Report on the June 2012 IMB recommendations

I. An emergency meeting of the Global Polio Partners Group is held to mobilise urgent funding to re-instate cancelled campaigns.

GPEI stakeholders participated in a PPG Working Group meeting (via conference call) in July to discuss resource mobilization plans.

As of October 4, the GPEI financial shortfall for 2012 is effectively closed. When the 75% likely prospects are successfully operationalized, the total funding gap for 2012-13 will be reduced to $340.76 million for 2013. The additional funding support ensured that high priority campaigns as identified in GPEI partner meetings in the summer of 2012 could be performed throughout the remainder of 2012.

Two major events this year contributed to addressing this gap. The first was the WHA declaration of eradication as a programmatic emergency, raising awareness of the need for immediate funding and programmatic changes. The second was the recent high-level UNGA polio event, called “the most important international meeting on polio eradication in the last 20 years". The event, hosted by UN Secretary General Ban Ki-moon with participation by the presidents of the endemic countries and high-level representation from donor countries, generated further global attention to the “once-in-a-generation” opportunity the world has to end polio, drove funding commitments from existing and new donors and helped set the stage for a shared agenda around resource mobilization and the long-term GPEI strategy.

One highlight of UNGA was the announcement by UK Minister Duncan of an additional £25M in polio funding, “We need to understand why some countries are reluctant to contribute. Everyone signed up, yet the eradication initiative still faces a budget shortfall...We need concrete commitments to make sure we don’t move backward.” In addition, the associated Global Festival event, run by Global Poverty Project, engaged tens of thousands of new “global citizens” in support of polio eradication.

A robust long-term strategy, more strategic collaboration of partners, continued on-the-ground progress, and momentum begun during UNGA should position the partnership to obtain by mid-2013 most of the long-term funding needed.

II. The Polio Oversight Board should continuously review the effectiveness of the Programme to achieve improvement; ten transformative activities are set out for this purpose.

[Description of actions in support of the 10 transformations is in a separate document]

III. A polio ‘end-game and legacy’ strategy should be urgently published for public and professional consultation.

The GPEI partners hired a Programme Manager (Andrew Freeman) in July 2012 to coordinate the development of an Endgame Strategic Plan and to outline a process for planning the Legacy of polio. In developing both elements, input has been sought from WHO Regional and Country Offices, the polio
donor and stakeholder community, the SAGE polio working group, and the GPEI Spearheading partners. Through this consultative process a draft document was developed. This draft will be discussed by the Polio Partnership Group (PPG) on 15 October and an updated version incorporating PPG input will be transmitted to the IMB on 18 October. Input from the IMB and technical guidance from SAGE at both their upcoming meetings will be incorporated into a final version.

The Endgame Strategic plan, which outlines how eradication will be achieved, the milestones along the way, and how related risks will be managed, will be finalized by the end of 2012. The key milestones within the plan are end-2014 for interruption of wild poliovirus transmission and end-2018 for global certification. An accompanying budget was developed, with an indicative financial requirement of US$5.5 billion for the period 2013-2018. The Legacy section that outlines the process for planning polio’s legacy will also be developed by end-2012. Planning for the post-polio era will require broad consultation amongst the wider global health community to ensure that the investments in polio eradication, and polio’s assets, are secured for broader global health benefits. These consultations are envisaged to take place in 2013. The Legacy section will outline the plan for these consultations.

IV. A plan to integrate polio vaccination into the humanitarian response to the food crisis and conflict in West Africa should be rapidly formulated and implemented. Alliances with all possible programmes must be urgently explored, to make every contact count.

In 2012, the nutrition and food security crisis impacted nine countries in the Sahel region (Mali, Mauritania, Burkina Faso, Niger, Nigeria, Chad, the Gambia, Senegal, and Cameroon). In addition to the nutrition crisis, other crises have required humanitarian responses throughout Africa: insecurity in northern Nigeria, northern Mali, and eastern DRC; flooding in Nigeria, Cameroon, Chad, Gambia, Mali, Niger, Senegal, Togo, and Ghana; and cholera in 15 countries in the African region.

