



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

# **2017 NIGERIA POLIO ERADICATION EMERGENCY PLAN**

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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 of 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
mOPV	Monovalent oral polio vaccine
NCC	National Certification Committee
NICS	National Immunization Coverage Survey
NIFAA	Nigeria Interfaith Action Association
NPEEP	National Polio Eradication Emergency Plan
NTL	Northern Traditional Leaders Committee on Primary Health Care Delivery
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
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

In 2016, Nigeria experienced a resurgence of wild polio virus (WPV). Four new cases were detected in Gwoza, Jere and Monguno Local Government Areas (LGA) of Borno State in August 2016, two years after the last case in July 2014. Circulating vaccine derived poliovirus type 2 (cVDPV2) was also detected from an environmental surveillance site in Maiduguri LGA with isolates collected on 23 March 2016, and from 1 AFP case in Sokoto state. A robust emergency response plan was timely implemented with leadership and oversight by Nigerian Government at Federal and State levels through the Emergency Operations Center (EOC).

Meanwhile, the Government of Nigeria continued to oversee the implementation of the 2016 National Polio Eradication Emergency Plan (NPEEP) with the EOC providing technical leadership and coordinating Government and partner efforts at the central level, and the State EOCs or their equivalents coordinating implementation at the state level. To ensure that planned activities in the NPEEP were implemented with quality, the EOC continued to enforce the accountability framework for stakeholders at all levels.

The key achievements in 2016 included the: (1) timely and robust response to WPV1 and cVDPV2 outbreaks in Borno and Sokoto states respectively, as per outbreak response guidelines; (2) sustained quality of IPDs with 90% of the LGAs in 18 high risk states achieving estimated coverage of at least 90% by December 2016, as verified by LQAS; (3) scale up of interventions and innovations, including Direct Observed Polio Vaccination (DOPV), health camps and other demand creation approaches to reduce missed children (the proportion of missed children remained low, at less than 1.5%, by end of December 2016); (4) enhanced population immunity countrywide, with 98% of non-polio AFP cases reporting at least 3 doses of OPV by week 52 in 2016 compared with 97% in 2015; (5) nationwide withdrawal of tOPV and switch to bOPV on 18 April 2016; (6) increased surveillance sensitivity with non-polio AFP detection rate at 19.9 per 100,000 population in week 52 of 2016, compared to 17.8 in the same period in 2015; (7) implementation of laboratory containment phase 1b survey; and (8) completion of mapping of polio assets and simulation exercise for transition planning within the context of the Polio End Game Strategy.

In 2017, the program will aim to achieve and sustain interruption of polio virus transmission, with special focus on the most vulnerable, high risk and insecure populations. It is imperative that the program continues to address outstanding 2016 challenges that include inaccessibility in security compromised areas of Borno, population immunity gaps among the most vulnerable populations, risks of complacency and surveillance gaps at ward level.

The 2017 NPEEP outlines key strategic priorities to ensure that interruption of poliovirus transmission is achieved and sustained, by: (1) sustaining resilience; (2) increasing access to vaccination in security challenged areas and IDPs; (3) enhancing SIA quality in prioritized vulnerable areas; (4) ensuring robust outbreak response across all states; (5) enhancing routine immunization; (6) intensifying surveillance; (7) strengthening cross border collaboration; and (8) polio transition planning. These priorities will be underpinned by strict adherence to the accountability framework.

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

### **1.1. Context of Polio Eradication Efforts in 2017 – looking towards interruption of polio virus transmission**

In 2016, Nigeria experienced a resurgence of WPV1. Having gone close to two years (since 24 July 2014) without confirming any WPV1 in Nigeria, four new cases were detected in Gwoza, Jere and Monguno Local Government Areas (LGAs) of Borno State. In Gwoza LGA, the WPV was isolated from a child that had onset of paralysis on 13 July 2016 and three close healthy contacts of that child; in Jere LGA, from a close healthy contact of a child who had developed AFP symptoms on 6 July 2016; and in Monguno LGA, from a child that had onset of paralysis on 6 August 2016 in Monguno ward, and a child that had onset on 21 August 2016 from Kumalia ward. The WPV1 cases detected in Borno State are closely matched to the virus that was circulating in Bama LGA of the State in 2011, indicating that the virus had been circulating undetected since then.

A circulating vaccine derived poliovirus type 2 (cVDPV2) was also detected from an environmental surveillance site in Maiduguri Metropolitan LGA with isolates collected on 23 March 2016. The cVDPV2 had 32 nucleotide difference from Sabin 2 and was genetically linked to the viruses that had been circulating in Borno, Yobe and Kano States in 2014 and closely matched to the cVDPV2 that had been circulating in Lake Chad area. Another cVDPV2 was detected from a healthy contact of the WPV1 case in Monguno ward. cVDPV2 was also 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.

Inaccessibility of some LGAs in Borno state due to insecurity is the major challenge hampering implementation of vaccination and surveillance activities. Consequently, there are areas with low population immunity and weak surveillance performance that have sustained poliovirus transmission and detection of orphan viruses. These populations are being liberated by the government military forces to internally displaced population (IDP) camps and host communities in relatively safer areas of the LGAs and State capital. The high influx of populations to the host communities increases the risk of secondary geographical spread to other LGAs within the state and beyond which can complicate on-going response to the outbreaks.

In addition to insecurity, population movements within and outside Borno state, including displacements to neighboring countries, pose a threat of international spread to countries around the Lake Chad Basin (Cameroun, Chad, Central African Republic and Niger).

The massive destruction of the health infrastructure (no functional health facilities, departure of health workers and lack of functional cold chain system to store vaccines in some LGAs also pose a challenge for mounting an adequate response.

To strengthen coordination and respond effectively to the polioviruses outbreaks, a multi-national Lake Chad Basin Polio Task Team (governments and partners) was established in N'Djamena. The Task Team is working closely with the Multi-National Lake Chad Basin Joint Military Task Force to ensure

synchronized vaccination and surveillance activities are implemented in the insecure areas. Additionally, the Ministers of Health of these countries declared the polio outbreak in Borno State a public health emergency for the region. The declaration facilitated the mobilization of political leadership at all levels, security forces and adequate resources (domestic and international) for a high quality response to stop the outbreak before end of 2016.

The presence of the military and collaborating armed groups (civilian Joint Task Force - cJTF, hunters, armed nomadic populations) provide an opportunity to improve programme accessibility for the outbreak response, surveillance and routine immunization activities.

Following the WPV1 outbreak, an immediate response in 5 LGAs of the Borno state and 5 additional rounds of wider scope were conducted. These rounds were synchronized in the northern states of Nigeria and neighboring countries between August and December 2016. In response to the environmental cVDPV2 outbreak in Borno, the affected and adjacent states timely implemented 3 rounds of monovalent oral polio vaccine (mOPV2) between May and July 2016 and subsequently in December. In response to the cVDPV2 case in Sokoto, mOPV2 campaigns were also conducted in the affected Bondinga LGA and the entire state respectively in December 2016.

The national and state EOCs continued to drive the programme, ensuring strong coordination of Government and partner efforts at all levels. The EOCs provided strategic technical support to the programme, including close monitoring of performance. The achievements in 2016 were due to the strong government leadership and the translation of the leadership vision and implementation of the strategic priorities identified in the 2016 NPEEP.

The key achievements during the implementation of the 2016 NPEEP included:

- Timely and robust response to WPV1 and cVDPV2 outbreaks in Borno and Sokoto states, as per outbreak response guidelines;
- Maintaining the quality of IPDs with 98% of the LGAs in 18 high risk states achieving estimated coverage of at least 80% by December 2016, as verified by LQAS. 97% of target LGAs in high risk states achieved above 80% coverage in December 2015;
- Scaling up of interventions and innovations, including DOPV, health camps and other demand creation approaches to reduce missed children; the proportion of missed children remained low (less than 1.5%) by end of December 2016;
- Enhanced population immunity countrywide, with 96% of non-polio AFP cases reporting at least 3 doses of OPV by week 51 in 2016;
- Nationwide withdrawal of tOPV and switch to bOPV on 18 April 2016;
- Increased surveillance sensitivity with non-polio AFP detection rate at 19.9 per 100,000 population in week 52 2016 compared to 17.8 in same period in December 2015; and stool adequacy at 99% in 2016 compared to 98% in 2015. The proportion of LGAs meeting both indicators was 99% by December 2016;
- Laboratory containment: phase 1a and 1b polio virus containment activities were successfully conducted with a total of 9,575 laboratories and 560 laboratories surveyed respectively. The

final reports for each phase were submitted to AFRO timely in February and November respectively.

- Completion of mapping of polio assets and simulation exercise for transition planning within the context of the Polio End Game Strategy.

The challenges in 2016 included:

- Reaching children in inaccessible areas of Borno state. Despite increasing military advancement and liberation of insecure areas, inaccessibility remains a major challenge in a significant area of Borno, estimated at 39% inaccessibility in December 2016. Additionally, there are still significant population movements and displacements.
- Heterogeneous 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 in some high risk states; inconsistent leadership and political commitment especially at the LGA level.
- Prolonged health worker strikes that hindered smooth implementation of activities in some states and interruption of routine immunization service delivery, further contributing to increased risk of VDPV outbreaks.
- Global vaccine supply constraints.

## **1.2. Poliovirus Epidemiology**

Over the past four 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. The goal of the 2016 NPEEP was to sustain interruption of WPV transmission and build the momentum towards certification. In August 2016, four cases of WPV1 were confirmed in 3 LGAs in Borno state among IDP children from previously inaccessible areas.

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 and 1 case in 2016 in Sokoto state. cVDPV2 was also detected from a healthy contact of the WPV1 case in Monguno ward. In 2016, Nigeria expanded the number of environmental sites from 42 in 10 states and FCT to 56 in 14 states and FCT to complement the surveillance system. A reduction in environmental cVDPV was recorded from 54 in 7 states to 2 in 1 state (Kamacha River in Zaria LGA of Kaduna state) on 20<sup>th</sup> January and 4<sup>th</sup> March 2015 respectively, to 1 in Borno state, Maiduguri Metropolitan LGA in March 2016.

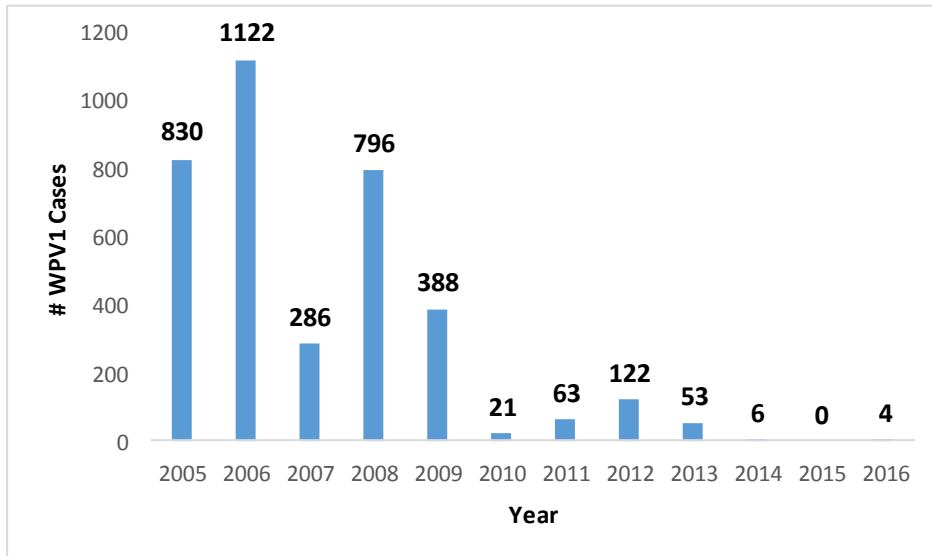
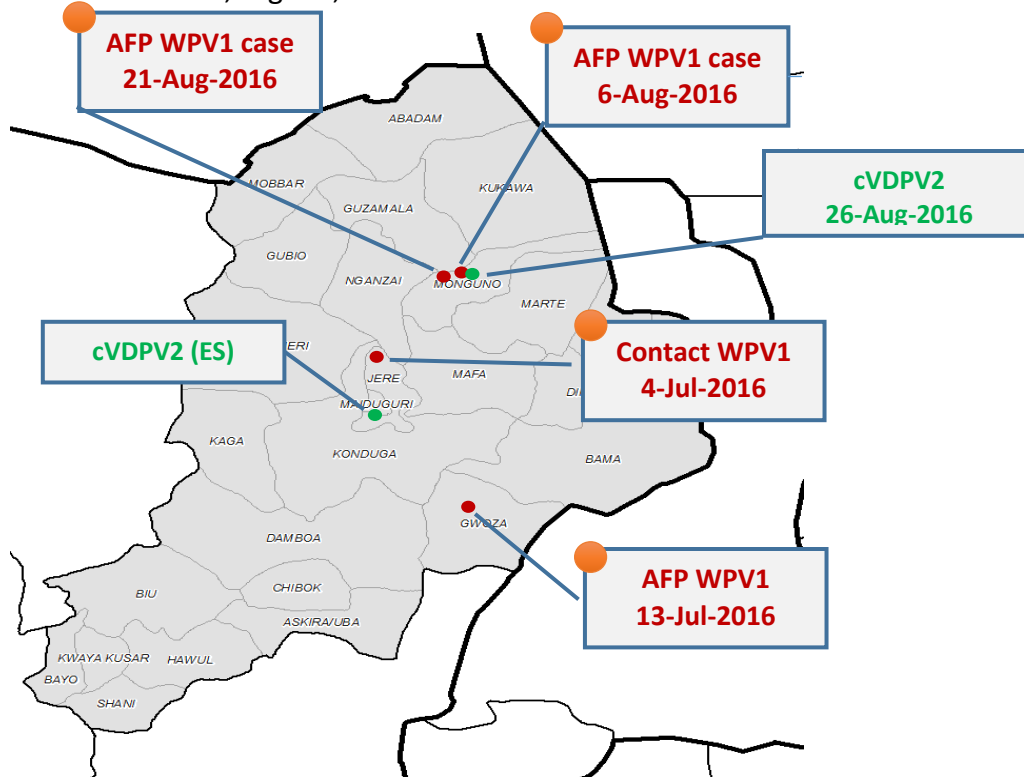


Figure 1: Confirmed WPV cases, Nigeria, 2005-2016

The WPV1 outbreak in 2016 was confined to 3 LGAs in Borno as a result of the implementation of high quality polio SIA rounds in Borno and other high risk states. This enhanced the population immunity and prevented further spread. In total, five bOPV rounds were conducted in response to the outbreak. To further boost immunity, IPV was integrated with bOPV during the second round in Borno State and 4 LGAs in Yobe State. In addition, special interventions were implemented at strategic locations to ensure high risk, mobile and displaced children were vaccinated.

