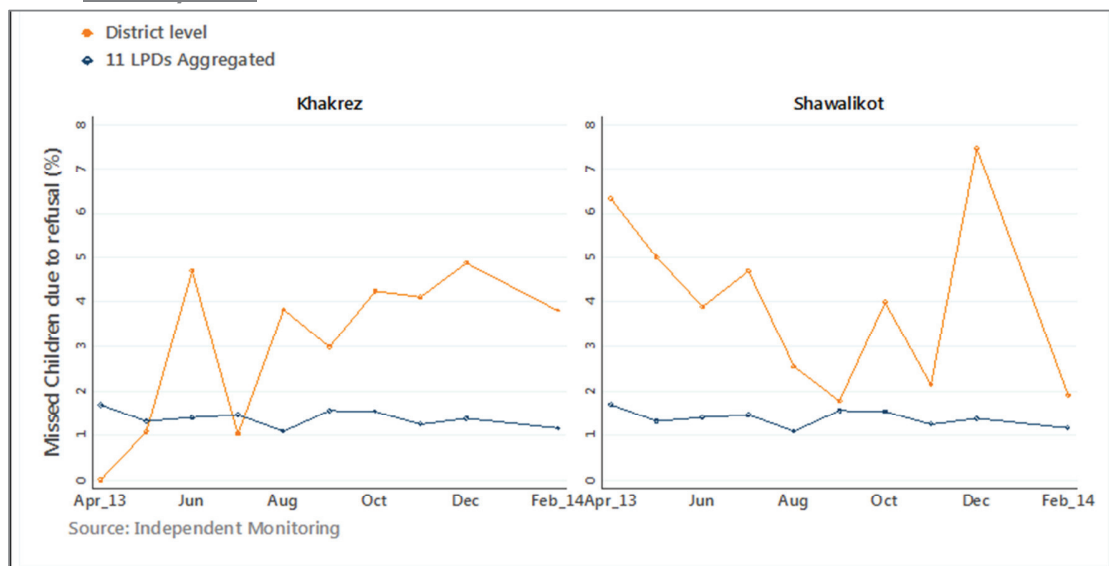
Trends in missed children, Afghanistan, August 2013 – February 2014



number, the proportion of refusals here remain the highest in the world, particularly in Shawalikot and Khakrez, which have remained erratic, but significantly above the 11 LPD average for >1 year.

Inaccessibility is one explanation for the slower progress, though of course, not the only one.

Proportion of under-5 target children missed due to refusal, Afghanistan, April 2013 – February 2014



SHIFTING STRATEGY

The programme must rapidly shift from a communications strategy that primarily promotes campaign awareness, which increased from 83% to 87% between March 2013 and February 2014, to

one that motivates communities, refusal households, and other households with missed children to actively demand OPV. Greater coverage, in addition to a rapid reduction in refusal, must be the key performance

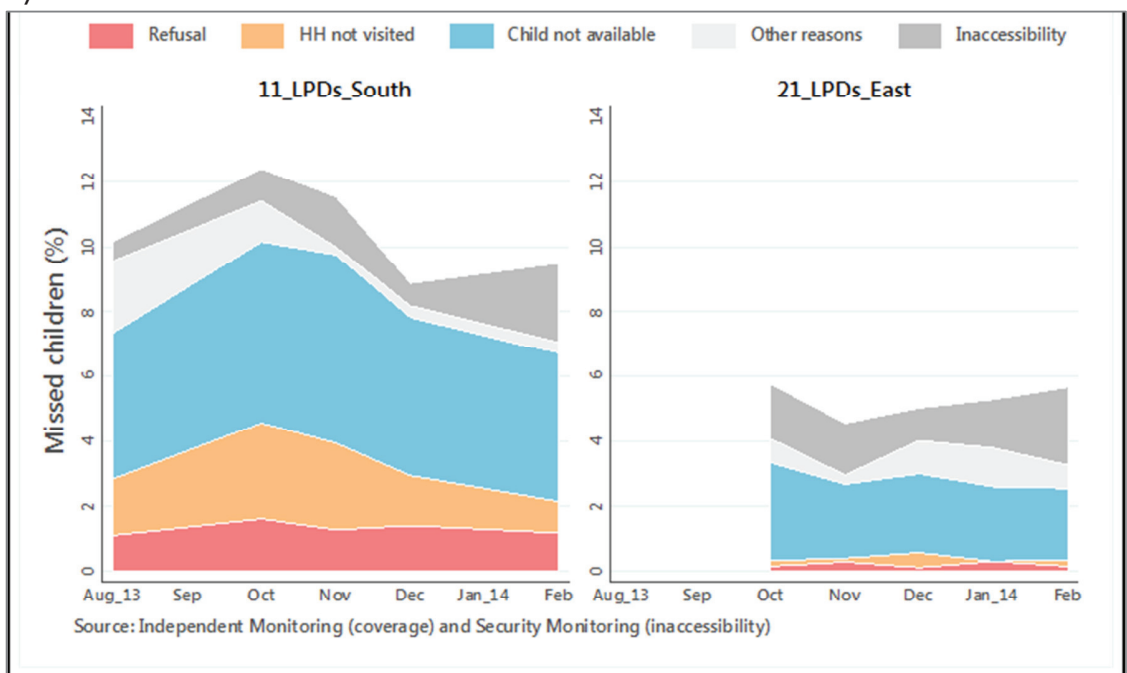
indicator for the efficacy of the ICN. In implementing this approach, the needs and different strategies required in the South versus the East are important to note.

In the South, disaggregating and using data to design local strategies that reach all missed children must be the top priority, particularly in Khakrez, Shawalikot, Spin Bodak, and Panjwai, where we may have been chronically missing the same children for over a year. In most districts, the main reason for missed children is because children are out of the house when teams arrive. The communications programme has pushed hard to identify where children are when they are not at home, but the broader programme must respond to this data with targeted strategies to reach nomadic children, those in transit, and illiterate caregivers.

In the East, where there is almost no refusal, ICN efforts must focus on ensuring community and household access through broader social mobilization and influencer identification. The expanded ICN network has done a good job of increasing campaign awareness through interpersonal, arguably more trusted, communications. For example, in the critical Kunar province, awareness levels by social mobilizers rose from 43% in October 2013 to 90% in March 2014. However, mobilizers and supervisors in the East will require a greater focus on negotiation skills to fulfil their distinct role. This will be particularly critical as fulltime mobilizers are being recruited to engage communities throughout the month as opposed to directly before the campaign. This strategy is expected to help build trust in security-compromised clusters and border areas with Pakistan.

The role of the Provincial Social Mobilization Groups (PSMGs), chaired by the Ministry of Health and whose membership is drawn from the key line ministries of Religious Affairs, Women's Affairs, Education, Rural Rehabilitation and Development, and Youth and Sports, is also critical. The PSMGs meet to prepare for polio rounds, and offer a ready forum to access community institutions including Health/Education shuras and Community Development Committees to promote polio-plus activities at the ground level.

Reasons for missed children, low performing districts (LPDs) in the Southern Sanctuary and Eastern Risk Area, Afghanistan, August 2013 – February 2014



ENGAGING WOMEN

The communications programme has made several creative attempts to engage women amidst staunchly difficult social and cultural norms.

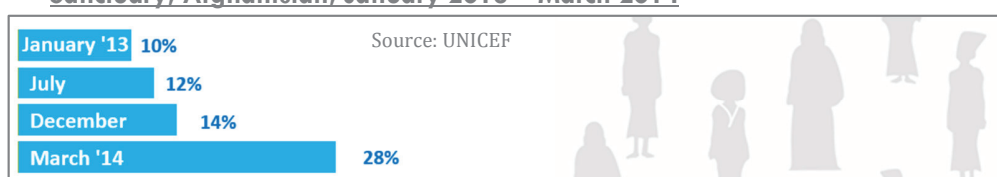
In both the Kandahar and Helmand Provinces, a Ministry of Women's Affairs Liaison Officer is part of the Provincial Social Mobilization Group. Between campaigns, these Liaison Officers conduct women's meetings through existing community networks. These innovations have led to a significant boost in female mobilizers in the Southern Region, from 14% in December to 28% in March. The impact of this shift needs to be

measured to determine if more children are being vaccinated with greater access to households.

In Jalalabad, female

social mobilizers are hired for pre-campaign house-to-house awareness-raising to engage mothers, and males are hired to accompany vaccination teams. The involvement of women in the polio programme is a highly sensitive issue, and one which will take time to address well.

Proportion of social mobilizers that are female in the 11 LPDs, Southern Sanctuary, Afghanistan, January 2013 – March 2014



PROGRAMME INFORMATION

ACCESSIBILITY AND SECURITY

The UN Security threat levels for Afghanistan have remained unchanged since November 2013, with 185 Districts (out of a total of 402) classed as “extreme”- or “high”-threat. It is within these districts that the WPV cases have been found and where inaccessibility remains an issue. The withdrawal of NATO combat forces in 2014 is expected to also impact the security situation as anti-government elements (AGE) forces are expected to increase attacks during this period.

The numbers of recorded security incidents between October 2013 and March 2014—historically, a time of year characterized by “limited fighting”—have followed seasonal trends. However, between October and December 2013, the highest ever numbers of ‘incidents for time of year’ were witnessed. 2014 is currently assessed to follow previous seasonal trends with the highest number of incidents in June. It is predicted that this will be at a higher level than 2012 and 2013, but lower than the worst recorded year to date of 2011.

Thirteen security-related incidents and six fatalities have been recorded between October 2013 and March 2014 in the Southern and Eastern Regions that involved polio staff. However, none of these incidents were assessed to be directly targeted at PEI, and had other motivations.

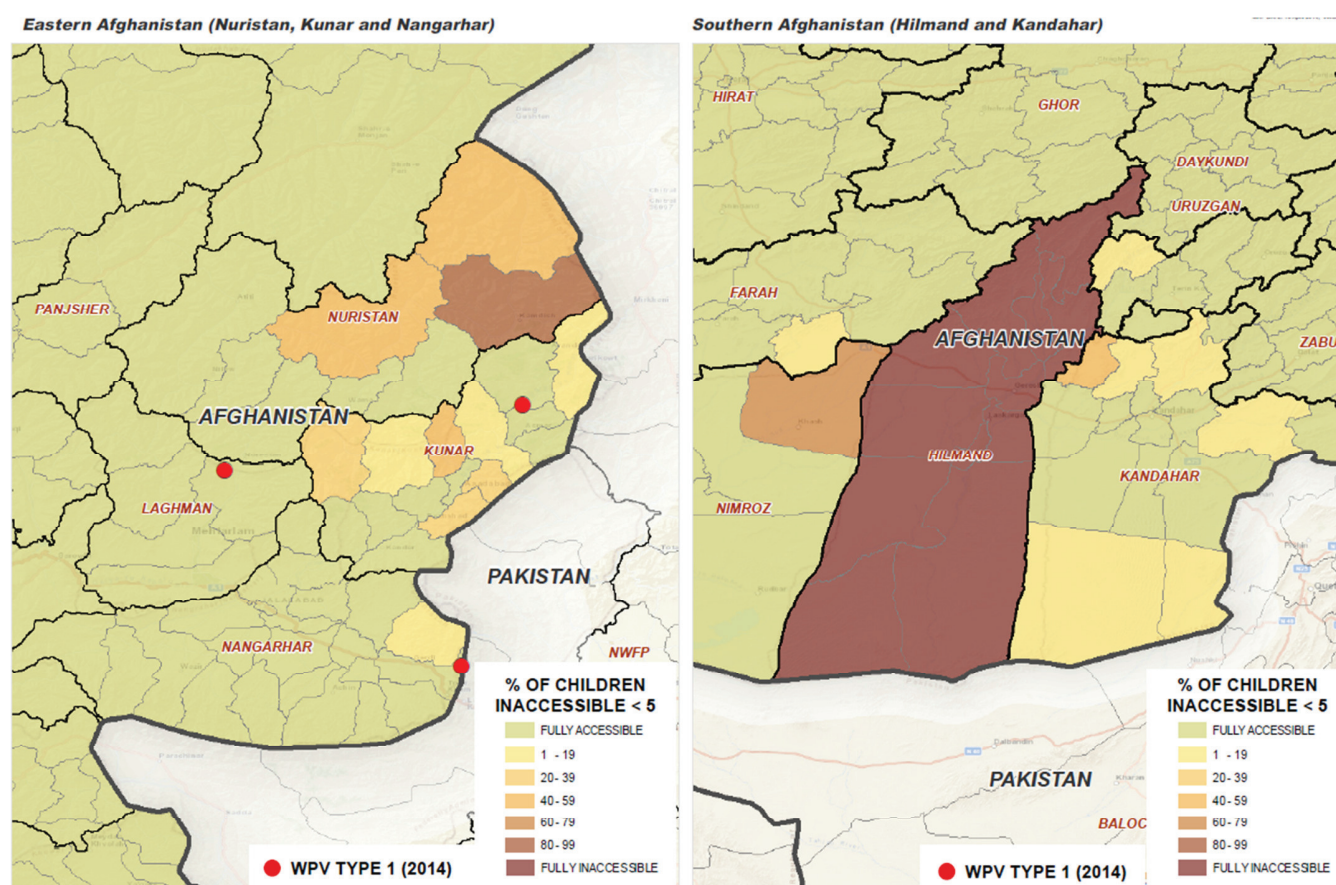
Data on 'inaccessibility' during SIAs, i.e., the proportion of SIA target children estimated to live in inaccessible areas, for the whole of Afghanistan have been reasonably stable up until late March 2014, averaging at 0.37% of the total <5-yrs-old population and 1.14% of the campaign target populations between October 2013 and February 2014.

In the Southern Region overall, figures for the February 2014 SIA show that from a target population of 4.6M children, 58,984 children (1.3%) were missed due to inaccessibility. In the 11 LPDs, the proportion of targeted children inaccessible due to insecurity fell from 9.2% in June 2012 to 1.4% in July 2013.

The total number of inaccessible children in the Eastern Region grew from 0.8% of the 2.19 million children targeted in the Region in the July 2013 SIA to 1.8% of children in the December 2013 SIAD conducted in 30 Eastern districts. In the February 2014 SIA, 21,816 (2.4%) children were missed from a target population of 930,000.

Access to SIAs worsened during the recent election period (March through April 2014), which hampered programme delivery. Access into areas where vaccination was previously possible has been denied during March and April 2014 by AGE in some provinces, particularly Helmand Province. Due to this situation, inaccessibility in the March 2014 NID was registered at 8.6% (740,628 children) of the total <5-yrs-old population of Afghanistan, largely due to 700,000 inaccessible children in Helmand province. However, it is expected that the previous level of accessibility will be likely resumed once the election period has finished. It is worth noting that communication links with all actors have been maintained during this period through International Committee of the Red Cross (ICRC), working with the Afghan Red Crescent Society and other intermediaries.

Inaccessible areas, 2014 WPV1 cases, and the estimated proportion of children affected during the March 2014 SIA— Eastern Risk Area and Southern Sanctuary, Afghanistan



Source: WHO

OWNERSHIP

National	Q2 '13	Q3 '13	Q4 '13	Q1 '14
National EPI Committee Weekly Meetings held with minutes available	Yes	Yes	Yes	Yes*
Polio Policy Dialogue Group Quarterly Meetings held with minutes available	Yes	Yes	Yes	Yes
President's Quarterly Meeting with Governors held	No	Yes**	No	No
Inter-Ministerial Task Force Quarterly Meetings held	No	Yes	No	No
Regional	Q2 '13	Q3 '13	Q4 '13	Q1 '14
Regional/Provincial EPI Management Teams Monthly Meetings held	Yes	Yes	Yes	Yes

* Held fortnightly ** No minutes available

Percent of Southern Region low performing districts meeting preparedness indicators

Indicator: District Coordination Committee Meetings Held (yes / no)

Low Performing Souther Region Districts	Jul '13	Aug '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Feb '14	Mar '14
Districts participating	8	8	7	7	8	8	8	8	8
Preparedness indicator met	100	100	100	100	100	100	100	88	71
Shahwalikot	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maiwand	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Panjwai	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Boldak	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bust (Lashkar Gah)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Nahesaraj	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	
Nadali	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	
Sangin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Kandahar		No*	No*	No*	No*	No*	Yes	Yes	Yes

Abbreviations: EPI=Expanded Program on Immunization

No campaign

No data

Source: Afghanistan Campaign Dashboard, WHO-Afghanistan

* Meeting in Kandahar is not at district level but is the Provincial Coordination Committee Meeting which is held regularly before each campaign.

Note: Results for 9 of the 11 Low Performing Districts were available at the time of this report. The 2 districts missing are Arghandab and Khakrez.

HUMAN RESOURCES

Location	Number of vaccination teams	Number (%) of vaccination teams with a female member	Number (%) of vaccination teams with a local member	Salary per vaccinator / day	Number of current GPEI staff			
					PEI Coordinator	Provincial Polio Officer	District Polio Officer	Total
Kandahar and Hilmand	3100	123(4%)	3100 (100%)	\$5.00	2	16*	18**	36

* Increased from 10 to 16

** Increased from 13 to 18

This does not include the UNICEF-supported communication staff of 33 District Communication Officers, 2 Provincial Polio Communication Officers, and 3 Assistant Provincial Communication Officers in Kandahar and Helmand.

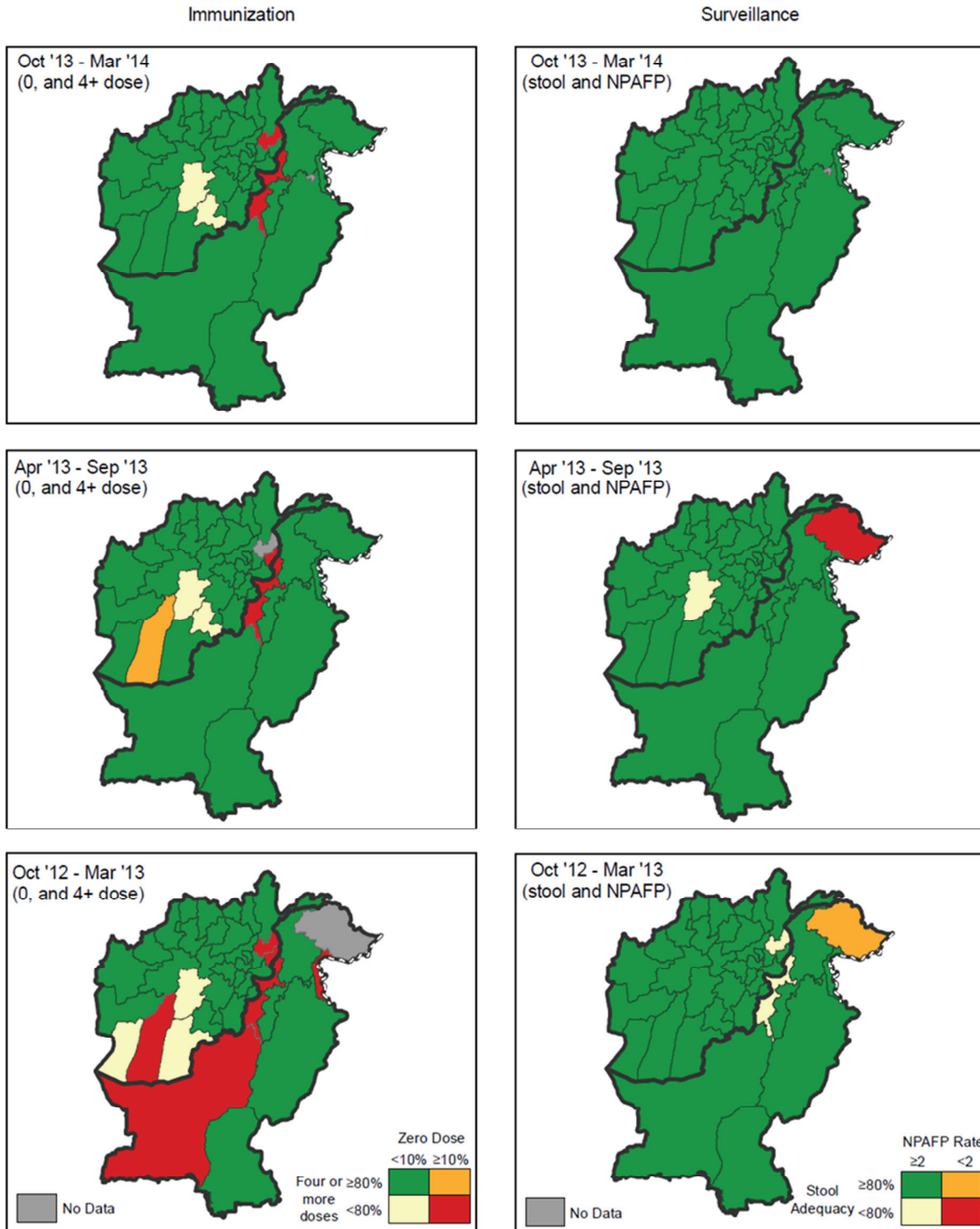
ROTARY INTERNATIONAL'S WORK IN AFGHANISTAN

Rotary's National PolioPlus Committee in Afghanistan recently provided funds to help launch a vaccination programme for travellers to India who must demonstrate evidence of a polio vaccination before receiving a visa for travel into India. The policy went into effect on 31 January 2014, and resulted in increased demand for routine vaccinators in Afghanistan. The funds provide incentives for additional vaccinators to help meet the increased demand, as well as training, vaccination cards and radio spots to help raise awareness about the new requirement for travellers. Rotarians in Afghanistan also recently completed construction of a dry storage shelter for vaccine carriers and other equipment needed for routine immunization efforts in the country. The facility will soon be handed over in an official ceremony to the Ministry of Public Health's National PEI Department.

PERFORMANCE INDICATORS

IMMUNIZATION AND SURVEILLANCE

Six-month–annualized standard immunization and surveillance indicators by province among children aged 6–35 months with NPAFP, Afghanistan and Pakistan October 2012 to March 2014



Source: CDC

GPEI POLIO ERADICATION AND ENDGAME STRATEGIC PLAN 2013–2018, AFGHANISTAN

STRATEGIC PLAN OBJECTIVE	OUTCOME INDICATORS (2013)	RESULTS	STATUS
Poliovirus Detection and Interruption: Complete the interruption of wild poliovirus transmission globally and more rapidly detect and interrupt any new outbreaks due to vaccine-derived polioviruses	All wild poliovirus transmission stopped by the end of 2014		NA*
	All new cVDPV outbreaks stopped within 120 days	All cVDPV cases in 2013 were either a continuation of the 2009 emergence or imported from Pakistan. There are no identified cVDPV cases in 2014 to date.	NA
	OUTPUT INDICATORS (2013)		
	Achieve and maintain an NPAFP rate of > 2/100,000 in all states/provinces of high-risk countries and maintain an NPAFP rate of > 2/100,000 in all states/provinces	In the last 12 months, the national NPAFP rate was 10.9/100,000, a slight increase from the previous year. All provinces have maintained a NPAFP rate >2/100,000.	Met
	Achieve and maintain adequate stool sample collection in 80% of cases in all states/provinces	Nationally, 93% of AFP cases had adequate stool specimen. All provinces have maintained adequate stool collection in ≥80% of AFP cases during the previous 12 months, which represents a slight increase from the previous year.	Met
	LQAS passed at 80% threshold in all high-risk areas	LQAS assessments continue to be limited. Using available data, of the LQAS assessments conducted in the Southern Sanctuary and Eastern Risk Area, 55% have passed the 80% threshold.	Not Met
	Establish full safety and security framework	A security management plan is in place as part of the overall security framework. Improvement of dialogue with anti-government elements (AGE) in the Southern Region resulted in improved access to children during SIAs in the South. Improvements also occurred in the Eastern Region following improved coordination with AGE, through intermediaries.	Established
	All current cVDPV outbreaks stopped by end-2013	More than 6 months have passed since the most recent cVDPV case.	Met

* Not applicable

SYNOPSIS

- Epidemiology:* Case counts decreased 62% in 2013 compared to 2012. Only one WPV case occurred in the Southern region in 2013, indicating that the endemic spread of WPV transmission in this part of Afghanistan is low-level. However, it should be noted that the virus from the most recent case (11 December 2013) had circulated undetected for 13 months. Thirteen of the 14 WPV cases that occurred in Afghanistan in 2013 were reported in Eastern provinces bordering the KP and FATA Sanctuaries in Pakistan. WPV importations from neighboring Pakistan into the Eastern Region continue into 2014, with a total of three WPV cases in 2014. Afghanistan will continue to remain at very high risk of importation of WPV as long as transmission continues in Pakistan.
- Immunization:* From December 2012 to December 2013, the proportions of children missed in SIAs as measured by independent monitoring ranged from 10.7% to 6.0%. NPAFP data from the endemic Southern Region suggest improvements in vaccination coverage during the previous 12 months overall, except in Helmand province. Despite these developments, four of Afghanistan's 34 provinces failed to achieve rates of $\geq 80\%$ of children with >3 doses of OPV among NPAFP cases. The circulation of cVDPV2 into early 2013 highlighted weaknesses in the routine immunization system in the Southern Region that appear to have been mitigated by tOPV SIAs and permanent polio team use of tOPV.
- Security:* The security situation in the South has steadily improved since 2012. Negotiations through the ICRC in the Southern Region have been successful in reducing children missed due to inaccessibility except for the apparent temporary lack of access in all of Helmand in March 2014. The Eastern Region of Afghanistan has a relatively higher proportion of "zero-dose" children aged 6–35 months with NPAFP, in part due to the inability of vaccination teams to enter parts of the region safely due to insecurity and anti-government elements, as well as programmatic issues. Credible channels of communication have been established to engage the AGE leadership systematically through intermediaries.
- Surveillance:* AFP performance indicators and virologic data had in the past suggested substantial surveillance gaps. In the most recent period, specimen adequacy has improved and virologic evidence suggested improved performance after 2010. However, detection of divergent ($>1\%$ from closest link) WPV1 viruses in late 2013/early 2014 in Helmand, Kabul and Laghman still suggest some gaps in surveillance which need to be strengthened.
- Ownership:* At the national level, indicators suggest strong ownership within the Ministry of Public Health but variable ownership elsewhere. There is concern whether the new government, when established, will take ownership of the programme. Even now, however, meetings of the Inter-Ministerial Task Force and of high-level governors with the President have been consistently postponed. Ownership is strong among health leaders at the provincial levels but variable at the district level.
- Community demand:* Vaccine refusal accounted for up to 25% of missed children among all 11 LPDs in the Southern Region and represented up to 5% of targeted children in some critical districts. Trends indicate a decline from previous levels on average in the 11 LPDs, from 2.3% in January to 1.5% in July 2013. In November 2013 16% of children missed in SIAs in Afghanistan were due to refusals. Among missed children in different regions the proportion due to refusals varied from 11% in the East, 13.5% in the South and 19% in the Southeast.

PAKISTAN

NATIONAL POLIO OVERVIEW

The number of WPV cases in Pakistan increased from 58 in 2012 to 93 in 2013, driven by an uncontrolled outbreak in FATA since May 2013. During 2014 to date, there have been 47 cases, compared with 6 for the same time period in 2013. Most cases have occurred in FATA (mainly North Waziristan Agency) and the majority of the remainder in KP, Punjab, and Southern Sindh (Karachi). Environmental surveillance indicates continued circulation in Sindh and KP during the end of 2013 through the first quarter of 2014; however, in Punjab, circulation appears to have decreased in comparison to the previous quarter. No WPV3 has been detected in Pakistan since April 2012. SIAs primarily have been with bOPV during the reporting period, with a tOPV NID in March 2014 and selective use of mOPV1 starting in April 2014. SIADs (an additional round 10 days after an SIA) have been conducted in the highest-risk areas since 2011. Violence against healthcare workers has continued sporadically and, while this has adversely affected vaccination in specific locations, the programme has largely been able to maintain population immunity in those areas where access is not impeded. Due to security concerns, LQAS has been used only sporadically in Karachi.

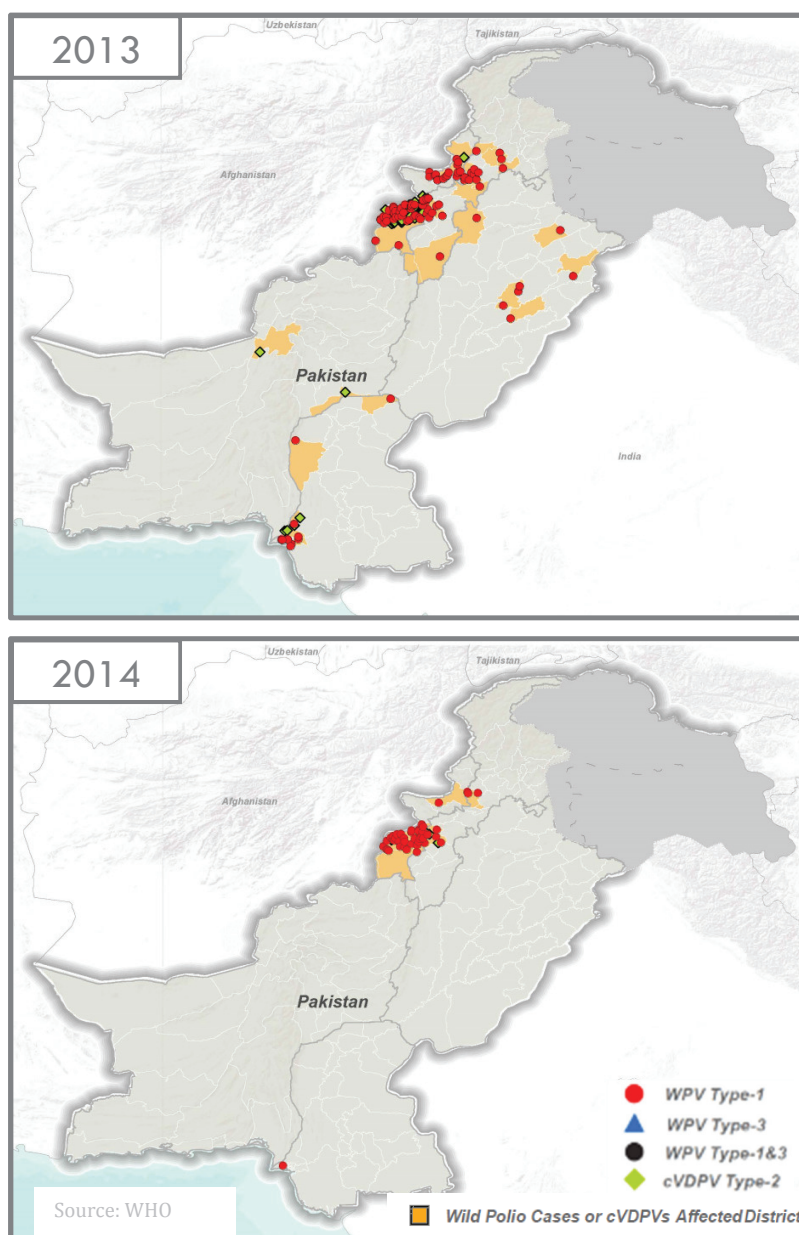
Between February and April this year, KP conducted an unprecedented series of 12 consecutive Sunday SIAs in Peshawar under extremely tight security. In all, seven million doses of OPV were administered during these campaigns without violence. Four districts

around Peshawar will have also completed multiple similar campaigns by the end of April, and Karachi is carrying out its own series of campaigns patterned after the 'Peshawar' Sunday campaigns.

