Nigeria Update on Polio Eradication

15th Independent Monitoring Board Meeting, London
3 May 2017
• Current Epidemiology
• Response to WPV1 and VDPV2 outbreaks
• Innovative approaches to reach children in inaccessible areas
• Efforts to strengthen surveillance
• Renewed political commitment
• Way forward
Nigeria has gone 8 months without WPV
6 months without cVDPV2

- Nigeria had 4 WPV1 from Borno. Date of onset of last case August 21, 2016
- WPV1 in Borno are orphans and isolated in security compromised areas in northern part of the state
- 2 cVDPV2 cases both from contacts (Borno and Sokoto). Last case was from Bodinga LGA in Sokoto State with date of onset September 28, 2016
- 10 VDPV2 have been isolated in the country in 2017 from environmental surveillance sites:
  - 6 in Sokoto
  - 2 in Gombe
  - 1 in Bauchi
  - 1 in Katsina
- 1 VDPV2 was isolated from a healthy contact in Sokoto (50th Stool sample)
- Nucleotide changes range from 6 - 10

All VDPV2 isolated in 2017 are not circulating by GPEI guidelines
The programme conducted a robust response to the outbreaks using mOPV2 and bOPV (Post switch)

1st Round, May ’16

2nd Round, June ’16

3rd Round, July ’16

Dec ’16 & Jan - 17

cVDPV2 OBR – Borno (mOPV2)(+IPV)

1st Round, Aug ’16; 5 states

2nd Round: Sep ’16; 3rd Round: Oct’16;
4th Round: 12-15 Nov; 5th Round: 3-6 Dec; 18 states

WPV1

OBR – Borno (bOPV)

cVDPV2 OBR1, 03 – 06 Dec 2016

cVDPV2, 16-19 Dec 2016

cVDPV2, 28-31 Jan 2017

cVDPV2 OBR - Sokoto (mOPV2)

IPV was used in inaccessible areas of Borno and 4 LGAs in Yobe in September and October 2016 respectively, alongside bOPV2
Trends of LQAs in the 11 High Risk States

Borno and other security compromised areas’ LQAs results represents accessible areas only

[Bar chart showing trends of LQAs in different months.]
Steady reduction in missed children, Jan 14 – Dec 16, 11 HR States

Source: Independent Monitoring Data
Decreasing trend of missed children - greater proportion attributed to Absenteeism in children as at March 2017

Borno

- Relatively high proportion of missed children reported every round

Adamawa

- Less than 1 percent of missed children

Yobe

Gombe

Source: IM Data
Accessibility has improved by 11% between Aug 2016 & Mar 2017
More Settlements have been reached based on Vaccination Tracking System (VTS) in Borno

Oct 2016: 1,999 Settlements reached

Feb 2017: 2,733 Settlements reached

Based on GPS tracks collected from vaccination teams
Systematic Engagement of Civilian Joint Task Force (cJTF) and Military in Borno, August – October 2016

- State EOC led consultative settlement based accessibility assessment at LGA level
  - Traditional leaders, Ward focal persons, Security agents, SPHCPDA staff, EOC Partners

- SOPs developed for systematic engagement of CJTF & the Military as Rapid access Vaccination teams

- Development of “5 vaccination contacts” visit plan for each settlement

- Identification of vaccination teams
  - 2 CJTF (1 Vaccinator, 1 recorder)
  - 4 CJTF providing security.
  - Military escort

### Table: Period-wise Vaccination Activity

<table>
<thead>
<tr>
<th>Period</th>
<th># LGAs</th>
<th># Wards</th>
<th># Settlements</th>
<th>OPV</th>
<th>IPV</th>
<th>AFP Cases Reported</th>
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<tbody>
<tr>
<td>Aug-16</td>
<td>10</td>
<td>15</td>
<td>66</td>
<td>4,100</td>
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<tr>
<td>Sep-16</td>
<td>10</td>
<td>21</td>
<td>157</td>
<td>17,163</td>
<td>15,360</td>
<td>4</td>
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<tr>
<td>Oct-16</td>
<td>11</td>
<td>26</td>
<td>321</td>
<td>19,446</td>
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</table>