Figure 2: Polio viruses in Borno, Nigeria, 2016





### **1.3 Profile of WPV1 Cases**

In 2016, the four WPV cases were among children between 22 - 55 months of age. The polio cases had not received any routine vaccines; the two cases from Monguno LGA were zero dose children (one from a non-compliant family), while the contact case from Jere had received 2 IPD doses (mOPV2), and the case from Gwoza had received 6 IPD doses. The families of the children were IDPs, poor and lowly educated (mostly koranic school education).

### **1.4 Genetic data:**

- Wild polio viruses: There was one circulating genetic cluster, N7B, from Genotype WEAF-B1.
- Circulating Vaccine Derived Polioviruses: There was 1 cVDPV from an AFP case with 12 nt difference from Sabin virus; and a cVDPV from a healthy contact of a WPV1 case. Environmental surveillance isolated 1 cVDPV2 belonging to the cVDPV–A genetic cluster.

## **2. ACTIVITIES IMPLEMENTED IN 2016 TO BOOST POPULATION IMMUNITY**

### **2.1 IPV campaign in Borno and vulnerable LGAs in Yobe**

Inactivated polio vaccine (IPV) was introduced into the national routine immunization schedule in 2015 in two phases, as part of the Polio End Game Strategic Plan. However, due to the interruption of routine vaccination services in inaccessible LGAs of Borno state, many children in Borno have not had access to IPV and other routine vaccines. The response plan to the WPV1 outbreak included a state-wide campaign with IPV for children aged 14 weeks – 5 years in Borno and in 4 LGAs of Yobe state (Damaturu, Gujba, Gulani and Yunusari) integrated with bOPV. 1,526,947 million children were vaccinated with IPV during the September round in Borno State and 157,196 children during the October round in Yobe State. LQAs results indicated 100% of target LGAs in Borno and Yobe States achieved at least 80% coverage.

### **2.2 Vaccinating in Security Compromised areas and Internally Displaced Persons (IDP) camps**

By December 2016, 39% of settlements in Borno state and 5% in Yobe state were completely inaccessible during IPDs due to insecurity. 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. Standard Operating Procedures (SOPs) for systematic engagement of the military and CJTF were developed and implemented. Borno State, with the support of partners, initiated and implemented the Reaching Every Settlement (RES) strategy in inaccessible settlements. RES strategy involves detailed consultative planning with stakeholders at LGA level and rapid vaccination visits depending on the security situation.

Table 1 below shows the number of OPV doses administered through special interventions from January – December 2016 in north eastern Nigeria.

Table 1: Children vaccinated through special interventions in security compromised areas, 2016

Interventions	Borno	Gombe	Yobe	Taraba	Adamawa	NE Total
Firewalling	28602	29764	26303	549		85,218
PHT	401614		364968	1250	80891	848,723
Market/Transit	440536	68134	67492	171398	126900	874,460
IBPT			53939	53605	136,141	243,685
Hit&Run	592409		211269	4438		808,116
IDPs	685661	8785	114310	8745	4246	821,747
Hospital	208134		40929			249,063
Nomadic	51627		108486	35427		195,540
Cross Border				306		306
RES	75187					75187
<b>NE Total</b>	<b>2,483,770</b>	<b>106,683</b>	<b>987,696</b>	<b>275,718</b>	<b>348,178</b>	<b>4,202,045</b>

The insurgency resulted in increased number of internally displaced persons (IDPs) in camps or assimilation in host communities in the northeastern part of the country and beyond. By November 2016, there were a total of 161 IDP camps (32 formal and 129 informal) in 27 LGAs of 4 states - Adamawa, Borno, Yobe, and Taraba. A total of 821,747 children aged 0 – 59 months were vaccinated with OPV from Week 1 to Week 51 of 2016 and those who did not present a card to indicate that they had received IPV were vaccinated with IPV.

Of the 821,747 children that were vaccinated in IDPs, 14,317 (2.0%) had not received any 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.

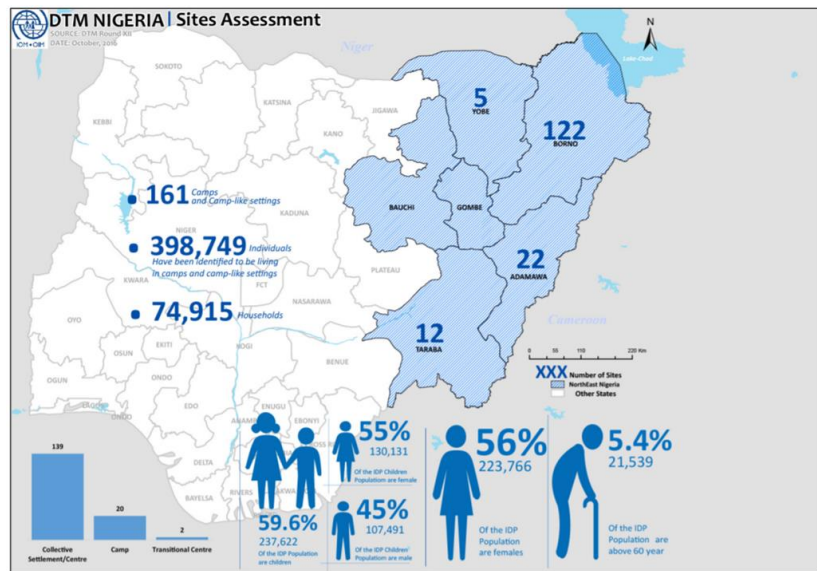
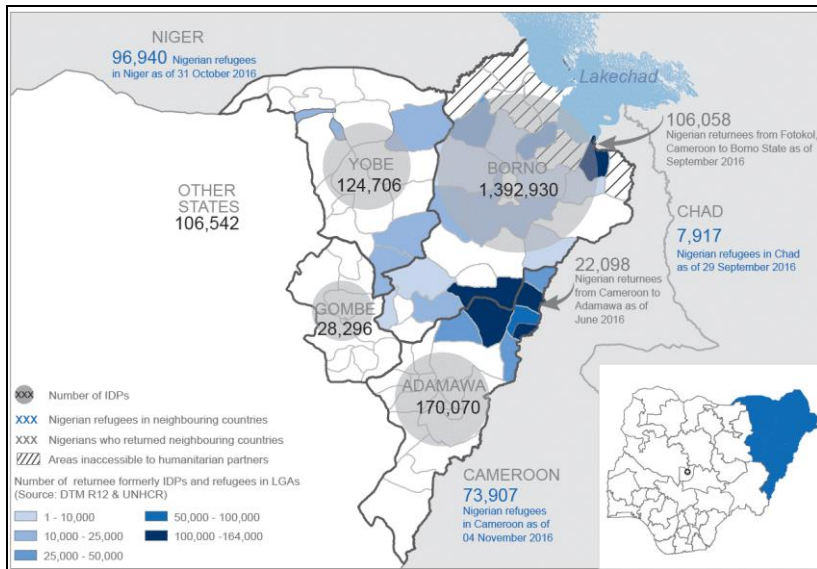


Figure 3: Movement of displaced populations in north eastern Nigeria, November 2016 (Source: OCHA)

Table 2: Children vaccinated in IDP camps in northern Nigeria, Week 01 – 51 2016

LGA/State	IDP Camps (Week 01-50)	Cumulative Children Vaccinated	Cumulative Zero Dose vaccinated	Cumulative IPV Vaccinated
Fufore	1	511	3	0
Girei	1	239	7	0
MUBI SOUTH	1	493	141	0
Yola North	2	434	10	0
Yola South	2	2569	167	0
<b>Adamawa</b>	<b>7</b>	<b>4246</b>	<b>328</b>	<b>0</b>
Bama	1	2495	681	1343
Biu	3	2347	35	110
Dikwa	3	41986	550	22
Jere	19	443396	4650	3851
Konduga	5	22426	845	1747
MAFA	2	528	14	256
Maiduguri	15	172483	3927	1020
<b>Borno</b>	<b>48</b>	<b>685661</b>	<b>10702</b>	<b>8349</b>
Ardo Kola	3	1525	50	22
Bali	5	1806	43	0
Donga	1	414	13	0
Gassol	1	520	7	0
Jalingo	2	1704	26	0
Kurmi	4	221	15	0
Wukari	6	2555	63	0
<b>Taraba</b>	<b>22</b>	<b>8745</b>	<b>217</b>	<b>22</b>
Bursari	3	25151	134	0
Damaturu	4	11790	713	11420
Geidam	-	3253	38	3760
Fune	-	16341	313	0
Jakusko	-	15459	270	6240
Nangere	-	2407	17	0
Tarmuwa	-	12360	135	13300
Bade	-	6781	176	0
Karasuwa	-	3525	54	0
Potiskum	-	7480	80	8620
Fika	3	2872	13	3340
Yusufari	-	2005	104	2400
Yusufari	-	125	5	140
Gujba	-	2461	27	2660
Gulani	-	1827	22	0
Fune	-	473	9	0
<b>Yobe</b>	<b>11</b>	<b>114310</b>	<b>2110</b>	<b>51880</b>
AKKO	3	2816	204	0
FUNAKAYE	3	1416	198	0
GOMBE	2	875	33	0
KWAMI	1	419	69	0
NAFADA	4	1277	301	0
YAMALTU DEBA	3	1276	125	0
SHAMAKI	-	132	4	0
NASSARAWo	-	65	1	0
PANTAMI	-	155	3	0
BOLARI EAST	-	45	0	0
GARKO	-	192	9	0
RIBADU	-	33	2	0
ASHAKA	-	23	0	0
BAJOGA WEST	-	27	3	0
BAJOGA EAST	-	34	8	0
<b>Gombe</b>	<b>16</b>	<b>8785</b>	<b>960</b>	<b>0</b>
	<b>104</b>	<b>821747</b>	<b>14317</b>	<b>60251</b>

### 2.3 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. Besides, 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 intensified in 2016. The number of transit teams in Borno State was increased following the 2016 WPV1 outbreak. States that performed well with transit vaccinations in 2016 were Borno, Taraba and Yobe. Through market vaccinations, 440,536 and 171,398 children were immunized with OPV in Borno and Taraba States respectively, while 208,134 and 40,929 children were immunized with OPV through hospital vaccinations in Borno and Yobe States respectively, and 108,486 children were immunized with OPV in Yobe State through nomadic vaccinations.

#### **2.4 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. Nigeria has a history of infecting other countries with the wild and circulating polioviruses. Also, Nigeria has history of importing viruses from neighboring states. 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 have been mapped with geo-coordinates obtained. 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.

#### **2.5 Routine immunization intensification in cVDPV and low population immunity LGAs**

Routine immunization was intensified in 59 vulnerable and cVDPV transmission prone LGAs to rapidly boost population immunity. Consequently, there was an increase in fixed and outreach sessions conducted to reach the unimmunized and under-immunized children.

#### **2.6 Mobile Outreach in Hard to Reach Areas**

Since May 2014, the Hard to reach mobile outreach services provided integrated immunization, maternal and child health care services in 3,200 hard to reach underserved settlements in 453 wards in 92 LGAs in 6 states of Borno, Yobe, Bauchi, Kaduna, Kano and Katsina. The initial settlements were selected in 2014 when it was found that 48% of the WPV cases reported in the second half of 2013 were

from hard to reach settlements. Periodically, the hard to reach settlements are reviewed with new ones identified and reprogrammed after improved population immunity in the previous set. In the security compromised states, the teams have been redeployed to support recently accessible areas and also target vulnerable populations in underserved IDP population and new arrivals from liberated settlements. Furthermore, the hard to reach mobile strategy has been adopted as part of the humanitarian crises response, with additional teams engaged in Borno state to target 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 September 2016, the project had administered 408,825 OPV doses to children 0 – 59 months, 175,260 children had been reached with Vitamin A, 155,034 children had been dewormed and treatment of minor ailments provided to 277, 632 persons.

## **2.7 Boosting population immunity in 56 vulnerable LGAs using polio infrastructure**

Special focus was given to 56 very very high risk and very high risk LGAs in 18 states (Adamawa, Bauchi, Benue, Edo, Enugu, Gombe, Kano, FCT, Kaduna, Katsina, Kwara, Lagos, Nasarawa, Osun, Rivers, Oyo, Sokoto, Rivers and Taraba), through use of polio infrastructure to support activities to boost population immunity. Plans to address gaps in routine EPI and boost immunity were developed, closely monitored, performance tracked by the EOC and review meetings held with the respective LGAs to assess performance.

By November 2016, 40 of the 56 high risk LGAs (71%) had achieved at least 10% increase in routine immunization coverage compared to 2015; 79% of the LGAs achieved >80% coverage compared to 54% of the same LGAs for the same period in 2015.

## **2.8 Directly Observed Polio Vaccination (DOPV)**

The DOPV strategy continued to be an effective approach for attracting children to be vaccinated outside the household to ensure that the 2 drops of OPV are administered. DOPV was conducted in 90 LGAs in 12 high-risk states for polio in Nigeria. Their selection was based on the risk categorization by the National EOC and Global Goods classification.

There has been a steady increase in population immunity in all the 90 DOPV implementing LGAs since the introduction DOPV in 2013. The number of states in which more than 90% of children received more than 4 OPV doses increased from 7 in 2013 to 11 by July 2016.

