



NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY

2019 NIGERIA POLIO ERADICATION EMERGENCY PLAN

December 2018

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Abbreviations

AFP	Acute Flaccid Paralysis
AVADAR	Auto-Visual AFP Detection and Reporting.
bOPV	Bivalent oral polio vaccine
BMGF	Bill and Melinda Gates Foundation
CDC	Centers for Disease Control and Prevention
CJTF	Civilian Joint Task Force
cVDPV	Circulating Vaccine Derived Poliovirus
DOPV	Directly observed polio vaccination
EOC	Emergency Operations Centre
ERC	Expert Review Committee on Polio Eradication and Routine Immunization
EPI	Expanded Programme on Immunization
FCT	Federal Capital Territory
FMOH	Federal Ministry of Health
FOMWAN	Federation of Muslim Women Associations in Nigeria
FRR	Financial Resources Requirements
GAVI	Global Alliance of Vaccines and Immunization
ICC	Inter Agency Coordination Committee
IDPs	Internally displaced populations
IPC	Inter-Personal Communication
IPDs	Immunization Plus Days
IMB	Independent Monitoring Board
LGA	Local Government Area
LQAS	Lot quality assurance sampling
mOPV2	Monovalent Oral Polio Vaccine type 2
NCC	National Certification Committee
NICS	National Immunization Coverage Survey
NIFAA	Nigeria Interfaith Action Association
NPEEP	National Polio Eradication Emergency Plan
NTLC	Northern Traditional Leaders Committee on Polio & PHC
NPHCDA	National Primary Health Care Development Agency
OIRIS	Optimized Integrated Routine Immunization Sessions
OPV	Oral polio vaccine
PEI	Polio Eradication Initiative
PTFoPE	Presidential Task Force on Polio Eradication
RES	Reaching Every Settlement
RI	Routine Immunization
RIC	Reaching Inaccessible Children
SIA	Supplemental Immunization Activities
STF	State Task Force on Immunization
UNICEF	United Nations Children's Fund
VCM	Volunteer Community Mobilizer
VDPV2	Vaccine derived poliovirus type 2
WHO	World Health Organization
WPV	Wild Polio Virus

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EXECUTIVE SUMMARY

The Nigeria Polio program made remarkable progress in 2018 marking twenty-seven months with no case of wild poliovirus (WPV) reported. The progress was made possible with increased vaccination and surveillance reach in inaccessible areas in the northeast. Reaching Every Settlement (RES) and Reaching Inaccessible Children (RIC) strategies were specially employed in Borno and Yobe states to address areas with security threat/risks. The program continued to implement innovative and impactful in-between round special interventions targeted at vaccinating more children potentially missed through the House-to-House campaigns. These strategies included profiling and vaccination of children liberated from captivity in the security compromised areas, vaccinations at transit points, IDP camps, hospitals, markets, etc. The innovative strategies resulted in more settlements being accessed and thus more children vaccinated in security-compromised areas than the previous years; a combination of house to house (H2H), RES and RIC have improved vaccination reach from 7,926 settlements in December 2016 to 12,296 settlements by December 2018.

The program faced two separate outbreaks of circulating vaccine derived poliovirus type 2 (cVDPV2) in 2018. A total of 145 positive cVDPV2 isolates were confirmed across 30 LGAs in eleven states, with 34 cVDPV2 from AFP cases isolated in Jigawa, Katsina, Yobe, Borno and Kaduna states. 50 of the cVDPV2 detected were isolated from environmental sites in Jigawa, Sokoto, Yobe, Borno, Bauchi, Kaduna and Gombe States while 58 were isolated from healthy children in Borno, Jigawa, Katsina and Yobe states. Three AFP contacts with positive cases were from Yobe and Borno states, and eleven ambiguous VDPV2 (aVDPV2) were from four states. The outbreak spread to neighboring Niger republic. There were eight polio compatible cases from five states in 2018.

Two National Immunization Plus Days (NIPDs), three Sub-National Immunization Plus Days (SIPDs) and five outbreak response (OBR) rounds were conducted between January and December 2018. The quality of the campaigns was reflected by the LQAs results following each round. For instance, in the December 2018 round, 81% of the sampled 217 LGAs in 16 high-risk states achieved 90% and above coverage. In addition to these campaigns, the program conducted RI intensification activities using IPV to boost population immunity in 93 LGAs across seven outbreak response states where mOPV2 SIAs had been conducted. The LQAS results for this response indicated that 56% and 75% of target LGAs achieved at least 90% coverage for both IPV and bOPV2 respectively.

Emphasis was placed on improving the quality and sensitivity of surveillance in 2018 through training and sensitization of surveillance actors, surveillance peer reviews at state level, use of LGA trigger criteria, strengthening of the accountability framework including AFP case verification, increase in frequency of environmental surveillance (ES) collection for some sites, creation of 23 Adhoc ES sites. Innovative approaches were implemented in

security compromised areas such as expansion of the community surveillance network, healthy children stool sampling, environmental sweeps and use of RES and RIC strategies for surveillance. Environmental surveillance was implemented in 78 functional collection sites in 20 states and the FCT in 2018. At the end of 2018, 9,544 AFP cases were reported in 2018, and although this is a reduction from the number of cases reported in 2017, it shows the sensitivity of the system to pick only true AFP cases. The non-polio-AFP and stool adequacy rates stood at 9.6 (target 3.0/100,000 of <15yrs) and 96% (target 80%) respectively. The proportion of LGAs meeting both key surveillance indicators was 87% and the non-polio enterovirus rate was 13.7.

Achieving the gains in 2018 were a result of carefully planned and implemented mobilization and engagement meetings, which resulted in strong political support and collaborative implementing of innovative strategies across the county. The Presidential Task Force for Polio Eradication and Routine Immunization, which provides overall stewardship and leadership to the programme met three times in 2018. The National and State EOCs continued to drive the programme, ensuring strong coordination of Government and partner efforts at all levels and strategic technical support to the programme, including close monitoring of performance. External assessments of the programme were done by the Independent Monitoring Board (IMB), global teams for Data surveillance review and Outbreak Response Assessment (OBRA), the Lake Chad TAG as well as locally by the Polio Expert Review Committee (ERC), which met twice in 2018.

The major challenges faced in 2018 were the outbreak of cVDPV2 as well as the lack of access to remaining children in completely inaccessible areas in Borno especially Abadam, Marte and some islands on the Lake Chad. Sustaining the gains made through polio campaigns was also threatened by potential immunity gaps as revealed by the upsurge in cVDPV2 cases and low coverage based on community surveys and RI LQAs data. There were also challenges of non-compliance and block rejections in states such as Jigawa, Katsina, Bauchi, and Gombe where long lasting insecticide treated nets were distributed by the National Malaria Control Programme.

In 2019, the overall goal of the program will be to sustain the interruption of wild poliovirus transmission and to contain the current outbreak of cVDPV2. This will be done through quality campaigns, increasing the reach to inaccessible areas in Borno state, achieving reduction in number of unimmunized children in very high risk LGAs, and sustaining quality surveillance performance indicators in all LGAs

1.0 INTRODUCTION AND CONTEXT OF THE PROGRAMME

Context of Polio Eradication Efforts in 2019 – interrupting all poliovirus transmission

Nigeria marked two years without any WPV1 in September 2018. The last virus was detected in a healthy contact in Monguno LGA of Borno State.

During 2018, the programme continued intensive efforts to interrupt transmission of WPV1 and strengthen surveillance. Surveillance reach in inaccessible areas expanded in Borno State through community informant network. Four hundred and twenty-nine (429) community informants were engaged to conduct surveillance in inaccessible areas (96 wards), and they were able to detect 125 AFP cases from 75 security compromised wards in 17 LGAs. Of the 429 community informants, 65 were from 72 island settlements in Lake Chad and these were able to detect six AFP cases. After 2 – 3 years of silence, community informants in Abadam and Marte LGAs detected four AFP cases. Where security allows, geo-coordinates of the community informants are collected.

Innovative approaches to reach children in inaccessible areas were sustained and guided by settlement-based accessibility mapping and collaboration with security forces. Through the Reaching Every Settlement (RES) strategy, 4,332 (99.5%) of 4,353 partially accessible settlements in 10 LGAs in Borno were reached and over 279,000 children vaccinated, while in Yobe 801 partially accessible settlements (100%) in 6 LGAs were reached and 62,645 children vaccinated. All RES settlements were transitioned to house-to-house teams. 3,788 (54%) of 7,078 inaccessible settlements were reached through the Reaching Inaccessible Children (RIC) strategy in 18 LGAs of Borno State, while in Yobe 99% (124) of planned RIC settlements were reached with 2,577 children vaccinated across 5 LGAs. Overall, accessibility for vaccination in Borno improved from 56% to 69% between December 2016 and December 2018 through the combined efforts of house-to-house, RES and RIC teams.

Other special interventions continued to be implemented at transit points, markets, nomadic routes, cross border sites, hospital and CMAM sites, in order to capture children coming out of inaccessible areas or on the move. A total of 3,725,084 children were vaccinated through special interventions in North East Zone, with the highest number of children vaccinated through transit points including markets, PHT, and IDP camps.

Settlement based validation was conducted in Borno in 2018. Out of the 23,230 settlements in the baseline master list, 15,617 were validated as true settlements; 7,933 were invalid settlements; and 320 were additional settlements discovered through the exercise.

Nigeria experienced two outbreaks of cVDPV2 in 2018 that originated in Jigawa and Sokoto states respectively. One hundred and forty-five (145) positive cVDPV2 isolates were confirmed in 30 LGAs in eleven states in northern Nigeria: 34 from AFP cases, 50 from the environment, 58 from healthy contacts and 3 from contacts of positive AFP cases. Eight ambiguous VDPV2 were also isolated from four states: Jigawa (2), Sokoto (2), Yobe (1) and

Borno (3) state. The Sokoto cVDPV2 isolates were all from the environment and were confined to two LGAs (Sokoto North and Sokoto South) while the Jigawa outbreak spread to Gombe, Bauchi, Borno, Yobe, Katsina, Kaduna, Taraba, Kano and Kwara, as well as across the border to neighboring Niger.

The last cVDPV2 was detected from an AFP case in Baruten LGA, Kwara State, with onset of paralysis on 5 December 2018. The last positive cVDPV2 from the environment was isolated from a sample collected on 13 November 2018 in Maiduguri, Borno State.

Intense efforts were made to interrupt cVDPV2 transmission through implementation of a series of SIAs using mOPV2 of varying scope, and use of IPV to rapidly boost population immunity. 18 States were targeted in the response where a range of 1 – 4 rounds was conducted using mOPV2 in 2018. Fractional dose IPV (fIPV) was administered in 93 LGAs in 7 states. Focused attention was availed to vaccine accountability through deployment of ward level Vaccine Accountability Officers (VOA) to ensure all mOPV2 vials were accounted for. Implementation in some rounds was staggered to facilitate close supervision and monitoring and attention was also availed to cross border collaboration with Niger given the dynamic situation at the borders. These efforts were complemented by the intensified efforts of the Emergency Routine Immunization Coordination Centers at national (NERICC) and State (SERICC) levels to address the gaps in routine immunization.

The National and State EOCs continued to drive the programme, ensuring strong coordination of Government and partner efforts at all levels and strategic technical support, including close monitoring of performance.

The Presidential Task Force for Polio Eradication and Routine Immunization provided overall stewardship of the programme. His Excellency the Vice President chaired three Task Force meetings in 2018 (March, July and November) with Executive State Governors and key stakeholders in attendance. The Expert Review Committee (ERC) held two meetings in March and October 2018 respectively and reviewed performance of the programme and provide technical and strategic guidance. In 2018, various external assessments were conducted. This included a field assessment by the Independent Monitoring Board for Polio Eradication (IMB) mandated panel in August 2018, and an outbreak response assessment (OBRA) in October 2018. There was also an external data review conducted in July 2018.

The key achievements during the implementation of the 2018 NPEEP included:

- No detection of WPV1 from cases or the environment for 27 months;
- Increased surveillance reach in inaccessible areas of Borno state. One hundred and twenty-five (125) AFP cases were detected from inaccessible areas including Abadam and Marte LGAs that had been silent for 2-3 years and from the island settlements;

- Improved quality of surveillance at State level. Surveillance sensitivity was maintained with non-polio AFP detection rate at 9.6 per 100,000 under 15 population and stool adequacy at 96% in 2018. The proportion of LGAs meeting both indicators was 87% by December 2018;
- Prompt investigation and response to cVDPV2 outbreaks. As the programme continues to implement response activities in a wider scope, no further cVDPV2 have been isolated from Gombe since 09 Apr 2018, from Jigawa since 06 June 2018, and Sokoto since 26 June 2018. However, the latest aVDPV2 from Sokoto was on 21 November 2018.
- Strengthened vaccine accountability. Since inception of new accountability measures, all mOPV2 vials provided for the cVDPV2 outbreak response activities were accounted for. These measures are being extended to other antigens.

The major challenges in 2018 included:

- Evolving security situation in Borno. Frequent attacks by insurgents made accessibility to parts of Borno a challenge. Implementation of RIC slowed down due to engagement of the military in security operations. An estimated 3,029 settlements in Borno have not been reached where it is estimated that 70,541 children remain trapped. In addition, 145 island settlements in the Lake Chad basin are still inaccessible.
- Low routine immunization coverage across northern Nigeria including IPV coverage fueled the emergence of cVDPV2 outbreaks and spread in ten states.
- Waning political support and commitment at the State and LGA levels. Release of counterpart funding for activities and timeliness of release continued to be a challenge at all levels. In addition, the involvement of political leaders in polio activities waned during the course of the year in the build up to the national elections in Q1 2019.

1.0. Poliovirus Epidemiology

The last wild polioviruses were detected from Borno State in 2016. In August 2016, four cases of WPV1 were confirmed in three LGAs in Borno State after 23 months of no virus detected in Nigeria. Two additional viruses were detected from a household and community contact respectively in September 2016. The viruses were detected from children among internally displaced persons who had not been accessible to the programme for some years. Genetic sequencing indicated the closest match to a virus that was last detected in Borno in 2011, indicating undetected circulation for about five years.

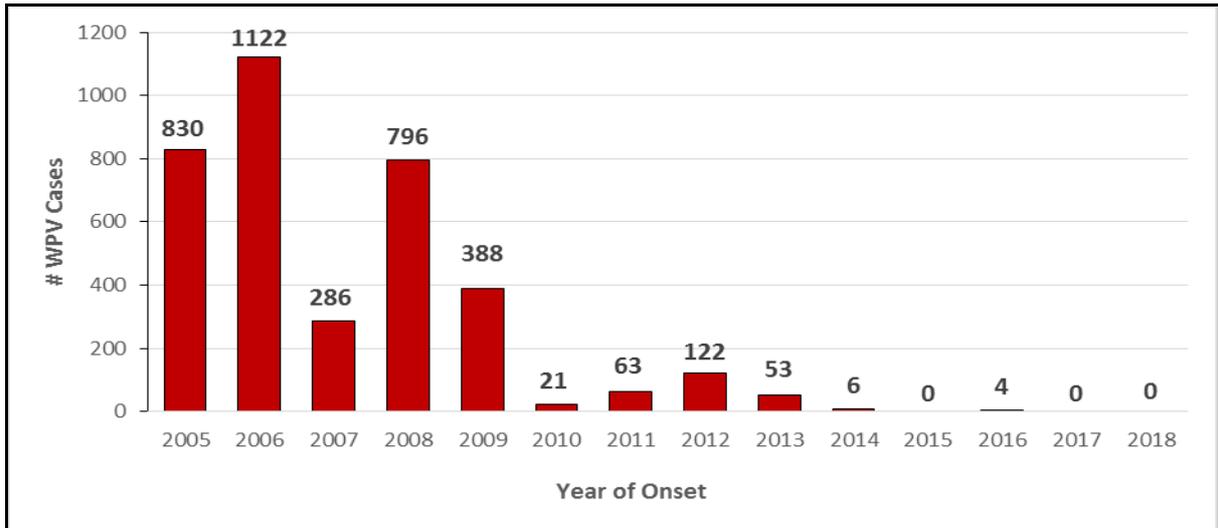


Figure 1: Confirmed WPV1 cases, Nigeria, 2005-2018

In 2018, the country saw a marked increase in cVDPV2 cases. The last peak in cVDPV2 cases was in 2014 where 30 cases were recorded from five states; this was followed by one case in 2015 from FCT and two cases from two states, Borno and Sokoto in 2016, and no case in 2017. As at December 2018, 34 positive cVDPV2 were isolated from AFP cases from seven states: Katsina (16), Borno (6), Yobe (5), Jigawa (4), Kaduna (1), Taraba (1) and Kwara (1) with the latest onset on 05/12/2018. The outbreak originated in Hadeija LGA of Jigawa state and spread to six states, with confirmation of genetic linkage.

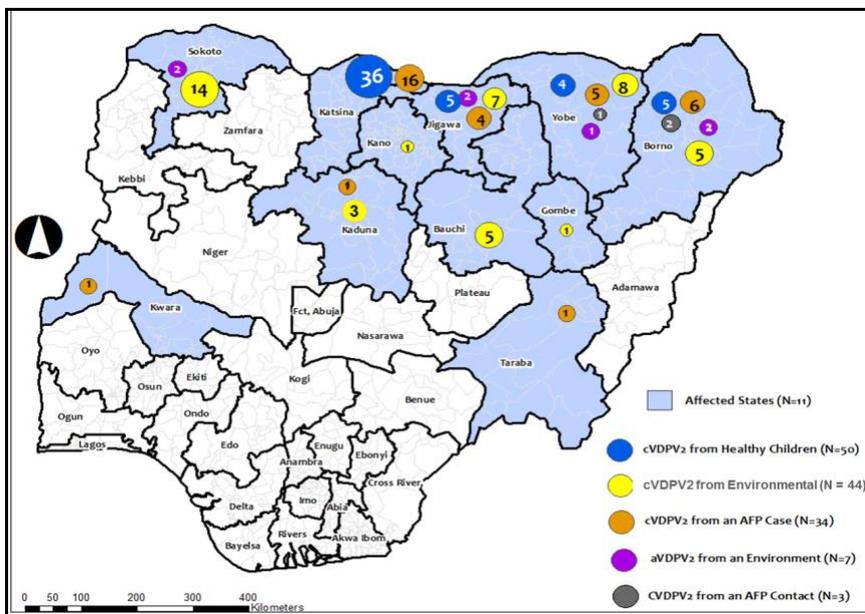


Figure 2: Location of VDPV2 isolates, 2018

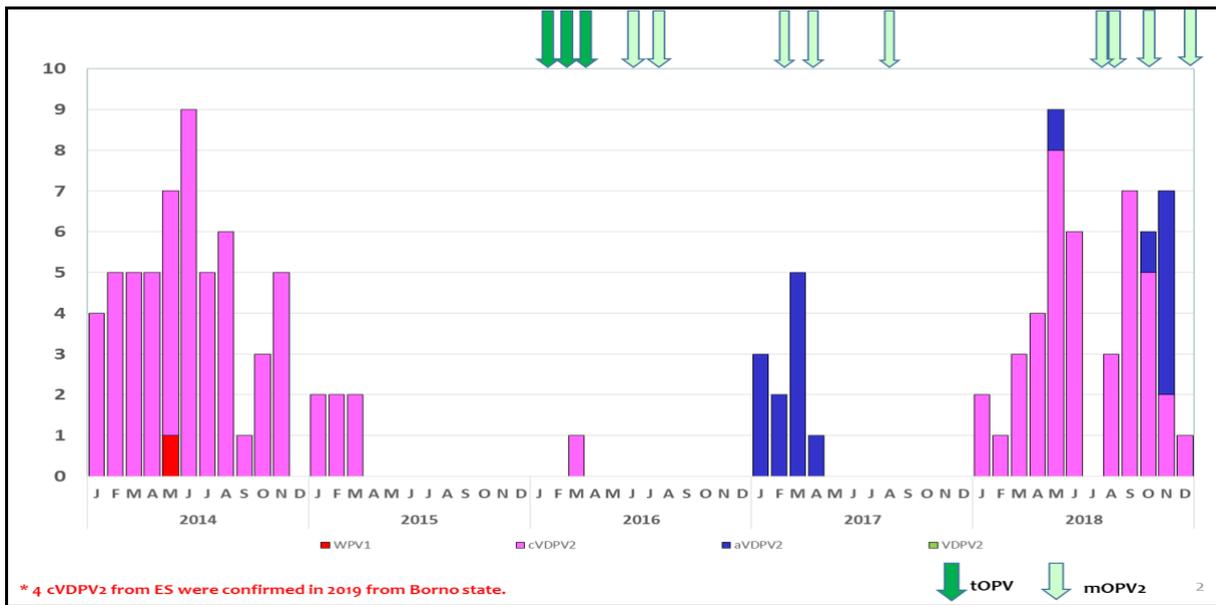


Figure 3: Trend in polioviruses from AFP cases, 2014-2018

Similarly, there was a marked increase in the number of positive cVDPV2 isolates from the environment from one positive isolate in Maiduguri LGA of Borno State in March 2016 to 0 in 2017 to 41 isolates in 2018 from 8 states. Katsina state accounted for 14 of the positive isolates followed by Yobe (8), Jigawa (7), Borno (5), Bauchi (5), Gombe (1), Kaduna (1), Kano (1). The last positive isolate was collected on 13 November 2018 in Maiduguri, Borno state. All positive isolates from the environment were linked to the Jigawa virus except Sokoto state, which was a separate distinct outbreak.

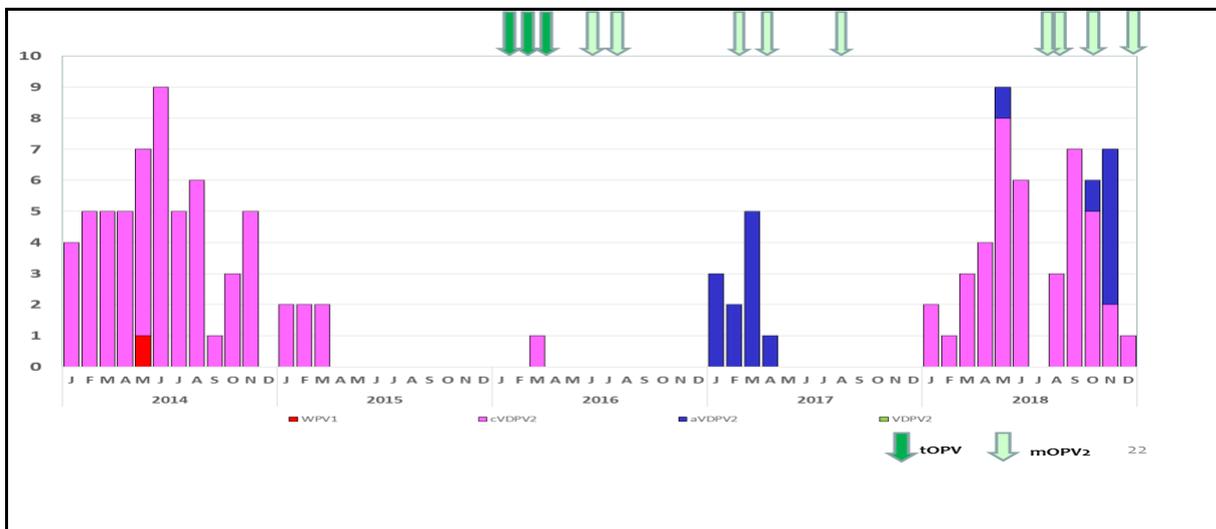


Figure 4: Trend in VDPV2 from the environment, 2014-2018

1.1. Profile of VDPV2 and Genetic Data

Detailed outbreak investigation in the cVDPV2-infected wards in 2018, indicated the following:

- The age range of the positive cVDPV2 AFP cases is 8 to 70 months old while for healthy children with positive cVDPV2 isolates ranges from 12 – 84 months old.
- The RI vaccination status of the confirmed cVDPV2 cases ranged from 0 to 4 doses with 24 out of the 31 cases (77%) as zero dose children.
- The vaccination coverage for IPV in the infected areas (based on community surveys conducted in 30 households in the area where the virus was picked up) ranged from 0% in Jigawa State to 83% in Bauchi State.

