A worrisome upward trend

POLIO SITUATION

MORE THAN FIFTY PERCENT OF THIS YEAR’S POLIO CASES WORLDWIDE ARE FROM NIGERIA

VOLUNTEER COMMUNITY MOBILIZERS
SOCIAL DATA ANALYSIS REVEALS THE IMPACT OF THE VOLUNTEERS’ WORK ON THE GROUND

EMERGENCY ACTION PLAN
PUTTING NIGERIA BACK ON TRACK TO REACH THE COVERAGE NEEDED TO STOP POLIO TRANSMISSION

POLIO SITUATION

A worrisome upward trend
Children of the Koranic School of Makarat Arabic in the village of Makeran Gandu are lining up for polio immunization during the May 2012 Immunization Plus Days in Kebbi State.
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLIO SITUATION</td>
<td>A worrisome upward trend, more than 50% of cases worldwide are from Nigeria</td>
<td>4</td>
</tr>
<tr>
<td>EMERGENCY ACTION PLAN</td>
<td>Putting Nigeria back on track to reach the coverage levels needed to stop polio transmission</td>
<td>8</td>
</tr>
<tr>
<td>VOLUNTEER COMMUNITY MOBILIZER NETWORK</td>
<td>Social data analysis reveals the impact of the Volunteer Community Mobilizers' work on the ground</td>
<td>10</td>
</tr>
<tr>
<td>OPINION</td>
<td>Don't fall at the finish line in the race to eradicate polio, by Dr. Muhammad Pate and Dr. Christopher Elias</td>
<td>12</td>
</tr>
<tr>
<td>AWARDS</td>
<td>Rotary honors Nigerian President Goodluck Jonathan as a champion in the worldwide effort to eradicate polio</td>
<td>13</td>
</tr>
<tr>
<td>ROUTINE IMMUNIZATION</td>
<td>Nigeria committed to expand access to life-saving vaccines to all Nigerian children</td>
<td>15</td>
</tr>
<tr>
<td>FROM THE FIELD</td>
<td>Volunteer Community Mobilizer Network in Sokoto and Kebbi -- Community empowerment in action</td>
<td>18</td>
</tr>
</tbody>
</table>
POLIO SITUATION

A worrisome upward trend in Nigeria

In 2012, the President of Nigeria declared polio eradication as a national emergency, and Nigeria has committed additional funds to the program from its own treasury. Domestic funding to polio eradication increased from $17m to $30m per year. Nevertheless, the Global Polio Eradication Initiative is currently facing its largest funding gap worldwide since its inception, with a total shortfall of $1 billion out of the $2.23 billion budget (see page 5). The Nigeria Emergency Plan for 2012 that was finalized in April is promising, and if vigorously implemented can achieve a rapid jump in campaign coverage. This plan aims to improve the national ownership and accountability, review Supplementary Immunization Activities (SIA) and Plans for 2012-2013, improve SIA quality and monitoring, and enhance surveillance (see page 8-9). The 23rd Expert Review Committee (28-29 March 2012) clearly emphasized the need to rapidly improve campaign quality in the worst performing local government areas (LGAs) in high risk states (see Page 7).

UNICEF, as part of its support to the polio eradication program, has deployed a team of Volunteer Community Mobilizers to address the issues of missed children and refusals to polio immunization programs. This initiative is hoped to contribute to the reduction of missed children through targeted interventions house-to-house to generate demand for and acceptance of oral polio vaccine. In total, over 2,150 settlement level volunteer community mobilizers will be deployed in the settlements where missed children and refusals of oral polio vaccine are still persistent (see Page 10-11).

"It is too late for us, but not for others. Tell our story and spread the word. Refusing polio immunization can harm your child’s future," concludes Muhammad Bello, "I can promise you, I will do my best to offer a brighter future to Aisha. I owe her that much."

As of 8 June 2012, Nigeria has recorded 43 cases of wild poliovirus in 10 States compared to 20 cases in 6 States for the same period in 2011. In key infected states like Borno, Kano, Sokoto and Yobe more than one in three children has received less than four doses of oral polio vaccine. Polio-free states like Kaduna and Niger were re-infected in 2012. Nigeria contributes 90% to the polio burden in Africa and more than 50% of this year’s cases worldwide are from Nigeria. Low quality routine services are further deteriorating. For DTP3, for example, coverage plummeted in 2011 with the number of unimmunized infants increasing by 55% compared to 2010. There were also central stock-outs of four of the eight childhood vaccines. Children are missed during campaigns due to a mixture of operational and social factors and these program gaps must be addressed if more children are to be reached.

While the proportion of missed children has shown a slightly decreasing trend in the last three rounds (7.2% in February, 7.4% in March and 7.2% in May), hundreds of thousands of children continue to be missed during polio immunization campaigns in Nigeria. According to the latest UNICEF Social Data Analysis, Kano has the highest percentage of missed children (8.9%), followed by Kebbi (8.4%) and Sokoto (8.1%). In all northern high risk states, caregivers’ refusals to vaccinate their children account for 24% of the total number of missed children during the May Immunization Plus Days (see Page 6).

"We never felt the need to get our children immunized, but now, I will do my best to mobilize our community," says Muhammad Bello, the grandfather of a 2-year-old Aisha who fell victim to the wild poliovirus just a few weeks ago in Sokoto state, northern Nigeria.

Aisha is now amongst the 43 children in northern Nigeria who have as of June been infected by the wild poliovirus this year. Aisha and her Grandfather are from the urban area of Sokoto North, in Sokoto State, Northern Nigeria.

"In the past, we always refused vaccination because some of our neighbours told the oral polio vaccine can cause sterility. Now, we know that it is not true and we can see the consequences. From now on, I will commit myself to be part of the social mobilization team,” says teary-eyed Zainabu holding little Aisha in her arms.

As of 8 June 2012, Nigeria has recorded 43 cases of wild poliovirus in 10 States compared to 20 cases in 6 States for the same period in 2011. In key infected states like Borno, Kano, Sokoto and Yobe more than one in three children has received less than four doses of oral polio vaccine. Polio-free states like Kaduna and Niger were re-infected in 2012. Nigeria contributes 90% to the polio burden in Africa and more than 50% of this year’s cases worldwide are from Nigeria. Low quality routine services are further deteriorating. For DTP3, for example, coverage plummeted in 2011 with the number of unimmunized infants increasing by 55% compared to 2010. There were also central stock-outs of four of the eight childhood vaccines. Children are missed during campaigns due to a mixture of operational and social factors and these program gaps must be addressed if more children are to be reached.