In Borno State, DOPV was initiated during the implementation of the outbreak response in four LGAs in June 2016. Specifically, in the target LGAs in Borno, there was an increase in the absolute number of children vaccinated from 742,917 in May 2016 to 883,396 in July 2016. In July 2016, DOPV contributed 78.6% of the total number children vaccinated in all the four LGAs, with MMC reporting 85.5% of the children vaccinated through DOPV.

## **2.9 Health Camps**

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 2016, there was targeted scaling up of health camps during specific interventions and IPDs. About 2,021 health camps were implemented across the 11 high-risk states during each IPD, with a cumulative total of 4,347,713 children vaccinated in the year 2016 rounds of IPDs and the 5 outbreak responses conducted.

### **3. REMAINING CHALLENGES FOR FOCUS IN 2017**

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

Although Borno and Yobe States implemented all scheduled polio campaigns, not all LGAs or wards within LGAs have completely and consistently been accessible to the vaccination teams. The number of inaccessible settlements reduced in 2016 from 61% to 39% in Borno state and 17% to 5% in Yobe state between January 2016 and December 2016. Despite the insecurity having an impact on campaign performance, Borno and Yobe states have managed to achieve the target threshold of at least 80% LGAs achieving at least 80% coverage. Surveillance activities have been intensified in these states to ensure that no polioviruses are concealed due to the ongoing insecurity. However, PEI activities including surveillance could not be implemented in 39% of Borno state territory that remains inaccessible due to insurgency by end of December 2016. As shown in Figure 4, the immunity profile of non-polio AFP cases in both Borno and Yobe States is much lower compared with other high risk states in the north east zone.

There was an increase in insurgent attacks in Borno State in 2016 compared to 2015 that resulted in increased displacements within and outside the State. IDP camps continued to sprout in different parts of the country but mostly in the north eastern and north central States (FCT, Nasarawa, Benue and Niger States). By November 2016, it was estimated that close to 2 million people had been displaced from inaccessible areas of Borno State. The continued movement into and out of Borno with the fluctuating security situation poses a huge risk of transmitting polioviruses. Also, insecurity due to tribal communal clashes in the north central part of the country has also resulted in the displacement of families in to IDP camps and communities.



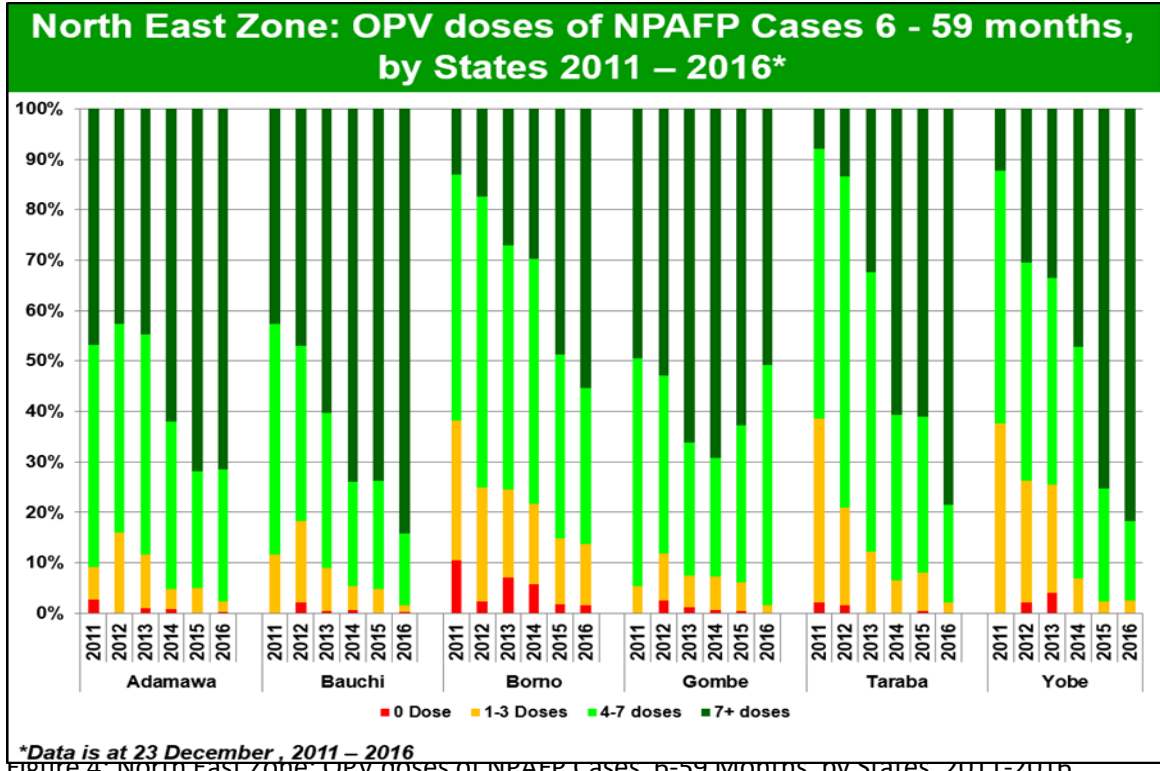


Figure 4: North East Zone: OPV doses of NPAFP Cases, 6-59 MONTHS, by States, 2011-2016

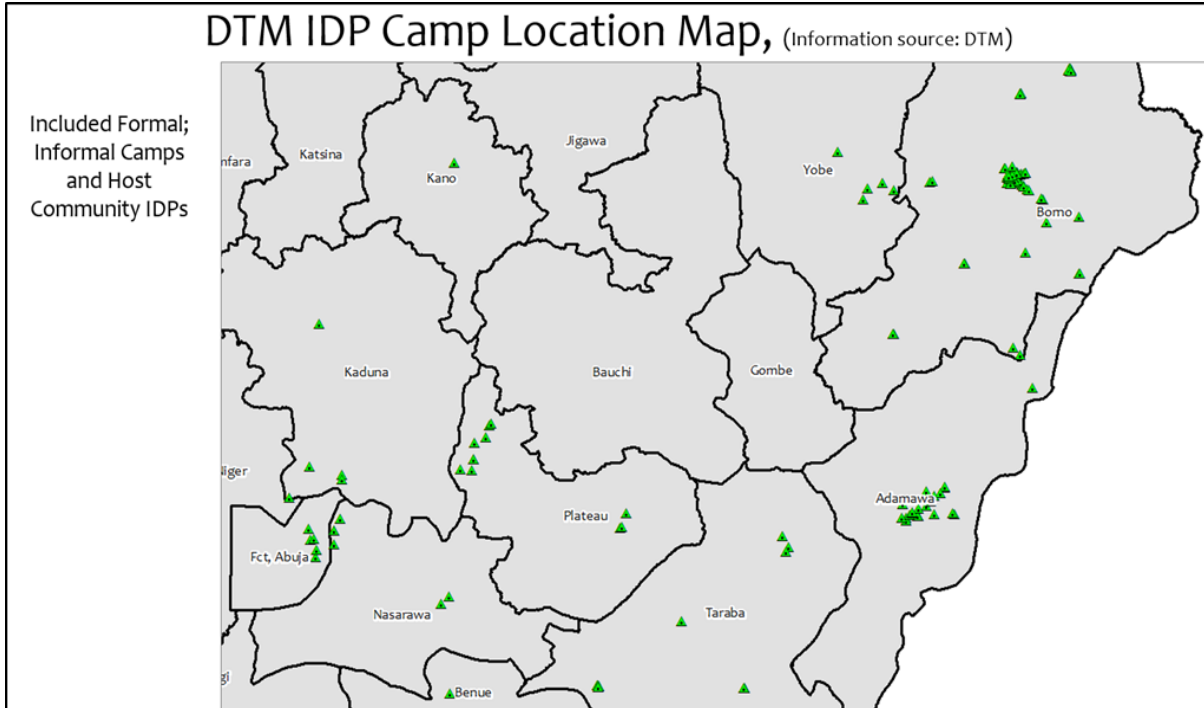


Figure 5: Location of IDP camps in northern Nigeria, 2016

### 3.2 Population immunity gaps and continued risk of VDPV

Population immunity remains fragile with the risk of continued transmission of the virus (wild or vaccine derived) due to accessibility and population immunity gaps. Figure 5 illustrates gaps in population immunity to cVDPV type 2 across the states after implementation of scheduled IPDs using mOPV2 in the north east by end of December 2016.

Gaps in population immunity in the southern states, resulting from prolonged interruptions in service provision due to frequent health worker strikes in some states, complacency and sub optimal coverage in SIAs, also pose a risk for VDPV outbreaks.

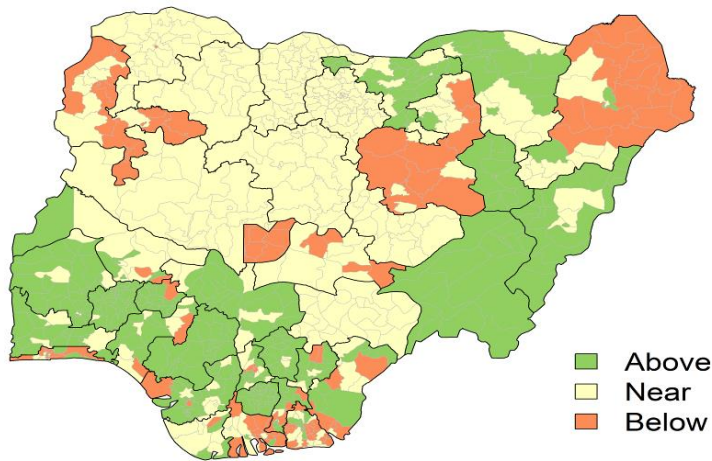


Figure 6: Type 2 population immunity profile after mOPV2 campaign in Zone 1, Nigeria, December 2016  
 Source: Institute of Disease Modelling (IDM)

Sero-prevalence surveys conducted in 2016 in Borno and Yobe States indicate suboptimal type 2 immunity in Yobe, especially among children aged 6 – 9 months. (Figure7).

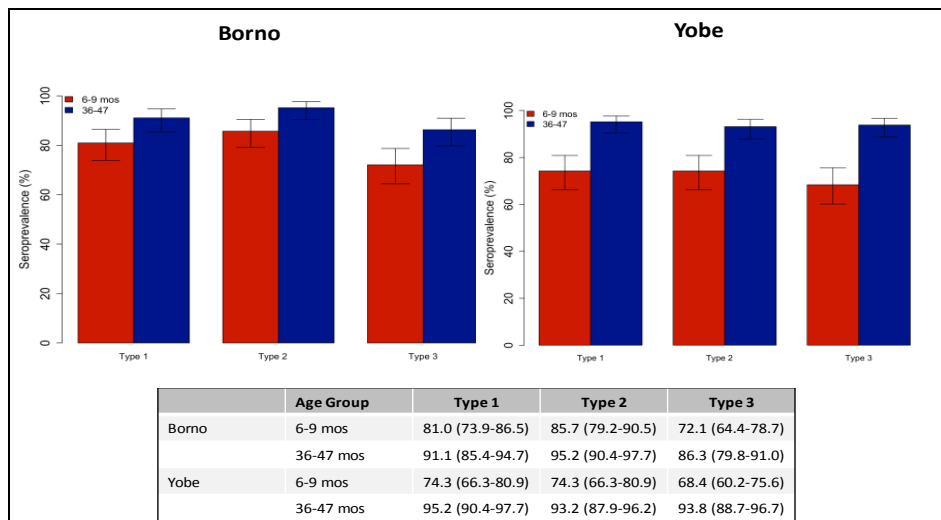


Figure 7: Sero prevalence survey results, Borno and Yobe, 2016

Based on administrative data from the DVD-MT, by October 2016, out of the 774 LGAs: 41 (5.3%) have OPV3 coverage less than 50%; 122 (15.8%) have their OPV3 coverage between 50% and 79.9%, and 611 (78.9%) have 80% or more OPV3 coverage (Figure 7). While for IPV out of the 774 LGAs: 70 (9.0%) have coverage less than 50%; 212 (27.4%) have coverage between 50% and 79.9%, and 492 (63.3%) have coverage 80% or more. With the noted difference between the reported administrative coverage for OPV3 and IPV, there could be more LGAs with lower coverage, hence, the risk for cVDPV outbreaks remains. Furthermore, immunity profile for OPV3 coverage of non-polio AFP cases in 2016 depicts low coverage in the following states: Rivers (65%), Akwa Ibom (75%), Abia (85%), Borno (86%), Cross Rivers (89%) and Plateau (89%).

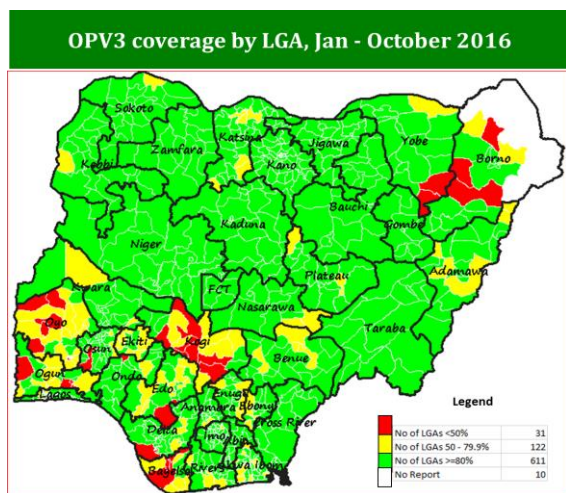


Figure 8: Routine OPV3 Coverage by LGA, Nigeria, January-October 2016

The cVDPV2 case detected in Bodinga LGA in October 2016 indicated gaps in population immunity, further confirmed by the household community survey in the affected settlement which showed very low routine immunization coverage, despite high SIA coverage. More effort is needed to increase demand for routine immunization in high risk areas.

Movement of nomadic populations across the country poses another risk to the spread of the circulating virus with risk of re-infecting other states. Just like the commercial traders, the beginning of the dry season (low polio transmission season) marks the commencement of nomads' movement from the upper northern states to the north central part of the country in search of pasture. There are so many nomadic routes traversing the northern states of the country in all directions. The nomadic routes have also been historically associated with long-range transmission of polio virus in the northern part of the country, including the north-central states.

