



## **NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY**

### **2018 NIGERIA POLIO ERADICATION EMERGENCY PLAN**

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**NPHCDA**  
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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
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
SIAs	Supplemental Immunization Activities
STF	State Task Force on Immunization
UNICEF	United Nations Children's Fund
VCM	Volunteer Community Mobilizer
VDPV2	Vaccine derived polio virus type 2
WHO	World Health Organization
WPV	Wild polio virus

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## EXECUTIVE SUMMARY

The Nigeria Polio program in the year 2017 made remarkable and consolidated gains with no case of wild or circulating polio virus reported. Seven quality polio campaigns were conducted in 2017 out of which two were nation-wide. The quality of the campaigns was reflected by the LQAs results following each round. For instance, in the October 2017 round, 96% of the sampled 268 LGAs in 18 high risk states achieved 80% and above coverage. In addition to these campaigns, the program carried out a robust response to boost population immunity in Sokoto state with IPV+mOPV for children between 14 weeks to 5years. This was due to the number of vaccine derived isolates seen from environmental samples in the state. The LQAs results for this response indicated that 100% of target LGAs achieved at least 90% coverage for both IPV and mOPV2.

Beyond the traditional campaigns, the program introduced series of innovative and impactful in-between round special interventions targeted at vaccinating more children potentially missed through the House-to-House campaigns. These strategies included: Hospital vaccinations, Market vaccination, Reaching Every Child (REC) and Reaching Every Settlements (RES), vaccinations in the IDP camps etc. 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 2 strategies have resulted in more settlements being accessed and thus more children vaccinated in security compromised areas than the previous years. For instance, through RES alone, 251,000 and 60,000 children were reached in partially accessible LGAs of Borno and Yobe states respectively. Additional approaches to boost population immunity included increasing vaccination in IDP camps, profiling and vaccination of children liberated from captivity in the security compromised areas and transit point vaccination.

To address surveillance gaps, many innovative activities such as peer review of surveillance data, temperature tracking using temperature log tags to track transported stool samples, expansion of environmental sampling sites were introduced in 2017. Stools are tracked from the collection points to the laboratories to ensure the maintenance of reverse cold chain all through the process of sample transportation. Environmental surveillance sites were expanded to 70 sites in 18 states + FCT compared to 57 sites in 2016. A one-time sewage collection from potential environmental sites identified from security compromised areas in Borno state was conducted. At the end of 2017, a total of 16,604 AFP cases compared to 17,863 same time 2016 was reported. The non-polio-AFP and stool adequacy rates stood at 17.3 (target 3.0/100,000 of <15yrs) and 98 % ( target 80%) respectively. The proportion of LGAs meeting both key surveillance indicators was 99% and the non-polio enterovirus rate was 13.5.

Above all, achieving these gains 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 country. The Presidential Task

Force for Polio Eradication which provided overall stewardship and leadership of the programme met twice in 2017. 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. At international level, the program was well represented at International Monitoring Board (IMB) meetings, Lake Chad Coordination meetings etc., while internally it hosted members of the Expert Review Committee (ERC) on Polio twice in 2017, Global teams for Data surveillance review & Outbreak Response Assessment (OBRA). The program also met with the Polio High Risk LGAs, the Northern Traditional Leaders Committee on Polio and PHC (NTLC) and the Nigerian Military, all aimed at consolidating our gains and expanding our strategic linkages for the good of the program.

The major challenge faced in 2017 was 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 2016 MICS/NICS result showing a low routine immunization coverage across several states in the country with a national pentavalent 3 and OPV3 coverage of 33% respectively. Resistance to accept vaccination during scheduled campaigns in October and November 2017 surfaced from rumors associated to perceived vaccination response against an outbreak of monkey pox virus.

In 2018, the overall goal of the program will be to sustain the interruption of poliovirus transmission. This will be done through sustaining a polio-free (WPV, cVDPV) status through quality campaign, increasing the reach to inaccessible areas in Borno state, achieving 50% reduction in number of unimmunized children in VVHR LGA, sustaining surveillance performance indicators in all LGAs and completion and approval of Nigeria's transition plan by June 2018.

## **INTRODUCTION AND CONTEXT OF THE PROGRAMME**

### **1.0. Context of Polio Eradication Efforts in 2018 – looking towards interruption of polio virus transmission**

During 2017, Nigeria did not record any WPV1 or cVDPV2 from cases or the environment. The last case of WPV1 was from Kumalia Ward in Monguno LGA of Borno state, with onset of paralysis on 21 August 2016 while the last cVDPV2 case was from Bodinga LGA of Sokoto State on 21 October 2016. Eleven (11) VDPV2s were detected in environmental samples from Sokoto (7), Katsina (1), Bauchi (1) and Gombe (2). The VDPV2s were detected following wide scale use of mOPV2 across 18 states of northern Nigeria.

The last cVDPV2 was detected from an AFP case in Bodinga LGA, Sokoto state, with onset of paralysis on 21 October 2016. There was no genetic linkage to any previously circulating VDPV2 for the Sokoto case and sequencing revealed 12 nucleotide difference from Sabin 2 virus. The last positive VDPV2 from the environment was isolated from a sample collected on 17 April 2017 in Sokoto.

The programme continued intensive efforts to interrupt transmission of WPV1 in 2017. Innovative approaches were deployed to reach children in Borno state, depending on the accessibility status. Settlement based planning and accessibility guided interventions and tracking of progress to reach trapped populations. The Reaching Every Settlement (RES) continued to be implemented in partially accessible settlements with good progress. In March 2017, a new strategy was devised with the military to reach fully inaccessible areas called the Reaching Inaccessible Children (RIC) strategy. By December 2017, 4286 partially accessible settlements through RES had been reached where over 251,000 children were vaccinated, while RIC was able to reach 2698 settlements and vaccinate 50,196 children. Overall, accessibility for vaccination in Borno improved from 56% to 69% between December 2016 and November 2017 through the combined efforts of house to house, RES and RIC teams. Similarly, in Yobe state, RES teams were able reach 548 partially accessible settlements where 60,402 children were vaccinated.

Special interventions continued to be expanded at strategic locations: transit points, markets, nomadic routes, cross border sites, in order to capture children coming out of inaccessible areas or on the move. Two hundred and ninety-nine thousand (299,000) children from inaccessible wards in Abadam and Marte LGAs of Borno state were vaccinated at transit locations in Monguno.

Similar intense efforts were made to interrupt VDPV2 transmission through implementation of high quality SIAs using mOPV2. Eighteen states conducted one round using mOPV2 in February 2017. An additional round with mOPV2 was done in Sokoto state in May 2017 with focused support through increased deployment of MSTs with strengthened accountability, staggering of implementation within the state and combined use of mOPV2 and IPV in five high risk LGAs. These efforts are being complemented by intensification of routine

immunization strengthening in high risk states including re-establishment of services in newly liberated areas in Borno.

Inaccessibility of several settlements in Borno state due to insecurity remains the major impediment to closure of the WPV1 outbreak. Close to 6,000 settlements across 15 LGAs have not been reached by the program, including two LGAs (Abadam and Marte). Surveillance in these areas is equally a challenge. One hundred and seventy-eight (178) islands in the Lake Chad basin, believed to be inhabited by Nigerian populations have also not been accessed, posing a potential threat for continued circulation. Collaboration within the Lake Chad basin was strengthened with support from the Lake Chad Task Team in N'djamena who facilitated joint planning across the countries for synchronized SIAs and cross border vaccinations.

The Presidential Task Force for Polio Eradication and Routine Immunization provided overall stewardship and leadership of the programme. His Excellency the Vice President chaired two Task Force meetings in 2017. 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.

The key achievements during the implementation of the 2017 NPEEP included:

- No detection of WPV1 or cVDPV2 from cases or the environment;
- Increased population immunity to type 1 and type 3 in Borno state based on sero-prevalence surveys by 12% between 2016 and 2017;
- Sustained high level surveillance sensitivity with non-polio AFP detection rate at 17.5 per 100,000 population in week 52 2016 (week 52 2017) compared to 19.9 in same period in December 2016; and stool adequacy at 98% in 2017 compared to 99% in 2016. The proportion of LGAs meeting both indicators was 99% by December 2017;
- Prompt response to emerging anti-vaccination rumors, efforts led to contain the event and prevent further spread and growing of noncompliance.

**The major challenges in 2017 included:**

- Reaching children in inaccessible areas of Borno state. Despite increasing military advancement and liberation of insecure areas, inaccessibility remained the major challenge in a significant area of Borno. Over 6,000 settlements in Borno have not been reached with an estimate of 161,000 children trapped. In addition, 178 islands in the Lake Chad basin are still inaccessible.
- Waning political support and commitment at the State and LGA levels, in particular, with late or no release of counterpart funding for implementation of planned activities; inconsistent leadership and political commitment especially at the LGA level.
- Low routine immunization coverage (based on coverage survey data) across all states, particularly in the north, posing a threat to sustained interruption of WPV1 and cVDPV2 circulation.



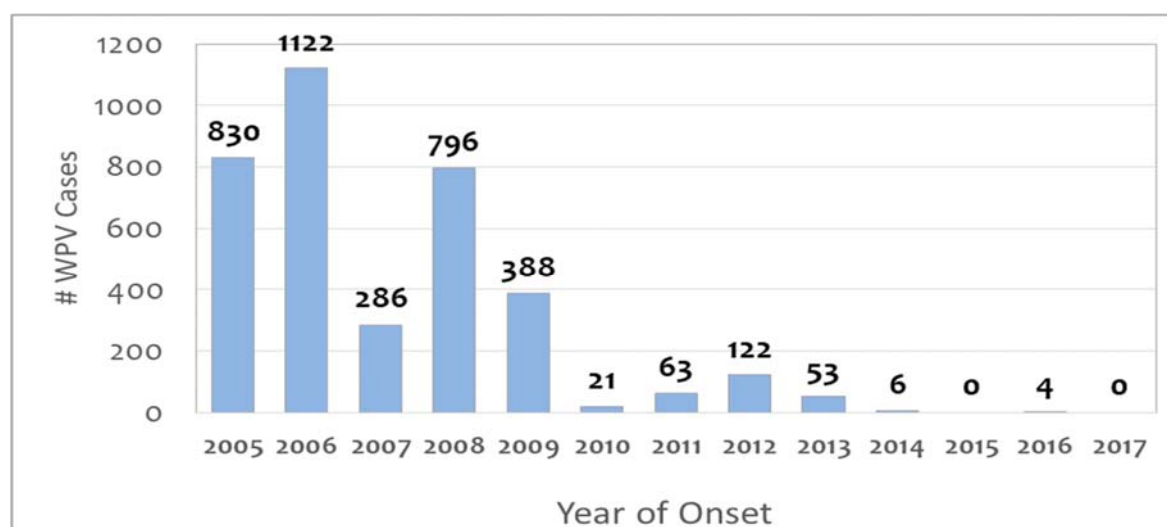
- Data quality gaps.

### 1.1. Poliovirus Epidemiology

Over the past six years, the number of confirmed WPV cases in Nigeria has declined substantially, from a total of 122 cases in 2012 to 53 cases in 2013, down to 6 cases in 2014 and zero cases in 2015. In August 2016, four cases of WPV1 were confirmed in 3 LGAs in Borno state among IDP children from previously inaccessible areas. Two additional viruses were detected from a house hold and community contact respectively in September 2016.