Mafa LGA Chair facilitating access, Sept 16
Training of CJTF on accelerated access, Borno
Vaccination in Kaga LGA by CJTF, Aug 2016: 512 zero dose children reached
Innovative Approaches to Reaching Children in Partially Accessible Areas

There has been an increase in number of settlements reached and children immunized from Reaching Every Settlement (RES) Strategy

**RES1, RES2, RES4, RES6 and RES7 are bOPV rounds while mOPV was used in RES3 and RES5**

SOURCE: Borno EOC

### Settlements visited from RES 1 – RES 7 (Numbers)

<table>
<thead>
<tr>
<th>RES</th>
<th>LGAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>RES 1</td>
<td>8</td>
</tr>
<tr>
<td>RES 2</td>
<td>14</td>
</tr>
<tr>
<td>RES 3</td>
<td>14</td>
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<tr>
<td>RES 4</td>
<td>15</td>
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<td>RES 5</td>
<td>14</td>
</tr>
<tr>
<td>RES 6</td>
<td>16</td>
</tr>
<tr>
<td>RES 7</td>
<td>16</td>
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</table>

### Children immunized from RES 1 – RES 7 (Numbers)

<table>
<thead>
<tr>
<th>RES</th>
<th>LGAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>RES 1</td>
<td>8</td>
</tr>
<tr>
<td>RES 2</td>
<td>14</td>
</tr>
<tr>
<td>RES 3</td>
<td>14</td>
</tr>
<tr>
<td>RES 4</td>
<td>15</td>
</tr>
<tr>
<td>RES 5</td>
<td>14</td>
</tr>
<tr>
<td>RES 6</td>
<td>16</td>
</tr>
<tr>
<td>RES 7</td>
<td>16</td>
</tr>
</tbody>
</table>

Each RES Team has at least 1 person conducting active surveillance.
Program now Reaching Children in completely Inaccessible Areas
(Through New Initiative: Reaching Inaccessible children, (RIC))

- ED NPHCDA and Partners advocated to the Theatre Commander of the Nigerian Army in Maiduguri for strategic support
- Main objective is to reach children in completely inaccessible areas with OPV using the military personnel as vaccinators
- Initiative commenced in March 2017 and is yielding results

March 2017

Advocacy meeting with Theater Commander, Maiduguri

April 2017

RIC in action. Army personnel immunizing children following liberation of 1,623 persons in Kalabalge LGA
Special Interventions to Increase Access in Inaccessible areas in Borno state using Military personnel as Vaccinators
Implementation is still ongoing in Konduga, Mobbar, Monguno and Kala/Balge LGAs.

Subsequent RIC rounds will focus on inhabited settlements only.

Apart from reaching previously unreached places and vaccinating children, the military has also helped in getting geo-coordinates for 277 settlements.

Geo-coordinates were not captured for 105 of 156 settlements visited in Konduga.

7,382 children have been immunized in 450 previously in accessible settlements across 6 LGAs (RIC1).

* Settlements in visited 5 wards of Dikwa LGA were collapsed into single settlement by insurgents for proper control.
More Settlements have now been reached: 63% of the Map are currently Accessible.
Proportion of Settlement Accessible through H2H and special interventions: March 2017

[Bar chart and pie chart showing the proportion of settlements accessible through different interventions]

- Reached by H2H: 54%
- Reached by RES 7: 9%
- Reached by RIC-1: 37%
- Inaccessible: 3%
Profiling and Immunizing Children from Highly Inaccessible Areas (Abadam, Bama, Gwoza, Marte & Monguno LGAs)

15,587 were profiled in 6 LGAs *(Dikwa, Jere, Konduga, Magumeri, Mobbar, Nganzai)*

Interventions using permanent teams:
- Transit/Market/Motor park
- IDPs Camps/Community
- CMAM Centers
- Hospitals

Total of 49,581 children profiled in Qtr 1 2017 from within and outside the State and Niger Republic