While the proportion of missed children has shown a slightly decreasing trend in the last three rounds (7.2% in February, 7.4% in March and 7.2% in May), hundreds of thousands of children continue to be missed during polio immunization campaigns in Nigeria. According to the latest UNICEF Social Data Analysis, Kano has the highest percentage of missed children (8.9%), followed by Kebbi (8.4%) and Sokoto (8.1%). In all northern high risk states, caregivers’ refusals to vaccinate their children account for 24% of the total number of missed children during the May Immunization Plus Days (see Page 6).
POLIO SITUATION WORLDWIDE

More than 50% of this year’s cases are from Nigeria — Funding gap comes at a critical time

More than 50% of this year’s cases are from Nigeria, which now constitutes the global epicenter of polio transmission. As of 8 June 2012, Nigeria has recorded 43 cases of wild poliovirus in 10 states compared to 20 cases during the same time period in 2011. After years of decline, polio cases have tripled last year in the remaining three endemic countries.

“Today, the flame of polio is near extinction - but sparks in three countries threaten to ignite a global blaze. Now is the moment to act.” This was UN Secretary-General Ban Ki-Moon’s call in May, in an op-ed that featured in newspapers across Africa.

Polio cases soared from 2010 to 2011 (in Nigeria by 185%), with the most dramatic rise in the second half of 2011. Polio also spread internationally from Nigeria and Pakistan, underscoring the risk that endemic poliovirus transmission continues to pose globally.

“Polio spreads very easily - it’s the nature of the virus. The re-importation of polio to previously polio-free countries will occur unless nearly 100% of all children receive vaccination. That requires sustained funding. In Nigeria, polio is endemic in the northern part of the country which has a weak health care system and suffers from persistent insecurity,” stated Mark Leon Golberg, from WHO, in a note entitled “Funding gap threatens progress against polio”.

“Nigeria has committed funds from its own treasury, and polio eradication in all three countries depends heavily on government resources. But that in itself is not enough. With a determined push, the international community can wipe out polio once and for all. To do so, however, it must organize - and commit the required financial resources,” continued Ban Ki-Moon in this op-ed.

The World Health Assembly was seriously alarmed by the polio eradication funding gap for 2012-13, especially given the decision to shift Polio Eradication into emergency mode. The gap in financial resources comes at a crucial time when there is heightened political commitment from the Governments of Afghanistan, Nigeria and Pakistan. And the number of polio cases and polio infected countries is at the lowest level ever. The Global Polio Eradication Initiative is facing its largest funding gap since inception. They are short $1.09 billion out of the $2.23 budget. “We have faced shortfalls before, but this is unprecedented,” says Bruce Aylward, the longtime leader of WHO’s polio eradication efforts.

“Polio eradication is at a tipping point between success and failure,” said Dr. Margaret Chan, Director-General of the World Health Organization during the World Health Assembly in May. “We are in emergency mode to tip towards success - working faster and better, focusing on the areas where children are most vulnerable.”

Once achieved, polio eradication would generate net benefits of US$40-50 billion globally by 2035, with the bulk of savings in the poorest countries, calculated based on investments made since the Global Polio Eradication Initiative was formed and savings from reduced treatment costs and gains in productivity.

“All our efforts are at risk until all children are fully immunized against polio - and that means fully funding the global polio eradication effort and reaching the children we have not yet reached. We have come so far in the battle against this crippling disease. We can now make history - or later be condemned by history for failing,” continued UNICEF Executive Director Anthony Lake.

Already, funding shortages have forced the GPEI to cancel or scale back critical vaccination activities in 24 high-risk countries. This leaves children vulnerable to contracting the disease, and exposes polio-free countries to the risk of re-emergence.

“The Global initiative is seriously at risk of failure because adequate resources are not available to cover essential activities. While accepting the logic of the prioritization process due to lack of funding, SAGE considered any reduction in essential activities completely unacceptable and a major threat to the overall global vaccine program.” SAGE urged all Governments and partners to act immediately to fill the funding gap in order to ensure the success of global polio elimination globally. By some estimates, failure to eradicate polio could lead within a decade to as many as 200,000 paralyzed children a year worldwide.
Hundreds of thousands of children continue to be missed during polio immunization campaigns

Inna Kanda, 40, is a vaccinator assigned to cover urban areas of Sokoto State. In two hours, Inna has visited almost 50 households and immunized a total of 65 children during the May Immunization Plus Days.

“Deciding to become a vaccinator due to the high number of children with polio in this area. I felt the need to do something for my community’s health. Like my own children, I want my neighbours’ children to be healthy and have the opportunity to grow up without any health problems.”

“I am committed to my work, not only for the sake of the community, but also to show that we can avoid child killer diseases by immunizing our children. Since I have worked as a vaccinator, the number of polio cases has decreased in this area, but there are a lot of challenges we are still facing. Because of their own beliefs, some parents still refuse to bring their children for immunization. It is unacceptable to see that new polio cases still occur in this area. This is why I try myself to convince them and refer some cases of persistent resistance to the district head (community leader).”

Like thousands of vaccinators across the country, Inna goes door-to-door to vaccinate thousands of children across the city. “In an urban area like Sokoto South, tracking every child is not an easy task. We continue to miss a high number of children every Immunization Plus Days (immunization campaign). The children are not inside their houses, or have gone out to play or attend a social event.”

While the proportion of missed children has shown a slightly decreasing trend in the last three rounds (7.2% in February, 7.4% in March and 7.2% in May), hundreds of thousands of children continue to be missed during polio immunization campaigns in Nigeria.

According to the May UNICEF data analysis, Kano has the highest percentage of missed children (8.9%) followed by Kebbi (8.4%) and Sokoto (8.1%). ‘Child absent’ remains the main reason for missed children, accounting for over 67% of the total number of missed children.

“Children who are absent when vaccination teams visit are usually out playing somewhere not so far from their homes. Other times, they may be at social events, which often take place in or near the household,” says Tommi Laulajainen, Chief of UNICEF Polio Communication.