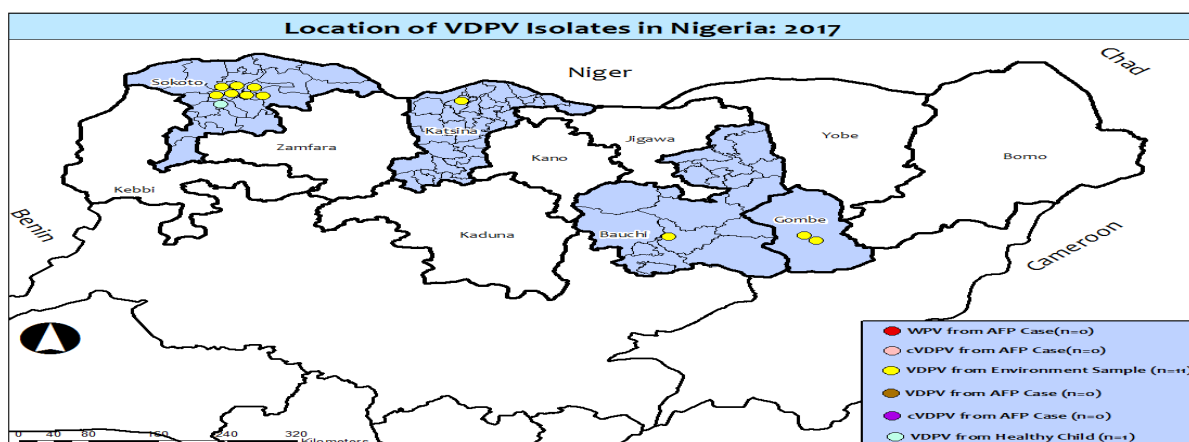
There was a 95.4% decrease in the number of cVDPVs from 30 cases in 5 states during 2014 to 1 case in 2015 reported from 1 state to 1 case in 2016 in Sokoto state and 0 in 2017. In 2017, Nigeria expanded the number of environmental surveillance sites from 56 in 14 states and FCT to 70 in 19 states and FCT. A reduction in environmental cVDPV2 was recorded from 1 positive isolate in Borno state, Maiduguri Metropolitan LGA in March 2016 to 0 in 2017.

Eleven positive VDPV2 isolates were confirmed in 2017 from four states: Sokoto (7), Bauchi (1), Gombe (2) and Katsina (1). The last positive isolate was collected in April 2017 in Sokoto South LGA in Sokoto State. There was no evidence of circulation of the VDPV2.



**Figure 1: Confirmed WPV cases, Nigeria, 2005-2017**

VDPV2 circulation was prevented through implementation of high quality mOPV2 SIAs in 18 high-risk states. The SIAs enhanced population immunity against type 2 virus. To further boost immunity, IPV was integrated with mOPV2 in one additional round in Sokoto state in 5 high risk LGAs in May 2017.



**Figure 2: Location of VDPV2 isolates, 2017**

## 1.2. Profile of VDPV2 and Genetic Data

In 2017, the positive VDPV2 isolates were from the environment in four states. The summary profiles of the VDPV2 isolates are summarized in Table 1.

**Table 1: Profile of VDPV2 isolates 2017**

No	Environmental site	LGA	State	Date of sample collection	Sequencing result
1	Shafa bridge	Bauchi	Bauchi	15/01/2017	6 nucleotide difference from sabin
2	Baba Roba Valley	Gombe	Gombe	31/01/2017	6 nucleotide difference from sabin
3	Tundun Wada Dallatu	Sokoto South	Sokoto	30/01/2017	6 nucleotide difference from sabin
4	Runbukawa Bridge 2	Sokoto North	Sokoto	06/02/2017	6 nucleotide difference from sabin
5	Runbukawa Bridge 2	Sokoto North	Sokoto	20/02/2017	8 nucleotide difference from sabin closest match Sokoto 4
6	Kofar Dundaye site	Sokoto North	Sokoto	06/03/2017	6 nucleotide difference from sabin
7	Runbukawa site	Sokoto North	Sokoto	06/03/2017	6 nucleotide difference from sabin
8	Tundun Wada Dallatu	Sokoto South	Sokoto	06/03/2017	6 nucleotide difference from sabin

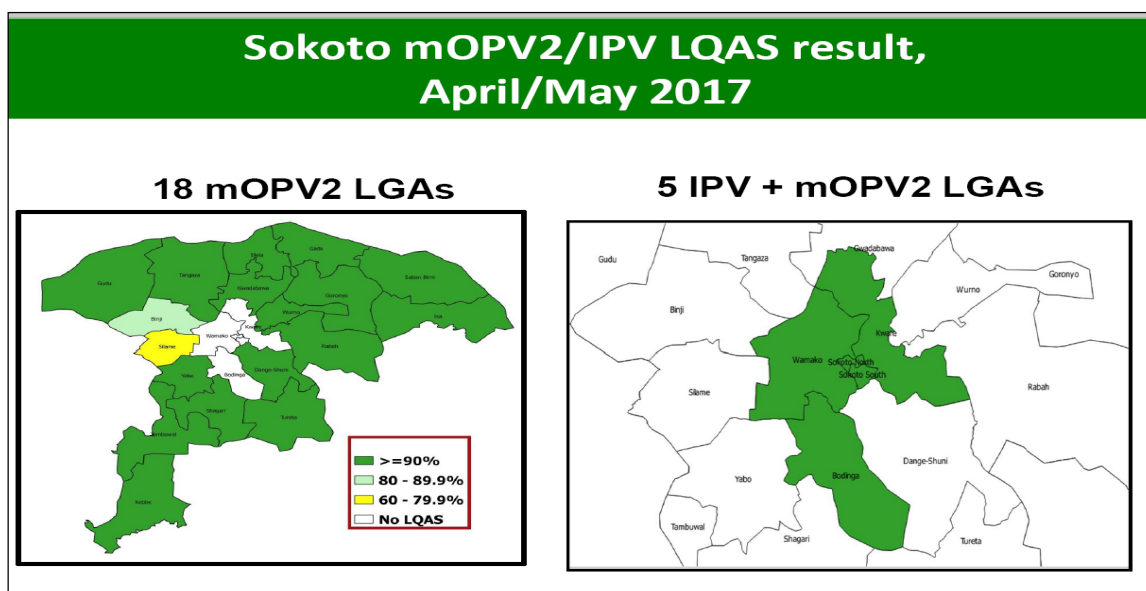
9	Dan Gusau Bridge	Gombe	Gombe	06/03/2017	6 nucleotide difference from sabin
10	Kofar Guga	Katsina	Katsina	20/03/2017	7 nucleotide difference from sabin
11	Kofar Dundaye	Sokoto North	Sokoto	17/04/2017	6 nucleotide difference from sabin
**	Healthy child (50th healthy children sample collected around the Tudun Wada site)	Sokoto South	Sokoto	02/03/2017	6 nucleotide difference from sabin

## 2.0. ACTIVITIES IMPLEMENTED IN 2017 TO BOOST POPULATION IMMUNITY

### 2.1. IPV campaign in Sokoto State

The high number of VDPV2 isolates from the environment in Sokoto state were an indication of low population immunity. The response plan to the VDPV2s included a campaign with IPV+mOPV2 for children aged 14 weeks – 5 years in 5 LGAs of Sokoto state (Sokoto North, Sokoto South, Wammako, Kware and Bodinga). The remaining 18 LGAs conducted a stand-alone mOPV2 campaign in May 2017.

Intensive efforts were made to ensure the campaign was of highest quality. Pre-campaign activities saw active participation of His Excellency the Governor of Sokoto State, all LGA Chairmen and other Stakeholders. Micro plans were also reviewed while training was decentralized while announcements were made through all established channels including the mosques. During the campaign, intra campaign activities were tracked, issues addressed timely. ODK was used by supervisors while VTS tracking introduced to ensure all areas are tracked and covered. At the end of the campaign, a total of 453,523 (97%) children were vaccinated with IPV and 511,483 (104%) with mOPV2 in the five LGAs. LQAs results indicated 100% of target LGAs achieved at least 90% coverage for both IPV and mOPV2.



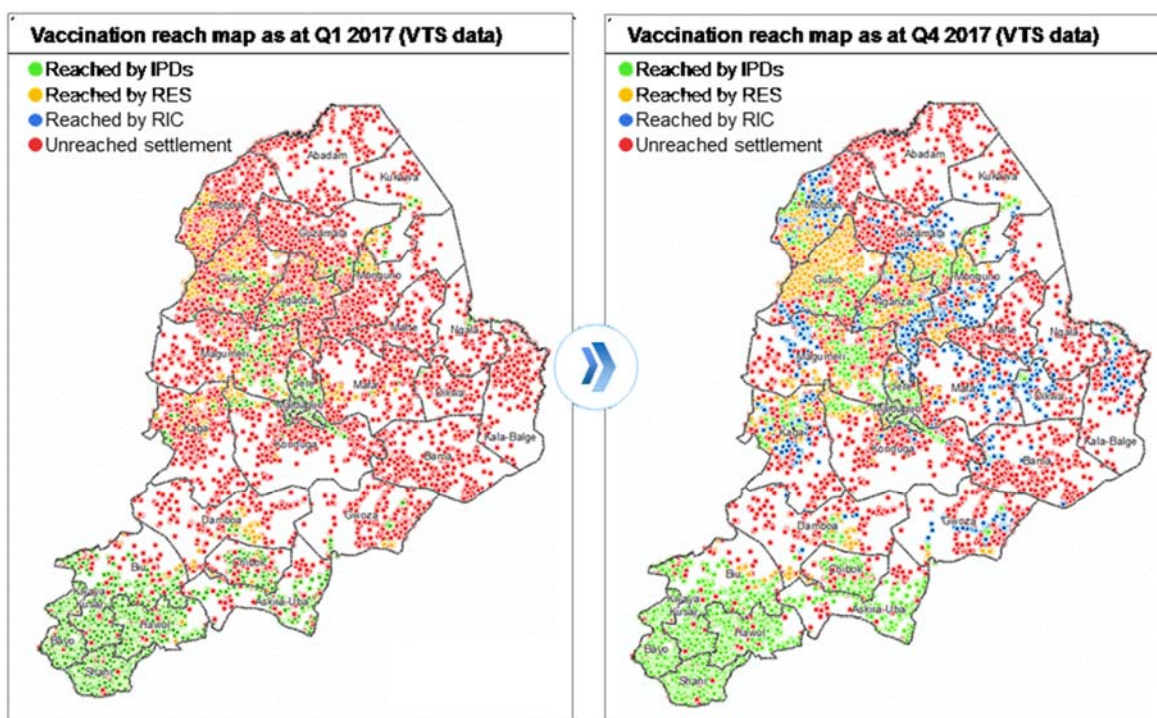
**Figure 3: LQAs results, Sokoto, May 2017**

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

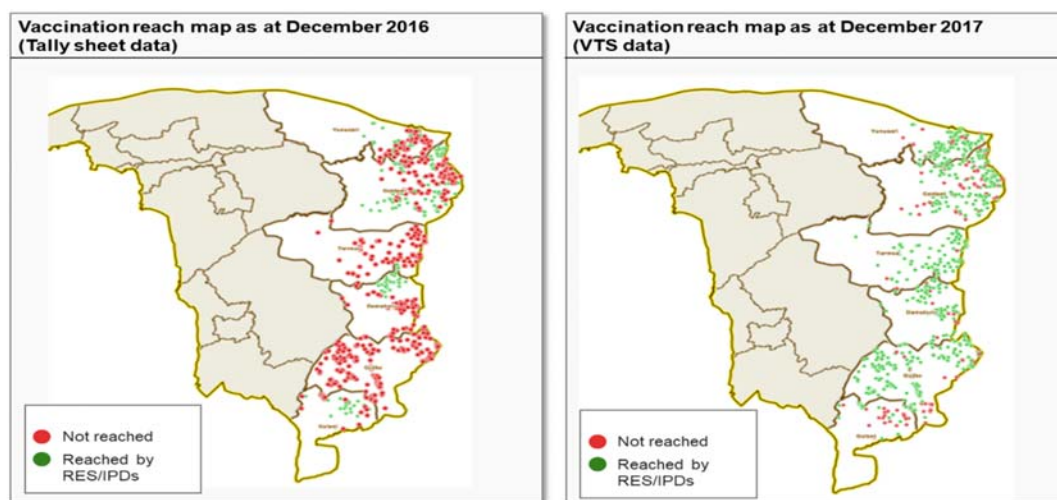
By December 2016, 44% of settlements in Borno state and 5% in Yobe state were completely inaccessible during IPDs due to insecurity. During 2017, local innovations continued to be implemented in areas with inaccessibility. Detailed, regular settlement-based security risk assessments were done to identify areas where implementation was feasible. There was close engagement of the military and CJTF to provide access information and security escorts for vaccination teams in partially accessible areas. Borno State, with the support of partners, initiated and implemented the Reaching Inaccessible Children (RIC) strategy in inaccessible settlements starting in March 2017. The RIC strategy involves detailed consultative planning with the military and rapid vaccination visits driven solely by the military. The military were sensitized on OPV vaccination and AFP surveillance. A total of 2,698 settlements in Borno were reached through RIC and 48,673 children vaccinated between April and October 2017.

The Reaching Every Settlement (RES) strategy continued to be implemented in Borno and Yobe states with the support of the CJTF and vigilante groups respectively. A total of 4,286 settlements were reached in Borno by RES teams between December 2016 and December 2017, with 251,000 children vaccinated.