In response to these crises, several countries in the region developed plans to integrate and implement curative and preventive activities in nutrition, health (including vaccination) and WASH (water, sanitation, and hygiene). The interventions aimed to ensure an integrated and multi-sectoral response. Integrating polio vaccination to nutritional and emergency interventions offered an opportunity to access children that may be otherwise inaccessible or un-immunized. Also, a great number of children are seen in centers that provide nutrition interventions and there is high demand for nutrition interventions which leads to less missed opportunities to vaccinate children. EPI/polio can also be seen as an entry point to provide a more comprehensive support to health activities among internally displaced populations (IDPs) and refugee populations while strengthening entire health systems in countries.

Although each country tailored integration of oral polio vaccine (OPV) with its nutritional and emergency response, the entire region strengthened cross-border collaboration. Since access is sometimes easier from the neighboring countries to vaccinate hard-to-reach, cross-border meetings were held at local level between neighboring countries to vaccinate children at each side of the border (e.g. Niger-Nigeria; Mali – Burkina Faso – Cote d’Ivoire) as well as regionally (cross-border meeting for countries around the Lake Chad, 3-4 Nov 2012, involving Cameroon, Chad, Niger and Nigeria); Cameroon-Chad cross border meeting in N’Djamena 5-6 Nov).
Emphasis has also been given to strategies to reach nomadic and other mobile populations which may increase during nutritional crisis and other emergencies in this context; WHO/IST West Africa organized a meeting with 5 countries (Burkina Faso, Mali, Niger, Chad, and Mauritania) in Burkina Faso on 28-30 August 2012, and ongoing experiences from Nigeria and Kenya were shared with countries attending the meeting.

Refugees and IDPs are being prioritized and included in all planned supplementary immunization activities (SIAs) and are targeted with specific messages and communication activities. Internally displaced populations (IDPs) in Mali and Malian refugees in Burkina Faso, Niger and Mauritania received polio vaccination during the campaigns and as part of a package of interventions in routine (combined with measles, vitamin A supplementation, nutrition screening, and deworming). To supplement regular synchronized campaigns held in the region, a synchronized campaign was conducted in June/early July in 4 countries: Niger (all regions except Agadez); Mali (the 6 regions accessible in the South); Burkina Faso (all regions neighboring Niger and Mali); and Guinea (Conakry and Kankan). These sites were chosen based on risk analysis which pointed to an increased risk for poliovirus transmission in the region due to the ongoing cases of wild polio virus (WPV) in Nigeria and the ongoing nutritional and humanitarian crisis with subsequent increased population mobility across the region. A campaign was also held in Nigeria. Synchronized polio SIAs are planned in October and November involving 14 countries in West and Central Africa (Benin, Burkina Faso, Cameroon, CAR, Chad, Cote d’Ivoire, DRC, Guinea, Liberia, Mali, Mauritania, Niger, Nigeria, Sierra Leone).

See Annex for further details of OPV integration with the humanitarian response, including country-specific data.

V. We recommend that environmental surveillance should be much expanded in its use, and that, if feasible, a positive environmental sample should trigger a full outbreak response. We recognize the feasibility and the logistics of this need to be looked into but this should be done rapidly.

A workshop on the topic of environmental surveillance was held in Atlanta May 7–8, 2012. The current status, a framework for setting priorities, and prospective new techniques were discussed. A strategic plan and guidance for poliovirus environmental surveillance are being drafted, to be completed by the end of 2012. These documents will address the role of environmental surveillance in different settings and phases of the eradication program, considerations for implementing poliovirus environmental surveillance, and methods for sample collection and laboratory processing, as well as recommendations for preparing regional poliovirus environmental surveillance plans.