ENVIRONMENTAL SURVEILLANCE

Environmental surveillance is ongoing at 25 sites throughout the country, including in two of the three poliovirus sanctuaries (all but FATA) and the Quetta Risk Area. The frequency of detection of WPV from several environmental sites declined in late 2012 and early 2013 but increased somewhat in late 2013. In 2012, 92 of 239 samples (38%) were positive. In the past 12 months, 22 % were positive. Environmental specimens from Peshawar in KP are the only environmental specimens that have consistently contained WPV1 throughout

WPV and cVDPV cases, Pakistan, 2013 and 2014



2013. WPV1 was isolated sporadically from environmental specimens from Rawalpindi in 2013 and from many specimens from various Karachi sites throughout 2013. WPV1 was isolated from Hyderabad in the first half of 2013, and at sites in Punjab, several individual specimens were positive in late 2013. No WPV3 viruses have been detected in environmental specimens since October 2010.

VIROLOGY

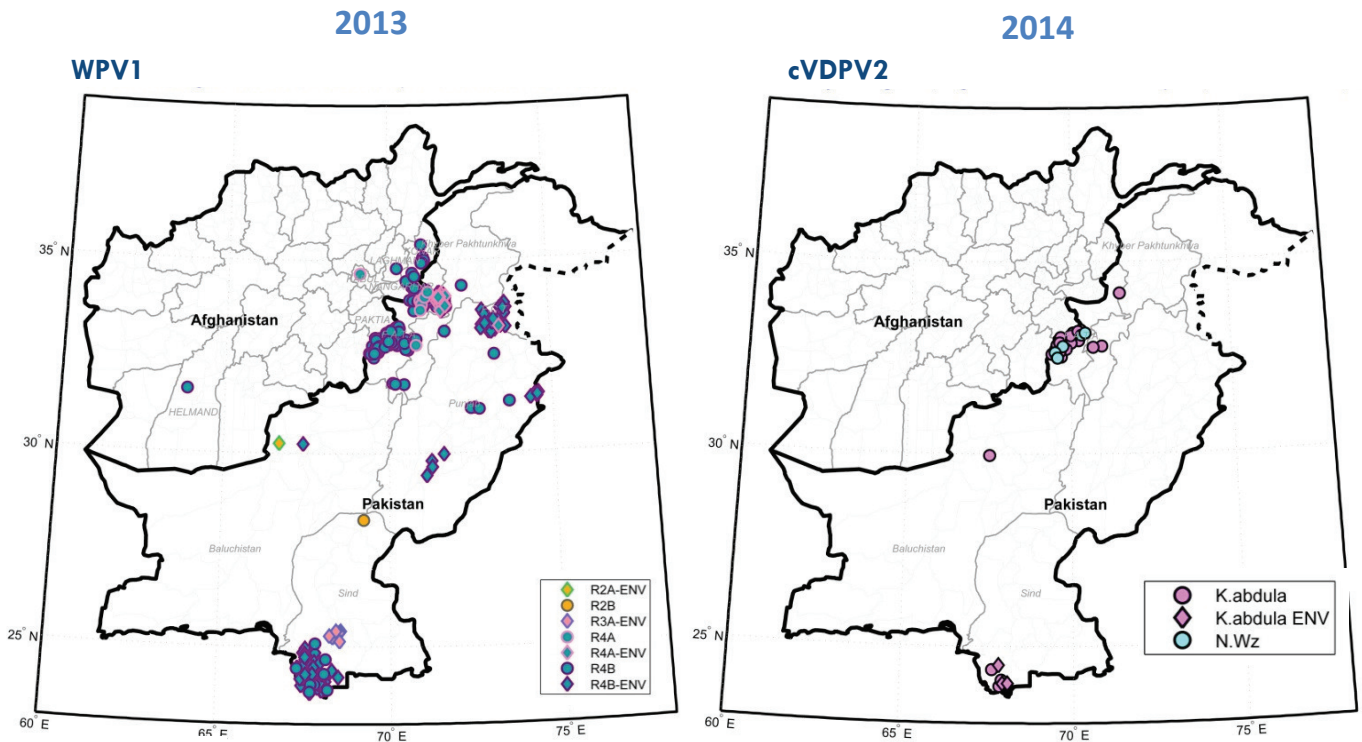
(See also maps of WPV1 by genetic cluster and cVDPV2 in the Afghanistan section of this document). Five genetic clusters of WPV1 were represented in specimens from polio cases and environmental specimens in the past 12 months. Viral genetic diversity and levels of virus circulation were highest in FATA. Wild virus has been exported from FATA to other parts of the country. After several months of no detection of WPV from Quetta environmental specimens, WPV1 was isolated from Quetta environmental specimens in late 2013. Two clusters of virus are localized to specific geographic locations; a single R2B virus in northern Sindh and a single R2A virus found through environmental specimens sampling in Quetta in late 2013. Despite the single positive Quetta environmental specimen, WPV1 transmission has probably been interrupted in the Quetta block.

VDPV emergence has resulted in cVDPV2 cases in Killa Abdullah districts of the Quetta block, Balochistan, with onset of the first case on 30 August 2012. The most recent cVDPV2 case in Balochistan was in June 2013. cVDPV2 originating in Killa Abdullah spread to North Waziristan, FATA in April 2013, causing the ongoing outbreak. This emergence group includes five cases from 2014; the onset of the most recent case was 8 March 2014. The first cVDPV2 from Pakistan environmental specimens was isolated from Karachi Gadaap on week 16 of 2013, and the most recent was 11 March 2014. A separate emergence group (N. Waziristan) consists of five cases from 26 August 2013 to 17 November 2013. Four independent aVDPV2s were detected in Pakistan in the past 12 months.

The potential for surveillance gaps exists at the sub-national level, as evidenced by a few chains of transmission that were detected only from environmental surveillance. The percentage of WPV1 isolates (from AFP cases) with much less genetic linkage than expected declined from 21% in 2009 to 5% in 2012 and has been 14% in the first half of 2013, 6% in the second half of 2013, and 9% in 2014 to date.

1. Both WPV1 and cVDPV2 circulation increased in 2013 compared with 2012, due principally to ongoing outbreaks in FATA.
2. Viral genetic diversity and levels of virus circulation were highest in FATA in 2013.
3. The percentage of WPV1 isolates with less genetic linkage than expected has increased since 2012. Detection of long-standing WPV circulation only by environmental surveillance provides virologic evidence of gaps in AFP surveillance.

WPV1 and cVDPV2 cases and environmental isolates by genetic cluster (WPV1) and emergence (cVDPV2), Pakistan, April 1, 2013 to March 31, 2014*



Source: CDC

* Data as of 15 April 2014.

POLIOVIRUS SANCTUARIES AND RISK AREAS

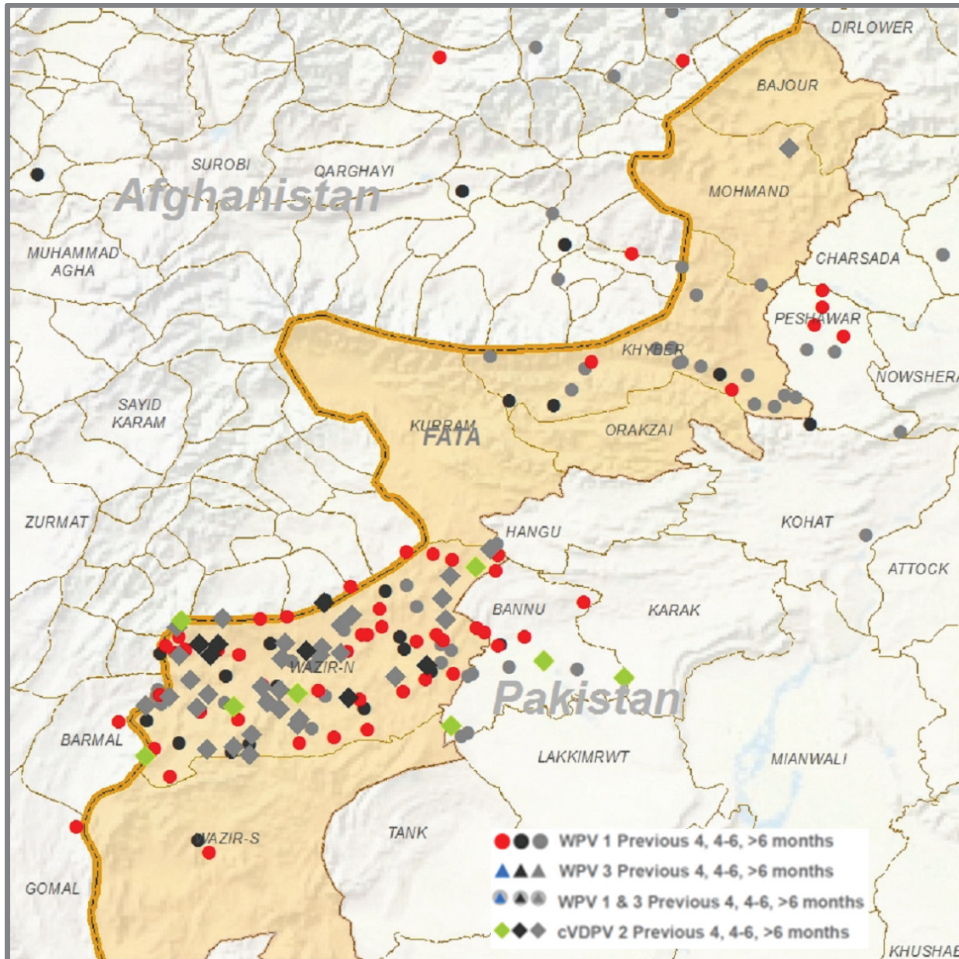
At the time of this report, Pakistan has three designated virus sanctuaries and one risk area:

1. Federally Administered Tribal Areas (FATA) Sanctuary
2. Central and Southern districts of Khyber Pakhtunkhwa province (KP) Sanctuary
3. Karachi Sanctuary
4. Quetta Risk Area

The Quetta block (Quetta, Killa Abdullah, and Pishin) had been included as a sanctuary previously. Evidence suggests that poliovirus is no longer circulating there, although poor performance indicators indicate ongoing risk. This area is now considered to be the Quetta Risk Area.

FATA POLIOVIRUS SANCTUARY

WPV and cVDPV cases, FATA Sanctuary, 9 April 2013 to 8 April 2014



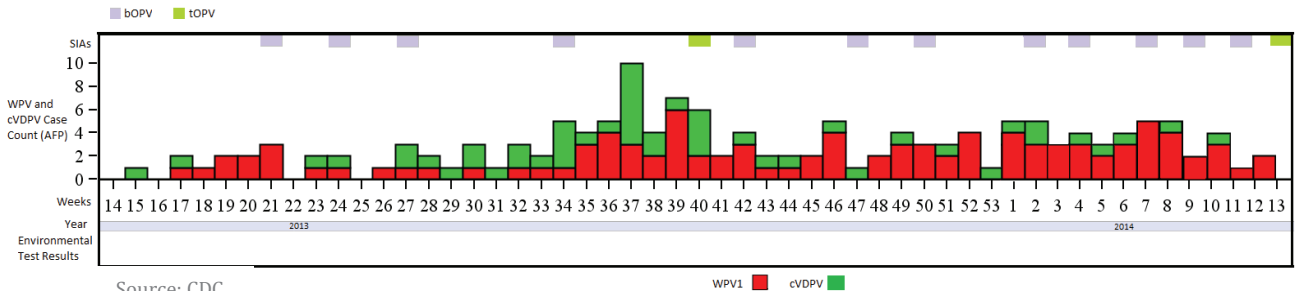
Source: WHO

LQAS surveys provide an assessment of SIA quality through a limited sample obtained from random cluster sampling. LQAS surveys in many areas affected by conflict or security problems in Pakistan have not been conducted at all, so as to avoid raising the visibility of the programme (in Karachi), or are not conducted in randomly selected areas but rather are conducted in areas selected based on feasibility regarding the security situation. This will lead to correspondingly biased results that may overstate SIA quality.

Other notes regarding LQAS:

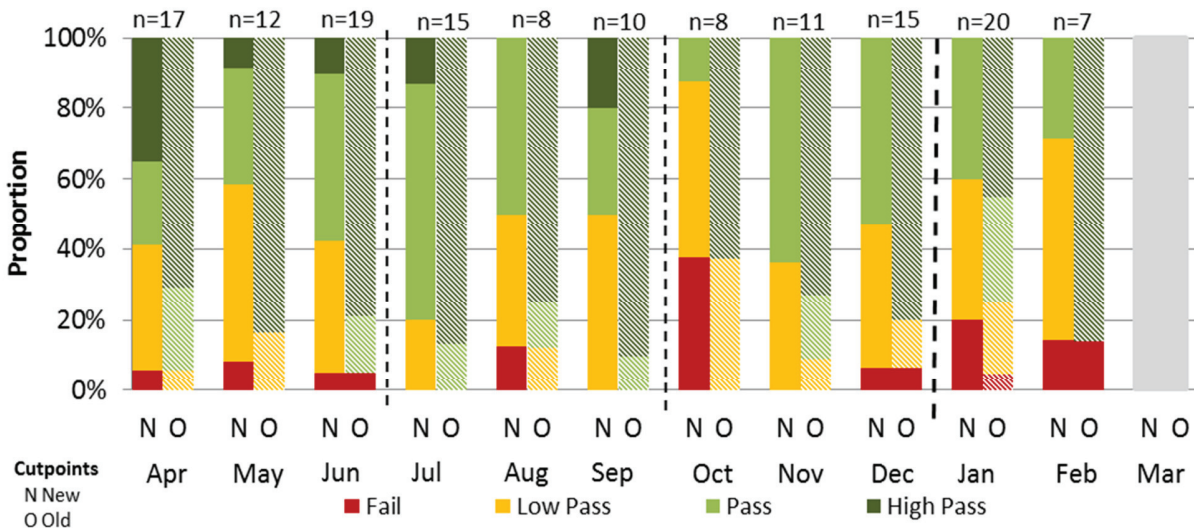
- Pakistan has used “old” decision rules of 0-5, 6-7, 8-12 and ≥ 13 for samples of five clusters of 10 children (50) and six clusters of 10 (60) for testing at thresholds of 95%, 90%, and 80%. These rules overstate SIA quality. Please refer to discussion of methodological limitations in previous reports.
- “New” decision rules of 0, 1-2, 3-6, and 7-50 for sample sizes of 50 and 0-3, 4-8, 9-19 and 20-60 for sample sizes of 60 provide a more reasonable quality assessment at 95% (**High Pass**), 90% (**Pass**), and 80% (**Low**) thresholds (or **Fail** if below) for programmatic purposes under the same assumption of variability.

WPV cases by week of onset and environmental surveillance results, FATA Sanctuary, Pakistan April 2013–March 2014*



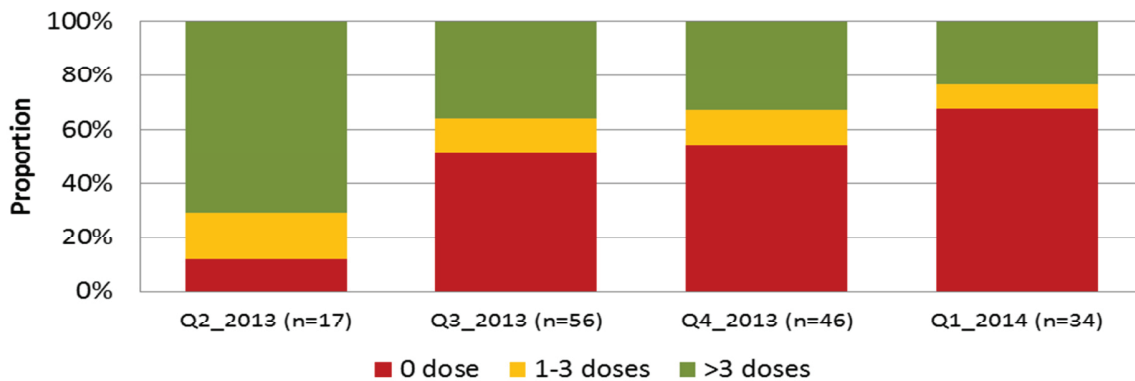
Note: Since June 2012, SIAs have not been conducted in North or South Waziristan or in parts of Khyber Agency.

Proportion of Union Councils with LQAS survey results by SIA, FATA Sanctuary, April 2013–March 2014



Note: LQAS not conducted in FATA in March

Proportion of NPAFP cases 6 to 35 months, by OPV status, FATA Sanctuary, April 2013–March 2014



*Data as of 15 April 2014

OWNERSHIP

Percent of Union Councils with indicators met for each campaign

FATA Sanctuary	Jul '13	Aug '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14 R1	Jan '14 R2	Feb '14 R1	Feb '14 R2	Mar '14 R1	Mar '14 R2
UPEC meeting held	78	78	78		76	75	53	39	77	58		32
UPEC chaired by UCMO	100	100	100		100	100	100	100	100	100		100
Microplan Validated	100	100	95		96	96	94	94	95	95		94

Percent of teams with indicators met for each campaign

≥1 Government member	87	90	92		88	89	87	91	86	87		88
≥1 Local member	99	99	97		99	100	98	99	100	99		98
≥1 Female member	13	12	14		13	13	14	15	13	14		14

Abbreviations: UPEC=Union Council Polio Eradication Committee

UCMO=Union Council Medical Officer

Source: Pakistan National Emergency Action Plan Indicators, WHO-Pakistan

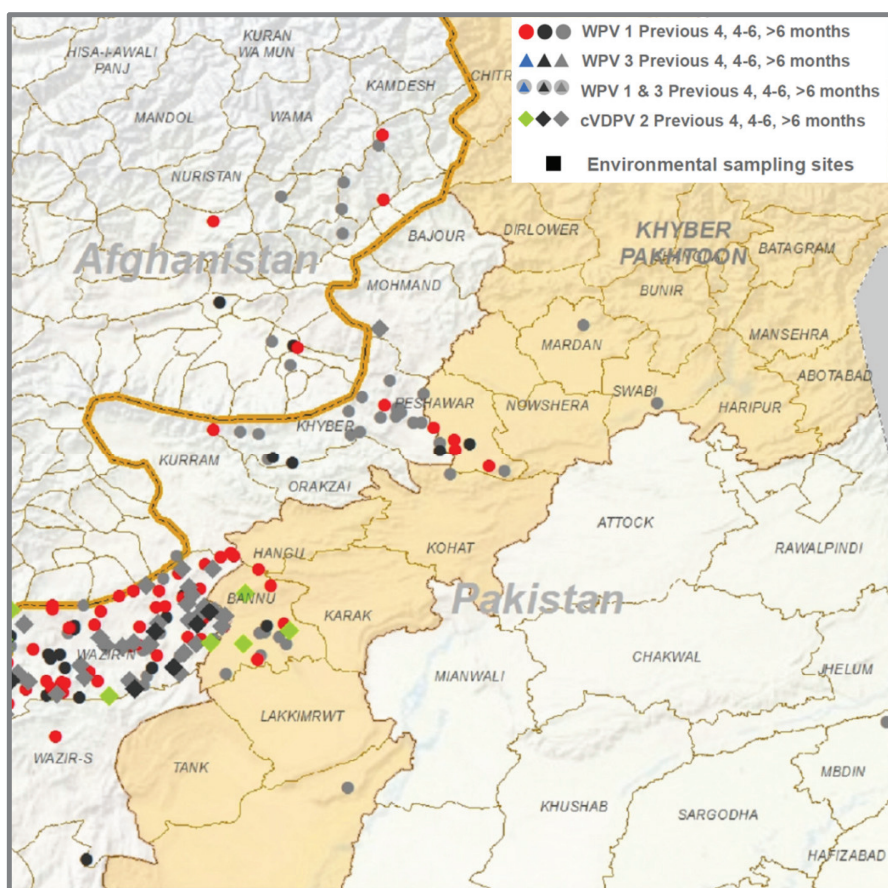
No campaign

No data

Note: Since June 2012, SIAs have not been conducted in North or South Waziristan or in parts of Khyber Agency.

CENTRAL AND SOUTHERN KHYBER-PAKHTUNKHWA SANCTUARY

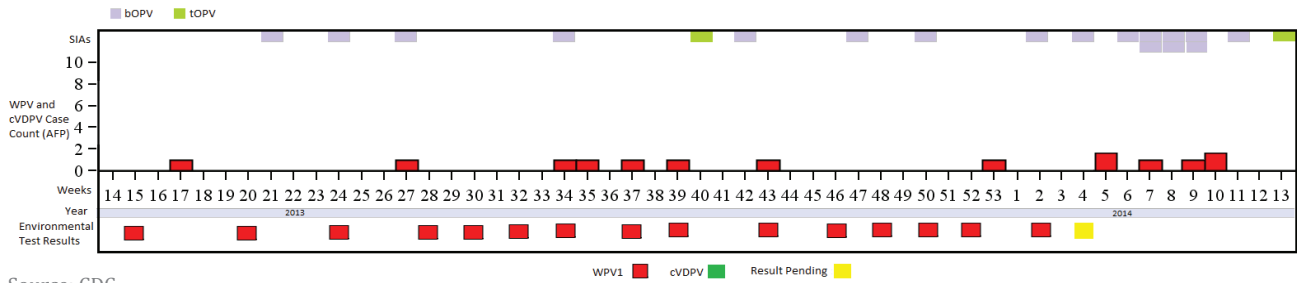
WPV and cVDPV cases, KP Sanctuary, 9 April 2013 to 8 April 2014



This reservoir consists of Central KP (Peshawar, Nowshera, Swabi, Charsaddah, Mardan districts) and Southern KP (Bannu, Tank, Lakki Marwat districts).

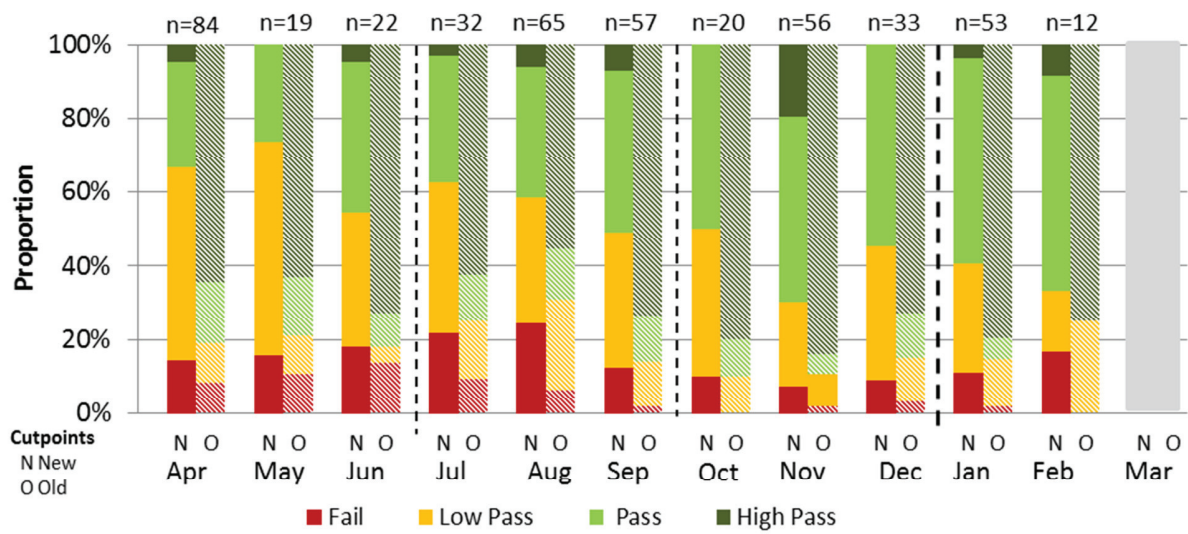
Source: WHO

WPV cases by week of onset and environmental surveillance results, KP Sanctuary, Pakistan April 2013-March 2014*



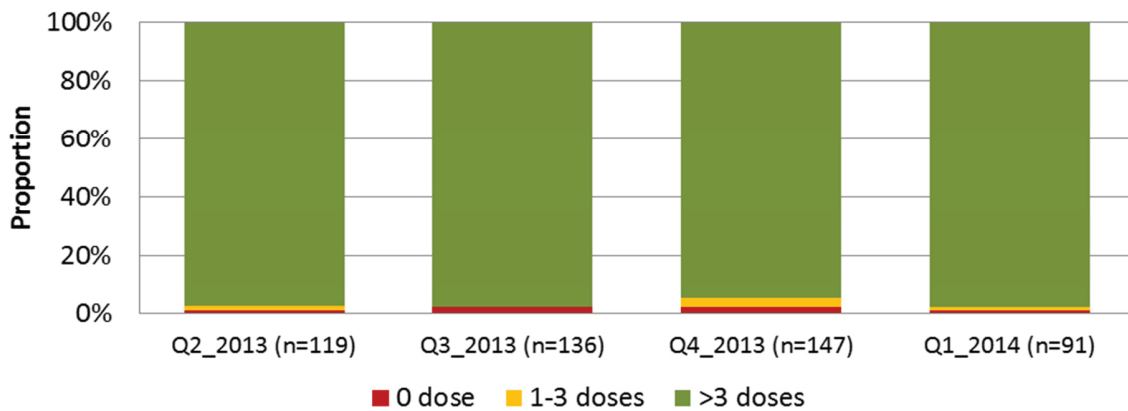
Source: CDC

Proportion of Union Councils with LQAS survey results by SIA, KP Sanctuary April 2013–March 2014



Note: LQAS not conducted in KP in March

Proportion of NPAFP cases 6 to 35 months, by OPV status, KP Sanctuary, April 2013–March 2014



*Data as of 15 April 2014

OWNERSHIP

Percent of Union Councils with indicators met for each campaign

KP Sanctuary	Jul '13	Aug '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14 R1	Jan '14 R2	Feb '14 R1	Feb '14 R2	Mar '14 R1	Mar '14 R2
UPEC meeting held	73	76	91	33	83	77	53	73	46	84	68	85
UPEC chaired by UCMO	100	100	100	100	100	100	100	100	100	100	100	100
Microplan Validated	72	75	77	70		89		71				

Percent of teams with indicators met for each campaign

≥1 Government	72	85	84	82	100	97		80				
≥1 Local	73	88	85	82	100	99		78				
≥1 Female	55	64	60	63	98	82		53				

Abbreviations: UPEC=Union Council Polio Eradication Committee
UCMO=Union Council Medical Officer

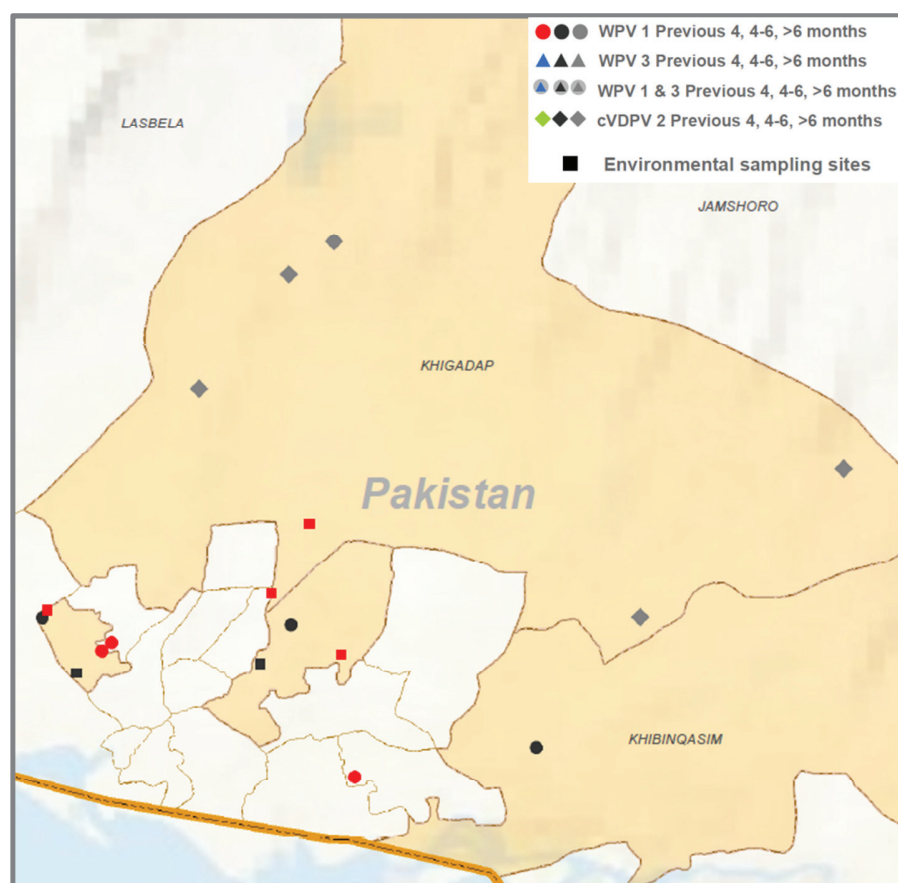
No campaign
No data

Source: Pakistan National Emergency Action Plan Indicators, WHO-Pakistan

KARACHI POLIOVIRUS SANCTUARY

WPV & cVDPV cases and environmental surveillance results, Karachi Sanctuary, 9 April 2013 to 8 April 2014

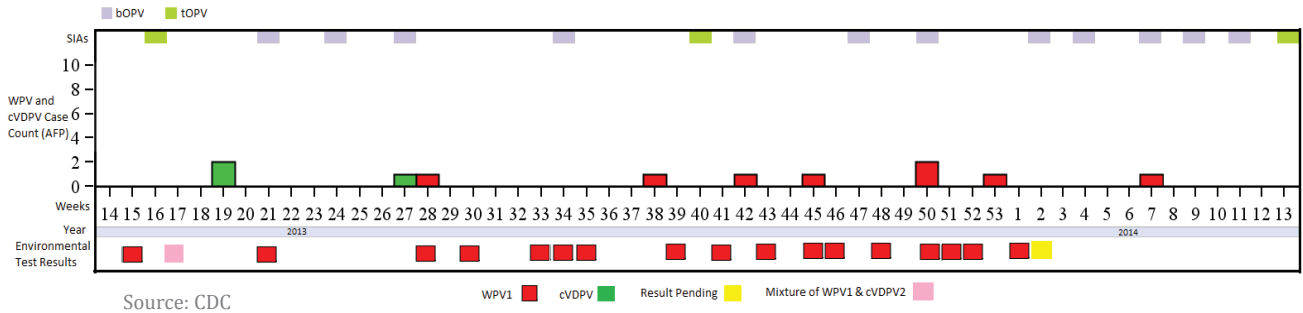
Red squares indicate environmental sampling sites where WPV1 were detected.