Table 1: Summary Profile of VDPV2 isolates 2018

SN	State	No. LGAs	Number of cVDPV2				# of aVDPV2	Date of sample collection of most recent cVDPV2 from ES	Latest Date of Onset of Paralysis of most recent cVDPV2 from AFP	Date of sample collection of most recent aVDPV2 from ES	Latest Date of Onset of Paralysis of most recent aVDPV2 from AFP
			AFP	Contact with Positive index AFP	HC	ES	ES				
1	Bauchi	Bauchi	0			5		05/11/2018	NA	NA	NA
2	Borno	Nganzai	3	1	1			12/04/2018	17/10/2018	18/12/2018	NA
		Magumeri	1								
		Monguno	1		4						
		Mafa	1	1							
		Maiduguri	0			5	5				
		Sub-total	6	2	5	5	5				
3	Gombe	Gombe	0	0	0	1	0	04/09/2018	NA	NA	NA
4	Jigawa	Hadejia	0			6		17/10/2018	13/10/2018	17/10/2018	NA
		Malam Maduri	0		2	1	2				
		Kaugama	1								
		Kafin Hausa	1								
		Miga	1		3						
		Kazaure	1								
		Sub-total	4	0	5	7	2				
5	Kaduna	Zaria	1			1		11/12/2018	09/10/2018	NA	NA
		Sabon Gari	0			1					
		Ikara	0			1					
		Sub-total	1	0	0	3	0				
6	Kano	Tarauni	0	0	0	1	0	10/10/2018	NA	NA	NA
7	Katsina	Baure	5		13			NA	05/11/2018	NA	NA
		Zango	5		7						
		Daura	5		14						
		Sandamu	1		2						
		Sub-total	16	0	36	0	0				
8	Sokoto	Sokoto North				12	1	21/11/2018	NA	21/11/2018	NA
		Sokoto South				2	2				
		Sub-total	0	0	0	14	3				
9	Taraba	Ardo Kola	1	0	0	0	0	NA	02/11/2018	NA	NA
10	Yobe	Geidam	1		2	5		20/11/2018	04/11/2018	20/11/2018	NA
		Damaturu	2			2					
		Nguru				1					
		Potiskum					1				
		Tarmua	1	1	2						
		Gujba	1								
		Sub-total	5	1	4	8	1				
11	Kwara	Baruten	1	0	0	0	0	NA	05/12/2018	NA	NA
Total		31 LGAs	34	3	50	44	11	11/12/2018	05/12/2018	18/12/2018	NA

2.0. ACTIVITIES IMPLEMENTED IN 2018 TO BOOST POPULATION IMMUNITY AND STRENGTHEN SURVEILLANCE

2.1. Routine Immunization Intensification in cVDPV2 Outbreak LGAs/ States

The upsurge in cVDPV2 isolates in 2018 indicated gaps in population immunity in the affected states. Immunity against type 2 virus has expectedly been waning since the switch

from tOPV to bOPV, and this is compounded by suboptimal routine IPV coverage. The national routine immunization coverage for IPV was 18.8% by card and 42.4% by card and history in 2016¹. Furthermore, community surveys done in the affected cVDPV2 outbreak affected areas indicated IPV coverage ranging from 0% in Jigawa and Kwara to 83% in Bauchi state. Highly mobile and nomadic populations between states are also a major risk factor for spread of the virus.

The National EOC worked in collaboration with the National Emergency Routine Immunization Coordination Centre (NERICC) to maximize on support to the high risk states. In order to rapidly boost population immunity against the cVDPV2 in outbreak-affected states, the outbreak response plan included a combined approach using mOPV2 campaigns followed by routine immunization intensification with IPV for children aged 14 weeks – 59 months. Nigeria has past experience in combining OPV and IPV use in cVDPV2 outbreak areas in Borno and Yobe (June, August 2014), Kaduna (April 2015), Kano (December 2014/March 2015), and Sokoto (April 2015, May 2017), successfully resulting in halt in transmission.

The following RI intensification activities were conducted using IPV among children aged 14 weeks to 59 months, where mOPV2 campaigns had already been implemented as shown in Table 2 below:

Table 2: Summary of RI intensification activities in cVDPV2 outbreak states, 2018

Dates	States	# LGAs	Children Vaccinated	IPV Doses
7 - 12 June	2: Jigawa, Gombe	7 + 1 ward (Garko, Akko LGA, Gombe)	438,380	Full dose
15 - 20 July	1: Sokoto	4	117,280	Full dose
3–13 November	7: Jigawa, Gombe, Sokoto, Yobe, Borno, Katsina, Kano	93	6,011,780	Fractional

Intensive efforts were made to ensure the activities were of high quality, which included Micro plans review, decentralized training using practical demonstrations and visual aids and community engagement facilitated through various channels including use of traditional institutions, announcements in mosques. Other activities included, house to house mobilization and use of attractive pluses. MSTs were deployed to the field level early to support preparations and implementation and intra progress campaign was tracked with daily feedback using ODK and VTS.

¹ Source: MICS/NICS 2016

Scope of RI Intensification in Jigawa and Gombe States: 6 – 11 June 2018

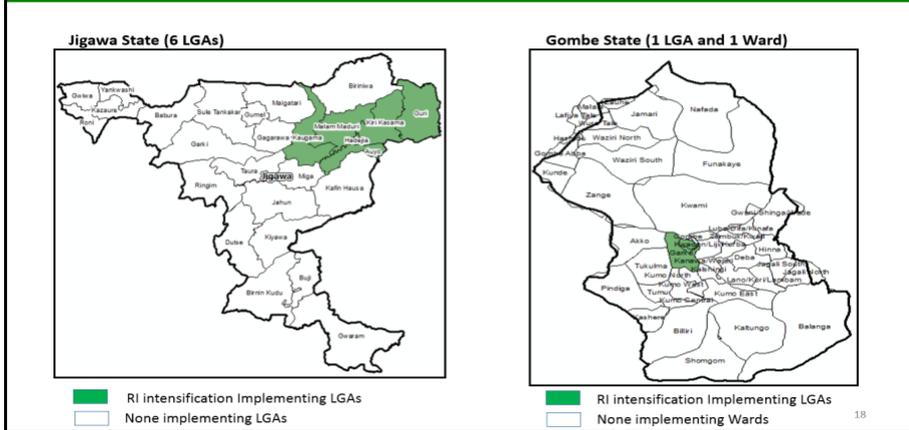


Figure 5: Scope and LQAs Results for RI intensification in Jigawa and Gombe, June 2018

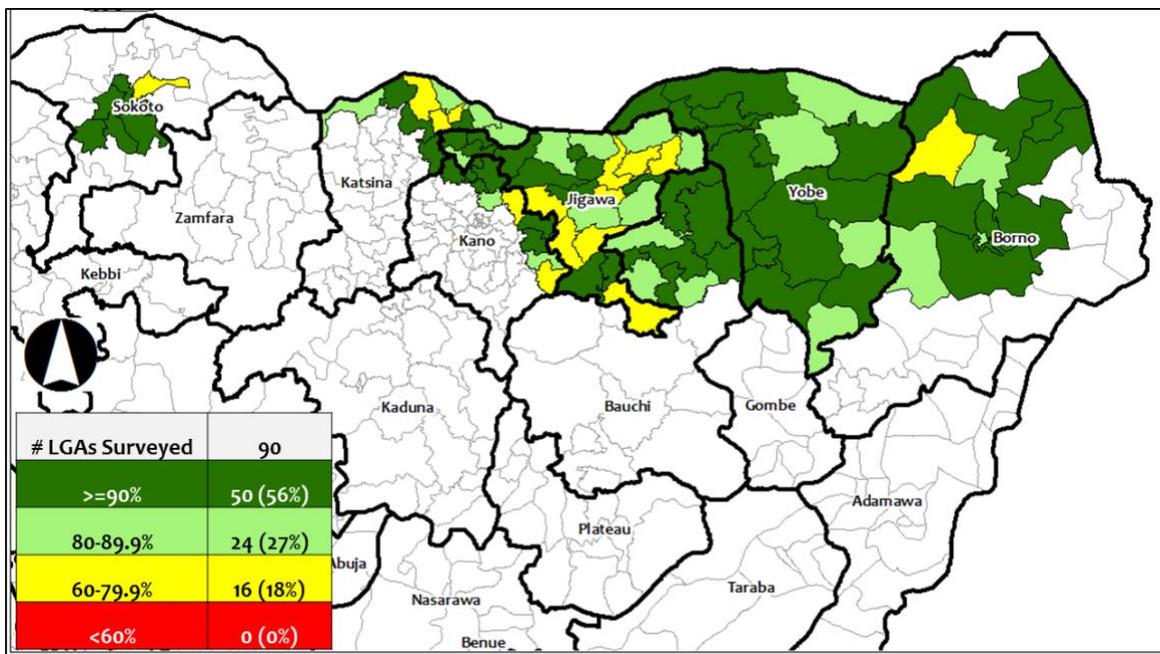


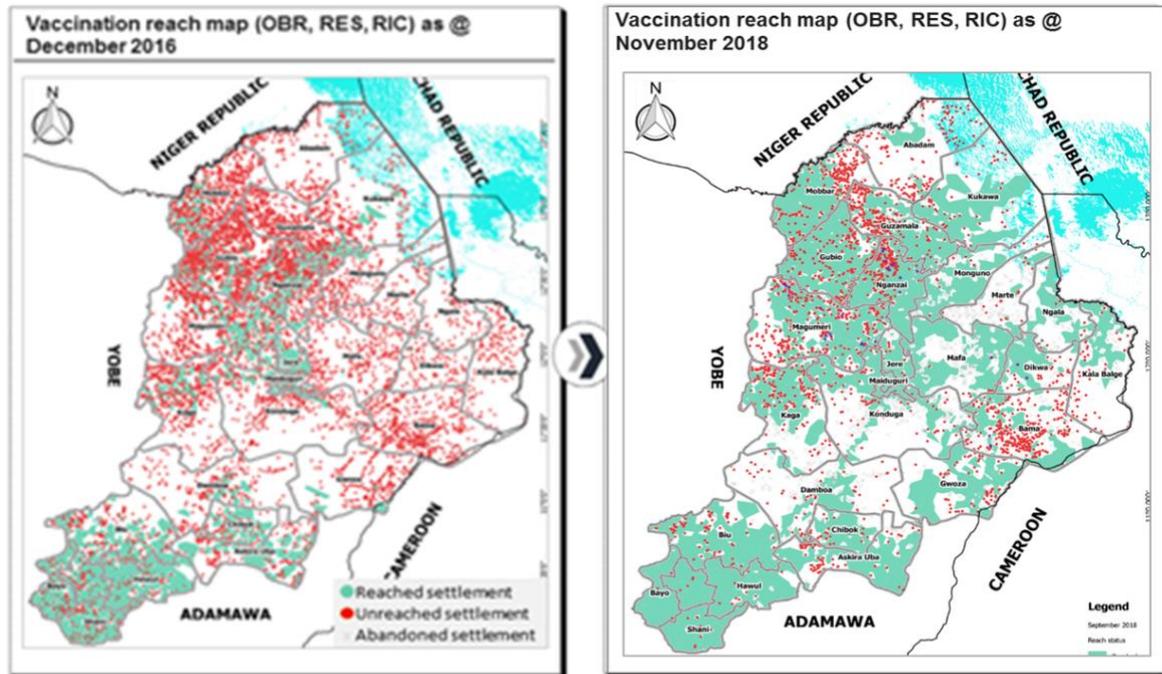
Figure 6: Scope and LQAs results of RI intensification with fIPV, 92 LGAs, November 2018

2.2. Vaccination in Security Compromised areas and Internally Displaced Persons (IDP) camps.

Accessibility remains the major impediment to the successful halting of polio transmission in Nigeria. The country has made tremendous progress in accessing children in security compromised areas. This was made possible through normal IPDs, outbreak response SIAs, RES and RIC strategies. In 2018, RES was discontinued and all RES settlements were being accessed by house to house teams till the end of 2018. RIC strategy has however continued to be implemented. After 10 rounds of RIC, 90,313 children have been reached through the program in 4,049 of 7,078 planned settlements across 17 RIC implementing LGAs. This implies that only 81% of the RIC settlements have been reached so far. There is an

estimated 178 Lake Chad Islands on the nigerian side and so far 33 of the Islands have been reached by vaccinations teams

A combination of H2H, RES and RIC have improved vaccination reach from 7,926 settlements in December 2016 to 12,296 settlements by January 2019 as shown in Figure 7.



Source: Borno EOC data team analysis

Figure 7: Vaccination Reach in Borno, Quarter 4 2016 – Quarter 4 2018

Similarly, in Yobe state, a marked improvement in accessibility was noted between December 2016 and December 2018. However, there was an escalation of insurgent attacks from July - December 2018 that led to re-instatement of the RES strategy. As part of the cVDPV2 outbreak response, teams were deployed to (Geidam, Gujba, Damaturu, Tarmuwa and Yunusari LGAs to implement the mOPV2 campaigns.

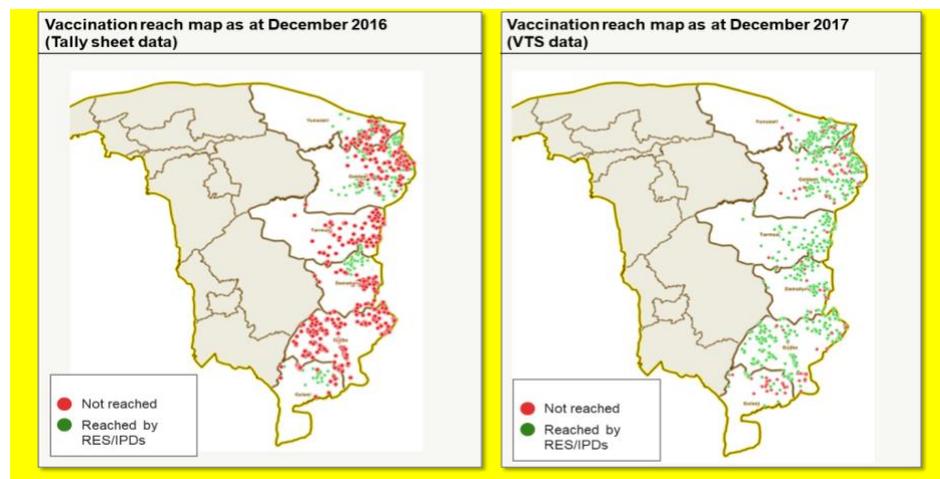


Figure 8: Vaccination Reach, Yobe State, December 2016 – December 2017

2.3. Vaccination of Internally Displaced Persons (IDPs)

Populations escaping from insurgents are housed in protected camps in safer areas by Government and assisted by partners. This makes it easier by government and partners to offer services to these internally displaced persons. The services include feeding and other basic services such as treatment of minor ailments and antenatal care. Polio eradication activities are also included among the activities taking place in IDP camps. Specific IDP camp teams are recruited to ensure children entering the IDP camps are vaccinated with OPV and IPV. The teams also search for AFP cases among the IDP population. Due to improvement in insurgent related security, there has been a significant reduction in the number of IDP camps particularly outside Borno State. In 2018, IDP camp immunization data was only received from four states namely Borno, Adamawa, Gombe and Taraba. 704,245 children were vaccinated with OPV in the four states with Borno contributing the highest number at 701,738 while Adamawa, Taraba and Gombe contributed 109, 1,769 and 629 respectively. A total of 89 AFPs were picked in the IDPs with 88 from Borno and 1 from Yobe.

Table 3: No. children vaccinated with bOPV in IDP camps by LGAs

LGA	Cumulative Children Vaccinated	Cumulative zero-dose children Vaccinated	Cumulative IPV Vaccinated	AFP Reported (AFP DB)
MUBI SOUTH	33	15	30	0
YOLA SOUTH	34	4	3	0
MUBI NORTH	42	0		0
ADAMAWA	109	19	33	0
BAMA	35,485	0	0	0
DIKWA	29,530	13	0	0
JERE	169,723	7,779	0	0
KONDUGA	30,524	4,367	56	0
MAFA	3,479	133	296	0
MAIDUGURI	129,607	1,807	72	0
GWOZA	62,250	1,487	0	0
BIU	8,305	164	0	0
NGALA	29,585	12,615	101	0
DAMBOA	47,669	6,436	0	0
KAGA	23,508	1,431	0	0
NGANZAI	10,893	675	100	0
MONGUNO	63,401	2,100	0	0
KALA BALGE	33,548	5,448	0	0
MAGUMERI	7,681	841	488	0
KUKAWA	9,467	69	32	0
ASKIRA/UBA	6,319	100	0	0
ASKIRA UBA	764	23	0	0
BORNO	701,738	45,488	1,145	0
BALI	147	0	0	0
GASSOL	541	5	1	0
JALINGO	1,017	5	68	0
SARDAUNA	64	1	0	0
TARABA	1,769	11	69	0
KWAMI	89	0	0	0
FUNAKAYE	254	3	0	0
AKKO	0	0	0	0
GOMBE	0	0	0	0
YAMALTU/DEBA	286	5	0	0
GOMBE	629	8	0	0
TOTAL	704,245	45,526	1,247	0

* As at Week 52, 89 AFP cases were reported from IDP camps, 88 from Borno & 1 from Yobe

Profiling Vaccinated Children

Children coming out of inaccessible areas in Borno were targeted at strategic locations such as transit/motor parks, market, IDP camps, Community Informants Tracking Teams (CITT), nomadic, CMAM centers, and hospital vaccinations. These children were profiled to determine the LGA and Ward of origin. During January – December 2018, 201,326 children were vaccinated and profiled, of which 189,361 migrated from 27 LGAs with in Borno and the rest – 11,965 were from other states in Nigeria or from other countries. A total of 7,930 children were vaccinated from Abadam and Marte.

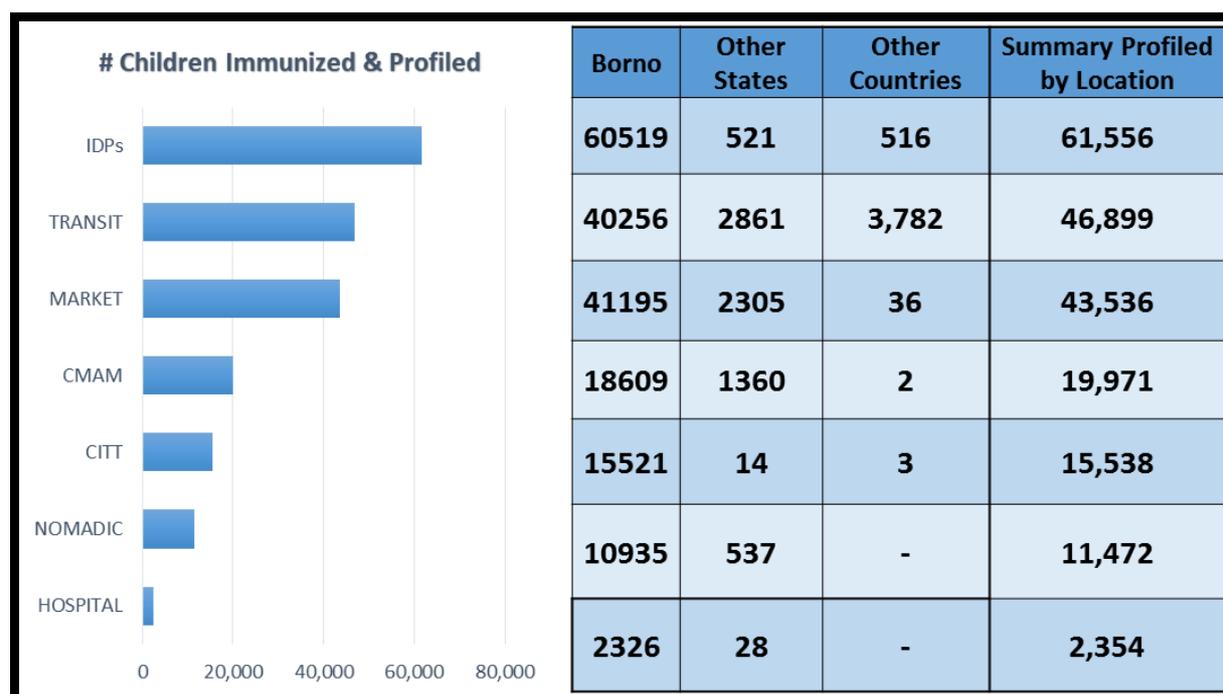


Figure 9: Profiling of children from inaccessible areas in Borno, January – December 2018

2.4. Transit Vaccinations: Markets, Motor parks, Highways, Hospitals, CMAM sites

Children in transit (highways, motor parks, markets, hospitals, nutrition centers) contribute to a good proportion of missed children during IPDs. Children in transit from areas where the poliovirus is in circulation pose a great risk of spreading the viruses to polio-free areas. Similarly, children going into polioviruses transmitting areas have to be administered with OPV to ensure they are protected. Farmers with children coming to markets to trade pose a risk of “trading” polioviruses in markets and nutrition centers. It is therefore important to vaccinate children in transit places.

Transit vaccination activities were conducted in 2018 in Borno, Yobe, Gombe and Taraba states. Through market/transit vaccinations, 1,353,080 children were vaccinated across the northeast zone in 2018, majority were from Borno state where 461,157 children were vaccinated. Table 4 shows the number of OPV doses administered through special

interventions as at Week 52 2018 in Northeastern Nigeria while table 5 highlights the children reached in the Northwest zone.