A combination of house to house, RES and RIC has improved the vaccination reach to 70% by November 2017 as shown in Figure 4.



**Figure 4: Vaccination Reach in Borno, Quarter 1 2016 – Quarter 4 2017**



**Figure 5: Vaccination Reach, Yobe State, December 2016 – December 2017**

### **2.3. Vaccination of Internally Displaced Persons (IDPs)**

According to the Displacement Tracking Matrix (DTM) of IOM Nigeria, as of December 2017, there were 1,702,608 displaced persons (321,580 households) across the six states of NE Zone. This represents a decrease of 11,091 individuals from the previous DTM round reflecting the continuing trend of IDPs returning to their LGAs particularly in Borno state (Figure 8). By December 2017, there were a total of 665,931 IDPs in 251 IDP camps, (camp/camp-like setting) in 27 LGAs of 4 states - Adamawa, Borno, Yobe, and Taraba. Additionally, a total of 1,036,749 IDPs were in 1941 host community sites found in the six

states of North East Zone. A total of 771,237 OPV doses were administered from Week 1 to Week 52 of 2017 and those who did not present a card to indicate that they had received IPV were vaccinated with IPV.

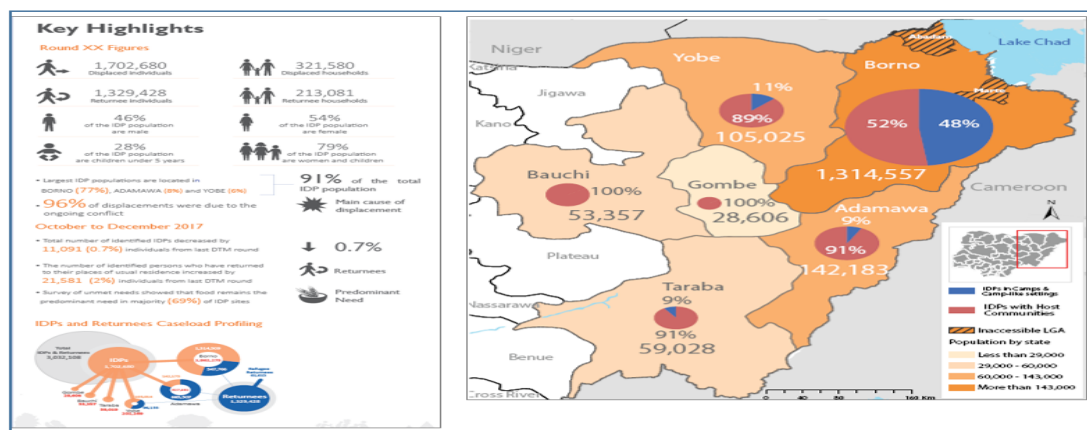


Figure 6: - IDP camps by state and LGAs as of August, 2017 (Source DTM, IOM).

Of the 771,237 doses used in IDP camps, 74,412 (9.6%) were to children with no history of OPV before, indicating gaps in population immunity in the areas where the children came from and risk of spread of the polioviruses. Table 2 below shows the number of children vaccinated with tOPV/bOPV in the different camps in the LGAs.

Table 2: Children vaccinated with OPV in IDP camps in North East Zone Nigeria, Week 01 – 52 2017

LGA	Cumulative Children Vaccinated	Cumulative zero-dose children Vaccinated	Cumulative IPV Vaccinated	AFP Reported
Fufere	327	10	0	0
Girei	315	0	0	0
Yola North	201	5	0	0
Yola South	555	75	0	0
Adamawa	1298	31	0	0
Bama	8241	932	0	0
Biu	10637	803	35	0
Chibok	1414	96	0	0
DAMBOA	3199	7594	18	0
DIKWA	29933	3695	149	0
Gwoza	20418	5673	0	0
JERE	264962	34708	2371	0
KAGA	13119	992	0	0
KALA BALGE	21595	5232	469	0
KONDUGA	13686	1520	0	0
KUKAWA	490	8	0	0
Mafa	1840	704	577	0
Magumeri	4604	368	413	0
Maiduguri	166934	3975	0	0
Monguno	138097	4270	0	0
Pigala	10665	2314	0	0
NGANZAI	13956	770	0	0
Borno	751286	73659	4033	0
Ardo Kola	293	68	0	0
Bati	2511	52	0	0
Donga	0	0	0	0
Gassol	1176	24	0	0
Jalingo	319	0	0	0
Kurmi	0	0	0	0
SARDAUNA	173	30	0	0
TAKUM	323	1	0	0
Wukari	0	0	0	0
Yorro	323	0	0	0
Taraba	4966	176	0	0
AKKO	3460	145	0	0
FUNAKAYE	2642	135	0	0
GOMBE	2786	107	0	0
KWAMI	842	43	0	0
NAFADA	336	16	0	0
YAMALU/DEBA	2911	110	0	0
Gombe	13187	556	0	0
Total	771237	74412	4033	0

## 2.4. 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 2017, a total of 397,370 children were vaccinated and profiled, of which 375,706 migrated from 27 LGAs with in Borno and the rest – 21,664 were from other states in Nigeria or from other countries. In the two LGAs that are completely inaccessible (Abadam and Marte), 14,341 children were vaccinated.



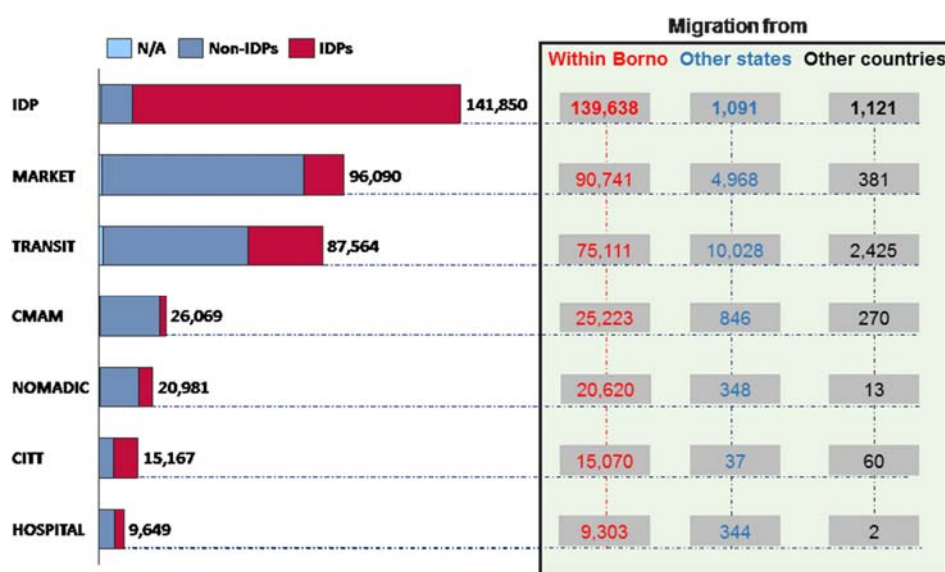


Figure 7: Profiling of children from inaccessible areas in Borno, January – December 2017

## 2.5. 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 OPV doses 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 2017 in Borno, Yobe, Gombe and Taraba states. The number of transit teams in Borno state increased from 290 in 2016 to 508 in 2017.

Through market/ transit vaccinations, 1,655,986 children were vaccinated across the north east zone in 2017, majority were from Borno state where 811,061 children were vaccinated. Table 3 shows the number of OPV doses administered through special interventions as at Week 52 2017 in Northeastern Nigeria while table 4 highlights the children reached in the Northwest zone.

**Table 3: Children vaccinated through special interventions in security compromised areas in North East Zone, 2017**

Interventions	Borno	Gombe	Yobe	Taraba	Adamawa	Bauchi	NE Total
Firewalling		97,030		750	717		98497
PHT			277,609	3,840	28,692		310141
Market/Transit	811,061	317,748	46,216	191,911	119,745	169,305	1655986
IBPT			37,452	40,212	79,054		156718
IDPs	751,786	13,187		4,966	1,298		771237
Hospital	73,929		25,290				99219
Nomadic	44,213		36,508	72,842	3,102		156665
Cross Border				425			425
RES/RIC	874,676		206,372				1081048
NE Total	2,555,665	427,965	629,447	314,946	232,608	169,305	4,329,936

**Table 4: Number of children vaccinated as at week 52, 2017 through the various special interventions in NWZ**

Interventions	Kaduna	Kano	Zamfara	NW Total
Market/Transit	381,586	130,807	22,234	534,627
IBPT			2,686	2,686
IDPs	14,837			14,837
Hospital		186,374	14,589	200,963
Nomadic	90,189			90,189
Cross Border	2,728		507	3,235
NW Total	489,340	317,181	40,016	846,537

#### **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. The confirmation of the WPV1 outbreak in August 2016, revealing circulation of a virus that previously circulated in Borno State and Chad Republic, called for intensified cross border collaboration to increase population immunity in communities along the border. All major crossing points along the international borders are mapped with geo-coordinates. Permanent border transit point vaccination teams continued to be stationed at strategic crossing points to immunize children entering and departing the country. The data generated is reviewed weekly at the national EOC. During SIAs, inter-border synchronization meetings are held and attended by officials from neighboring countries and these meetings culminate into joint plans and synchronization of vaccination sessions by teams from both countries. In 2017, 159,404 doses of vaccines were used to vaccinate children passing through international borders in Northwest and Northeast through special interventions.



## ***2.6. Routine immunization intensification in VDPV2 affected and vulnerable LGAs using polio infrastructure.***

In response to the VDPV2 environmental sample isolates, routine immunization was intensified in the affected, vulnerable and VDPV2 transmission prone LGAs to rapidly boost population immunity. Special focus was given to Sokoto, Gombe, Katsina and Bauchi states and to 85 polio vulnerable LGAs in 15 states following a population immunity risk categorization. The affected states are FCT, Plateau, Adamawa, Taraba, Kano, Kaduna, Enugu, Bayelsa, Lagos, Benue, Nasarawa, Zamfara, Akwa Ibom, Ogun and Rivers. All LGAs in Sokoto, Yobe and Borno were considered special in view of their unique high-risk status. The National EOC facilitated advocacy and orientation meetings for the vulnerable LGAs to draw up plans to address the immunity gaps and tracked the implementation of planned activities. Coordination of support was harmonized with the National Emergency Routine Immunization Coordination Center (NERICC) to facilitate joint support, planning and monitoring.

By December 2017, 59 of the 85-high risk LGAs (69.4%) had graduated from the list of high risk LGAs, while 26 (30.6%) still remain high risk and will be a continued focus in 2018.

Some of the key interventions conducted to improve routine immunization services in states that had VDPV2 in 2017 were scaling up of fixed sessions to daily in tertiary and secondary health facilities, intensification of outreach services in poor performing LGAs, Market, CMAM and Border vaccination in Sokoto State, development of REW micro plan using the GIS and comprehensive training of health workers at State, LGA and health facilities on routine immunization. Other interventions included conducting of local immunization days (LIDs) in Gombe and Katsina States as well as quality self-assessment, monthly meetings with local immunization officers to review routine immunization performance and improve data quality and joint supportive supervision.

## ***2.7. Mobile Outreach in Hard to Reach Areas***

The Hard to reach mobile outreach services project, which was implemented in 6 states since 2014, drew to a close in December 2016. However, activities in Yobe and Borno continued throughout 2017, given the high-risk nature of the states and the need to continue reaching in inaccessible areas and those liberated in IDP camps. A total of 63 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.

The hard to reach teams in Borno and Yobe States surmounted the security and logistics challenges in these hard to reach areas. By December 2017, the project had administered 1,127,293 OPV doses to children 0 – 59 months, 679,047 children had been reached with Vitamin A, 600,456 children had been dewormed and treatment of minor ailments provided to 663,909 persons.

## **2.8. Health Camps**

In 2017, resources were invested in reaching more children with vaccines in the most difficult, noncompliant and security challenged 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 free provision of primary health care services and free treatment of common diseases. In some communities, the house-to-house polio vaccination campaign was made possible by the institution of mobile health camps, further reaching more children. In 2017, health camps were implemented across the 11 high-risk states during each IPD, with a cumulative total of 2,605,938 children vaccinated in the rounds of IPDs and the 5 outbreak responses conducted.