Non-compliance as a reason for missed children during IPDs also remains high in some parts of Nigeria. In the most high-risk States, caregivers’ refusals to vaccinate their children account for 24% of the total number of missed children during campaigns. States like Yobe (54%), Borno (39%) and Zamfara (28%) still have a high proportion of unresolved non-compliance even after revisit teams have gone back to the households refusing vaccination in the first place. REDO data for the last three Immunization Plus Days shows that “Traditional leaders” are amongst the most significant groups in terms of resolving vaccine refusals.

In the May campaign, Sokoto had the highest non-compliance (37%). In Jigawa, “no felt need” is a dominating reason for refusals with 34% of caregivers refusing OPV citing this reason. The main reasons for non-compliance in high risk states are given as “no felt need” (25%), “no reason” (24%), “no care giver consent” (15%), “religious belief” (10%), and “too many rounds” (7%).

“Many social studies have revealed that high risk populations in Nigeria do not know how many doses of Oral Polio Vaccine (OPV) their children require. Additionally, caregivers have some concerns over the safety of OPV, or do not feel their children are susceptible to polio, which could contribute to the response of “no felt need.” Other social and political factors also contribute to refusals,” Laulajainen continues.

In the highest risk states, 97% of the caregivers are aware of the Immunization Plus Days. A total of 47% of the caregivers were informed about Immunization Plus Days by town announcers followed by radio (21%), and traditional leaders (15%). May data analysis also revealed that 56% of the decisions for immunization were taken by the husbands and 25% by the mothers. In the last six rounds of Immunization Plus Days, over 80% of decisions to vaccinate are influenced by the caregiver and the husband.

“I am convinced that Nigeria, could be polio-free in the next few months. We need to be more committed; we need to act collectively and act now at all levels, from the top executive to the grassroots. Together, we can win the race,” concludes Inna. See here the full story of Inna.
Experts recommend more focused and consistent interventions to eradicate polio in Nigeria

"Nigeria has the tools to improve quality, to reach and immunize every child and to eradicate polio. The challenge is to fully and consistently implement the National Polio Emergency Plan." This is the message delivered following the 23rd Expert Review Committee (ERC) meeting in Abuja. The ERC brings together global polio experts twice a year to review the status of the polio eradication initiative and routine immunization in Nigeria, and put forward key recommendations for the Government and GPEI partners.

"To eradicate polio we must immunize more children more consistently, and to protect polio-free areas we must close quality gaps in the high risk states, local governments and villages," experts mentioned. "Achieving the goal of eradication requires truly embracing and operating as an ‘emergency program’ with faster identification and fixing of problems in campaigns, focused resources in the worst-performing areas, and full accountability of national authorities and partner agencies on their assigned tasks."

Nigeria continues to experience a surge of polio cases. As of 8 June 2012, already 43 new cases of wild poliovirus have been reported in 10 states compared to 20 cases in 6 states for the same time period in 2011. In four key infected states – Borno, Kano, Sokoto and Yobe - more than one in thirty children has received less than four doses of oral polio vaccine. And, in the first quarter of 2012, only half of the 12 infected or very high risk northern states convened a State Polio Task Force meeting. Why are we having an upsurge in cases in Nigeria? The answer from the experts was clear: because "we are still failing to immunize every child". The already low quality and coverage of routine immunization services is deteriorating. An estimated of 2.7 million Nigerian infants were completely unvaccinated in 2011.

Encouragingly, there is very compelling evidence that Nigeria now has all of the tools and tactics necessary to achieve rapidly a huge jump in Immunization Plus Days quality. A study conducted since the ERC last met in October 2011 demonstrate that in the poor performing areas ‘non-compliance’ and ‘absence of a vaccination team’ accounted for 45% and 32% of missed children - much higher proportions than typically reported. "Furthermore, the solutions to these problems now exist. Where properly applied, hard data prove that properly applied, hard data prove that the Intensified Ward Communication Strategy (IWCS) reconciled nearly all of the non-compliance that had been encountered. The proposal to structure the current 6-person vaccination team strategy into 2 teams of 3 people could rapidly help address the problem of insufficient teams. The systematic application of the new microplanning templates and processes, supplemented with GIS mapping in priority LGAs, could rapidly solve the nagging problem of missed places. Special population strategies, such as that being piloted for the nomadic population, prove that these very important populations can be reached," experts added.

With 62 WPV cases in 2011, Nigeria is facing challenges in campaign quality. The World Health Organisation Executive Board has declared polio eradication as a ‘programmatic emergency for global public health’ in February 2012. "Nigeria could fail if we stall or slip on implementing the National Polio Emergency Plan and if we fail to rapidly improve campaign quality in the worst performing local governments (LGAs) in high risk states. The program needs to concentrate on the worst performing LGAs in the highest risk states," experts concluded during the meeting.

The new National Emergency Plan is very promising. It addresses all of the major chronic operational and communications challenges the program has faced with approaches that have been proven at the pilot scale. Optimizing the proposed Polio Eradication Accountability Framework of the Presidential Task Force on Polio Eradication, as well as the function of State Task Forces, will be essential to the scale-up of these pilot approaches. It is also critical to ensure the Plan’s full application as an emergency intervention, reward those showing true leadership of the ‘emergency approach’, and sanction those who stand in its way.

A series of recommendations have been defined by the ERC during this strategic meeting, aiming to (i) build a national sense of emergency, (ii) refine the national polio eradication emergency plan, (iii) enhance the impact of this plan, (iv) give a real time urgency to the accountability framework, (v) maintain the focus on the highest risk states and local governments, (vi) improve the supplementary immunization activities strategy and (vii) link the polio emergency approach to improve routine immunization. See here the full report of the 23rd ERC Meeting in Nigeria.
POLIO ERADICATION EMERGENCY PLAN

Putting Nigeria back on track to reach the coverage needed to stop polio transmission

While the immunization status of children in northern Nigeria has continued to improve slowly in 2011, both the number and geographical extent of cases are increasing. In four infected states, <65% of children have >4 OPV doses (Borno, Kano, Sokoto and Yobe). Nearly one third of WPV cases in 2011 were in children who had never received a single dose of OPV. Case investigations suggest that 50% of children with WPV were not vaccinated because of parental refusal. The low-quality routine services are deteriorating; 55% more infants were not vaccinated with DPT3 in 2011 than in 2010, and there were central stock-outs of four of the eight childhood vaccines. Children are missed due to a mixture of operational and social factors, and these program gaps must be addressed if more children are to be reached.