Table 4: Children vaccinated through special interventions in security compromised areas in North East Zone, 2018

Interventions	Borno	Gombe	Yobe	Taraba	Adamawa	Bauchi	NE Total
Firewalling		7,399					7,399
PHT			578,253	716	18,503		597,472
Market/Transit	461,157	343,134	87,090	158,781	139,132	163,786	1,353,080
IBPT	4,940		94,451	44,503	65,388		209,282
Insecurity	9,821					32,606	42,427
IDPs	701,738	629		1,769	109		704,245
Hospital	41,721	174,720	40,920				257,361
Nomadic	70,746	21,272	125,186	49,187	924	107,328	374,643
CMAM	156,343	45,723		1,251	668		203,985
RES/RIC	99,066		20,105				119,171
NE Total	1,545,532	592,877	946,005	256,207	224,724	303,720	3,869,065

Table 5: Number of children vaccinated as at week 46, 2018 through the various special interventions in NWZ

Interventions	Kaduna	Katsina	Kano	Sokoto	Zamfara	NW Total
Market/Transit	160,331	124	36,307	6,679	318,891	522,332
IBPT		13,384		1,775	9,324	24,483
Insecurity	23,273	4,897		8,776	1,801	38,747
IDPs	2,475					2,475
Hospital	896			3,274	177,368	181,538
Nomadic	22,635	1,009			1,763	25,407
CMAM	1,980		16,400		54,909	73,289
NW Total	211,590	19,414	52,707		564,056	868,271

International Border Activities

Nigeria has 16 States, 60 LGAs and 201 wards along the international border. Prominent among these are states that share borders with Niger and Cameroon. In 2018, a cVDPV2 originating from Jigawa State was isolated in Niger Republic and has continued to spread in the country. This buttresses the importance of international border activities being an important undertaking in the polio eradication program. One of the activities undertaken as a response to the exportation of the virus to Niger Republic was vaccination by the Nigerian teams 10kms in Niger Republic using mOPV2. This was one of the laudable public health interventions in recent times and highlighted another level of international border collaboration. The borders along Borno with Cameroon remained inaccessible to border

activities due to the continued insurgent activities in the State. In other borders vaccinations continued as an in between round activity. In 2018, 233,765 doses of vaccines were used to vaccinate children passing through international borders in Northwest and Northeast through special interventions.

2.5. Routine immunization intensification in polio vulnerable LGAs using polio infrastructure.

Special focus was availed to the VDPV2 affected States/LGAs as well as high risk LGAs identified through the risk analysis. Using a combination of risk criteria related to population immunity, security and other factors, 115 LGAs across 27 states were identified as high risk in 2018. This was broken down as follows; 29 in tier one/very high risk; 37 in tier 2/high risk; and 49 were considered as a 'special' category based on security and other LGA-specific factors (all LGAs in Borno state were under the special category of LGAs based on security risks).

Harmonization of high risk LGAs was done with the NERICC in order to coordinate joint support. NERICC led the convening of a two-day meeting with vulnerable LGAs in phases. Feedback on RI performance was provided and discussed in detail, as well as strategies to improve performance such as Optimized Integrated Routine Immunization Strengthening (OIRIS). The LGAs developed action plans and were followed up through NERICC. The polio infrastructure in the affected states was used to support planning, implementation and monitoring of action plans to improve performance, including participation in the State Emergency Routine Immunization Coordination Centers (SERICC).

Some of the key interventions conducted to improve routine immunization services in the high-risk states/LGAs included: implementation of OIRIS, implementation of daily fixed sessions in tertiary and secondary health facilities, intensification of outreach services, REW micro planning and implementation of intensified integrated RI services/local immunization days (LIDs).

2.6. Mobile Outreaches in Hard to Reach Areas

The Hard to reach (HTR) mobile outreaches continue to provide support to PEI in potential reservoirs of the virus. The HTR project activities in Yobe and Borno continued throughout 2018, given the high-risk nature of the states and the need to continue reaching in inaccessible areas and those liberated in IDP camps. 58 hard to reach teams were redeployed to support recently accessible areas and also target vulnerable populations in underserved IDP population and new arrivals from liberated settlements. As part of the humanitarian crises response, 35 additional teams were engaged in Borno State to target the vulnerable population and supported by the Emergency Cluster responding to the crisis in Northeast.

The HTR teams in Borno and Yobe States surmounted the security and logistics challenges in these hard to reach areas. They provide services such as RI, treatment of minor ailments, antenatal services as well as Surveillance for AFP and other IDSR priority diseases.

By December 2018, the HTR teams had administered 606,878 OPV doses to children 0-59 months old; 305,573 children had been reached with Vitamin A; 272,144 children had been dewormed; and treatment of minor ailments provided to 370,074 persons in Borno state. HTR session plans have been integrated with the strategy of engaging informants from insecure areas by providing services at strategic locations for persons from insecure areas seeking services in secure areas.

2.7. Health Camps

In 2018, resources were invested in reaching more children with vaccines in the most difficult, noncompliant and security challenged areas using various demand creation strategies. Health camps continued to be implemented in areas with persistent non-compliance in high risk states for provision of routine immunization services and other health interventions. In polio high-risk states, mobile health camps have greatly improved the community's trust of health care workers through the provision of free primary health care services and including treatment of common diseases. In some communities, the house-to-house polio vaccination campaign was facilitated by the institution of mobile health camps that enabled reaching more children.

In 2018, health camps were implemented across the 11 high-risk states during each IPD, with a cumulative 2,195,313 children vaccinated in the rounds of IPDs and the five outbreak responses conducted.

2.8. Strengthening Surveillance

Nigeria has continued to have a strong surveillance system that can detect poliovirus transmission in the accessible areas. However, inaccessible areas exist especially in the security challenged state of Borno where the programme doesn't have sufficient information on the population and whether or not poliovirus transmission in these areas can be sustained.

Considering the reporting period from January to December 2018, 9,544 AFP cases were reported compared to 16,470 over the same period in 2017. The reduction in the number of AFP cases in 2018 may not be unconnected to efforts put in place aim at ensuring that only true AFP cases are reported and verified. In 2018, 356 AFP cases in the database were classified as Not True compared with 248 in 2017. In addition, 2,354 suspected cases were rejected as not being AFP cases. The number of rejected AFP cases in 2017 during the same period was 1,849. The main causes of AFP rejection in the country in 2018 were

malnutrition (17%), spastic paralysis (13%), Malaria (13%), Trauma (11%), Sickle Cell Disease (10%), Abscess (7%) and Congenital Abnormality (5%).

The Non-Polio AFP (NP-AFP), stool adequacy and Non-polio enterovirus rates (NPENT) in 2018 were 9.5 (target =>3/100,000/under 15 population), 96% (target =>80%) and 13.7% (target =>10%) respectively. The corresponding figures for 2017 were 18.6, 98% and 13.9%. All the 36 states and the Federal Capital Territory (FCT) have achieved the minimum of the two core AFP surveillance indicators (NP-AFP and stool adequacy rates) in 2018. The proportion of LGAs that achieved the two core indicators in 2018 was 86% as against 99% in 2017. The main sources of AFP reporting in 2018 (>90%) were health workers (30%), community informants (22%), health facility focal person (21%), vaccination teams (11%) and partner agency staff (7%). The corresponding figures for sources of AFP reporting in 2017 were 39%, 19%, 18%, 6% and 7%.

The proportion of AFP cases verified was 98% and 97% (target =>90%) in 2018 and 2017 respectively. In 2018, contact samples were collected from 92% of inadequate AFP cases in all states of the federation (except in the security challenged states of Adamawa, Borno and Yobe) as against 88% in 2017. In the security challenged states on the other hand where contact samples are collected for all AFP cases, there was 100% contact sample collection in Adamawa, 90% in Borno and 92% sample collection in Yobe state.

The timeliness and completeness of AFP surveillance reports in 2018 (January-November) was 92% and 96% respectively. The proportion of expected active surveillance conducted by the Disease Surveillance and Notification Officers (DSNOs) in 2018 (January-November) was estimated globally at 78%: 80% for highest, 77% for high, 77% for medium and 81% for low priority reporting sites.

In 2018, a total of 102,718 (91%) surveillance personnel including Disease surveillance and Notification Officers (DSNOs), Assistant DSNOs (ADSNOs), Cluster Coordinators (CCs), Local Government Area Facilitators (LGAFs), Field Volunteers (FVs), Voluntary Community Mobilisers (VCMs), Community Informants (CIs) and others were trained/sensitized. In contrast, the number of surveillance personnel trained in 2017 was 70,822.

Timely (within 48 hours) and comprehensive outbreak investigations and risk assessments were conducted following confirmation of the cVDPV2 outbreaks. The investigations and risk assessments enabled evidence-based planning for immunization (mOPV2 and IPV) and other surveillance response activities.

Validation of Surveillance Data and Peer Reviews:

Quality surveillance information is crucial for certification. Several surveillance reviews have recommended the improvement of surveillance data. To this end, the country has

introduced a quarterly peer review of states with high AFP surveillance performance and has as well introduced a trigger criteria of peer review for states to use as part of self-assessment. The peer review started in August 2017 and by April 2018, the review was conducted in a total of 11 states and the Federal Capital Territory (FCT). The average true AFP and stool adequacy concordances were 77% and 78% respectively. The state with the least True AFP concordance was Sokoto with 59% while those with the least stool adequacy concordance were Adamawa and FCT with 68% each.

At the end of each peer review, surveillance improvement plans are developed by the states with the support of reviewers. Implementation of such plans are expected to be monitored and the results shared with the national level. Experience from the reviews conducted so far shows that the most common reasons why cases are ruled out as Not True by reviewers are Spastic Paralysis, Malnutrition, Sickle Cell Disease, Trauma and Injection Pains/abscess. The main causes of inadequate stools on the other hand were collection of two samples less than 24 hours apart, failure to ask parents when the second stool was collected in relation to the first one, inadequate communication between the investigator and caregiver, inadequate interview skills of the investigator to elicit exact date of onset of paralysis and attitudinal problems.

One of the main conclusions of surveillance peer reviews so far conducted was that AFP case definition was not strictly applied by field personnel including verifiers. Training of 348 AFP verifiers (CCs, LGAFs, Stoppers, ZCs, STCs) was conducted in order to further improve surveillance data quality and guide strict application of AFP case definition as well as improve capacity on neurological examination and differentiating AFP from other common local diseases and conditions (e.g. Malnutrition, Sickle Cell Disease).

AFP verification is an added advantage to the Nigerian surveillance system in that it acts as a filter to sieve out all cases that are Not True AFP cases. Trainers in this regard included senior personnel from teaching hospitals and other institutions (Pediatricians, Hematologists, Nutritionist), WHO and government personnel. State Coordinators, Zonal Coordinators and Monitoring and Evaluation officers are expected to validate at least 5-10% of verified AFP cases. While AFP verification data is used to update the AFP surveillance database, validation data on the other hand is used to among others assess the quality of verification and build capacity of the verifiers as well as give feedback.

Table 6: True AFP and Stool Adequacy Rate Concordance by State, 2017-2018

Period	States	AFP concordance	Average AFP Concordance	Period	States	Stool adequacy concordance	Average stool adequacy
Aug-17	Nasarawa	92%	73%	Aug-17	Nasarawa	89%	81%
	Kebbi	70%			Sokoto	81%	
	Jigawa	69%			Jigawa	79%	
	Sokoto	59%			Kebbi	74%	
Nov-17	Ekiti	100%	84%	Nov-17	Ekiti	95%	81%
	Edo	92%			Edo	88%	
	FCT	75%			Plateau	72%	
	Plateau	69%			FCT	68%	
Apr-18	Adamawa	85%	73%	Apr-18	Gombe	84%	74%
	Gombe	73%			Taraba	73%	
	Yobe	72%			Yobe	69%	
	Taraba	63%			Adamawa	68%	
National average		77%		National average		78%	

NB: Verifiers training took place in December 2017 and February 2018

Expansion of Environmental Surveillance:

In 2018, 6 additional environmental surveillance collection sites in two states (Enugu and Anambra) were added. One ES site from Rivers and 1 from Jigawa States were reviewed, and closed due high rates of negative results and replaced with new sites. At the end of 2018, a total of 78 routine environmental sites in 20 states plus FCT states were functional. Due to the upsurge of VDPV2 in 2018, 23 ES ad-hoc sites were opened and functional in 11 states already implementing routine ES. The environmental surveillance samples were processed in Ibadan. In December 2018, ES sewage sample testing was initiated in Maiduguri polio laboratory. The laboratory started with testing samples from 4 ES sites, doing parallel testing with Ibadan polio laboratory.

Innovative approaches to increase surveillance reach in security-compromised areas:

One of the main challenges to completion of the job of polio eradication in Nigeria is the presence of areas with trapped populations that have not been reached for several years with either surveillance or immunization activities. In 2018, surveillance reach in

inaccessible areas increased due to implementation of innovative strategies such as the following:

a) Surveillance through Reaching Every Settlement (RES) and Reaching Inaccessible Children (RIC) Strategies:

The RES strategy has been implemented with the military, civilian Joint Task Force (cJTF) and immunization personnel to reach partially accessible settlements with immunization services as well as surveillance activities including active case search, case investigation and identification and engagement of community informants. The RIC strategy has been conducted by the military alone following training of personnel to provide immunization services and search for AFP cases among populations they liberated in inaccessible areas. In 2018, six AFP cases were reported in Borno state through this partnership.

b) Stool sample collection from healthy children:

During Phase 1 healthy children sampling in Borno state from January to October 2017, a total of 242 stool samples were collected from Under 10 years old healthy children from 12 inaccessible/partially accessible LGAs of Borno and from one LGA each from Yobe (Gujiba) and Adamawa (Madagali) states. In addition, one stool sample was collected from a healthy child coming from Niger republic. No WPV, cVDPV or VDPV was isolated in any of the samples.

Phase 2 of the healthy children sampling was continuous as opposed to the targeted phase 1 strategy. Stool samples were collected from new arrivals of nomadic children, RIC/RS strategy whenever they visited non-reporting Wards since 2017 and trapped IDPs entering IDP camps. Samples were collected within 7 days of entry into IDP camps or arrival in a Borno LGA for nomads, all in children less than 10 years. In 2018, 722 stool samples from healthy children were collected: 520 from trapped IDPS entering IDP camps, 81 Nomadic populations and 121 RES/RIC. As at week 3 of 2019, laboratory results are still pending for 12 samples. No WPV nor VDPV were detected from these stool samples. Two of the stool samples were positive for Sabin 2.

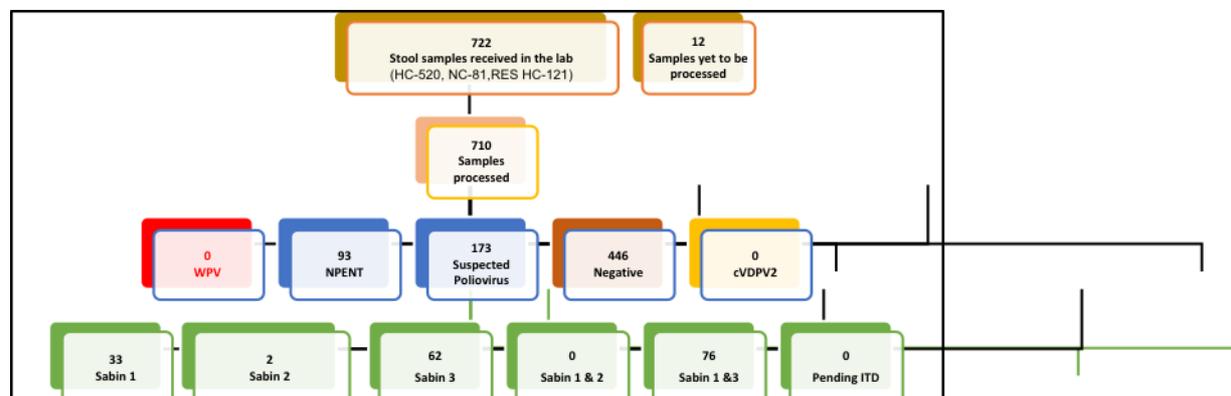


Figure 10: Healthy children sampling in 2018

c) Environmental Surveillance ‘Sweep’

The 34th ERC held in September 2017 recommended that the ES ‘sweep’ be reviewed, modified and continue to be implemented. The second phase of ES ‘sweep’ was conducted from 19 February to 7 March 2018. This time around, in addition to ES sample collection (as in Phase 1), sample collectors also took pictures of the sites and geo-coordinates using mobile phones and sent the data in the ODK platform. In this phase, 42 samples from security compromised LGAs were collected. The results of these samples showed that 35 samples were negative and seven samples isolated non-polio enteroviruses

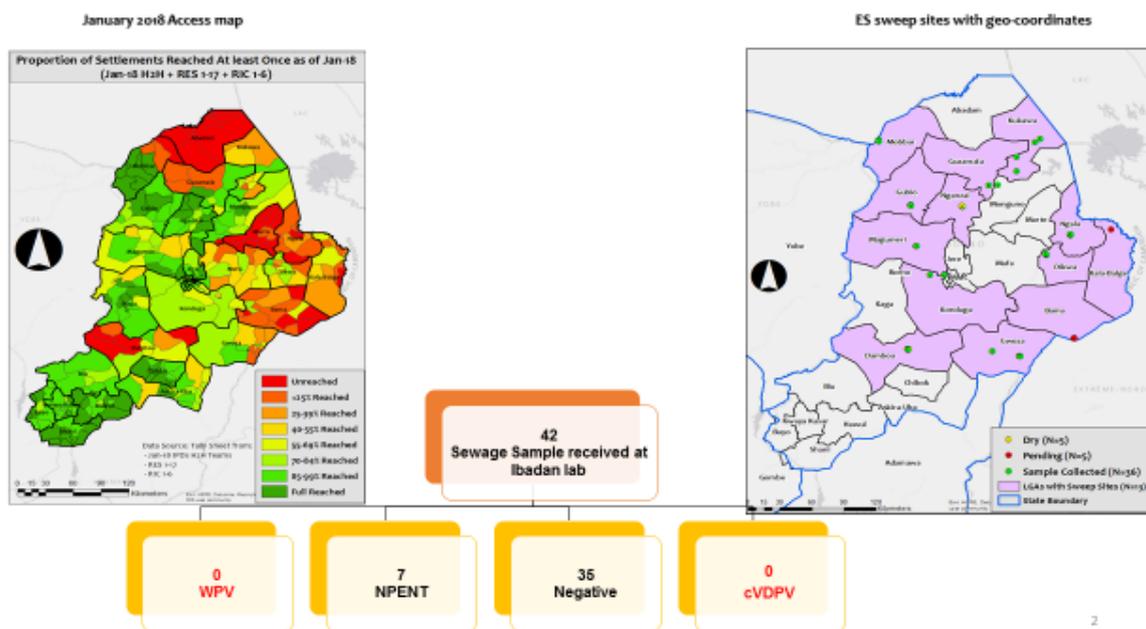


Figure 11: Outcome of Borno environmental surveillance sweep samples, 2018

d) Engaging Community Informants from Inaccessible settlements:

Informants from inaccessible areas are **any persons** residing in inaccessible settlements with regular contact (weekly, fortnightly or monthly contacts) with secure areas. Contact with secure areas is usually to utilize basic services like health care, market or visitation of relatives. Such community informants include persons like lamidos, hunters, drivers, fishermen, cJTF, informal health care providers (TBA, drug retailers/hawkers). Informants are engaged through LGA Community Informants Focal persons in collaboration with the LGA DSNO. LGA Community Informant Focal Persons include Nomadic/Miyetti Allah or Lamido, Bulamas, Market leaders. Each informant engaged uses his “circle of influence” to engage other informants who also have regular contact with secure areas and link them with LGA Community Informants Focal Persons.

As at December 2018, 511 of these informants were recruited. Of the 127 AFP cases reported from inaccessible areas in Borno, 112(88%) were reported by informants from the inaccessible areas. The NPENT rate of these cases was 25.2%, stool adequacy 61.4% and Sabin detection 13.4

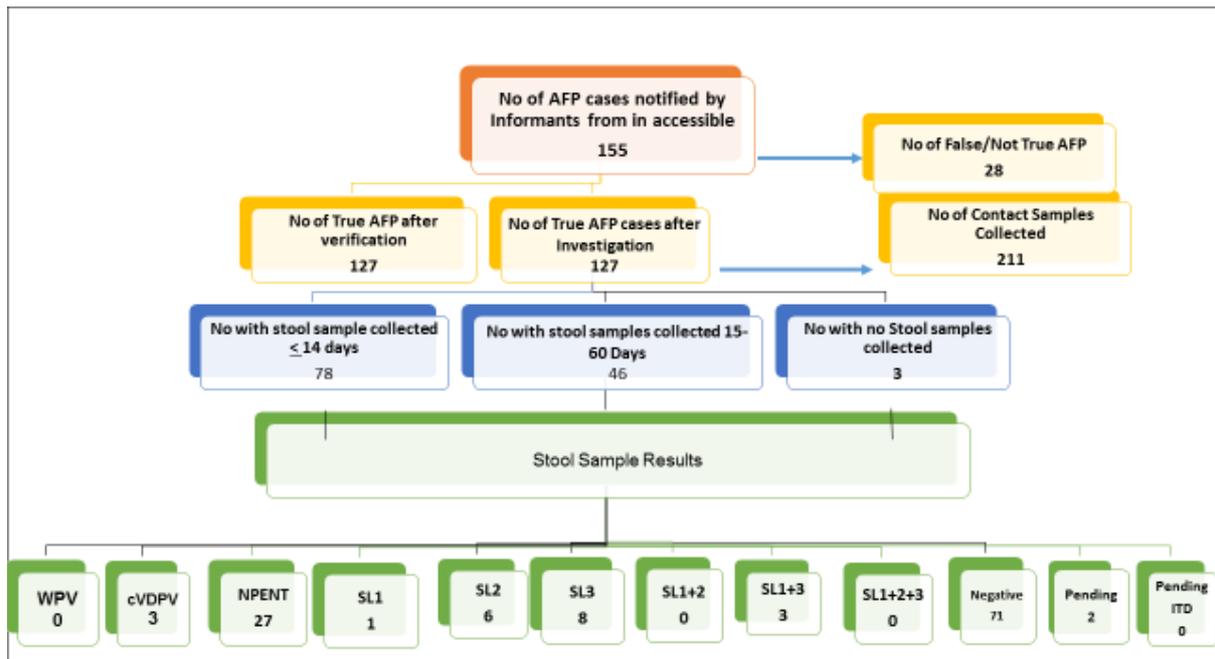


Figure 12: Outcome of AFP cases reported by community informants from inaccessible areas in 2018

e) Stool samples from AFP Contacts reported from inaccessible areas in 2018

With the introduction of community informants from inaccessible areas, the number of inadequate AFP cases in Borno states increased in 2018. To this special category of AFP cases, it was not always easy to systematically get contacts stool samples as it had to also involve evacuating the healthy children from same security compromised settlements. In all 212 contact stool samples were collected in 2018, one of whom turned out to be cVDPV2 and 6 Sabin 2.