## **2.9. Strengthening Surveillance**

As at the end of December 2017, the country reported a total of 16,604 AFP cases compared to 17,863 same time 2016. The non-polio-AFP and stool adequacy rates are 17.3 (target 3.0/100,000 of <15yrs) and 98 % (target 80%) respectively. The proportion of LGAs meeting both key surveillance indicators was 99% (target 80%). The non-polio enterovirus rate was 13.5 (target >10%). Out of the reported cases, 91% of AFP cases were verified.

The main sources of AFP reporting in the country are health workers, health facility focal persons, community informants and vaccination team members. The country has a total of 5,807 prioritized health facilities as focal sites with 5,832 focal persons. An estimated 489 (8%) private health facilities are also part of the surveillance focal sites. A total of 47,554 community informants comprising Traditional Birth attendants (TBA), Patent Medicine Vendors (PMVs), traditional Healers (TH), nomadic informants, religious and community leaders are part of the network amongst whom 43,450 (92%) were trained in 2017.

A number of capacity building sessions were conducted across all states in 2017 resulting in the training/sensitization of 827/827 LGA Disease Surveillance and Notification Officers (DSNOs), 753/817 Assistant DSNOs, 5,662/5,693 focal persons, 2,391 professional groups including Physiotherapists, 37/37 State Epidemiologists, 37/37 State DSNOs, 14,556 Clinicians and 43,450 community informants.

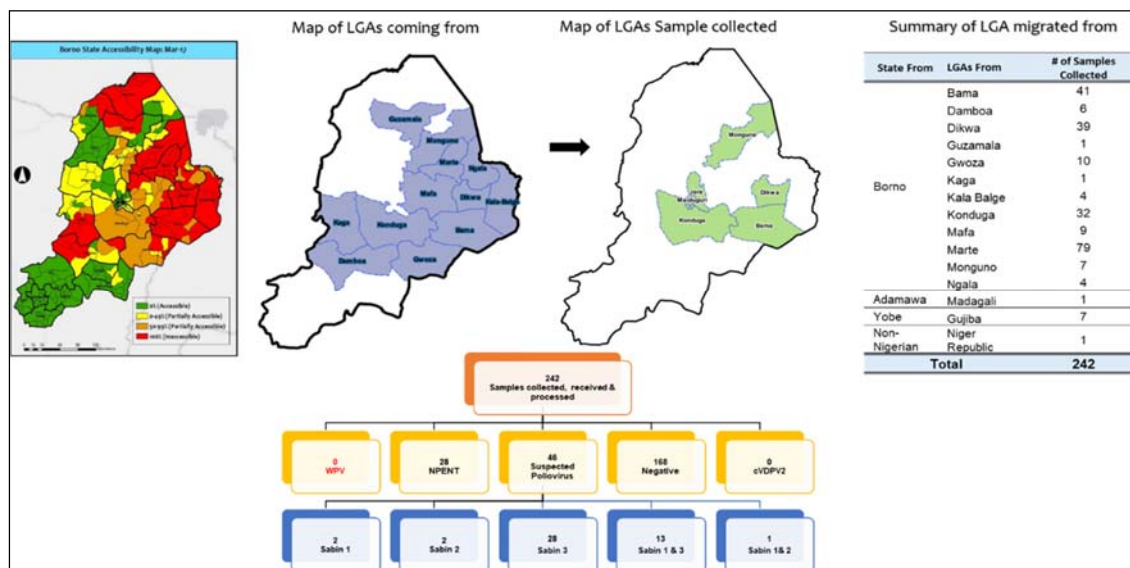
**Expansion of Environmental Surveillance:** In 2017, 13 additional environmental surveillance collection sites in four states were added. At the end of 2017, a total of 70 environmental sites in 18 states plus FCT states were functional. Eleven (11) aVDPV 2 cases were isolated from the environment. The environmental surveillance samples were processed in Ibadan. The necessary equipment to initiate ES testing in Maiduguri lab have been procured and will start by June 2018.

**Surveillance Peer reviews:** Improving the quality of AFP surveillance was a major focus in 2017. Two sets of reviews were done in August and November of 2017. Eight (8) states were visited, 4 per session using a standardized guideline approved by the National EOC. The overall objective of the review was to assess the AFP and stool adequacy concordance of states with very high NPAFP rates and stool adequacy. The result of the review was used to develop a plan to improve the quality of surveillance amongst which the development of a standardized training directed towards AFP verifiers nationwide was conducted. Below is the summary of the findings of the reviews in the eight target states.

**Table 5: True AFP and Stool Adequacy Rate Concordance by State, 2017**

States	Total number of LGAs in state	Review findings				
		No. LGAs visited	Number of reviewed AFP cases	Number of conclusive AFP cases reviewed	True AFP concordance	Stool Adequacy concordance
Kebbi	21	19	135	128	70%	74%
Jigawa	22	12	103	103	69%	79%
Sokoto	23	23	103	103	59%	81%
Nasarawa	13	13	102	101	92%	89%
Edo	18	16	125	112	92%	88%
Ekiti	16	16	112	109	100%	95%
FCT	6	6	110	100	75%	68%
Plateau	17	17	115	107	69%	72%

**Surveillance Efforts in Security Compromised States:** Surveillance in the security challenged states of Adamawa, Borno and Yobe has improved significantly with all the states reporting more AFP cases in 2017 compared to 2016. As part of efforts to improve surveillance sensitivity in the security challenged areas and to indirectly have an idea whether poliovirus is still circulating in inaccessible and partially accessible areas, several innovative approaches were introduced. This included collection of three contact samples from every AFP case, increasing the number of samples collected from healthy children coming from inaccessible areas, expansion of environmental sample collection sites and frequency of sample collection, Auto-visual AFP detection and reporting (AVADAR) extension in Borno, Yobe and Adamawa, and implementation of environmental surveillance sweep. A total of 242 stool samples were collected from healthy children less than 10 years of age coming recently into 24 selected IDP camps located in six LGAs from 17<sup>th</sup> February to 16<sup>th</sup> May 2017. Laboratory results showed that none of the samples was positive for WPV or VDPV; but Sabin and non-polio enterovirus isolation rates were 19% and 12% respectively. Figure 7 below shows the accessibility map of Borno state as at March 2017. In addition, the figure also depicts that virtually all the healthy children were coming from the inaccessible LGAs of the state into IDP camps located in relatively secure areas. Of the 46 Sabin isolates from the healthy children, only 2 were Sabin type 2; and the rest Sabin type 3 (28), Sabin type 1 (2), mixtures of Sabin type 1 and 3 (13) and Sabin type 1 and 2 (1).



**Figure 7: Healthy children sampling from February – May, 2017**

**Environmental Sweep:** A one-time sewage collection from potential environmental sites identified from security compromised areas in Borno state (from 17 of the 27 LGAs) in Borno state was conducted, except in Jere and Maiduguri Municipal Council where there is ongoing routine environmental surveillance. A total of 47 samples were collected over a four-week period. Of the 47 samples, neither WPV nor cVDPV2 was detected. A total of 35 (74.5%) of the samples were negative, 6 (12.8%) Non-Polio Enterovirus (NPENT) and 4 (8.5%) Sabin3. There was 1 (2.1%) Non-Enterovirus (NEV) and 1 (2.1%) sample with NPENT + Sabin 3.



**Figure 8: Outcome of Borno environmental surveillance sweep samples, 2017**

**Temperature monitoring of sample transportation:** Implementation of the second phase of temperature tracking commenced in 25 States in 2017. A total of 59 samples were tracked in 2017, 15 of the samples had high temperature above 8 degrees and for at least 3 hours while on transit to the laboratory. Samples with high temperatures have been investigated by States and intervention measures are being taken to address challenges.

Results of temperature tracking were compiled by the polio laboratories and shared weekly to concerned states and the national level for intervention. Sample temperature tracking has given a lot of insight into specimen condition from collection up to the polio laboratories. Results of temperature tracking have enabled the program to mount intervention measures through training and even changing of faulty vaccine carriers.

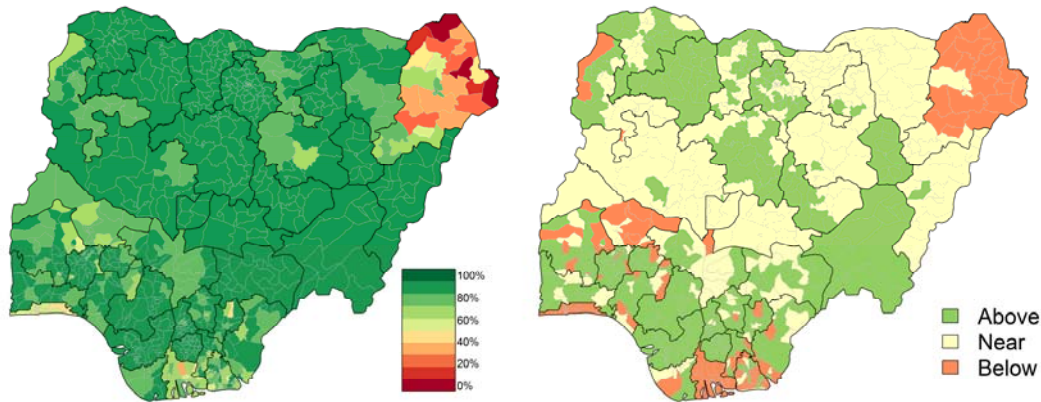
### **3.0. REMAINING CHALLENGES FOR FOCUS IN 2018**

#### **3.1 *Inaccessibility in Security Compromised States and IDPs***

The major challenge in the Nigerian program is accessing children particularly in completely inaccessible areas. Out of the 27 LGAs in Borno State, two of them Marte and Abadam remained inaccessible as at the end of 2017. The accessible LGAs varied from 20% accessibility to 100% for southern LGAs and in MMC. The inaccessible areas in Borno include the Islands on Lake Chad that remain completely inaccessible and will be the main area of focus in 2018 aside from the other inaccessible areas. For the main land, 98% of the partially accessible settlements were reached using RES strategy by cJTF and military while only 36% of the completely inaccessible settlements were reached by security forces using RIC strategy. Other challenges include possibility of missing children from inaccessible areas, lack of cold chain facilities in recently liberated LGAs and insufficient RI providers.

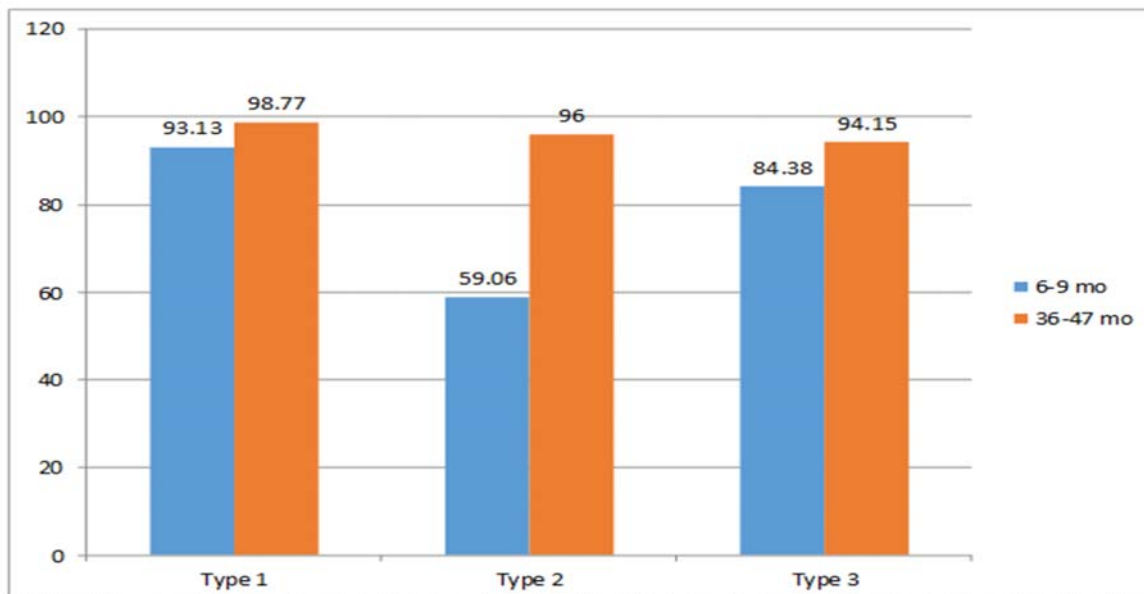
#### **3.2 Population Immunity Gaps**

Population immunity profile analysis indicates a number of areas with low type 1 immunity, posing a risk for continued transmission of wild polio virus particularly in north eastern Nigeria, Kebbi state in the North West and the south. Figure 9 illustrates gaps type 1 immunity profile across the states by end of December 2017 (on the left is estimated immunity and on the right is the immunity relative to an 80% threshold, which is the target threshold for interrupting transmission).