Profiling of children from inaccessible LGAs entails screening to determine LGA/ Ward of origin and vaccination status
318,381 children vaccinated through special interventions in between rounds in Borno State – Results as of 01 March, 2017

<table>
<thead>
<tr>
<th>Zero dose: 48,569 (15.2%)</th>
<th>≥1 dose: 269,812 (84.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit 44,459</td>
<td>CMAM 17,125</td>
</tr>
</tbody>
</table>

19 LGA where Special Interventions are conducted
Response to WPV Outbreak included screening and referral of malnourished children, Sept 2016

- Planning and training synchronized with IPV and OPV pre-implementation activities
- Screening Integrated into IPV Vaccination

Data Source: Sept 2016 IPV round
9,422 Children < 5 years were Screened for Malnutrition and Immunized with OPV by HTR Teams across 24 LGAs of Borno State in Q1, 2017

<table>
<thead>
<tr>
<th>LGA</th>
<th>Green Male</th>
<th>Green Female</th>
<th>Yellow Male</th>
<th>Yellow Female</th>
<th>Red Male</th>
<th>Red Female</th>
<th>0-11Months</th>
<th>12-59 Months</th>
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<td>258</td>
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<td>1</td>
<td>0</td>
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<td>535</td>
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<td>119</td>
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<td>0</td>
<td>1</td>
<td>105</td>
<td>118</td>
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<tr>
<td>Biu</td>
<td>287</td>
<td>334</td>
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<td>4</td>
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<td>73</td>
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<td>33</td>
<td>7</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>135</td>
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<td>185</td>
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<td>127</td>
<td>10</td>
<td>11</td>
<td>1</td>
<td>4</td>
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<td>265</td>
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<td>Mobbar</td>
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<td>64</td>
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<td>15</td>
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<td>4</td>
<td>205</td>
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<td>Monguno</td>
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<td>327</td>
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<td>5</td>
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<td>0</td>
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<td>9</td>
<td>0</td>
<td>0</td>
<td>147</td>
<td>188</td>
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<td>Nganzai</td>
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<td>75</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>34</td>
<td>130</td>
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<tr>
<td>Shani</td>
<td>154</td>
<td>213</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>89</td>
<td>369</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2748</strong></td>
<td><strong>3253</strong></td>
<td><strong>142</strong></td>
<td><strong>185</strong></td>
<td><strong>24</strong></td>
<td><strong>30</strong></td>
<td><strong>2524</strong></td>
<td><strong>6898</strong></td>
</tr>
</tbody>
</table>

Data Source: Hard to Reach (HTR MNCH)
VDPV2 Isolates in Sokoto State, 2016-2017

Location Map of VDPV2 in Sokoto State

- **ENV-NIE-SOS-SKK-RDD-17-005**
  - Date of collection: 06 March, 2017
  - Name of ES Site: Kofar Dundaye
  - LGA: Sokoto North
  - Estimated Drainage Area: Not Available
  - Estimated Drainage Pop: Not Available
  - Lat: 11.0686
  - Long: 5.2448

- **ENV-NIE-SOS-SKK-RBW-17-003**
  - Date of collection: 06 Feb, 2017
  - Name of ES Site: Runbukwa Bridge 2
  - LGA: Sokoto North
  - Estimated Drainage Area: 1 Km Sqr
  - Estimated Drainage Pop: 13, 779
  - Lat: 11.0781
  - Long: 5.2464

- **ENV-NIE-SOS-SKK-RBW-17-004**
  - Date of collection: 20 Feb, 2017
  - Name of ES Site: Runbukwa Bridge 2
  - LGA: Sokoto North
  - Estimated Drainage Area: 1 Km Sqr
  - Estimated Drainage Pop: 13, 779
  - Lat: 11.0781
  - Long: 5.2464

- **ENV-NIESO-S-SRK-17-005**
  - Date of collection: 06 March, 2017
  - Name of ES Site: Runbukwa Bridge 2
  - LGA: Sokoto North
  - Estimated Drainage Area: 1 Km Sqr
  - Estimated Drainage Pop: 13, 779
  - Lat: 11.0781
  - Long: 5.2464