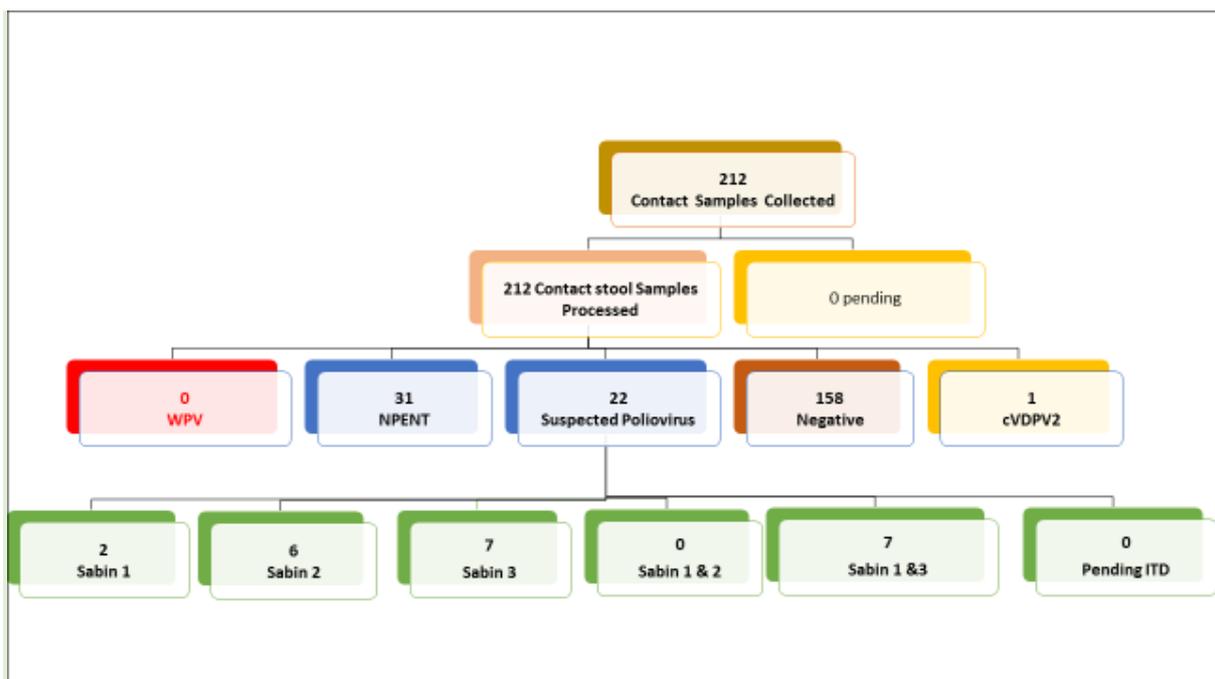


Figure 13: Outcome of Borno stool samples from AFP contacts from inaccessible areas in 2018

Auto-Visual AFP Detection and Reporting (AVADAR):

AVADAR has proven to be a high impact innovation that enables timely AFP detection, investigation and verification. It also improves 'zero' reporting of cases. AVADAR has other potentials including tracking of immunization defaulters, sending reminders in immunization sessions in the community and notification of other vaccine preventable diseases other than polio. During 2018, AVADAR was expanded to 4 LGAs (2 in Kano, 1 in Kwara and 1 in FCT) in 3 states, bring the total number of implementing LGAs and States to 43 and 7 respectively. Kwara and FCT started on Week 39 and 52 of 2018 respectively.

Of the 700 AFP cases reported in the 43 AVADAR implementing LGAs in 2018, 392(56%) were from AVADAR informants (health workers and community informants). This proportion is 35% for Borno State in the 8 implementing LGAs.

Table 7: Outcome of AVADAR AFP reporting in 2018

States	# LGA in State	# of implementing LGAs in State	# Wards in implementing LGAs	# of implementing Wards	Total Alerts	Alerts Investigated	% of Alerts Investigated	Pending Alerts	Total false AFP Alerts	Total AVADAR AFP	Total Non AVADAR AFP	Total AFP In LGA	% of AFP Reported by AVADAR
Borno	27	8	98	75	327	321	98%	6	234	90	172	262	35%
Sokoto	23	7	75	75	265	265	100%	0	196	69	27	95	73%
Adamawa	21	12	126	120	321	312	97%	9	212	95	60	155	61%
Yobe	17	12	125	115	315	306	97	9	187	119	44	163	73
Kano	44	2	20	20	117	97	83%	20	83	14	6	20	70%
Kwara	16	1	11	11	14	14	100%	0	9	5	0	5	100%
FCT	6	1	10	10	4	3	75%	1	3	0	0	0	0
National	154	43	465	426	1363	1318	97%	44	921	392	309	700	56%

Temperature monitoring of sample transportation:

As the program prioritized quality surveillance, 87 LGAs from 25 States were selected for reverse cold chain temperature monitoring from Week 43 of 2017. These were LGAs that had reported at least 1 AFP case with no Sabin nor NPENT detection. In February 2018, due to insurgency all the LGAs in Adamawa, Borno and Yobe States were included in the monitoring as recommended by the 2nd OBRA. As at 30th of November 2018, 670 samples had been tracked from 133 (88%) of the 151 LGAs selected for reverse cold chain monitoring in 27 states. About 152 (23%) of the 670 tracked samples had a temperature > 8°C. Of these 152, 94 (62%) benefited from detailed investigation to determine the cause of abnormal temperature. The NPENT rate in tracked samples with abnormal temperature was 28% as against 16% in those with temperature <8°C. The main reasons of abnormal

temperatures were watery ice packs (18%), Caregivers tampering with specimen carrier (16%), prolonged exposure of trackers (13%) and delayed transportation to laboratory (13%)

2.9 Cross Border Collaboration

Cross-border AFP notification between Nigeria and neighboring countries was strengthened especially with the current cVDPV2 outbreak in northern Nigeria and confirmed cross border importations from Nigeria into Niger and Benin Republics. A cross border surveillance meeting was held in November 2018 between Katsina State and Niger Team to enhance cross border detection and reporting of AFP cases following the cVDPV2 outbreak.

Efforts were increased to enhance cross border collaboration and coordination with Cameroun due to the influx of refugees following civil unrest and agitations in that country. In addition, cross border collaboration with all the Lake Chad Task Team countries remained pertinent given access to the inaccessible islands of Nigeria and Chad is key to ending polio in the region.

2.10 Strengthening of Vaccine Accountability

Intensive effort was made in 2018 to tighten vaccine accountability, particularly at the field level. The implementation of the mOPV2 campaigns provided an opportunity to pilot and scale up best practices in vaccine accountability.

The following measures were instituted to ensure vaccine accountability for SIAs:

- A Vaccine Accountability Management (S-VAM) framework was developed with guidance notes to explain the expected roles and responsibilities of all stakeholders. This ensured that cold chain and vaccine management systems and mechanisms were in place at different levels before, during and after a campaign
- The logistics requests from States to National level, were based on agreed population figures arrived at by the National EOC based on the latest enumeration outcomes and other program data. Strategic buffer was stored at zonal level to address any eventual additional requirements from States.
- Cold Chain Officers and Senior Supervisors were trained on the guidelines for management of polio vaccines (bOPV/mOPV2) which included the rigorous implementation of the accountability process, deployment of vaccine management tools such as the tally sheets and summaries, the form A and S-VAM to all levels.
- Daily call in data for vaccine accountability was reinforced, while returns of empty vials was closely monitored to ensure full accountability for doses deployed. From State to teams, documentation of number of vials given out and returned were available. At the end of a campaign or OBR round, reconciliation of vaccines deployed and utilized was done and reported using S-VAM form.
- Senior Logisticians from national and zonal level were deployed as part of the MST deployment during mOPV2 and all other OPV campaigns. To further strengthen management and accountability of mOPV2 vaccines, Ward Vaccine Accountability

Officers were engaged in all implementing wards and this strategy paid off as all mOPV2 vaccine vials were accounted for throughout the year.

- Documentation at all levels was strengthened by ensuring that all arrival procedures at the national level were strictly adhered to. The arrival procedures at national level were modified for State and LGA levels and the necessary documentation was put in place.
 - I. State LWGs were required share their distribution plans with the National LWG for proper tracking, guidance and accountability. The same process was encouraged at the state level for the LGAs.
 - II. For in between rounds: thorough stock reconciliation was conducted by the national and zonal logistics teams with the support of the National EOC. Records of OPV vaccine deployed to each state were compared with available data on stock received, number of vials dispatched to the field, number of vials returned opened or unopened, number of vials held in storage. Any identified gaps were closed to ensure that activities continued to be implemented.
 - III. At vaccination team level: The correct use of the tally sheets continued to be encouraged while also ensuring that all vaccine vials were kept in Ziploc bags in the vaccine carriers. When mOPV2 vaccine was used, the Ziploc bags were labelled with stickers indicating “mOPV2 only” to ensure segregation from other vaccines.
- At the LGA level, small bags were provided for packaging used vials in predetermined numbers for easy accountability. Bigger sacks were provided for the safe storage of the returned used vials before transportation to final disposal sites. The use of these bags was to prevent spillage especially from used vials thereby contaminating surfaces and posing risk to the programme in terms of incidences of VAPPs and cVDPV2s.

There was great improvement in vaccine management and accountability especially after the deployment of Ward Vaccine Accountability Officers for mOPV2 campaigns and ensuring the implementation of the S-VAM framework.

Table 8: Summary of mOPV2 Accountability Report-Round 1, May 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Sokoto	379,520	327,180	-	52,340	52,340	-	Fully accounted
Jigawa	1,768,140	1,760,120	3	8,020	7,960	-	Fully accounted
Bauchi	1,275,380	1,002,660	-	272,720	272,720	-	Fully accounted
Gombe	1,046,140	807,100	1	239,040	239,020	-	Fully accounted
Total	4,469,180	3,897,060	4	572,120	572,040	-	

Table 9: Summary of mOPV2 Accountability Report-Round 2, May/June 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Sokoto	379,040	340,140	-	38,900	38,900	-	Fully accounted
Jigawa	1,879,580	1,771,860	15	107,720	107,420	-	Fully accounted
Bauchi	1,343,080	1,007,400	-	335,680	335,680	-	Fully accounted
Gombe	978,460	806,560	-	171,900	171,900	-	Fully accounted
Total	4,580,160	3,925,960	15	654,200	653,900	-	

Table 10: Summary of mOPV2 Accountability Report-Yobe July 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Yobe	454,940	439,760	5	15,180	15,080	-	Fully accounted
Total	454,940	439,760	5	15,180	15,080	-	

Table 11: Summary of mOPV2 Accountability Report-Round 1, September, 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Bauchi	817,100	809,460	-	7,640	7,640	-	Fully accounted
Borno	1,543,900	1,502,460	4	41,440	41,360	-	Fully accounted
Jigawa	1,798,460	1,708,440	16	90,020	89,700	-	Fully accounted
Katsina	737,800	688,880	29	48,920	48,340	-	Fully accounted
Kano	565,700	552,080	-	13,620	13,620	-	Fully accounted
Sokoto	520,400	514,880	1	5,520	5,500	-	Fully accounted
Yobe	1,137,480	1,113,140	8	24,340	24,180	-	Fully accounted
Total	4,897,260	4,709,240	49	188,020	187,040	-	

Table 12: Summary of mOPV2 Accountability Report-Round 2, October, 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Bauchi	826,920	816,300	4	10,620	10,540	-	Fully accounted
Borno	1,531,240	1,523,380	-	7,860	7,860	-	Fully accounted
Jigawa	1,793,820	1,738,300	11	55,520	55,300	-	Fully accounted
Katsina	737,800	720,020	-	17,780	17,780	-	Fully accounted
Kano	565,700	552,680	3	13,020	12,960	-	Fully accounted
Sokoto	525,400	503,000	4	22,400	22,320	-	Fully accounted
Yobe	1,132,400	1,122,260	8	10,140	9,980	-	Fully accounted
Total	4,889,780	4,798,000	15	91,780	91,480	-	

Table 13: Summary of mOPV2 Accountability Report-Katsina (Jibia+5LGAs) October 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Katsina	118,060	114,480	39	3,580	2,800	-	Fully accounted
Total	118,060	114,480	39	3,580	2,800	-	

Table 14: Summary of mOPV2 Accountability Report-Kaduna November 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Kaduna	55,800	55,800	-	-	-	-	Fully accounted
Total	55,800	55,800	-	-	-	-	

Table 15: Summary of mOPV2 Accountability Report-Bauchi November 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Bauchi	260,540	243,920	-	16,620	16,620	-	Fully accounted
Total	260,540	243,920	-	16,620	16,620	-	

Table 16: Summary of mOPV2 Accountability Report-Katsina December, 2018

Name of State	Total Stock available in the State for the exercise (Doses)	No of doses for Empty Vials Returned /Doses used	Un-usable (VM3,4,broken, damaged, distorted label)	mOPV2 Balance in the state (Doses)		Vials Unaccounted	Remarks
				Calculated from Report	Actual (Physical stock)		
Katsina	330,880	27,080	-	303,800	303,800	-	Fully accounted
Total	330,880	27,080	-	303,800	303,800	-	

3.0. REMAINING CHALLENGES FOR FOCUS IN 2019

3.1 Reaching the remaining children still trapped in very insecure areas of Borno and the Lake Chad islands

An estimated 70,541 children remain trapped in very security challenged settlements in Borno². In addition, 145 Island settlements have not yet been accessed. The escalation of security incidents in 2018 hampered the pace of implementation of special interventions (RIC) with the military. Ensuring full involvement of the military to complete the planned activities in insecure areas will require continued advocacy at all levels.

3.2 Population Immunity Gaps

Population immunity profile analysis indicates a number of areas with low type 1 immunity, posing a risk for continued transmission of wild poliovirus particularly in northeastern Nigeria, Kwara and Kogi State in the Northcentral. Figure 14 illustrates gaps type 1 immunity profile across the states by end of December 2018).

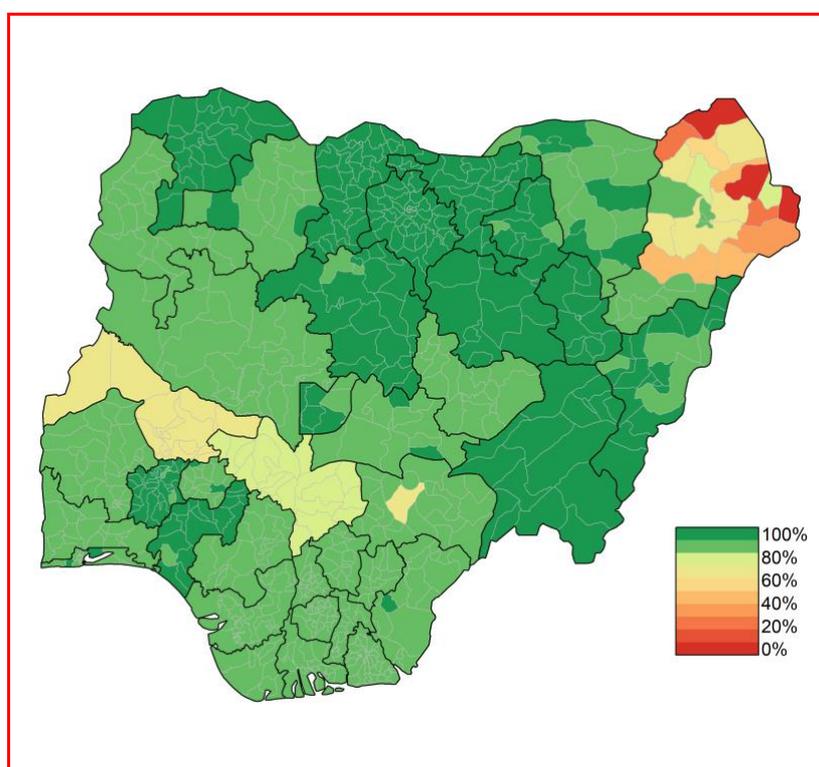


Figure 14: Type 1 population immunity profile, Nigeria, December 2018 (Source: Institute of Disease Modelling (IDM)).

With a record of an improvement in the accessibility in Borno State, type two immunity seems to be increasing generally with a good number of LGAs recording as high as 100%. All

² Based on aggregated data from satellite imagery, vaccination tracking, and vaccination through special interventions

the southern states had estimated below 60%. However, IPV coverage was not considered in the analysis, hence the picture portrayed in Fig 15.

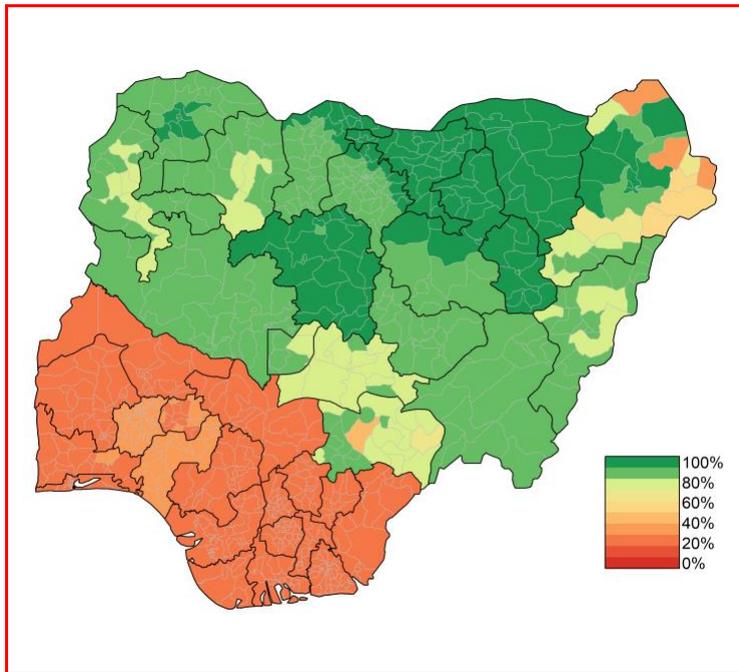


Fig 15: Type 1 population immunity profile, Nigeria, December 2018 (Source: Institute of Disease Modelling (IDM)).

The cVDPV2s detected from the environment and AFP cases in 11 states in northern Nigeria in 2018 further indicated gaps in population immunity. Quarterly RI LQAs data in 18 high-risk states shows some progressive improvement in LGAs that pass at 80% (Figure 16), however, majority of LGAs remain below expectation.

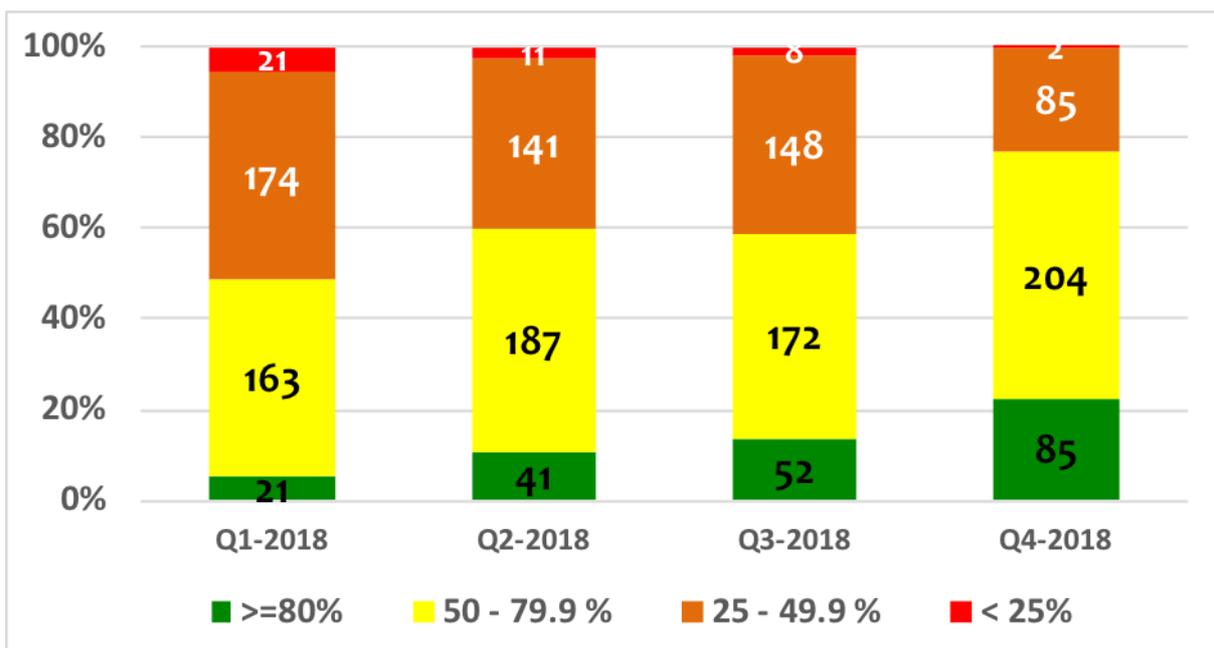


Figure 16: Trend in RI LQAs performance in 18 high risk states, 2018

National Health and Nutrition Survey (SMART) for 2018 showed improvement in the national coverage from 48.8% in 2015 to 57.2% in 2018. The range of coverage ranged from 12% in Zamfara to 92.6% in Lagos state. More effort is needed to increase demand for routine immunization and to ensure sustained service delivery in high-risk areas.

3.3 Complacency

The prolonged duration of non-detection of WPV in several states (outside Borno) has created a sense of complacency that the “job is finished” resulting in challenges to the programme: wavering political support, reduced counterpart funding, and ‘fatigue’. There was non-fulfillment of financial commitments and lack of release of counterpart funding in several states. The tracking of Abuja commitments indicated all the tracked indicators were below 50%. Personal involvement of the Governors however had increased from 22% in quarter 1 to 40% in quarter 4 of 2018. Counterpart funding progressively declined from 61% in quarter 1 down to 33% in quarter 4. There was slight improvement the indicator tracking the governors meeting with chairmen from 33% in quarter 1 to 40% in quarter 4 while the indicator tracking the Deputy Governors chairing Task Force meeting declined from 61% to 40% as shown in Figure 17.

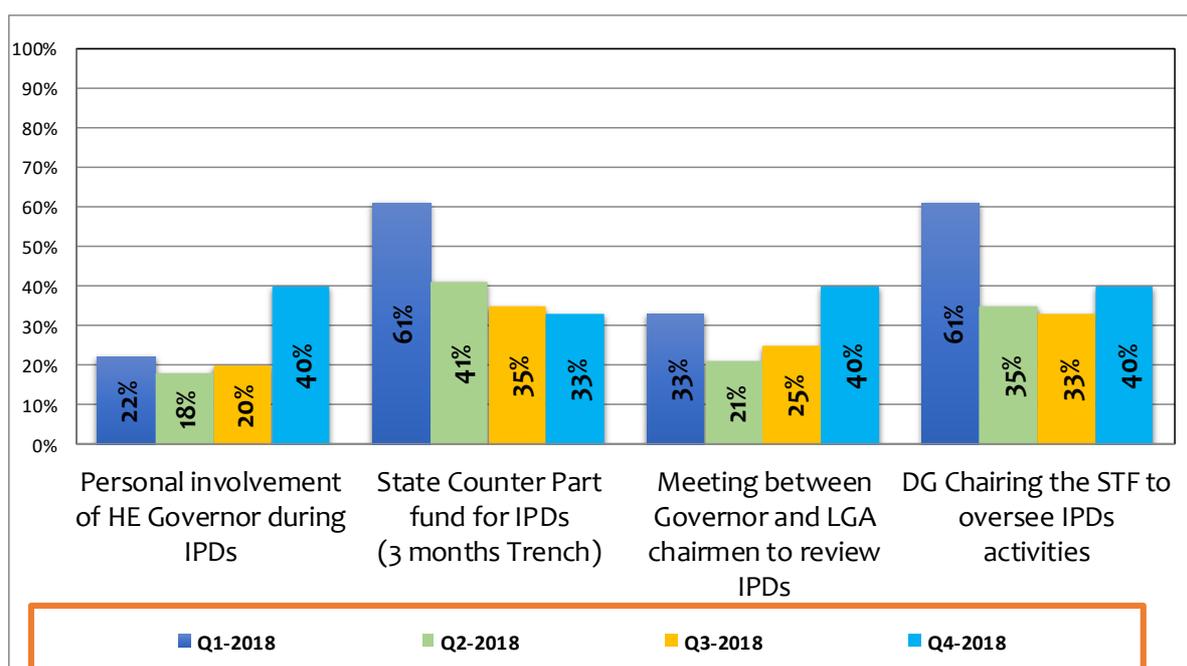


Figure 17: Trend in Abuja Commitments for polio eradication, Q1-Q4 2018, Nigeria

3.4 Surveillance gaps

Despite the high surveillance performance in Nigeria, several challenges remain to be surmounted before polio is finally eradicated. Areas of inaccessibility still exist in the security challenged state of Borno. In addition, surveillance gaps have been identified during outbreak response assessments, peer reviews and supervision. These gaps include an element of poor surveillance data quality, inadequate active surveillance, and knowledge

gaps among surveillance personnel, presence of polio compatible cases; and inadequate documentation; among others.