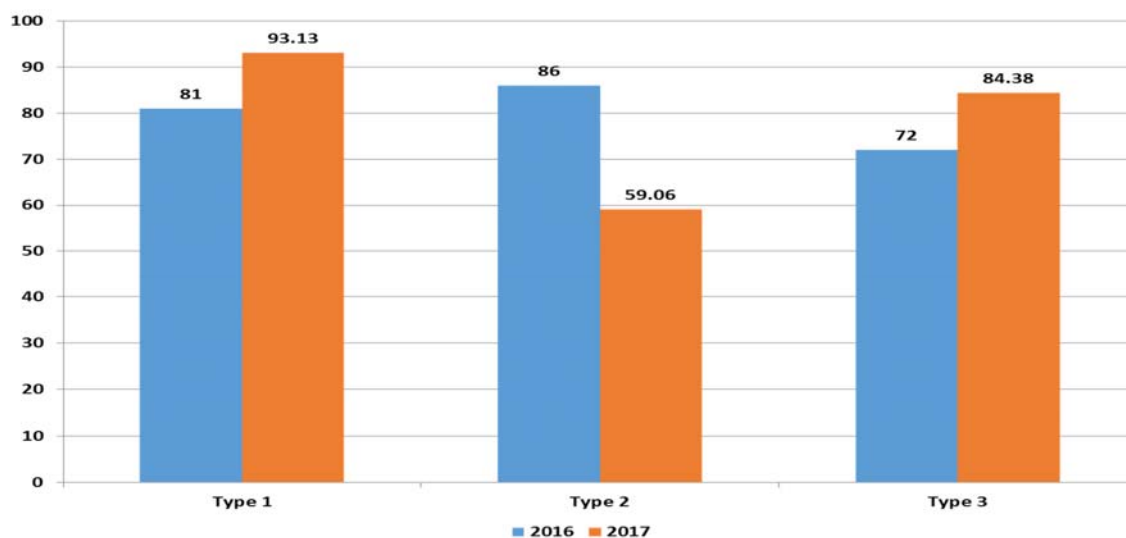


**Figure 9: Type 1 population immunity profile, Nigeria, December 2017 (Source: Institute of Disease Modelling (IDM)).**

A repeat sero-prevalence survey was conducted in 2017 in Borno state. The survey included a combination of facility based and IDPs sampling from the community. The results indicate overall seroprevalence is high except type 2 in 6-9 months; seroprevalence is significantly higher in 36-47 months than 6-9 months for all three types (Figure 10). Among the 6-9 months old children sampled, there were 12% gains in immunity for types 1 and 3 and a fall in type 2 immunity is on expected lines in 6-9 months comparing 2016 and 2017 results (Figure 11).

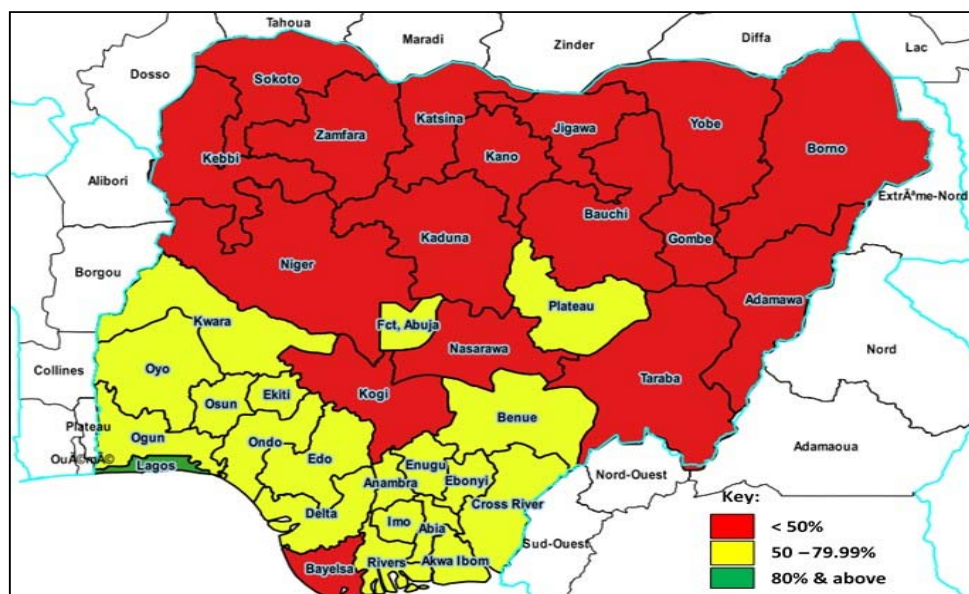


**Figure 10: Sero prevalence survey results, Borno, 2017**



**Figure 11: Sero prevalence survey results comparing 2016 and 2017 in Borno.**

Based on coverage survey data (MICS/ NICS 2016), routine immunization coverage performance is very low across several states. OPV3 coverage ranged from 7% in Sokoto and Yobe to 75% in Lagos; with a national average of 33% (Figure 12).



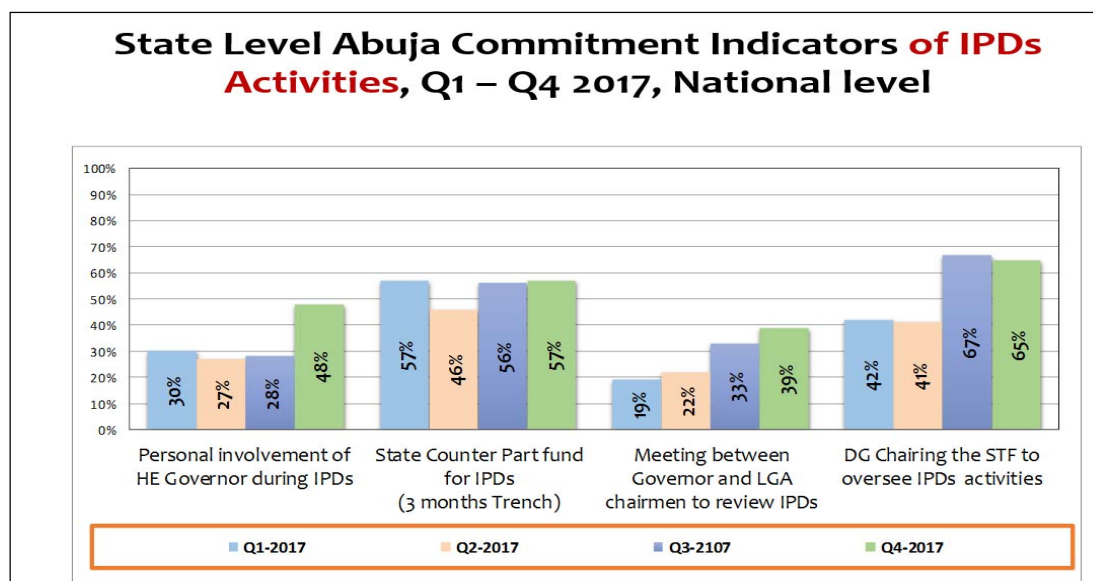
**Figure 12: Routine OPV3 Coverage, Nigeria, 2015-2016 (Source: MICS/NICS 2016)**

Routine administrative data from DHIS2, by December 2017, indicated 16 (43%) of states achieved OPV3 coverage above 80%, 19 (51%) had coverage between 50-79%, and 2 (6%) were less than 50%. While for IPV 12 (32%) have coverage 80% or more; 21 (57%) have coverage between 50% and 79.9%, and 4 (11%) have coverage less than 50%. Disparity between reported and survey data remain a concern in accurate monitoring of progress. Furthermore, immunity profile for OPV3 coverage of non-polio AFP cases in 2017 depicts low coverage in Akwa Ibom (84%) and Borno (89%). The VDPVs detected in Sokoto, Katsina,

Gombe and Bauchi in 2017 further indicated gaps in population immunity. More effort is needed to increase demand for routine immunization in high risk areas. With the low RI coverage, the risk for outbreaks remains. The VDPVs detected in Sokoto, Katsina, Gombe and Bauchi in 2017 further indicated gaps in population immunity. More effort is needed to increase demand for routine immunization in high risk areas. With the low RI coverage, the risk for outbreaks remains.

### 3.3 Risk of 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 Figure 13.



**Figure 13: Trend in Abuja Commitments for polio eradication, Q1-Q4 2017, Nigeria.**

### 3.4 Surveillance gaps

Despite the appreciable surveillance performance in 2017, gaps still exist especially at sub-national levels. As at the end December 2017, 9 LGAs in four states (Borno 3, Delta 2, Akwa Ibom 1, Anambra 1, Ebonyi 1 and Yobe 1) were not able to achieve the two key surveillance indicators. During the reporting period, the minimum requirement (10%) of non-polio enterovirus rate was not achieved in 7 states (Rivers 9.9%, Akwa Ibom 9.6%, Bayelsa 9.3%, Ekiti 9.2%, Ondo 9.2%, Osun 8.6% and Kogi 8.5%). A total of 11 polio compatible cases have so far been classified (Kano 4, Nasarawa 1, Ebony 1, Taraba 1, Adamawa 1, Borno 1, Edo 1 and the Federal Capital Territory 1) by the National Polio Expert Committee. Nonetheless the 2017 database has not yet been closed as there are about 262 inadequate AFP cases pending final classification by NPEC. Other identified surveillance gaps include sub-optimal data quality, inadequate active surveillance, sub-optimal quality of active surveillance leading to



missed AFP cases, less than 20% of health facilities being focal sites, knowledge gaps among clinicians and community informants, limited geographical accessibility for field activities in some areas in the north east and southern parts of the country due to insecurity and inadequate documentation of surveillance activities in many states.

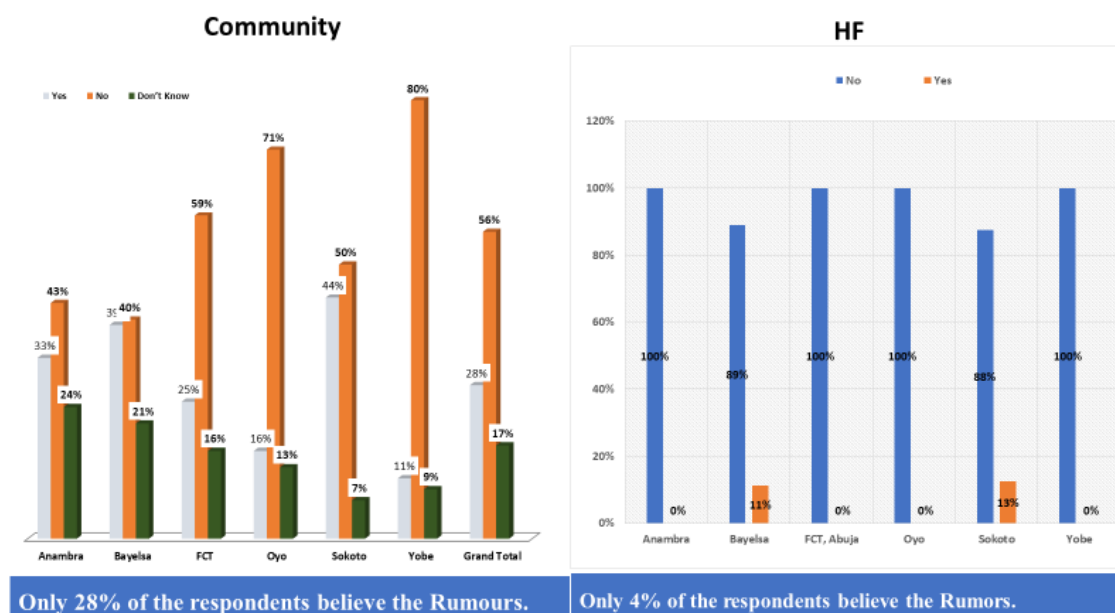
As Nigeria moves closer to interruption of poliovirus transmission, surveillance gaps will be prioritized with a view to implementing effective measures to address the gaps. There is need to build the required confidence that the surveillance system in the country can be relied upon to timely detect any poliovirus circulation. Priority will continue to be given to the security challenged areas (not forgetting the southern states), innovations and at the same time maintaining data quality and adequate documentation in view of certification.