Viruses with genetic evidence of long periods of circulation without detection are still being found, indicating both surveillance gaps, and the strong likelihood that population subgroups, especially nomadic groups and other migrants, are not being adequately covered by immunization or surveillance activities. Recent insecurity in the north is further affecting program quality. Although polio has been declared an emergency by His Excellency the President, in the first quarter of 2012, only half of the 12 northern states convened their State Task Force on Immunization to address problems.

However, the new National Emergency Plan 2012 finalized in April is promising, and if vigorously implemented can achieve a rapid jump in campaign coverage. Data from recently conducted pilots prove the Intensified Ward Communication Strategy (IWCS) can tackle the issue of parents refusing to vaccinate their children. Restructuring the vaccination team strategy should help address the issue of insufficient teams. Pilots designed to improve vaccinator selection/ performance and reduce refusals are showing promise.

Application of the new micro planning templates, supplemented by Global Information System (GIS) mapping, could solve the problem of missed communities. Special population strategies, as for nomadic populations, prove these important groups can now be reached. It will be crucial to take these innovations to scale rapidly in the worst-performing LGAs and districts, through the planned surge support. Additionally, optimizing the Accountability Framework of the Presidential Task Force on Polio Eradication, as well as the State Task Forces, and continued public reporting of the Abuja Commitments to hold states and LGAs accountable, are essential to ensure the Plan’s full application, reward leadership, and sanction those who stand in its way. The National Emergency Plan 2012 provides specificity (activities, targets, deadlines, accountability framework and performance metrics etc.) in each of the following areas. See here the GPEI Emergency Action Plan 2012-2013.
Improving national ownership, oversight and accountability

On 1 March 2012 the President inaugurated a Polio Eradication Task Force, chaired by the Minister of State for Health, to oversee implementation of the National Emergency Action Plan. The issue of accountability of all levels of government is one of the key thematic elements of the plan, in particular the implementation and close monitoring of the Abuja Commitments.

The country’s Expert Review Committee meets at least twice a year to provide strategic advice to the Ministry of Health on polio eradication and to review progress on implementation of the Emergency Plan.

SIA and vaccine plans for 2012-13

Nigeria is planning for a minimum of two national and five large-scale subnational supplementary immunization rounds in 2012, and a minimum of two national and four large sub-national rounds in 2013. A combination of bOPV and tOPV will be used to stop transmission of the cVDPV2 as well as WPV1 and WPV3. Subnational rounds will target, at a minimum, the eight key endemic states of the north.

Improving SIA quality and monitoring

Under its Emergency Action Plan the interim biannual program performance target set for SIA coverage in Nigeria is >90%. The Plan will target levels surpassing this in high-risk, mobile population subgroups. Performance against these targets will be assessed by LQAS. The Emergency Action Plan elaborates key thematic elements for improving the quality of immunization activities, including:

- **Heightened LGA accountability and advocacy:** intensifying advocacy at LGA level while re-enforcing leadership in key high risk states, closely linked to the monitoring of critical steps outlined in the Abuja Commitments;

- **Improved SIA quality and innovations:** the review and refinement of basic strategies for supplementary immunization, including a thorough review of current guidelines, training practices and materials, and the micro planning process, and incorporating new approaches including GIS technology;

- **Improved SIA planning:** developing and implementing a system of indicators to assess preparations for each SIA round at LGA level, coupled with a process for delaying implementation in any LGA/ward failing to meet satisfactory preparation;

  - **Human resource surge:** the identification and deployment of adequate human resources to the highest-risk states and areas (government and partner resources) from the level of vaccination teams and community mobilizers up to state level management;

  - **Reaching chronically-missed children:** introducing and scaling up new interventions to reach chronically-missed children, including a process of in-depth investigation of identified wards or populations (including nomadic populations) where children are being missed, to develop a package of appropriate operational and social interventions;

  - **Enhanced routine immunization:** intensifying routine immunization activities through the ‘reaching every ward’ strategy in the high-risk states and incorporating lessons learnt in polio, including micro planning to ensure all communities are reached, monitoring of service delivery, and communications strategies to build community demand;

  - **Strengthened communication response in key priority areas to address vaccine resistance:** Establishing the Volunteer Community Mobilizer (VCM) initiative in poor performing settlements in Kano, Kebbi, Sokoto, Zamfara and Jigawa. Following-up on the Polio Free Torch campaign with media engagement and organizing state level events to engage Governors. Intensifying engagement of religious clerics and launching an anti-rumour campaign in northern Nigeria.

  - **Focusing on the front-line workers and vaccinators:** improving interpersonal communication training for vaccinators, their supervisors and ward focal points; rewarding well-performing volunteers; and rewarding settlements who continue to have 0% missed children and 0% non-compliance (refusals).

Enhancing Surveillance

The Emergency Plan outlines a process for strengthening surveillance, including the continued use of rapid assessments linked to action plans to address gaps, a full national surveillance review, a series of processes for the better engagement of medical and health workers, and expanded environmental surveillance. Additionally, mobile phone SMS prompting to increase and improve active surveillance, especially in difficult access areas (e.g. Borno) will be piloted, with a view to wider scale-up.

<table>
<thead>
<tr>
<th>Area</th>
<th>Achievement/Target</th>
<th>Date (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIA Coverage</td>
<td>&gt;80% LGAs in high-risk states (HRS) achieve 90% coverage in at least 1 ID (Immunization Plus Day) round.</td>
<td>End June</td>
</tr>
<tr>
<td></td>
<td>&gt;70% LGAs in the HRS achieve 90% coverage in 2 IDPs.</td>
<td>End September</td>
</tr>
<tr>
<td></td>
<td>&gt;70% LGAs in the HRS achieve 90% coverage in at least 4 IDPs.</td>
<td>End December</td>
</tr>
<tr>
<td>Surveillance</td>
<td>90% of LGAs meet the 2 main surveillance indicators.</td>
<td>End December</td>
</tr>
<tr>
<td></td>
<td>Zero orphan virus detection</td>
<td>End December</td>
</tr>
<tr>
<td>Routine Immunization</td>
<td>Achievement of at least 50%OPV3 coverage in all high-risk LGAs.</td>
<td>End December</td>
</tr>
<tr>
<td>Communication &amp; social mobilization</td>
<td>Ensure 80% of high-risk States and LGAs achieve quarterly Abuja Commitments.</td>
<td>End December</td>
</tr>
<tr>
<td></td>
<td>80% of LGAs implement 80% of social mobilization activities in national EAP.</td>
<td>End December</td>
</tr>
</tbody>
</table>
VOLUNTEER COMMUNITY MOBILIZER NETWORK

Social data analysis reveals the impact of the Volunteer Community Mobilizers’ (VCM) work on the ground

Prior to May Immunization Plus Days, 613 Volunteer Community Mobilizers were fully operational in the States of Kano (368), Kebbi (200) and Sokoto (47), as part of the first phase of the initiative. These volunteers have started to identify and characterise chronically missed children and non-compliant parents through community friendly approach. They conducted house-to-house visits to linelist all children in their settlement. During the May Immunization Plus Days, they have assisted vaccination teams to track all non compliance cases.