With current technologies, laboratory testing of environmental samples requires extensive training, acquisition of equipment and supplies, and increased human resources and working space, in addition to a laborious process of properly and systematically collecting specimens from multiple carefully chosen sites, generally on a weekly or biweekly basis. Most current laboratories in the Global Polio Laboratory Network are already highly taxed by the workload of acute flaccid paralysis (AFP) specimen testing, which cannot be compromised. For remote testing of environmental specimens (e.g., in a non-endemic country whose laboratory may have available capacity), concentration of the specimen is
required, still with considerable training and investment, and with a heavy burden of proper, costly transportation.

Therefore, GPEI expansion of environmental surveillance will phased, while research is undertaken to develop new technologies to streamline and improve the effectiveness of specimen collection and laboratory testing. Partners are also working together to identify a source of funds to support development of optimized sample collection and concentration, as recommended during the May 2012 workshop. A Request for Proposals (RFP) to use these funds is expected to be announced during the 4th quarter of 2012, with work to commence in early 2013.

The current priorities for expanding environmental surveillance using existing technology for are:

- **2012-Q4:** Adding/changing specimen collection sites within the Kano metro area, Kano State, Nigeria.
- **2013-Q1:** Starting specimen collection at designated sites in Luanda, Angola for concentration in a local laboratory and testing at a remote laboratory (tentatively in South Africa).
- **2013-Q2 or later:** Initiate specimen collection at sites in Maiduguri, Borno State, Nigeria (laboratory capacity must first be sufficiently increased to accommodate this).
- **2013-Q4:** Consider additional locations in sub-Saharan Africa that are major transport hubs, e.g. Ouagadougou, Burkina Faso.

VI. Contingency plans should be drawn up now to activate the International Health Regulations (IHR) to require travellers from polio-affected countries to carry a valid vaccination certificate; this measure should be implemented when just two affected countries remain.

The work to take this recommendation forward is ongoing at WHO, in collaboration with the Department of Global Capacities Alert and Response which coordinates the secretariat’s implementation of the IHR. International spread of poliovirus from the remaining endemic countries (currently Afghanistan, Nigeria and Pakistan) represents the major threat to the successful completion of Polio eradication, and vaccination substantially reduces the risk that an infected traveler will excrete virus and infect others.

The three options that were considered were: (1) an amendment to the IHR, or for the DG/WHO to issue either a (2) 'Temporary Recommendation', or (3) 'Standing Recommendation' under the IHR.

1. The option of amending the IHR would be the only way to “require” that travelers have a complete and documented course of vaccination before being allowed to travel. However, this option is not favored because the amendment process is long (at least 27 months plus any entry into force delays), involving an eventual decision by the WHA, which, in 2008, had already rejected the option of amending the IHR. Also, even if an amendment to the IHR was adopted, any country which does not want to be bound by this requirement could simply reject it by sending a notification to the DG.

2. A “temporary recommendation” is not favored because it would require the declaration of a “public health emergency of international concern,” and the establishment of an “IHR Emergency Committee,” with considerable administrative effort and related processes. A
temporary recommendation also has to be reviewed every 3 months and cannot continue for
more than 23 months.
3. The formal IHR procedure that was identified by WHO as the best option to address the IMB
recommendation is for a “standing recommendation” to be issued by the DG/WHO under the
IHR. While a standing recommendation would, by definition, constitute 'non-binding advice', it
would clearly apply to such a specific ongoing risk to international public health, and could
potentially include vaccination or review of proof of vaccination and exit screening.

Preparations for an IHR standing recommendation will require the use of the IHR Review Committee
meeting process to review and advise on the proposed standing recommendation. While the standing
recommendation will be in effect as soon as formally issued by the DG, it must then be submitted to
the next World Health Assembly for its consideration. The IHR Expert Review Committee will consist of
at least 6 experts (one each drawn from each WHO region) in order to satisfy the requirements for
equitable geographical representation. It is envisioned that the process of preparing for a standing
recommendation should be initiated earlier rather than later, possibly by an initial consultation with an
expert review committee late-2012 or early-2013.