### **3.5 Anti-vaccination Rumors**

There was a surge in resistance to vaccination in the fourth quarter of 2017 following rumors that linked a monkey pox outbreak to vaccination. The rumors started in the south east zone and spread to the rest of the country. Several states were affected negatively including some high-risk states like Borno, Yobe and Adamawa, that was evidenced by independent monitoring results of the polio IPDs in October and November 2017 (Figure 14).

- i. A study was conducted to assess the impact of the anti-vaccination rumor after which some strategies were proposed to tackle the rumor which include:
- ii. Provide technical support but allow govt to take the lead
- iii. Institute / reactivate crisis management to tackle rumours, disease outbreaks esp. VDPDs outbreaks
- iv. Investigate vaccine related rumours - could have negative impact on vaccination or could be disease outbreak
- v. Immediate press release by highest authority in health to debunk rumours
- vi. Every opportunity of engagement whether on media or face to face, promotes immunisation
- vii. Involve ethnic, religious and political minorities in information activities.
- viii. Prepare packages on frequently asked questions for all health workers, especially before vaccination campaigns or introduction of new vaccines
- ix. Disseminate a single set of messages through the same channels as those used by the rumour-mongers
- x. Do not raise the rumour-mongers' profile by identifying and denouncing them. Our job is informing the public about vaccines, not denouncing our opponents
- xi. Monitor vaccinations in areas reached by rumours. Do not overreact where there is no decline in vaccinations. Quantify impacts. Do your vaccination tally sheets tell a different story from what you anticipated? Do not respond to a decline in vaccinations which does not, in the event, materialize
- xii. Meet with your opponents as well as your friends
- xiii. Combat ignorance with knowledge, not with coercion

- xiv. Pay particular attention to health workers. Coverage surveys and interviews conducted for the anti-rumour study confirm that mothers cite the health worker as the single most important source of information on vaccinations
- xv. Use African Vaccination Week to organize activities to debunk rumours.



**Figure 14: Impact of Anti-vaccination Rumours Survey in some selected states, 2017**

### 3.6 Vaccine Accountability

The use of mOPV2 vaccine in responding to the cVDPV2 outbreak required strict accounting of the vaccine used. However, the country experienced challenges in accounting for those vaccines. Use of sub-standard improvised stock management tools and inadequate follow up by health workers especially at LGA and ward levels, led to difficulty in generating the correct information. States submitted incomplete and poor vaccine accountability reports late. Some teams wasted vaccines deliberately and there were poor cold chain management practices during implementation as well as when returning the balance of vaccines and used vials to the ward. Using mOPV2 for outbreak response after the withdrawal of tOPV has the risk of potential cVDPV2 outbreaks especially in areas where there is low population immunity. The verification exercises for the withdrawal of tOPV and mOPV2 revealed leakages of vaccines into cattle and other markets. This points to deficient vaccine accountability at all levels as it is difficult to pinpoint exactly where the leakages are occurring from.

## **4 GOAL, TARGETS, AND MILESTONES FOR 2018**

### **4.1 Goal**

The overall goal of the NPEEP 2018 is to achieve and sustain interruption of all poliovirus transmission.

### **4.2 Targets**

**Target 1:** Achieve and sustain polio free (WPV, cVDPV) status by December 2018.

**Target 2:** Achieve and sustain surveillance performance indicators in all LGAs by December 2018

**Target 3:** Achieve 50% reduction in number of unimmunized children in VVHR LGAs

**Target 4:** Transition Plan completed and approved by June 2018

**Target 5:** Increase reach of inaccessible areas in Borno by December 2018

### **4.3 Major Milestones**

- 1) Systematic advocacy and engagement plan for Governors, LGA chairmen and key stakeholders such as donors achieved
- 2) Achieve 100% quality implementation of 6 planned rounds by December 2018
- 3) Plan for Scale up special interventions (RIC scale up, RES, others) to reach trapped populations (in security compromised areas) of Borno and Yobe States developed and implemented by June 2018
- 4) All outbreak mop-up responses to polioviruses detected either by AFP, healthy contacts, community surveys or environmental surveillance are planned and timely conducted as per GPEI and EOC guidelines
- 5) All very high risk and vulnerable LGAs have routine immunization strengthening plans (as developed by NERICC) implemented throughout 2018 with joint close monitoring by EOC and NERICC
- 6) Expand environmental surveillance to at least two additional states by June 2018
- 7) Expand the surveillance reporting network of health facilities and community informants by at least 10% from 2017 figures
- 8) Finalize Polio transition plan by June 2018.

## **5 STRATEGIC PRIORITIES FOR 2018**

The strategic priorities for 2018 as identified by the National EOC is driven by data and due consultation with immunization partners and local stakeholders to include: **(1) Sustaining resilience; (2) Enhancing SIA quality in prioritized vulnerable areas; (3) Increasing access to vaccination in security challenged areas and IDPs (particularly in Borno, Yobe and Lake Chad islands); (4) Ensuring robust outbreak response across all states; (5) Enhancing routine immunization in polio high risk LGAs; (6) Intensifying surveillance; (7) Strengthening cross border collaboration; (8) Improving and strengthening quality assurance of all Polio data and (9) 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. Sustaining resilience: intensifying advocacy and social mobilization**

Nigeria has conducted a series of bOPV, mOPV2 and targeted IPV rounds in 2017, in continuation of the outbreak response to the detection of WPV type 1 and VDPV2 in 2016, almost a year after achieving interruption of transmission. As at December 2017, the country marked 16 months without a case of WPV1 and 13 months without detection of WPV1 or cVDPV2 from environmental samples. This has the potential to reduce stakeholders' risk perception and consequently make them complacent. The stakeholders include caregivers, frontline workers, community, traditional, religious and political leaders as well as donors.

Communication and advocacy efforts for 2018 will entail clear narrative in communicating to Nigerians that the country is still susceptible to poliovirus reinfection, emphasizing on the benefits & values of immunization and the risk of non-vaccination especially for under-5 children. Lessons learnt from the rapid, aggressive and robust response to the anti-vaccination rumours that started in the south east in October 2017 following the monkey pox outbreak, will guide the systematic use of the social media for the intensive communication campaign.

Achieving the quarterly meetings of the Presidential Taskforce to provide overarching guidance to Nigeria Polio program will be highly prioritized in 2018. Based on outcomes of the PTFoPE meeting, the program will continue to have regular interface with Governors through the Nigerian Governors Forum. Additionally, systematic engagement with the LGA Chairmen through retreats and regular information sharing kick-started in 2017, will be sustained and intensified. The focus will be on priority LGAs across all States based the 2018 risk categorization and other factors. There is need to sustain the high-level advocacy to the theatre commander Operation Lafiya Dole based in Maiduguri, in the northeast to maintain the support of the military in reaching children in inaccessible areas. A robust engagement of key traditional and religious leaders in the South to complement the efforts of the northern traditional and religious leaders to secure regular public pronouncements will be undertaken to check rumors and ensure every eligible child is immunized during supplemental immunization campaigns and through routine immunization services.

A comprehensive IPC skills training will be conducted for all frontline workers especially in polio high risk and RI low performing LGAs. The training will be complemented with a national performance and award system to be rolled out in 2018 to motivate service providers and mobilizers.

Social Mobilization networks (such as VCM Network) will be evaluated to ensure that only high impact structures and those adaptable to support mobilization of households and communities for routine immunization services are retained and scaled up to the south.

Redistribution of VCMs within States in line with 2018 high risk algorithm will be undertaken. The VCM network will be further empowered to support active case search for AFP and undertake other surveillance activities and the network will eventually be integrated into the CHIPS program.

Evidence-based communication and advocacy efforts will be sustained with more timely analysis and dissemination of social data after every SIA to all stakeholders, particularly political and traditional leaders. The peer data quality review started in 2017 will be sustained and scaled up to further improve social data quality. More concerted effort will be made to further probe the reasons for 'child absent' through special investigations and regular polling surveys on knowledge attitude and practice (KAP). The results of such investigations and surveys will be disseminated and used to guide interventions.

The concept of placing polio within the broader health context of child survival in messaging was started in 2016. This will be sustained in 2018 with support to the National Emergency Routine Immunization Coordination Centre (NERICC) in launching an intensive advocacy and communication campaign highlighting the under-5 deaths in Nigeria due to low routine immunization coverage. Also, household and community mobilizers will continue to play a pivotal role in delivering integrated messages at the household level to increase the risk perception of caregivers and build trust for immunization. The Northern Traditional Leaders Committee (NTLC), the Federation of Muslim Women Associations in Nigeria (FOMWAN), the Catholic Women Organization (CWO), the Pentecostal Women Fellowship, the Da'awah Coordination Council of Nigeria (DCCN) and the Christian Association of Nigeria (CAN) and other community-based organizations, will be further sensitized on the need to support routine immunization efforts.

As the country is gradually closing out polio, 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.

## **Activities**

### **1. Reducing chronically missed children**

- Undertake quarterly peer data quality review
- Undertake special investigation to understand in-depth the reasons for chronically missed children; especially due to 'child absent'.
- Undertake periodic KAP surveys in collaboration with NERICC to guide communication planning and interventions
- Support development of evidence based integrated communication plan in every polio high risk and RI low performing LGA, including focus on activities to address the locally specific reasons for non-vaccination
- Intensify in-between round activities to track and vaccinate missed children including in the southern States

- Undertake monthly performance assessment of mobilizers and enforce accountability.

## **2. Enhancing demand for routine immunization**

- Finalize and disseminate nationwide the integrated communication strategy document
- Launch an intensive advocacy and communication campaign highlighting the under-5 deaths in Nigeria due to low population immunity in collaboration with NERICC, including a social media campaign
- Develop new entertainment-education packages in English and main Nigerian languages for mass, traditional and social media platforms to reflect integrated messaging that places polio within the broad context of routine immunization & child survival
- Support States to develop and produce State customized new BCC materials to enhance visibility, awareness and further improve acceptability of routine immunization and SIAs (States to be support with technical and material resources)
- Conduct sensitization meetings with the leadership of faith-based organizations to support integrated messaging and public pronouncements
- Support development of evidence based integrated communication plan in every polio high risk and RI low performing LGA

## **3. Motivating the frontline health workers**

- Conduct monthly performance assessment of mobilizers
- Roll out National recognition scheme for frontline workers – vaccination teams and mobilizers
- Design Certificates for Awards and participation/facilitation at major EPI trainings.

## **4. Ensuring strong political support for immunization**

- Sustain advocacy for regular quarterly meeting of the Presidential Taskforce to address threats and emerging challenges.
- Re-orient state and LGA teams on the effective tracking of 'Abuja Commitment' dashboard and using the data for action at the operational level
- 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.

## **5. Strengthening engagement with donors**

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

## **6. Documentation**

- Display social data at the EOC after every polio campaign
- Share result of every polio campaign with key stakeholders
- Produce monthly e-snapshot on immunization & circulate through NPHCDA & GPEI websites
- Conduct bi-annual national EPI communication review meetings
- Produce bi-annual polio communication report to document EOC communication activities and best practices

### **5.1.1. Targets, milestones and indicators**

- EPI Integrated communication strategy document building on Polio communication strategy and disseminated by end of March 2018
- Intensive EPI advocacy and communication campaign (including social media campaign) in collaboration with NERICC launched by end April 2018
- Special investigation into reasons for chronically missed children undertaken after the 2 national rounds of IPDs
- At least one KAP conducted by June 2018
- National recognition scheme for front-line workers rolled out by end May 2018
- New entertainment-education packages in English and the main Nigerian languages for in place by June 2018
- National recognition scheme for front-line workers rolled out by end March 2018
- Bi-annual EPI Communication review conducted in July and December 2018
- Annual EPI Communication report available by end 2018
- Increased proportion of States providing State & LGA counterpart funds during IPDs by end 2018
- Reduced proportion of missed children to less than 1% in high risk states by end 2018
- Proportion of High Risk States with New BCC materials in local languages by February 2018
- Increased proportion of States achieving at least 80% of Abuja Commitment indicators for PEI & RI
- Increased number of states conducting Peer Data Quality Reviews by end 2018
- Increased proportion of LGA chairmen providing counterpart funds and attending ERM by June 2018
- Reduced proportion of missed children in high-risk states by June 2018
- Number of EPI communication reviews conducted by end of 2018.