Preliminary results from Sokoto State have shown some encouraging trends as well as areas where improvements are necessary. It is clear that the role of the Volunteer Ward Supervisors is extremely important in terms of ensuring the monitoring forms are filled out correctly.

The proportion of missed children and actual non compliance came down in some of the settlements where the VCMs were deployed while it stayed the same in others. For the first time, all the households in the settlements were visited. 15 settlements out of 47 have recorded a significant reduction of the proportion of missed children. A total of 220 children, previously missed in March campaign were reached during the May Campaign and 183 cases of non compliance were resolved. The proportion of missed children came down from 12.3% to 9.8%. A complete social data analysis is underway to measure the impact of the volunteers’ work on the reduction of missed children and non compliance. In the first two weeks of June, the cascade trainings of the remaining volunteers planned for Kano, Kebbi and Sokoto were completed. As planned, 957 volunteers are now operational (557 for Kano, 200 for Kebbi and 200 for Sokoto).

The launch of the initiative in the States of Zamfara, Jigawa and Katsina has started this month with the training of trainers session for the Volunteer Ward Supervisors, Ward Focal Points and LGA Health Educators. The first phase of the expansion will target 150 settlements per State. By early July, expansion of the VCM Net will be completed in Yobe and Borno, covering initial 150 settlements in each State.

“The initiative is facing some challenges we need to address. Some VCMs are not able to do their assignments. They are already engaged in another activity at one settlement. Some are too old to even move outside their homes due to the fact that the selection was done according to the set criteria and process. Field verification is required,” stated Naureen Naqvi, UNICEF Communication for Development Specialist for Polio.

Selected from their respective settlements, the volunteers have been trained to work as “change agents” in the community and are responsible for house-to-house mobilization and communication for polio and routine immunization. With a pictorial flipbook, VCMs conduct interpersonal counseling house-to-house on immunization and promotion of some key household practices such as treatment of diarrhoea, prevention of malaria, breastfeeding and hand washing. In total, over 2,150 settlement level VCMs will be recruited, trained and deployed in the settlements where missed children and refusals of oral polio vaccine are still persistent. See here the latest UNICEF update on VCMNet.
VOLUNTEER WARD SUPERVISORS

Community Empowerment in Action

Meet the volunteer

Maimuna Umar
Volunteer Community Mobilizer
Gidam Danala Settlement
Sokoto South, Sokoto State

Maimuna Umar, 35, is a Volunteer Community Mobilizer (VCM), assigned to cover the village of Gidam Danala, in the urban area of Sokoto South. Prior to the May Immunization Days (from 19 to 22 May 2012), she has visited a total of 170 households.

Concretely, what did you do before the May Immunization Plus Days?

I started to linelist all the households within the settlement where I am assigned and tried to identify all non compliant families. With the pictorial flipbook, I try to convince them not only on polio immunization but also on some key household practices. I can say that families pay more attention to polio immunization when we talk about other key practices like breastfeeding, malaria prevention, hygiene and sanitation. Before the campaigns, I identified a large number of non-compliant households in this village. In total, I visited 170 households.

Families pay more attention to oral polio vaccine when we also talk about other key households practices

How did you contribute to the reduction of these cases of refusals?

Almost all the non-compliant families identified before the campaign have accepted to receive the oral polio vaccine. I assisted the vaccination team in identifying them, based on the data I already collected. I also supported re-do and revisit teams in the settlement.

Any suggestion from your side to improve the implementation of this initiative?

First of all, the success of this project will depend on the synergy between the vaccination team and the VCMs. We are here to support the vaccination team. I have to say also that some of the VCMs find it difficult to do their job. Some of them are too old and many of them do not know how to write and read.
OPINION

Don’t fall at the finish line in the race to eradicate polio

Dr. Muhammad Ali Pate is Minister of State for Health in Nigeria. Dr. Christopher Elias is president of Global Development at the Bill & Melinda Gates Foundation. The views expressed in this article are solely those of Pate and Elias.

The two of us are roughly the same age but we grew up in very different parts of the world. One of us had the luxury of never giving polio a second thought. The other saw his best friend paralyzed by the disease and, some years later, killed by a car as he struggled to cross the street.

It’s a tragic story of the inequities that separate rich countries like the United States from developing countries such as Nigeria. But it’s also a hopeful story as progress on polio eradication is made.

In less than a quarter century, the number of children paralyzed by polio has dropped spectacularly — from 350,000 cases annually to just 650 last year. In 1988, there were 125 countries where polio was endemic. Today, there are just three - Nigeria, Pakistan and Afghanistan.

Earlier this year, India was removed from the list of polio-endemic countries. Just two years ago, India — a subcontinent with a population of more than 1 billion — was thought to be the last place on earth where polio would be eliminated.

India’s success proves that polio is a disease that can be defeated in the most challenging circumstances, and for the most part has been. But finishing the job in a remaining few pockets in Nigeria, Pakistan and Afghanistan will take a stronger commitment.

We are at a critical moment in the effort to create a polio-free world: Anything short of complete eradication means we give up on the promise of providing all children, no matter where they live, the benefit of living a life free of this debilitating disease. It also means every year tens of thousands of children — not just in the currently endemic countries but also children in countries that have been polio-free for years — run the risk of getting paralyzed from polio.

The reality is that until the remaining three endemic countries eradicate polio, the virus could make a comeback anywhere. As recent outbreaks in China and Tajikistan have shown, polio knows no borders. We learned from India’s experience that stopping polio transmission requires a strong commitment by political and community leaders, well-managed and high-quality vaccination programs tailor-made to local circumstances, and adequate financial resources.