VII. The number of missed children (those with zero doses of vaccine, those with fewer than three
doses, and those missed in each country’s most recent vaccination campaign) should henceforth be
the predominant metric for the Programme; a sheet of paper with these three numbers should be
placed on the desk of each of the Heads of the Spearheading Agencies at the beginning of each
week. This action should commence immediately.

GPEI partners and affiliated modeling experts have carefully considered various options to best analyze
and display data to track ‘missed children’ and quality of immunization activities in Polio Sanctuaries
and polio affected countries. There is consensus that the most insightful display of data in tracking
missed children involves triangulation of different sources of data that independently indicate
proportions of missed children over time. These methods allow assessment of trends and pre-empt
controversies when the accuracy of population figures are challenged by local and national authorities.
The following data are triangulated to assess missed children over time:

- Lot-quality assessment surveys (LQAS) conducted in high risk/worst performing areas
  immediately after SIA rounds,
- OPV immunization status of non-polio AFP cases,
- Post campaign market surveys and ‘independent monitoring’.

Most importantly, the programs in Pakistan and Nigeria are focusing more on house based monitoring
of missed children during the SIAs to enable review of data in evening meetings and immediate
corrective action during the campaign.

The programme has developed 'results monitoring frameworks' showing the most important program
inputs, outcome indicators (SIA quality, OPV status of non-polio AFP cases) and impact data (polio
cases, environmental isolates) for the highest risk areas (see examples in joined CDC/WHO report for
the October IMB meeting).
Annex: Update on integration of polio vaccination into the humanitarian response to the nutrition crisis and conflict in West and Central Africa

1- Where did we succeed to integrate OPV into the humanitarian and nutritional response and how it was achieved.

- Nigeria is integrating polio and routine immunization in the Children Moderate and Acute Malnutrition (CMAM) centers established in response to the nutritional crisis (collaboration with WFP). Focus is to have an integrated approach that aims at having a *Strategy for Intensified Polio Ward Communication* activities, reaching the unimmunized child and the expansion of cold chain facilities in the response in the polio high risk States in the North.
- In Chad, polio was also integrated in the response to the nutritional crisis. In the context of revitalization of the health facilities in response to the nutritional crisis, 100 paramedics were trained in July 2012, including training on polio vaccination. They conduct vaccination in health and nutrition centers. There is plan to recruit additional paramedics, starting with 130 in November 2012. The vaccination data are included in the health data for the area.
- In Burkina Faso, the total number of Malian refugees following the recently completed census level II (figures have just been released officially) is estimated at 34,877 (UNHCR), a sharp decline in comparison to the previous estimated figures of 107,929. They are concentrated in the northern provinces of Soum and Oudalan within the Sahel Region. The immunization activities have been carried out so far on top of the polio SIAs. Refugee children aged 0-11 months (1,395) are currently enrolled in the routine EPI program delivered with the local health centers structures. All these activities are conducted by the Ministry of Health in conjunction with UNHCR, WHO, UNICEF, Médecins Sans Frontière (MSF) and Médecins du Monde (MDM).
• In Mali, cooperative agreements were signed with international NGOs (MSF, MDM Belgique, ALIMA) and national ones (Groupe Pivot Santé et Population (GPSP) and FENASCOM), as well as the Ordre des Médecins (national medical organization) for support to the health system and rehabilitation of the health centers. Through these partnerships, routine vaccination (including OPV) and integrated campaigns (polio, measles, vitamin A, deworming and at times nutritional screening) were held in the North of Mali (in Tombouctou and Kidal; currently underway in Gao). Data is available in the annex.