### 3.3 Risk of complacency

The initial removal of Nigeria from the list of polio endemic countries was misinterpreted by many parties to mean that polio virus has been eradicated from Nigeria. This created a sense of complacency that the "job is finished" resulting in a new wave of challenges: wavering political support, reduced

counterpart funding, non-compliance in some communities and ‘fatigue’. The economic recession in Nigeria has also contributed to reduced local resources and prioritization of other activities.

### **3.4 Surveillance gaps**

There have been improvements in AFP surveillance performance in 2016 compared to 2015 with more AFP cases detected in 2016 – 17,578 as at week 52 compared to 13,985 in the whole of 2015, which represents a 24% increase in detection rate. The increased detection is attributed to expansion of reporting networks including community informants, capacity building and sensitization, engagement of the surge capacity in surveillance activities as well as partnership with other stakeholders. Performance indicators show that the AFP surveillance system is more sensitive, even in security-compromised areas. In 2016, Borno State reported 625 AFP cases compared to 353 cases in 2015 while Adamawa and Yobe States reported 525 and 420 AFP cases respectively in 2016 compared to of 359 and 336 cases respectively in 2015. These figures represent a 71%, 46% and 25% increase in AFP cases detection in Borno, Adamawa and Yobe states respectively in 2016 compared to 2015. As of November 2016, 99% of the 774 LGAs in the country have met the minimum of the two main performance indicators (NP-AFP and stool adequacy rates), a feat which was also achieved by December 2015.

Although there was a reduction in the number of AFP cases classified as polio compatible by the National Polio Expert Committee (NPEC) from 24 cases in 2015 to 13 cases in 2016, this indicates that there are still surveillance gaps that need to be addressed. These gaps include inadequate active surveillance, sub optimal quality of active surveillance leading to missed AFP cases, knowledge gaps among clinicians and community informants, sub optimal IDSR surveillance and 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.

These surveillance gaps must be addressed in 2017 to ensure timely detection of any poliovirus transmission so that timely and adequate mop-up response can be mounted. Additionally, the OPV doses of the non- polio AFP cases will be used to identify areas with population immunity gaps so that immunization activities will be intensified to boost population immunity in the vulnerable areas.

## **4. GOAL, TARGETS, AND MILESTONES FOR 2017**

### **4.1. Goal**

The overall goal of the NPEEP 2017 is to interrupt all poliovirus transmission.

### **4.2. Targets**

- Target 1:** Achieve and sustain polio free (WPV, cVDPV) status by December 2017
- Target 2:** Achieve and sustain surveillance performance indicators in all LGAs by December 2017
- Target 3:** 50% reduction in number of unimmunized children in VVHR LGAs
- Target 4:** Transition Plan completed and approved by June 2017

### **4.3. Major Milestones**

- Aggressive advocacy and engagement plan in place for Governors, LGA chairmen and key stakeholders such as donors by February 2017
- Borno and Yobe States Strategic Operational Plan 2016 for security compromised areas finalized by January 2017 and implementation closely monitored by February 2017
- In accessible areas, all outbreak mop-up responses to polioviruses detected by AFP or environmental surveillance conducted timely and adequately as per GPEI and EOC guidelines
- All very high risk and vulnerable LGAs have routine immunization strengthening plans by March 2017 and implementation closely monitored monthly by the EOC
- Expansion of environmental surveillance to at least four additional states by Sept 2017
- 90% of planned active AFP surveillance visits to prioritized sites conducted by June 2017 and AVADAR expanded to at least two additional states by Sept 2017.
- 10% increase in community informants in insecure areas of north east Nigeria
- Finalization of transition plan by June 2017

## **5. STRATEGIC PRIORITIES FOR 2017**

The strategic priorities identified by the EOC after consultation with immunization partners and local stakeholders to achieve the set goal, targets and milestones include: (1) sustaining resilience; (2) increasing access to vaccination in security challenged areas and IDPs; (3) enhancing SIA quality in prioritized vulnerable areas; (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; and (8) polio transition planning. These strategies will be underpinned by strict adherence to the accountability framework which continues to guide the NPEEP.

### **5.1 Sustaining resilience: intensifying social mobilization**

The reclassification of Nigeria as a polio endemic country in September 2016, following the outbreak of WPV in Borno State in August, after two years of interruption of transmission has the potential to demotivate key stakeholders including caregivers, frontline workers, community, traditional, religious and political leaders as well as donors. Communication and advocacy efforts in 2017 will entail rebuilding trust in the ability of the country to contain the outbreak and interrupt transmission and galvanizing all stakeholders to appreciate the fact that although the outbreak is geographically limited to the northeast zone, the entire country is still at risk from poliomyelitis. Consequently, there is need to secure stronger commitment from political, traditional and religious leaders at all levels through reinvigorated systematic engagement. Also, caregivers, frontline workers and communities need to be motivated to continue to ensure that every eligible child is immunized during supplemental immunization campaigns and through routine immunization services.

Sustained support from donors through prioritization of the country in resource allocation and international advocacy will be critical. Global discourse will be hinged on the message that Nigeria has

the technical capacity and political will to contain the outbreak, stop transmission and achieve eradication.

Within the country, the mechanism for tracking the revised 'Abuja Commitment' dashboard will be strengthened by including verification and evidence of performance for each indicator while gaps in political commitment will be timely addressed through high level advocacy. Also, Presidential, State and LGA Task Forces will be reinvigorated to strengthen political oversight. Donor engagements will be more regular through biannual meetings, facilitation of field visits and visibility.

In 2016, high level advocacy (HiLAT) was reinvigorated commencing with Adamawa and Taraba States in the northeast zone. It will continue in 2017 with prioritization of the remaining northeast states and will include expanding the scope to critical southern States. Evidence-based communication and advocacy efforts will be sustained with more timely analysis and dissemination of social data after every SIA, delving deeper into reasons for 'child absent' through special investigations and regular polling surveys on knowledge attitude and practice (KAP). The concept of placing polio within the broader health context of child survival in messaging was started in 2016. This will be sustained in 2017 with entertainment-education as the key channel for message dissemination at the community level. 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 Da'awah Coordination Council of Nigeria (DCCN) and the Christian Association of Nigeria (CAN) and other community-based organizations, including youth groups, Polio Survival Groups (PSGs), will be further engaged to build trust.

The scope of the volunteer community mobilizer (VCM) network will be expanded to other critical high risk States, especially Adamawa, Gombe and Taraba, as may be guided by the EOC. Redistribution of VCMs within States in line with 2017 high risk algorithm will be undertaken. The VCM network will be systematically engaged to track movement of internally displaced persons in IDP camps and host communities in the northeast states. Strict adherence to the accountability framework for all communication personnel at the operational level will be promoted. Additionally, new mobile phone technology will be rolled out to further enhance household and community engagement, generate demand and reduce proportion of missed children.

The inter-personal communication training (IPC) with the new training module, kick-started in Borno State in 2016, will be reviewed to fine-tune the module for adaptation for use in other high risk States and the IPC training expanded to other high risk states.

An overarching messaging framework that places polio in the broad context of immunization and child survival will be developed for all key audiences with focus on entertainment-education activities. Message dissemination will be primarily through community and household channels such as mobile theatre (a.k.a majigi), viewing centres, praise singers and other community entertainers and new technologies. States will be supported to develop and produce customized behavior change communication (BCC) materials to suit their peculiarities. Also, States will be encouraged and supported

technically to systematically engage the mass and traditional media through regular orientation opportunities and the continual roll-out of key themes as identified via KAP surveys and any other special investigations approved by EOC.

A national Reward Scheme to motivate frontline workers and other polio personnel will be rolled out in 2017. Emphasis will be on non-monetary rewards. Partners will be encouraged to integrate their non-monetary reward systems with the scheme for standardization and uniformity. A national guideline for institutionalizing evening review meetings (ERMs) and trainings as recognition and motivational mechanisms will be developed and implemented.

#### **5.1.1 Integrated messaging**

- Develop overarching message framework for all key stakeholders – political, traditional, religious and community leaders, donors, frontline workers, communities, etc
- Entertainment-education packages in local languages for local mass and traditional media platforms to reflect integrated messaging that places polio within the broad context of routine immunization & child survival
- Develop and produce State customized new BCC materials to enhance visibility, awareness and further improve acceptability (States to be support with technical and material resources)

#### **5.1.2 Reducing chronically missed children**

- Undertake special investigations following each polio campaign to understand in depth the reasons for chronically missed children; especially ‘child absent’.
- Undertake periodic KAP surveys to guide communication planning and interventions
- Develop evidence based communication plan in every high risk LGA, including a focus on activities in the high-risk wards to address the locally specific reasons for missed children, especially the insights from the special investigation and KAP;
- Reinvigorate engagement with DCCN to further build trust and increase risk perception
- Intensify in-between round activities to track and vaccinate missed children

#### **5.1.3 Intensive Communication support for Northeast States (Borno, Yobe, Adamawa, Gombe, Bauchi and Taraba)**

- Expand VCM network to priority LGAs in Gombe, Adamawa, Taraba and Bauchi States
- Reallocate VCMs to highest priority LGAs in the other northeast states
- Sustain engagement of Tsangaya school proprietors, teachers and their spouses
- Review 2016 IPC training in Borno and use lessons learnt to fine-tune the training module for use in other States
- Prioritize IPC training using the new training module in the remaining northeast states
- Systematically engage VCMs to track movement of IDPs in camps (formal & informal) and host communities
- Sustain engagement of community influencers and CBOs, including youth groups
- Develop and produce customized messages in local languages for IDPs
- Improve social data reporting and analysis
- Document communication interventions after every polio campaign

#### **5.1.4 Enhancing demand for routine immunization**

- Every high risk LGA to have an evidence-based integrated communication plan for PEI & routine immunization.
- Facilitate implementation of NTLC 2016 Plan for supporting RI in polio high risk LGAs
- Enforce accountability framework among mobilizers and other communication personnel at the operational level

#### **5.1.5 Ensuring strong political support for immunization**

- Review the tracking mechanism for the revised 'Abuja Commitment' dashboard by including verification and evidence of performance for each indicator. And closely monitor the release of counterpart funds and other key indicators of political commitment;
- Regular interface with chairmen of very high risk LGAs to follow up on gaps in the dashboard and sustain political support at the operational level
- Production and circulation of **State Monthly Score Card** on PEI and RI performance of each state to engender competition among Governors;
- High Level Advocacy Team (HiLAT) to follow up with State Governors and the Nigerian Governors' Forum on areas where there are gaps highlighted by the 'commitment' dashboard through one-on-one engagement;
- Reinvigorate the Presidential Taskforce to address security challenges and implementation of 'Abuja commitment'.
- Engage international, national and state media proactively to ensure editorial content reflects the new message framework and supports efforts to enhance political commitment.

#### **5.1.5 Strengthening engagement with donors**

- Periodically review donor landscape mapping within Nigeria
- Conduct bi-annual meetings with Heads of Donor Agencies/governments for updates and recognition
- Facilitate periodic donor field visits for confidence-building

#### **5.1.6 Motivating the frontline health workers**

- Implement National recognition scheme for frontline workers with emphasis on non-monetary rewards
- Develop and implement guideline on the use of trainings and review meetings as opportunities for motivation and recognition in a more systematic way;

#### **5.1.7 Documentation**

- Produce and present to EOC, a comprehensive communication report, including detailed data analysis for every polio campaign;
- Display social data at the EOC after every polio campaign
- Produce and publish annual polio communication report to document EOC activities and best practices
- Publish EOC Polio Bulletin every month.



### **5.1.8 Targets, milestones and indicators**

- Integrated message framework in place by end January 2017
- New mechanism for tracking revised Abuja Commitment to include verification and evidence of performance for each indicator rolled out by end January 2017
- Increased proportion of States providing State & LGA counterpart funds during IPDs by end 2017
- At least 80% of evening review meetings chaired by LGA chairmen in high risk states by end 2017
- Reduced proportion of missed children to less than 2% in high risk states by end 2017
- All high risk states with new BCC materials in local languages by June 2017
- Expansion of VCM network to Adamawa, Taraba and Gombe states by June 2017
- Special investigation into reasons for high missed children undertaken after every campaign;
- National recognition scheme for front-line workers rolled out by end March 2017
- Guidelines for using ERMs and training as motivational opportunities rolled out by end February 2017
- New audio-visual entertainment-education package for mobile theatre, viewing centers and radio rolled out by June 2017
- Communication report available for every polio SIAs by end 2017

## **5.2 Enhancing SIAs quality in prioritized vulnerable areas**

### **Activities**

#### **5.2.1 Focus on weak performing areas (deployment of stronger support):**

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 review and re-deployment on LGA and ward staff will be done as the situation demands based on available poor performance data.

#### **5.2.2 Identifying vulnerable areas**

The classification of LGAs as vulnerable is jointly conducted by the National EOC, WHO, CDC and Institute of Disease Modelling (IDM), and reviewed every 6 months. Furthermore, other analyses such as LQAs performance, independent monitoring and vaccinator tracking every round will continue to determine the vulnerability of LGAs. This would be in addition to other risks such as detection of non-Sabin-like viruses. The available information will be used to determine the LGAs and settlements with persistent poor performance and hence vulnerability.