The three countries where polio is still endemic are applying these lessons. At the highest levels of government, there is a deep and unwavering commitment. To address unique local conditions, Afghanistan and Pakistan have established permanent polio teams to serve provinces where security conditions have made it difficult for volunteer teams to reach children with vaccines. In Nigeria, satellite technology is being used to help ensure every community is reached.

We need to do all we can to support these kinds of efforts and ensure that leaders at all levels are accountable for getting the job done. Follow-through of another kind is just as important. The global partnership that has worked so successfully to eradicate polio is nearly $1 billion short of the funds necessary to fully implement the campaign through 2013. Already, the funding shortage has forced cancellation or scaling back of essential vaccination activities in 24 high-risk countries.

This is where governments and other donors can make a key difference — continuing to support the level of funding necessary to sustain the eradication effort. The lagging economy is putting extra pressure on donors, but inaction will not only lead to terrible human suffering; it will also carry a far greater economic price tag than continuing to invest now.

In fact, a successful eradication effort will result in benefits of up to $50 billion by 2035 in the world’s poorest countries, according to world health groups. The world’s investment in polio eradication is also paying dividends by laying the foundation for delivery of other cost-effective health services—including vaccines for other preventable diseases.

Health ministers representing nearly 200 countries underscored their strong belief in the effectiveness of vaccines and their importance of protecting all the world’s children by passing two resolutions. One declared polio eradication a worldwide health emergency. The other endorsed a global plan to ensure that all children — not just those in wealthy countries — have access to vaccines that prevent diseases.

As public health practitioners and as parents, we believe that every child, no matter whether they were born in a U.S. hospital or a hut in Nigeria, deserve to be protected from this preventable disease. And we believe that because eradicating polio is something that benefits us all, we all share in the responsibility to make that happen. (Source: Global Public Square Blogs CNN)
POLIO ERADICATION CHAMPION AWARD

Rotary honors Nigerian President Goodluck Jonathan as a champion in the worldwide effort to eradicate polio

The Rotary Foundation, Wilf Wilkinson, the Polio Eradication Champion Award is the highest honor Rotary presents to heads of state, health agency leaders and others who have made significant contributions to the global polio eradication effort.

"On behalf of Rotary’s 1.2 million members worldwide, including nearly 6,000 in Nigeria alone, I would like to express the solidarity of Rotary members in standing firmly beside President Jonathan and the Nigerian people in the polio eradication effort. I am honored to recognize the commitment of President Goodluck Jonathan for support of a polio-free Nigeria, and a polio-free world," said Wilkinson.

During Jonathan’s term, Nigeria posted a 95 percent decline in polio cases in 2010 as compared with 2009. However, 2011 saw a resurgence of the disease (62 reported cases), emphasizing the need for continued vigilance in the fight against polio. Jonathan renewed his attention to polio eradication with the launch of Nigeria’s Emergency Action Plan – a comprehensive strategy to accelerate progress toward polio eradication at every level. To support the plan, Jonathan announced that he would significantly increase funding for polio eradication activities: US$30 million annually for 2012 and 2013.

In receiving Rotary’s Polio Eradication Champion Award, Jonathan joins a roster of distinguished leaders, including India’s Prime Minister Manmohan Singh, Chancellor of Germany Angela Merkel, current UN Secretary-General Ban Ki-moon and former Secretary General Kofi Annan, President Asif Ali Zardari of Pakistan, and former Chairperson of the African Union Commission Alpha Oumar Konare. Read more

BORNO STATE

The Polio Free Torch campaign aims to drum up high level commitment

"I want to call on our brothers and sisters... to lay down their arms and embrace peace and dialogue,” announced Kashim Shettima, the Governor of Borno State, at the state launch of the Polio Free Torch campaign in the city of Maiduguri. Borno State has lately been the site of ongoing violence. In August, 2011, an armed group bombed the United Nations House in Abuja, killing 22 people, and Maiduguri continues to witness attacks against police and government officials on a weekly basis.

Conflict can weaken public health systems, but Mr. Shettima is determined to make his state polio-free in spite of the security situation. “I believe where there is a will, there is a way,” he said.

Borno has already seen six new polio cases in 2012. Out of the state’s 27 Local Government Areas (LGA), 12 are considered high-risk areas for the disease. In these areas, large numbers of children continue to be missed during vaccination campaigns. During February campaign, nearly 30 per cent of caregivers refused to vaccinate their children.

But UNICEF and its partners are setting up two new interventions to address these issues. Read more
Federal Government receives grant from Japan to interrupt polio in Nigeria

The Federal Government of Nigeria has received a grant of US$7.85 million approximately N1.24 billion for child survival programs in Nigeria. The donation was given by the Japanese Government for polio eradication, strengthening cold chain system especially for routine immunization and support for Maternal Newborn and Child Health Weeks in Nigeria.

The Minister of Health, Prof.C.O.Onyebuchi who received the grant on behalf of the Federal Government, thanked the Japanese Government for the kind gesture adding that Japan remains a major donor to the global health sector. "This year, the Federal Government has upscaled its commitment against polio with N4.7 billion for eradication effort pointing out that in 2013 Nigeria will be removed from polio endemic countries," he said.

Delivering his keynote address, the Japanese ambassador to Nigeria, Mr. Ryuichi Shoji said that Japan has been making sustained efforts to fight against infectious diseases noting that it has been attempting to eradicate polio in cooperation with UNICEF as well as the Government of Nigeria for more than ten years. "Japan’s financial contribution in the fight against polio in Nigeria amounts to more than 7 billion yen (about 14 billion naira) stressing that though Nigeria has made significant progress in polio eradication, there is a need to redouble efforts to eradicate the polio scourge," said Mr. Shoji, and added, "mortality rate of children under five years of age and maternal mortality rate in Nigeria are still high; we still need to make progress."

In her remarks, Dr. Suomi Sakai UNICEF Representative in Nigeria said that while Nigeria is making some progress in reducing its high child mortality rate, key challenges remain to be addressed if Nigeria is to achieve the health MDGs. She pointed out that childhood killer diseases such as measles, tetanus or whooping cough are among the major causes of child mortality. "The grant will be used to provide Oral Polio Vaccine (OPV) for use during Immunization Plus Days (IPDs) adding that it will also be used to procure cold chain equipment to fill existing cold chain gaps in the context of new vaccines introduction," said Dr. Sakai.