• In Senegal, vaccination of all children admitted in the nutritional therapeutic centers (currently in Diourbel and Matam regions, will be scaled up in the remaining 8 regions) as a package of prevention and care (Health, HIV, Wash, Nutrition and Communication). In flood areas, mobile teams conduct monthly visits to vaccinate children up to 5 years of age, non-vaccinated or without proof of vaccination (vaccination card), in shelters that host flood victims.

• With the occurrence of floods, attention has been particularly focused on flooded areas and sites of resettlement of people. Different integration strategies have been strengthened at these levels. Outreach vaccination strategies are organized in these priority sites, including mobile teams conducting regular visit to vaccinate children in settlements that host flood victims. The monitoring data are reported daily. Additionally, the immunization status of children in hospitals is systematically checked and those who are not vaccinated take their vaccines, including OPV, on site.

• In DRC, a plan has been developed to integrate OPV into emergency response (2013 convergence plan in the District of Tanganyika with OPV, nutrition, WASH, and Communication for Development (C4D)).

2- What were the challenges faced which prevented us from capitalizing on some of the opportunities that the crisis presented and how do we propose they could be addressed in the future.

There were various challenges faced when integrating OPV in emergency and crisis response. These challenges are identified under main categories below:

Coordination and human resources:
• Convincing partners (OCHA and others) to include preventive activities in emergency situation, particularly when developing funding requests (Central Emergency Response Fund (CERF) and flash Appeal).
• Limited human resources in some of the refugee camps and insecure areas, which does not facilitate the continuity of some of the vaccination activities, leading to missed opportunities.

Data
• The monitoring system and epidemiological surveillance needs to be more specific to disaggregate the number vaccinated in IDPs sites to help us know the coverage in the IDPs camps. In many instances, data collected is not disaggregated to know the impact of malnutrition activities on polio vaccination.
• Difficulty in getting accurate figures of children related to the refugees and to be able to estimate coverage (this might be improving in some countries with the publication of the outcomes of the last UNHCR census level II).
• Low rates of completeness of the data reports on OPV integration activities.
Supply Constraints:
- Some countries indicate that there is no stockpile for the vaccines and all vaccines in country are for the routine programme and for ongoing polio campaigns.
- It was challenging to harmonize implementation activities in refugee camps and in sites originally planned for. Planning for supplies (vaccines and consumables) does not always take into account refugee and displaced populations.

Logistics
- Difficulties in accessing some areas due to the insecurity (e.g., parts of Mali due to the conflict).
- The returnee populations are dispersed in the host community and it is difficult to identify them and ensure the follow up of their immunization status.

Proposed way forward:
- Rely on existing channels such as the Inter-Agency Think Tank at global level and any other regional bodies to advocate for stronger partner coordination and support to integration of OPV during crisis and emergency response even in absence of wild poliovirus circulation. This should address operations, data collection/reporting and funding.
- Country programs should assess their operational and vaccine needs to address plans to integrate OPV into emergency interventions targeting refugees and IDPs based on the available figures.
- Standardize data collection tools to ensure specific disaggregated data is available for refugee and IDP camps across all agencies. This could be done through the health cluster coordination mechanisms.
- Need to ensure systematic program links between flooding, cholera and polio (fecal-oral transmission) as the risk of polio transmission is higher in these settings. Where flooding and cholera are present there is need to assess if vaccination criteria are met and if not ensure relevant vaccination, including OPV.

DETAILED COUNTRY INFORMATION:

Nigeria
- OPV is part of the response to the humanitarian crisis in Nigeria, including the nutritional crisis and the ongoing flooding in many states in Nigeria. OPV is also integrated in Mother, Newborn and Child Health Weeks (MNCHW).
- Nigeria is integrating polio and routine immunization in the nutritional response in the North (polio high risk States in Nigeria are in the North). A review of 169 Children Moderate and Acute Malnutrition (CMAM) centers established in response to the nutritional crisis (collaboration with WFP) conducted in September 2012 in Bauchi indicated that so far, OPV and measles vaccination were conducted in almost all (95%) of the CMAM centers in Borno, Yobe, Jigawa and Kano states. Focus is to have an integrated approach that aims at having a Strategy for Intensified Polio Ward Communication activities, reaching the unimmunized child and the expansion of cold chain facilities in the CMAM centers sites established in response to the nutritional crisis (collaboration with WFP). Other interventions integrated into the CMAM package are Health (treatment of common illness with focus on Pneumonia and Diarrhea, measles response, response to cholera outbreak), Water, Hygiene and Sanitation (distribution of WASH kits, construction of water pumps, and toilets in identified needy areas), Child Protection (birth registration, psychosocial support to care givers) and Education in emergency.
UNICEF is currently scaling up its human resource capacity in 8 of the high risk states of the country where polio continues to persist. Nearly 2000 volunteer community mobilizers (VCMs), volunteer ward supervisors, LGA social mobilization supervisors and state social mobilization supervisors have recently been hired to support intensified polio communications activities in the field.

In response to the Sahel crisis, the polio Volunteer Community Mobilizers (VCM) are now supporting community mobilization for CMAM. Although VCMs are recruited to primarily carry out community mobilization activities for polio immunization, the nature of their roles place them in regular contact with children. With basic knowledge on CMAM and location of outpatient treatment protocols (OTPs), they have been trained to understand Mid-Upper Arm Circumference and can refer children with severe acute malnutrition to the OTPs. VCMs are assisting in passive or opportunistic case-finding and possibly defaulter tracing. One of the key challenges is that the VCM network is still in its infancy stages, even for polio communications.

In areas with complex security context (e.g. North of Mali, parts of Nigeria such as Borno and Yobe States), efforts are being made for analyzing the nature, accurate assessment of the operating constraints, and true impact of the insecurity on programme performance, to guide program strategies to optimize coverage. Environmental sampling (already introduced in selected areas of Nigeria (Kano, Sokoto) should be expanded according to the standard protocols (e.g., as recommended by the 24th ERC of Nigeria to cover Maiduguri) as part of the plan to facilitate the ongoing assessment of the programme’s impact and risks. Data on areas/teams that are unable to perform their duties due to insecurity are being collected and compiled into regular reports following each SIA so that it can be used to monitor and track the evolving situation.

Chad

- NGOs and other partners conduct polio vaccination in refugee camps, particularly during polio campaigns, and routine immunization, in close collaboration with the Ministry of Health, WHO and UNICEF.
- Polio was also integrated in the response to the nutritional crisis. In the context of revitalization of the health facilities in response to the nutritional crisis, 100 paramedics were trained in July 2012, including training on polio vaccination. They conduct vaccination in health and nutrition centers. There is a plan to recruit additional paramedics, starting with 130 in November 2012. The vaccination data are included in the health data for the area.

DRC

- IDP sites and displaced populations hosted by indigenous groups are included during polio campaigns and in routine for provision of the Minimum Package of Activities (MPA). IDP sites which are not served by the public health system are covered by health posts supported by national and international NGOs working closely with UNICEF and WHO.
- Social mobilization and communication activities also cover IDP sites. A program to strengthen the capacity of health zones for C4D (particularly focused on the fight against Polio) is currently underway and includes systematic structures serving displaced sites.
Some data from DRC

- **NIDs/May 2012**:  

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Total number of IDPs</th>
<th>Cible NIDs/Polio 0-59 months</th>
<th>Coverage rate in general population of the province</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nord Kivu</td>
<td>836,144</td>
<td>167,229</td>
<td>116%</td>
<td></td>
</tr>
<tr>
<td>South Kivu</td>
<td>489,795</td>
<td>97,959</td>
<td>113.2%</td>
<td></td>
</tr>
<tr>
<td>Ituri</td>
<td>468,000</td>
<td>93,600</td>
<td>107.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,793,939</strong></td>
<td><strong>358,788</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **NIDs/June 2012**:  

<table>
<thead>
<tr>
<th>Provinces</th>
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<tbody>
<tr>
<td>North Kivu</td>
<td>836,144</td>
<td>167,229</td>
<td>106%</td>
<td></td>
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<tr>
<td>South Kivu</td>
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<td><strong>358,788</strong></td>
<td></td>
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</tbody>
</table>

All IDPs sites are covered by the campaign but the monitoring doesn’t permit to know the specific coverage in these IDPs sites. The data include in these of the formal health system.