- **NIESO'S-SRZ-17-003**
  - NC0_ENV_TW
  - LGA: Sokoto South
  - Healthy Child from 50 Samples collected after VDPV from Tudun Wada ES Site
  - ES Sample EPID: ENV-NIE-SOS-SRZ-TWD-17-003

- **ENV-NIE-SOS-SRZ-TWD-17-006**
  - Date of collection: 06 March, 2017
  - Name of ES Site: Tudun Wada
  - LGA: Sokoto South
  - Estimated Drainage Area: 3.7 Km Sqr
  - Estimated Drainage Pop: 39,767
  - Lat: 11.0591
  - Long: 5.3572

- **ENV-NIE-SOS-SRZ-TWD-17-003**
  - Date of collection: 30 January, 2017
  - Name of ES Site: Tudun Wada
  - LGA: Sokoto South
  - Estimated Drainage Area: 3.7 Km Sqr
  - Estimated Drainage Pop: 39,767
  - Lat: 11.0591
  - Long: 5.3572

Legend:
- **Affected LGAs**
- **Affected State**
- **State Boundary**

Kebbi
Zamfara

Kebbi

Kebbi

Zamfara

Kebbi

Zamfara

Kebbi

Zamfara
Proposed Response Plan to VDPV2s in Sokoto, May 2017

- 1 round of mOPV2 planned in all LGAs
- Staggered implementation starting with 5 LGAs (Sokoto North, Sokoto South, Wamakko, Kware and Bodinga)
- Target population for mOPV2: 1,694,379
- mOPV 2 vaccine requirement: 1,863,817
- Dates of implementation: 13 - 18 May 2017

<table>
<thead>
<tr>
<th>S/No</th>
<th>LGA</th>
<th>OPV Target Population</th>
<th>OPV Vaccine Requirements (wf 1.11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sokoto North</td>
<td>113,151</td>
<td>125,598</td>
</tr>
<tr>
<td>2</td>
<td>Sokoto South</td>
<td>100,330</td>
<td>111,366</td>
</tr>
<tr>
<td>3</td>
<td>Wamakko</td>
<td>116,955</td>
<td>129,820</td>
</tr>
<tr>
<td>4</td>
<td>Bodinga</td>
<td>74,102</td>
<td>82,253</td>
</tr>
<tr>
<td>5</td>
<td>Kware</td>
<td>85,796</td>
<td>95,234</td>
</tr>
<tr>
<td></td>
<td>Total (5 LGAs)</td>
<td>490,334</td>
<td>544,271</td>
</tr>
<tr>
<td>6</td>
<td>18 LGAs</td>
<td>1,204,045</td>
<td>1,319,546</td>
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<td></td>
<td>Total (SOKOTO STATE)</td>
<td>1,694,379</td>
<td>1,863,817</td>
</tr>
</tbody>
</table>
Progressive Improvement in AFP Surveillance Indicators (Jan – Dec, 2007-2016)

Target

% Stool Adequacy

NP-AFP rate

SA rate

17,578 AFP cases as at Dec 2016


NP-AFP rate

% Stool Adequacy

100
90
80
70
60
50
40
30
20
10
0

92 91 92 93 93 95 96 96 98 99

0 3 6 9 12 15 18 21

17,578 AFP cases as at Dec 2016
Programme is tracking Possible Transmission in Security Compromised Areas

Stool samples from <10 year old healthy children coming out of security compromised areas are collected and taken for processing

as of 19/04/17
Expanding environmental sampling to other LGAs using sweep in Borno, 2017

Sewage samples collected in LGAs with no formal environmental sites

47 Sewage sample received in the lab

47 Samples processed

0 WPV

7 NPENT

5 Suspected Poliovirus

35 Negative

0 cVDPV2

3 Sabin 3

1 NEV

1 Pending

15/03/17 to 16/04/17
Other efforts to improve surveillance

• Introduction of Audio-visual AFP Detection and Reporting (AVADAR) in Borno State to enhance AFP case detection through community informants who are reminded weekly to go through their mobile phones to report AFP cases