"The grant is timely and will make a significant contribution to Nigeria’s final push to stop the transmission of the wild poliovirus. It will support the efforts to strengthen routine immunization including expansion of the cold chain system for introduction of new vaccines. Furthermore, the grant will be used to support the process of institutionalizing Maternal, Newborn and Child Health Weeks (MNCHWs) in Nigeria," concluded Dr. Sakai.

FLASH

UNICEF Polio Communication Chief, Tommi Laulajainen and his wife Dina, administer Oral Polio Vaccine to their 6-week old son, Alex in Abuja, in March. “OPV is safe, and the only way parents can protect their children against polio is to immunize them at every opportunity, during every campaign - the more doses children receive, the better,” says Laulajainen. Nigeria is implementing two national and five sub-national polio campaigns this year.
Nigeria committed to expand access to life-saving vaccines to all Nigerian children

At the opening ceremony of the Vaccine Summit in Abuja, the Minister of State for Health Dr. Muhammad Ali Pate announced the Federal Government’s allocation of 6 Billion Naira for the procurement of routine vaccines against child killer diseases.

“In 2012, the Government of Nigeria has allocated 6 Billion Naira for procurement of routine vaccines and new vaccines against pneumonia. Millions of doses of routine vaccines will be procured directly through UNICEF and distributed to all the 36 States and FCT for administration to all Nigerian children free of charge,” said Minister Pate.

“This year we do not expect funding to affect the delivery of vaccines. What we require now is that counterpart action from the State Governments will ensure that their cold stores are effective and their health workers are adequately positioned to deliver the vaccines in primary healthcare centers and during outreach sessions,” he added.

Speaking on the lack of awareness by parents, the Minister said that many parents were not fully aware of the benefits of vaccination and as a result they missed the important opportunity to protect their children against vaccine preventable diseases. He noted that it is only severe lack of understanding that can lead a parent to refuse few drops of polio vaccines that can protect their children from a disease that can kill or permanently paralyze them.

In order to address these challenges, the Minister said that “we must embark on continued awareness promotion to parents and community leaders to recognise and demand for vaccines to protect their children, all children are the same, no child shall be left behind.”

He urged all political, religious and traditional leaders to ensure that in all public gatherings, vaccination is explained and encouraged. He further acknowledged and commended the role of traditional rulers and community leaders in the fight against polio in the country. Dr. Pate said that the Federal Government is committed to expand access to life-saving vaccines to all Nigerian children.

In 2009, the National Immunization Policy was revised to accommodate new vaccines. In addition to traditional vaccines the policy made room for introduction of new vaccines that will protect children against pneumonia and other invasive bacterial diseases.

The Federal Government has strengthened the capacity of vaccine managers in all the 36 states of the Federation and FCT, to manage the routine immunization system while also improving the supervisory function throughout the country. The Minister commended Development Partners such as Japanese Government, UNICEF and European Union (EU) among others for their contribution on routine immunization.

In his remarks the Secretary of the Government of the Federation, Senator Anyim Pious Anyim said that despite the availability of simple cost effective measures such as vaccines, Nigeria continued to lose an estimated one million Nigerian children each year to diseases that could be prevented through vaccination.

“Federal, State, Local Government, Private stakeholders, Non Governmental organizations, traditional rulers and religious leaders must join hands together to educate Nigerians on the benefits of vaccination,” he added, and urged “all stakeholders to mobilize the necessary resources for vaccination and also to monitor the entire process of vaccination.”

Senator Anyim emphasised that the process of monitoring and ensuring accountability is very important especially in the rural areas where large numbers of people are living. He stressed that as the year 2015 drew near Nigeria remained committed to achieving Millennium Development Goals. It is proven that vaccinating our children is the most cost effective way of achieving MDG4, i.e. reducing child mortality rate.

Senator Anyim said that Federal Government had lent its full support to convening of the Vaccine Summit.
Traditional Leaders play a key role in resolving refusals to polio immunization in Nigeria

“...my energy has squandered in vain until North Eastern Nigeria is “emancipated” from Polio. I have seen many children being crippled for life by polio, a virus that could have been prevented by immunization and this by all means is unacceptable!” This was a message delivered by Alhaji Bilyaminu Othman, the Emir of Dass during the pre-implementation of the Supplementary Immunization Activities (SIAs) in Guda ward of Ningi LGA, a village which is considered high risk for transmission of the polio virus in Bauchi State.

Othman is a member of the Northern Traditional Leaders’ Committee (NTLC) on Primary Health Care Delivery. This committee has been tasked to improve immunization coverage, ensure total eradication of polio and contribute to the development of an effective primary health care system.

As influential leader, Othman has been instrumental in dispelling rumors against immunization and has greatly complimented the social mobilization activities undertaken by Bauchi State Primary Health Care Development Agency and UNICEF prior to the implementation of Supplementary Immunization Activities. While the campaigns were underway, his charismatic presence with the vaccination teams was enough to mobilize as many as 400 households in Guda village, a non-compliant community with an estimated population of 4,500 people. According to him, there is a need to reach other hard to reach areas in North East of Nigeria where terrain is difficult in order to convince non-compliant people on the need and importance of immunization. “I repeatedly say that no rest until North Eastern Nigeria is “emancipated” from polio.”

According to the latest UNICEF Social Data Analysis, Traditional Leaders are playing a key role in resolving refusals to polio immunization programs. During May campaign, 30% of non-compliance cases were resolved by Traditional Leaders in the most high risk States, followed by Religious Leaders (8%), and Community Leaders (7%).

Within the Northern Traditional Leaders’ Committee, Traditional Leaders undertake series of activities ranging from advocacy, acting as role models, involving in mass mobilisation and community education of their people as well as monitoring immunization and other health activities. In the first quarter of 2012, NTLC has undertaken a series of activities which have had a direct impact on the reduction of missed children and non-compliance.