## 5.2. 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 115 LGAs across 26 States + FCT have been prioritized and will be specially focused in 2018 while focusing on these LGAs, the program will still pay attention to the remaining 659 LGAs across all the States and FCT. The special attention to these unique 115 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).

### Activities.

#### 1. Identifying Vulnerable Areas

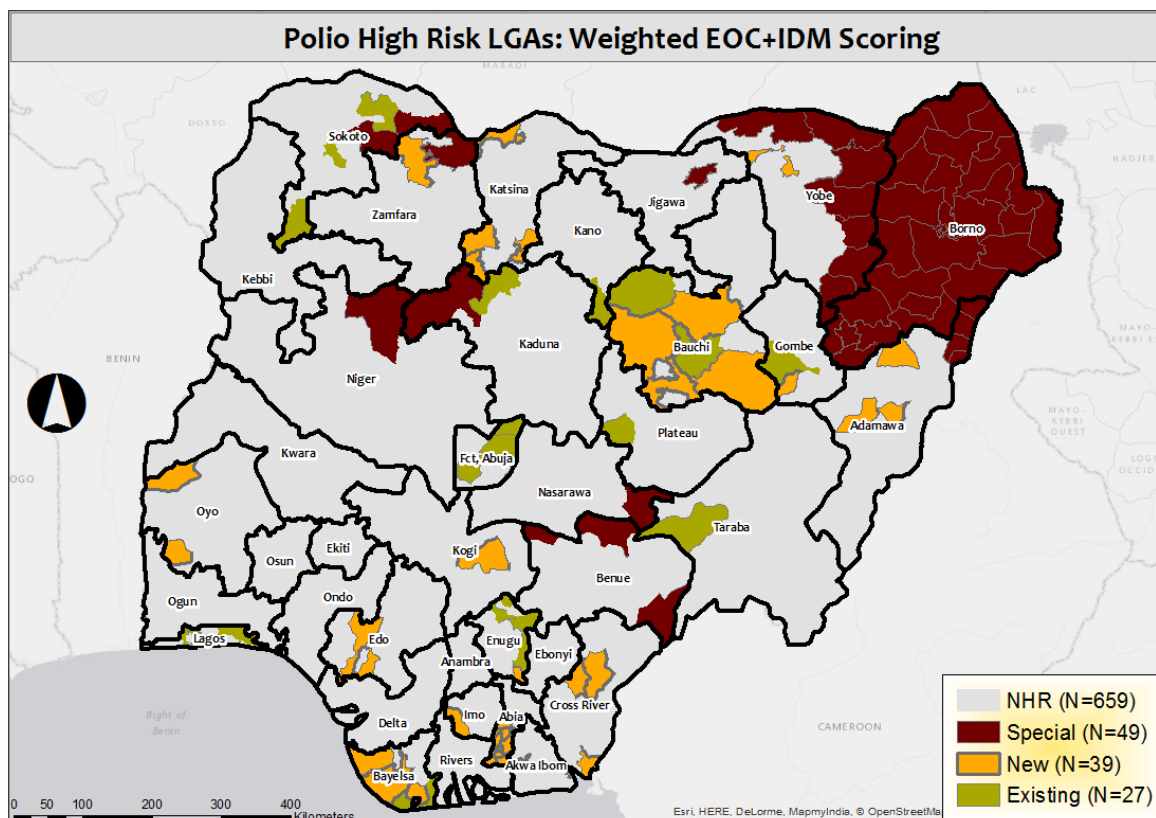
The classification of LGAs as vulnerable is jointly conducted by the National EOC and Institute of Disease Modelling (IDM), and reviewed every 6 months. For the 2018 high risk categorization, out of the 774 LGAs a total of 115 LGAs across 26 States + FCT as indicated in the map/table below will be given special attention and focus.

**Table 6: 2018 High Risk LGA Categorization**

Zone	State	HR	VHR	Special	Grand Total
NCZ	Benue			3	3
	FCT, Abuja		3		3
	Kogi		1		1
	Nasarawa			1	1
	Niger			1	1
	Plateau		1		1
NEZ	Adamawa	2	1	4	7
	Bauchi	3	3		6
	Borno			27	27
	Gombe	2			2
	Taraba		1		1
	Yobe		1	7	8
NWZ	Jigawa			2	2
	Kaduna		1	1	2
	Kano	1			1
	Katsina	2	3		5
	Sokoto	2	1	2	5
	Zamfara	1		1	2
SEZ	Abia	6	2		8
	Enugu	5	1		6
	Imo	1			1
SSZ	Akwa Ibom	2			2



	Bayelsa		4		4
	Cross River	3			3
	Edo	1	1		2
SWZ	Lagos	4	5		9
	Oyo	2			2
Grand Total		37	29	49	115



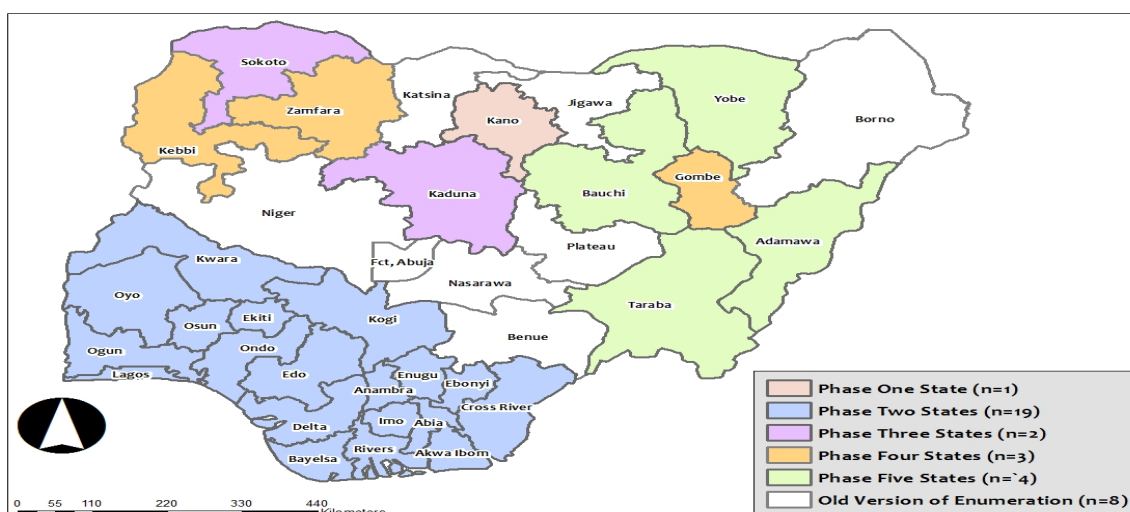
**Figure 15: Polio Highrisk LGAs**

As indicated in the map above, 27 of the 115 LGAs were part of the 2017 high risk LGAs, while 39/115 LGAs for 2018 are new LGAs. All the 23 LGAs from Borno State, 7 LGAs from Yobe and 4 LGAs from Adamawa made up 38/49 special LGAs primarily due to security risk. The remaining 11 LGAs under special categories as indicated in the table above are from Sokoto, Zamfara, Benue, Niger, Jigawa, Nasarawa, & Kaduna States considered due to a mix of security and other factors.

- a) **Strengthening support and supervision on High risk/weak performing areas:**  
Continuous assessment of campaign quality and identification of weak performing areas will continue to guide prioritization. Government and partners will regularly review performance of their respective state, LGA and ward staff and ensure that stronger hands are redeployed to weak performing LGAs. This would result in quality

implementation of planned activities. The period review and re-deployment of LGA and ward level staffs will be done as the situation demands based on available performance data.

- b) **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 2018, the critical activities will include:
- c) ***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 LGAs after every round of campaign. WFP and team performance should be reviewed by team made up of Government and partners at LGA levels and measured 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 side, very good performing wards (>90% LQAs performances) should 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 guideline and all partner agencies at the LGA level should be active leaders and 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.
- d) ***Household based micro-planning revision and extension of Household based enumeration:*** In 2017, a total of 22 states conducted the household-based enumerations using the revised SOPs. This resulted in a 29.4% reduction in the target population from 35,661,754 before enumerations to 25,174,277 (a reduction of 10,487,477). The States included all the entire South and 2 states in the North central zone (Kogi and Kwara) and 3 States in the North west zones (Kaduna, Sokoto and Kano).



**Figure 16: Progressive House-hold based micro planning using the revised SOPs, 201-2018.**

### Plans to extend enumerations in 2018

In 2018, the program plans to extend the current enumeration to 8 States of Kebbi, Zamfara, Gombe, Bauchi, Yobe, Taraba and Adamawa within the first 6 months of 2018. The anticipated benefits of extending enumerations to these 8 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.

### Key elements of the revised House-hold based enumeration

The revised house-hold based enumeration is based on a 4-variable process involving:

- Enumeration of all HH (not House)
- Enumeration of all Children < 1 yr
- Enumeration of all Children < 5 yrs
- Enumeration of all children < 15 yrs

### Innovative ideas to improve the quality of micro Plans in 2018:

- 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%.

- e) **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.

- f) **Enhancing quality of team members training:** Training modules for major components of the IPDs will be developed 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.
- g) **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 task force and National EOC after each round. Use of an electronic supervisory checklist on an ODK platform piloted in 2017 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.
- h) **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 piloted in Sokoto State during the August 2017 and will be 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 is expected to re-establish confidence in the process while generating quality data that will guide program interventions.
- i) **Vaccine management and accountability:** Learning from the SIAs conducted in the country it is very clear that vaccine management and accountability needs to be strengthened at all levels. To address the issue, a vaccine accountability management (S-VAM) framework has been developed with guidance notes to explain the expected roles and responsibilities of all stakeholders. This will ensure that cold chain and vaccine management systems and mechanisms are in place at different levels before, during and after a campaign. The following steps will be followed to ensure vaccine accountability (mOPV2/bOPV/IPV etc.):
  - I. The request/supplies from States to National, should be based on agreed population figures arrived at by the National EOC based on recent

enumeration outcomes and other program data as they arise. Strategic buffer should be kept at zonal levels to address any eventual additional requirements from States.

- II. Training of Cold Chain Officers and senior supervisors on the guidelines for management of polio vaccines (bOPV/mOPV2) including lessons learnt, deployment of vaccine management tools, the tally sheets and summaries, the form A and S-VAM to all levels and the rigorous implementation of the accountability process.
- III. Daily call in data for vaccine accountability will be reinforced, while returns of empty vials will also be closely monitored to ensure full accountability for doses deployed. From State to teams, there should be documentation of number of vials given out and returned.
- IV. Senior Logisticians from national and zonal levels will continue to be part of the MST deployment during mOPV2 and all other OPV campaigns.
- V. Documentation at all levels will continue to be strengthened by ensuring that all arrival procedures at the national level are strictly adhered to. The arrival procedures at national level will be modified for State and LGA levels with the necessary documentation in place.
- VI. State LWGs should share their distribution plans with the National LWG for proper tracking, guidance and accountability. The same process will be encouraged at the state level for the LGAs.
- VII. For in between rounds: a thorough stock reconciliation will be done by the national and zonal logistics teams with the support of the National EOC. Records of OPV vaccine deployed to each state will be 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 and where indicated gaps and activities to close the gaps will be implemented.
- VIII. At the end of the campaign or OBR rounds, a similar reconciliation of vaccines deployed and utilization reporting (using S-VAM form) will be conducted to ensure total withdrawal of all vaccines from the field.
- IX. At vaccination team level: The correct use of the tally sheets will continue to be encouraged while also ensuring that all vaccine vials are kept in Ziploc bags in the vaccine carriers. If mOPV2 being used, Ziploc bags to be labelled with stickers indicating “mOPV2 only”.
- X. At the LGA level, small bags will be provided for packaging used vials in predetermined numbers for easy accountability. Bigger sacks will be provided

for the safe storage of the returned used vials and these will be transported finally to the disposal sites. The use of these bags is to prevent spillage especially from used vials thereby contaminating surfaces and posing risk to the programme in terms of incidences of VAPPs and cVDPVs. While the use of mOPV2 only stickers, where appropriate, is to ensure segregation from other vaccines.

- XI. Vaccine accountability reports should be submitted to national level within two weeks of the campaign from each state.