The same dynamic is maintained, displaced people are still programmed for SNIDs Polio program for the months of October and November 2012, as shown in the following table:

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Total Number of IDPs</th>
<th>expected target vaccination campaigns</th>
<th>Polio vaccination campaigns</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Kivu</td>
<td>836,144</td>
<td>167,229</td>
<td>167,229</td>
</tr>
<tr>
<td>South Kivu</td>
<td>489,795</td>
<td>97,959</td>
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<td><strong>1,793,939</strong></td>
<td><strong>358,788</strong></td>
<td></td>
</tr>
</tbody>
</table>

Unfortunately, DRC has not yet integrated OPV vaccination in the nutritional response. A plan has been developed to do so (2013 convergence plan in the District of Tanganyika with OPV, nutrition, Wash. and C4D).

**Burkina Faso**

- The total number of Malian refugees following the recently completed census level II in Burkina Faso is estimated at 34,877 (UNHCR), a sharp decline in comparison to the previous estimated figures of 107,929. They are concentrated in the northern provinces of Soum and Oudalan within
the Sahel Region. The following immunization activities have been carried out so far on top of the NID against polio.

- Refugee children aged 0-11 months (1,395) are currently enrolled in the routine EPI program delivered with the local health centers structures.
- All these activities are conducted by the Ministry of Health in conjunction with UNHCR, WHO, UNICEF, MSF and MDM.
- Polio vaccination is not specifically integrated in the nutrition crisis response, but during the NID and routine vaccination, malnourished children are equally targeted either at home or in the pediatric ward or the rehabilitation nutrition center. Since the first NID in March 2012, all the Malian refugees’ children living in the official camps or close to the Burkinabe villages were targeted and included.
- The below table shows polio vaccination coverage during the three campaigns conducted in 2012 in Burkina Faso, including number vaccinated in the refugee camps for the Sahel region:

<table>
<thead>
<tr>
<th>Period</th>
<th>NID rank/Sub-NID</th>
<th>Coverage of 0-59 months children immunized National level</th>
<th>Number of 0-59 months children immunized Refugees camps in Sahel region</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2012</td>
<td>1\textsuperscript{st} NIDs</td>
<td>6,026,801 (101%)</td>
<td>3,419</td>
</tr>
<tr>
<td>May 2012</td>
<td>2\textsuperscript{nd} NIDs</td>
<td>5,967,130 (100 %)</td>
<td>4,802</td>
</tr>
<tr>
<td>June 2012</td>
<td>1\textsuperscript{st} Sub NIDs including in the Sahel region</td>
<td>2,876,240 (100%)</td>
<td>4,900</td>
</tr>
</tbody>
</table>

Cameroon

- With the occurrence of floods, attention has been particularly focused on flooded areas and sites of resettlement of the people. Different integration strategies have also been strengthened at these levels. Thus, monitoring by the community relay is most active. The reporting is daily. Advanced strategies are organized in these priority sites.
- Strengthening of fixed, advanced or mobile strategies is done with special emphasis on the villages with a large number of malnourished children;
- Preparation of Polio SIA cross-border activities with border districts Chad-Cameroun on going. This SIA is integrated to child Health days.

Mali

- Cooperative agreements were signed with international NGOs (MSF, MDM Belgique, ALIMA) and national ones (GPSP and FENASCOM), as well as the Ordre des Médecins (national medical organization) for support to the health system and rehabilitation of the health centers. Through these partnerships, routine vaccination (including OPV), and integrated campaigns (polio, measles, vitamin A, deworming and at times nutritional screening) were held in the North of Mali (in Tombouctou and Kidal; currently underway in Gao).