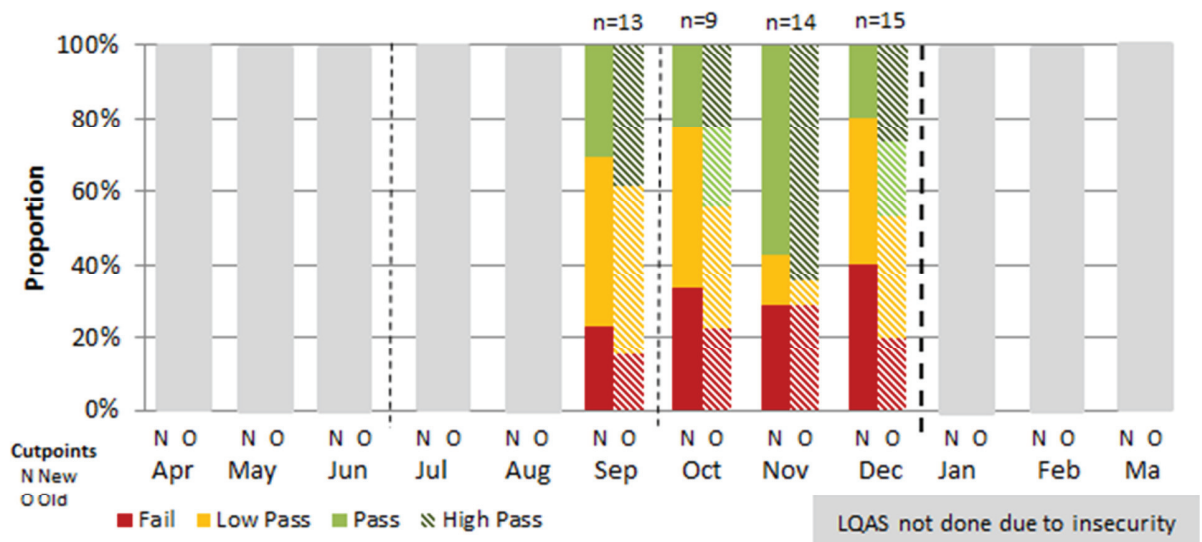
All of Karachi is currently serving as the WPV reservoir within Sindh.

Source: WHO

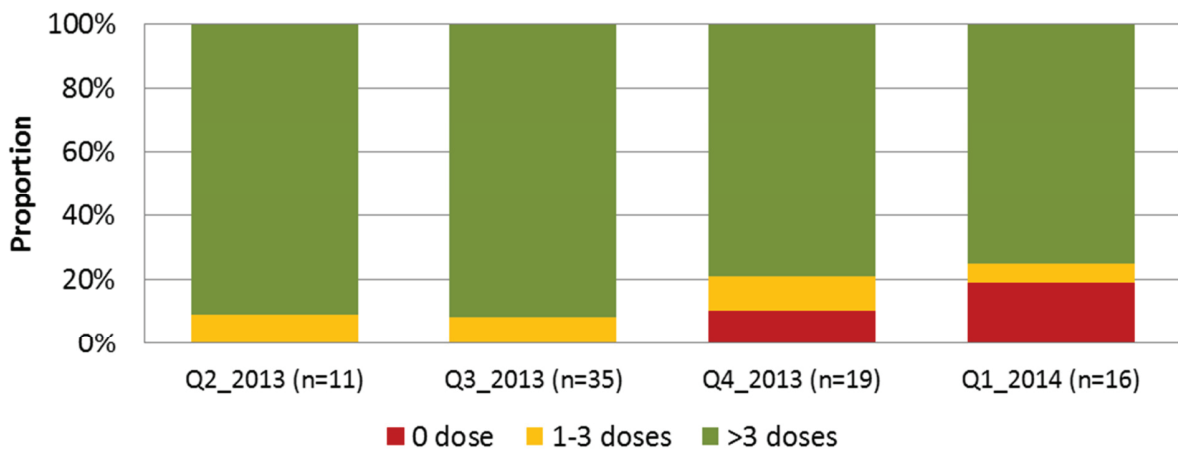
WPV cases by week of onset and environmental surveillance results, Karachi Sanctuary, Pakistan April 2013–March 2014*



Proportion of union councils with LQAS survey results* by SIA, Karachi Sanctuary, April 2013–March 2014



Proportion of NPAFP cases 6 to 35 months, by OPV status, Karachi Sanctuary, April 2013–March 2014



*Data as of 15 April 2014

OWNERSHIP

Percent of Union Councils with indicators met for each campaign

Sindh	Jul '13	Aug '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14 R1	Jan '14 R2	Feb '14 R1	Feb '14 R2	Mar '14 R1	Mar '14 R2
UPEC meeting held	100	99	100		100	84	89	100		94		99
UPEC chaired by UCMO	100	100	100		100	100		100		100		100
Microplan Validated	100	98	97		98	100		99		99		98

Percent of teams with indicators met for each campaign

≥ 1 Government member	98	98	96		96	97		96		98		97
≥ 1 Local member	99	99	96		98	98		98		99		98
≥ 1 Female member	93	93	91		92	92		92		92		93

Abbreviations: UPEC=Union Council Polio Eradication Committee
UCMO=Union Council Medical Officer

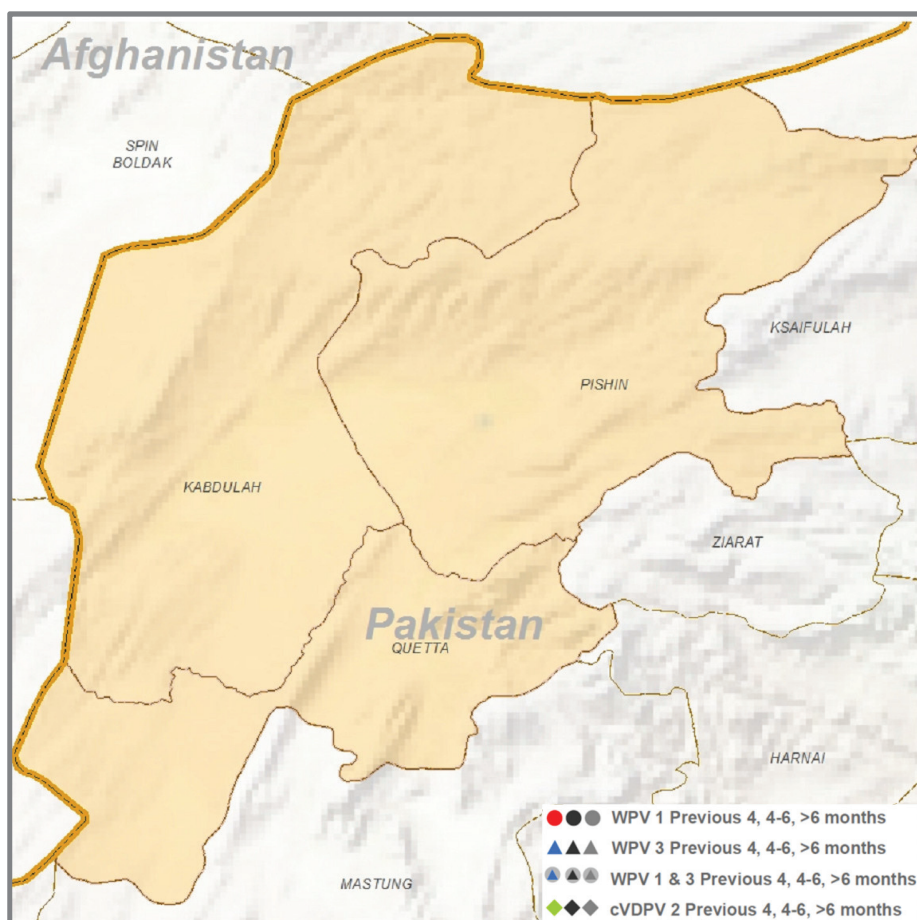
No campaign
No data

Source: Pakistan National Emergency Action Plan Indicators, WHO-Pakistan

Data shown above are for all of the Sindh Province

QUETTA RISK AREA (THE THREE HIGH-RISK DISTRICTS OF QUETTA, KILLA ABDULLAH, AND PISHIN)

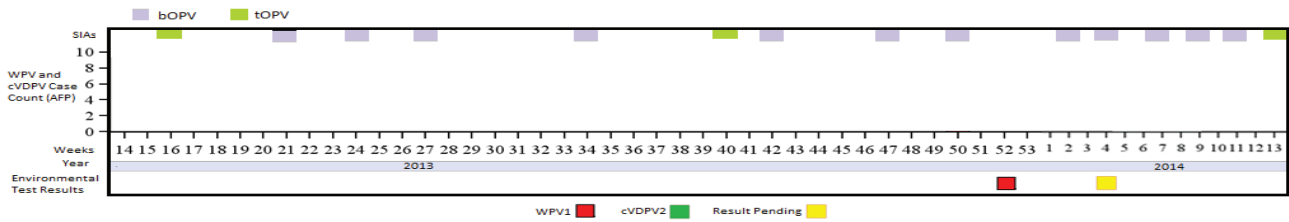
WPV and cVDPV2 cases, Quetta Risk Area, April 9 2013 to April 8 2014



All endemic WPV circulation within the Quetta block has apparently been interrupted. Pishin, Killa Abdullah and Quetta now constitute a risk zone for reintroduction of WPV.

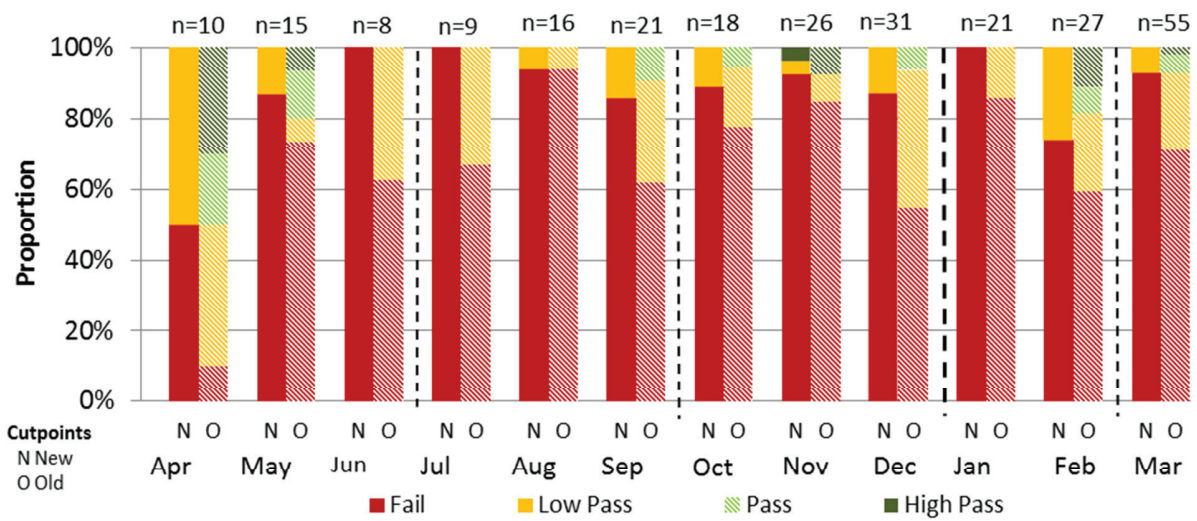
Source: WHO

WPV cases by week of onset and environmental surveillance results, Quetta Risk Area, Pakistan April 2013–March 2014*

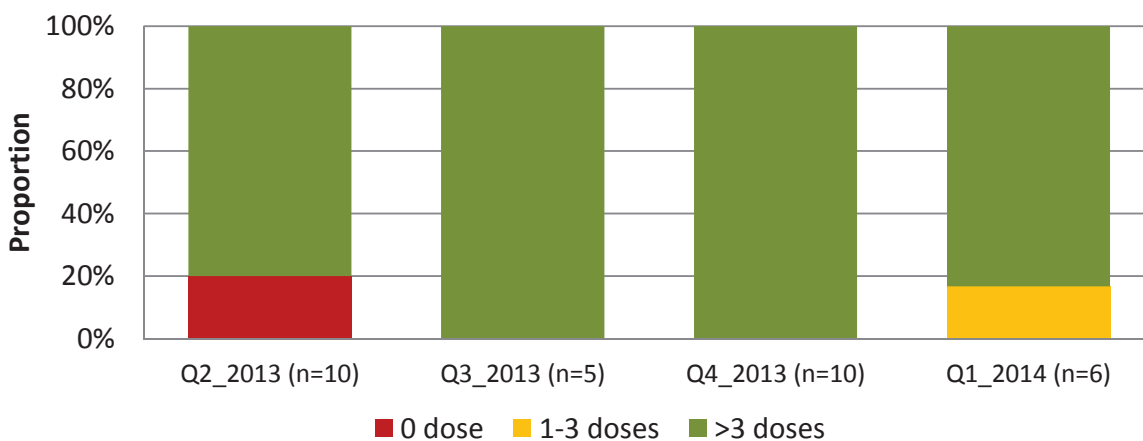


Source: CDC

Proportion of Union Councils with LQAS survey results* by SIA, Quetta Risk Area, April 2013–March 2014



Proportion of NPAFP cases 6 to 35 months, by OPV status, Quetta Risk Area, April 2013–March 2014



*Data as of 15 April 2014

OWNERSHIP

Percent of Union Councils with indicators met for each campaign

Balochistan	Jul '13	Aug '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14 R1	Jan '14 R2	Feb '14 R1	Feb '14 R2	Mar '14 R1	Mar '14 R2
UPEC meeting held	57	64	70		70			48	29	66	34	85
UPEC chaired by UCMO	100	100	99		96	100		100	100	100	99	100
Microplan Validated	100	80	78			68		69	88	92		90

Percent of teams with indicators met for each campaign

≥ 1 Government member	46	47	71		87	41		69	49	90	90	81
≥ 1 Local member	66	73	100		100	69		96	75			100
≥ 1 Female member	66	42	62	0	49	29		52	75	64	84	51

Abbreviations: UPEC=Union Council Polio Eradication Committee
UCMO=Union Council Medical Officer

No campaign
No data

Source: Pakistan National Emergency Action Plan Indicators, WHO-Pakistan

Data shown above are for all of the Balochistan Province

COMMUNICATION AND SOCIAL MOBILIZATION

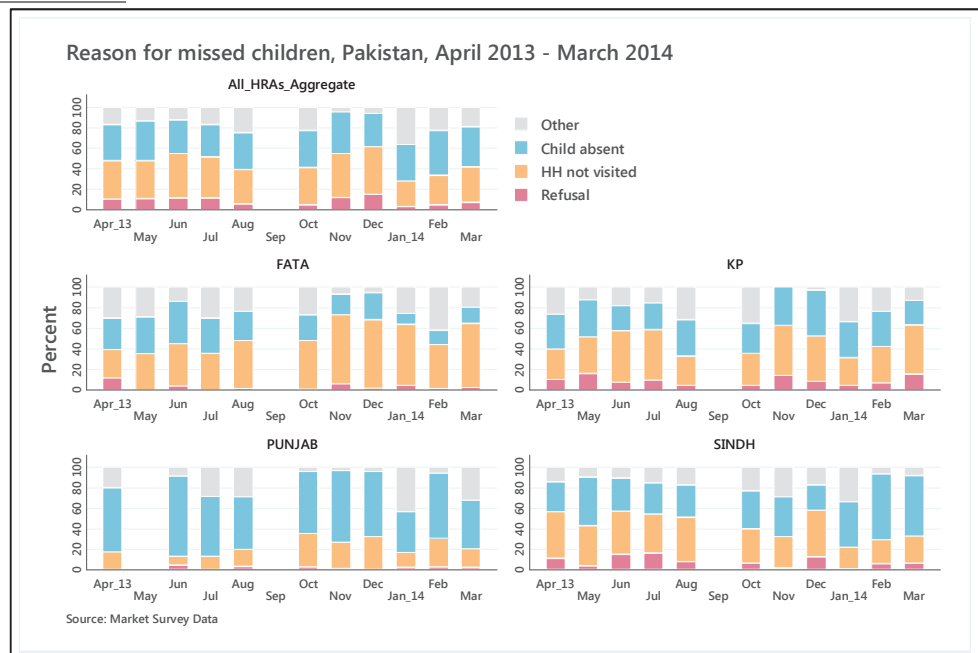
PERFORMANCE

With consistent support from the Communication Network’s (COMNet) nearly 2,000 social mobilizers, the polio programme has brought refusals down to unprecedented levels: for the last three NIDs, only 0.17% of the targeted 34 million children <5 years of age were refused OPV, the lowest refusal rate among endemic countries. Harvard polling data validates this progress showing that where vaccinators reach the doorstep, over 95% of caregivers in all high risk areas, including FATA, accept vaccine for their children.

This is not to say there are no social challenges impacting vaccine uptake. Despite progress, data show that progress may be fragile. Basic disease knowledge and risk perception are low in high risk districts. Even outside of FATA, 30% of caregivers among predominantly Pashtun communities believe that polio is curable and nearly a third of caregivers are not concerned about their child contracting polio.

To maintain progress, risk perception must be

Among missed children, reasons for having been missed, Pakistan, April 2013 – March 2014



elevated among the more vulnerable communities, and there must be no question about the permanence of polio nor the safety and efficacy of the vaccine.

In accessible areas, most children are missed either because vaccinators do not visit all of the households in their microplans—an issue that is partially linked to insecurity, but not entirely (as this phenomenon exists even in some relatively safe areas) – or because some children are not identified when vaccinators do reach the households or might be reported as absent by caregivers who may be reluctant to repeatedly vaccinate their children. In FATA, more than half of missed children are not vaccinated because vaccinators do not visit their household, according to market survey data. In KP, it is almost an equal mix between children reported as not available and households not visited, although refusals are creeping up, particularly due to repeated campaigns as part of the Peshawar Plan.

STRATEGY

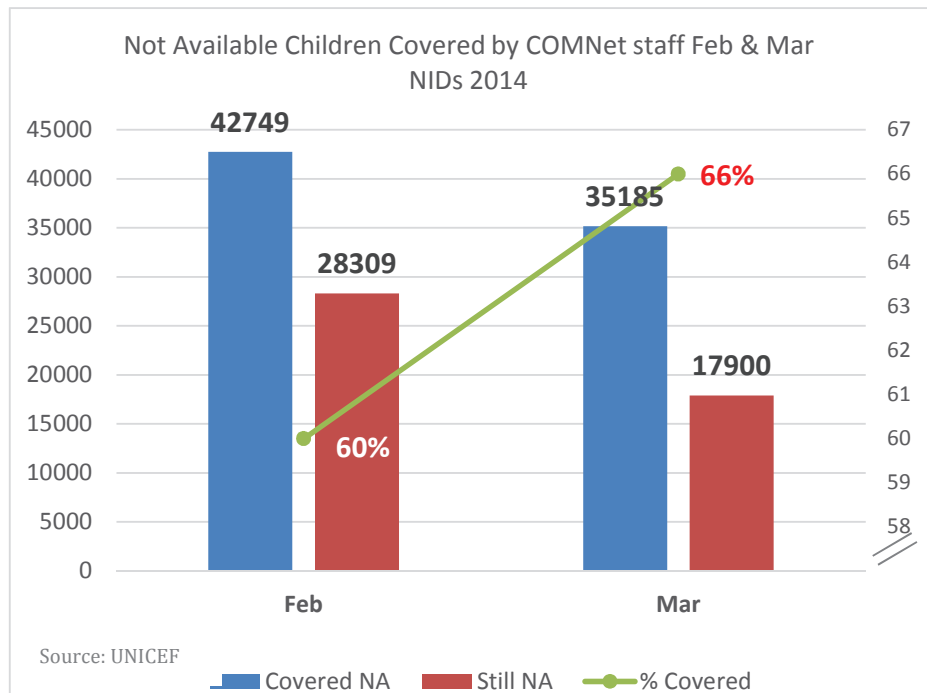
The focus of COMNet—and the broader programme—must more consistently shift to the identifying persistently missed children, especially the “not available” children. This important work has already begun in many areas, with COMNet converting over 65% of not available children in priority 1 and 2 districts where COMNet exists.

Interpersonal communication for all frontline workers – vaccinators and social mobilizers – needs much greater focus to ensure the best chance of identifying and

vaccinating children after so much effort has been expended to reach households. For children truly outside the house when teams arrive, tailored mobile strategies to reach children in markets, madrasa’s, and mosques, need to respond to local contexts. This approach will require even more reliable social data collection and analysis to develop interventions to reach all missed children.

FATA

Harvard polling data for High Risk areas of Pakistan (January 2014) reveal a striking difference between knowledge, awareness, and intent to vaccinate in FATA versus the predominantly Pashtun communities in high risk areas in the rest of the country. Only 70% of parents in FATA said they vaccinated their children with OPV in the last round, compared to 99% in the rest of the country’s high risk areas who said they vaccinated their children. The 30% most vulnerable to being missed with OPV in FATA were children of illiterate caregivers, and unskilled labourers. Among the 30% who did not vaccinate their children in FATA, 11% had never heard of polio or a disease that causes paralysis. These children may be at much higher risk of being missed by the programme.



As we approach the final leg of polio eradication, communication and social mobilization work must support efforts to resume vaccination in FATA, while at the same time ensuring the success and the momentum of the programme in the rest of the country.

In FATA, 48% of respondents heard a destructive rumour compared to 18% in non-FATA high risk areas. Even more concerning, 33% in FATA said they believed at least one of these rumours. Over 20% of caregivers in FATA thought that international organizations were at least partly responsible for vaccination in their neighbourhood, and among those, 30% said they didn't trust international organizations.

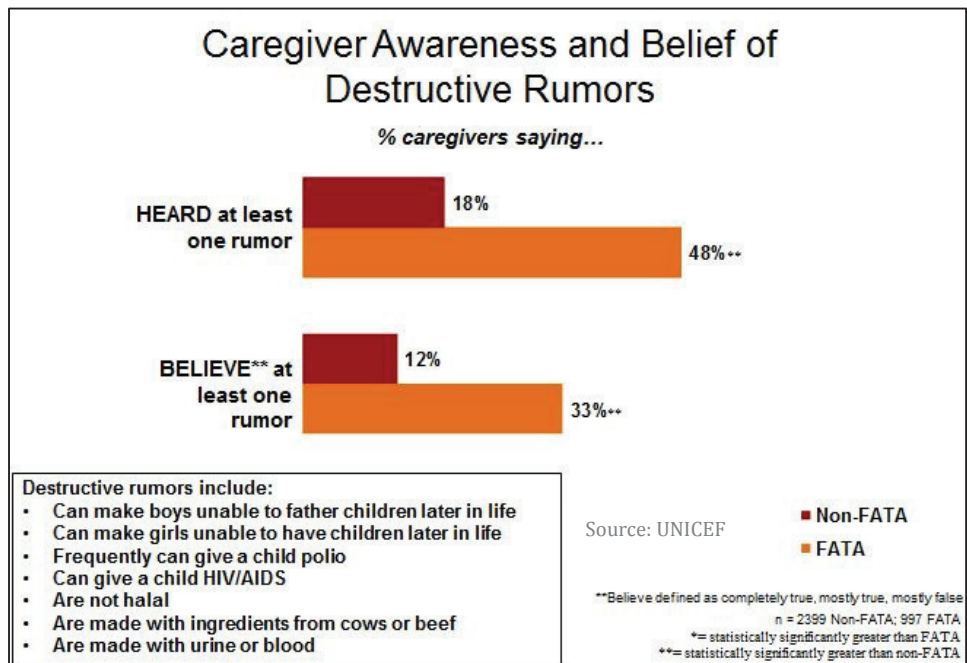
Across all the high risk areas, support for OPV diminishes as you travel further outside the nuclear family and into broader social structures. But social support for OPV is significantly lower in FATA. For example, approximately 86% of caregivers said their children's grandparents thought polio drops were a 'very good' or 'somewhat good idea.' In FATA, this figure is less than 50% for maternal grandparents, and less than 60% for paternal grandparents. Only 49%

of people said their religious leaders were supportive of polio, compared with over 90% in the rest of the country. Only 25% said their traditional healers were supportive, and 65% said their neighbours were supportive.

Religious engagement needs further strengthening, despite the significant effort to engage religious leaders in FATA, including work undertaken with the National Islamic University and through the national and international Islamic Advisory Group. In the October NID, over 1 million voice messages in the voice of Mufti Rafi Usmani of Jamia Dar Ul Uloom, were delivered to approximately 1.5 million mobile recipients in four districts of KP, including Peshawar. These and other more focused efforts need to be intensified in FATA.

ACCESS

Without vaccinating children in inaccessible areas, Pakistan, and the world, will continue to be vulnerable to polio. Mobile population strategies, transit points and cross-border efforts can help mitigate the impact of not reaching children in inaccessible areas. Work is currently being strengthened to understand characteristics of target children at critical crossing points, and be able to better assess whether vaccination teams are reaching all children possible. Transit mobilizers have begun to be placed at critical border crossings, both within Pakistan and Afghanistan, but this approach needs significant scale up if it is to have impact.



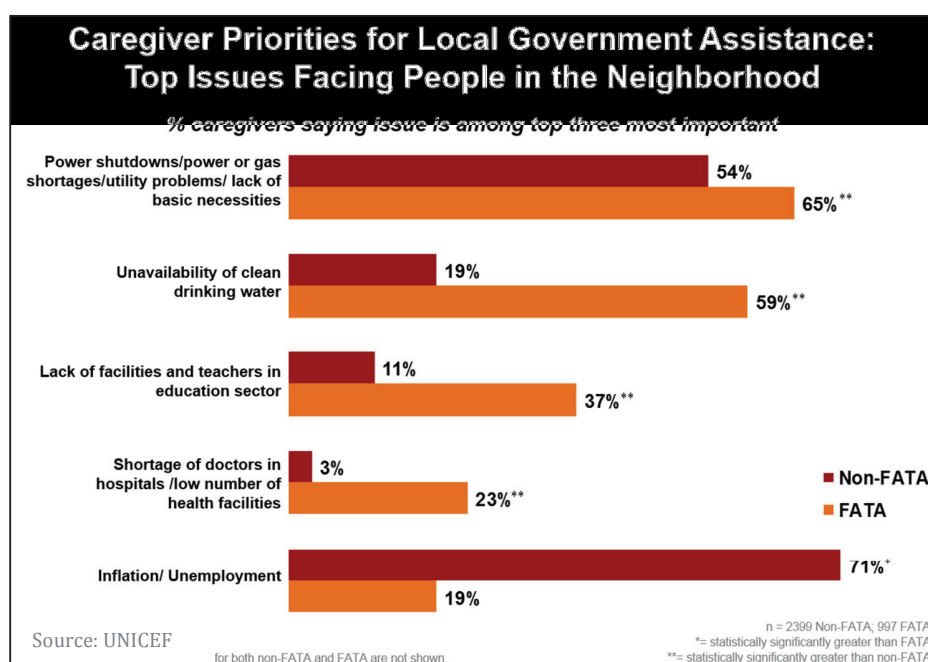
Efforts to “prepare the ground” for when vaccination can be resumed are ongoing, as COMNet staff map facilities and vulnerable populations in and around North and South Waziristan, and support self-vaccination programmes in the inaccessible areas. Currently, over 400 children in North and South Waziristan have been vaccinated through a self-vaccination strategy of stocking up health centres for caregivers to bring OPV home, or bring their children to the centre. Although 400 among 260,000 may not seem like a significant number to mention, if this behaviour catches on, it has the potential for impact. With additional strategies at work in the next quarter, we could see this figure reaching into the thousands. COMNet staff are also contributing to local influencer mapping which informs negotiation strategies inside and outside of FATA.

This advance-work, both in creating a ring of immunity around inaccessible areas, as well as creatively working to better understand the reality on the ground, will form the foundation for activities when vaccination is resumed .

BEYOND OPV

Harvard polling has revealed a clear picture of community demand. Neither polio vaccination nor other health services are high priorities in comparison with clean water, electricity and education. Nearly 60% of caregivers in FATA said clean water was the highest priority they wanted local Government to address.

While the Peshawar Plan is meant to provide additional services beyond OPV, provision is based upon a coupon system, which is not always consistently implemented, or effectively linked to polio campaigns. Providing additional needs that meet community demand is an area that requires greater strengthening in Pakistan.



INNOVATION

Innovation is routine in the Pakistan programme, from campaigns like the *Sehat ka Insaf* in Peshawar, to work reaching out to religious leaders and publications; to the BrainTrust, which brought together over 15 international and local experts for creative brainstorming on how to increase acceptance and demand for polio vaccination.

These learnings have made the Pakistan polio programme one of the most dynamic and responsive in the world. To attain eradication, the Pakistan programme must reach all children - whether they are out of the house during campaign visits, unavailable to teams who are not asking the right questions at the doorstep, or residing in communities banned for vaccination teams. The key to Pakistan must be an expanded definition of ‘access’ – one that goes beyond access to insecure areas, and addresses access to children in all households.

PROGRAMME INFORMATION

ACCESSIBILITY AND SECURITY

The overall security situation throughout Pakistan continues to be extremely volatile. Despite ongoing peace talks between the Government and the Pakistan Taliban and the announcement of a month-long ceasefire by the Pakistan Taliban at the start of March (since expired), the country continues to witness terrorist attacks. The possible political and security situation in Afghanistan in 2014, owing to the Presidential elections this year and parliamentary elections the following year, may have an overspill effect in FATA.

Targeted attacks on healthcare workers in Pakistan remain a frightening reality that continues to have effects on vaccinators and their efforts. Since the first attack in July 2012 in Karachi, assailants have killed dozens of polio workers and police officers assigned to protect them. No group has claimed responsibility for these attacks and the motivations behind the attacks are unclear. This insecurity has resulted in decreased access to key populations (especially in KP and in Karachi) and has impaired the ability of the programme to provide on-site supervision and to make changes needed for programme improvement. The programme has adapted to improve security by encouraging Provincial Security Coordination Committees in KP and Sindh to convene regularly. Chaired by Home Secretary, the committees seek engagement of police and security forces in District Polio Eradication Committees in key districts of KP and Karachi and ensure that Civil-Military Coordination Committees are functional for FATA.

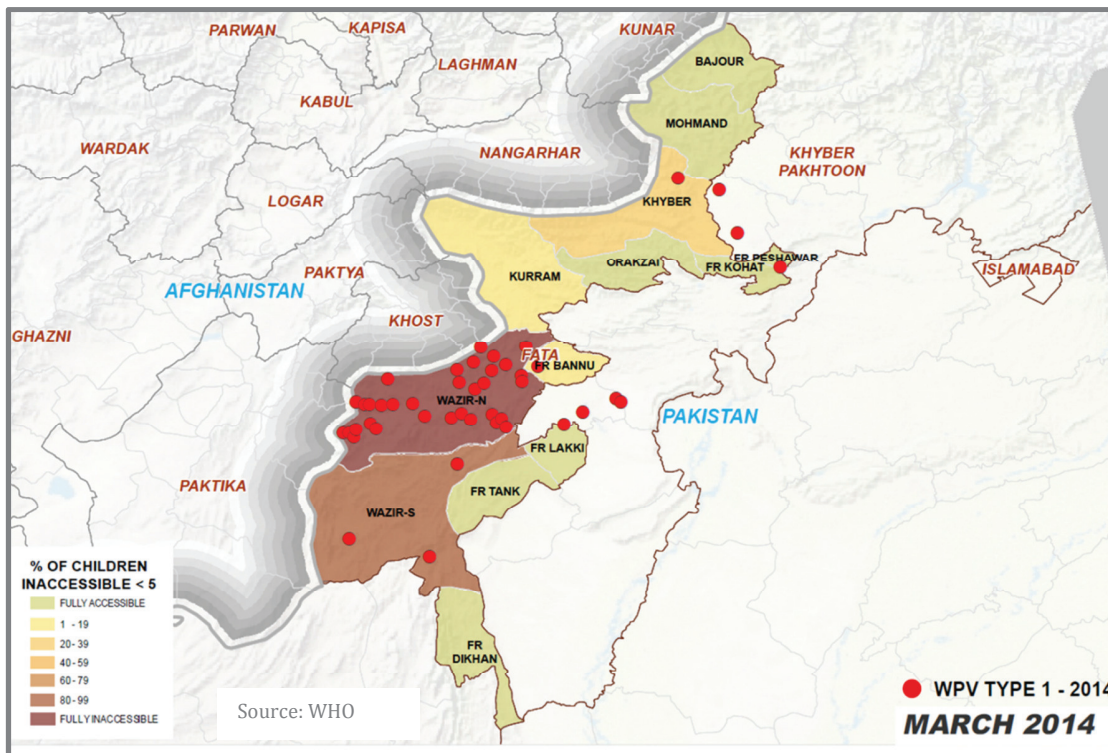
To deal with issues of insecurity and community perceptions about polio vaccination efforts, since early 2014, the programme has supported the development and implementation of innovative KP Government-led (and supported fully by the ruling political party cadres in the community) campaigns like the *Sehat ka Insaf* where significant security measures with over 4,000 security personnel have been deployed to conduct special Sunday SIAs in and around Peshawar. These activities, targeting nine diseases, recently successfully vaccinated over 7 million children in 12 successive Sundays without any violent incidents. More recently, Karachi began carrying out similar campaigns based on this successful model.