#### **5.2.1: Targets, Milestone and Indicators**

- Share line lists of 115 HR LGAs to States by February 2018
- Develop an inter-agency Supportive supervision plan and start implementation by March 2018
- Review and share ward level performance (LQAs) after every round and use that to assess WFP starting March 2018
- Ensure S-VAM report is shared by States and LGAs 5-days post campaign
- Finalize HH based enumerations in 8 priority States by June 2018

#### ***5.3 Implementing special approaches for security challenged areas and IDPs:***

As indicated, one of the most significant risk factor to achieving interruption and eradication of Polio is security situation. The program will continue to focus attention in security compromised areas and ensure it is able to penetrate, reach and vaccinate eligible children as much as possible. The north-eastern States of Borno, Yobe & Adamawa will continue to be special areas of focus in addition of other hot spots in north-central and north-western States

#### **Activities**

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

Insecurity remained the greatest risk to global quest to achieving Polio eradication. In Nigeria, the Polio eradication can only be made possible and guaranteed if all children in security compromised areas (in addition to other secure areas) are reached with adequate doses vaccines based on plan. Three States (Borno, Yobe & Adamawa) have for over 7 years been faced with security challenge due to insurgency. Although lots of gains have been recorded to secure these states, the challenge still remains in some LGAs. Enhanced collaboration between the program and Nigerian military is still a key determining factor to accessing this remaining security challenged areas. Following the latest advocacy to the Theatre Commander, a consensus was arrived at to have soldiers dedicated to Reaching Inaccessible Communities (RIC) activities only.

As at the end of 2017 in Borno state, the number of settlements reached were 2538, representing 45% of total settlements. The goal in 2018 using the dedicated military personnel for just Polio vaccination is to reach 90% of all inaccessible settlements (6154) by

June 2018. This strategy also known as RIC plus strategy will be extended to reach the 178 Lake Chad Islands on the Nigeria side in 5 LGAs (Abadam, Kukawa, Marte, Mungonu and Ngala) that have not been visited. In addition to the RIC, the Reaching Every Settlement (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.

In Yobe States, the focus in 2017 for RES were in 6 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 2018. The scope will be determined by the prevailing security situation during the year.

In 2017, Adamawa had 2 security compromised LGAs namely Michika and Madagali. These LGAs shares border with Borno State along the Gwoza axis. Security had however improved in 2017 with a number of activities taking place with continuous security patrols.

Satellite imagery will continue to be used to determine habitation to guide 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 2018 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 this endeavors will be determined to large extent on continuous engagements with military and cJTF including adequate supplies and capacity building.

**a) Validation of inaccessibility data:**

As we are reaching these children within the security comprised areas, validating the data generated remained an important endeavor. In 2017, a team of ex-service men were engaged to validate the RES team work, however, data was not readily available and utilized for program advancement. In 2018 accessibility activities and data generated will be tracked, reviewed and analyzed regularly through the use of a dashboard. The program will look into innovative ways to also track, independently monitor and analyze data from the RIC activities.

**b) 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.

**c) 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 < 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.

**d) Scale up permanent vaccination sites at all major transit points:**

In 2017, 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 18, 988 of the children vaccinated in 2017 were from Abadam and Marte LGAs which are completely inaccessible.

**2. 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 disrupts immunization activities. In 2018, special emphasis will be made to vaccinate in the affected areas.

**KEY ACTIVITIES IN 2018**

- Implement the revised 'RIC Plus' strategy of 80 dedicated RIC teams across the 17 LGAs in the state to reach 80% of all inaccessible settlements by end June 2018
- Expand RES to the remaining areas using military and or cJTF support. Settlements covered by RES more than 5 contacts to be moved from SIAD to regular SIA.
- Intensify use of VTS and ODK by military and cJTF during vaccination in insecure areas
- 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)
- 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 innovation that improves quality of SIA - DOPV, HC, DC, Mock LQAS, VATA, and expand Mock LQAS to partially accessible LGAs.

#### ***5.3.1 Targets, Milestones and Indicators:***

- Cover and immunize 80% of remaining 64% of the RIC settlement by June 2018.
- Cover and immunize 50% of the lake Chad Islands by September 2018
- Cover and immunize the remaining 2% RES settlements by March 2018
- Vaccinate all children including those possibly who missed vaccination from newly liberated by December 2018
- 5 contact vaccination by SIAD within 10 weeks of new arrivals by the Special intervention teams January to December 2018
- All New arrivals assumed to have suboptimal immunity to vaccine preventable diseases to have penta3/OPV3 by 3 months of arrival
- Provide at least 2 technical personnel per HF for RI in newly liberated LGAs by March 2018
- Provide cold chain equipment in security compromised areas and army barracks involved in RIC/RES strategies.

#### ***5.4 Ensure robust outbreak response:***

##### **1. Maintaining strong and responsive Outbreak response teams across all levels:**

The program in 2018 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.

## 2. Vaccine Accountability:

The country will continue to conduct the monitoring and validation 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 cVDPVs. Monitors will be trained after each OBR activity and will be deployed to states that conducted these OBRA's. Disposal of all used or unused vials after the campaigns will be done based on global guidelines by 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 will be incorporated into routine supervisory checklists to ensure none is left in the system.

### 5.4.1 Targets, Milestones and Indicators

- Reactivate and share names of National, State and LGA Outbreak teams by March 2018.
- 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.

## 5.5 Enhancing Routine Immunization

To ensure sustained interruption of all polioviruses, it is important that routine immunization is rapidly strengthened. However, the 2016 MICS/NICS showed a national Pentavalent 3 and OPV3 coverage of only 33.6%, which is less than 2015 survey results. Government and partners are concerned that the RI coverage estimates remain extremely low and this has implications for the polio eradication program. ***To this end, a state of Public Health Concern on Routine Immunization was declared;*** and the National Emergency Routine Immunization Coordinating Center (NERRIC) was established on July 4<sup>th</sup> 2017 to respond to the low RI rates by (a) pulling together on-going efforts by Government and Partners to revamp RI with strong accountability, (b) designing a road map for RI quick wins with strong monitoring and tracking implementation of strategies that are data driven for improving RI including, using polio EOC structures

Strengthening routine immunization across board is an important and strategic component for PEI. Collaborating with the NERICC, the Polio EOC will focus its attention to the 115 LGAs most of whom fall within the 18 NERICC RI priority RI intensification efforts will continue in the 18 States and they include amongst others: Hard to Reach projects, Local Immunization Days (LIDs), etc. Polio staff and EOCs is 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 115 LGAs will be tracked and reported on a monthly basis. The LGAs and their respective states will be provided feedback. Focused supportive supervision will be embarked upon in 2018 to these LGAs. Aside the 115 LGAs, other LGAs within the 18 RI priority States will also be jointly monitored both by the National EOC and the NERICC team and the focus will be for LGAs and wards with large numbers of unimmunized / under-immunized children, with poor performance indicators & 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 NERRIC shall engage in discussions on the type of support that will be required by the vulnerable LGAs. Polio infrastructure will continue to be used to support 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 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 leaving beyond 5km.

### **3. Advocacy to states for ownership:**

The NERRIC and the National EOC will continue to advocate to State Primary Health Care Boards/Task Forces / 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. As part of the polio HRLGA meetings, the focus will not only be on polio but RI and implementation of intensified RI activities.

#### **4. Monitoring for Action:**

Government and partners will assist with:

- Printing data tools for proper collection of accurate RI data in the prioritized areas: registers, vaccination cards, vaccine management data tools, vaccination data reporting and monitoring tools. Supporting NERRIC with 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 on weekly basis, 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 will also be scaled up based on findings and will provide additional monitoring and provision of real time data on a weekly basis.
- 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.
- 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

#### **5.5.1 Targets, milestones and indicators**

- Follow up on the priority LGAs / wards for strengthening RI identified and shared with State Task Forces / EOCs by February 2018
- Commencement of National EOC advocacy with state task forces / SERRIC/ EOCs for human, material and financial support by March 2018
- Complete the house to house enumeration activities in the remaining Northern states by July 2018
- Develop/Update RI REW plans based on GIS maps & population estimates and walk-through micro-plan data and session plans available by August, 2018
- Data tools for capturing and monitoring routine immunizations performance available in priority LGAs by March 2018
- National and State EOCs / NERICC to commence monthly monitoring of RI performance by March 2018
- Conduct monthly RISS from the national to State/LGAs/HFs. Target of  $\geq 80\%$  of planned visits conducted by 2018
- Achieve greater than 85% immunization coverage for all antigens by 2019 in line with NERRIC's vision.

## **5.6 Intensifying Surveillance:**

### **1. Intensify high quality surveillance in the whole country:**

The surveillance system in the country will in 2018 continue to focus on improving sensitivity in all states of the federation. The focus will be ward level targeted especially in areas with established weak surveillance system. In this regard, expansion of reporting network of health facilities and community informants as well as private health facilities will be prioritized. Training and sensitization of all key surveillance players such as the DSNOs, clinicians and informants will be given high attention. In addition, partnership with the community, security personnel including the Military and civilian JTFs will be enhanced in order to access more security challenged areas. Active surveillance is going to be vigorously monitored and surveillance data quality and documentation will be enhanced. Innovations that have proven to be efficient will be maintained and scaled up. In this regard, efforts will be made to improve AVADAR performance, introduce implementation of active surveillance with smartphones, (electronic surveillance/eSurve), enhance AFP case verification, continue healthy children stool sample collection, review environmental surveillance sweep, continue surveillance peer reviews, institute LGA trigger criteria for state review, and improve on surveillance documentation. There will be close monitoring of active surveillance visits done by DSNOs and AFP surveillance performance will be monitored at ward level. In addition, surveillance data quality and documentation will be given the well-deserved attention in 2018. The LGA DSNOs and their assistants will be supported with logistics support to conduct regular active surveillance, supervision and outbreak investigation. Regular feedback to DSNOs, clinicians and caregivers will be prioritized.

### **2. Intensify high quality surveillance in security compromised areas:**

In 2018, the country will continue to intensify surveillance with greater focus on security challenged areas: Surveillance activities in areas with insecurity due to insurgency (example of Adamawa, Borno and Yobe) and other security challenged spots in other states of the country such as kidnapping, cattle rustling, banditry etc. will be strengthened to ensure planned activities happened. In this regard, collaboration with the Military and para-military groups as well as CJTF will be maximized to provide entry points and participation in surveillance activities. IDP camps in these areas/states will also be given special attention for surveillance. Additionally, the program will expand reporting network of health facilities including private clinics, capacity building and sensitization including public enlightenment. All these activities are to ensure a very sensitive AFP surveillance system, such that poliovirus transmission, if it exists, is detected timely.

Timely and quality AFP case verification, contact sample collection from inadequate AFP cases and from all AFP cases in Adamawa, Borno and Yobe states will be maintained. Provision of data tools, surveillance guidelines and other IEC materials will receive adequate attention and so will public sensitization and awareness creation through the media (radio and TV). In addition, supervisory visits and monitoring of surveillance performance in security challenged

states from the national level will be intensified. Innovations to further increase the sensitivity of surveillance including AVADAR, healthy children stool collection and environmental sweep are going to be reviewed and scaled up. Research activities will be identified and implemented to further improve surveillance performance and monitoring.

Nomadic routes in the security challenged state of Borno will be identified and mapped as the security situation allows. Retrospective AFP case searches will be implemented especially in wards that have not reported AFP cases for two to three years. Biannual review and prioritization of reporting sites and AFP mapping with geo-coordinates will continue to be undertaken. The use of e-supervisory check list for IDP camps on a mobile device which was introduced in 2016, will be sustained just like the ISS checklist. Priority will also be given to monitoring and implementation of recommendations of various bodies and teams including OBRA, ERC, IMB; and the National polio committees.

### **Key Activities**

#### **a) To Enhance Quality and Sensitive AFP Surveillance**

- Reaching Inaccessible Children (RIC) with vaccinations and conduct AFP active case search (Borno and Yobe)
- Reaching Every settlement (RES) with vaccination and conduct AFP active case search in 3 priority States.
- Develop 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.
- Continue to prioritize security challenged states to implement key activities aimed at strengthening surveillance including: expansion of reporting network of health facilities including private clinics and informants, Capacity building and sensitization of key surveillance personnel, monitoring of active surveillance, partnership with community, military, CJTF and partners.
- Priority will also be assigned to surveillance activities in IDP camps including mapping and line listing of such camps, monitoring of active surveillance in camps, conduct of monthly meetings with camp coordinators and identification and sensitization of camp health workers and informants. Use of identified community members of trapped communities to support active surveillance and community sensitization on AFP surveillance, AFP case search and case investigation (sample collection) and identification of more community informants.