#### **5.2.3 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 2017, the critical activities will include:

- ***Strengthening Ward selection committee meeting endorsement:*** States and LGA Task Forces will review the appointment of ward focal persons in the very high risk persistently poor performing wards and will hold partner agencies accountable for their staff working in these wards. A responsible coordinator from a partner agency will oversee the selection process of teams in poor performing LGAs and wards. The programme will focus on the process of team selection and very senior programme officers from government and partners will be deployed to the wards to oversee the team selection process by enforcing accountability and transparency in the process. Senior partner agencies' staff will verify and validate that ALL ward selection meetings have been done and vaccination team members selected as per set National IPDs Guideline.
- ***Household based micro-planning revision and extension of enumeration:*** Micro-plans of all LGAs will be reviewed after each SIA round after analysing tally-sheet, LQAs and independent monitoring data from the concluded IPDs. Extensive walk-throughs with enumeration and validation to revise micro-plans in identified poor performing LGAs from the desk review and in select states with questionable denominators will be conducted.
- ***Enhancing quality of team members training:*** Training modules for major components of the IPDs will be developed to ensure consistency of the trainings. 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.
- ***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 will be piloted and scaled up to facilitate monitoring, tracking, analysis and storage. The accountability framework will be enforced on poor performing government and agency staff.
- ***Improve SIAs monitoring:*** For enhanced independent monitoring, the State EOCs and LGA teams will select the settlements for independent monitoring before deployment of monitors based on the high risk operational plan (poor performing, underserved etc.). To ensure quality data from independent monitors, government and partner agency staff will develop itineraries to monitor the independent monitors work. They will validate at least 20% of the independent monitors' data. Mock LQAs will continue to be implemented in selected LGAs and settlements during the IPDs in areas where independent monitoring reveals poor quality of IPDs for intra-campaign corrective

measures. LQAs will be implemented after the round; and final LQAs verification will continue to take place after each round in 30-40% of selected LGAs, and where anomalies are found between the LQAs surveyor and LQAs verifier, the surveyor will be held accountable.

- **Enhancing the quality of cross border activities:** Continue collaboration, planning and synchronized implementation of PEI activities across international, interstate, inter-LGA and inter-ward borders.
- **Community engagement:** The community structure will be systematically engaged in the entire process of SIAs implementation. Youth, traditional leadership, Community based organizations and CSOs will be engaged. They will assist in identifying local guides, and vigilante support to the teams during the IPDs preparation and implementation

#### 5.2.4 Targets, milestones and indicators

- At least 90% of target LGAs achieving at least 90% coverage in each SIA by December 2017
- All IDP camps and accessible areas in Borno achieving at least 80% coverage by December 2017
- Reduced proportion of missed children to less than 2% in accessible areas by December 2017.

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

#### 5.3.1 Activities

- **Fortnightly security risk assessments** will continue to be conducted to determine accessibility for PEI/EPI activities. For these to be done with ease and accuracy, continued involvement of the major stakeholders like the security and intelligence officers who are part of the State EOCs / Task forces, LGA chairmen who are chief security officers of the LGAs, traditional and religious leaders as well as the civilian JTF who have played a very crucial role in the fight against insurgency will be required. Experience in 2016 indicates that while whole swathes of LGAs may not be accessible due to insecurity, the latter group of individuals provide reliable information around how a few settlements or wards could be systematically approached for limited PEI activities. The implementation of the planned IPDs will be geographically adjusted according to the prevailing security risk assessments.
- **Deployment of National and state EOC personnel:** Deployment of personnel to support PEI activities in Borno State will continue with focus to needy LGAs. Previously, many personnel assigned to support Borno State ended up supervising PEI activities in accessible areas in Borno particularly in Jere and MMC. 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 nation 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.

#### 5.3.2 Borno State

At the end of 2016, only 2 LGAs - Abadam and Marte were fully inaccessible while 5 LGAs were completely accessible and 20 LGAs were partially accessible. The fully accessible LGAs are 4 LGAs in the

southern part of the State and MMC. Jere LGA, though seemingly fully accessible has some areas that are inaccessible in its rural wards. (Refer to Annex 3 for Map of Accessibility in Borno for IPDs in 2016).

The strategic priorities for Borno in 2017 include:

#### ***5.3.2.1 Vaccination in Recently Accessible Territories (VRAT)***

As the military continues to make transient gains in different LGAs and wards with insecurity, the programme has trained and prepositioned human resources, logistics, vaccines and other materials required to mount a hit and run exercise. This would be done in collaboration with NEMA and the Military, leveraging on the security provided by the institutions, to conduct a campaign within 48 hours of obtaining information that territories are safe. For this information to become readily available, there is need for constant interaction between the EOC, NEMA and the Military to provide real time information on the accessibility of these areas. This is necessary to ensure that the programme keys into the operations of NEMA, which typically involves the transportation of food and medical supplies to the communities that have been under the control of the insurgents. This campaign is feasible because in most of the previously occupied LGAs and wards, most of the population is concentrated in the LGA Headquarters such that access to eligible children becomes feasible by such an action.

#### ***5.3.2.2 Vaccination in Partially Accessible Territories (VPAT)***

As a result of the military actions by the Nigerian Army, there has been a conscious shift in the accessibility of small areas due to the tactical movement of insurgents from areas they previously occupy. While the Army may have deliberately liberated some of these territories, tactical withdrawal by insurgents has also made some areas accessible so that a whole LGA that was previously occupied by the insurgents, now has some sections that are passable for goods and services by LGA Chairmen and Local Access Security Facilitators. This means that some of the partially accessible territories are safe for well-defined, highly mobile teams to operate in. These teams are structured like the hit and run teams, however, the number of personnel, vaccines and logistics required would depend on the size of the target population. The plan will be for the nucleus of these teams to be formed by very competent and experienced health workers drawn from the metropolitan LGAs but supported by health workers from the host LGAs. For these teams to be successful they would require reliable intelligence on the security situation of the LGA, experienced logisticians, reliable cold chain equipment, and appropriate transportation. VPAT operations will continue in 2017 as the landscape of accessibility evolves.

#### ***5.3.2.3 Hit and Run Campaigns***

In 2016, 60 hit and run activities were conducted in 32 LGAs and wards with 824,657 children reached with OPV. In 2017, the programme will continue this activity in all insecure areas with primary focus in Abadam and Marte LGAs including other areas still under the insurgents. Reaching Every Settlement (RES) Strategy, initiated by the Borno State EOC will be targeted at settlements accessible with military escorts. 17 security challenged LGAs have been identified and selected for RES and detailed settlement accessibility line listing with participation of traditional leaders across all selected LGAs will be conducted. Military and paramilitary personnel will be engaged to protect vaccination teams during RES or to conduct vaccinations, data management and monitoring aimed at improving program quality. So

far, 1,422 of 2,265 settlements have been reached with OPV through the RES initiative with over 53,000 children immunized in 11 LGAs. The plan is to have 5 contacts per child with OPV.

#### ***5.3.2.4 Catch-Up Contacts for LGAs and Wards that have missed IPDs between 2015 and 2016***

Some LGAs and wards have consistently missed IPDs rounds due to persistent insecurity. These LGAs have been catalogued and as there are plans to conduct IPDs between January - June 2017, catch up campaigns would be conducted in the affected LGAs regardless of participation in any of the scheduled IPDs, assuming security improves. During the catch up campaigns, bOPV will be used and the target age will be older children who may have exceeded the target age group for OPV.

#### ***5.3.2.5 Enhanced Health Services***

Displacement of populations comes with disruption of health services with resultant epidemics recorded over time. The EOC will partner with relevant authorities to re-establish health facilities and intensify use of Health camps.

#### ***5.3.2.6 Establish and strengthen Routine Immunization services in IDP camps***

Although vaccinations are currently taking place in most IDP camps, deliberate steps will be taken to establish RI services in new camps. With vaccination cards given to all residents of the camp, this will be linked to other therapeutic services. 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.

#### ***5.3.2.7 Strengthen Permanent Health Teams to wards and settlements with inaccessibility challenges and persistent non-compliance***

Permanent health teams (PHT) strategy was devised to reach security compromised areas with vaccine when the insurgents were residing within the metropolis areas of MMC and Jere LGAs. In 2016, the role of PHTs was reviewed to focus on resolving noncompliance, particularly in Borno State. In 2017, this role will continue to reach vulnerable children at risk of perpetuating chains of low population immunity due to lack of vaccination arising from parents refusing access to the children.

#### ***5.3.2.8 Scale up permanent vaccination sites at all major transit points***

In 2016, the programme identified special transit points between accessible and inaccessible areas after realizing that insurgents were allowing populations under their control movement to markets and to seek health services for limited duration. Permanent vaccination sites have been established to immunize children coming out and getting into these areas with OPV and IPV including RI antigens. A total of 848,723 children have been immunized with OPV/IPV. This initiative will continue in 2017 with focus on ALL areas under insurgents' control.

#### ***5.3.2.9 Establishing Health Camps and expanding therapeutic feeding centers (OTP) / CMAM***

The displacement of communities because of insurgent activities brought with it a disruption of social life such as provision of basic health services and normal life activities that included farming as well as trading hence depriving individual families of income and capacity to fend for themselves. This had a

huge impact on the wellbeing of families and the hardest hit are children under the age of 5 especially infants. Cases of malnutrition and ailments such as diarrhoea and measles became rampant in displaced communities. The programme will continue to offer services such as treatment of minor ailments and expanding therapeutic feeding centers to curb the rising cases of malnourished children.

#### ***5.3.2.10. Enhancing AFP surveillance***

The focus will continue to be on improving strategies that would enable AFP reporting from inaccessible settlements and IDP camps. The intention is to ensure that cases continue to be reported outside of the orthodox health infrastructure. In 2017, there will be recruitment of more community-based organizations, individuals, informants (herbalists, bone setters, traditional birth attendants, Patent Medicine Vendors), and faith-based organizations to report AFP cases. As accessibility increases, DSNOs will be involved in VRAT and VPAT activities described above. Thus, as territories become accessible, community informants' structure will be improved upon and set up where it had been disrupted, health staff will be organized and trained and provided with management tools to conduct community case search for AFP cases that may have been missed. There will be a continuous effort to increase the number of meetings between DSNOs, health facility based focal persons and informants. Cases reported will have geo-coordinates and be mapped accordingly. The Auto-Visual AFP Detection and Reporting System (AVADAR) that helped to improve surveillance during the pilot phase in FCT and Kwara states and recently introduced in Borno state, will be expanded to 2-3 states by end of quarter 3 in 2017. AFP surveillance activities will be complemented by environmental surveillance (ES). A second laboratory for the analysis of ES samples will be set up at Maiduguri Lab, new states included in the network and an ES sweep organized as an innovative strategy.

#### ***5.3.2.11. Scaling up engagement of Local Government Chairmen, traditional, religious leaders and other influencers***

In 2016, there was sub-optimal engagement of LGA Chairmen, traditional and religious leaders as evidenced by the IPDs dashboard. Engagement of LGA chairmen, traditional and religious leaders and other stakeholders will be scaled up to build trust for the programme at the operational level.

#### ***5.3.3 Yobe State***

In 2016, the security situation improved tremendously in Yobe state which saw all the LGAs being accessible although two of them namely Gulani and Gujiba were partially accessible. PEI activities were conducted in all the wards except the few inaccessible wards in Gujiba and Gulani. Experience from reaching inaccessible settlements in Borno will be contextualized for improving access to vaccination in the 2 partially accessible LGAs in Yobe.

#### ***5.3.4 Adamawa and Taraba States***

In 2016, the two states of Taraba and Adamawa were classified as special states alongside other security compromised states of Borno and Yobe. However, following the improved security status of the states, they have been reclassified as very high risk states under tier 1 of 2017 High risk algorithm as they are in the north east zone and share international borders with Cameroon. Consequently, they will continue to be prioritized for support and supervision during the OBR campaigns.

### **5.3.5 North West Zone States**

Some states in the northwestern 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 be implemented in these insecure areas based on accessibility.

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

- Detailed Operational plan for Borno and Yobe States updated and implementation being closely monitored by end December 2016.
- Conduct 5 “Catch-up” OPV contacts in wards and LGAs that did not participate in planned IPDs rounds by December 2016
- Conduct 3 “Hit & Run” mop-ups to all wards with WPV and accessibility challenges that did not achieve high quality IPDs during “catch-up” contacts by July 2017
- Estimate of inaccessible children in Borno is reviewed monthly using the data on vaccination for newly arrived population, children covered by RES and permanent transit teams.
- Permanent Transit Vaccination sites established in all areas bordering inaccessible areas by end March 2017
- In the advent of improved security in areas with Permanent Health Teams, terms of reference to be reviewed with focus on resolving persistent noncompliance.
- Reactivate routine immunization services in newly liberated LGAs within one month of granted accessibility
- Targeted Health Camps and CMAM sites established and expanded in poor performing and non-compliant wards by March 2017
- Estimate of inaccessible children in Borno reviewed monthly using vaccination data from special interventions to reach children.

### **5.4 Mounting timely and adequate outbreak responses to all polioviruses**

Prompt and timely response to the reported outbreaks of any non-Sabin poliovirus is critical to the polio eradication initiative goals. The response activities need to be conducted in an appropriate and coordinated manner. The aim is to rapidly reverse and interrupt any circulating virus and mitigate its impact on the gains made so far. All efforts need to be harnessed both within and outside the global partnership to ensure its success. For areas with insecurity, comprehensive plans in collaboration with the military and local security network (Vigilante, civilian JTF and local community leadership) is required to implement any response.

The outbreak response, coordinated by the National EOC, will be conducted in strict adherence to the Global Outbreak Response Standard Operating Procedures (SOPs) and dashboard indicators (GPEI polio outbreak protocol).

#### **5.4.2 Activities:**

- **Appointment of senior outbreak response management team at national and states levels:**  
The overall response will be coordinated by the national EOC Incident Manager. The team comprises members from NPHCDA, National and State EOCs and State Task Forces including partners.
- **Development of state outbreak response plans:** All states will develop a state specific polio outbreak response plan. The plans will also ensure that outbreak responses are conducted timely as per the GPEI guidelines with approximately 2 million children targeted.
- **Timely deployment of the National Outbreak Management Team for all outbreak response activities:**  
All agencies will be expected to ensure that funds are set aside for timely dispatch of their respective outbreak team members to infected states within 24 hours of non-Sabin ITD notification.
- **Monitor and maintain the outbreak dashboard:** Monitor the implementation of outbreak response regularly, as per EOC Outbreak SOPs and the Outbreak dashboard. The dashboard will be improved by installing reminders to reporting of outbreak activities done in the infected state. This ensures regular sharing of updates on the progress of the response activity.
- **Maintain pre-positioning of vaccines and operational funds for outbreak response:** Monitor vaccine stock levels in country through weekly presentation at the EOC by the National Logistics Working Group on availability and forecast for OPV.
- **Use LQAs to monitor mop-up quality:** LQAS will continue to be conducted for each response to ensure quality. As set standards, ALL the implementing LGAs should be accepted at 90% coverage as estimated by LQAS. If these expected levels are not met through LQAS or independent monitoring findings, the LGAs will continue mopping-up areas which contributed to the poor quality before deciding that the response is adequate.