With the combined challenges of large proportions of children being missed due to inaccessibility and the attacks affecting the polio programme, Pakistan's security analysts are seeking to strengthen the national capacity for observation, documentation and analysis of the ongoing security situation surrounding the programme.

Inaccessibility remains a considerable challenge in North and South Waziristan, where the ban imposed by non-state actors since June 2012 continues to be in effect. Access to children in certain districts of other agencies within FATA, especially in Khyber and Kurram Agencies, in FR Tank and FR Bannu, has also been restricted. It is to be noted that access to children in Bara Tehsil in Khyber Agency has been restricted for more than four years, though this area is not affected by the ban imposed by militant groups.

While mitigation strategies (transit points, COMNet etc.) are being implemented, the programme is exploiting all avenues to further engage and encourage civilian and military leadership to take measures to help reach and vaccinate all children in North and South Waziristan (areas responsible for 80% of the polio cases in Pakistan). Recent commitments from the civilian and military leadership are encouraging. Through intermediaries, the leadership of other stakeholders in the region are also being systematically engaged by programme. Significant ongoing political and situational analysis is being conducted to assist in strategy formulation and implementation.

Inaccessible areas during the April 2014 SIA and 2014 WPV1 cases, Pakistan



ROTARY INTERNATIONAL'S WORK IN PAKISTAN

In April 2014, Rotary's National PolioPlus Committee in Pakistan implemented a strategy to cover transient children moving from KP and FATA into Punjab. As part of that effort, two shelters were constructed out of re-fabricated containers at Mandi Mor, District Rawalpindi and Attock to target transient families with children entering Punjab and traveling into other parts of the country. The Punjab Minister for Health Khwaja Salman Rafique inaugurated the Rotary Permanent Transit Posts on 11 April 2014, and noted in his address the importance of such strategies for reaching unvaccinated children. It is estimated that the permanent transit posts will reach an average of 1,800 children a day. Rotary has currently established 12 Permanent Transit Posts (PTPs) at various borders across the country.

Rotarians have also inaugurated a Pakistan Rotary Polio Resource Centre in Gulshan Iqbal, one of six resource centers intended to strengthen collaboration among partners and facilitate intensified polio eradication activities in the high risk Union Councils. A health campaign was organized on 9 March 2014 in collaboration with partners to help engage the mobilizers and polio teams. Each Rotary club has also been charged with creating an immunization center, and currently 14 are in operation. Rotarians have also distributed vaccine carriers and Speaking Books in schools to raise awareness among children about how polio is spread and the importance of getting vaccinated. The National PolioPlus Committee in Pakistan is working with the Mother & Neonatal Child Health (MNCH), Government of Sindh and Telenor Pakistan to develop and facilitate a monitoring system by providing 552 cell phones to Community Based Workers

(CBWs) to help reach newborns and children <5 years of age. The project was part of a matching grant funded through Rotary International and sponsored by Rotary Club Baroda Metro, India and Rotary Club Karachi Kolachi. The cell phones and network connections were provided through Telenor Pakistan and will help target missed children and refusals in their catchment areas and expand Routine Immunization.

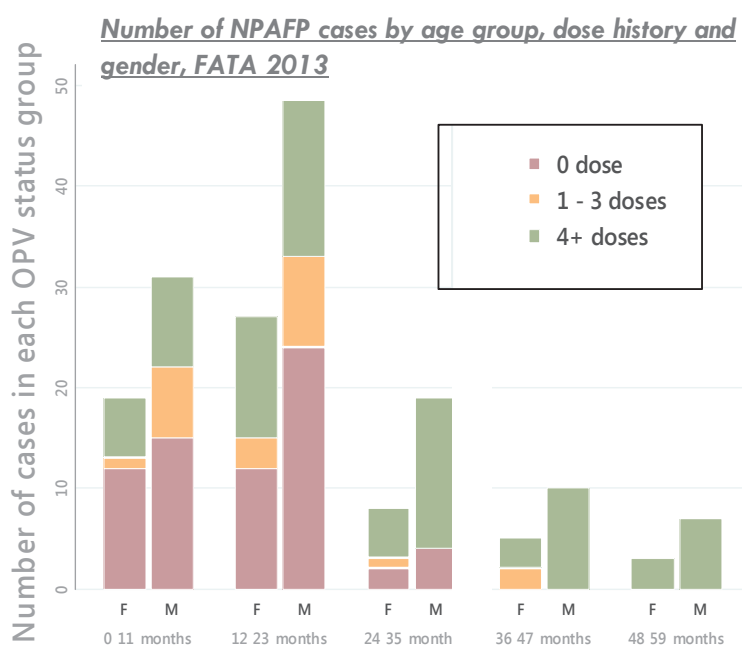
PERFORMANCE INDICATORS

IMMUNIZATION AND SURVEILLANCE

(See also Six-month–annualized standard immunization and surveillance indicators by province among children aged 6–35 months with NPAFP, Afghanistan and Pakistan October 2012 to March 2014 on page 20).

Immunization: Dose history profile of NPAFP cases

In 2013, the recall dose history for children with NPAFP cases in Pakistan indicated under-immunization (<4 OPV doses) of 6% in children <5 years of age. Subnational review indicates shows that in FATA, 52% of children had a history of <4 OPV doses. A detailed review of cases in FATA by birth cohort shows that 70% of all children <24 months of age are under and un-immunized.



Source: UNICEF

Surveillance: Gender profile of NPAFP cases

Although the NPAFP rate in FATA consistently reaches the standard of >2/100,000 children <15 years of age, and there is no difficulty in documenting the circulation of WPV in the population, there is evidence of biased detection that indicates potential under-estimate of the WPV burden and distortion in the representativeness of NPAFP cases. In 2013, comparison of NPAFP cases across the endemic countries reveals an expected male predominance in Afghanistan and Nigeria at a consistent ratio of 1.2:1 (male to female); for Pakistan overall, the ratio was 1.5:1. Subnational review of the gender profile of NPAFP cases in Pakistan shows an even more pronounced male gender imbalance; for cases identified in FATA, the ratio was 1.7:1. This strongly suggests that female children in FATA are less likely to be identified by the AFP surveillance system as compared to Pakistan at the national level.

GPEI POLIO ERADICATION AND ENDGAME STRATEGIC PLAN 2013–2018, PAKISTAN

STRATEGIC PLAN OBJECTIVE	OUTCOME INDICATORS (2013)	RESULTS	STATUS
Poliovirus Detection and Interruption: Complete the interruption of wild poliovirus transmission globally and more rapidly detect and interrupt any new outbreaks due to vaccine-derived polioviruses	All wild poliovirus transmission stopped by the end of 2014		NA*
	All new cVDPV outbreaks stopped within 120 days	All cVDPV cases in 2013 were continuation of 2012 emergence.	NA
	OUTPUT INDICATORS (2013)		
	Achieve and maintain an NPAFP rate of $> 2/100,000$ in all states/provinces of high-risk countries and maintain an NPAFP rate of $> 2/100,000$ in all states/provinces	National NPAFP rate during April 2013 to March 2014 period was 6.0/100,000, which is almost a 3% decrease from the previous rolling year. Only 75% of provinces have maintained NPAFP $>2/100,000$ this time, compared to 100% the previous rolling year	Not Fully Met
	Achieve and maintain adequate stool sample collection in 80% of cases in all states/provinces	Nationally the proportion of AFP cases with adequate stool was 90%. All provinces have maintained adequate stool collection in $\geq 80\%$ of AFP cases during April 2013 to March 2014, a small increase from the previous year.	Met
	LQAS passed at 90% threshold in all high-risk areas	Over the last 12 months, of the 901 LQAS assessments conducted in the sanctuaries and risk area, 5% have passed at the 90% threshold and 34% have passed at the 80% threshold. Performance has been particularly poor in Quetta.	Not Met
	Establish full safety and security framework	A plan to provide security to UN polio workers has been developed and is supported by all stakeholders. A framework for operating in insecure areas has been incorporated into the current version of the National Emergency Action Plan. Discussions and efforts with provincial and national authorities continue to enhance security for all government health workers involved in SIAs,	Established
	All current cVDPV outbreaks stopped by end-2013	cVDPV cases have occurred within the previous 6 months in FATA and Karachi; ongoing observation is warranted	Not Met

* Not applicable

SYNOPSIS

- *Epidemiology*: There is an ongoing outbreak of WPV1 and cVDPV2 in North Waziristan that started around April 2013 and has caused a surge in cases and exportation to Afghanistan and other parts of Pakistan.
- *Immunization*: Polio vaccination remains suspended in North Waziristan. Elsewhere in Pakistan, the programme has generally maintained an immunity level that is preventing re-establishment of transmission, although there are weaknesses, such as the low quality of SIAs in Balochistan.
- *Security*: While security of polio vaccination teams remains a serious concern in Pakistan, the recent completion of 12 consecutive Sunday vaccination campaigns in Peshawar provides an example of how, with strong political commitment, SIAs can be carried out without violence.
- *Surveillance*: Although overall strong, some indicators suggest decreased surveillance performance. The percentage of WPV1 isolates with less genetic linkage than expected has increased since 2012. Detection of long-standing WPV circulation only by environmental surveillance provides virologic evidence of gaps in AFP surveillance. Analysis of NPAFP cases suggests some opportunity for under-reporting of cases in FATA.
- *Ownership*: The high degree of political commitment in KP is encouraging and has already produced very concrete results. The declining number of Union Council Polio Eradication Committee (UPEC) meetings held in FATA is concerning.
- *Community Demand*: Harvard polling results show a high demand for polio vaccination among Pakistan's Pashtun population; this is not the case in FATA.

NIGERIA

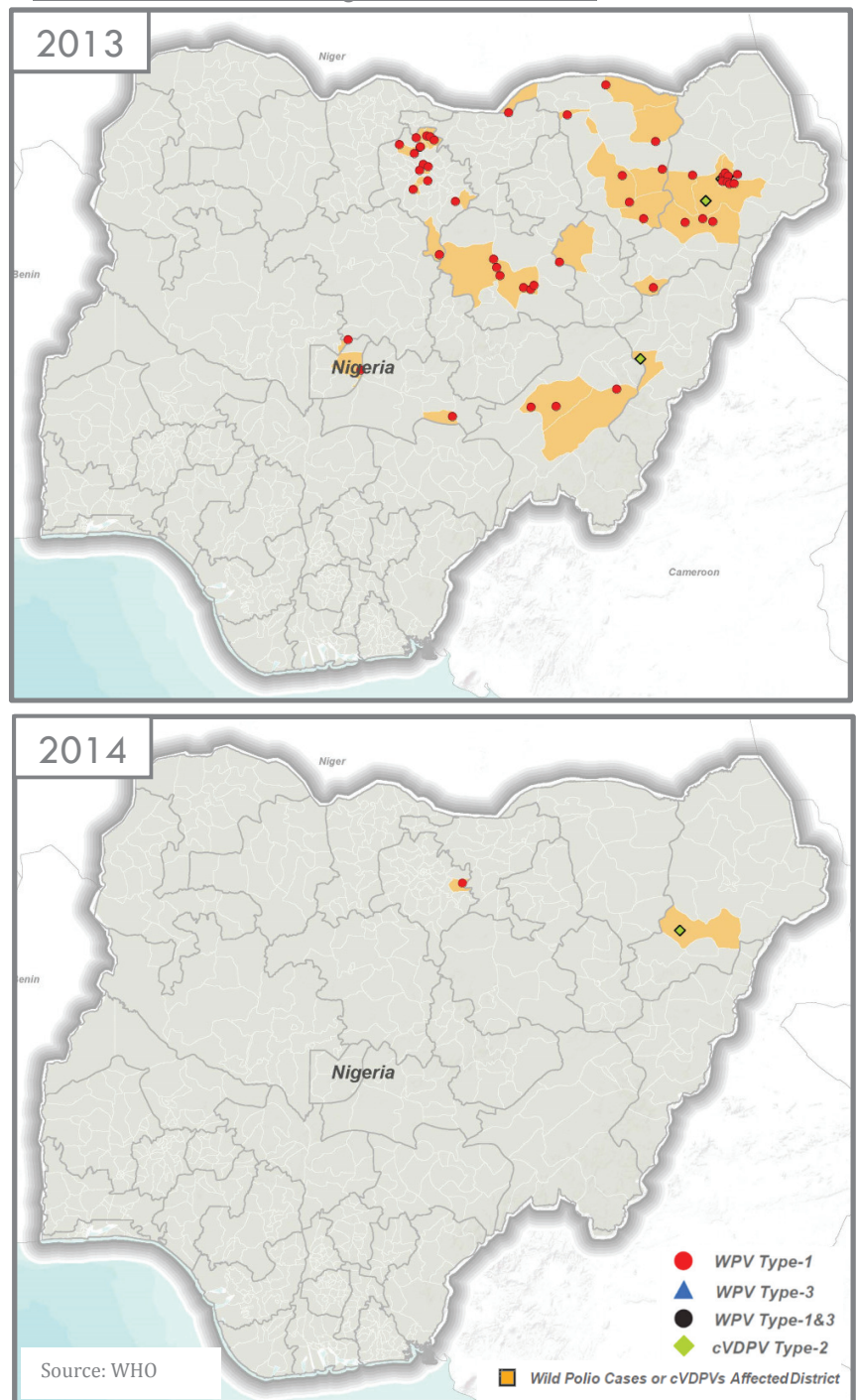
NATIONAL POLIO OVERVIEW

The number of WPV cases in Nigeria decreased from 122 in 2012 to 53 in 2013. No WPV3 has been detected since November of 2012. During 2014, as of 28 April, there have been two WPV1 cases confirmed to date (in Kano), compared with 14 WPV1 cases during the same time period in 2013, and there have been only four WPV cases in the past six months (three as of 15 April, the reference date for cases in most of the subsequent maps and graphs). Transmission has been limited to Kano and Borno since September 3, 2013. While only one cVDPV2 case has been reported in 2014 (February 9, in Borno) environmental surveillance continues to detect cVDPV2 almost continuously in Borno and has found the virus in three of 24 specimens in Sokoto and in one of eight specimens in Kano in 2014.

Throughout 2013, Nigeria implemented a broad array of innovations in its polio programme. Considerable improvement in SIA quality was observed in both Q4 2013 and Q1 2014, and for the first time ever, >80% of Local Government Areas (LGAs) in high risk states surveyed with LQAS exceeded the 80% threshold in February and then exceeded it again during March and April IPDs. Much of this gain is due to improvements in Kano, which exceeded the national achievement by LQAS for all 2014 IPDs to date. However, insecurity in Borno continues to impede the implementation of consistent and high quality SIAs. Thus, identifying unique opportunities to increase access in Borno is a major focus of the national programme. There remains virologic evidence of AFP surveillance gaps. The number of AFP reporting sites is being increased in 2014, with a particular emphasis in Borno.

Efforts to improve SIA performance in persistently poor performing LGAs increased throughout 2013, and were effective. The proportion of persistently poor performing LGAs achieving $\geq 80\%$ on LQAS increased

WPV and cVDPV cases, Nigeria, 2013 and 2014



from 54% in March 2013 to 86% in March 2014. The geographic areas that consistently fail to deliver quality SIAs have been reduced, though certain LGAs continue to act as potential harbours for the virus due to poor performance. Since mid-2013, the EOC has formed and deployed “management support teams” to the poorest performing LGAs ahead of SIAs and has increasingly used health camps to address other felt needs in non-compliant and underserved communities. Innovative strategies such as permanent health teams and rapid administration of additional doses in Borno aim to increase coverage there. Additionally, IPV will be administered along with tOPV to 200,000 often missed children in Borno in June 2014 followed by even larger administration when more IPV becomes available in August 2014. cVDPV2 remains a concern, particularly in Borno where four cVDPV cases were detected in 2013, one thus far in 2014, and six environmental detections have occurred in 2014. Also, Sokoto (11 environmental detections in 2013; three in 2014) and Kano (two environmental detections in 2013; one in 2014) are also areas of concern for cVDPV. To address this, the national programme administered tOPV in several LGAs in Borno in December 2013, will use tOPV with IPV in Borno in June 2014, and plans to administer tOPV to all northern states in the August and November SIAs.

VIROLOGY

The genetic diversity of the WPV1 chains of transmission declined during April 2013 through March 2014 compared to the previous 12 month period. In this reporting period, viruses from two clusters were detected. One cluster (N5A) was found in areas inside and outside the North-Central Sanctuary and another cluster (N7B) was found primarily in the Northeast Sanctuary. No WPV cases have been detected in the Northwest Risk Area since September 2012.

WPV1 isolation from environmental specimens declined substantially during the high season of 2013. The most recent WPV1 isolated from Sokoto environmental samples was detected in late April 2013. This virus was most closely related to strains circulating in the North-Central and Northeast Sanctuaries at the time. The only other WPV1 detected in environmental samples was from Borno in week 42 (October) of 2013. No WPV or cVDPV has yet been detected in environmental sites initiated in Kaduna and Federal Capital Territory (FCT) in June 2013. Sampling was recently initiated at three sites in Kebbi and three sites in Katsina.

Genomic sequence analysis indicates surveillance gaps, including some chains of WPV transmission during 2013 that went undetected for more than a year.

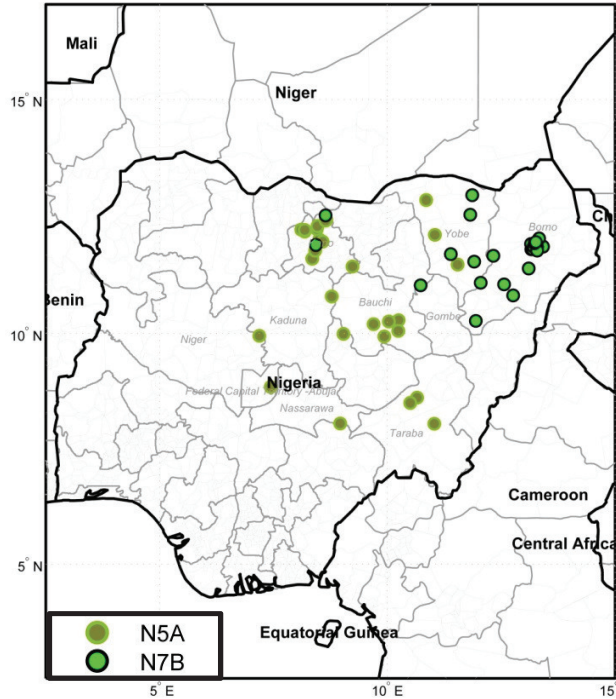
Viruses from AFP cases from five different states (Borno, Gombe, Bauchi, Kano, and FCT) had less genetic linkage than expected with sensitive AFP surveillance. Three viruses from Kano cases were orphans. Nationally, the percentage of WPV1 isolates with much less genetic linkage than expected declined substantially from 2010 to 2012 but has increased recently to 22% for 2013.

1. The genetic diversity of WPV1 strains has declined during April 2013 through March 2014 compared to the previous 12 month period.
2. WPV1 isolation from environmental specimens declined substantially during the high season of 2013.
3. Virologic data indicate continued gaps in AFP surveillance.

Wild poliovirus type 1 (WPV1) by genetic cluster and circulating vaccine-derived poliovirus type 2 (cVDPV2) by emergence, Nigeria, 2013 and 2014 to date*

WPV1

2013



2014



cVDPV2

2013



2014



*Data as of April 15, 2014.

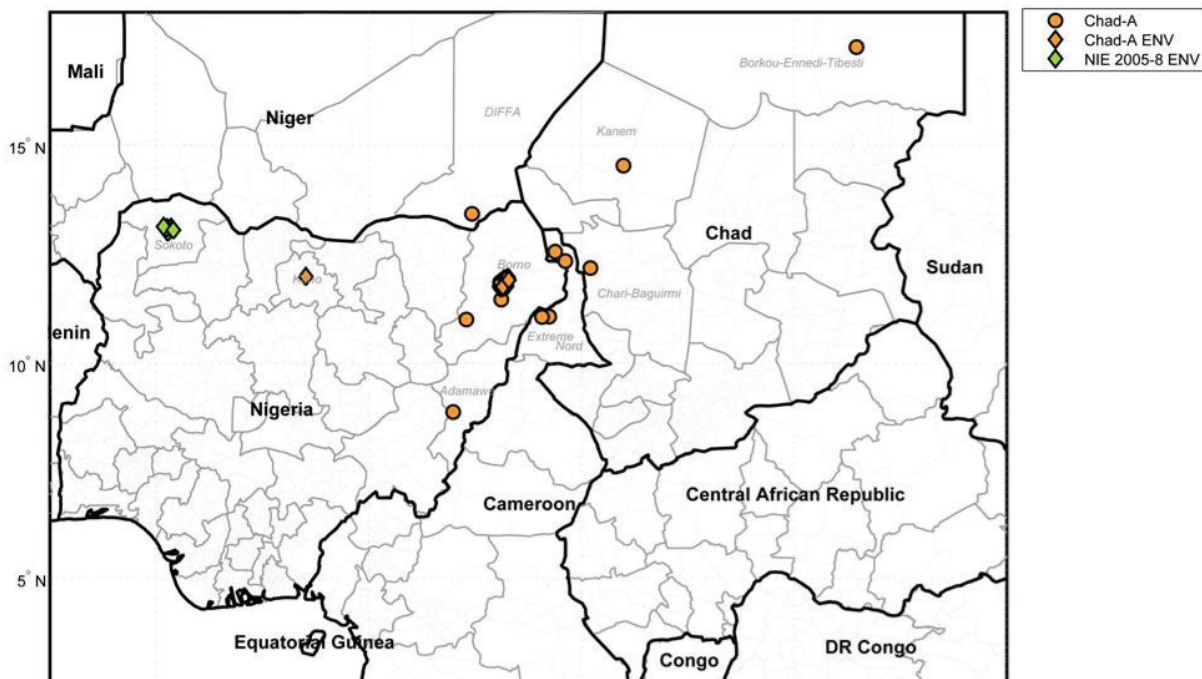
Source: CDC

CIRCULATING VDPV2 IN WEST AND CENTRAL AFRICA

cVDPV2 emergence in Nigeria: The number of cVDPV2 cases associated with circulating Nigerian lineages (from Nigerian emergences) has declined from 22 in 2011 to zero in 2013 and 2014, with the exception of a recently sequenced case; the patient sought medical care in Cameroon after onset of paralysis in March at his home in Borno, Nigeria. The VDPV2 isolate is an extreme orphan (3.2% VP1-coding nucleotide identity to its closest relative) that is genetically linked to the Nigeria group 2005-8 (which has been circulating for more than 8 years) and most closely linked to a 2011 case in Nigeria. Environmental sampling in Sokoto state continues to detect several cVDPV2s from the Nigerian emergence group 2005-8. Additionally, independent aVDPV2 emergences occurred in three states (cases in Gombe, Cross Rivers and FCT and environmental sample in Kano) during the reporting period. In addition, VDPV2 emergence in Chad has affected Nigeria, Niger and Cameroon.

cVDPV2 emergence in Chad: Three genetically linked cVDPV2s isolated from AFP cases in Chad during the reporting period were related to emergence group A of the 2012–2013 Chad cVDPV2 outbreak; the latest case had onset May 2013. The time from outbreak confirmation to the latest case was >6 months; however, this outbreak is no longer active. In early 2013, viruses linked to the Chad outbreak were detected in surrounding countries. Four Cameroon cVDPV2 cases were linked; with the latest case onset being in August, this outbreak is no longer considered active. Six cVDPV2 cases in Nigeria and cVDPV2 isolates from Borno and Kano environmental specimens during the reporting period are genetically linked to the Chad cVDPV2 group A outbreak. With 214 days since confirmation of Chad Group A circulation in Nigeria, this circulation is not controlled. A single 2013 Niger cVDPV2 case was found to be genetically most closely linked to Nigerian viruses that are part of the Chad cVDPV2 outbreak, with onset in July 2013.

cVDPV in West Africa by emergence, April 2013 – March 2014*



* Data as of 15 April 2014.

Source: CDC

POLIOVIRUS SANCTUARIES AND RISK AREAS

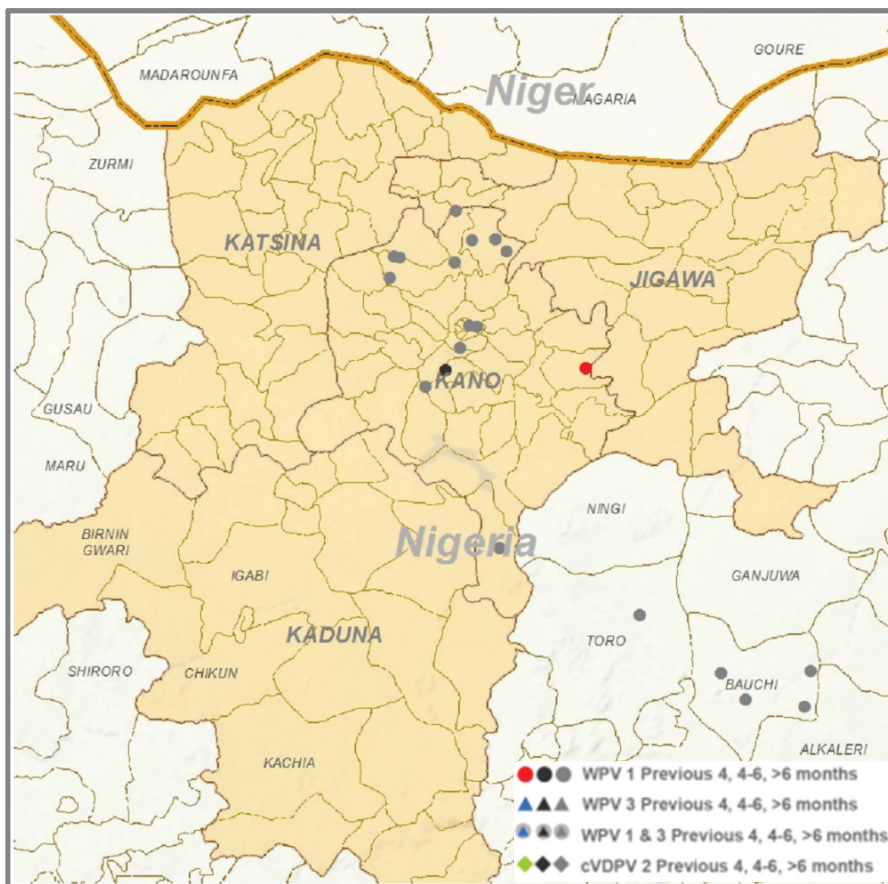
At the time of this report, Nigeria has two virus sanctuaries and one risk area:

1. North-Central Sanctuary (Kano, Katsina, Jigawa, and Kaduna)
2. Northeast Sanctuary (Borno and Yobe)
3. Northwest Risk Area (Sokoto and Zamfara)

Although WPV cases have not been identified in Katsina and Kaduna since 2012, these states with Kano and Jigawa formed a common reservoir of linked WPV clusters until that time. The Northwest states of Sokoto and Zamfara do not appear to have circulating WPV; these states are now referred to as the Northwest Risk Area.

NORTH-CENTRAL SANCTUARY

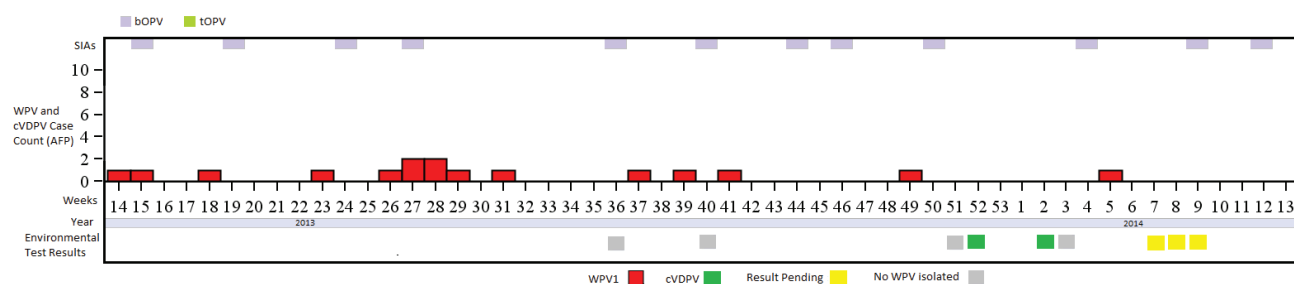
WPV and cVDPV cases, North-Central Sanctuary, 9 April 2013 to 8 April 2014



Source: WHO

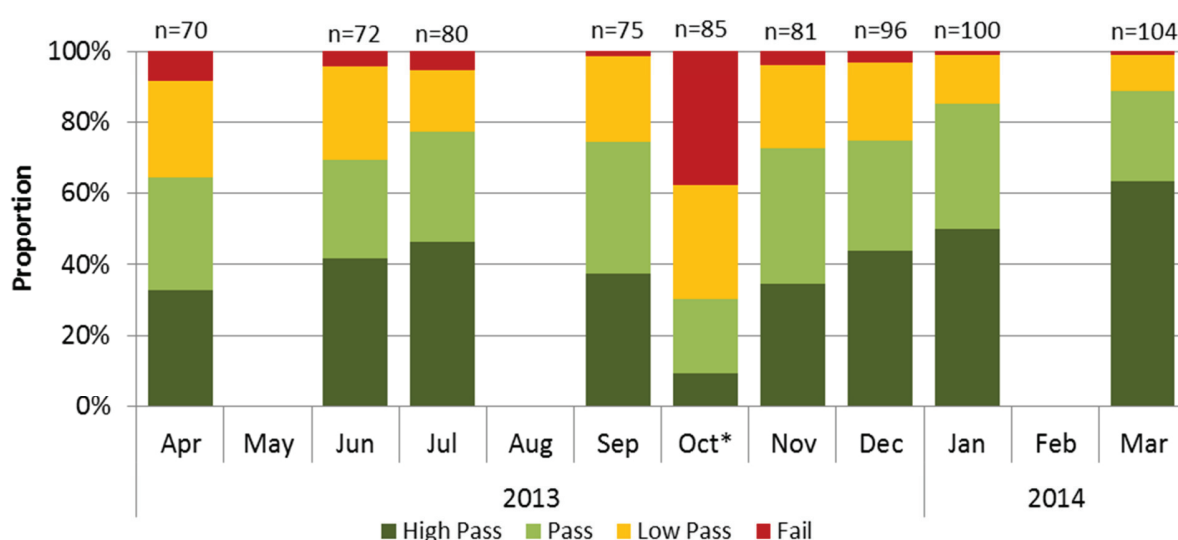
Notes regarding Nigeria's LQAS survey results (see next page). Decision rules of 0–3, 4–8, 9–19, and 20–60 for sample sizes of 60 in Nigeria provide a reasonable assessment of SIA quality at 90% (**High Pass**), 80% (**Pass**), and 60% (**Low**) thresholds (or **Fail** if below) for programmatic purposes under the assumption of moderate variability in cluster-level results. These surveys do not allow accurate statements about vaccination coverage.