• Expansion of AFP community informant network within and out of IDP Camps

• Investigation of unusually high NPAFP rates in states reporting such

• Initiation of Environmental surveillance in new sites and states

• Preparations and commencement of community based Sero-survey in Borno State

• Investigation of all zero dose AFPs cases reported
Introduction of AVADAR has increased AFP Reporting

AFP Cases Reported by LGA, Borno (4 Dec 16 to 5 Apr 17)
Edo State: 21(95.5%) of 22 AFP cases investigated were true cases

Ondo State: 34(89.5%) of 38 of AFP cases investigated were true cases

Kebbi State: 15(83.3%) of 18 AFP cases investigated were true cases

Kaduna State: 20(80%) of 25 AFP cases investigated were true cases

However all reported AFP cases in all states were suspected AFP cases with limb symptoms

Where Skill and knowledge gap among LGA DSNOs, FPs, HWs and informants were observed, refresher training was conducted
Intensification of AFP reporting from IDP camps in Borno, 2014 - 2017

Total number of IDP camps in Borno from 2014 to 2017

<table>
<thead>
<tr>
<th>State</th>
<th>No of IDP camps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formal</td>
<td>Informal</td>
</tr>
<tr>
<td>2014</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>52</td>
<td>71</td>
</tr>
<tr>
<td>2017</td>
<td>32(^1)</td>
<td>132(^1)</td>
</tr>
</tbody>
</table>

- Camp Coordinators appointed
- Standby Teams to immunize newcomers
- Active case search in IDP camps

1- IOM DTM Round 15
Expansion of Community Informants have increased AFP Detection in Borno, 2012-2016
High Level Advocacy Team (HILAT) visits 2016
Minister of State for Health led a team to Taraba and Adamawa in the first leg

Top Left: HMSH with mic presenting a synopsis of priority issues to Adamawa Governor

Top Right: cross section of LGA Chairmen during a meeting with HMSH in Taraba State

Bottom Left: Taraba Deputy Governor vaccinating a child at the flag-off of the 3rd OBR

Bottom Right: HMSH with mic presenting a synopsis of priority issues & banner to Taraba Deputy Governor
High Level Political Commitment Renewed
Presidential Task Force on Polio Eradication and Routine Immunization held

• 11th Meeting of Presidential Task Force on Polio Eradication (PTFoPE) held on 27th April
• President pledged to release all allocations to PEI as soon as the NASS passes 2017 budget
• Security Agents directed to support polio teams
• President charged Governors to:
  • Prioritize PEI and provide needed oversight
  • Release counterpart funds timely
  • Hold similar meeting with LGA Chairmen
  • Provide regular updates to Mr. President on PEI activities
• Front line Polio health workers were commended as national heroes
In Summary

• WPV1 outbreak occurred in security compromised areas of Borno State

• Robust response to the outbreak was undertaken, which included use of bOPV, IPV and mOPV2

• Country is experiencing emergence of VDPV2 particularly in areas with perceived low immunity

• Several innovations to reach children, partnering with the military, are yielding results

• The program is tracking and investigating children from inaccessible areas to check for possible continued transmission

• The program is also heightening surveillance through various innovations

• The programme is using the dashboard to enforce the accountability framework
Way Forward

• Our major priority is to stop transmission of WPV1 in Borno
  • Efforts to increase access to the program will continue with the military

• Robust response will be implemented to address emerging VDPV2 in Sokoto

• Maintain and track the renewed political commitment at State and LGA levels

• Transition planning for the polio program is a priority and is on track to ensure polio assets are prioritized for PHC revitalization, strengthening of routine immunization, and disease surveillance and outbreak response

• Government of Nigeria is committed to fulfilling its financial obligation as soon as the 2017 budget is passed and support from partner organizations will be crucial in closing out the financial gaps
Thank You