#### **5.4.3 Management of mOPV2 use post switch for type 2 events or outbreaks**

Nigeria has conducted a few mOPV2 OBRs in 2016 after the tOPV switch, from May through December 2016. Another round in expanded scope covering 18 states is planned for January 2017. Global guidelines for the management of mOPV2 were adapted to ensure adequate deployment and management of the mOPV2 during these response activities. The lessons learnt from the mOPV2 rounds in 2016 will be adequately implemented during any mOPV2 events or outbreaks in 2017.

The following steps will be followed to ensure mOPV2 vaccine accountability:



- The request for mOPV2 to be done using population figures agreed at the national EOC based on available vaccination data during the previous rounds of SIAs.
- Training of Cold Chain Officers and senior supervisors participating in OBRs on the guidelines for management of mOPV2 including lessons learnt, deployment of mOPV2 vaccine management tools especially the revised tally sheets and summaries and the form A to all levels and the rigorous implementation of the accountability process.
- 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.
- Senior Logisticians from national and zonal levels will continue to be part of the MST deployment during mOPV2 and all other OPV campaigns. The early deployment of these logisticians will be encouraged so that they are part of the planning process at the state level to ensure adherence to global guidelines. Trainings will also be conducted for them on the guidelines and updates discussed during such engagements.
- Documentation at all levels will continue to be strengthened by ensuring that all arrival procedures at the national level are strictly adhered to. The states logistics working groups will also be empowered to continue to provide oversight on reception of mOPV2 at state level while also ensuring adequate distribution planning.
- State LWGs will be obliged to 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.

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 mOPV2 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 of close the gaps will be implemented. At the end of the OBR rounds, a similar reconciliation of vaccines deployed and utilization reporting will be conducted to ensure total withdrawal of all mOPV2 from the field.

### **Operations at the vaccination team level**

The correct implementation of the revised tally sheets will continue to be encouraged while also ensuring that all mOPV2 vials are kept in Ziploc bags in vaccine carriers. 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.

The country will continue to conduct the monitoring and validation after each mOPV2 implementation 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 OBRAs. 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.

#### **5.4.4 Targets, Milestones and Indicators**

- National and State Outbreak Response Managers and teams promptly updated on confirmed outbreaks within 24 hours by the Government and partners as the need arises.
- 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. Strengthening routine immunization is labor, material and finance intensive, so it is key that the efforts of the polio programme towards strengthening routine immunization should be targeted to areas that pose a great risk to interrupting transmission.

If the prioritized areas already have other routine immunization projects being funded and implemented such as RI Intensification for vulnerable LGAs, Integrated Mobile Outreach for Hard to Reach Areas etc., the role of the polio staff and EOCs is to ensure that activities are being carried out as planned and ensure weekly reporting of number of sessions carried out and children vaccinated to the National EOC.

#### **Activities**

##### **5.5.1 Identify priority areas for strengthening routine immunization:**

These vulnerable areas include LGAs and wards with large numbers of unimmunized / under-immunized children, categorized as VVHR or VHR, evidence of polioviruses circulation, and those with population influx and internally displaced persons in camps or assimilated in communities.

#### **5.5.2 Development of routine immunization improvement micro-plans**

The national EOC and NPHCDA'S RI Working Group shall engage in discussions of the type of support that will be required by the vulnerable LGAs. Polio infrastructure will support the development of REW micro-plans that will include identifying the populations that are not being reached with services. This may include conduct of walk-through micro-plans, micro-census, enumeration and verifications to establish almost 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. To enhance routine immunization sessions, the health facilities may consider providing a minimum integrated package of MNCH services.

Although vaccinations are currently taking place in most existing IDP camps in Borno, moving forward, deliberate steps will be taken to establish RI services in new camps. In the newly liberated areas, the LGA team will plan for procurement of cold chain equipment required for re-establishment of cold chain storage facilities at LGA and in selected health facilities.

#### **5.5.3 Advocacy to states for ownership**

NPHCDA and the National EOC will 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 routine immunization intensification plans.

#### **5.5.4 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, and vaccine management data tools, vaccination data reporting and monitoring tools.

The National and State EOC will 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.

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.

#### **5.5.5 Targets, milestones and indicators**

- Priority LGAs / wards for strengthening RI identified and shared with State Task Forces / EOCs by February 2017
- Commencement of National EOC advocacy with state task forces / EOCs for human, material and financial support by March 2017
- Updated RI plans based on walk-through micro-plan data and session plans available by March 2017

- Data tools for capturing and monitoring routine immunizations performance available in priority LGAs by March 2017
- Polio surge capacity supporting and monitoring sessions by March 2017
- National and State EOCs / task forces commence weekly monitoring of RI performance by April 2017

## **5.6 Intensifying Surveillance**

A highly sensitive AFP surveillance system remains the gold standard for timely detection of poliovirus circulation and this will be critical in 2017 to ensure that poliovirus transmission is not missed anywhere in the country and especially in the security challenged states of the north eastern Nigeria.

In 2017, the real focus with regards to strengthening surveillance will be in the security challenged states of the northeast zone focusing on high risk populations, IDPs as well as the inaccessible areas. Greater effort will be geared towards intensive active surveillance in IDP camps and other health facilities including private clinics, engagement and sensitization of community informants from inaccessible areas, partnering and sensitization of other partners including security personnel, vigilantes and civilian CJTF. Provision of adequate logistics support to DSNOs and their assistants as well as regular refresher training of these personnel will be prioritized. Wherever indicated, additional DSNOs/ Assistants and community informants will be recruited to further support the surveillance system. 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 to security challenged states from the national level will be intensified. Innovations to improve AFP detection and reporting like the AVADAR are going to be embraced.

AFP cases from security challenged states will continue to be mapped by place of onset of paralysis to better give a more realistic picture of areas of poliovirus transmission and remove ambiguity in the assigning of AFP cases to LGAs. In addition, wherever security situation permits, geo-coordinates of active surveillance field visits to designated reporting sites, IDP camps and all AFP and polioviruses cases will continue to be taken. The use of an e-supervisory check list for IDPs camps on a mobile device which was introduced in 2016 will be sustained just like the ISS checklist. The ISS checklist has provided useful information that has been used to strengthen surveillance weaknesses and validate implementation of planned surveillance activities.

### **5.6.1. Activities**

#### **5.6.1.1. Enhance Sensitivity of AFP Surveillance:**

- Implement targeted surveillance activities to enhance surveillance in states with security challenges including: expansion of reporting network of informants, private and public health facilities and IDP camps; conduct of sensitization/trainings; provision of additional logistics to DSNOs and assistants; engagement of additional DSNOs/assistants wherever indicated; sensitization of other partners and professional groups including security personnel, vigilantes and civilian JTF.

- A network of informants (including Traditional leaders/ Ardos) of nomadic populations will be identified and trained in under-served communities including nomadic communities as well as border and hard-to-reach areas to boost AFP detection and reporting. Regular sensitization and feedback sessions will be conducted with these informants and any outstanding performance will be recognized and rewarded.
- Collection and analysis of stool samples from samples of healthy children arriving from security challenged communities will be initiated.
- Development of jingles and use of local radio stations to sensitize the public on surveillance.
- Monitor implementation of external surveillance reviews and ERC recommendations.
- Review and update the AFP surveillance network of public and private health facilities as well as community informants and reporting sites every 6 months.
- Continue to advocate to the political and technical leadership at all levels for support to surveillance especially in terms of logistics support for DSNOs and supervision/monitoring.
- Implement regular capacity building of personnel involved in surveillance including surveillance site focal points, DSNOs, State Epidemiologists, surge capacity and others involved in surveillance through supportive supervision, on-the-job training, peer exchanges and refresher trainings.
- Monitor quality of active surveillance and performance of the AFP surveillance network through supportive supervision, monthly and quarterly surveillance review meetings at LGA, State, zonal and national level as well as implementation of regular surveillance reviews especially in high risk states and other states based on risk analysis.
- Continue to motivate vaccination teams to report AFP cases through provision of N1,000 reward to any vaccination team that reports a true AFP case during IPDs nation-wide. Continue to provide N1,000 to any person who reports a true AFP case in Kano, Kwara and Borno states.
- Provide additional financial/ logistics support for DSNOs transporting samples from inaccessible/ partially accessible areas to the labs.
- Improve the sensitivity of AFP surveillance through collection of contact samples from all AFP cases from Adamawa, Borno and Yobe states and from all inadequate AFP cases from other states and FCT.
- Continue to update the inventory of laboratories with poliovirus and potentially infectious materials in the country.
- Investigate and respond to polio compatible cases as per the new guidelines.
- Expand current surveillance reporting network by at least 10 % (increase focal sites and community informants from the existing non-focal sites by Dec 2017).
- Continue to support the National polio committees (NCC, NPEC) to function effectively.
- Review, update and disseminate all surveillance guidelines (AFP, Measles, YF, and NNT) to accommodate the current practice and exigencies of the programme (with regards to IMB and ERC recommendations for example).
- Conduct assessment of the 2017 Borno surveillance plan by August-September 2017.
- Expand the AVADAR system to at least three additional states by June 2017.

#### **5.6.1.2. Sustain and Expand Environmental Surveillance**

- Support existing environmental surveillance activities in 15 states (Kano, Sokoto, Lagos, Kaduna, Jigawa, Yobe, Katsina, Kebbi, Borno, Adamawa, Rivers, Osun, Bauchi and Gombe and FCT)
- Expand environmental surveillance to at least 4 additional high risk/vulnerable states by June 2017 depending on poliovirus epidemiology.
- Establish environmental surveillance laboratory in Maiduguri national polio lab by Sept 2017.
- Implement environmental surveillance ‘sweeps’ in selected security compromised areas in Borno.
- Conduct quarterly supervision of all environmental surveillance sites.
- Conduct annual meeting of environmental surveillance system technical staff.

#### **5.6.1.3. Sustain performance and accreditation of the National Polio Laboratory activities:**

- Provide laboratory reagents, supplies and equipment.
- Provide technical support, capacity building and accreditation visits.
- Annual technical meetings with National Polio Laboratory staff.
- Support the new Maiduguri polio lab building to function efficiently.
- Support the Modular lab at University of Ibadan to function efficiently.

#### **5.6.1.4. Conduct polio sero-surveys:**

- Finalize IPV/bOPV clinical trials in Ilorin and Enugu that was commenced in 2016
- Conduct a repeat SPS in Borno (within operational limits consider both facility- based /IDP camp-based SPS by March 2017).

#### **5.6.1.5. Addressing emerging risk of Sabin like type 2 (SL2) isolates**

Isolation of SL2 is an indication of possible population immunity gaps and on-going use of type 2 containing vaccines. All SL2 are reportable under IHR regulations and have to be investigated.

- Conduct thorough investigation, profiling community immunity, and systematic search of health facilities (private and public) for any tOPV/ mOPV2 and submit report within 2 weeks of notification (for positive isolates detected four months after type 2 containing vaccine use).

#### **5.6.2. Targets, Milestones and Indicators**

- Sustained attainment of the two main AFP surveillance performance indicators at national, state and LGA levels by June 2017
- At least 80% of inaccessible or partially inaccessible LGAs meet required standards for surveillance indicators
- All confirmed SL-2 isolates detected four months after type 2 containing vaccine use investigated and report prepared within two weeks of notification
- At least 90% of all reported AFP and polioviruses validated and with geo-coordinates by June 2017.
- At least 5-10% increase in community informants conducting AFP surveillance by June 2017.
- Conduct at least 90% planned monthly active surveillance activities (including visits to community informants) by June 2017
- At least 50% reduction in polio compatible cases by December 2017.

- Establish environmental surveillance laboratory in Maiduguri by September 2017.
- Environmental surveillance expansion to at least three additional high risk/vulnerable States by June 2017
- Repeat sero-prevalence surveys conducted in Borno by March 2017.
- National Polio Laboratories maintain WHO accreditation in 2017.
- Achieve at least 90% implementation of external surveillance and ERC recommendations by March 2017.
- Polio containment activities in 2017 (phase 2a) if initiated globally is achieved in the country.

## **5.7 Cross border Collaboration**

Nigeria has 16 States, 60 LGAs and 201 wards along the international border with Cameroun, Chad, Niger and Benin Republic. Due to the confirmation of WPV1 outbreak in Borno Nigeria, within the Lake Chad basin, a Public Health Emergency of Regional Concern was declared in the region by the RD of WHO and Ministers of Cameroon, Central African Republic, Chad, Niger and Nigeria. The Lake Chad Basin will remain a high priority area for the program in 2017.

The emergency declaration requires all countries of the Lake Chad Basin to implement coordinated responses to prevent international spread and ensure rapid interruption of the outbreak. The Task Team (TT) set up by GPEI in N'Djamena will provide coordination support for implementation of synchronized polio vaccination and surveillance activities.

### **5.7.1 Activities**

#### **Coordination with the Lake Chad Coordination Task Team (TT)**

The direct and strong link between the NEOC and the Lake Chad TT in Ndjamenana will be strengthened and maintained to facilitate rapid decision-making, deployment of resources and problem solving among the five countries.

- In coordination with the TT, conduct risk assessments to ensure emerging threats are identified
- Regularly provide the TT with information and data sets in compliance with specific deadlines for submission, to ensure rapid analysis and identification of gaps in areas that impact cross-border Surveillance, SIA and in-between SIAs activities. The mechanisms for sharing information will include through the representative of Nigeria to the Lake Chad Basin Task Team, participation in the regular teleconferences and outbreak assessments and review meetings.
- Update work plan to ensure synchronization, efficient use of resources and maximum impact.
- Incorporate monitoring feedback from the Task Team in the in-country plans.
- Continue political advocacy to ensure engagement and program ownership at all administrative levels across the five countries.