WPV and cVDPV cases by week of onset and environmental surveillance results, North-Central Sanctuary, Nigeria April 2013–March 2014*



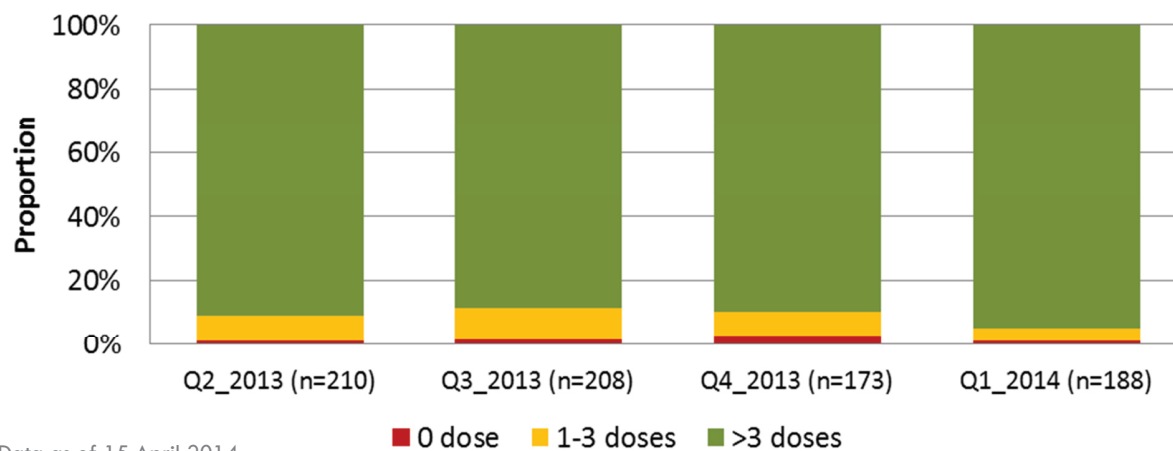
Source: CDC

Proportion of LGAs with LQAS survey results by SIA, North-Central Sanctuary, April 2013–March 2014



*The October round was a combined measles OPV-measles campaign.

Proportion of NPAFP cases 6 to 35 months, by OPV status, North-Central Sanctuary, April 2013–March 2014



*Data as of 15 April 2014

OWNERSHIP

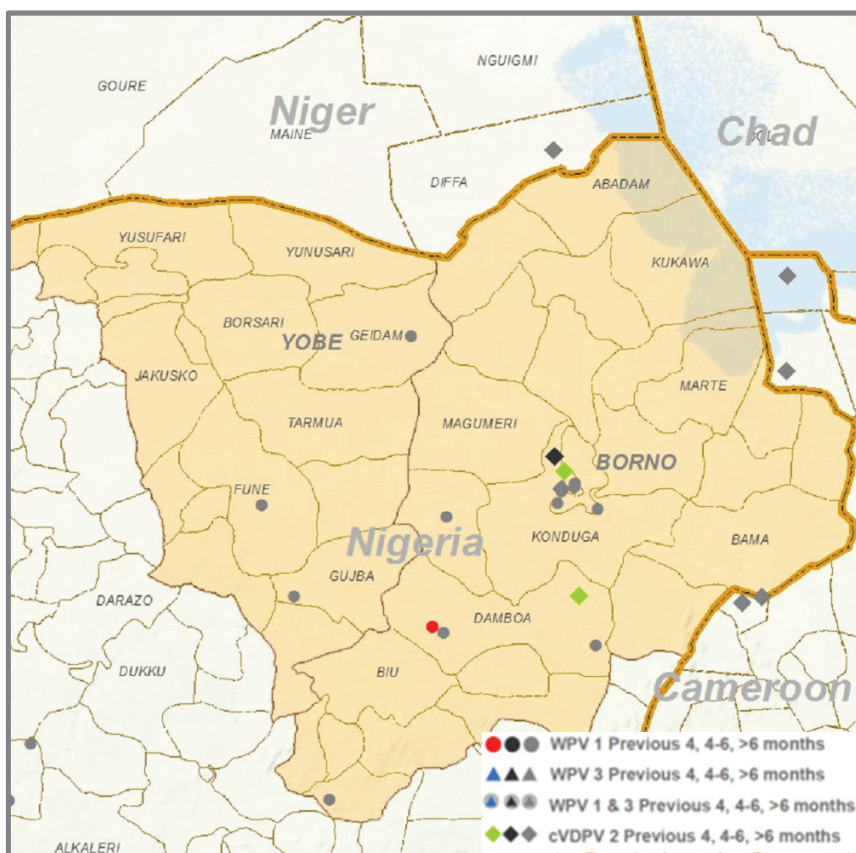
North Central Sanctuary	Percent of LGAs meeting indicators 1 week pre-campaign							Percent of LGAs meeting indicators 3 days pre-campaign						
	Jul '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Mar '14	Jul '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Mar '14
# of LGAs participating	128	128		128	120	128	128	128	128		128	120	128	128
% of LGA task forces that met	42	70		77	35	79	80	96	100		100	69	98	99
% of LGA counterpart funding released	33	28		38	32	34	34	82	93		82	43	71	66
Jigawa														
State task force met (yes, no)	No	No		No	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes
State counterpart funding released (yes, no)	No	No		No	No	No	No	Yes	Yes		Yes	Yes	No	No
Kano														
State task force met (yes, no)	No	No		Yes		Yes	Yes	No	Yes					
State counterpart funding released (yes, no)	Yes	No		Yes		No	Yes	Yes	Yes					
Kaduna														
State task force met (yes, no)	No	No		No	No	Yes	Yes	Yes	Yes			Yes	Yes	Yes
State counterpart funding released (yes, no)	No	No		No	No	No	No	No	Yes			No	No	No
Katsina														
State task force met (yes, no)	No							Yes						
State counterpart funding released (yes, no)	No							Yes						

Abbreviations: LGA=Local Government Area
 Source: Nigeria Polio Campaign Dashboard, WHO-Nigeria

No campaign
 No data

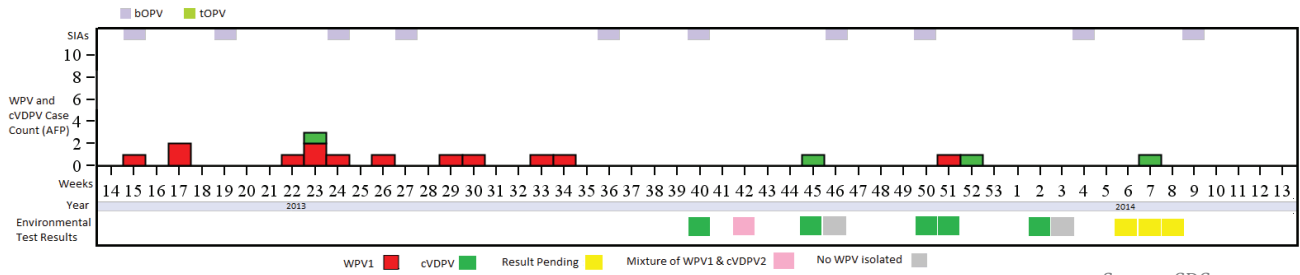
NORTHEAST SANCTUARY

WPV and cVDPV cases, Northeast Sanctuary, 9 April 2013 to 8 April 2014

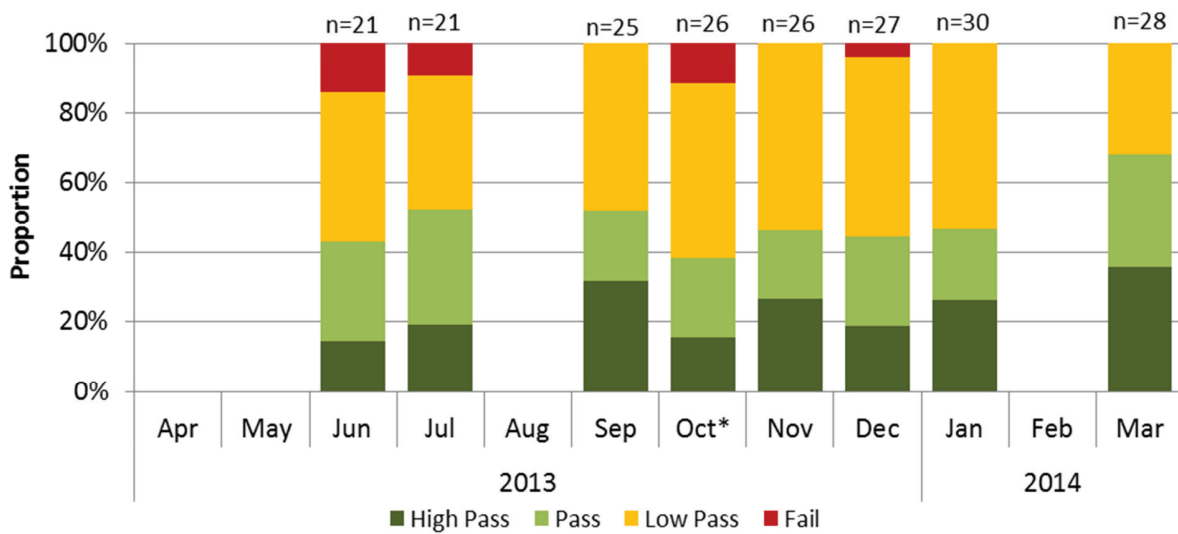


Source: WHO

WPV and cVDPV cases by week of onset and environmental surveillance results, Northeast Sanctuary, Nigeria April 2013–March 2014

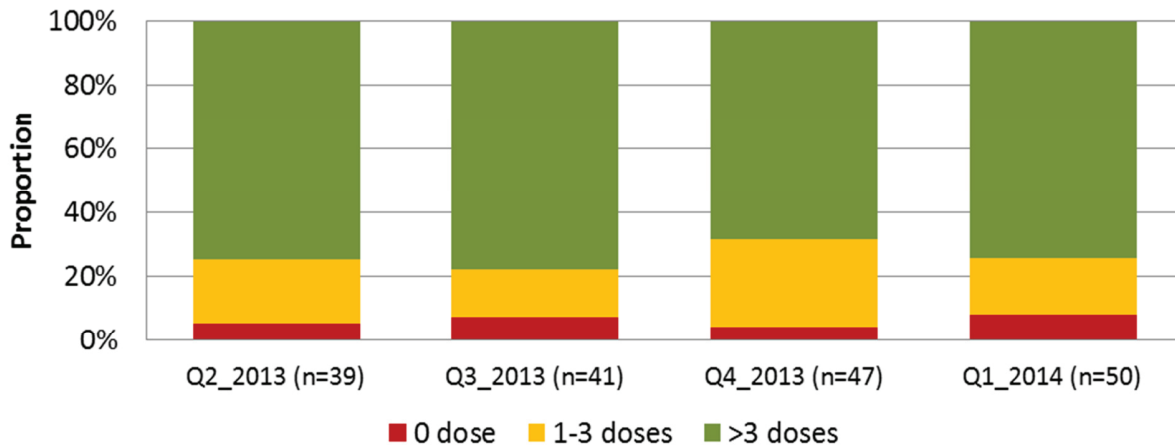


Proportion of LGAs with LQAS survey results by SIA, Northeast Sanctuary



*The October round was a combined measles OPV-measles campaign.

Proportion of NPAFP cases 6 to 35 months, by OPV status, Northeast Sanctuary



*Data as of 15 April 2014

OWNERSHIP

	Percent of LGAs meeting indicators 1 week pre-campaign							Percent of LGAs meeting indicators 3 days pre-campaign						
	Jul '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Mar '14	Jul '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Mar '14
Northeast Sanctuary														
# of LGAs participating	44	44		44	44	44	44	44	44		44	27	44	44
% of LGA task forces that met	23	61		48	57	61	61	75	64		52	41	61	61
% of LGA counterpart funding released	0	0		0	0	0	0	61	82		95	96	98	98
Borno														
State task force met (yes, no)	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes			
State counterpart funding released (yes, no)	No	No		No	No	No	No	Yes	Yes		Yes			
Yobe														
State task force met (yes, no)	No	Yes		Yes	Yes	No	No	No	Yes		Yes		Yes	Yes
State counterpart funding released (yes, no)	No	No		No	No	No	No	No	Yes		Yes		Yes	Yes

Abbreviations: LGA=Local Government Area
 Source: Nigeria Polio Campaign Dashboard, WHO-Nigeria

No campaign
No data

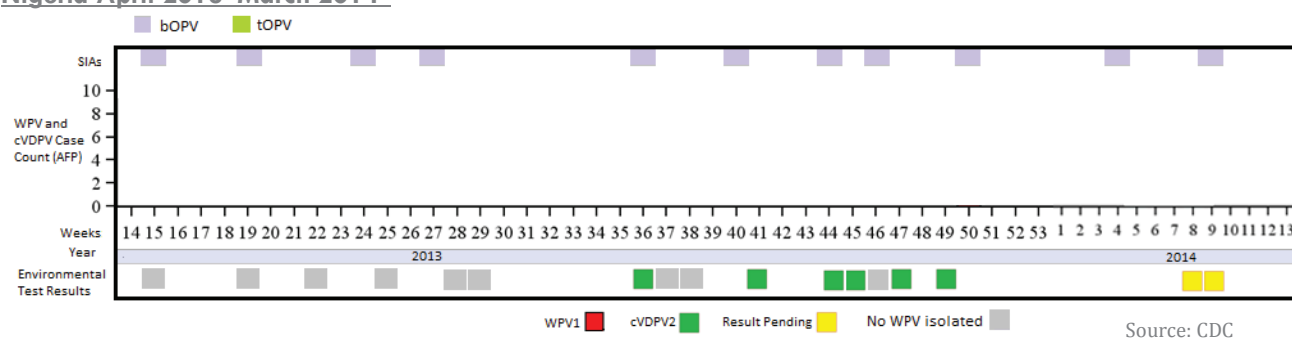
NORTHWEST RISK AREA

WPV and cVDPV2 cases, Northwest risk area, 9 April 2013 to 8 April 2014

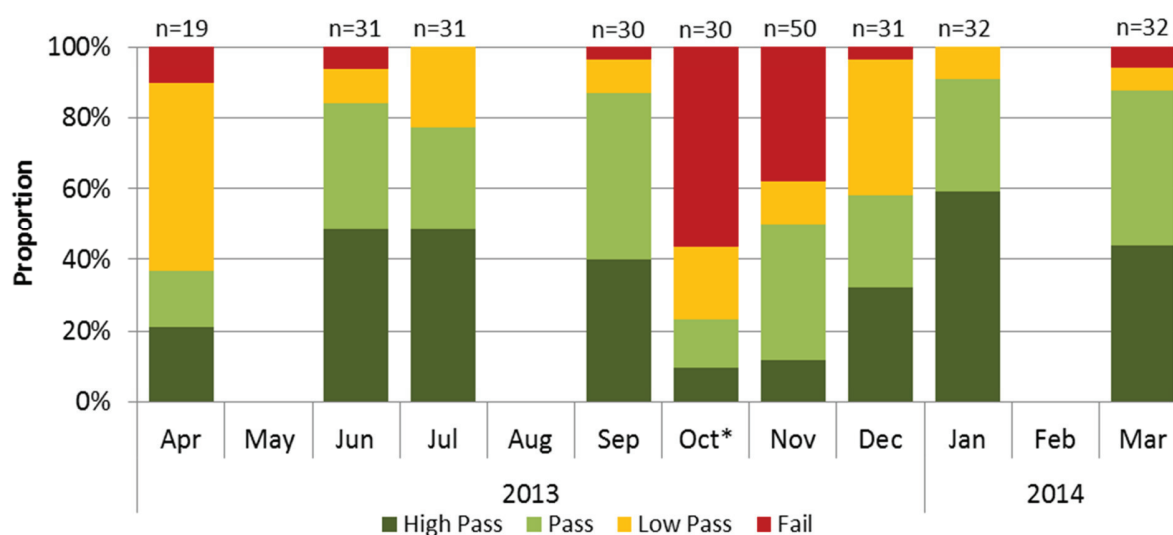


Source: WHO

WPV and cVDPV cases by week of onset and environmental surveillance results, Northwest Risk Area, Nigeria April 2013–March 2014*

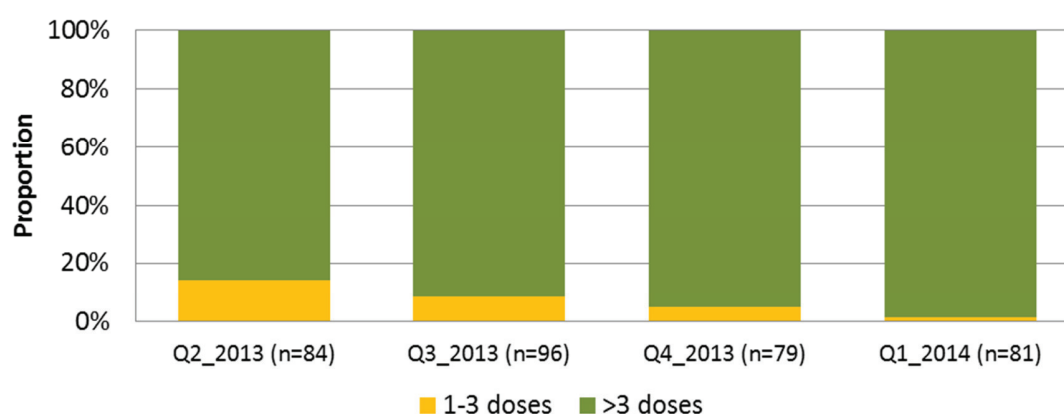


Proportion of LGAs with LQAS survey results by SIA, Northwest Risk Area, April 2013–March 2014



*The October round was a combined measles OPV-measles campaign.

Proportion of NPAPF cases 6 to 35 months, by OPV status, Northwest risk area, April 2013–March 2014



*Data as of 15 April 2014

OWNERSHIP

Northwest Risk Area	Percent of LGAs meeting indicators 1 week pre-campaign							Percent of LGAs meeting indicators 3 days pre-campaign						
	Jul '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Mar '14	Jul '13	Sep '13	Oct '13	Nov '13	Dec '13	Jan '14	Mar '14
# of LGAs participating	37	37		37	37	37	37	37	37		37	37	37	37
% of LGA task forces that met	46	73		59	35	62	62	86	97		92	100	100	100
% of LGA counterpart funding released	0	0		0	0	14	14	11	0		5	14	27	27

Sokoto	
State task force met (yes, no)	No No No No No No No
State counterpart funding released (yes, no)	No No No No No No No

Zamfara	
State task force met (yes, no)	No No Yes No No No No
State counterpart funding released (yes, no)	No No No No Yes No No

Abbreviations: LGA=Local Government Area

Source: Nigeria Polio Campaign Dashboard, WHO-Nigeria

No campaign
No data

COMMUNICATION AND SOCIAL MOBILIZATION

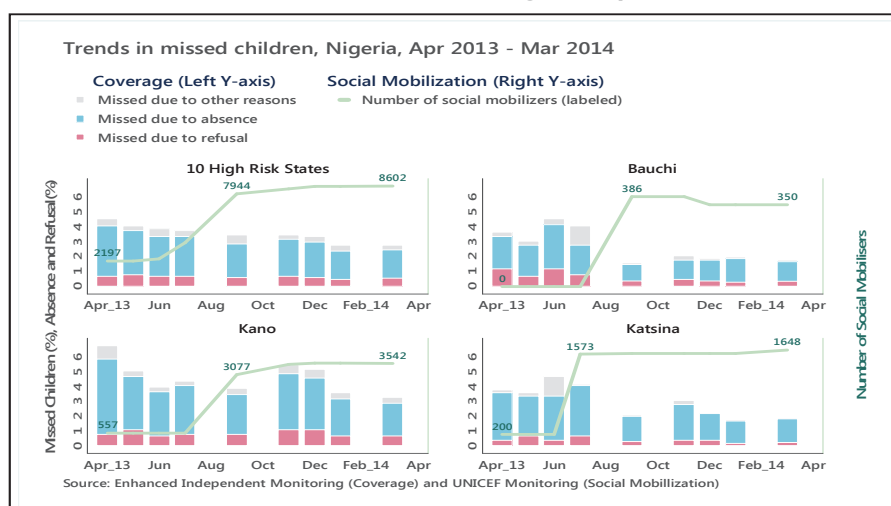
PERFORMANCE

The largest social mobilization network in the world has proven to be a significant asset to the Nigerian polio programme.

Even if such a rapid scale up requires more oversight and operational quality control, the Volunteer Community Mobilization (VCM) network has achieved impressive results in a very short timeframe. In all areas with VCM deployment, refusals and overall missed children have significantly reduced. Refusals alone have reduced by 70% in the country

with previously the highest number and proportion of chronic non-compliance. This success is a combination of deliberate mobilization approaches, better performance among all frontline workers, and in some cases – simply having more boots on the ground, even if they are not performing at optimum quality yet. Kano State, for example, has hosted almost half of the entire VCM network, and has not shown progress as dramatic as Bauchi and Katsina. Nonetheless, with such a dramatic decrease in non-compliance overall, expectations are high for the VCM network to contribute strongly to eradication.

Trends in missed children, select states in Nigeria, April 2013–March 2014



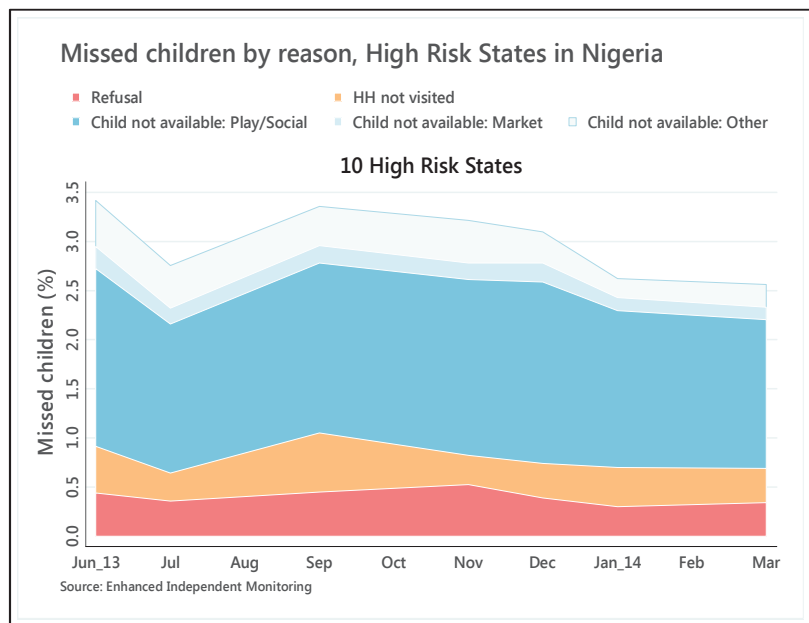
EXPERTISE

The extensive VCM is larger still if one considers the hundreds of ward supervisors, and the thousands of community volunteers that bolster behaviour change: 1600 religious focal points, 1320 polio survivors, and hundreds of Doctors and Journalists Against Polio all work together with the network to promote strong social norms for vaccination. Now that resources are in place, 2014 marks a new phase focused on enhanced quality and empowerment to make sure that the network follows standards of excellence and delivers the best possible results when engaging with households and communities.

STRATEGY

Nigeria's progress can be marked by several strategic shifts that have proven successful. The combination of a full-time, very localized network at village level – with the additional support of thousands more volunteers from the social and traditional infrastructure – creates a strong circle of community support. Whilst other networks work with community groups, Nigeria's model is perhaps the most indigenous, and has contributed strongly to building a local face and stronger trust for the programme. The programme has also responded most strongly to communities' additional needs, particularly in areas that have been almost completely forgotten by the health system. In these underserved areas, family health camps have been established to provide services not only for children, but for parents as well, particularly pregnant mothers. Routine immunization is provided, along with free medicine for malaria and management of diarrhea. Over 3000 health kits have been delivered by the GPEI in the past year, which are welcomed with great enthusiasm by communities. In >25 LGAs, mobilizers also screen for acute malnutrition and refer under-nourished children to Community Management (CMAM) sites, where they receive therapeutic feeding, routine immunization and polio drops. Although this intervention is happening in limited areas, where it functions, it contributes greatly.

Reasons for missed children, high risk states (HRASs) in Nigeria, June 2013–March 2014



Because the VCMs are permanent workers consistently covering the same (~200) households in their catchment area, they can contribute more broadly to coverage and improved health behavior in their areas. Between campaigns, the VCMs track newborns, attend naming ceremonies, link children to facilities for routine immunization, track AFP cases, and deliver OPV drops in-between rounds, particularly to those absent children missed during campaigns. VCMs have begun to use more interactive products to engage parents, showing videos on their cell phones and transmitting them directly to parents and other health workers and community members via Bluetooth; distributing DVR films and showing them during evening-time Majigi gatherings.

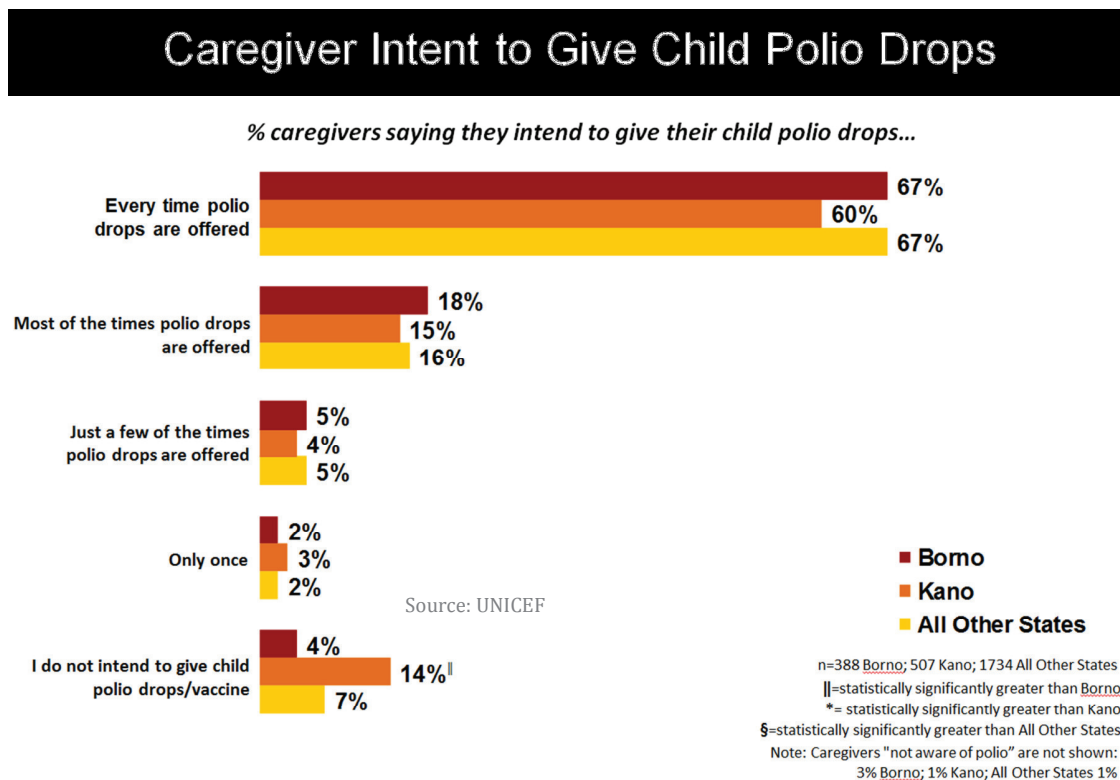
All of these interventions are leading to results. The data clearly show a decrease in children missed due to refusal and children unavailable, though Kano will be a critical determinant of success. Operational quality and service delivery strategies still need to be strengthened to minimize those children missed by vaccination teams during the campaigns, but the programme is firmly on the right track.

RISKS TO THE 2014 TARGET

Despite Nigeria's overall progress, in the battleground state of Borno, insecurity challenges dwarf problems of operational quality. Tackling this will be essential to reaching zero by the end of the year. Nigeria elections in early 2015—Presidential, National Assembly, Governorship and State Houses of Assembly—means that political campaigns start in 2014. This presents a major threat of distraction and increased politicization of polio activities when the momentum needs to be pushed now more than ever.

Harvard Polling completed in March 2014 shows clear areas of vulnerability in community perception, both in Kano and Borno. Over 38% of caregivers in Borno and 28% in Kano think that polio is curable, or don't know if it is. Nearly 20% of caregivers in Kano are not concerned that their children will get polio — polio is not likely to affect their children and it is rarely seen in their community. Almost 50% of parents in Borno have heard at least one destructive rumour about OPV, and 15% believe at least one. The belief in destructive rumours is more prevalent in Borno than anywhere else in the country. In Kano, over 40% of caregivers said vaccinators who come to their door are not from their local community; in Borno, this figure is 34% and in the rest of the eight high risk states, this figure is 31%. Nearly 40% of caregivers in Borno were also not visited by their preferred gender combination of vaccinators — most caregivers said they preferred at least one woman on

the vaccination team. Intent to vaccinate is lowest in Kano, where 14% of parents said they did not intend to vaccinate their children, despite the vast majority of the population knowing that polio drops should be given every time they're offered.



MITIGATING THE RISKS

Moving forward, it will be important to depoliticize the polio program by amplifying trusted faces and voices as ambassadors for immunization. At the same time, broader health services must continue to be promoted, and responding to community needs should be used as a way to penetrate inaccessible areas. Scaling up and improving the content that can be shared by Bluetooth can help create viral products that can spread into inaccessible areas. Showing a broader package of services that can be offered may soften access negotiations. In areas where the programme does have access, quality improvement must be at the forefront of focus for 2014. High quality training in interpersonal communication must be ensured for all mobilizers and frontline workers, and they must be equipped with engaging communication tools that facilitate dialogue.

PROGRAMME INFORMATION

ACCESSIBILITY AND SECURITY

While access has improved remarkably since mid-2013, the security and humanitarian situation in the North East (Borno and Yobe) has continued to deteriorate. Overall the security situation in Nigeria continues to be influenced by insurgency in the North East; and by communal violence especially in the middle belt.