3.5 Vaccine Management

Challenges still prevail with data accuracy, completeness and timeliness especially at the last mile. State Governments have not uniformly embraced the system of empty vial retrieval for RI vaccines. Several states still report shortage of giostyle vaccine carriers despite deployment of 36,000 units within the last 2 years.

4 GOAL, TARGETS, AND MILESTONES FOR 2019

4.1 Goal

The overall goal of the NPEEP 2019 is to achieve and sustain interruption of all poliovirus transmission.

4.2 Targets

Target 1: Achieve and sustain WPV1 polio free status by December 2019.

Target 2: Increase reach of inaccessible areas in Borno by June 2019

Target 2: Interrupt cVDPV2 transmission by March 2019

Target 3: Achieve and sustain surveillance performance indicators in all LGAs by December 2019

Target 4: Achieve 50% reduction in number of unimmunized children in VVHR LGAs

Target 5: Polio Transition Business Case finalized and approved by March 2019

4.3 Major Milestones

- 1) Scale up special interventions (RIC scale up, RES others) to reach trapped populations (in security compromised areas) of Borno and Yobe States by June 2019
- 2) Polio certification documentation prepared and presented to ARCC by November 2019
- 3) High quality outbreak and mop-up responses to cVDPV2 implemented timely
- 4) Expand environmental surveillance to at least three additional states by December 2019
- 5) Expand the surveillance reporting network of health facilities and community informants by at least 10% from 2018 figures
- 6) All high risk and vulnerable LGAs have routine immunization strengthening plans (as developed by NERICC) implemented throughout 2019 with joint close monitoring by EOC and NERICC
- 7) Finalize Polio transition business case by March 2019

5. STRATEGIC PRIORITIES FOR 2019

The strategic priorities for 2019 as identified by the National EOC are data driven and due consultation with immunization partners and local stakeholders to include:

- 1) Increasing access to vaccination in security challenged areas and IDPs (particularly in Borno, Yobe and Lake Chad islands);
- 2) Identification of emerging security issues in States outside Borno and Yobe and apply strategies to reach children in these areas
- 3) Interrupting cVDPV2 outbreaks and ensuring robust outbreak response across all states;
- 4) Sustaining resilience towards certification;
- 5) Enhance quality and sensitive surveillance;
- 6) Enhancing SIA quality in prioritized vulnerable areas;
- 7) Enhancing routine immunization in polio high risk LGAs;
- 8) Strengthening cross border collaboration;
- 9) Improving and strengthening quality assurance of all Polio data and
- 10) Polio transition planning

These strategies will aim to achieve the country's set goal, targets and milestones and will be underpinned by strict adherence to the accountability framework.

5.1 Increasing access to vaccination in security challenged areas and IDPs:

Insecurity and inaccessibility remain to be the most significant risk factor to achieving interruption and eradication of Polio. The program will continue to focus attention in security compromised areas and ensure it is able to penetrate, reach and vaccinate eligible children and conduct surveillance activities, as much as possible. The north-eastern states of Borno, Yobe and Adamawa will continue to be special areas of focus in addition to other hot spots in north-central and north-western zones.

Key Activities

1. Vaccination in completely inaccessible areas (Borno, Yobe and Adamawa States):

Enhanced collaboration between the program and Nigerian military is still a key determining factor to accessing the remaining security challenged areas.

As at the end of 2018 in Borno state, the number of settlements reached were 3788, representing 53.5% of total settlements. Furthermore, 72 islands in the Lake Chad have been reached with surveillance and vaccination, using community informers. The goal in 2019 is using the innovative strategies to make inroads to reach the remaining inaccessible settlements by June 2019. These strategies will be extended to reach the 106/178 Lake Chad Islands on the Nigeria side in five LGAs (Abadam, Kukawa, Marte, Monguno and Ngala) that have not been visited. In addition to the RIC, the RES strategy involving the civilian Joint Taskforce (cJTF) will be continued to reach all children in partially accessible

settlements. The scope will be determined by the prevailing security situation during the year.

The community informants' network in Borno State that has been used primarily for surveillance activities will be expanded and further explored to reach more inaccessible areas with vaccination. The activities will be expanded in 2019.

In Yobe State, the focus in 2018 for RES were in six LGAs namely: Gulani, Damaturu, Geidam, Gujba, Tarmuwa and Yunusari while RIC occurred in all 5 above LGAs except Gulani. RIC and RES strategies to reach the remaining inaccessible areas will be continued in 2019. The scope will be determined by the prevailing security situation during the year.

In 2018, Adamawa had two security compromised LGAs namely Michika and Madagali. These LGAs shares border with Borno State along the Gwoza axis. Security had however improved in 2018 with a number of activities taking place with continuous security patrols.

Satellite imagery will continue to be used to determine habitation to inform the military on planned movement. Mapping and placing of permanent transit teams with vaccines, (OPV and IPV including routine antigens) at all potential routes from the Islands and other security challenged areas will continue in 2019 and profiling of these children will further help the program to understand extend of reach to these trapped populations that will be liberated. Success of these endeavors will be determined to large extent on continuous engagements with military and CJTF including adequate supplies and capacity building.

2. Validation of inaccessibility data:

As the program reaches more children within the security comprised areas, validating the data generated will remain an important endeavor. In 2019 accessibility activities and data generated will be tracked, reviewed and analyzed regularly by a dashboard. As the security situation allows, informers and vaccinators are encouraged to collect geo coordinates. The program will look into innovative ways to also track, independently monitor and analyze data from the RIC activities.

3. Deployment of National and State EOC personnel:

Deployment of personnel to support PEI activities in Borno and Yobe States will continue to be focused to prioritized LGAs. Previously, many personnel assigned to support Borno State ended up supervising PEI activities. The State EOC in conjunction with the National EOC will align deployment plans that will ensure all the LGAs with special needs are assigned supervisors from national level on a rotational basis. This will ensure liberated LGAs as well as those that are recently liberated are supervised by personnel deployed from national level and within the State.

4. Expand and strengthen Routine Immunization Services in IDP camps:

Although vaccinations through special outreach services are currently taking place in most IDP camps, deliberate steps will be taken to ensure camps (old and new ones) are enlisted and systematically provided with routine vaccine service to children less than 1-year-old. Vaccination cards will be used to provide other child survival interventions in the camp. In the event of the camps being closed and populations moving back to their former locations, a deliberate policy to re-establish RI services within a 30-day period will be facilitated starting with provision of cold chain equipment as well as staffing. The activities will also target host communities.

5. Scale up permanent vaccination sites at all major transit points:

In 2018, the programme continued vaccination in special transit points between accessible and inaccessible areas targeting populations moving around to markets and other areas. In Borno State alone, 508 Permanent vaccination sites were established to immunize children coming out and getting into these areas with OPV and IPV including RI antigens. Profiling was also done in these vaccination points and 7,930 of the children vaccinated in 2018 were from Abadam and Marte LGAs which are completely inaccessible. The permanent vaccination sites will be reviewed based on the evolving security situation, and facilitated to ensure children in transit are vaccinated.

6. Reaching other Insecure States:

Some states in the north-western region of Nigeria have been contending with the challenge of insecurity due to kidnapping, armed robbery and cattle rustling. This has made some wards and LGAs in 5 States, including Bauchi (Toro, Darazo, and Ganjuwa LGAs); Kano (Tudun Wada and Doguwa LGAs); Kaduna (Birnin Gwari, Igabi, Chikun, and Giwa LGAs); Katsina (Batsari and Jibia LGAs); and Zamfara (Maradun, Bungudu, Maru, and Birni Magaji) inaccessible for SIAs. Special interventions will continue to be implemented in these insecure areas based on accessibility. Taraba had a different type of security challenge which involved mainly communal clashes and constant clashes between herdsmen and farmers. These clashes usually disrupt immunization activities. In 2019, special emphasis will be made to vaccinate in the affected areas.

Key Activities in 2019:

- Continue to advocate and implement the revised 'RIC' strategy of dedicated RIC teams across the 17 LGAs in the state to reach 80% of all inaccessible settlements by end June 2019
- Intensify use of VTS and ODK by military and cJTF during vaccination in insecure areas
- Provide at least 2 technical personnel per HF for RI in newly liberated LGAs by March 2019

- Establish good cold chain system at military bases in recently liberated LGAs and LGAs supporting RIC/RES activities
- Continuous tracking of trapped population using satellite imagery
- Sustain the regular high-level advocacy to military and the agreed monthly briefing of RIC/RES with the Governor and Theater Commander
- Sustain permanent team vaccination in special places and IDPs
- Sustain vaccination among IDPs in host communities
- Scale up vaccination in Nomadic routes and CMAM centers
- Sustain the innovation of profiling and tracking with tickler cards for all new arrivals to camps and host communities
- Maintain quality SIAs among IDPs and special places
- Sustain integration of RI in special interventions (Transit, markets, CMAM, and Nomadic routes)
- Expand community informers network to inaccessible settlements
- Intensify the current strategy of 'Community Engagement' using traditional leaders (birth registration/line-listing, referral of newborn to HF for vaccination, tracking of defaulters)
- Ensure vaccine and other commodity availability for special interventions in security compromised areas
- Provide accurate and timely of vaccine utilization reports using the approved templates to the national
- Advocate to the government to increase manpower
- Government and NGOs to support engagement of security guards for CCEs
- Sustain all innovations that improve quality of SIA - DOPV, HC, DC, Mock LQAS, VATA, and expand Mock LQAS to partially accessible LGAs

Targets, Milestones and Indicators:

- Cover and vaccinate 80% of remaining 46% of the RIC settlements by June 2019.
- Cover and vaccinate 50% of the lake Chad Islands by September 2019
- Vaccinate all children including those who possibly missed vaccination from newly liberated areas by December 2019
- 5 contact vaccination by SIAD within 10 weeks of new arrivals by the Special intervention teams January to December 2019
- All new arrivals assumed to have suboptimal immunity to vaccine preventable diseases to have penta3/OPV3 by 3 months of arrival

5.2 Interrupt cVDPV2 outbreak and ensure robust outbreak response

Halting the cVDPV2 outbreak:

One large scale round will be implemented in January 2019 across 16 high risk states, using mOPV2. In addition, to rapidly boost population immunity, and building on the lessons learned from the 2018 response activities, fIPV will be administered in areas where the mOPV2 SIAs have been conducted. Emphasis will be on achieving quality rounds.

Maintaining strong and responsive outbreak response teams across all levels:

The program in 2019 will remain alert to respond to any outbreak and or event as they may occur. Key to this is having an active and responsive outbreak response team both at LGA, State and National levels.

Vaccine Accountability:

The country will continue to monitor and validate the strategy of vaccine accountability, during and after **each mOPV2** campaign to ensure there are no left-over vials in the field to avoid misuse or accidental use and the possible effect of VAPP and cVDPV2. Each State will be given the responsibility of accounting for all the vaccines deployed to them. The ward accountability officers will continue to be held accountable for retrieval for all vials used during the campaigns. Monitors will be trained and deployed to states to monitor disposal of all used or unused vials after the campaigns based on global guidelines (employing the boil and bury method used for the tOPV switch in Nigeria). A report of the validation, including number of vials disposed will be shared with AFRO and the Advisory Group. After the validation, surveillance for vials that could possibly have been missed during the implementation will continue during each supportive supervision visit to the field. Checking for tOPV and mOPV2 vials has been incorporated into routine supervisory checklists to ensure none is left in the system.

In 2019, special attention will be given to:

- Strengthening vaccine arrival processes (with appropriate documentation) at all levels to ensure accountability of vaccines.
- Continue strengthening knowledge and skills of cold chain officers and senior supervisors on the management and accountability of polio vaccines
- Support institutionalization of the ward vaccine accountability officers in all SIA activities to strengthen vaccine accountability. Furthermore, printing and deployment of the S-VAM framework to all states, LGAs and ward levels will be done to enable full implementation of the framework.
- Support NERICC in the institutionalization and sustenance of monthly empty vial retrieval for all RI vaccines including triangulation of data (vaccine utilization data, number of children vaccinated and empty vials retrieved) in priority LGAs

- Conduct mOPV2/tOPV sweep in a phased manner as component of the containment exercise.
- Liaise with the NLWG for the verification of vaccine carriers country wide from the ODK master list of the 2018 cold chain inventory and assessment to quantify gaps and mobilize resources to bridge the gaps.

Targets, Milestones and Indicators:

- Reactivate and share names of National, State and LGA Outbreak teams by March 2019
- State Outbreak Response Plans developed and shared with National EOC
- National Outbreak Management Team deployed to outbreak states within 24 hours of non-Sabin ITD notification
- The first response to all poliovirus outbreaks conducted within 2 weeks of non-Sabin virus notification and 5 responses completed within 4 months. Timeliness of the outbreak responses continue to be monitored based on the National EOC Outbreak SOPs and the Outbreak dashboard on a weekly basis
- mOPV2 released from global stock within 2 weeks of report of type2 virus
- Vaccine utilization report compiled within 2 weeks of completion campaign
- mOPV2 destroyed systematically based on global standards

5.3 Sustaining Resilience towards Certification

Although as at December 2018, Nigeria had gone 27 months without a case of WPV, the country witnessed an intense transmission of cVDPV2 resulting in the conduct of multiple mOPV2 rounds and the introduction of fIPV for polio SIAs for the first time on the African continent. About 50% of the cVDPV2 cases were from healthy children. This has the potential to make caregivers doubt the efficacy of the vaccine and the benefits of immunization. In addition, donors are likely to become weary.

In 2019, communication and advocacy efforts will continue with the momentum of the outbreak response. Rapid, robust, and effective communication plans will be developed and implemented at all levels to strengthen community awareness of persisting risks of Polio, particularly for children under 5, and the benefits of vaccination. The overarching roadmap for 2019 communication, social mobilization and advocacy efforts will be the EPI Communication Strategy for Expanded Programme on Immunization in Nigeria, developed in 2018. Dissemination of the Strategy to Polio and RI communication actors at all levels through cascaded workshops will be prioritized in early 2019 to ensure standardization in interventions and messaging. Roll out of full Implementation of the strategy will entail development of new IEC materials with integrated messaging for both PEI and RI guided by social data and fine-tuning of relevant standard operating procedures (SOPs). The use of popular entertainment will feature prominently in the 2019 approach; use of community

influencers; and the use of new technologies will aid in putting polio within the broader health context of child survival.

A new and nuanced messaging framework will be developed for all key audiences – political leaders, donors, community influencers such as religious and traditional leaders, programme officers, frontline workers, and communities themselves taking into consideration the Government of Nigeria position that the country will not claim to have stopped WPV transmission until everywhere is accessible for immunization and surveillance activities. The new message framework will guide programming across all immunization platforms to create a positive environment for immunization at the community level.

The programme will evolve a strategic approach to communicating the presence of VDPV without jeopardizing the gains that have been made in trust-building for the programme among stakeholders, especially at the community and household levels. Intensive capacity building of communication and social mobilization actors at all levels will be undertaken to ensure that standardized messaging on VDPV and the need for outbreak response is clearly understood.

In terms of advocacy, 2019 is a particularly a crucial year for Polio and Routine Immunization to be on the agenda of political leaders, given the national election scheduled for February 2019. Aggressive Advocacy efforts will continue post-election with the newly elected political leaders (President, governors, national and state legislators; LGA Chairmen, etc) to ensure that child health is strategically placed in the national and state plans. The polio programme will develop and implement a strategic plan for re-engagement of political leaders using existing platforms such as the Nigerian Governors' Forum (NGF) and Association of Local Governments of Nigeria. Also, the Health Committees of National and State Houses of Assembly will be sensitized on the need for oversight and adequate funding to finish the job of polio eradication. In addition, the programme will leverage on every opportunity through NERICC, PHC revitalization and any other programme to send the message that the job of polio eradication is not done yet.

Media engagement will complement advocacy, using targeted messaging to create a positive opinion toward vaccination. Media also serves a critical role in controlling rumors and false information, as a key molder of public opinion. The programme will continue to promote intensive media engagement at the state level and media advocacy at national level.

In 2018, the programme witnessed reduced funding support from government and donors. Efforts will be made to address this potential risk through engagement of influential structures such as the NGF, NTLC, Dawaah Coordination Council of Nigeria (DCCN) and the legislature at all levels to ensure that funding is sustained in line with the 36th ERC

recommendation. The National Economic Council (NEC) will also be engaged through its secretariat to sustain and improve the quality of the quarterly meetings of the Presidential Task Force on Polio Eradication and Routine Immunization as independent side meetings with clear Agenda and deliverables. The tracking and reporting of Abuja Commitment indicators will be used to engender the spirit of competition among States and LGAs.

Donors and Partners will be sensitized to be true polio ambassadors by integrating polio issues during every advocacy opportunity with political leaders at all levels. Concerted effort will be made to address donor fatigue through a synthesis of interventions including sensitization meetings, social events, field visits and media visibility such as sponsored editorials and commentaries.

One of the prevailing risks to the polio programme in 2018 is the emergence of community or group refusal of vaccination to protest perceived inequitable distribution of insecticide treated nets in some high-risk States. This resulted in high rate of missed children especially in Jigawa and Katsina States. Other states also experienced cases of group refusals where provision of community felt needs such as boreholes, schools and roads, etc, was given as a condition for accepting vaccination for children.

Lessons learned from the Jigawa experience in October 2018 has shown that intensive and proactive engagement of community gatekeepers can check such behaviors and reduce non-compliance due to community felt needs. Consequently, the programme will make such engagements mandatory pre-implementation activities. Concerted effort will be made to amplify the linkage between the social amenities donated to communities by polio partners (UNICEF WASH; Rotary Boreholes, etc) to the polio programme to underscore the additional benefits of the polio programme to the community. In addition, the national EOC will initiate intersectoral collaboration with relevant programmes so that various sectors of development will work together to respond to the diverse needs of communities including regular interface between the malaria programme and the polio programme at the national and State levels.

Intensive house-to-house mobilization by the volunteer community mobilizers (VCMs) network will continue to be the backbone of social and community mobilization. In 2018, over 21,000 volunteer community mobilizers (VCMs) were deployed in 14 polio high risk states and they have continued to be pivotal in ensuring intensive household mobilization for polio, RI and non-polio SIAs. Continuous training and mentoring will be provided to VCMs to keep them up-to-date, ensure data accuracy, and strengthen their capacity as they provide messaging beyond polio. The programme will conduct periodic evaluation of the VCMs to ensure sustained quality and redistribute within states in line with 2019 high risk analysis.

The engagement of traditional and religious leaders has remained critical in addressing non-compliance and building trust for the polio programme. The Expert Review Committee (ERC)

and the Outbreak Response Assessment (OBRA-3) commended the role of religious and traditional leaders in resolving cases of non-compliance and in raising the knowledge and awareness of the community. This engagement will be sustained and further improved through capacity building of NTLC and NERICC community engagement focal persons. Also, DCCN members will be empowered to provide oversight on religion-related issues during IPDs. NTLC Secretariat will be reinvigorated to produce quarterly reports on the NTLC and DCCN partnership.

The capacity of Health Educators is will be continuously strengthened, to facilitate their role as key actors at State and LGA levels to positively influence acceptance of both Polio and Routine Immunization initiatives. OBRA-3 noted the role of Health Educators in influencing the programme and recommended continuous strengthening of their leadership in communication role. Cascaded interpersonal communications (IPC) training for communication actors and service providers will be conducted to further hone their skills. Biannual review of the country's EPI communication landscape will be undertaken in collaboration with NERICC to holistically identify and address emerging challenges.

Evidence-based communication and advocacy will be supported by timely data collection and analysis. In addition to the social data aggregated within and in-between rounds, a KAP (Knowledge, Attitude and Practice) survey will be conducted in select high-risk states to guide interventions. Also, Behavioral Surveillance Survey (BSS) will be conducted to better understand the risk behaviors that predispose children to VDPV, especially in areas where most cVDPV2 cases are from healthy children. Special investigation will be undertaken for a more in-depth understanding of missed children in settlements with persistently missed children.

Concerted effort will be made to formally document all programme strategies, innovations, standard operating procedures, events and any other documentations that may be required by the national polio emergency operations center.

Key Activities

1. Enhancing quality communication interventions

- Conduct cascaded dissemination workshops for the Communication Strategy for Expanded Programme on Immunization in Nigeria
- Undertake quarterly peer data quality review
- Conduct strategy workshop on communicating VDPV
- Conduct Behavioural Surveillance Survey in areas with high rate of cVDPV2 among healthy children
- Review relevant SOPs in line with the Communication Strategy
- Develop new print and audio-visual IEC materials
- Conduct intensive IPC training for service providers in collaboration with NERICC

- Conduct periodic KAP surveys in collaboration with NERICC to guide communication planning and interventions
- Conduct biannual Communication Review and Planning meeting with state Health Education Officers and other communication actors in collaboration with NERICC
- Conduct a strategy meeting with communication and logistics leadership at the State level and relevant GPEI partners to address chronic delays in release of social mobilization and logistics funds to the operational level for IPDs

2. Aggressive Post-Election Advocacy

- Develop and implement a comprehensive high-level advocacy plan to engage new political leaders at national and state levels
- Collaborate with NEC to improve frequency and quality of meetings of the Presidential Task Force
- Advocate for revalidation of the Governors' Abuja Commitment to Polio Eradication & Routine Immunization by the new political leadership
- Track and report on Abuja Commitment through conventional and social media channels and platforms
- Produce and circulate quarterly immunization 'score card' for states and LGAs to facilitate ED/NPHCDA regular briefing of the Nigerian Governors' Forum & ALGON
- Conduct zonal sensitization meetings on immunization with ALGON executives
- Conduct retreat with LGA Chairmen of low performing States (polio high risk and RI low coverage)
- Produce 'advocacy briefs' to facilitate advocacy to Governors & LGA chairmen as at when needed
- Engage international, national and state media proactively to ensure editorial content reflects the integrated message framework and supports efforts to enhance political commitment

3. Reducing chronically missed children

- Map communities with chronically missed children and categorizing them based on reason for missing the children.
- Undertake special investigation to understand in-depth the reasons for chronically missed children; especially due to 'child absent'.
- Support development of evidence-based integrated communication plan in every polio high-risk and RI low-performing LGA, including a focus on activities to address the locally-specific reasons for non-vaccination
- Intensify in-between round activities to track and vaccinate missed children.