### **5.7.2 Strengthening cross-border activities in the Lake Chad Basin countries**

Cross-border coordination and synchronization, communication, notification and tracking population movements in the Lake Chad Basin countries will be ensured.

- Updating and geo-referenced mapping of all the major crossing points along the international borders
- Ensure functional border/transit point vaccination is established and all eligible children are immunized while coming in and going outside Nigeria.
- During SIAs, inter-border synchronization meetings facilitated by the Lake Chad TT are held and attended by officials from across the borders leading to joint plans and synchronization of vaccination sessions by both countries teams.
- Adherence to the reporting formats and guidelines on cross border AFP notification the review and standardization by the TT is finalized
- Immediate communication with neighboring country of all AFP cases detected along the borders to ensure timely investigation response.

#### **Access and High Risk Populations**

Efforts will continue to ensure access to all children in border areas, prioritizing high risk populations particularly in IDPs, nomads, hard to reach and Lake Chad island communities.

- Identify and regularly update mapping of settlements and tracking of communities and nomads in the border areas.
- Categorize the settlements by accessibility (completely/partially inaccessible, and fully accessible)
- Corroborate with relevant agencies on use of satellite imagery, to determine population estimates of the high-risk population groups across borders.
- Review and update specific vaccination, surveillance and communication activities by engaging all stakeholders including the security forces, local leaders, informants in the immunization and AFP case search among the high-risk populations
- Continue disaggregation of data on high risk population IDPs/refugee populations in both camp and host communities, regularly updating with the outcome of activities and unreached populations

#### **Border vaccinations in other states**

- Update and continue border vaccinations in the other states that share borders with Niger and Cameroon

### **5.7.2. Targets, Milestones and Indicators**



- Updated work plans by January 2017
- Updated checklist on information required by Task Team and timelines (Lake Chad Task team (January 2017)
- Updated database of settlements categorized by accessibility monthly
- Updated maps of border settlements, IDPs/Refugee camps and crossing points,
- Immediate AFP cross-border notification once detected
- Updated line lists of AFP detected along borders weekly
- Border vaccination reports monthly

## **5.8 Transition Planning**

The Government of Nigeria has shown commitment towards Transition planning with its leadership of the process through the inauguration of government structures with government leadership building on the prior work done by the legacy technical working group in 2015.

Transition planning in Nigeria is guided by technical guidelines shared by the Transition Monitoring Group (TMG). Despite the WPV outbreak in Borno state in August 2016 and a flurry of OBR activities, transition planning in Nigeria was sustained with technical assistant provided by partners and a reinvigorated Polio legacy technical task team (PLT3) with oversight by the National Polio Legacy Planning committee(NPLPC). A functional secretariat space is available at the NPHCDA headquarters with regular meetings held every Thursdays. The Transition planning activities in Nigeria was implemented in 2016 based on an agreed PLT3 Work plan with funding from Global Affairs Canada through WHO as the secretariat for transition planning

The Government of Nigeria through the Honorable Minister of Health has reemphasized its commitment towards transition planning and endorsed three key thematic areas of health focus for the country including Primary health care (PHC), routine immunization (RI) and disease surveillance and outbreak response.

The country completed the asset mapping process documenting human resources and physical assets costs, as well as documentation of a compendium of best practices in Nigeria. A simulation exercise to define transition strategies for all polio functions into these thematic areas of government focus was done with a report available and awaiting endorsement. Ongoing engagements with partners and stakeholders continue with presentations to the ICC for endorsement of Transition planning activities for the year 2017.

### **5.8.1 Activities**

- Conduct financial analysis for transition strategies in Nigeria.
- Development of the Business case.

- Advocacy and communication to government agencies on suggested transition strategies.
- Conduct transition planning engagements at state and LGA levels for inputs on transition strategies
- Resource mobilization based on budget for transition execution in Nigeria
- Finalization of transition plan and endorsement of MOU by Government and partners in Nigeria.
- Regular meeting of transition governance structures
- Institution of a monitoring and accountability framework for transition plan execution.

### **5.8.2 Targets, Milestones and Indicators**

- Development of business case with budget for transition planning in Nigeria available by March 2017
- Resources mobilization plan in place and commitment of resources for executing a transition plan in Nigeria received June 2016
- Nigeria Polio transition plan concluded and available June 2016
- M&E structure for transition plan execution finalized and in place by August 2016
- Endorsement and signing of MOU for execution of transition plan by Government and partners by September 2017

## **6. MONITORING AND EVALUATION**

### **6.1. Monitoring Process**

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

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

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

- Specific plans with detailed activities and monitoring indicators for prioritized LGAs, that have been flagged using prioritization which is updated every 6 months
- Monthly feedback to VVHR and VHR LGAs including all LGAs of Borno and Yobe on implementation status of identified activities.
- Monitoring using evidence twice a week on the implementation of surveillance, routine immunization, in-between round activities and SIAs at national and state EOC.
- Enhanced/real time monitoring of performance and increased accountability at all levels.

- Standard pre-implementation and implementation monitoring checklists and presentation of information in the polio SIA dashboard.
- Supportive supervision, including concurrent monitoring, using real time data collection on the Open Data Kit (ODK) platform. MST activities and findings will be monitored using ODK.
- Enhanced independent monitoring.
- LQAs implementation of settlement selection using GIS.
- Systematic analysis and triangulation of available data sources including LQAS, EIM, VTS, etc.
- In-depth analysis and feedback on vaccination tracking system.
- Programme audits and reviews.
- Special studies including polio sero-surveys.
- Monitoring of performance and increased accountability at all levels
- Monitor the extensive use of increasing interventions through strong monitoring and evaluation support in all states, with especial emphasis Zone 1 states. Avail data assistance to better capture, analyze and use the data at the point where data is generated to improve program performance. Strengthen the data management support in Borno through coordination of data managers in the state under the state EOC.

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

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

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

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

## **6.2 Improving Data Quality**

Emphasis will be placed on closer look at program data periodically to identify quality gaps and take action. Data will be available to partners, as guided by a data sharing policy, to facilitate review for quality improvement and guidance for programmatic action. Key efforts to improve quality will include:

- Use of supervisors to validate tally sheet data in target areas.
- Independent monitoring validation. Sampling of independent monitors will be done each round by senior supervisors to validate their activities.
- LQAs verification. 30-40% of LGAs selected for LQAs will be sampled for verification each round.
- Field investigations in states with questionable indicators such as very high non-polio AFP rates.
- Verification of 10% of validated AFP cases by senior staff.
- Data quality checks for program data using automated mechanism to flag errors at different levels
- Weekly harmonization of data bases – AFP, case verification, laboratory.
- Weekly data quality feedback to zonal and state level data managers

## **7. OVERSIGHT AND MANAGEMENT**

### **7.1 National, State, LGAs and Traditional Forum**

The reactivated Presidential Task Force on polio eradication and routine immunization (PTFoPE) will provide oversight to the PEI program in Nigeria. The PTFoPE will monitor progress at the State and LGA levels through quarterly meetings.

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

The LGA Task Forces on Immunization will meet at least once monthly to review the progress in achieving PEI and RI targets in LGAs, identify remaining challenges as well as appropriate strategies to address them. In 2017, LGA Task Forces will continue to be an important forum to bring together key political leaders, Traditional and Religious leaders as well as health workers, to oversee critical activities implemented at LGA level and in all wards, particularly the Very High Risk and High Risk wards.

Traditional leaders play a very important role in the PEI programme. They have been incorporated in all the taskforces from presidential to the LGA task force. Aside from their involvement in various task forces, the traditional authorities in northern Nigeria have an organization called the Northern Traditional Leaders Committee on PHC Delivery (NTLC) whose mandate among others is to lead the process of achieving PEI and RI goals through the systematic involvement in activities for Polio eradication. They have established committees at Emirate and District levels that coordinate activities in

the LGAs, wards and settlements. These committees are involved in advocacy, micro planning, vaccination team selection, supervision of IPDS activities, resolution of non-compliance and promotion of community demand for vaccination services. NTLC as well as the religious leaders through established structures such as the Nigeria Inter-Faith Action Association (NIFAA) and Federation of Muslim Women Associations in Nigeria (FOMWAN) will be expected to participate in the national coordination committees (PTFoPE, ICC, and ICC Working Groups) and thereby support planning, implementation and evaluation of priority activities in the 2017 NPEEP. In 2017, continued focus will be placed on the engagement of Daawah Coordination Council of Nigeria (DCCN) together with the NTLC.

## **7.2 Independent Advisory Bodies and Global Partners**

**GPEI Partners:** GPEI partners and donors are expected to support the national authorities to effectively implement the key activities included in the 2017 NPEEP. The GPEI partners are also expected to support resource mobilization.

**Expert Review Committee on Polio Eradication and Routine Immunization (ERC):** The ERC is expected to meet 2-3 times a year to provide technical guidance on programme implementation in improving SIAs quality, strengthening routine immunization as well as strengthening surveillance activities.

**National Polio Expert Committee (NPEC):** The NPEC supports virological classification of AFP by meeting regularly to review and classify AFP cases with inadequate stool specimen.

## **7.3 Accountability**

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

- **Promoting individual accountability at every level:** People have been hired to achieve specific terms of reference for the polio eradication programme. This framework helps to identify those who are performing and those who are not, and to consider rewards and consequences accordingly.
- **Rewards for strong performance:** The individuals who demonstrate strong performance should be recognized through a reward programme. The programme has developed a reward scheme to recognize top performers in wards, LGAs and states. This was piloted in 31/44 LGAs of Kano state during the December 2013 IPDs campaign. An award certificate was issued to winning LGAs. However, these rewards may include public recognition, a congratulatory meeting with a senior leader, a mention in the media, enrollment in training of choice, etc.

- **Consequences for weak performance:** All weak performance will be documented and reported to appropriate policy makers and stakeholders. Furthermore, demonstrated weak performance will be sanctioned (e.g., including warnings, withholding of allowances and/or disengagement from the programme).
- **Evidence based decision making:** Assessments of critical impediments, their solutions, staff performance and progress will be evidence based.
- **Independent assessments every month:** The programme will conduct random independent assessments of critical impediments, solutions and performance at LGA and state levels throughout the year.
- **Feedback to all levels:** Constant feedback loops are critical to ensure a coordinated response and common understanding of challenges and progress. Feedback loops between wards, LGAs, state, Core Group and Presidential Task Force will be in place.
- **Accountability of MSTs and supervisors** through the use of harmonized supervisory checklist and tracking on ODK platform, with provision of feedback. This will be instituted and outcome documented.

The Accountability Framework will continue to be instrumental in evaluating staff performance by Government and partners with management actions taken based on staff performance. Figure 8 highlights an example of the management actions taken by WHO for polio personnel between 2014 and 2016. Figure 9 summarizes management actions taken by UNICEF for VCM network members in 2016.

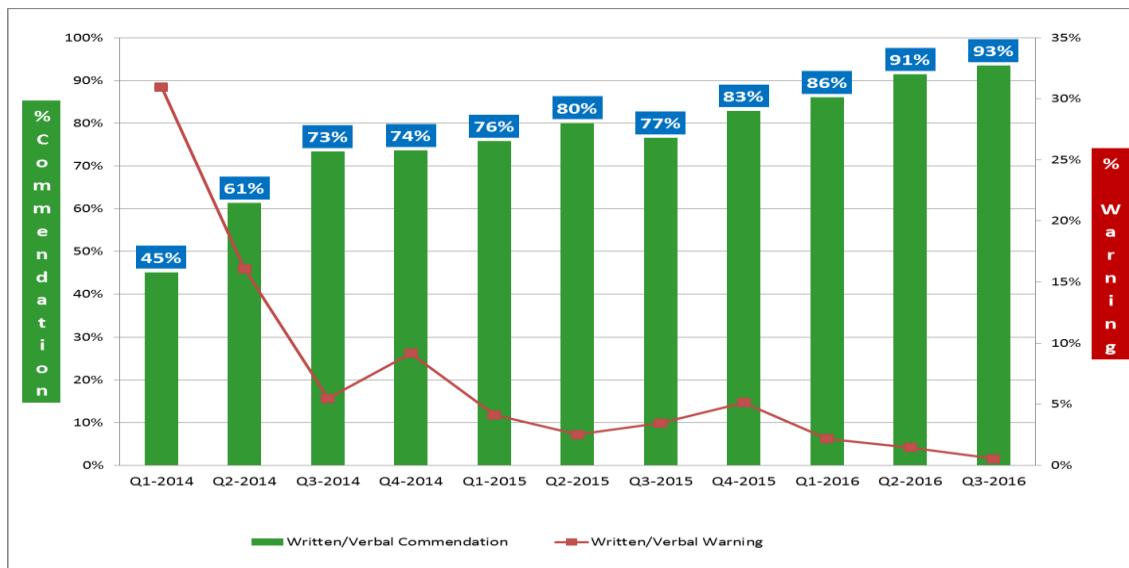


Figure 8: Summary of administrative actions by Quarter, WHO, 2014 to 2016

- ✓ 366 (2%) of VCM network members' appointment were terminated
- ✓ 487 (3%) of VCM network members received commendation letters or awards
- ✓ 600 (4%) of VCM network members received warnings