The Military has intensified its operations with air support against the insurgents. An increase in reprisal attacks on the local communities by the

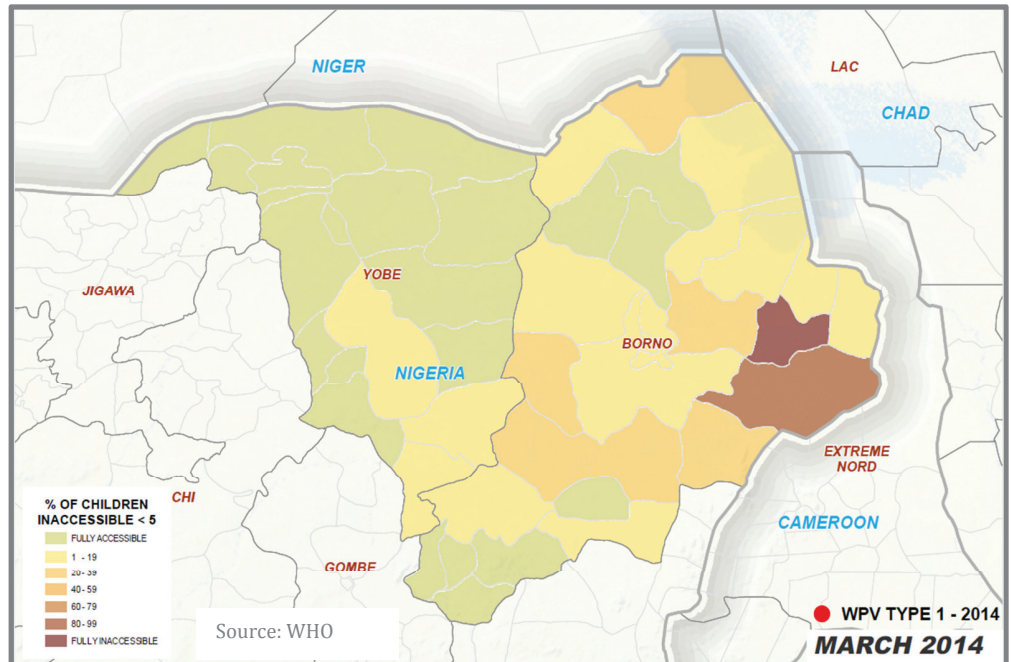
insurgents has been noted, especially in rural areas, and the population continues to flee from the rural areas to urban areas, and also to neighbouring Adamawa State. There has also been an increase in attacks on the road networks by Boko Haram insurgents in Borno and Yobe States.

An estimated 11 million out of the 16 million Nigerians who live in the three North East States (Borno, Yobe and Adamawa) have been affected by the insecurity, with 4 million in Borno State alone. The United Nations Security Management Team in Abuja has temporarily suspended UN staff movement in 20 out of the 29 LGAs in Borno State and seven out of the 17 LGAs in Yobe State.

Terrorism remains a threat in most parts of the country, with varying degrees of likelihood of occurrence. The Northern States have the highest prevalence rates of terrorism. The incidence of criminality – which manifests in various forms and levels of violence – is the most common threat UN staff are exposed to throughout the country. The ANSARU group, an offshoot of Boko Haram, is particularly noted for kidnapping foreigners for ransom in the Northern States. Criminal gangs – sometimes operating under the guise of terrorist groups – have targeted foreign nationals for abduction in the North and in the South. Civil unrest is a common phenomenon in several parts of the country. Religious and inter-ethnic conflicts, and political violence have had consequential loss of life and property in several parts of the country. These incidents have in the past curtailed programme delivery due to access restrictions during periods of escalation.

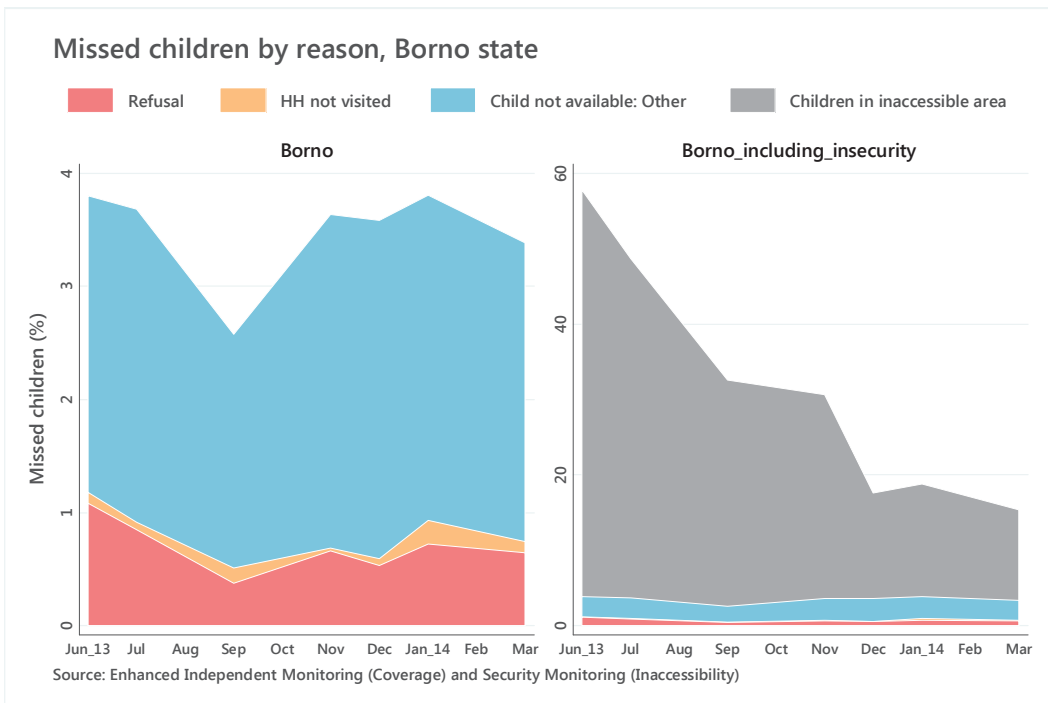
The elections scheduled for early 2015 will likely complicate the current security situation as soon as mid-2014.

Inaccessible areas, WPV1 cases, and the estimated number of children affected during the March 2014 SIA—Northeast Sanctuary, Nigeria



Attacks on polio workers and health clinics have also been witnessed in Nigeria although the root causes of some of these incidents are unrelated to the eradication efforts. While the general security situation has deteriorated over the reporting period, the ability of the polio programme to access areas particularly in the north east of the country has been, in part, due to the Government of Nigeria undertaking robust risk assessments at the local level and due to close relations developed by programme staff with traditional and religious leaders in the affected areas. These assessments at the local level using a risk assessment tool involve the community, which has provided the ability to unpack the real security issues, and solve those that are more managerial. This level of inaccessibility has reduced dramatically in Borno, for example, from March 2013, when all of the state was unreachable to the 16.1% witnessed in March 2014. However there does appear to be a certain degree of stagnation in the recent three campaigns where the extent of inaccessibility has plateaued since the December 2013 round. Access has not translated into the same quality improvement in SIAs seen throughout the rest of northern Nigeria.

Reasons for missed children, Borno State, Nigeria, June 2013–March 2014



HUMAN RESOURCES

Location (sanctuary or risk area)	Total number of vaccination teams	Number (%) of vaccination teams with a female member	Number (%) of vaccination teams with a local member	Salary per vaccinator / day	Number of current GPEI staff	Number of additional GPEI staff needed (if surge is planned)
Northwest (Sokoto and Zamfara)	3,962	3,962 (100%)	3,962 (100%)	\$4.34	110	18
North central (Kano, Katsina, Jigawa, and Kaduna)	23,849	23,849 (100%)	23,849 (97%)	\$4.34	492	34
Northeast (Borno and Yobe)	3,554	3,554 (100%)	3,554 (100%)	\$4.34	21	

Source: WHO

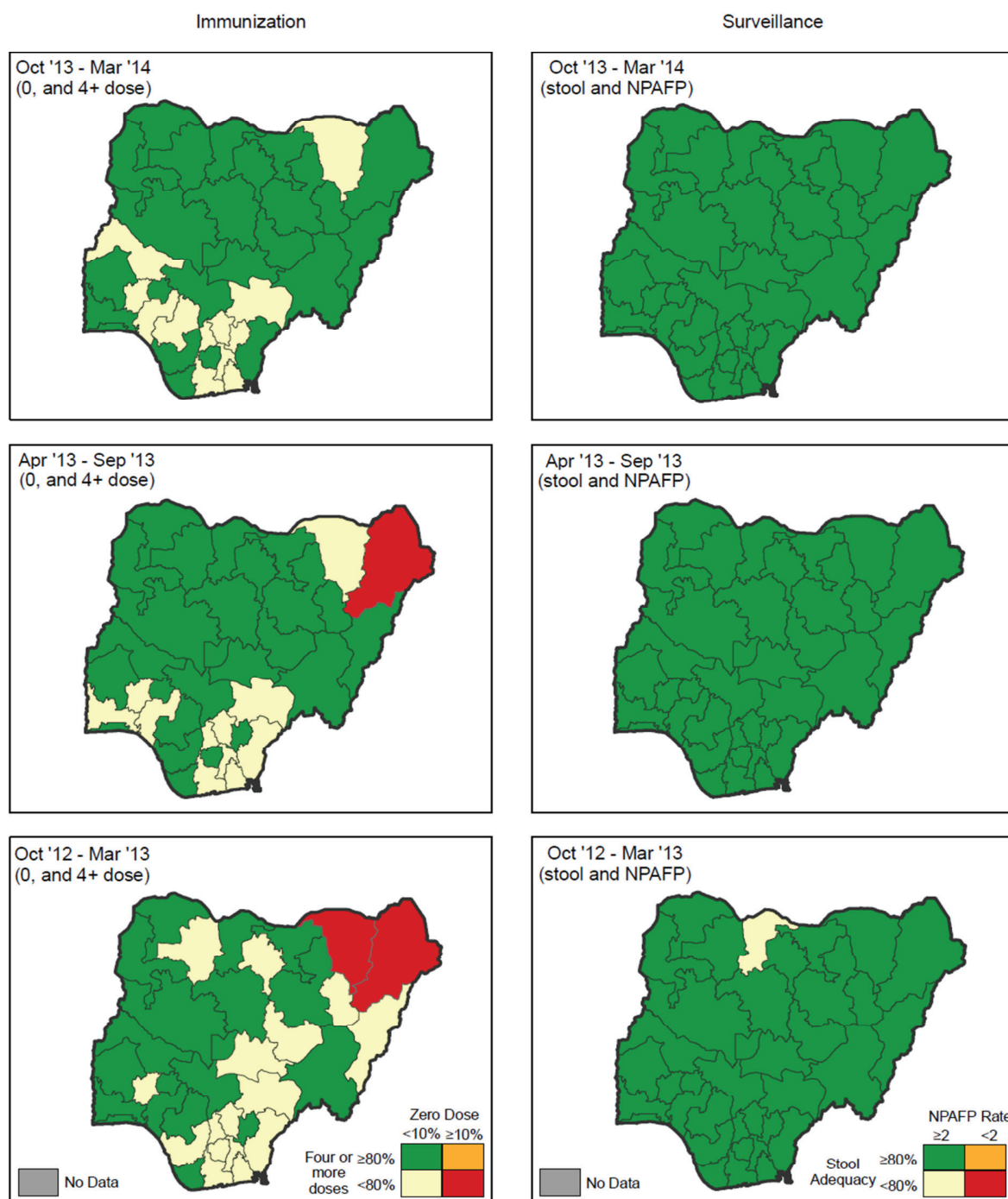
ROTARY INTERNATIONAL'S WORK IN NIGERIA

Rotary's National PolioPlus Committee in Nigeria organized a PolioPlus Summit at the end of April 2014. The purpose of the summit was to bring together key partners in the GPEI to ensure a collaborative and focused approach as it relates to the polio endgame strategy. Additionally, the summit provided an opportunity to highlight the need for funding in support of polio eradication efforts in Nigeria, particularly as it relates to domestic support of the programme. Rotarians continue to work with local imams to strengthen the frequency and span of mosque announcements and to encourage acceptance of the polio vaccine. Rotarians have conducted health camps in underserved communities such as Katsina and Gidan Igwai Sokoto North to help encourage demand for the vaccine and increase trust for the polio programme. Recently Rotary's Polio Ambassador Sir Emeka Offor, a leading business entrepreneur who has committed to using his influence and voice, opened a polio office with staff support to help raise awareness and funds for the polio eradication campaign in Nigeria.

PERFORMANCE INDICATORS

IMMUNIZATION AND SURVEILLANCE

Six-month–annualized standard immunization and surveillance indicators by state among children aged 6-35 months with AFP, Nigeria, October 2012 to March 2014



Source: CDC

GPEI POLIO ERADICATION AND ENDGAME STRATEGIC PLAN 2013–2018, NIGERIA

STRATEGIC PLAN OBJECTIVE	OUTCOME INDICATORS (2013)	RESULTS	STATUS
Poliovirus Detection and Interruption: Complete the interruption of wild poliovirus transmission globally and more rapidly detect and interrupt any new outbreaks due to vaccine-derived polioviruses	All wild poliovirus transmission stopped by the end of 2014	The most recent WPV	NA*
	All new cVDPV outbreaks stopped within 120 days	Circulation of cVDPV imported from Chad, as evidenced by cases and environmental isolation, was not stopped within 120 days of confirmation.	Not met
	OUTPUT INDICATORS (2013)		
	Achieve and maintain an NPAFP rate of $> 2/100,000$ in all states/provinces of high-risk countries and maintain an NPAFP rate of $> 2/100,000$ in all states/provinces	From April 2013 to March 2014, the national NPAFP rate was 10.4/100,000, a 13% increase from the previous year. One hundred percent of provinces have maintained NPAFP $> 2/100,000$.	Met
	Achieve and maintain adequate stool sample collection in 80% of cases in all states/provinces	During the last 12 months, 96% of AFP cases nationally had an adequate stool specimen and all provinces have maintained adequate stool collection in $\geq 80\%$ of AFP cases in the previous 12 months.	Met
	LQAS passed at 80% threshold in all high-risk areas	In the last 12 months, of the 1253 LQAS assessments conducted in the sanctuaries and NW risk area, 67% have passed the 80% threshold.	Not Met
	Establish full safety and security framework	A UN security management and enhancement plan has been developed and funded. The national programme has developed a specific operational plan with innovative strategies to vaccinate children in highly insecure LGAs of Borno. An Emergency Operations Center has been established in Borno.	Established
	All current cVDPV outbreaks stopped by end-2013	There have been 2014 environmental isolations of indigenous strain from emergence in 2005 and a recent case; imported Chad A emergent strain continued circulation into 2014. Virologic evidence indicates ongoing surveillance gaps.	Not Met

* Not Applicable

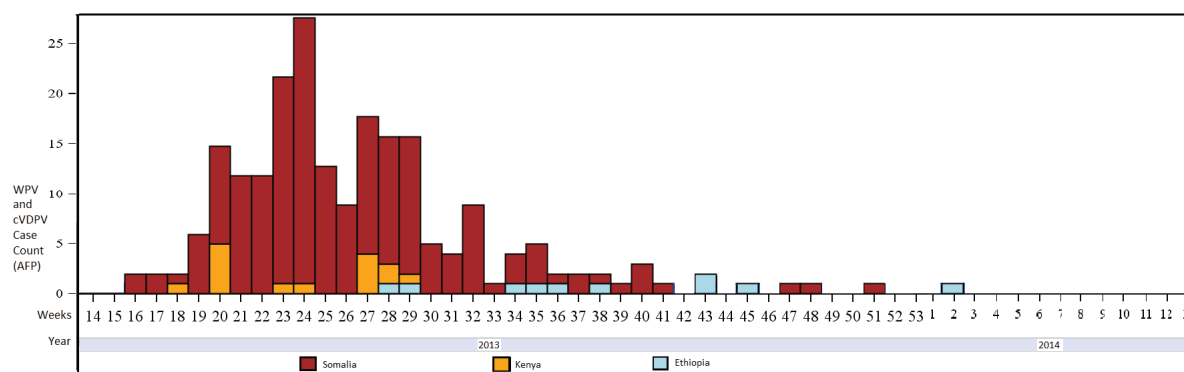
SYNOPSIS

- *Epidemiology:* The WPV case count as of 28 April 2014 (2) is lower than at the same time period in 2013 (14) and 2012 (27). Over the last six months cases only occurred in Kano (2) and Borno (1). cVDPVs continued to circulate Borno and Kano after emergence in Chad. In Borno, four cVDPV cases were detected in 2013, one thus far in 2014. Environmental sampling indicates circulation in Kano and the ongoing cVDPV transmission in Sokoto since 2005 emergence in Nigeria. WPV3 has not been detected since 10 November 2012.
- *Immunization:* LQAS data show improvement, most strikingly in Kano in early 2014. Kano performance has exceeded national performance in all 2014 rounds with 92-100% of LQAS meeting the 80% threshold in January–April 2014. In all high risk states except two—Borno (61%) and Yobe (74%)—>80% of LGAs passed at the 80% threshold in March. Eighty-six percent of 2013 very-high-risk and very-very-high-risk LGAs and 89% of the 2014 very-high-risk and very-very-high-risk LGAs passed at the 80% thresholds in March, an indication that ongoing innovations targeting improvement in these persistently poor performing LGAs are having an impact. The programme innovations include management support teams, health camps to address other felt needs in the community, and staggered SIA schedules. The focus of the NSTOP programme was expanded to include both SIAs and routine immunization services.
- *Security:* Insecurity continues to limit access to key populations, particularly in Borno, and to a lesser extent in Yobe, Adamawa, and some LGAs in other states. Access in Borno improved throughout 2013 but appears to have levelled off in 2014. Several polio workers were killed in 2013 and 2014 in targeted and non-targeted attacks. Given the upcoming elections and anticipated political instability, sustaining relations with traditional and religious leaders remains a critical component of ensuring access to insecure areas.
- *Surveillance:* Surveillance gaps continue based on the ongoing detection of WPVs and cVDPVs with less genetic linkage than expected, though improvements are planned for 2014, particularly for Borno state.
- *Ownership:* There is evidence of strong ownership at the national level, but the indicators of ownership are highly irregular at the state level and LGA levels, and are particularly weak in the Northwest risk area.
- *Community Demand:* Vaccine refusal in specific communities remains a concern in Nigeria, though the anti-vaccination groups that have developed and widely distributed an anti-polio vaccine video in the past have been relatively quiet during the last six months. Efforts by the government to offset the impact of the negative messages conveyed by these groups have helped, but several religious sects throughout the north continue to promote non-participation in polio activities. Resources continue to be directed to engaging religious and community leaders at the local level to support polio vaccination campaigns.

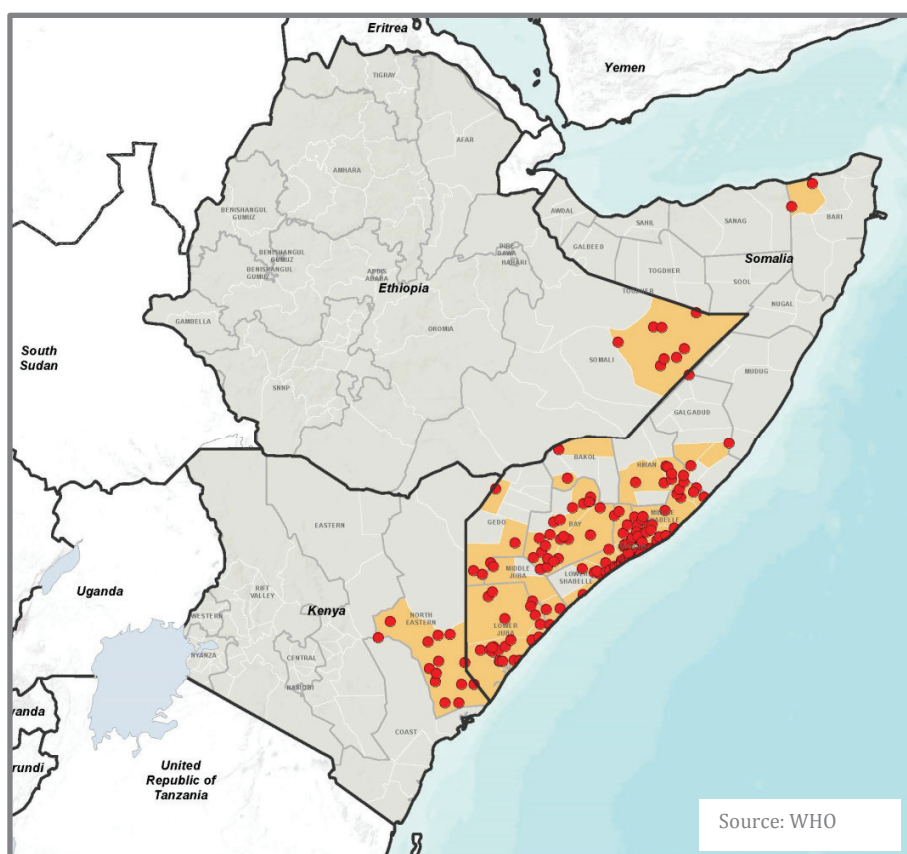
NON-ENDEMIC COUNTRIES

HORN OF AFRICA OUTBREAK

WPV1 Cases in the Horn of Africa, 2013–2014*



Source: CDC



The WPV1 outbreak in the Horn of Africa started in April 2013. The first case was identified in Banadir (Mogadishu) Somalia in May with subsequent cases identified in Kenya and Ethiopia. As of 28 April 2014, the most recent WPV1 case linked to this outbreak in the sub-region occurred in Ethiopia on 5 January 2014, >240 days after confirmation of the first case of the HOA outbreak. Among each country, only in Somalia has the time from outbreak confirmation to the onset of the latest case exceeded 6 months. In 2013, the outbreak accounted for 54% of the polio cases globally. In addition to the polio outbreak in 2013–2014, HOA countries have been

affected by measles outbreaks, armed conflict in the Republic of South Sudan which caused the rapid migration of South Sudanese into Kenya and Ethiopia, and ongoing African Union military activities in Somalia

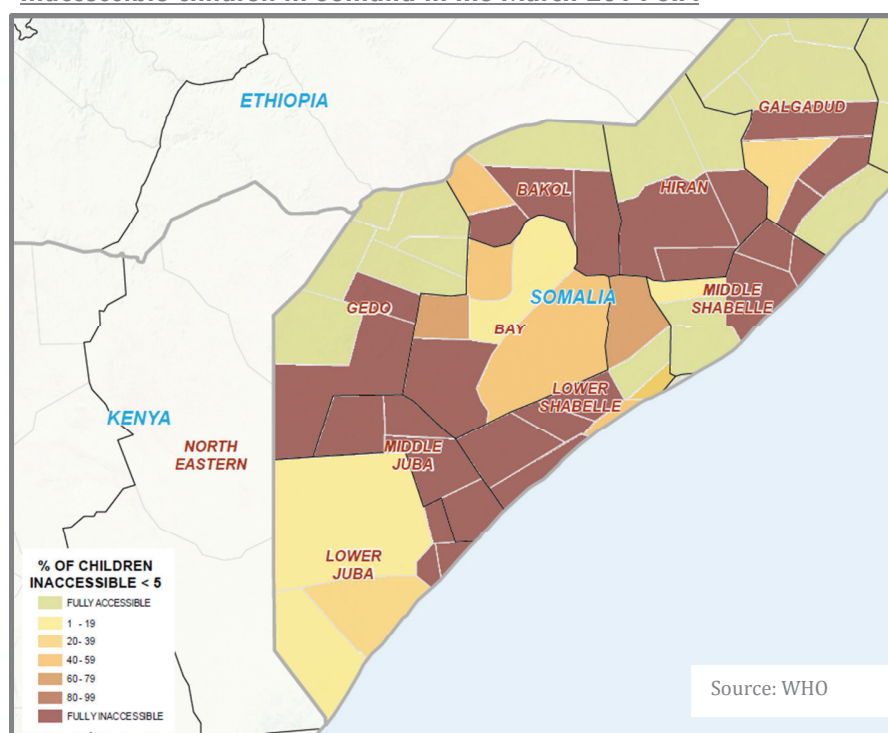
* Data as of 15 April 2014.

against Al Shabaab militants which result in fluctuations in areas of accessibility, particularly in South Central Somalia.

SOMALIA

The onset of the first confirmed case was 18 April 2013; the outbreak was confirmed on 9 May 2013. So far, Somalia has had a total of 194 confirmed WPV1 cases, the most recent from Bossaso district, Bari region,

Inaccessible children in Somalia in the March 2014 SIA



Puntland with onset on 20 December 2013 (225 days after confirmation). Among the 194 cases, 93% were among children aged <5 years and one case was aged >15 years (27 year old). During 2013, 51 cases (26%) were in accessible areas, 50 cases (26%) were in inaccessible areas, 48 (25%) were in partially accessible areas, and 45 (23%) were in accessible areas with security challenges.

In 2013 there were 10 rounds of SIAs, some targeting all age groups or children up to 10 years of age and some conducted at short intervals. In 2014 there have been six rounds to date, including three “short interval” (1-2 weeks apart) outbreak

response rounds in Puntland following the December case.

Immunity gaps remain in South Central Somalia in part because of the challenges with inaccessibility and routine immunization. The programme has made extensive use of transit-post vaccination, reaching approximately 300,000 children who otherwise would have been inaccessible, including 30,000 who had never received OPV. The recent AMISOM operations in South Central Somalia has expanded access into previously inaccessible districts, but vaccination campaigns will be conducted in these areas only after critical guidance is received from UN security and approval from AMISOM.

KENYA

A total of 14 cases occurred in Kenya, with onset from 30 April 2013 to 14 July 2013. All cases were located in North Eastern Kenya. Seven cases occurred in residents of refugee camps near Dadaab, six in surrounding communities in Garissa County, and one in a non-contiguous district but also near the Kenya-Somalia border. One sewage sample collected during the pilot phase of environmental surveillance in Nairobi found to be positive for WPV1 was collected in October 2013; the WPV1 isolate was considered a new importation based on its genetic relatedness to AFP cases and contacts of AFP cases detected in Somalia. Subsequent samples from the same site have been negative for WPV. Several SIA rounds targeted expanded age

groups in the outbreak-affected area. In December 2013, the Kenya Ministry of Health provided IPV with OPV to further boost immunity status of children in Dadaab camps and host communities, targeting 126,000 children. The intervention, which was well accepted by the community, was documented in CDC's Morbidity and Mortality Weekly Report and WHO's Weekly Epidemiologic Record so that lessons from this experience could be applied elsewhere.

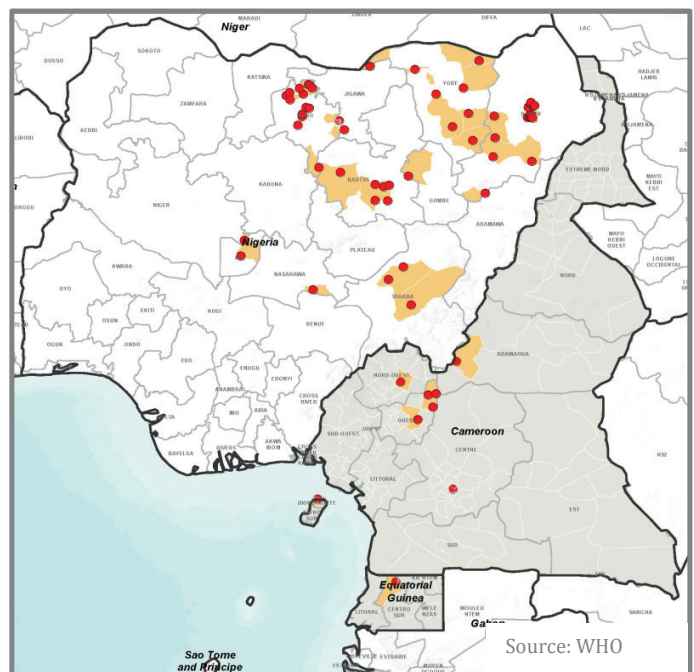
ETHIOPIA

Ten cases of WPV1 have been detected in the Somali Region of Ethiopia since August 2013, with the onset of the most recent case occurring on 5 January 2014. In addition to small, targeted emergency outbreak response vaccination in June 2013, a total of five rounds of SIAs were undertaken during 2013, including one NID. In 2014, two SIAs have occurred to date with three additional rounds planned for 2014. An outbreak response assessment in January led to a number of changes in the programme, particularly in the Somali region. Along the border with Somalia and Kenya, 28 permanent vaccination posts have been established which vaccinate children <15 years of age.

CENTRAL AFRICA OUTBREAK

The WPV1 outbreak in Central Africa was discovered in October 2013 in Cameroon with subsequent spread to Equatorial Guinea. To date, there have been 10 WPV1 cases (seven in Cameroon, three in Equatorial Guinea). As of 12 April 2014, the most recent WPV1 case linked to this outbreak in the sub-region occurred in Equatorial Guinea in March 2014. Due to continued poliovirus circulation in Cameroon, population movement amongst vulnerable refugee populations in the area and significant gaps in surveillance in the region, the risk of further spread is quite high. The response to this outbreak has been expanded to include Gabon, Congo and Central African Republic but remains to be fully developed. In addition to their proximity to Cameroon and Equatorial Guinea, these countries have substantial under-immunized populations and major gaps in surveillance. The complex humanitarian crisis in Central African Republic exacerbates the region's vulnerability. Gabon is planning a nationwide campaign for May 2014, Congo is planning a nationwide SIA during the first week of May 2014. The Central African Republic is planning intensified vaccination activities that started in April 2014 to followed with with nationwide SIAs planned for later in the year, to be implemented as conditions and access allow.

WPV1 Cases in Central Africa, 2013–2014*



* Data as of 15 April 2014.

CAMEROON

Since October 2013, seven WPV1 cases have now been reported from West, North West, Centre and Adamaoua Regions, with onset of paralysis ranging from 1 October 2013 to 31 January 2014. The latest case was in a child identified in Yaounde but who had lived part of his life in the northwest region of Equatorial Guinea. Since the family has been lost to follow-up, it is unclear where exposure and onset of illness occurred. The first isolate in the country was genetically most closely linked to WPV1 previously isolated in Chad in 2011, suggesting prolonged undetected circulation of virus somewhere in the region. Genomic sequencing of other isolates from the outbreak indicates more distant linkage than expected under sensitive AFP surveillance within Cameroon.

Since December 2013, Cameroon has conducted five nationwide immunization campaigns. The quality of the campaigns has improved overall according to independent monitoring data but quality varies across the country, with significant gaps in implementation and supervision. The three-month outbreak response assessment coincided with the most recent campaign scheduled 11–13 April 2014 and recommended a number of improvements, including measures to improve micro-planning and surveillance. Going forward, the response is expected to address improving the quality of the campaigns scheduled for May and June 2014.

EQUATORIAL GUINEA

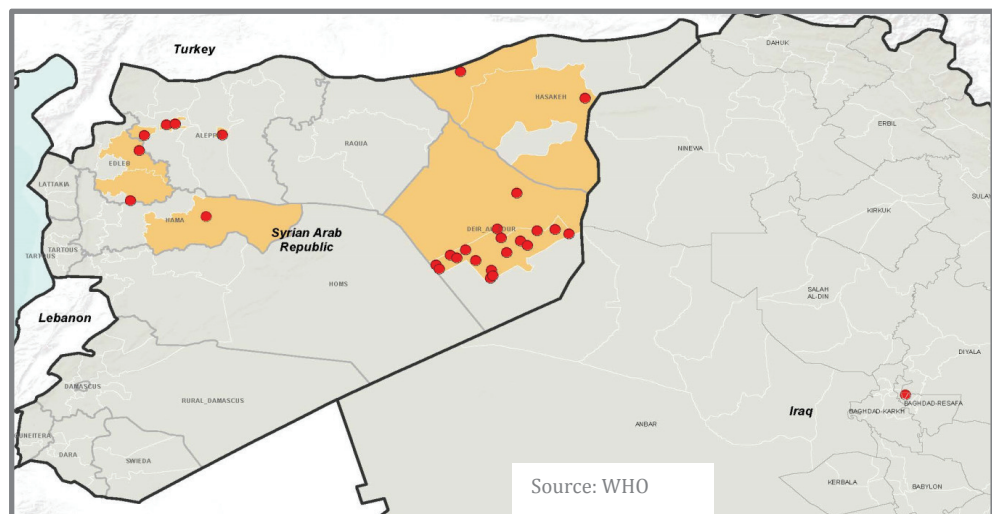
As of 28 April 2014, there have been three confirmed WPV1 cases reported. The first had onset on 28 January 2014 in a 14-month-old girl from the Niefang district; the second had onset on 19 March 2014, in a 17-month-old boy from Malabo; the third had onset on 24 March 2014 in Bata. Equatorial Guinea has little experience with polio, having had no cases since 1999 and having conducted no SIAs since 2010. AFP surveillance is poor, with two AFP cases reported in the past five years. A limited mop-up campaign has been conducted. Three nationwide campaigns are scheduled for April (starting 22 April), May, and June 2014.