- Mandatory advocacy to Emirs, district and village heads and any other community influencers before and after every round of IPDs to address pending non-compliance
- Intensive H2H mobilization, community dialogues, advocacy visits to political and traditional leaders in-between campaigns to sensitize caregivers on the risk of non-vaccination
- Deployment of influential rapid response teams during and in-between campaigns to areas with sporadic community refusals to address block rejections.
- Initiate intersectoral collaboration to check non-compliance due to perceived inequitable distribution of social amenities (Malaria programme, etc)
- Facilitate linkage between social amenities donated to non-compliant communities by GPEI Partners and the Polio Programme.

4. Media engagement

- Undertake strategic advocacy and public-opinion moulding through focused media engagement
- Conduct media sensitisation workshops in strategic geopolitical locations.
- Maintain streamlined messaging on media to check rumours
- Sustain the Rumour Rapid Response teams at all levels

5. Motivating the frontline health workers

- Undertake quarterly performance assessment of mobilizers and enforce accountability.
- Roll out National recognition scheme for frontline workers – vaccination teams and mobilizers
- Design Certificates for Awards and participation/facilitation at major EPI trainings.
- Conduct IPC training for health educators, mobilizers and service providers
- Conduct strategic C4D training on behaviour change for health educators

6. Addressing Donor Fatigue

- Conduct bi-annual meetings with heads of donor Agencies/governments for updates and recognition.
- Facilitate periodic donor field visits for confidence-building.

7. Documentation

- Sustain display of social data at the NEOC after every polio campaign
- Share results of every polio campaign with key stakeholders

- Produce monthly e-snapshot on immunization for donors & Partners & circulate through NPHCDA & GPEI websites
- Produce annual polio communication report to document EOC communication activities and best practices
- Produce a reference document for the NEOC on polio programme strategies, innovations SOPs, events.

Targets, milestones and indicators

- Aggressive advocacy and engagement plan in place for President, Legislature, Governors and LGA chairmen by end March 2019
- Governors' Abuja Commitment revalidated by newly constituted NGF by end September 2019
- *Communication Strategy for Expanded Programme on Immunization in Nigeria* rolled out and in use in polio high risk and NERICC priority States by end June 2019
- Strategy for communicating VDPV developed and implemented by June 2019
- Sustain intensive EPI advocacy and communication campaign (including social media campaign) in collaboration with NERICC
- Special investigation into reasons for chronically missed children undertaken: a pilot in the LGAs with most missed children by March 2019
- At least 80% of donors sustain funding support for PEI in 2019
- At least one BSS conducted and one KAP conducted by end 2019
- New entertainment-education packages in place by September 2019
- Increased proportion of States providing State & LGA counterpart funds IPDs by end 2019
- Proportion of missed children in high risk states reduced by 50% from the 2018 level by end 2019
- 30% increase in the proportion of States achieving at least 80% of Abuja Commitment indicators for PEI & RI by September 2019
- Updated SOPs for components of communication interventions in place by end 2019
- National recognition scheme for front-line workers rolled out by end 2019
- Increased proportion of LGA chairmen providing counterpart funds and attending ERM by end 2019
- Increased proportion of high-risk States received logistics and social mobilization funds two weeks prior to IPDs
- Number of EPI Communication reviews conducted in collaboration with NERICC by end 2019
- Annual Polio Communication Report available by end of Q1 2020

5.4 Enhance Quality and Sensitive Surveillance

The programme will continue to implement innovative strategies aimed at improving surveillance quality, documentation as well as reaching more population in inaccessible areas with immunization and surveillance activities. These strategies will be in line with the framework for certification of polio eradication in the African region. The main drive in 2019 is to ensure the following:

- Improved surveillance sensitivity through among others capacity building, innovation, expansion of reporting network and monitoring of active surveillance conducted by DSNOs, ADSNOs and other partners;
- Enhanced surveillance data quality through training, data harmonization meetings, peer reviews, use of trigger criteria, application of accountability framework, AFP verification and validation;
- Strengthen surveillance documentation through coordination, provision of logistics and technical support;
- Increasing access to more population in the security challenged states (especially Borno). In this regard, key strategies will be deployed including innovations, use of technology and partnership with communities and security personnel including the Military and civilian Joint Task Forces (cJTF), community informants from inaccessible areas;
- Provision of adequate support (both technical and logistic) to the national polio laboratories to maintain accreditation standards;
- Conducting other supplementary surveillance activities, especially Environmental Surveillance (ES). Performance of ES will be monitored to ensure optimal functioning and ES expansion will occur determined by poliovirus epidemiology.

Key Activities

- Development of annual surveillance work plan at all levels (national, states, LGA) with participation of all key stakeholders and monitoring of the status of implementation of work plans.
- Implement regular capacity building of personnel involved in surveillance including surveillance site focal points, DSNOs, State Epidemiologists, surge capacity and others involved in surveillance through supportive supervision, on-the-job training, peer exchanges and refresher trainings.
- Continue to prioritize security challenged states to implement key activities aimed at improving access to populations in inaccessible areas through innovations, partnership with communities, the Military and other security agents. In addition, capacity building of surveillance personnel, healthy children stool sample collection, enhanced surveillance in IDP camps and host communities, use of technology to improve AFP reporting, expansion of reporting network as well as enhancing other

complimentary surveillance activities especially environmental surveillance will be prioritized.

- Improving surveillance data quality through such activities as peer reviews, capacity building of surveillance personnel, conduct of data harmonization meeting and conduct of case verification and validation.
- Creation of community awareness and sensitization including in the local media (TV and radio) through discussions Jingles using local language and provision of posters in both English and local languages.
- Targeted sensitization of special populations such as nomadic groups and selection of informants and focal persons among nomadic populations.
- Conduct quarterly polio risk assessments with mapping.
- Ensure optimal functioning of environmental surveillance and initiate ES in Oyo and Cross River states
- Finalize phase 1 containment activities (polioviruses infectious and potentially infectious materials) documentation according to revised GAP III guidelines.
- Update the list of health facilities and informants in the country and prioritize these facilities for active surveillance. Prioritized facilities should be reviewed every six months
- Monitor LGA DSNO active surveillance and AFP zero reporting
- Conduct regular surveillance data analysis and monitoring to identify areas with surveillance gaps for focused intervention (e.g. supportive supervision).
- Strengthen coordination and quality of feedback through monitoring of monthly DSNOs review meetings, quarterly zonal review meetings and national review meetings.
- Monitor the implementation status of recommendations of key bodies, reviews and teams such as the ERC, OBRA, IMB, ARCC, data quality review and the National Polio committees.
- Monitor quality of active surveillance and performance of the AFP surveillance network through supportive supervision, monthly and quarterly surveillance review meetings at LGA, State, zonal and national level as well as implementation of regular surveillance reviews especially in high risk states and other states based on risk analysis.
- Continue to motivate vaccination teams to report AFP cases.
- Conduct timely Investigation of confirmed poliovirus isolation, Sabin type 2 isolation, OPV zero dose and polio compatible cases following standard guidelines.
- Conduct retroactive AFP case search in wards that have not reported AFP cases for two to three years.
- Support the conduct of rapid surveillance assessments in states with surveillance gaps.

- Continue to support the national polio laboratories to achieve and sustain WHO accreditation
- Continue to support the National polio committees (NCC, NPEC, NTF) to function effectively
- Complete the introduction of e-surveillance in the remaining 19 states by June 2019.

Targets, Milestones and Indicators

- Build capacity of at least 90% of key surveillance personnel (e.g. DSNO, ADSNO, health facility focal persons, informants) through refresher training by June 2019
- Attainment of the two main AFP surveillance performance indicators at national, state and LGA levels by June 2019
- At least 90% of all reported AFP are verified and geo-coordinates collected in 100% of verified cases as at June 2019.
- Validate at least 5-10% of verified AFP cases
- Collect at least 80% of contact samples of all AFP cases from Adamawa, Borno, Sokoto and Yobe states and from inadequate AFP cases of the remaining states and the Federal Capital Territory (FCT).
- Conduct at least 80% planned monthly active surveillance activities (including to community informants) by June 2019
- Implement at least 80% of the surveillance annual work plan by December 2019
- At least 25% reduction in polio compatible cases by December 2019.
- Environmental surveillance laboratory in Maiduguri is well established June 2019.
- Strengthen national polio committees and documentation of certification processes throughout 2019
- Environmental surveillance expansion to at least two States in the Southern zones by September 2019
- Monitor reverse cold chain in LGAs that have not detected NPENT nor Sabin
- Conduct timely (within 48 hours of notification) investigation of all confirmed poliovirus outbreaks.
- Conduct community polio sero-prevalence survey in Sokoto by September 2019.
- National Polio Laboratories maintain WHO accreditation in 2019.
- Achieve at least 80% implementation of ARCC, ERC and OBRA recommendations by June 2019.
- Conduct and complete the phase 1 Polio containment by June 2019.
- Complete and submit the 2018 country annual progress report to ARCC by April 2019.
- Country documentation for certification accepted by ARCC by December 2019
- Organize cross border surveillance meetings between states sharing international border and their counter-parts.

5.5 Enhancing SIAs Quality with special focus to vulnerable/special areas

Based on risk categorization algorithm (combined EOC and Institute of Disease Modelling-IDM), a total of 83 LGAs across 13 States have been prioritized and will be specially focused in 2019 while focusing on these LGAs, the program will still pay attention to the remaining 691 LGAs across all the States and FCT. The special attention to these unique 83 LGAs include increased supervision and support, increased high level engagement with the political, Religious and Community leadership, improved planning, implementation and evaluation of polio related activities (including campaigns).

Key Activities

1. Identifying vulnerable areas

The classification of LGAs as vulnerable is conducted by the National EOC inconjunction with the Institute of Disease Modelling (IDM). This process is repeated every 6 months. For the 2019 high-risk categorization, out of the 774 LGAs a total of 83 LGAs across 13 States + FCT as indicated in the Table 17 and Fig 18 below will be given special attention and focus.

Table 17: 2019 High Risk LGA Categorization

States	EOC + IDM	Only EOC	Only IDM	Special	Total
BORNO				27	27
JIGAWA	4	4	3		11
KATSINA	6		3		9
YOBE	4		1	2	7
BAUCHI	3	2			5
KADUNA	5				5
TARABA		5			5
ADAMAWA				4	4
KANO	1		3		4
SOKOTO	1	2			3
ANAMBRA		1			1
KWARA		1			1
ZAMFARA		1			1
13 states	24	16	10	33	83

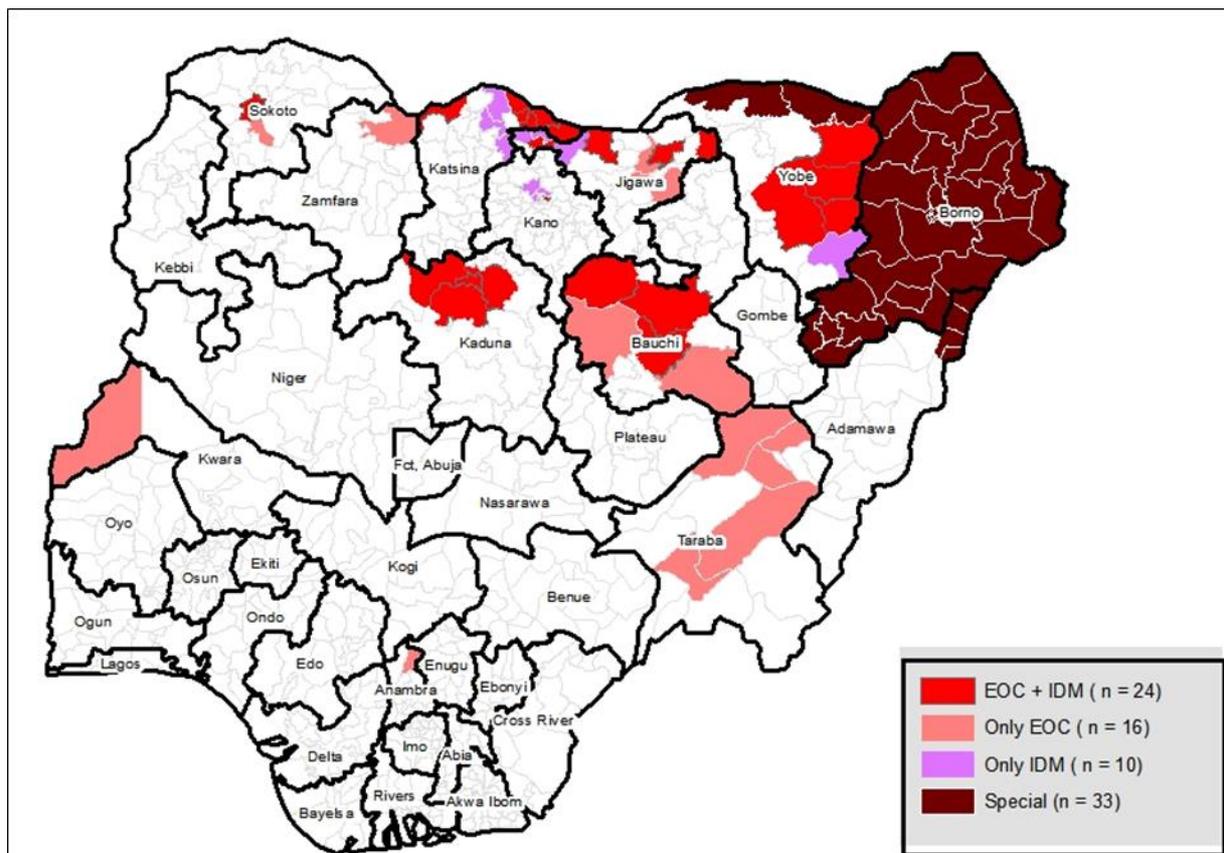


Figure 18: Polio Highrisk LGAs

As indicated in figure 18, 33 of the 83 LGAs are special LGAs comprising all the 27 LGAs from Borno, two of the LGAs are from Yobe while Adamawa State contributed four LGAs. There was convergence in 24 LGAs being selected by both the EOC and IDM while 16 of the LGAs were in the EOC model alone 10 in the IDM model. Only one LGA in Anambra State was included from the southern states.

Strengthening support and supervision on High risk/weak performing areas

Continuous review of campaign quality and identification of weak performing areas, through high-risk analysis and HROP will continue to guide prioritization. Government and partners will regularly review performance of their respective state, LGA, ward staff, and ensure that stronger hands are redeployed to poor performing LGAs. This would result in quality implementation of planned activities. The periodic review and re-deployment of LGA and ward level staffs will be done as the situation demands based on available performance data. Management support teams will also be deployed based on these assessments.

Improving team performance

Team performance is mainly assessed through child absent households and households not being visited during the IPDs. Other parameters of measure include, knowledge of VVM, 5

key household questions and knowledge of the daily implementation plans. To improve team performance in 2019, the critical activities will include:

Strengthening and sustaining data-driven ward level team selection

LGA Task Forces should review the appointments/retention of ward focal persons and vaccination in all LGAs but primarily focusing on the priority ones after every round of campaign. A team made up of Government and partners at LGA level should review WFP and team performance, and measure it against set campaign outcome indicators. Any ward with LQAs results of <90% (and where this is established to be due to team performance) should have the WFP account fully for that. On the other hand, very good performing wards (>90% LQAs performances) should have their respective WFPs rewarded (in form of incentives such as commendation letters, public recognition, capacity building opportunities, promotions etc). Team selection should align with the national guidelines and all partner agencies at the LGA level should be active members in the selection process, and in the review of performance process. These will form part of their performance and accountability measure within their respective partner organizations.

Household based micro-planning revision and extension of Household based enumeration:

In 2018, three states conducted the household-based enumerations using the revised SOPs. The results have been used to rationalize teams’ allocation. The process was put on hold in 2018 for two major reasons one being household based enumeration micro planning being inappropriate 8 months preceding national elections. This will insulate the Polio program from being misconstrued as doing Populations census through the back-door and the other being NERICC’s desire to tap into the under one population generated by the enumeration exercise which necessitated additional layers of validation.

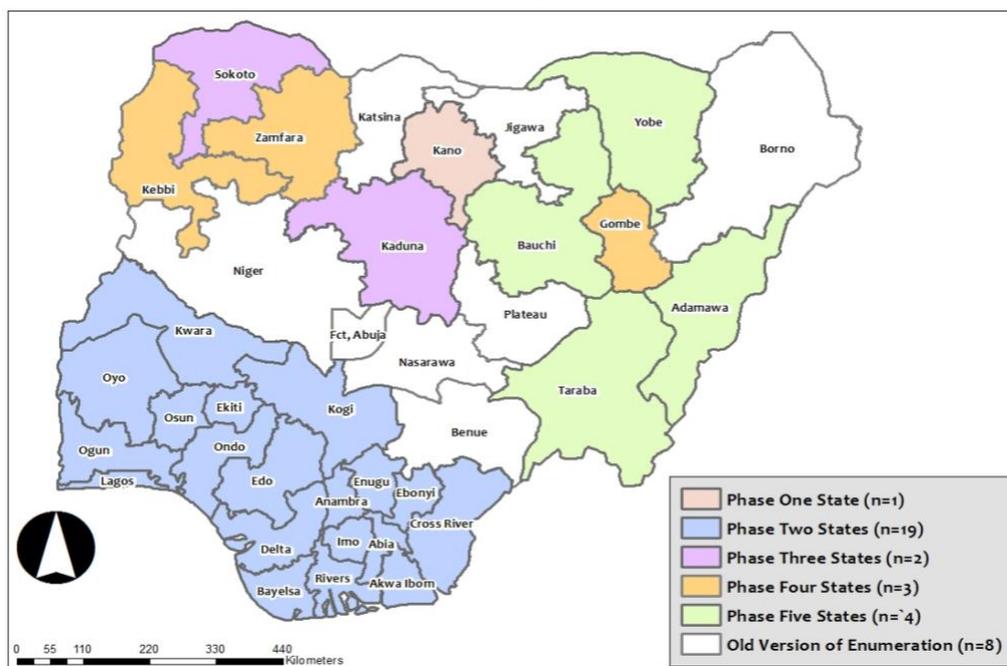


Figure 19: Progressive House-hold based micro planning using the revised SOPs, 2018.

Plans to extend enumerations in 2019:

In 2019, the program plans to continue with enumeration in states that have not completed enumeration. The anticipated benefits of extending enumerations to these additional states include:

- Reduction in the population denominator with resultant savings in the financial resource requirements especially vaccines and devices,
- Rationalized workload for house to house and transit teams during SIAs

Innovative ideas to improve and maintain the quality of micro Plans in 2019:

- Tracking of enumeration teams and Ward Focal Persons using vaccinator tracking system (VTS)
- Compulsory use of ODK by all Senior Supervisors including MSTs
- Weekly triangulation of ODK and VTS data as part of accountability
- Use of Security Vigilantes in security compromised settlements escorting enumeration teams
- Comprehensive validation process of at least 40% of the micro plans up from the previous 10%

Continuous micro planning

Micro-plans of all LGAs will be reviewed after each SIA round through a detailed tally-sheet analysis, LQAS and Independent Monitoring data from the concluded IPDs. Revised household-based enumeration with an inbuilt validation processes be used in identified poor performing LGAs with questionable denominators will be conducted.

Enhancing quality of team members training

Training modules for major components of the IPDs will be reviewed to ensure consistency of the trainings and in line with adult learning approach. In addition, audio-visual training materials will be produced and emphasis will be made for trainings at all levels to be conducted by senior programme officers, and particularly at ward levels, the trainings will be led by the PHCC along with partners. The IPD guideline will be reviewed and updated in 2019 to incorporate experiences with innovative approaches to improve the quality of SIAs.

Enhancing supervision

The national EOC will deploy management support teams (MST) to states based on risk / performance concerns. The State EOCs / State Task Forces will deploy the MSTs, state level and partner agency staff to the identified high risk LGAs and wards based on the high risk operational plan for that round. There will be stringent monitoring of the completed supervisory checklist submitted by staff deployed by each agency to ensure adherence and accountability. The analysis of completed supervisory checklists by agency will be presented to the state EOC/State Taskforce and National EOC during/after each round. Use of an electronic supervisory checklist on an ODK platform will be scaled up to facilitate

monitoring, tracking, analysis and storage. During SIAs ODK and VTS data will be triangulated and shared during evening review meetings for action. The accountability framework will be enforced on poor performing government and agency staff.

Improve SIAs monitoring

In an effort to improve enhanced independent monitoring and LQAS processes, the National EOC revised the standard operating procedures (SOPs) of conducting independent monitoring in 2017. These SOPs were scaled up to all the states in 2018. The SOP has spelt out verification processes of the LQAS to ensure the integrity of data collected by surveyors. The implementation of the SOP is key to ensuring concordance between all sources of monitoring data and improvement on the quality and veracity of the data. This has re-established confidence in the process while generating quality data that will guide program interventions.

Include a brief description of the Mop Up Vaccination Approach

Vaccine Management and Accountability

The gaps identified from the previous sweeps conducted in the country, showed clearly that vaccine management and accountability needs to be strengthened at all levels. To address the issue, ward vaccine accountability officers were introduced at the wards level during each round of SIAs. Introduction of LGA and Ward Vaccine Accountability forms and Introduction of Logistics Management Support Team (MST) support from Government and Partners in each implementing State/ LGA to address all logistics issues and account for all vaccines. These innovations resulted in the full accountability of all the mOPV2 used in the OBRs in 2018

Targets, Milestones and Indicators

- Share line lists of 83 HR LGAs to States by February 2019
- Develop an inter-agency Supportive supervision plan and start implementation by March 2019
- Review and share ward level performance (LQAS) after every round and use that to assess WFP starting March 2019
- Achieve atleast 90% LGAs at 90% pass per round
- Ensure S-VAM report is shared by States and LGAs 5-days post campaign
- Finalize HH based enumerations in 8 priority States by June 2019

5.6 Enhancing Routine Immunization

To ensure sustained interruption of all polioviruses, it is important that RI is rapidly strengthened and coverage improved. The most recent meeting of the Global Certification Commission noted that “Inadequate routine immunization levels coupled with subnational gaps in surveillance in high-risk countries continue to be the main risk factors for the emergence or continuation of cVDPVs.” Thus, both risk factors must be addressed.

Strengthening routine immunization across board is an important and strategic component for PEI. Therefore, following the establishment of National Emergency Routine Immunization Coordinating Center (NERICC) on July 4 2017, several innovations have been implemented on improving RI coverage. The Polio EOC has worked with NERICC to improve RI and the recent smart survey of 2018, shows RI coverage to have improved from 48% in 2015 to 58% in 2018. In addition, recent RI LQAS done quarterly has shown improvement from 21(6%) in 4th quarter 2017 to 85(23%) in 4th quarter 2018 in the 18 HR states. Despite the improvements, much still needs to be done to improve coverage to enable Nigeria achieve polio free status.