NTLC ACTIVITIES (Q1)

- Conducting Flag-Offs at Emirates and district level by vaccinating own children
- Conducting pre-implementation supervisory tour to high-risk LGAs based on challenges of the previous IPDs
- Direct resolution of non-compliance in high-risk settlements and households
- Chairing of daily evening review meetings and community dialogue
- Sensitization tour of emirates and traditional councils on PEI and flag-off campaigns throughout IPDs
- Supporting the implementation of polio awareness day
- Announcements / endorsements on PEI and Routine Immunization during Eids celebration
- Supporting the implementation of the Polio-Free Torch Campaign

NTLC INNOVATIONS

- 2011 Annual Review meeting organized by Traditional Leaders in HR States (Kebbi, Bauchi, Borno) to discuss outcome of the year and way forward
- Flag offs by Emirs in most 2011 IPDs
- Distribution of wheel chairs to polio victims by some Emirs
- Field tours to districts dedicated for immunization and PHC services by some Emirs
- Development of IEC materials by some Emirates for advocacy and mobilization (Bauchi and Kebbi)
- Commencement of line listing of HR settlements (Yobe and Plateau) and town announcers
TRACKING THE LAST CHILD

A new investigation tool designed to understand and address non-compliance

WHO is developing a new investigation tool designed to improve understanding of the issue of refusals to polio immunization and to address non-compliance cases vaccinators are facing on the ground. The idea is to generate case scenarios and suggest probable responses for thought-provoking discussions with the frontline personnel who usually serve as the primary contact between the vaccine and the child.

Since the vaccinator is the primary bridge between the vaccine and the child, the caregiver expects the vaccinator to provide her with convincing explanations as to why her child must receive OPV for about 8-10 times in just one year. The vaccinator is posed with several questions and concerns ranging from OPV safety to religious beliefs against immunization. The vaccinator has to convince the caregiver on why the sick child must be vaccinated, explain why the government offers free polio vaccination but charges money for ordinary analgesic in health facilities and so forth. This new investigation tool enumerates 20 non-compliance case scenarios and suggests 20 possible convincing responses as a guide to enable the vaccinator to persuade caregivers to vaccinate their children against polio.

In Nigeria, persistent community resistance to vaccination in some of the high risk areas is profoundly impacting progress. Caregivers in Nigeria still refuse to vaccinate their children more frequently than in any other country in the world. In the most high risk States, caregivers’ refusals account for 24% of the total number of missed children, according the latest UNICEF social data analysis. Sokoto (37%), Kano (33%) and Yobe (33%) have the highest proportion of non-compliance amongst the missed children.

GEOGRAPHIC INFORMATION SYSTEM

Innovative solution to map high risk polio areas and track vaccination teams on the ground

Nigeria’s telecommunications company, Etisalat has partnered with the Economic and Social Research Institute (ESRI) to deploy android based Geographic Information Systems (GIS) applications for the mapping of high risk polio areas and tracking of routes covered by polio vaccination teams during campaigns in the country. The polio tracking application is designed to help achieve a safe threshold of at least 90% vaccination coverage of the child population in high risk areas, a threshold that public health scientists consider sufficient to prevent further polio recurrence. The first phase of this application will be deployed to high risk polio areas in northern parts of Nigeria. The application tracks areas covered by vaccinators in high risk polio locations and upload acquired tracks into an Esri ArcGIS server, via GPS. Uploaded server information are used for map creation (risk mapping) and generation of automated reports, which can show the distribution of risk, success, activities, findings, and plans, for polio teams, program managers, donors, and other stakeholders.

Speaking on the partnership, Chief Commercial Officer, Etisalat Nigeria, Wael Ammar commended the efforts that have been made so far by the Federal, State and Local Governments as well as individuals and NGOs. He, however, highlighted the importance of the polio monitoring application which helps in tracking the risk areas. He said, “Polio eradication effort is not only about the disease, but also about delivering an innovative and effective solution and leveraging the opportunity of mHealth that will help prevent a serious disease that depends on a functioning health system to succeed. This application will significantly improve the chances of identifying and eradicating polio in Nigeria.” With the growth in number of polio cases detected in Nigeria lately, a holistic approach towards eradicating the disease has been put in place by Esri in partnership with the United Nations and World Health Organization, and supported by the use of the technology from Etisalat which could be one of the most innovative approaches to mHealth in Nigeria. The initiative is funded by the Bill & Melinda Gates Foundation.
FROM THE FIELD

Volunteer Community Mobilizer Network in Sokoto and Kebbi — Community empowerment in action

Balikisu Yusufu is a Volunteer Community Mobilizer (VCM) covering the settlement of Takalmsula, in Sokoto South. Prior to the May IPDs, Yusufu has visited a total of 175 households.

Safi Bello, 25, a VCM covering the settlement of Shiyar Zabarmawa in Kebbi State. With the pictorial flipbook, she is trying to convince the community on the importance of Polio Immunization and key household practices.

Using this monitoring tool, the Volunteer Community Mobilizers are responsible for identifying, tracking and engaging families classified as non-compliant households or caregivers.

Selected from her own settlement, the VCM assists the vaccination team during IPDs to reach all the non-compliant families/caregivers. Photo taken in Kebbi State during the May 2012 Subnational Immunization Plus Days.

Interpersonal counselling on immunization and promotion of key household practices such as treatment of diarrhoea, prevention of malaria, breastfeeding carried out door-to-door and person-to-person form the core of the volunteers’ work. Photo taken in Kebbi State during the May Immunization Plus Days.

With the District Head support, the Ward supervisor for the Volunteer Community Mobilizer Network has convinced the teachers of the Koranic School of Takalmsula to immunize all the children in the school during May IPDs in Sokoto South, Sokoto State.
According to the May data analysis, Kano has the highest percentage of missed children (8.9%) followed by Kebbi (8.4%) and Sokoto (8.1%). Photo of the child taken in Kebbi State during the May Immunization Plus Days.

In the most high risk States, caregivers’ refusals account for 24% of the total number of missed children, according to the latest UNICEF social data analysis. Photo taken in Kebbi State during the May 2012 Immunization Plus Days.

“Families pay more attention to oral polio vaccine when we also talk about key household practices, like good hygiene, breastfeeding, etc.,” said Umar, VCM from Sokoto South. Photo: Child drinking clean water in the urban area of Sokoto South.

The vaccination team, supported by the Volunteer Community Mobilizer, has convinced the teachers of the Koranic School of Makarat Arabic in the village of Makeran Gandu, to immunize all the children in the school, during the May 2012 Immunization Plus Days in Kebbi.

While the proportion of missed children has shown a slightly decreasing trend in the last three rounds of Immunization campaigns (7.4% in March and 7.2% in May), hundreds of thousands of children continue to be missed during polio immunization campaigns in Nigeria.

In the May campaign, Sokoto had the highest non-compliance (37%). Photo of mother and child attending the flag-off ceremony of the May Immunization Plus Days in Sokoto State.