MIDDLE EAST OUTBREAK

SYRIA

On 28 October 2013, the Minister of Health of the Syrian Arab Republic announced that after 15 years absence, polio had returned to the Middle East. Thirteen cases due to WPV1 were confirmed from Deir Al Zour province. Genetic sequencing indicates that the virus, originating from Pakistan, likely had been circulating in Syria for nearly a year before detection (and is linked to WPV1 detected in environmental samples collected in Egypt in December

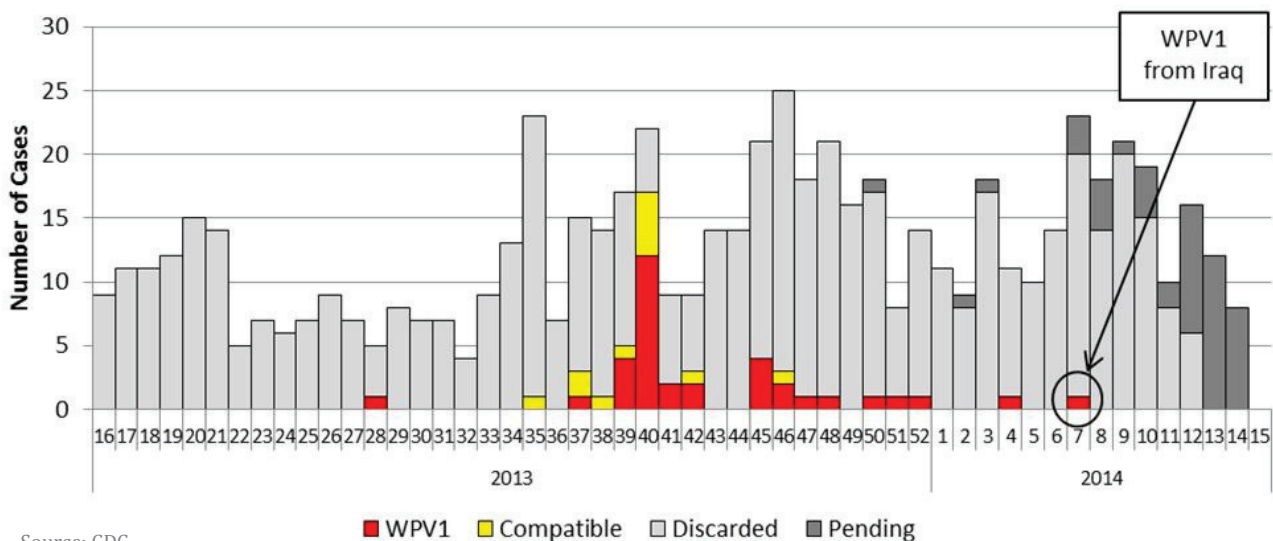
WPV cases in Syria and Iraq, 2013–2014*



* Data as of 15 April 2014.

2012, and in Israel, the West Bank and Gaza during February 2013–March 2014). Since that time, as of 28 April 2014, a total of 36 cases have been confirmed in Syria, with the most recently reported confirmed case of polio in Syria occurring on 21 January 2014. Syria, being the primary outbreak zone, has conducted 5 NIDs to date with the most recent one in April 2014. The first mass vaccination campaign using tOPV was launched by the Ministry of Health, Syria on 24 October 2013, within five days of WHO's polio alert. An estimated 2.4 million children were vaccinated during the campaign that extended for four weeks due to conflict and logistic challenges. The Syrian government fast-tracked the registration of bOPV in November 2013 and it has been used in in all subsequent SIAs.

Cases of acute flaccid paralysis in Syria (n=34) and Iraq (n=1, WPV), 2013–2014**



Source: CDC

** Data as of 15 April 2014.

IRAQ

Iraq confirmed the first WPV1 case since 2000 in a 6-month-old, intentionally unvaccinated child in Baghdad who had onset of paralysis on 10 February 2014. Genetic sequencing indicates the virus is most closely related to virus detected in December 2013 in Hasakeh, the Syrian Arab Republic. In April 2014, Iraq conducted its seventh SIA since October 2013, all of which used tOPV. Subsequent campaigns will use bOPV.

MIDDLE EAST OUTBREAK RESPONSE

Since WPV cases were first found in Syria, the outbreak has been considered to be regional and the outbreak response has been targeted accordingly. During November 2013–April 2014, 28 SIAs have been carried out in seven jurisdictions. The regional outbreak response is currently being coordinated out of Amman, Jordan. A review of the response plan done in March indicated that significant progress has been made. In the six months since Syria's polio outbreak began, the programme has reached over 22 million children with the polio vaccine in the region's largest-ever mass immunisation campaign. The vast majority of children across the Middle East are now being reached, with estimated coverage over 90% in Syria, Lebanon and Iraq. Jordan lags behind, with estimated 87% coverage in March 2014. At the same time there is need to focus on the further improvements in the quality of the campaigns guided by independent post-campaign monitoring data which has not been the standard. The review also showed the

need to strengthen communication to raise awareness and especially about the importance of taking polio vaccine each time it is offered during the multiple campaigns planned, and to address surveillance gaps.

A plan for “phase 2” of the regional response has recently been drafted and envisions activities through at least December 2014. The second phase of the outbreak response, the key challenge is to reach the hardest-to-reach – those pockets of children that continue to be missed, especially in Syria’s besieged and conflict areas and in remote areas of Iraq. Coordinating a response of this unprecedented scale presents daily challenges. The vaccine must be swiftly and repeatedly delivered to tens of millions of children across seven countries. Thousands of mobile teams must go door-to-door. Health centres, where they are functioning and where families are able to reach them, must also have vaccine as well as cross-border refugee registration stations and other sites where populations on the move can be reached.

Supplemental immunization activities in response to the Middle East outbreak, October 2013–June 2014

Country / Territory	Total SIAs completed from Oct 2013		Total SIAs completed in 2014		2013 SIA activities			2014 SIA activities					
	NID	SNID	NID	SNID	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Egypt	2		1	1		NID 17-Nov tOPV	NID 29-Dec tOPV			SNID 10-Mar tOPV	NID 6-10 Apr tOPV		
Iraq	2	1	2	2	NID 21-Oct tOPV	SNID 2-Nov tOPV	NID 1-Dec tOPV	SNID 5-Jan tOPV	SNID 4-Feb tOPV	NID 6-10 Mar tOPV	NID 6-10 Apr tOPV	NID 10-12 May tOPV	SNID 10-12 Jun bOPV
Jordan	2	1	1			NID 2-Nov tOPV	NID 28-Dec tOPV			NID 2-Mar tOPV			
Lebanon	2		1			NID 8-Nov tOPV	NID 6-Dec tOPV			NID 10-15 Mar tOPV	NID 14-19 Apr tOPV		
Syria	2		4		NID 24 Oct-21 Nov tOPV		NID 8-Dec bOPV	NID 5-Jan bOPV	NID 2-Feb bOPV	NID 2-6 Mar bOPV	NID 6-10 Apr bOPV	NID 4-8 May bOPV	
Turkey		2		2		SNID 18-Nov tOPV	SNID 23-Dec tOPV		SNID 10-Feb tOPV		SNID 7-11 Apr tOPV		
West Bank and Gaza Strip	1		1				NID 8-Dec tOPV	NID 12-Jan tOPV					

SNID Completed activity

NID Ongoing or Planned activities

SNIDs in Iraq and Turkey cover the following administrative areas:

Iraq: Anbar, Dahuk, Erbil, Kirkuk, Najaf, Ninewa, Salah Al-Din, Sulaymaniyah

Turkey: Adana, Adiyaman, Gaziantep, Hatay, K. Maras, Kilis, Malatya, Mardin, Osmaniye, Sanli Urfa, Sirnak

April sNIDs will cover Hakkari, Diyarbakir, Batman, Siirt, Van, Mersin

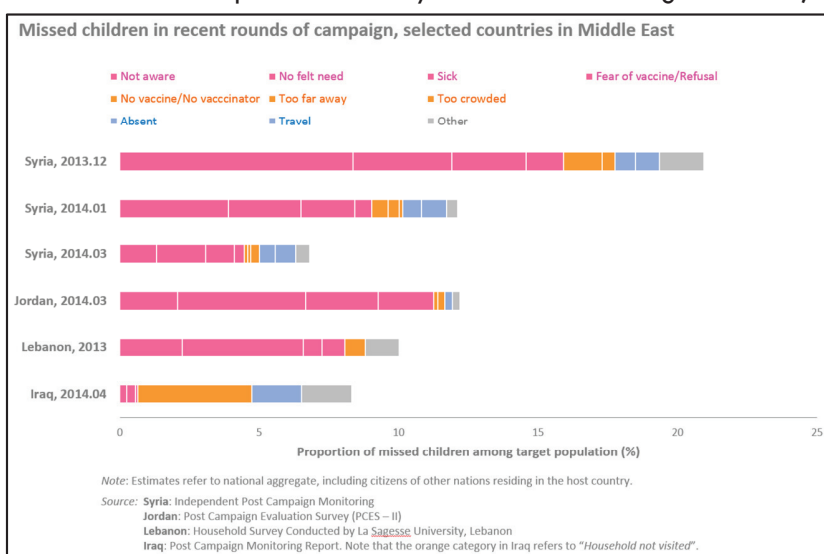
COMMUNICATION AND SOCIAL MOBILIZATION

The numbers in the Middle East are staggering: 5.5 million Syrian children are in need of humanitarian assistance. Over 1.2 million children live as refugees outside the country’s borders. An estimated 323,000 children <5 years of age live under siege or in hard-to-access areas within Syria. More than 10,000 children have been killed in the conflict. Over 8,000 children, fleeing violence, have arrived at the country’s borders

without their parents. Before the conflict, Syria's well-established public health system had led the vanguard. Syria's war caused child immunisation rates to plummet from 99% prior to the conflict, to 52% in 2012. It rendered 500,000-700,000 children unreachable by OPV during the peak period of the conflict, due to violence and access constraints.

Caregivers and health workers alike must be inspired to action in all communities throughout the region – no easy task in volatile areas where polio is perceived as a much lower risk, by some, than venturing out onto still-violent streets. Meanwhile, host communities across the region are feeling the strain on their already overstretched resources. Anti-Syrian sentiment is growing, with communities perceiving the polio outbreak, other disease outbreaks and other social burdens as incursions from the Syrian population. All of this takes place within a volatile atmosphere where the most hard-to-reach children are more vulnerable than ever. Of the 27 confirmed polio cases in Syria with case investigation data, nearly all had never been vaccinated, or

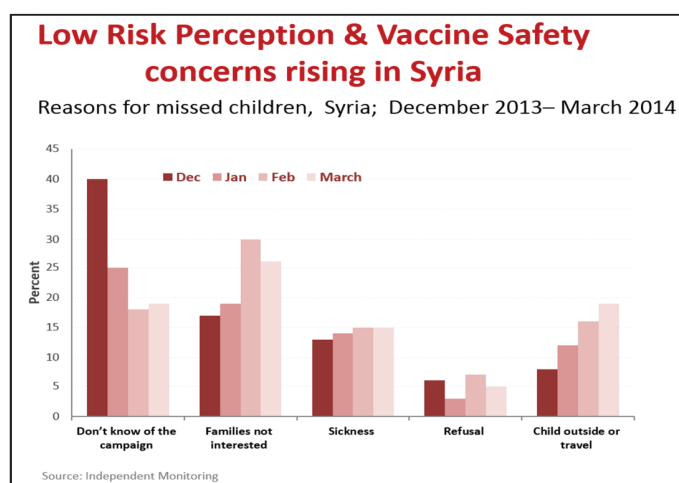
had not taken sufficient additional rounds of the vaccine. Over 70% of missed children in the region are missed because they were not aware of the campaign, they feared side effects of the vaccine, or they did not feel they required the vaccine. In Jordan, of the 13% of children who were missed by the SIA as determined by independent monitoring, nearly all were missed due to social reasons. The sole WPV case in Iraq to date occurred in a child from a refusal family, fearful of OPV's perceived side-effects.



The way we communicate with caregivers and communities can make or break our ability to reach every child

in Syria. In a country where polio had been nearly forgotten, and where war already poses families with so many daunting challenges to raising healthy, happy children, it is important to ensure that caregivers understand the clear and present risk of polio. It is also critical that the way we communicate is able to break through the crowded media space around the war. Syrians across the region are plugged in almost constantly to local and regional news outlets; taking their attention away from their immediate threats will require sophisticated communication approaches.

The private sector in Lebanon – key to the success of any polio campaigns – has been engaged for the next wave of TV spots. The campaign will emphasize the need for multiple doses, and promote the safety of the vaccine, even if children are sick – a message that has been obfuscated in the combined measles/OPV campaigns.



Stopping this outbreak will require wide-scale communication efforts at regional, national and local levels – through advocacy, media and health worker engagement. The resources currently available are insufficient to adequately respond.

OTHER COUNTRIES/AREAS WITH DETECTION OF ACTIVE POLIOVIRUS TRANSMISSION

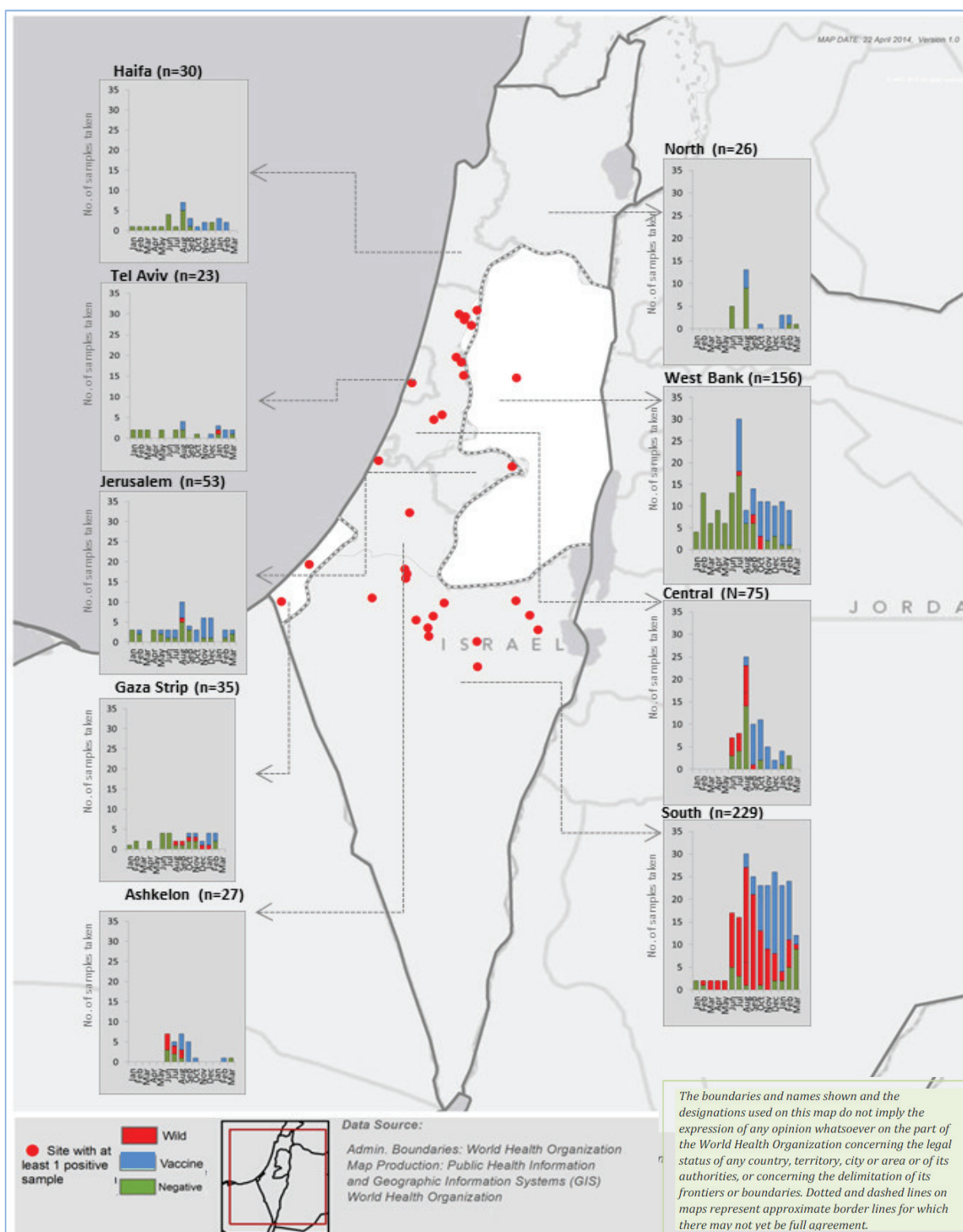
ISRAEL; THE WEST BANK AND GAZA

In June 2013, the Israel Ministry of Health notified WHO that WPV1 had been detected in sewage samples taken in May in an Arab town in the Southern District of Israel, part of their extensive environmental surveillance network. Retesting and further sampling in June revealed WPV1 presence in sewage samples taken at this and other sites in the Southern District. Since that time, samples from this and additional districts have been positive, totalling 144 samples during 3 February 2013–16 March 2014. These positives were primarily in weekly samples taken at sites in the Southern District, but also include positive samples taken from sites in the Central District and sporadic positive samples taken from sites in the Jerusalem and Tel Aviv Districts. Stool surveys in July 2013, obtained through convenience sampling, identified WPV1 in a high proportion of specimens collected at health facilities from children under 10 years of age residing in the Southern District who had been fully-vaccinated with IPV. Genomic sequencing and phylogenetic analysis suggests that this WPV1 originated from Pakistan and is similar to WPV found transiently detected in environmental specimens in Egypt in December 2012 and found circulating in Syria, suggesting broad transmission in the Middle East starting in 2012.

In Israel, only IPV has been administered in routine childhood immunization since 2005. Childhood vaccination coverage with 4 doses of IPV is very high (92%–98%). An “intercalated” schedule of IPV/OPV was used from 1990 until 2005. Upon the initial finding of WPV1 in sewage samples, the Israel Ministry of Health in June 2013 administered catch-up IPV vaccination to children who had not completed the IPV series, expanded environmental surveillance to additional sites, and expanded the age range of AFP surveillance to include adults. No clinical polio cases (WPV-associated AFP) have been identified. The WHO-led consultation conducted in late June recommended at least two SIAs with bOPV for the child cohorts vaccinated only with IPV. On 4 August 2013, the Ministry of Health initiated a campaign to administer bOPV to all children aged >2 months born since 2004 in the Southern District of Israel. Two weeks later, the Minister of Health expanded the campaign nationally when WPV1 was detected in other sewage samples outside the Southern District. By mid-October 2013, ~70% of the target population had been vaccinated with a dose of bOPV, including ~90% in the Bedouin towns of the Southern District. As noted above, WPV1-positive cultures continued to be identified from samples taken at selected sewage sampling points serving several Southern District communities with Arab populations. Vaccination with a second bOPV dose was recommended in October for children only in those communities and reached ~30% of the target population. In January 2014, routine immunization with bOPV was added to the childhood immunization schedule at 6 and 18 months of age (without substantial further catch-up for older cohorts), reaching >90% coverage at age-appropriate visits. With a sporadic positive sample in Tel Aviv along with some other sporadically positive sites in the Southern District in February 2014, only one collection site (Ar’ara) in the Southern District remained consistently positive after early February. All sampling sites were negative one week in early March 2014; Ar’ara was again positive for the sample collected 16 March. That site has since had another negative sample.

In the West Bank and Gaza, a sequential IPV/OPV schedule was introduced in 1990 and remains in use. WPV1 was intermittently detected in sewage samples taken at routinely tested sites in the West Bank in July through October 2013 and in Gaza in August 2013 through January 2014, the most recent being taken on 5 January 2014. Full SIAs were conducted with tOPV in the West Bank and the Gaza during November and December 2013. No polio cases have been identified to date in the West Bank and Gaza.

Number and results of environmental samples tested for poliovirus, Israel and the West Bank and Gaza, January 2013–March 2014



*Data as of 16 Apr 2014
 Source: WHO

COUNTRIES AT RISK

COUNTRIES WITH RECENT POLIOVIRUS TRANSMISSION

Countries which have stopped transmission of indigenous WPV are subject to the risk of WPV importation from remaining reservoirs. Depending on the level of immunity in the population, outbreaks can result. Although substantial epidemics resulted following WPV1 importation into Tajikistan and other countries in the European Region in 2010 and into China in 2011, the primary risk of outbreaks remains in the WPV-endemic regions of WHO — the African (AFR) and the Eastern Mediterranean (EMR) Regions. Many outbreaks in polio-free countries occurred in the “WPV importation belt” of the African Continent — a band of countries from West Africa to the Horn of Africa with West African B (WEAF-B) WPV1 genotype originating from Nigeria. Additional outbreaks occurred in South/Central African countries due to South Asian (SOAS) WPV1 genotype originating from India. The 2013–2014 WPV1 outbreaks in the Horn of Africa, Central Africa, and the Middle East demonstrate the ongoing risk of spread following importation from Nigeria, Afghanistan and Pakistan, even in the face of preventive SIAs in some areas. Additionally, emergence and transmission of cVDPVs have occurred in some of these same countries as well as some others in AFR and EMR with compromised population immunity. There are 29 previously polio-free countries in AFR (Angola, Benin, Burkina Faso, Burundi, Cameroon, CAR, Chad, Congo, Côte d’Ivoire, DRC, Ethiopia, Equatorial Guinea, Gabon, Guinea, Kenya, Liberia, Mali, Mauritania, Mozambique, Niger, Senegal, Sierra Leone, South Sudan, Togo and Uganda) and EMR (Iraq, Somalia, Syria, Yemen) in which WPV or cVDPV transmission has occurred since 2009 that are subject to ongoing risk of poliovirus transmission.

We present surveillance performance indicators and dose-histories in non-polio AFP (NPAFP) cases, reflecting immunity status in 32 countries — these 29 previously polio-free countries plus the three WPV1-endemic countries. We also present an overview of the assessment of risk of WPV transmission based on the NPAFP dose history, history of outbreaks and proximity to transmission, indicators of routine immunization system delivery and other factors that were recently evaluated by WHO, CDC and the Institute of Disease Modelling (Global Good) (Risk Assessment Task Team) to arrive at a consensus on which countries are at highest risk in the AFR and EMR as well as selected countries of other regions. Lastly, mitigating activities in 2014 are briefly reviewed.

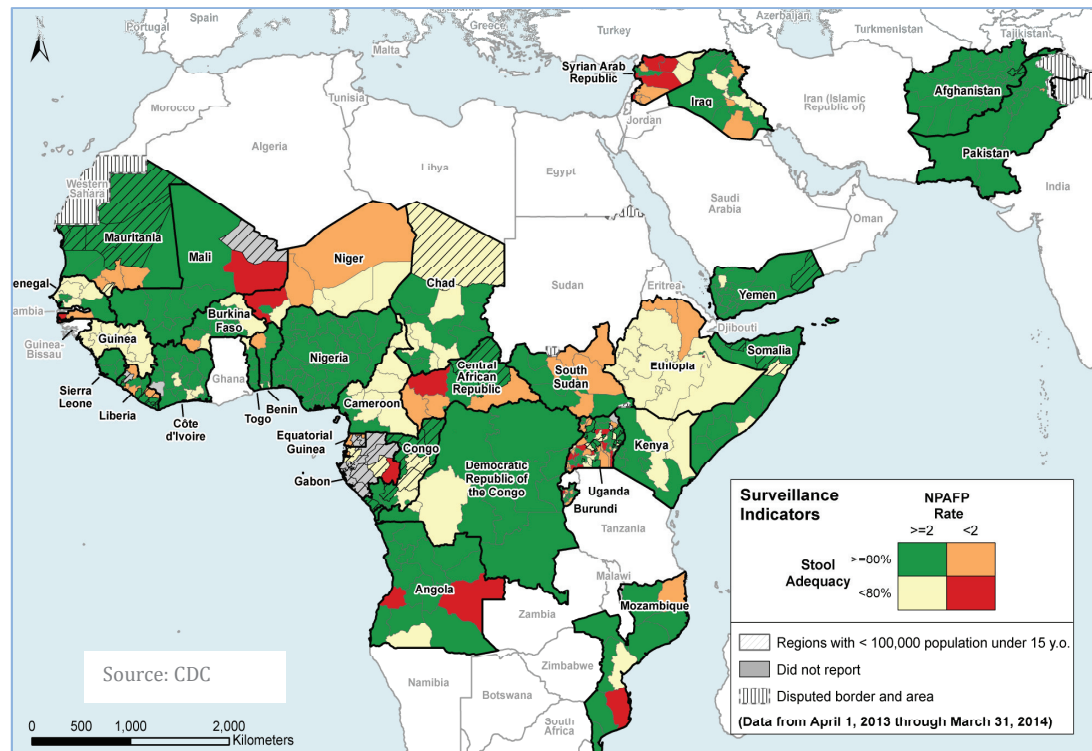
SURVEILLANCE PERFORMANCE

An article simultaneously published 25 April 2014 in CDC’s Morbidity and Mortality Weekly Report and WHO’s Weekly Epidemiologic Record assessing surveillance indicators for 2012–2013 highlighted a deterioration of surveillance indicators from 2012 to 2013 among the 30 countries evaluated, primarily in AFR countries and primarily due to a decrease in the proportion of AFP cases with collection of adequate specimens. Overall, national performance indicator targets for AFP surveillance and collection of adequate specimens were met in 27 (90%) of 30 countries in 2012 and 22 (73%) in 2013. In 17 (57%) countries, $\geq 80\%$ of the population lived in subnational areas meeting both AFP performance indicators in 2012, decreasing to 13 (43%) in 2013.

Over the last 12 months through 31 March 2014, 29 (91%) of 32 countries with PV transmission during 2009–2014 met the national target of an annual rate of ≥ 2 NPAFP cases per 100,000 population aged < 15 years. The three countries where the NPAFP rate indicator did not meet the national target were Equatorial Guinea (1.0), Gabon (0.5), and Syria (1.7). The national target of $\geq 80\%$ of AFP cases with adequate stool specimens was met by 25 of 32 (78%) countries over the last 12 months. The seven countries where the stool adequacy rate indicator did not meet the target were Cameroon (77%), Ethiopia (73%), Gabon (20%), Guinea (67%), Niger (75%), Senegal (70%), and Syria (70%).

This map presents composite surveillance indicators for the previous 12 months at a sub-national level (state/province) for countries reporting poliovirus (WPV or cVDPV) transmission during 2009–2014 highlighting sub-national weaknesses that are masked by overall national data. These data suggest that suboptimal surveillance limited the prompt detection of outbreaks in most of the countries affected by importations in 2013–2014 which would have

AFP surveillance indicators at first administrative level, 1 April 2013–31 March 2014



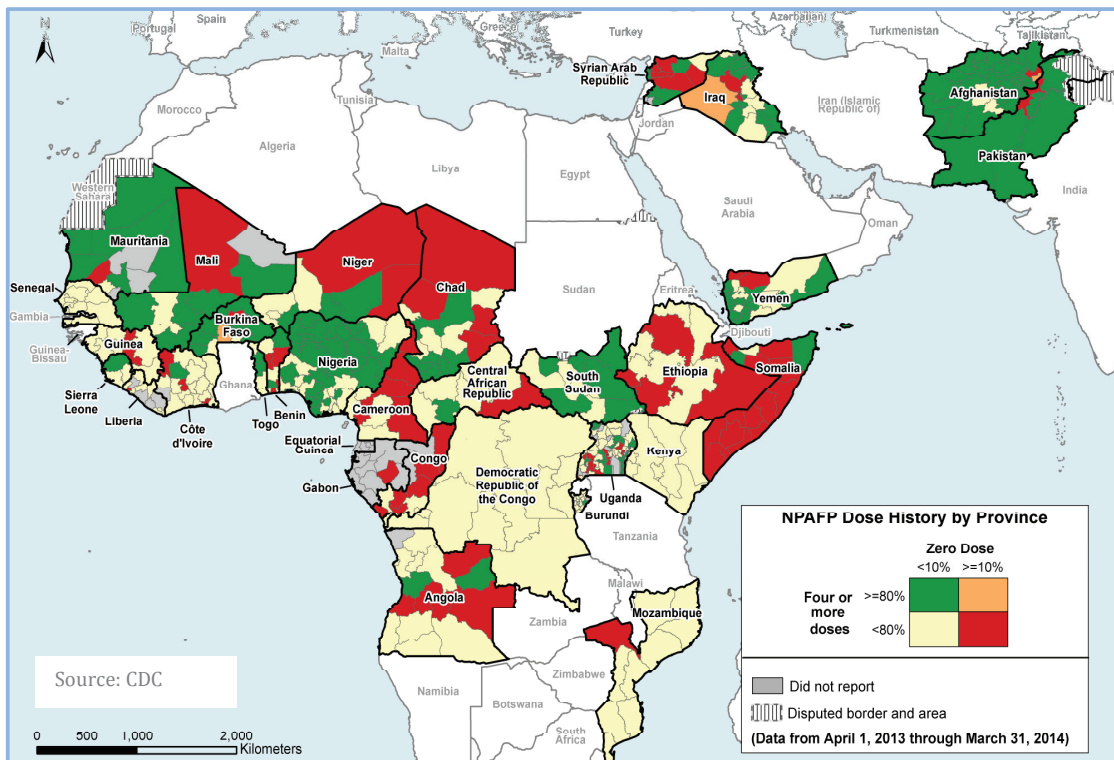
allowed more timely outbreak response activities and potentially limited the extent of each outbreak. Sub-national AFP surveillance quality was variable, noting a failure to meet one or both indicators in major areas of several countries in close proximity to Nigeria, including Burkina Faso, Cameroon, Central African Republic (CAR), Chad, Congo, Equatorial Guinea, Gabon, Mali, and Niger. In addition, there were notable deficiencies in parts of several countries in the Horn of Africa, including Ethiopia, Kenya, South Sudan, and Uganda. The other countries that reported a failure to meet one or both indicators in major areas are: Angola, Benin, Burundi, Cote d'Ivoire, Democratic Republic of the Congo (DRC), Guinea, Liberia, Mauritania, Mozambique, Senegal, Togo, Iraq, Pakistan, Somalia, Syrian Arab Republic, and Yemen.

IMMUNIZATION STATUS

This map represents immunization status indicators at a sub-national level for 32 countries reporting poliovirus (WPV or cVDPV) transmission during 2009–2014. The immunization status of children was assessed using dose history for children 6–35 months of age with NPAFP over the previous 12 months and looked at the proportion of children with no history of OPV doses (0-dose) and the proportion with >4 OPV doses. Despite SIAs in this period in most of these countries, a high number of countries have numerous sub-national areas in which <80% of children have >4 OPV doses, and many of those areas have >10% of children with 0-dose history. Most of the same countries with limited sub-national indicators of surveillance exhibit substantial weaknesses in population immunity and ongoing risk of further spread of WPV.