Collaborating with the NERICC, the Polio EOC will also focus its attention to the 108 LGAs that fall within the 18 NERICC RI priority States. RI intensification efforts will continue in the 18 States and will include amongst others: intensifying fixed post activities during SIAs, supporting hard to reach populations (Nomads etc) with RI including IPV, Local Immunization Days (LIDs), Optimizing Routine Immunization Sessions (OIRIS) etc. Polio staff and EOCs will review plans and work together to ensure that activities are being carried out as planned and ensure regular reporting of all planned and conducted activities including key agreed indicators.

Key Activities

1. Tracking Focused LGA RI Performance:

Using the approved key RI indicators, all the 108 LGAs will be tracked and reports generated on a monthly basis and feedback will be availed to all LGAs involved. Focused supportive supervision will be embarked upon in 2019 to these LGAs. Both the National EOC and the NERICC teams will jointly monitor the 108 LGAs and other LGAs within the 18 RI priority States. Focus will be for LGAs and wards with large numbers of unimmunized/under-immunized children, with poor performance indicators and those with population influx and internally displaced persons in camps or assimilated in communities.

2. Development of Routine Immunization Improvement Micro-Plans:

The National EOC and NERICC shall engage in discussions on the type of support that will be required by the vulnerable LGAs. Polio infrastructure will continue to be used in supporting the development of REW micro-plans that will include identifying the populations that are not being reached with services. The GIS maps generated through VTS tracking and updated during the measles microplanning and the master list of settlements for the polio campaigns will also be used to reconcile and validate missing settlements in the REW development process. The polio EOC will ensure completion of walk-through micro-plans, micro-census, enumeration and verifications in the remaining Zamfara, Bauchi, Taraba, Gombe, Adamawa, Yobe, Kebbi, Katsina, Jigawa states in the North. The combination of GIS maps, population and the walk-through population estimates will invariably help to establish more accurate

target populations for routine immunization. During walk-throughs, the areas for outreach sessions will be determined in agreement with traditional leaders. The REW micro-plans will include implementation plans for sessions (both fixed and outreaches); logistics support to carry vaccines to and from sessions, supportive supervision; demand creation and community linkage activities. The outreach strategy has been revised to cater for 20% of the population that lives beyond 2 km to the HF while providing mobile sessions will be provided to those living beyond 5km.

3. Advocacy to states for ownership:

The National EOC and NERRIC will continue to advocate to State Primary Health Care Boards/Taskforces/EOCs for State ownership and human, logistics and financial support to the identified LGAs as per developed high-risk operational plans and State routine immunization intensification plans. In November, 2018, a two-week meeting was held with 108 LGA teams that had failed LQAs including the ES of the states, Director PHCs, RIOs, LIOs and partners (WHO, CDC, UNICEF etc.) At the end of each session, each team developed HROPs that will be followed through and periodically assessed in 2019 in order to intensify and improve coverage. Follow up with these LGAs will be key for both EOC and NERRIC.

4. Monitoring for Action:

Government and partners will assist with:

- Printing data tools for proper collection of accurate RI data which include: registers, vaccination cards, vaccine management data tools, vaccination data reporting and monitoring tools.
- Supporting NERRIC conduct quarterly RI LQAS in 18 priority states to estimate LGA level RI performance for improvement
- The National and State EOC to monitor data from these LGAs, the proportion of fixed and outreach sessions carried out, number of children vaccinated in the sessions, community linkage activities and vaccine availability/stock outs.
- The SMS pilot project for real time RI data that was scaled up to 18 states to be nationwide. The project has already started to provide useful information on vaccines needed including IPV for RI intensification will be improved upon with capacity to enter health codes to identify facilities for improvement.
- Government and partners to participate and monitor the fixed and outreach sessions carried out in these prioritized areas using the routine immunization session monitoring checklist and during the OIRIS visits which occur once every three months
- Provide Polio EOC data from high-risk LGAs to State desk officers at NERRIC, who are also following up and monitoring each state weekly and requesting improvements using information provided by DHIS2 data and RISS
- Utilize DHIS2 monthly data to assess coverage, vaccine utilization, wastage and other indicators for reviewing improvement in RI programming

- Conduct high-risk LGA analysis using IDM for WPV and cVDPV2s and merge the data with RI HR LGAs to determine where they overlap and use this for program action.

Targets, milestones and indicators

- Achieve greater than 44% immunization coverage for all antigens by 2019 in line with NERRIC's vision and the NSIPSS document.
- Follow up on the priority LGAs/wards for strengthening RI identified and shared with State Task Forces/EOCs by end February 2019
- Continue National EOC advocacy with State Taskforces/ SERRIC/ EOCs for human, material and financial support by December, 2019
- Develop/Update RI REW plans based on GIS maps & population estimates and walk-through micro-plan data and session plans available by October, 2019
- Data tools for capturing and monitoring routine immunizations performance available in priority LGAs by March 2019
- National and State EOCs/NERICC to continue monthly monitoring of RI performance
- Conduct monthly RISS from the national to State/LGAs/HFs. Target of ≥80% of planned visits conducted by 2019
- Improve polio vaccine coverage for type 2 through quality SIA campaigns and intensification using fIPV/ IPV

5.7 Cross Border Collaboration

About 4% of states in Nigeria have an international border, comprising of 201 wards in 60 LGAs. These wards border four countries: Cameroon, Chad, Niger and Benin republics. Except for Chad republic, Nigeria is linked to these countries through land borders. About 56% of the international border LGAs in Borno state border with Chad republic via the Lake Chad waters.

The Lake Chad basin border areas are associated with active population movement driven by social, economic and humanitarian reasons. Most of these movements are temporary and include those to major commercial centers in various states. In addition, a complex pattern of diverse nomadic populations' seasonal movements in search of pasture and water is a common feature.

Justification for intensified cross border activities in Nigeria

In 2018, Nigeria was affected by two separate, but concurrent cVDPV2 outbreaks in Jigawa and Sokoto states respectively. As at 31 December 2018, Nigeria has reported 34 cases of cVDPV2 and zero case of WPV. The Jigawa outbreak has subsequently spread to 8 states and across the international border to Niger Republic. In the latter, nine cases of cVDPV2 were reported in 2018, and are genetically linked to the Jigawa circulating viruses. About 96.3% of

the reported cVDPV2 cases and 83.3% of cVDPV2 isolated from the environmental sites were in states with international borders.

The spread both within Nigeria and beyond the border, underscores the need to strengthen the coordination efforts to address surveillance and population immunity gaps in the Lake Chad basin countries. The risk of continued transmission and spread, likely facilitated by population movements further increases the interaction between susceptible and infected individuals. The Lake Chad Basin has major commercial centers that draw local and international populations along major road networks and crossing points. Additionally, the major nomadic migratory routes are well established in the basin and regular and seasonally predictable. However, insecurity due to rustling in the northwest, interethnic conflicts in the north central and insurgency in the NE have influenced changes on the nomadic routes. Besides, these populations usually have poor access to health services, and by transecting through outbreak zones, and areas likely populated by vulnerable communities (including trapped and displaced populations) increases the risk of exposure and spread of the virus.

Since the declaration of a public health emergency by Ministers of Health of the five Lake Chad basin countries 2016, several Outbreak Response Assessments (OBRA), TAG meetings and surveillance reviews have been conducted, but despite documenting clear progress the endemic WPV transmission is yet to be closed. Further, the risk of cVDPV2 transmission and spread remains because of the suboptimal population immunity.

Consequently, Nigeria will continue to strengthen cross border collaboration focussing on all border areas with special emphasis on states that reported cVDPV2 cases and the Lake Chad basin priority LGAs in Adamawa, Borno and Yobe states.

Broadly, the program will continue to strengthen coordination and mainstreaming the planning, implementation and monitoring of activities targeting the mobile populations.

Key Activities

Coordination with the Lake Chad Coordination Task Team:

The country will ensure a strong corroboration link between the NEOC and the Lake Chad TT in Ndjamena is maintained through the national representative and country working group, to facilitate rapid decision-making, deployment of resources and problem solving across the five countries.

- The representative will regularly provide the Task Team with information and data required in compliance with specific deadlines for submission and participation in the regular teleconference, outbreak assessments and review meetings. These will facilitate rapid analysis and identification of gaps in areas that influence cross-border surveillance, OBRA, SIAs and in-between SIAs activities and inform risk assessments.

- Ensure adequate preparedness for potential further spread of the ongoing cVDPV2 outbreak within Nigeria and into other uninfected areas and other countries. To this effect, the TAG requests the Lake Chad task team to review evolving risk and prepare contingency support plans for all areas within the Lake Chad region at risk of an outbreak
- Conduct regular coordination cross-border meetings to enhance collaboration on the identification and vaccination of high-risk and mobile populations including nomads
- Participate in cross-border meetings with nomad experts from Nigeria, Niger, Chad, and Cameroun to gather information about and map the nomadic movements throughout the Lake Chad basin. Specific information will include location, routes and time of the movements in order to understand where and when populations move, variables impacting historic movements (e.g. insecurity), and how to reflect this information in the response activities.
- Update work-plan to ensure synchronization, efficient use of resources and maximum impact and incorporate monitoring feedback from the Task Team in the in-country plans
- Continue political advocacy and to ensure engagement and program ownership at all administrative levels across the five countries.
- Strengthen country program management and administration and strictly implement the accountability framework at all levels

Strengthening cross-border activities in the Lake Chad Basin countries:

The program will ensure cross-border coordination and synchronization, communication, notification and implementation of activities at local border LGA/district levels through:

- Updating and geo-referenced mapping of all the major crossing points along the international borders
- Ensure functional border/transit point vaccination is established and all eligible children are immunized while coming and going outside Nigeria.
- During OBRs and SIAs, inter-border synchronization meetings facilitated by the Lake Chad task Team are held and attended by officials from across the borders leading to joint plans and synchronization of vaccination sessions.
- Update and continue border vaccinations in the other states that share borders with Niger and Cameroon
- Expand AVADAR to all priority LGAs
- Adherence to the reporting formats and guidelines on cross border AFP notification the review and standardization by the TT is finalized
- Immediate communication with neighbouring country all AFP cases detected along the borders to ensure timely investigation and plan for response activities.
- IPC skills training and production of IEC materials for AFP active case search during IPDs by H2H vaccination team in all priority LGAs

- Regular tracking of zero reporting by informants and quarterly meeting to review zero reporting in all Priority LGAs
- Monthly meetings, analysis and feedback of active surveillance visits by DSNOs of priority LGA using standardized tool.
- Monthly silent wards analysis and implementation of retroactive case search and sensitization
- Timely investigation of polio cases (WPV, cVDPV, Compatibles, AFP zero dose) using appropriate tool and take corrective actions
- Quality planning for each round of SIA (TSA, HRA/HROPs, pre-implementation dashboard, schedule of activity)
- Implement EIM and LQAS with corrective actions after each SIPD in 15 priority LGAs
- Provision of additional resources to conduct quality revisit/mop-up with documentation in each of the priority LGAs that failed LQAS
- Develop an Integrated Communication Plan and assessment tools to inform the behaviour and social change component of mobile population in 15 priority LGAs.

Enhance program performance in Lake Chad priority LGAs plus MMC and Jere

In order to strengthen surveillance, planning and implementation of OBR/SIAs in insecure areas and Lake Chad islands in 15 + MMC and Jere LGAs:

- Update accessibility status of settlement 15th of every month including mobile population.
- Corroboration with relevant agencies and use of satellite imagery, to determine population estimates of the high-risk population groups across borders.
- Reaching Inaccessible Children (RIC) with vaccinations and conduct AFP active case search (Borno and Yobe)
- Reaching Every Settlement (RES) with vaccination during IPDS /SIAs/ OBR and conduct AFP active case search in three priority States.
- Reaching special population by Hard to Reach teams to reach special population in 3 priority States
- Expansion of Routine Immunization to RES vaccination areas
- Vaccination in Transit point, IDPs camp, Markets, Nomadic, CMAM sites, busy Hospital, International Border posts and integrating livestock vaccination including AFP active case search.
- Intensification of routine immunization in specified transit points along 15 priority LGAs
- Profiling and vaccination of children vaccinated in-between rounds (special interventions)
- Conduct Periodic (bi-annual) Routine immunization intensification (PIRI) using LIDs in areas with evidence of low population immunity in the 3 priority states
- Enhance collaboration with other UN agencies and NGOs for integration of services

- Expand surveillance reporting network to include informants, VCMs, private and public health facilities including humanitarian partners
- Identify, train and engage mobile population focal points (nomadic, IDPs, fishermen) in AFP surveillance in priority LGAs (15 + MMC and Jere)
- Implement second phase of healthy children sampling in children less than 10 years arriving in IDP camps from inaccessible areas and mobile populations in the priority States
- Expansion of active case search in inaccessible areas integrate the vaccine management accountability framework into the broader operational accountability framework

Tracking of mobile and nomadic populations to enhance vaccination and surveillance reach

Aim: enhance vaccination and surveillance reach among mobile and nomadic populations

Coordination and collaboration

- Strengthen and mainstream an effective coordination and planning of mobile population under the EOC/state technical team (Polio)
- Identify mobile population stakeholders (Ministry of Agriculture, Veterinary department, Fisheries department, Miyetti Allah Organization, FAO)
- Strengthen linkages between LGAs, state and Lake Chad basin countries on mobile populations
- Seek and establish collaboration with relevant agencies to explore leverage opportunities such as animal vaccinations
- Identify the mobile populations: Nomadic populations, Migrant fishing populations, Refugees

Update geo-mapping of nomadic, fishing and other mobile populations

- Identify and geo-code nomadic and migrant settlements including their accessibility status
- Update mapping the GIS map to display nomadic settlement, population, routes, markets near routes, camping/sites for seasonal campaigns, water points, grazing areas.
- Update seasonality (temporal) mapping of the mobile population movement
- To establish a data base of mobile population and their leaders, to ensure effective community linkages

Risk analysis prior to OBRs and SIAs

- Review performance during previous OBR/SIAs (Low coverage, LQAs, independent monitoring, missed settlements and sites) reflecting the population status as at and during the planned OBR/SIAs
- Missed children (vaccination hesitant and child absent data)

- Vaccination status of AFP cases (<3doses)
- Low routine immunization coverage

Microplanning and logistics

- Update LGAs micro plans based on the population movement and risk assessment
- Review and rationalize vaccination team requirement
- Review of vaccines and logistic requirements
- Update microplanning prior every campaign OBR and SIAs: Pre-implementation activities

In-between rounds and special Interventions to target mobile and nomadic population

- Organize human-animal integrated vaccination campaign where possible
- Organize Special nomadic vaccination campaigns
- RIC Vaccination strategy
 - Segregate data to identify number of nomadic settlements in inaccessible areas (Islands, mountain top and inaccessible)
 - Proportion of the population inaccessible areas that are nomadic

Strengthen surveillance among mobile population

- Identify surveillance informants within the population (e.g. Leaders, traditional healers, traditional barbers, TBAs)
- Sensitization on AFP surveillance
- Tracking surveillance reach among nomadic communities (NP-AFP rate and stool adequacy)

Routine Immunization among mobile and nomadic population

- Microplanning (REW) update to capture all mobile pop
- Establishment/strengthening/expanding RI
- Reviewing RI performance among nomad population
- Defaulter tracking (prioritizing outreach and mobile strategies that includes nomadic settlements)

Communication and Social Mobilization targeting nomads and mobile population

- Advocacy visits and sensitization meetings with nomadic leaders (state, LGA, wards, settlements levels)
- Enhance reach to mobile and nomadic population through radio, IEC materials (to be used at selected sites such as markets (livestock, milk (“Nono”) selling points, house of TLs) and Phones (Memory cards, MP3, voice and videos) and Oral communication/word of mouth
- Identify VCMs among nomads (nomadic settlements, Focal persons in markets and mobile groups)

Monitoring and data management of mobile and nomadic population vaccination and surveillance activities

- Ensure monitoring tools capture of disaggregated data on nomadic populations on all program areas including surveillance, vaccination (RI and SIAs, communication and social mobilization, special interventions)

Targets, milestones and indicators

These parameters will be measured based on the standard indicators used to measure all PEI activities (including process indicators for vaccination, surveillance and social mobilization).

a. Coordination with the Lake Chad Coordination Task Team

- Updated phase 3 work plan by end of February 2019
- Updated database of settlements by end of March 2019
- Updated maps of border settlements, crossing points, IDPs/Refugee camps by March 2019
- Monthly reports to be shared with Lake Chad TT
- AFP cross-border notification, reporting formats and guidelines in place by March 2019
- Sharing of line lists of AFP detected along borders on a weekly basis
- Updated map of border crossing points by end of February 2019
- Weekly border vaccination reports to NEOC

b. Strengthening cross-border activities in the Lake Chad Basin countries

- Updated database of settlements categorized by accessibility by end February 2019
- Updated maps of border settlements, IDPs/Refugee camps and crossing points by February 2019
- Monthly reports to Lake Chad TT
- AFP cross-border notification, reporting formats and guidelines shared by March 2019
- Line lists of AFP detected along borders shared on a weekly basis

c. Maps and work plan

- Update the State master list of settlements identifying nomadic and fishing settlements by end of February 2019
- Updated maps nomadic routes, grazing reserves and major watering points
- Line listing of nomadic community leaders by end of March 2019
- Updated work plan for intensifying RI and surveillance in the nomadic community by end of January 2019

d. Border vaccinations in other states

- Updated map of border crossing points by end of January 2019
- Border vaccination reports – monthly

5.8 Improving and strengthening quality assurance of all Polio data

The quality of Polio related data is an important concern for both the program and the country. The program can only be able to better review, plan and implement its activities driven by data, if such data are of highest quality, timely and complete. Hence the focus for 2019 is to consolidate and improve upon the program data generation, data analysis, data transformation and feedback. In 2017, the National EOC embarked on a critical data reform strategy that culminated into signing of a Data protocol sharing agreement between Government and all PEI partners. In addition, the Polio EOC data team was reactivated and the process to develop a Polio portal began. In 2018, the program finalized and launched the Polio EOC portal which has provided both the general public and Immunization partners regulated access to Polio Information, reports, plans and data in a timely manner possible to ensure better understanding of actual polio performance for informed decision making. The portal will also improve transparency in matters related to data.

Key Activities

- Support State EOCs and other State data team to improve quality and delivery of data generated from SIA activities
- Conduct data review meetings with State EOCs
- Use of ODK by supervisors and analysis/feedback by data team.

Targets, Milestones and Indicators

- Quarterly Supportive supervision visit carried out in 2019
- Periodic uploading of program data on the data portal

5.9 Transition Planning

The Nigeria Polio Transition planning process is on course with Government of Nigeria taking the lead with partners support to ensure the process succeeds.

Despite the huge effort deployed to contain the outbreak in Borno, the transition planning has made steady progress. Consultants were recruited to facilitate the development of the Polio Business Case in 2018. Through a comprehensive consultative process with stakeholders, a draft business case was developed. The Post-Certification Strategic Plan (PCSP) from GPEI has also been shared with all relevant countries including Nigeria. The PCSP is intended to provide the future guardians of a polio-free world with a starting point by documenting the functions and activities required to sustain eradication until future risks are deemed no longer relevant. The implementation of the PCSP is expected to be driven by Ministries of Health, advisory groups, global partners, and donors. Nigeria is expected to work with the GPEI and partners to implement the content of the PCSP which the Polio Transition Technical Task Team (PT4) is driving as part of its next phase of transition planning activities in 2018 and beyond.

The recommendations of the 36th Expert Review Committee on Polio and Routine Immunization (ERC) recommended that the Government of Nigeria finalize the polio transition Business Case by the end of 2018; and convene a forum in the first quarter of 2019 with key in-country partners. The forum will allow for the following:

- Present the final Business Case for consideration and discussion with partners;
- Provide the polio eradication and asset mapping to partners/stakeholders;
- Provide the documentation of lessons learned from the polio eradication programme to partners/stakeholders

ERC recommends that the presented revised transition timeframe for transition planning be implemented, including the Business case for transition planning by April 2019 and that Government should accelerate leveraging of resources for routine immunization, PHC as well as Disease Surveillance and outbreak response and other public health priorities. The PT4 and NPTPC will prioritize the PCSP and address the recommendations of the ERC in ensuring that the transition planning process meets with and even surpasses global transition benchmarks and best practices.

Key activities and milestones to be prioritized in the transition planning implementation in 2019 are highlighted below as well as the targets, milestones and indicators.

Key Activities

- In country visit by Global Taskforce on Polio Transition
- Complete development of Business case
- Endorsement of Business case and transition planning cost/ financial requirements by NPTPC and ICC
- Dissemination of draft transition plan with stakeholders/states and LGAs for review and inputs
- Resource mobilization and funding commitment by partners/donors for transition plan implementation
- Communication and advocacy on transition planning in Nigeria
- Finalization of transition plan
- Endorsement and signing of MOU on transition planning by Government and Partners
- Transition plan implementation scheduled for June-September-2019

Targets, Milestones and Indicators

- Development of draft Business case with budget developed by end of February, 2019
- Business case and transition planning cost/Financial requirements endorsed of by NPTPC and ICC by April 2019

- Draft transition plan disseminated for inputs/review by stakeholders (states and LGAs) by March, 2019
- Resource mobilization by partners/donors for transition plan by June, 2019
- Communication and advocacy on transition planning completed by June, 2019
- Finalization of transition plan by April 2019.
- Transition plan implementation scheduled for June –September 2019

6.0 MONITORING AND EVALUATION

6.1 Monitoring Process

The overall guiding principle for monitoring of SIAs for quality implementation are:

- Increased quality of all polio eradication activities including campaigns, AFP Surveillance and routine immunization
- Increased programmatic access and reach with a focus on continuously missed children
- Integration and coordinated planning and implementation of Operations, Security and Communications through national and state EOCs.

Priority activities to improve quality of immunization services, particularly scheduled SIAs, and special rounds targeting underserved populations as well as outbreak response immunization will be monitored using:

- Specific plans with detailed activities and monitoring indicators for prioritized LGAs, that have been flagged using prioritization which is updated every 6 months
- Monthly feedback to VVHR and VHR LGAs including all LGAs of Borno and Yobe on implementation status of identified activities in collaboration with NERICC.
- Monitor using evidence twice a week on the implementation of surveillance, routine immunization, in-between round activities and implementation of scheduled and outbreak SIAs at national and state EOC.
- Enhanced/real time monitoring of performance and increased accountability at all levels.
- Standard pre-implementation and implementation monitoring checklists and presentation of information in the polio SIA dashboard.
- Supportive supervision, including concurrent monitoring, using real time data collection on the Open Data Kit (ODK) platform.
- Enhanced independent monitoring.
- LQAs implementation of settlement selection using GIS.
- Systematic analysis and triangulation of available data sources including LQAS, EIM, VTS, etc.

- In-depth analysis and feedback on vaccination tracking system.
- Programme audits and reviews.
- Special studies including polio sero-surveys.
- Monitoring of performance and increased accountability at all levels
- Monitor the extensive use of increasing interventions through a strong monitoring and evaluation support in all states, with especial emphasis on high risk states. Avail data assistance to better capture, analyze and use the data at the point where data is generated to improve program performance. Strengthen the data management support in Borno through coordination of data managers in the state under the state EOC.