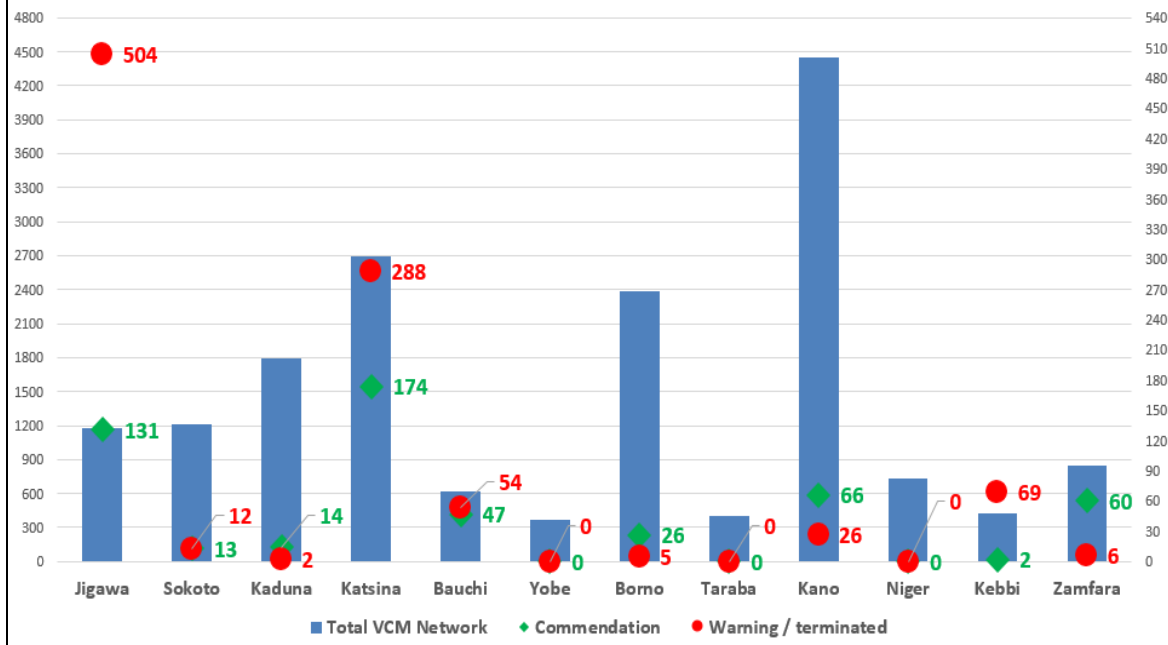


Figure 9: UNICEF VCM Network Accountability Framework Enforcement 2016

## 8. ANNEXES

### 8.1 Annex 1: High Risk LGAs, EOC, December 2016

S.No	Zone	state	LGA	Tier
1	NCZ	Plateau	Bokkos	Tier one
2	NCZ	Nasarawa	Kokona	Tier one
3	NCZ	Fct, Abuja	Municipal Area Council	Tier one
4	SEZ	Lagos	Ifako/Ijaye	Tier one
5	SEZ	Lagos	Badagry	Tier one
6	SEZ	Lagos	Lagos Island	Tier one
7	NEZ	Bauchi	Ningi	Tier one
8	SEZ	Lagos	Apapa	Tier one
9	SEZ	Lagos	Alimosho	Tier one
10	SEZ	Lagos	Mushin	Tier one
11	SEZ	Lagos	Ajeromi/Ifelodun	Tier one
12	NCZ	Plateau	Qua'An Pan	Tier one
13	NCZ	Plateau	Bassa	Tier one
14	NCZ	Plateau	Kanam	Tier one
15	NCZ	Plateau	Shendam	Tier one
16	NCZ	Plateau	Jos East	Tier one
17	NCZ	Plateau	Jos North	Tier one
18	NCZ	Nasarawa	Keffi	Tier one
19	NCZ	Nasarawa	Nasarawa Egon	Tier one
20	NCZ	Nasarawa	Awe	Tier one
21	NCZ	Nasarawa	Doma	Tier one
22	NCZ	Nasarawa	Obi	Tier one
23	NCZ	Nasarawa	Lafia	Tier one
24	NCZ	Benue	Agatu	Tier one
25	NEZ	Gombe	Gombe	Tier one
26	NEZ	Gombe	Akko	Tier one
27	NEZ	Gombe	Funakaye	Tier one
28	NEZ	Gombe	Dukku	Tier one
29	NEZ	Gombe	Yamaltu/Deba	Tier one
30	NEZ	Gombe	Kwami	Tier one
31	NEZ	Gombe	Nafada	Tier one
32	NCZ	Fct, Abuja	Kwali	Tier one
33	NCZ	Fct, Abuja	Gwagwalada	Tier one
34	NCZ	Bauchi	Bauchi	Tier one
35	NCZ	Benue	Apa	Tier one
36	NCZ	Fct, Abuja	Kuje	Tier one
37	NWZ	Kano	Ungongo	Tier one
38	NWZ	Kano	Gwale	Tier one
39	NWZ	Kano	Kano Municipal	Tier one
40	NWZ	Kano	Sumaila	Tier one



41	NEZ	Adamawa	Madagali	Tier one
42	NCZ	Benue	Buruku	Tier one
43	NWZ	Kano	Takai	Tier one
44	NWZ	Kano	Kura	Tier one
45	NWZ	Kano	Minjibir	Tier one
46	NCZ	Fct, Abuja	Municipal Area Council	Tier one
47	NWZ	Sokoto	Sokoto North	Tier one
1	NEZ	Adamawa	Michika	Tier two
2	NWZ	Kaduna	Birnin Gwari	Tier two
3	NWZ	Kaduna	Chikun	Tier two
4	NWZ	Kaduna	Giwa	Tier two
5	NWZ	Kaduna	Sanga	Tier two
6	NWZ	Kaduna	Zaria	Tier two
7	NWZ	Kano	Doguwa	Tier two
8	NEZ	Taraba	Bali	Tier two
9	NEZ	Taraba	Gassol	Tier two
10	NEZ	Taraba	Ibi	Tier two
11	NEZ	Taraba	Wukari	Tier two
12	NWZ	Zamfara	Anka	Tier two
13	NWZ	Zamfara	Bukkuyum	Tier two
14	NWZ	Zamfara	Maru	Tier two
15	SEZ	Enugu	Enugu East	Tier two
16	SEZ	Enugu	Isi-Uzo	Tier two
17	SEZ	Enugu	Igbo-Eze-North	Tier two
18	SEZ	Enugu	Udi	Tier two
19	SEZ	Enugu	Nsukka	Tier two
20	SSZ	Rivers	Ahoada West	Tier two
21	NEZ	Adamawa	Numan	Tier two
22	SWZ	Lagos	Amuwo Odofin	Tier two
23	SWZ	Lagos	Epe	Tier two
24	SWZ	Lagos	Ikeja	Tier two
25	SWZ	Lagos	Kosofe	Tier two
26	SEZ	Enugu	Uzo-Uwani	Tier two
27	SEZ	Enugu	Enugu North	Tier two
28	SEZ	Enugu	Enugu South	Tier two
29	SEZ	Enugu	Nkanu East	Tier two
30	SEZ	Enugu	Nkanu West	Tier two
31	SEZ	Enugu	Oji-River	Tier two
32	SWZ	Ogun	Odeda	Tier two
33	SWZ	Ogun	Remo North	Tier two
34	SSZ	Akwa Ibom	Abak	Tier two
35	SSZ	Bayelsa	Brass	Tier two
36	SSZ	Bayelsa	Ogbia	Tier two
37	NCZ	Benue	Ado	Tier two
38	NCZ	Benue	Ushongo	Tier two

**\* 44 LGAs in Borno and Yobe states considered as special due to insecurity**

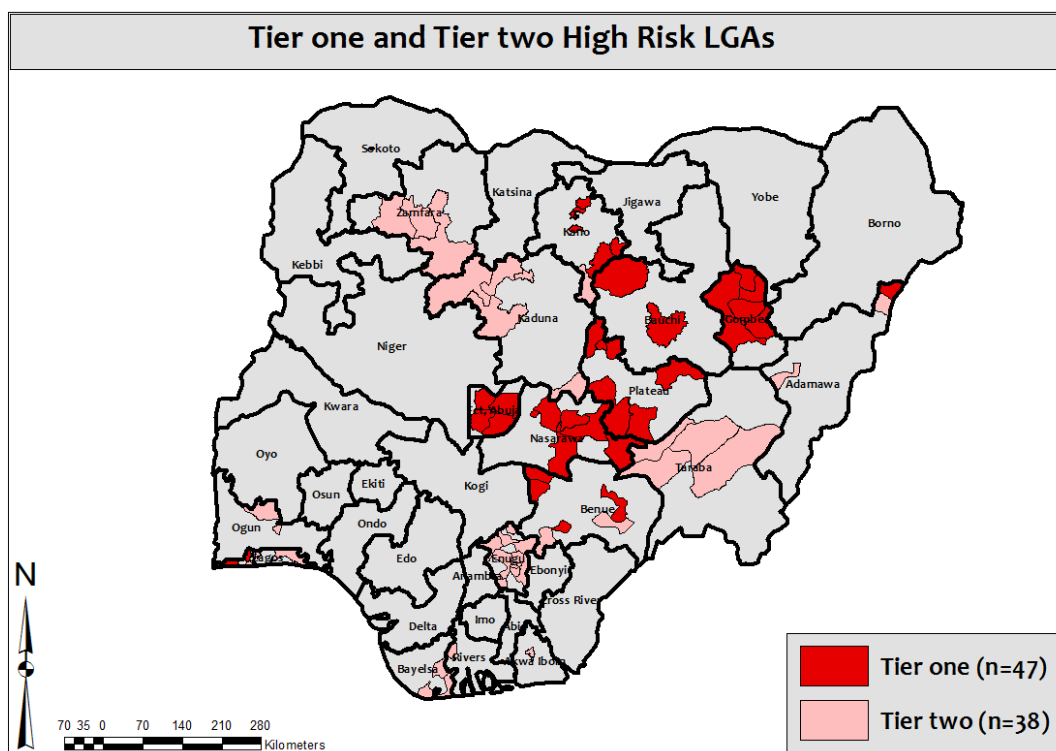


Figure 10: High risk analysis, 2016

### 8.2 Annex 2: Polio SIA Schedule, 2017

S/N	Month	Dates	Scope	Remarks	Target Populations	Antigen
	January	28 <sup>th</sup> - 31 <sup>st</sup>	SIPDs (18 States)	2nd mOPV2 OBR in 18 states	33,478,035	mOPV2
1	February	25 <sup>th</sup> - 28 <sup>th</sup>	SIPDs (14 High Risk States)	List of high risk states reviewed using the HR Algorithm and local information on risk	26,256,251	bOPV
2	March	25 <sup>th</sup> - 28 <sup>th</sup>	NIPDs (36+1)	Nationwide	59,961,520	bOPV
3	April	22 <sup>nd</sup> - 25 <sup>th</sup>	NIPDs (36+1)	Nationwide	59,961,520	bOPV
4	July	1 <sup>st</sup> - 4 <sup>th</sup>	SIPDs (18 High Risk States)	High Risk States	33,478,035	bOPV
5	October	14 <sup>th</sup> - 17 <sup>th</sup>	SIPDs (18 High Risk States)	High Risk States	33,478,035	bOPV
6	December	9 <sup>th</sup> - 12 <sup>th</sup>	SIPDs (6 High Risk States)	High Risk States	8,285,075	bOPV

8.3 Annex 3:

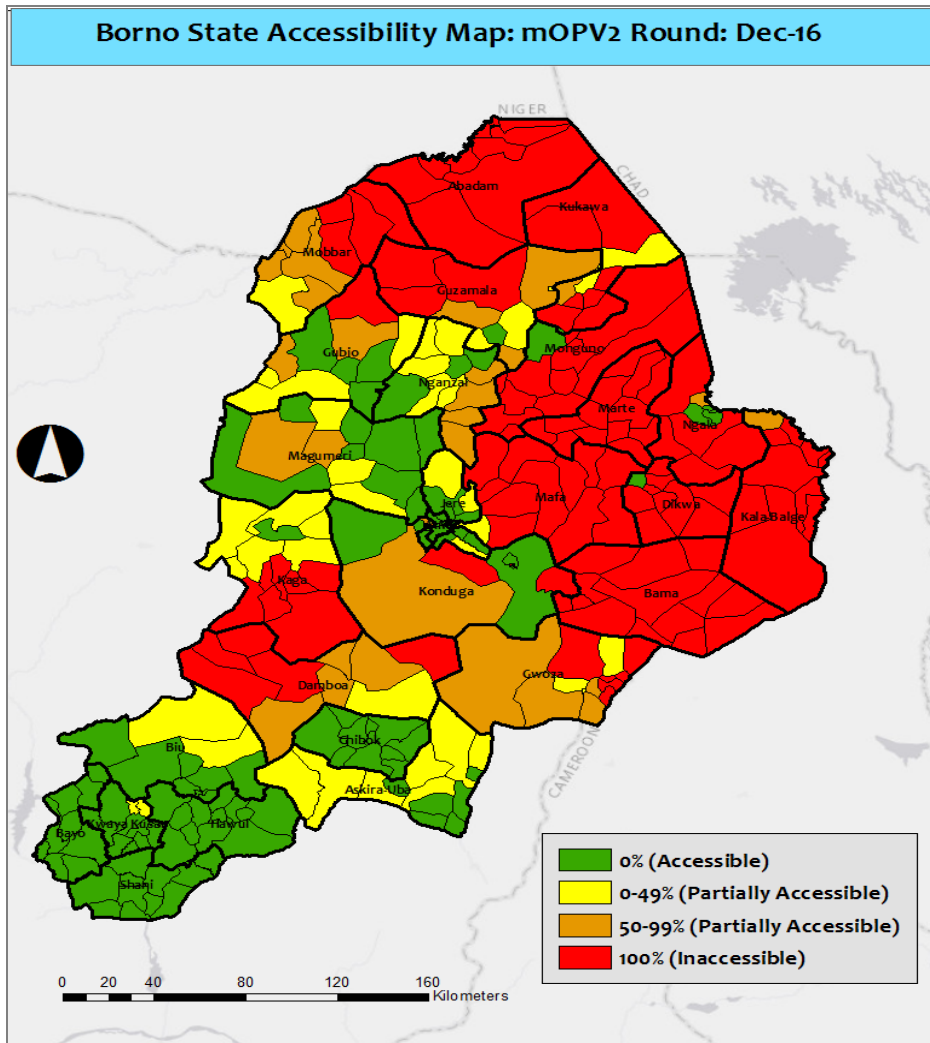


Figure 11: Borno state accessibility, December 2016