Results of the campaigns in the Northern Regions of Mali

<table>
<thead>
<tr>
<th>Areas covered</th>
<th>Diré (Tombouctou)</th>
<th>4 districts de Tombouctou</th>
<th>Kidal</th>
<th>3 districts de Gao</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partners</td>
<td>ALIMA</td>
<td>GPSP</td>
<td>MDM</td>
<td>FENASCOM</td>
</tr>
</tbody>
</table>
### Epidemiological surveillance activities for vaccine preventable diseases

Epidemiological surveillance activities for vaccine preventable diseases were conducted in refugee camps as well as other areas in districts hosting Mali refugees. In May 2012, measles campaign in M'Berra camp integrated polio vaccination, providing OPV to 10,663 (89.4%) children age less than 5 years. Community mobilizers identified by the leaders of the refugee camps and trained in C4D informed families in the camps on vaccination activities. Routine immunization is also conducted in M'Bera camp with 2 vaccination sessions organized each week, including OPV. The impact of these interventions has been remarkable, with no cases of WPV or measles since the arrival of the refugees coming mainly from parts of Mali poorly covered by EPI programs due to insecurity.

In Mauritania OPV has not yet been integrated in the nutritional response. However immunization outreach, including OPV, is systematically conducted in regions that have a nutritional crisis.

### Summary of vaccination data in refugee camps in host districts (Bassiknou district, Mauritania)

<table>
<thead>
<tr>
<th>MOUGHATAA</th>
<th>VACCINATION OPV</th>
<th>VACCINATION MEASLES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL OPV</td>
<td>de 6 à 59 mois</td>
</tr>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Réfugiés</td>
<td>10 663</td>
<td>89,4%</td>
</tr>
<tr>
<td>Bassiknou (district)</td>
<td>8 430</td>
<td>102,6%</td>
</tr>
<tr>
<td>Total</td>
<td>19 093</td>
<td>1</td>
</tr>
</tbody>
</table>

### Niger

Vaccination against polio has been integrated into the humanitarian response in refugee’s sites. During the polio NIDs March and May the refugee’s sites were specifically covered with the following results:

<table>
<thead>
<tr>
<th>REGION</th>
<th>DISTRICT</th>
<th>REFUGEE SITE</th>
<th>U5 CHILDREN</th>
<th>VPO</th>
<th>COVERAGE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TILLABERI</td>
<td>TILLABERI</td>
<td>Ayorou</td>
<td>885</td>
<td>922</td>
<td>104%</td>
</tr>
</tbody>
</table>
Vaccination against polio and measles is a part of the Health Cluster Consolidated Appeal Proposal (a humanitarian financing mechanism) and it is included in the response to the current food crisis. Nutritional crisis affecting the whole country, routine immunization strategies (fixed, mobile and advanced) were intensified throughout the country with the following results in August 2012: OPV1: 93% and OPV3: 85%.

During the nutritional screening in villages, the child vaccination status is checked in order to catch up all the unvaccinated or incompletely vaccinated children. Vaccination is also included in the guidelines of SAM and MAM treatment.

**Senegal**

- Support provided to the Ministry of Health in the development of plans for response to the nutritional crisis at central, regional and district levels. The regions and districts affected by the nutritional crisis will obtain support for RI strengthening, including polio vaccination.
- Vaccination of all children admitted in the nutritional therapeutic centers (currently in Diourbel and Matam regions, will scaled up in remaining 8 regions) as a package of prevention and care (Health, HIV, Wash, Nutrition and Communication).
- In flood areas, mobile teams conduct monthly visit to vaccinate children up to 5 year of age non-vaccinated or without proof of vaccination (vaccination card) in shelters that host flood victims.