Activities to be undertaken

Specific activities that will be undertaken to monitor surveillance and polio laboratory activities will include:

- Weekly and monthly review of standard surveillance and laboratory performance indicators focusing on ward level performance
- Monitor the utilization of new initiatives in surveillance, implementation of AVADAR to strengthen sensitivity of surveillance in Borno state.
- Rapid surveillance appraisals, targeting areas with sub-optimal performance indicators.
- Annual laboratory accreditation missions

The information collected from the monitoring processes will be analyzed by EOCs and State Operations rooms and regular monitoring reports prepared for use by:

- Presidential and State Task Forces
- High Level Advocacy Team (HiLAT)
- Nigerian Governors' Forum
- ALGON
- ERC and other oversight bodies
- Quarterly PEI review meetings
- Lake Chad countries review and other technical oversight meetings

7.0 OVERSIGHT AND MANAGEMENT

7.1 National, State, LGAs and Traditional Forum

The Presidential Task Force on Polio Eradication and Routine Immunization (PTFoPE) will continue to provide oversight to the PEI program in Nigeria. The PTFoPE will monitor progress at the State and LGA levels through quarterly meetings.

The National EOC, which is the operational/programme management secretariat of the Presidential Force, will continue to provide an enabling environment for key government and partner staff to continue to work as a team with the aim of improving decision making, information sharing, conducting joint planning and programming, and implementing new strategies. This is aimed at increasing the effectiveness of the polio programme. The State EOCs and State Task Forces on Immunization will replicate the functions of the national EOC.

The LGA Task Forces on Immunization will meet at least once monthly to review the progress in achieving PEI and RI targets in LGAs, identify remaining challenges as well as appropriate strategies to address them. In 2019, LGA Task Forces will continue to be an important forum to bring together key political leaders, Traditional and Religious leaders as well as health workers, to oversee critical activities implemented at LGA level and in all wards, particularly the Very High Risk and High-Risk wards.

Traditional leaders play a very important role in the PEI programme. They have been incorporated in all the taskforces from Presidential to the LGA. Aside from their involvement in various task forces, the traditional authorities in northern Nigeria have an organization called the Northern Traditional Leaders Committee on PHC Delivery (NTLC) whose mandate among others is to lead the process of achieving PEI and RI goals through the systematic involvement in activities for Polio eradication. They have established committees at Emirate and District levels that coordinate activities in the LGAs, wards and settlements. These committees are involved in advocacy, micro planning, vaccination team selection, supervision of IPDS activities, resolution of non-compliance and promotion of community demand for vaccination services. NTLC as well as the religious leaders through established structures such as the Nigeria Inter-Faith Action Association (NIFAA) and Federation of Muslim Women Associations in Nigeria (FOMWAN) will be expected to participate in the national coordination committees (PTFoPE, ICC, and ICC Working Groups) and thereby support planning, implementation and evaluation of priority activities in the 2018 NPEEP. In 2019, continued focus will be placed on the engagement of Daawah Coordination Council of Nigeria (DCCN) together with the NTLC.

7.2 Independent Advisory Bodies and Global Partners

a) GPEI Partners:

GPEI partners and donors are expected to support the national authorities to effectively implement the key activities included in the 2019 NPEEP. The GPEI partners are also expected to support in resource mobilization.

b) Expert Review Committee on Polio Eradication and Routine Immunization (ERC):

The ERC is expected to meet 2-3 times a year to provide technical guidance on programme implementation in improving SIAs quality, strengthening routine immunization as well as strengthening surveillance activities.

c) National Polio Expert Committee (NPEC):

The NPEC supports virological classification of AFP by meeting quarterly to review and classify AFP cases from adequate and inadequate stool specimens. They will continue meeting on a quarterly and on Adhoc basis.

7.3 Accountability framework

Accountability mechanisms and rewards:

Enforcement of accountability continues to underpin all aspects of Nigeria's polio eradication programme and has contributed to the game changer since 2013. The EOC will continue to ensure that all programme officers are held accountable while delivering on their assigned mandates. Increased accountability across all levels is needed to ensure campaigns and other activities are carried out with a high degree of quality. Programme officers in the high-risk polio LGAs will also be held accountable for performance of routine immunization. The Accountability Framework is an evidence-based tool used to promote accountability, evaluate staff performance and increase inter-agency transparency. It is based on several key principles:

a) Promoting individual accountability at every level:

People have been hired to achieve specific terms of reference for the polio eradication programme. This framework helps to identify those who are performing and those who are not, and to consider rewards and consequences accordingly.

b) Rewards for strong performance: The individuals who demonstrate strong performance should be recognized through a reward programme. The programme has developed a reward scheme to recognize top performers in wards, LGAs and states. This was piloted in 31/44 LGAs of Kano state during the December 2013 IPDs campaign. An award certificate was issued to winning LGAs. However, these rewards may include public recognition, a congratulatory meeting with a senior leader, a mention in the media, enrollment in training of choice, etc.

c) Consequences for weak performance: All weak performance will be documented and reported to appropriate policy makers and stakeholders. Furthermore, demonstrated weak performance will be sanctioned (e.g., including warnings, withholding of allowances and/or disengagement from the programme).

d) Evidence based decision making: Assessments of critical impediments, their solutions, staff performance and progress will be evidence based.

e) Independent assessments every month: The programme will conduct random independent assessments of critical impediments, solutions and performance at LGA and state levels throughout the year.

- f) **Feedback to all levels:** Constant feedback loops are critical to ensure a coordinated response and common understanding of challenges and progress. Feedback loops between wards, LGAs, state, Core Group and Presidential Task Force will be in place.
- g) **Accountability of MSTs and supervisors:** Through the use of harmonized supervisory checklist and tracking on ODK platform, with provision of feedback. This will be instituted and outcome documented.

The Accountability Framework will continue to be instrumental in evaluating staff performance by Government and partners with management actions taken based on staff performance. Figure 20 highlights an example of the management actions taken by WHO for polio personnel between 2014 and 2016. Figure 21 summarizes management actions taken by UNICEF for VCM network members in 2018.

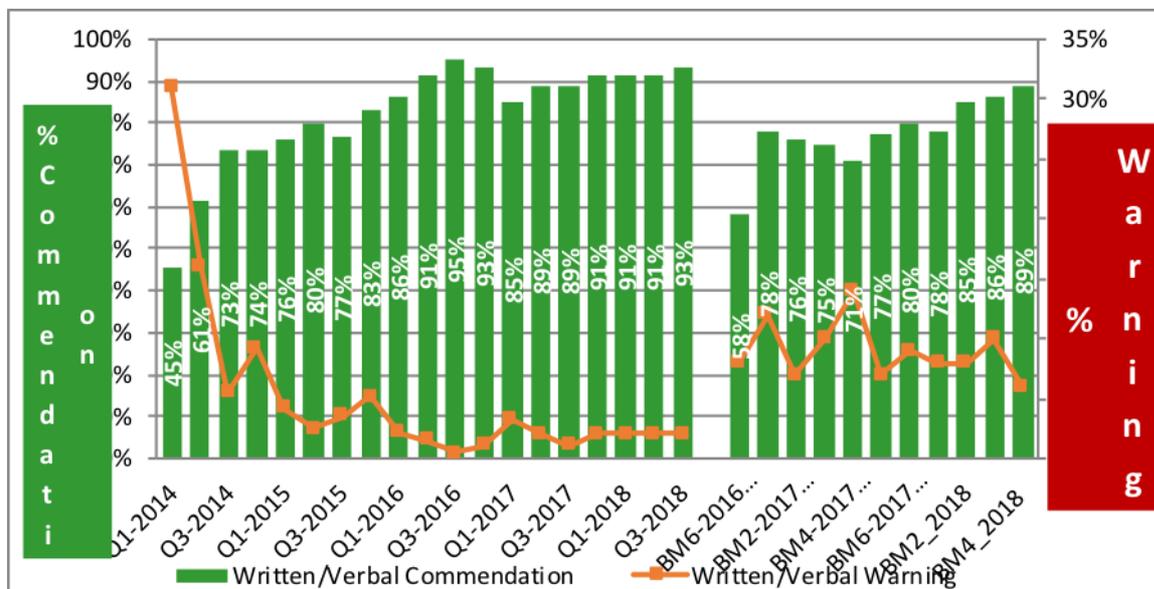


Figure 20: Summary of administrative actions by Quarter, WHO, 2014 to 2018

Figure 21 below summarizes management actions taken by UNICEF for VCM network members in 2018.

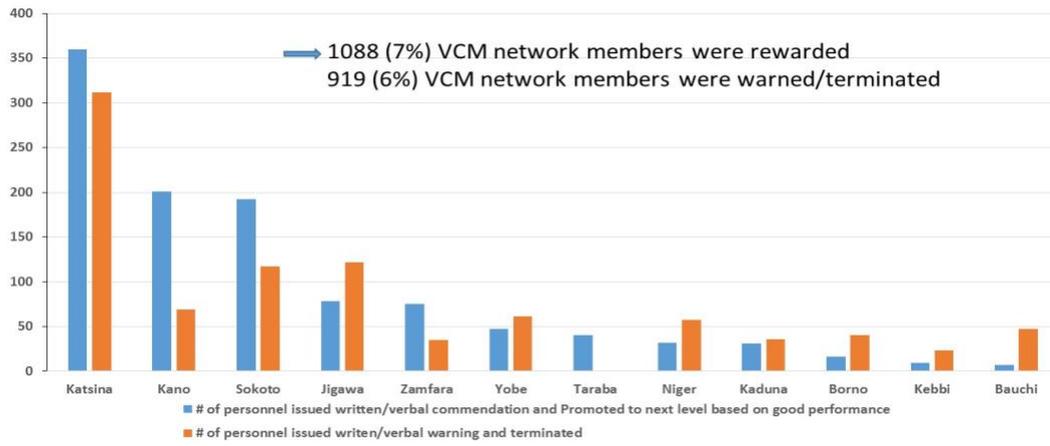


Figure 21: UNICEF VCM Network Accountability Framework Enforcement 2018

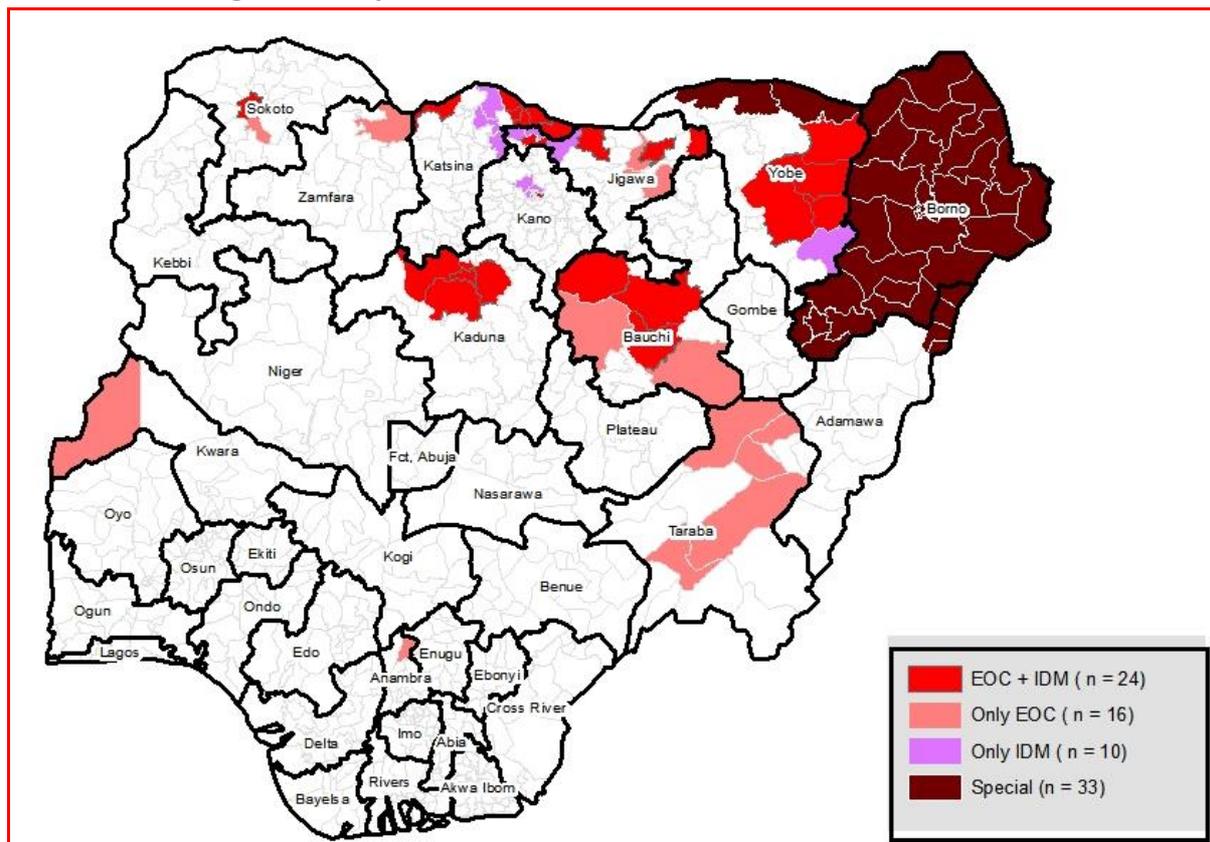
8.0 ANNEXES

Annex 1: High Risk LGAs, EOC, January 2019

Num	Zone	state	LGA	Total Score	HR Status categorization
1	NEZ	Bauchi	Bauchi	37	VVHR
2	NWZ	Jigawa	Kafin Hausa	30	VVHR
3	NWZ	Jigawa	Kaugama	32	VVHR
4	NWZ	Jigawa	Malam Maduri	36	VVHR
5	NWZ	Jigawa	Miga	39	VVHR
6	NWZ	Kaduna	Sabon Gari	33	VVHR
7	NWZ	Kaduna	Zaria	30	VVHR
8	NWZ	Katsina	Baure	70	VVHR
9	NWZ	Katsina	Daura	60	VVHR
10	NWZ	Katsina	Zango	48	VVHR
11	NWZ	Sokoto	Sokoto North	30	VVHR
12	NEZ	Taraba	Ardo-Kola	38	VVHR
13	NEZ	Taraba	Donga	30	VVHR
14	NEZ	Yobe	Damaturu	52	VVHR
15	NEZ	Yobe	Geidam	44	VVHR
16	NEZ	Yobe	Tarmua	30	VVHR
17	SEZ	Abia	Isiala-Ngwa South	24	VHR
18	SEZ	Anambra	Ayamelum	26	VHR
19	NEZ	Bauchi	Alkaleri	26	VHR
20	NEZ	Bauchi	Ganjuwa	24	VHR
21	NEZ	Bauchi	Toro	28	VHR
22	NEZ	Bauchi	Zaki	24	VHR
23	NWZ	Jigawa	Hadejia	26	VHR
24	NWZ	Jigawa	Jahun	24	VHR
25	NWZ	Jigawa	Kazaure	28	VHR
26	NWZ	Kaduna	Soba	26	VHR
27	NWZ	Katsina	Jibia	24	VHR
28	NWZ	Katsina	Mai'Adua	24	VHR
29	NWZ	Katsina	Sandamu	26	VHR
30	NCZ	Kwara	Baruten	26	VHR
31	NCZ	Nasarawa	Toto	24	VHR
32	NWZ	Sokoto	Bodinga	26	VHR
33	NWZ	Sokoto	Isa	24	VHR
34	NWZ	Sokoto	Sokoto South	24	VHR
35	NEZ	Taraba	Bali	28	VHR
36	NEZ	Taraba	Karim Lamido	26	VHR
37	NEZ	Taraba	Lau	26	VHR
38	NEZ	Yobe	Fune	26	VHR

39	NWZ	Zamfara	Anka	24	VHR
40	NWZ	Zamfara	Maradun	24	VHR
41	NWZ	Zamfara	Zurmi	26	VHR
42	NEZ	Taraba	Gassol	21	VHR
43	NEZ	Adamawa	Madagali	22	Special
44	NEZ	Borno	Bayo	16	Special
45	NEZ	Adamawa	Mubi North	22	Special
46	NEZ	Borno	Abadam	26	Special
47	NEZ	Borno	Askira-Uba	33	Special
48	NEZ	Borno	Bama	38	Special
49	NEZ	Borno	Chibok	4	Special
50	NEZ	Borno	Biu	22	Special
51	NEZ	Borno	Dambo	52	Special
52	NEZ	Borno	Dikwa	22	Special
53	NEZ	Borno	Gubio	29	Special
54	NEZ	Borno	Guzamala	45	Special
55	NEZ	Borno	Gwoza	34	Special
56	NEZ	Borno	Hawul	16	Special
57	NEZ	Borno	Jere	39	Special
58	NEZ	Borno	Kaga	24	Special
59	NEZ	Borno	Kala-Balge	24	Special
60	NEZ	Borno	Konduga	46	Special
61	NEZ	Borno	Kukawa	41	Special
62	NEZ	Borno	Mafa	32	Special
63	NEZ	Borno	Magumeri	78	Special
64	NEZ	Borno	Maiduguri	36	Special
65	NEZ	Borno	Marte	31	Special
66	NEZ	Borno	Mobbar	46	Special
67	NEZ	Borno	Monguno	58	Special
68	NEZ	Borno	Ngala	33	Special
69	NEZ	Borno	Nganzai	65	Special
70	NEZ	Borno	Kwaya Kusar	17	Special
71	NEZ	Yobe	Yunusari	32	Special
72	NEZ	Adamawa	Michika	10	Special
73	NEZ	Adamawa	Mubi South	20	Special
74	NEZ	Borno	Shani	16	Special
75	NEZ	Yobe	Yusufari	16	Special

Annex 2: 2019 High Risk map

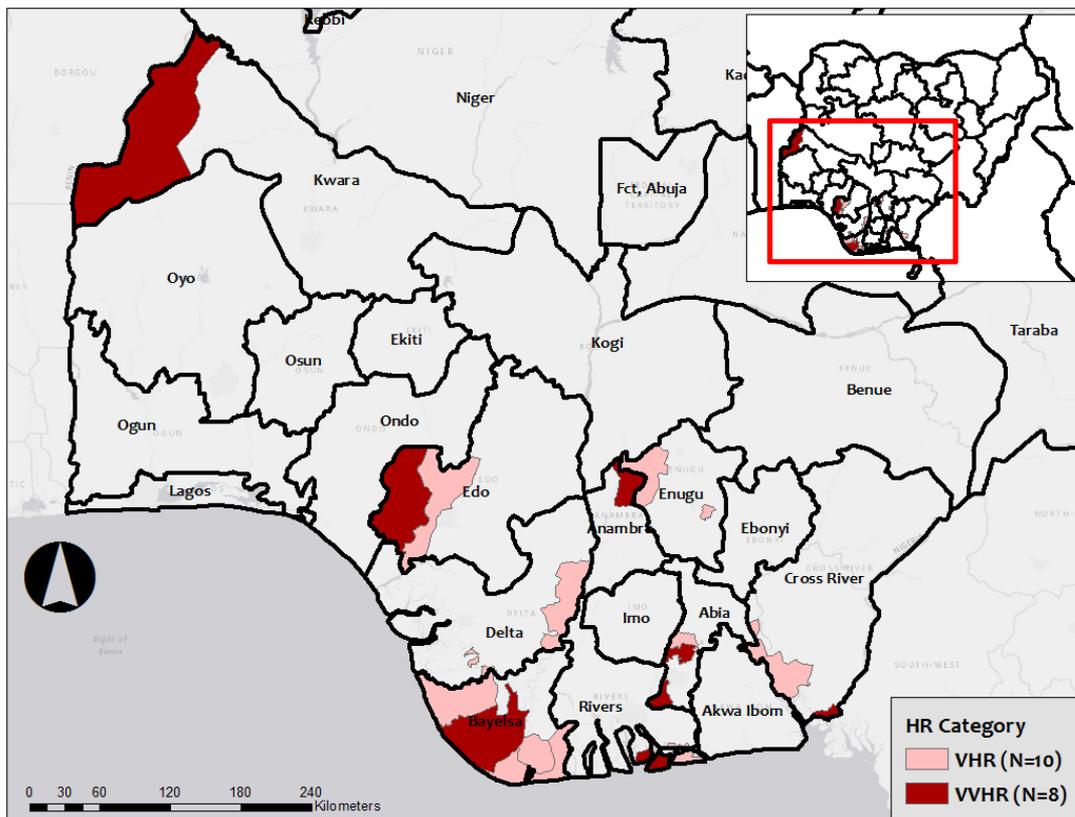


Annex 3: Southern States High Risk LGAs, EOC, January 2019

Zone	state	LGA	Total Score	HR Status categorization
SEZ	Abia	Isiala-Ngwa South	34	VVHR
SEZ	Abia	Ukwa West	34	VVHR
SSZ	Cross River	Bakassi	34	VVHR
SSZ	Edo	Ovia South-West	34	VVHR
SSZ	Rivers	Bonny	34	VVHR
NCZ	Kwara	Baruten	32	VVHR
SEZ	Anambra	Ayamelum	32	VVHR
SSZ	Bayelsa	Southern Ijaw	32	VVHR
SSZ	Bayelsa	Brass	30	VHR
SSZ	Bayelsa	Ekeremor	30	VHR

SSZ	Delta	Bomadi	30	VHR
SSZ	Delta	Ndokwa East	30	VHR
SEZ	Enugu	Uzo-Uwani	29	VHR
SEZ	Abia	Isiala-Ngwa North	28	VHR
SSZ	Bayelsa	Nembe	28	VHR
SSZ	Cross River	Odukpani	28	VHR
SSZ	Edo	Ovia North-East	28	VHR
SSZ	Rivers	Andoni	28	VHR

Annex 4: Tire 2 High Risk analysis for southern States



Annex 5: Polio SIA Schedule, 2019

S/No	Month	Dates	Scope	Antigen	Status
1	January	26 th January-29 th January	2nd OBR to Bauchi/Kaduna cVDPV2 in 16 states --Kaduna, Kano, Katsina, Kebbi, Sokoto, Zamfara, Adamawa, Bauchi, Borno, Gombe, Taraba, FCT, Benue, Nasarawa, Niger and Plateau, Kwara (Asa, Baruten, Edu, Kaiama and Moro LGAs) , Oyo (Shaki East, Shaki West, Irepo, Olorunsogo and Orelope LGAs)	mOPV2	Pending
2	March	9 th - 12 th	SIPDs (Borno + 6 high risk states	bOPV	Pending
3	March - April	30 th March - 2 nd April	SIPDs in 18 states (Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, Zamfara, Adamawa, Bauchi, Borno, Gombe, Taraba, Yobe, FCT, Benue, Nasarawa, Niger and Plateau)	bOPV	Pending
4	April	27 th - 30 th	NIPDS	bOPV	Pending
5	May	25 th - 28 th	NIPDS	bOPV	Pending
6	September	25 th -28 th	SIPDs (8 high risk states)	bOPV	Pending