Validity and interpretation of data is of concern when dose history is missing for $\geq 20\%$ of NPAFP cases, as in Senegal (28% [25 of 89]), Mozambique (26% [27 of 104]), and Ethiopia (25% [72 of 291]). The following countries have 10 to 20% NPAFP cases missing dose history: Cote d'Ivoire (19%), Togo (18%), Kenya (17%), Burundi (15%), Central African Republic (14%), Democratic Republic of the Congo (12%), and Mauritania (11%). Equatorial Guinea has only 4 AFP cases in the time period, with 1 reported WPV, and 3 pending final classification.

Immunization status at first administrative level, 1 April 2013–31 March 2014



PRIORITY COUNTRIES (RED LIST)

In late-April, GPEI completed a cross-agency review of vulnerability and factors affecting risk of exposure. This risk assessment will be revised quarterly and will form the basis going forward for prioritization of countries for inclusion on the “Red List”. In addition, a number of countries in the Horn of Africa (e.g., Kenya, Uganda, Djibouti, Yemen, South Sudan) and the Middle East (e.g., Jordan, Lebanon, Turkey) are at least as vulnerable as the countries currently on the Red List. The outbreak response in those areas is not limited solely to interrupting transmission in countries affected by the outbreak but is also working to reduce the risk of importation in unaffected countries in the area. Outside of those two outbreak response zones, the Red List countries considered to be at the highest risk of polio outbreaks are the following 10 countries:

Central Africa: Chad, Congo, Central African Republic, the Democratic Republic of Congo and Gabon; Other: Angola, Benin, Côte d'Ivoire, Niger, and Mali.

Many other countries are considered at potential risk, and are also recommended to undertake national or subnational SIAs as appropriate to mitigate risks. These include, among others, the Philippines and Ukraine.

MITIGATING ACTIVITIES

The global SIA schedule was reviewed in late April 2014, and decided to increase the number of SIAs planned for the second half of 2014 in at-risk countries. Increasing SIA frequency, however, is only one means of reducing risk. To address other priorities in mitigating risk, such as improving SIA quality and enhancing surveillance, GPEI has recently created a multi-agency committee (the “Red List Task Team”) to work with the regions and these countries to improve routine immunization, SIA, and surveillance performance. The work of this task team is in the early stages and progress in Red List countries will be reviewed on a quarterly basis.

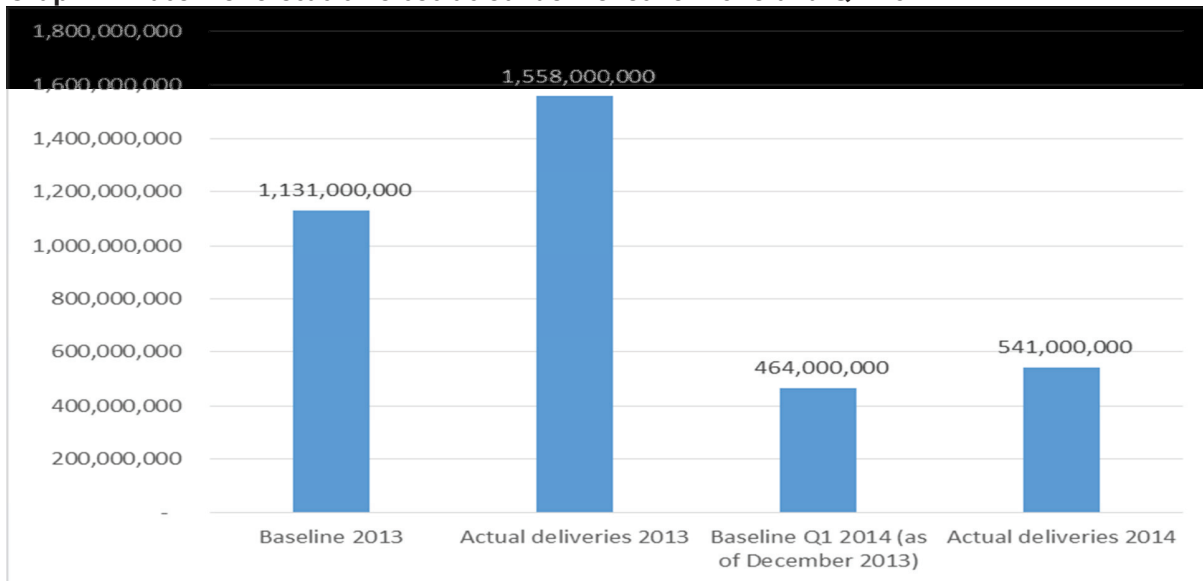
VACCINE SUPPLY

Since 2013, UNICEF has faced a highly constrained OPV supply market due to changes in supply schedules from manufacturers as well as significantly increased demand associated with outbreak response needs and intensification of activities in polio-endemic countries. Although supply has continued to be constrained throughout first quarter (Q1) of 2014, the situation is expected to improve starting end April and May for both OPV types. This is due to proactive planning with manufacturers to minimize any supply shortages. With supply no longer a barrier, the focus will be the prioritization of activities for the remainder of 2014 and early 2015, as well as longer-term planning for remainder of 2015-2017 demand and supply requirements in line with the goals of the GPEI Strategic Plan for Objectives 1 and 2.

Q1 2014 Demand and Supply

UNICEF experienced a constrained supply period throughout the first quarter of 2014 primarily due to the significant increase in demand experienced throughout 2013. Supply requirements during 2013 increased by more than 400 million doses from the original awards in October 2012. Following additional awards of more than 400 million doses by August 2013, manufacturing capacity was fully maximized for Q1 2014. Furthermore, a series of unplanned activities requiring an additional 140 million doses of bOPV required for Pakistan and outbreak response in the Middle East, Horn of Africa, and Cameroon, along with delays in production from some manufacturers, further aggravated the tight supply projections for Q1 2014.

In order to manage supply during Q1 2014 and maintain an adequate buffer to respond to polio outbreaks, immunization activities were prioritized together among partners and countries for SIAs in endemic countries; countries currently experiencing polio outbreaks; countries bordering polio outbreak and/or endemic countries or those categorised as a high-risk country for an outbreak. Proposed changes were endorsed by the Eradication Management Group (EMG).

Graph 1. Baseline forecasts versus actual deliveries for 2013 and Q1 2014

Source: UNICEF

Supply and demand for Q2 2014 – Q1 2015

To minimize supply shortages for the 2nd half 2014, UNICEF made further additional awards of 460 million doses of trivalent and bivalent OPV in November 2013, expected to be available starting in May 2014. In addition, UNICEF awarded 94 million doses of mOPV1 supply to one manufacturer for outbreak response and targeted SIAs in Pakistan and Afghanistan. This has resulted in a buffer supply of more than 400 million doses above current demand levels.

Under the auspices of the EMG, the Vaccine Supply Task Force conducted their quarterly review in early April 2014, to review supply availability and demand requirements through Q1 2015, based on funding levels and epidemiological needs. Final demand requirements are expected to be communicated by the programme following a risk assessment and expected funding levels. Based on current buffer levels, UNICEF does not expect to experience supply shortages (although it is important to remember the risk for batch failures or delays due to quality-related issues with biological products). Potential challenges for the 2nd half of 2014 and Q1 2015 could include:

- Licensing requirements for Pakistan, Nigeria and Middle East countries: Currently, only a limited number of suppliers (2) are licensed in these countries for bOPV and tOPV. Both Pakistan and Nigeria require high volumes of OPV from the same manufacturers. The additional demand from the countries in Middle East also requires supply from the same manufacturers, adding further pressure on supplies from these manufacturers. Although Nigeria has provided several waivers, it is critical that a permanent solution be found this year through either a blanket waiver or by moving forward on the expedited review.
- Potential production stop from one filler by mid-2014 could reduce flexibility to switch between bOPV and tOPV and would increase pressure on the remaining suppliers.

Next steps for Q2 2014 and Q1 2015:

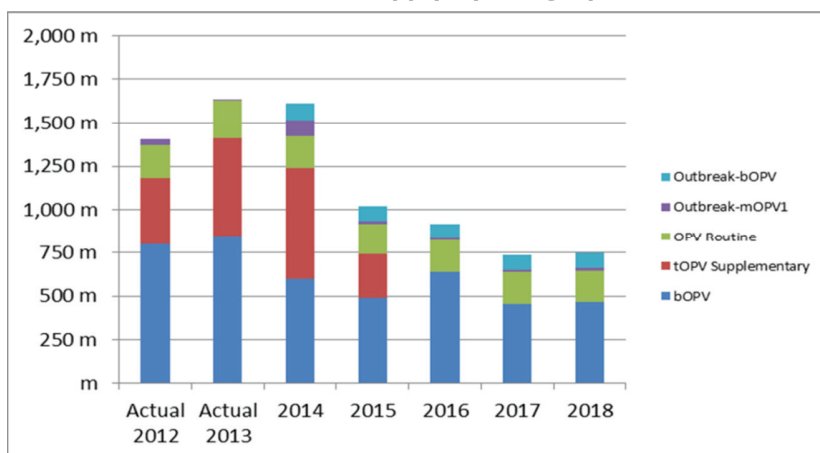
- UNICEF will work with manufacturers and programme to manage supply and demand to not have overstock.
- Forecasting for 2015 and beyond, including planning for global switch from tOPV to bOPV and vaccine stockpile.
- Continue quarterly meetings: To allow for risk assessment and ensure best information flow for supply planning.
- If there is a requirement for mOPV1 in 2015, the planning needs to be done as soon as possible, the minimum production lead time is 9 months for mOPV1.

Looking forward to the Endgame: next steps for 2015 – 2017

In line with the GPEI Endgame Strategy, UNICEF and other GPEI partners are looking ahead to meet the goals for type 2 withdrawal and the tOPV/bOPV switch. This will require significant advance planning with manufacturers to ensure there are no shortages in either tOPV or bOPV. The following activities are critical areas of work that must take place over the next quarter to meet the above objective:

1. Forecasting total demand requirements for 2015 - 2017: Manufacturers require final forecasts for 2015 by June or July 2014 at the latest. Forecasts should take into account any plans for a switch in April 2016 as this will impact the production by OPV type. Based on current information, manufacturers are planning for an April 2016 type 2 withdrawal and will slow down tOPV production unless the programme indicates otherwise. An 18-month lead time should be planned to meet future demand changes and a potential postponement of the switch. A strategy is being developed to manage this transition between product types to ensure no shortage of tOPV supply should there be a delay in the withdrawal date.

Actual and estimated OPV supply by category of use, 2012-2018



Source: UNICEF Supply Division

2. Coordination with industry: An industry consultation following the SAGE working group in June 2014 will take place with manufacturers and GPEI partners to ensure alignment on timelines for the withdrawal, tOPV and bOPV production requirements, and regulatory issues.
3. Implementation and operationalization of the switch: A strategy for implementing and operationalizing the type 2 withdrawal and switch to bOPV will be being developed to ensure a

smooth transition in the procurement and delivery between products, and to minimize excess tOPV stocks in countries.

4. Planning for the OPV bulk stockpile: a key requirement for Objective 2 and type 2 withdrawal is the availability of type 2 in both bulk and finished product. Bulk supply is expected to be finished by end 2014 or early 2015. UNICEF and WHO will be planning with the bulk stockpile manufacturers to ensure filled product is available for meeting the Endgame timelines for type 2 withdrawal. A key challenge will be balancing existing manufacturing capacity to meet the SIA activities and potential increased demand and filling for the OPV stockpile by end 2015. UNICEF will conduct a procurement process before end Q2 for the filled product.

STAFFING AND CAMPAIGNS IN 2013 AND 2014

Consultants

Person-month of GPEI consultants deployed by WHO by country, 2013-2014

Country	2013	2014
Afghanistan		7
Cameroon		27
CAR		8
Congo		3
Djibouti	6	
Ethiopia	25	30
Iraq		9
Jordan	1	23
Kenya	21	22
Niger	9	
Nigeria	106	37
Pakistan	11	
Somalia	46	
South Sudan	10	7
Syria		8
Turkey		11
Uganda	3	
Yemen	3	
Total	241	192

Staffing 2014

Region	Country	Country Staffing for Polio ¹							
		CDC		Rotary ³	WHO		UNICEF		STOP ⁵
		CDC Staff & NSTOP	Supporting partners ²		Core ⁴	Surge	Core	Surge & Soc Mob	
AFR	Algeria								
	Angola			3	80	7	4		6
	Botswana								1
	Benin			5	4				2
	Burkina Faso		1	16	6				2
	Burundi								1
	Cameroon			3	9				4
	Cape Verde								
	Central African Republic				9				4
	Chad		1	3	35	35	25		14
	Congo		1	4	9				4
	Côte d'Ivoire			15	16				4
	Democratic Republic of the Congo		1	6	93	43	20	18,688	20
	Eritrea				6				
	Ethiopia			11	73		1		7
	Equatorial Guinea				0				0
	Gabon		2	5	2				1
	Gambia				2				0
	Ghana			7	4				0
	Guinea			3	2				3
	Guinea-Bissau				3				0
	Kenya		1	6	13	1	3		9
	Liberia			3	7				4
	Madagascar				9				1
	Malawi				2				
	Mali			6	4		3		4
	Mauritania				1				3
	Mozambique				5				2
	Namibia				4				0
	Niger			5	21		1		4
	Rwanda				3				2
	Senegal				3				2
	Sierra Leone				7				3
South Africa				8					
South Sudan				446		12		18	
Swaziland				3					
Tanzania				7	1			0	
Togo			3	5				1	
Uganda			3	12	1	2		4	
Zambia				9					
Zimbabwe				3					

Region	Country	Country Staffing for Polio ¹							
		CDC		Rotary ³	WHO		UNICEF		STOP ⁵
		CDC Staff & NSTOP	Supporting partners ²		Core ⁴	Surge	Core	Surge & Soc Mob	
Endemic	Afghanistan	3		4	153	121	23	2,892	7
	Pakistan	32	1	41	306	689	71	1,708	3
	Nigeria	122		25	314	2297	18	8,602	29
AMR	Haiti								4
EMR	Djibouti				1				1
	Egypt			11	4				
	Iraq						3		
	Jordan								1
	Lebanon								2
	Somalia		1		194	42	12	12	2
	Sudan			4	69				0
	Syrian Arab Republic								
	Yemen				38				4
EURO	Kyrgyzstan								
	Russian Federation								
	Tajikistan				1				
	Uzbekistan				2				
SEAR	Bangladesh			21	103				
	India		2	33	1160		18	8000	
	Indonesia			6	49				
	Myanmar				50				
	Nepal			11	57				
WPR	Cambodia								0
	China		1						
	Papua New Guinea								1
	Philippines				3				1
	Viet Nam								

1. Does not include staff at other levels

2. CDC secondees to WHO country offices and contractors are also counted as WHO core staff

3. Includes both volunteers and paid staff

4. Includes international and national technical staff

5. Stop Transmission of Polio (STOP) round 43, deployed February-June 2014

SIAs 2013 and 2014

Region	Country	2013 Polio Campaigns ¹					2013 Polio Program Costs ² (USD, millions)	2014 Polio Campaigns ¹					2014 Polio Program Costs ² (USD, millions)
		Total No.	NIDs		SNIDs			Total No.	NIDs		SNIDs		
			No.	Target (thousand)	No.	Target (thousand)			No.	Target (thousand)	No.	Target (thousand)	
Endemic	Afghanistan		5	33,554	15	20,273	\$52.07		4	35,114	12	23,110	\$58.91
	Pakistan		4	139,307	16	127,925	\$129.46		5	172,619	17	146,064	\$136.56
	Nigeria		3	105,027	19	274,643	\$286.66		2	117,925	7	185,732	\$266.45
AFR	Algeria												
	Angola		3	18,389			\$25.20				1	3,873	\$11.77
	Botswana												
	Benin		4	12,645			\$7.04		2	6,686			\$3.43
	Burkina Faso		4	24,446	1	1,630	\$12.14		2	13,170			\$5.93
	Burundi												
	Cameroon		2	6,851	4	7,420	\$5.55		6	30,346			\$7.85
	Cape Verde						\$0.15						
	Central African Republic				4	1,545	\$3.20		4	2,643			\$3.21
	Chad ³		4	12,319	8	7,371	\$23.06		2	7,342	1	1,811	\$16.55
	Congo		2	1,748			\$1.81		2	2,080			
	Côte d'Ivoire		3	22,645			\$9.53		1	7,890			\$4.46
	Democratic Republic of the Congo		2	30,296	3	11,029	\$52.85				5	16,157	\$20.66
	Eritrea		2	1,149			\$0.66						
	Ethiopia		3	25,889	8	5,556	\$21.73				5	19,218	\$18.03
	Equatorial Guinea								3	735			
	Gabon								2	991			
	Gambia		2	842			\$0.54						
	Ghana		2	10,158			\$5.35						
	Guinea		3	9,188			\$4.36		1	3,543			\$1.69
	Guinea-Bissau		2	573			\$0.65						
	Kenya ³		1	8,241	8	15,700	\$4.51		2	16,673	3	11,454	\$16.82
	Liberia		3	2,810			\$2.65						
	Madagascar												
	Malawi												
	Mali		4	25,638	2	4,506	\$12.47		2	14,375			\$5.89
	Mauritania		2	1,278			\$1.44						
	Mozambique												
	Namibia												
	Niger ³		4	20,125	3	10,899	\$14.95		2	11,185	2	7,286	\$10.26
	Rwanda												
	Senegal		2	5,432			\$2.74						
Sierra Leone		4	5,699			\$3.95							
South Africa													
South Sudan		4	13,108	2	4,728	19.7		2	5,738			12.52	
Swaziland													
Tanzania													
Togo		2	3,577			\$2.03							
Uganda				2	5,341	\$3.12				1	2,000	\$1.55	
Zambia													
Zimbabwe													

Region	Country	2013 Polio Campaigns ¹					Polio Program Costs ² (USD, millions)	2014 Polio Campaigns ¹					Polio Program Costs ² (USD, millions)
		Total No.	NIDs		SNIDs			Total No.	NIDs		SNIDs		
			No.	Target (thousand)	No.	Target (thousand)			No.	Target (thousand)	No.	Target (thousand)	
AMR	Haiti												
EMR	Djibouti		3	381								\$0.34	
	Egypt		2	25,318	3	6,962		1	12,945			0.51	
	Iraq							3	17,185	2	4,707	4.16	
	Jordan							1	928			2.36	
	Lebanon							2	1,421			0.66	
	Somalia ³		7	29,119	17	104,484		3	6,244	8	4,725	\$16.57	
	Sudan ³		2	13,819	2	7,436		1	6,836	1	4,427	\$9.57	
	Syrian Arab Republic		2	5,708	4	3,465		6	15,826			8.61	
	Yemen		3	14,188	3	10,097		2	10,353			\$4.98	
EURO	Kyrgyzstan				2	681,792						\$0.34	
	Russian Federation												
	Tajikistan		2	1,230,174				2	2,086			\$0.24	
	Uzbekistan				2	1,943							
SEAR	Bangladesh		1	24,987								\$12.51	
	India		2	360,470	4	303,200		2	362,483	3	273,372	45.78	
	Indonesia												
	Myanmar												
	Nepal		1	4,228								\$6.68	
WPR	Cambodia												
	China ³												
	Papua New Guinea												
	Philippines									2	27,247		
	Viet Nam												

1. Includes National Immunization Days (NIDs), Subnational Immunization Days (SNIDs), Mop ups, and Child Health Days (CHDs)

2. Includes AFP surveillance, Social Mobilization, Technical Assistance, OPV, and Operational Costs. Costs for CHDs and CDC programmes not included

3. Concurrent SNIDs in different geographical areas were counted separately

Rotary Support

Rotarians in Nigeria held a meeting on 22-23 June 2013 in Abuja under the leadership of the Past Rotary International President from Nigeria to discuss plans for enhanced Rotarian engagement. It was agreed that Past District Governors would lead Rotary teams for the remaining four rounds of Subnational Immunization Plus Days in high risks states. Also, the National PolioPlus Committee Chair is targeting Rotary ambassadors for each of the worst performing districts. In Pakistan, the National PolioPlus Committee Chair has an office manager and a newly hired Project Manager who will help coordinate Rotary efforts in the worst performing districts. Plans are underway to further expand Rotary infrastructure in Pakistan, Nigeria, Chad and DRC with professional staff to support Rotarian activities.

FINANCING

Please note: Once the SIA plans for the second half of 2014 have been approved, we will provide the IMB a financial update which would include the updated costs for 2014 as well as cash flow information.

Funding Gap

The Funding Gap represents the GPEI's public message on the funding situation for the Initiative, including public recognition of contributions, for the full period covered by the Strategic Plan 2013-2018.

Against the US\$ 5.5 billion budget for 2013–2018, the best-case funding gap for the entire period is US\$ 563 million (Table 1).

The funding gap represents the difference between the total costs budgeted in the endgame plan less a) pledges made at the 2013 vaccine summit, b) pledges made after the summit, and c) projections for donors who have not made political commitments but who have historically provided support and have indicated that they will continue to do so.

Table 1: GPEI Funding Gap as of February 2014

Funding Gap (USD millions)	2013-2018 Feb 2013	2013-2018 Feb 2014
	(pre-Vaccine Summit)	
Funding Required (FRRs)	\$ 5,525	\$ 5,525
Confirmed Funding	\$ 395	\$ 1,834
Pledged Funding	\$ -	\$ 2,698
Projected Funding	\$ 3,100	\$ 430
'Best Case' Funding Gap	\$ 2,030	\$ 563

Source. GPEI.

This level of commitment from donors over the entire period of the plan represents a historic shift in the way the Initiative is funded and has enabled stronger forward planning, more discipline in budget control and supported a fast response to the two major outbreaks of 2013.

In spite of the historic levels of commitments, there are still concerns about the financing situation of the Initiative. Pledges do not represent cash available to the Initiative. Changes in political leadership or economic downturns present a risk that pledges will not be honoured. In addition, none of the donors who pledged at the Vaccine Summit was in a position to make a full payment of the pledges immediately and the timing of the operationalization of pledges has an impact on implementation.

Table 2 shows the status of vaccine summit pledges as of 1 February 2014. The table shows that all donors have released some portion of their pledges, the total funds released in 2013 were US\$ 1.5 billion.

Table 2: Summary of Vaccine Summit pledges

Donor	Pledge	Received as of Feb 2014	
		Amount	%
BMGF	\$ 1,800.00	\$ 364.00	20%
Private philanthropists	\$ 335.00	\$ 51.00	15%
Norway	\$ 252.00	\$ 12.00	5%
Canada	\$ 244.00	\$ 65.00	27%
UK	\$ 457.00	\$ 294.00	64%
Abu-Dhabi Crown Prince	\$ 120.00	\$ 12.00	10%
Germany	\$ 152.00	\$ 54.00	36%
IDB	\$ 227.00	\$ 137.00	60%
UNICEF	\$ 65.00	\$ 23.00	35%
Nigeria	\$ 40.00	\$ 23.00	58%
Others	\$ 351.00	\$ 468.00	133%
TOTAL	\$ 4,043.00	\$ 1,503.00	37%

Source. GPEI. Detailed table available at <http://www.polioeradication.org/Financing.aspx>

This table does not include the following pledges made since April 2013:

- Rotary: 135 million US dollars 2013-18
- Australia: 80 million Australian dollars for 2015-2018

While no donor has failed to release at least part of their pledge, the percentage of pledges released ranges from 5% to 68%. Annex 1 provides further information on the status of pledges.

Delays in the realization of pledges could be due to a) the timing of donor governments' budget and political cycles, b) the time required for new donors to establish new mechanisms to work with GPEI for transfer and accountability of funds, and/or c) the need for donors to raise funds from their own constituencies before releasing them to GPEI.

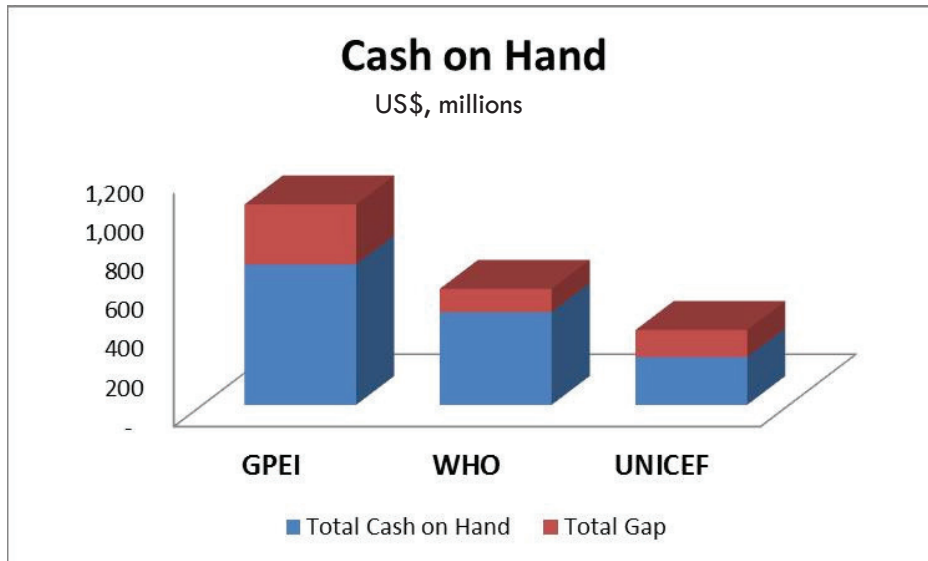
A final area of concern and risk is the timely realization of pledges by country governments, in particular the Government of Nigeria, as they support a significant portion of Nigeria's operational cost requirements for polio eradication.

Cash Gap

The cash gap represents the GPEI's internal operating position in the near term based upon cash available for expenditure.

As of April 2014, the Initiative has cash on hand of US\$ 721million against the total budget of US\$ 1.033 billion for 2014 (Figure 1).

Figure 1: GPEI Cash Gap for 2014 as of April 2014



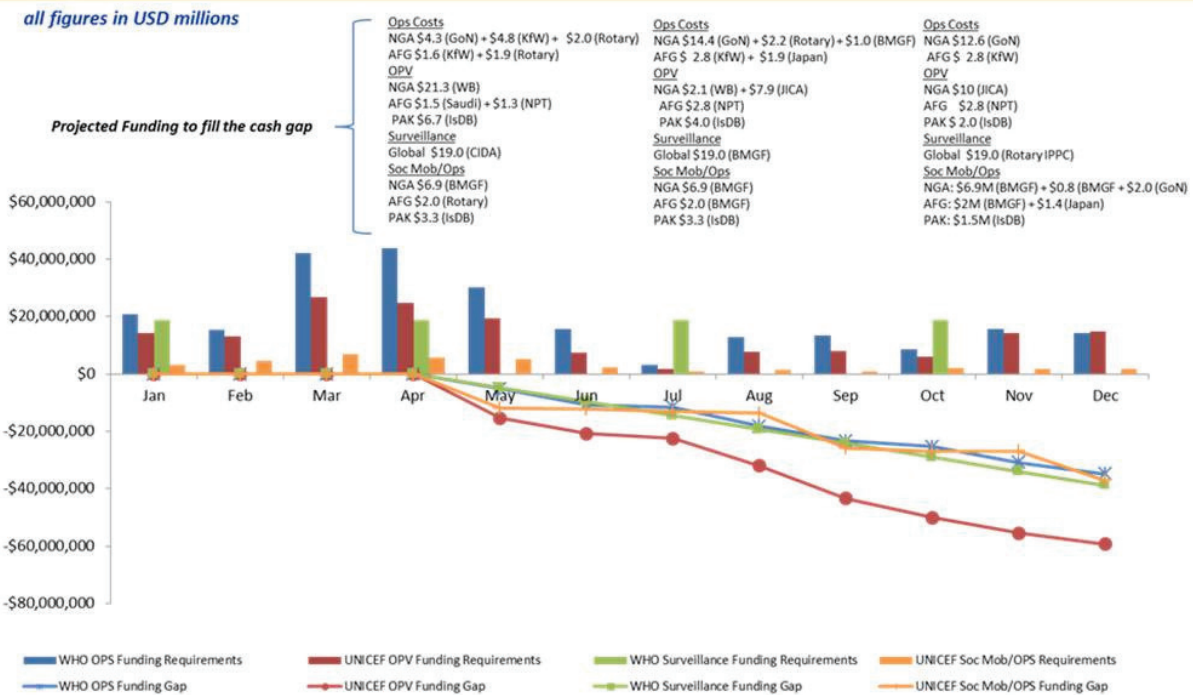
Source. GPEI

The most critical cash gaps are in budget categories for supplementary immunization activities and surveillance. Figure 2 shows the cash gap situation by month for these areas, as well as the pledges by quarter which need to be realized in order to fill the cash gap.

Managing the cash gap presents a significant challenge as the Initiative is forced to juggle requests from countries for funding as SIA plans change based upon the evolving epidemiology, while still dependent on the timing of incoming funds from donors. This challenge is further complicated by the decrease in flexibility of funding. In 2013, less than 25% of funds were flexible, meaning that more than 75% of funding was tied to specific activities or geographies. This decrease in flexibility is partly the result of increased restrictions on use of funds by donor governments, and reduces the ability of the Initiative to respond to programmatic adjustments in a flexible manner.

Figure 2: GPEI Cash Gap for SIAs and Surveillance in 2014 as of April 2014

Cash Gap for SIAs and Surveillance (2014)



Source. GPEI.

The timing of the operationalization of pledges presents a significant risk to the Initiative at a critical period when more agility is needed. While no activities were cancelled for lack of funds in 2013, some campaigns were delayed because of timing of receipt of funding, due in part to the time needed to transfer funds from the implementing agencies to local authorities.

By the end of November 2013, aggregated requests for financing of eradication activities in 2014 exceeded the original projected US\$ 1.033 million budget for 2014 (as of the June 2013 FRR) by US\$ 287 million. To address this, the Eradication Management Group (EMG) revised OPV campaigns plans for 2014 to optimize the probability of stopping wild virus, by (a) starting from the proposed schedules of the endemic countries, (b) including an adequate response/mop-up schedule in the re-infected countries, (c) sustaining activities in highest risk areas bordering infected countries, and (d) emphasizing activities mainly in infected countries and outbreak zones in the first half of the year (in the low season). The EMG also reserved some financing 'contingency capacity' for campaigns which would be scheduled by May/June based on evolving epidemiology. However, as we approach mid-2014 with both the Middle East and Cameroon outbreaks spreading geographically resulting in cases in Iraq and Equatorial Guinea, respectively, as well as the implementation of more aggressive immunization tactics in the endemic countries, the risk of cost overruns against the budget appears high.

Specific actions taken by GPEI to strengthen the financing situation of the Initiative include:

- increasing capacity to strengthen budgeting and financial forecasting, including increased staffing in implementing agencies and enhanced governance with the creation of the Finance Working Group.
- enhancing resource mobilization capacity in both UNICEF and WHO, and implementing a strategy to increase pledges to cover the risks of donor default.
- conducting leadership visits to major pledging countries to confirm commitment and increase donor visibility.
- strengthening oversight of financial issues in the governance structure of GPEI with regular reports to the PSC and POB, and including Finance Working Group (FWG) members in the Eradication Management Group (EMG).

Specific actions requested from donors to strengthen the financing situation of the Initiative include more predictability in disbursements, and greater flexibility in the use of funds.

Specific actions requested from affected countries to strengthen the financing situation of the Initiative include the timely release of domestic funds for polio activities, advance planning for campaigns and advance communication of planned changes in vaccination campaigns so that the impact of modifications on the financial forecasting and planning of the Initiative can be assessed and taken into consideration.